# EURL-PROFICIENCY TEST-FV-12, 2010

# Pesticide Residues in Leek Homogenate

## Final Report

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QCG: Quality Control Group
AG: Advisory Group

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# EURL-EUROPEAN UNION PROFICIENCY TEST 12
# FOR THE DETERMININATION OF PESTICIDES IN FRUIT AND VEGETABLES USING MULTIRESIDUE METHODS
# 2010

According to Article 28 of Regulation 396/2005/EC (23rd February, 2005) of the European Parliament and of the Council concerning maximum residue levels for pesticides in or on food and feed of plant and animal origin[1] all laboratories analysing samples for the official control of pesticide residues shall participate in the European Union Proficiency Tests (EUPTs) for pesticide residues organised by the European Union. These proficiency tests are carried out on an annual basis in order to ensure the quality, accuracy and comparability of the residue data reported by EU Member States to the European Union, as well as other Member States, within the framework of the EU co-ordinated and national monitoring programmes.

Regulation (EC) No 882/2004[2] lays down the general tasks, duties and requirements for European Union Reference Laboratories (EURLs)[3] for Food, Feed and Animal Health. Among these tasks is the provision for independently-organised comparative tests. The European Proficiency Test 12 has been organised by the EURL in Fruit and Vegetables at the University of Almería, Spain[4].

Now that Regulation 396/2005 has fully come into force, participation in this European Proficiency Test 12 was mandatory for all National Reference Laboratories, as well as all other EU official laboratories, involved in the determination of pesticide residues in fruit and vegetables for the EU-coordinated monitoring programme or for their own national programmes. Additionally, laboratories from Norway, Switzerland, Egypt, Turkey and Uruguay, who had been invited to take part in the previous test, again participated. Brazil and Singapore participated in this test for the first time.

This report will be presented to the European Union Standing Committee for Animal Health and the Food Chain. Furthermore, DG-SANCO has full access to all data from EUPTs including the lab-code/lab-name key.

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[1] Regulation (EC) No 396/2005, published in the OJ of the EU L70 on 16.03.2005, as last amended by Regulation 839/2008 published in the OJ of the EU L234 on 30.08.2008.

[2] Regulation (EC) No 882/2004 of the European Parliament and of the Council on official controls performed to ensure compliance verification with feed and food law, animal health and animal welfare rules. Published in the OJ of the EU L191 on 28.05.2004.

[3] The Community Reference Laboratory (CRL) changed its name to the European Union Reference Laboratory (EURL) on 1st December 2009 as a result of the Treaty of Lisbon. OJ of the EU C306 on 17.12.2007

[4] Commission Regulation (EC) No 776/2006 of 23rd May 2006 - amending Annex VII to Regulation (EC) No 882/2004 of the European Parliament and of the Council as regards European Union Reference Laboratories.

## 1. INTRODUCTION

One hundred and fifty-three laboratories agreed to participate in European Union Proficiency Test 12.

The proficiency test was performed in 2010 using leek homogenate. The leeks were grown in Catalunya, Spain, and were treated post-harvest, using commercial formulations and analytical standards - both were applied using a microspray technique. Eighteen pesticides were used for the treatments (eight as diluted commercial formulations and ten as standards dissolved in solvent). Participating laboratories were also provided with a 'blank' leek homogenate as well as the treated test material.

The test materials, 300 g of leek homogenate containing pesticide residues, together with 300 g of 'blank' leek homogenate, were shipped to participants on 12th April 2010. The deadline for result submission to the Organiser was 7th May 2010. The participants were provided with a list of one hundred and fourty-four target pesticide residue definitions (Annex 1) and informed that any of these pesticides (and components within the residue definitions) might be present in the test material. They were asked to determine the residue levels of all the components and report the concentration for each of the pesticides that they detected. This list of target pesticides also contained the Minimum Required Reporting Level (MRRL) for each pesticide fixed at 0.01 mg/Kg, except for the following pesticides which have lower MRRLs, based on Regulation (EU) No. 396/2005 and EU Directive 2006/125/EU: cadusafos (0.006 mg/Kg), dimethoate sum (0.003 mg/Kg), ethoprophos (0.008 mg/Kg), fipronil (0.004 mg/Kg) and oxydemeton-methyl sum (0.006 mg/Kg).

Participants were asked to analyse the blank test material and report results for any of the pesticides they found which were included in the list. This 'blank' material was intended to be used in recovery experiments for the pesticides found in the test material and, if necessary, for the preparation of matrix-matched calibration standard solutions.

The median values of the analytical data submitted were used to obtain the assigned (true) values for each of the pesticide residues present. A fit-for-purpose relative target standard deviation (FFP RSD) of 25% was chosen to calculate the target standard deviations ($\sigma$) as well as the z-scores for each pesticide.

For the assessment of the overall laboratory performance, the Sum of Weighted z-Scores (SWZ) was used as in previous Proficiency Tests. This year the criteria changed slightly - only those laboratories that detected at least 90% of the pesticides present in the test material and reported no false positives have been considered to have demonstrated 'sufficient scope' and have therefore been classified into Category A. Within Category A, the laboratories have also been subclassified as 'good', 'satisfactory' or 'unsatisfactory'.

Furthermore, this year, a new additional formula has been used to classify laboratories in Category A. This classification is orientative so laboratories can familiarise themselves with it. It is the Sum of Squared z-Scores ($SZ^2$). The use of this formula will involvethe same criteria as the SWZ, that is to say, it requires the laboratory to detect 90% of the pesticides present in the sample and not report any false positives so as to have sufficient scope and be included in Category A.

All the other laboratories have been classified into Category B, because they have demonstrated 'insufficient scope'. For laboratories in Category B, individual z-scores have been calculated but their overall performance has not been assessed. They have been listed in order of the number of pesticides sought and the number of acceptable z-scores achieved. In addition, this year, the laboratories in Category B table will be ranked according to the number of pesticides detected from the total number of pesticides taken into account for the evaluation.

Laboratories that did not report results have not been classified into any category and are indicated in Annex 2.

## 2. TEST MATERIALS

### 2.1 Analytical methods

The two analytical methods, described briefly below, were performed by the EURL-FV in order to conduct the homogeneity and stability tests. These were:

- GC method [1]: The sample is extracted with acetone followed by partition with dichlorometane/petroleum ether (1:1). The mixture is centrifuged and an aliquot of the extract is concentrated to dryness. The residue is redissolved with cyclohexane and injected in GC-MS/MS.
- LC method [2]: The sample is extracted with acetonitrile. After the addition of magnesium sulfate, sodium chloride and buffering citrate salts (pH 5-5.5), the mixture is shaken intensively and centrifuged. An aliquot of the organic phase is cleaned-up by dispersive SPE with PSA and MgSO4. The extract is dissolved in acetonitrile and directly injected into LC-MS/MS.

Amitraz, DMF (2,4-dimethylformanilide), DMPF (N-2,4-dimethylphenyl-N-methyl-formamidine), aldicarb sulfone, carbendazim, imidacloprid, methamidophos, oxamyl, thiacloprid and triflumuron were determined using the LC method described above. All other pesticides (cadusafos, chlorothalonil, azinphos-methyl, chlorpyrifos-ethyl, EPN, ethion, fenpropathrin, kresoxim-methyl, omethoate and prothiofos) were analysed using the GC method described above. For confirmation purposes, MS/MS spectra were used.

### 2.2 Preparation of the treated test material

Before preparation of the test material, the pesticides and target residue levels were selected, following recommendations made by the Quality Control Group, which had been appointed specifically for Proficiency Test 12. One hundred and fifty kilograms of leek were treated; some with post-harvest commercial pesticide formulations dissolved in water (azinphos-methyl, carbendazim, chlorpyrifos-ethyl, chlorothalonil, imidacloprid, kresoxim-methyl, oxamyl and thiacloprid) and others with analytical standards dissolved in solvent (aldicarb sulfone, amitraz, cadusafos, EPN, ethion, fenpropathrin, methamidophos, omethoate, prothiofos and trifluomuron). Both the formulations and the standard solutions were applied to the leeks using a microspray. After all the pesticides had been applied, a portion of the treated leek was taken and analysed to check if the residue levels present were close to the target levels or whether any additional spraying was necessary. When the residue levels in the leeks were close to those recommended by the Quality Control Group, the entire sample was frozen and chopped using liquid nitrogen and a mincer. The frozen minced leeks were mixed in a constantly-spinning container until a homogeneous material was obtained. 300g portions of the well-mixed homogenate were weighed out into screw-capped polyethylene plastic bottles; sealed and stored in a freezer at about - 20 °C prior to distribution to participants.

### 2.3 Preparation of 'blank' test material

The leeks used for the production of the blank test material were organically-grown in the same field as the test material. A homogenate was prepared in the same way as the treated test material described above.

### 2.4 Homogeneity test

Ten bottles of treated test material were randomly chosen from those stored in the freezer and analyses were performed on duplicate portions taken from each bottle. The sequence of analyses was determined using a table of randomly-generated numbers. The injection sequence of the 20 extracts analysed by GC and LC was also randomly chosen. The quantification by GC and LC was performed using a 3-point calibration curve constructed from matrix-matched standards prepared from the 'blank' leek test material.

The statistical evaluation was performed according to the International Harmonized Protocol published by IUPAC, ISO and AOAC [3]. The individual residue data from the homogeneity tests are given in Appendix 1. The results of the statistical analyses are given in Table 2.1. The acceptance criteria for the test material to be sufficiently homogenous for the proficiency test were that: $Ss^2 < c$, where $S_s$ is the between-bottle sampling standard deviation and $c = F_1\sigma^2_{all} + F_2S^2_{an}$, $F_1$ and $F_2$ being constant values of 1.88 and 1.01, respectively, from the 10 samples taken, and $\sigma^2_{all}$ = 0.3 x FFP RSD(25%) x the analytical sampling mean for all the pesticides.

Table 2.1. Statistical evaluation of the homogeneity test data (n = 20 analyses)

| Pesticide | Mean Conc. (mg/Kg) | $Ss^2$ | c | $Ss^2 < c$ Pass/Fail |
|---|---|---|---|---|
| **Aldicarb sulfone** | 0.045 | $0.125x10^{-4}$ | $0.658x10^{-4}$ | Pass |
| **Amitraz** | 0.116 | $0.5076x10^{-3}$ | $0.4967x10^{-3}$ | Fail |
| **DMPF** | 0.062 | $0.121x10^{-4}$ | $0.503x10^{-4}$ | Pass |
| **DMF** | 0.030 | $0.14x10^{-5}$ | $0.150x10^{-4}$ | Pass |
| **Azinphos-methyl** | 0.036 | 0 | $0.639x10^{-4}$ | Pass |
| **Cadusafos** | 0.013 | $0.8x10^{-6}$ | $0.85x10^{-5}$ | Pass |
| **Carbendazim** | 0.278 | 0 | $0.2681x10^{-2}$ | Pass |
| **Chlorpyrifos-ethyl** | 0.150 | 0 | $0.1x10^{-2}$ | Pass |
| **Chlorothalonil** | 0.166 | 0 | $0.26347 x10^{-2}$ | Pass |
| **EPN** | 0.050 | 0 | $0.1562 x10^{-3}$ | Pass |
| **Ethion** | 0.057 | 0 | $0.1550 x10^{-3}$ | Pass |
| **Fenpropathrin** | 0.063 | 0 | $0.2147 x10^{-3}$ | Pass |
| **Imidacloprid** | 0.203 | 0 | $0.15964x10^{-2}$ | Pass |

| Pesticide | Mean Conc. (mg/Kg) | $Ss^2$ | c | $Ss^2 < c$ Pass/Fail |
|---|---|---|---|---|
| **Kresoxim-methyl** | 0.286 | $0.7207 \times 10^{-3}$ | $0.33852 \times 10^{-2}$ | Pass |
| **Methamidophos** | 0.302 | $0.6471 \times 10^{-3}$ | $0.55169 \times 10^{-2}$ | Pass |
| **Omethoate** | 0.026 | $0.17 \times 10^{-5}$ | $0.333 \times 10^{-4}$ | Pass |
| **Oxamyl** | 0.300 | 0 | $0.60984 \times 10^{-2}$ | Pass |
| **Thiacloprid** | 0.215 | $0.194 \times 10^{-4}$ | $0.17774 \times 10^{-2}$ | Pass |
| **Prothiofos** | 0.340 | $0.22548 \times 10^{-2}$ | $0.40830 \times 10^{-2}$ | Pass |
| **Triflumuron** | 0.276 | $0.6276 \times 10^{-3}$ | $0.25152 \times 10^{-2}$ | Pass |

$S_s$: Between-Sampling Standard Deviation

As can be seen from Table 2.1, amitraz, as the parent compound, did not pass the homogeneity test. Neither was it tested for the stability test. Its degradation products, DMPF and DMF did pass the homogeneity test.

**2.5 Stability tests**

The two analytical methods, described briefly in section 2.1, were also used for the stability tests. The tests were performed on two occasions. On each occasion, a single bottle stored in the freezer at -20°C was chosen randomly and duplicate analyses were performed.

The two occasions were:
- Day 1: coinciding with the first sample shipment, which took place on 12th April 2010.
- Day 2: shortly after the deadline for reporting results, on 12th May 2010.

The individual results are given in Table 2.2. In general, these tests did not show any significant decrease in the pesticide levels. This demonstrates that, for the duration of the proficiency test and provided that the storage conditions prescribed were followed, the time elapsed until the participants performed the analysis would not have influenced their results. Moreover, as a result of some laboratory's doubts regarding the stability of their sample arriving not completely frozen, a duplicate analysis of a bottle stored at room temperature for 48 hours was performed – which found differences of no greater than 10%. Laboratories could therefore be sufficiently confident in accepting the sample even if it was not completely frozen.
Only amitraz was not being sufficiently homogeneous, and as a result, the stability test was not conducted – but it was carried out for its metabolites.

Table 2.2. Statistical test for analytical precision and to demonstrate stability

| Pesticide | Concentration (mg/Kg) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Day 1 (1st analysis) | Day 1 (2nd analysis) | Mean 1 | Day 2 (1st analysis) | Day 2 (2nd analysis) | Mean 2 | (M2-M1)/M1 | % |
| Aldicarb sulfone | 0.050 | 0.053 | 0.052 | 0.048 | 0.050 | 0.049 | -0.049 | -5 |
| Azinphos-methyl | 0.050 | 0.051 | 0.0505 | 0.047 | 0.049 | 0.048 | -0.050 | -5 |
| Cadusafos | 0.020 | 0.022 | 0.021 | 0.021 | 0.019 | 0.020 | -0.048 | -5 |
| Carbendazim | 0.340 | 0.342 | 0.341 | 0.328 | 0.325 | 0.327 | -0.043 | -4 |
| Chlorpyrifos-ethyl | 0.164 | 0.170 | 0.167 | 0.160 | 0.154 | 0.157 | -0.060 | -6 |
| Chlorothalonil | 0.228 | 0.212 | 0.220 | 0.190 | 0.208 | 0.199 | -0.095 | -10 |
| DMPF | 0.070 | 0.068 | 0.069 | 0.069 | 0.062 | 0.066 | -0.051 | -5 |
| DMF | 0.032 | 0.035 | 0.034 | 0.037 | 0.038 | 0.038 | 0.119 | 12 |
| EPN | 0.061 | 0.062 | 0.062 | 0.057 | 0.059 | 0.058 | -0.057 | -6 |
| Ethion | 0.070 | 0.074 | 0.072 | 0.068 | 0.072 | 0.070 | -0.028 | -3 |
| Fenpropathrin | 0.072 | 0.077 | 0.075 | 0.070 | 0.068 | 0.069 | -0.074 | -7 |
| Imidacloprid | 0.248 | 0.260 | 0.254 | 0.249 | 0.255 | 0.252 | -0.008 | -1 |
| Kresoxim-methyl | 0.320 | 0.324 | 0.322 | 0.318 | 0.304 | 0.311 | -0.034 | -3 |
| Methamidophos | 0.227 | 0.234 | 0.231 | 0.207 | 0.217 | 0.212 | -0.080 | -8 |
| Omethoate | 0.040 | 0.041 | 0.041 | 0.036 | 0.038 | 0.037 | -0.086 | -9 |
| Oxamyl | 0.352 | 0.349 | 0.351 | 0.339 | 0.341 | 0.340 | -0.030 | -3 |
| Thiacloprid | 0.270 | 0.281 | 0.276 | 0.269 | 0.258 | 0.26 | -0.044 | -4 |
| Prothiofos | 0.320 | 0.314 | 0.317 | 0.311 | 0.309 | 0.310 | -0.022 | -2 |
| Triflumuron | 0.245 | 0.241 | 0.243 | 0.231 | 0.228 | 0.230 | -0.056 | -6 |

**2.6 Distribution of test material and protocol to participants**

One bottle of frozen treated test material and one bottle of frozen 'blank' material were shipped to each participant in boxes containing dry ice. The samples were sent on 12th April 2010.

Before sample shipment, the laboratories received full instructions (Annex 1) for the receipt, storage and analysis of the test materials although they were encouraged to use their normal sample receipt procedure and method(s) of analysis. These instructions were uploaded onto the open site of the EURL-FV web page as part of the Specific Protocol. The Application Form was also available as an on-line form. When applying to participate in the test, each laboratory decided on their own password, which was required in order to enter the restricted zone where Forms 1-4 could be accessed on-line. This information was made available when laboratories received an e-mail from the Organiser confirming their acceptance along with their Lab Code allowing them to participate. This ensured that confidentiality was maintained throughout the duration of Proficiency Test 12. Form 4 was created within the test to avoid laboratories reporting unneccesary data. On this form, information was requested on analytical methods for pesticides that were reported by the laboratories as sought but not detected yet were actually present in the sample. The Target Pesticide List and the Minimum Required Reporting Levels (MRRLs), as established by the Organiser, were uploaded onto the EURL-FV open web site to allow laboratories sufficient time to purchase standards and to validate their methods.

## 3. STATISTICAL METHODS

### 3.1 False positives and negatives

3.1.1 False positives

Results reported for pesticides that were included in the pesticide list, but which were (i) not used in the preparation of the test material and (ii) not detected by the Organiser (even after a repeated analysis with lower detection limits) were assigned as false positives - if they were reported at concentrations at, or above, the Minimum Required Reporting Level (MRRL) as stipulated by the Organiser. Results reported which were lower than the MRRL have been disregarded and have not therefore been considered to be false positives. No z-score values have been calculated for these results. Any laboratory reporting a false positive, even when reporting the necessary number of pesticides to obtain sufficient scope, has been classified into Category B.

3.1.2 False negatives

Results for pesticides reported by the laboratories as not detected (ND), even though they were used by the Organiser to treat the test material and were subsequently detected at, or above, the MRRL specified by the Organiser (and the majority of participating laboratories) have been considered to be false negatives. z-Scores have been calculated for all pesticides detected at levels at or above the MRRL, including false negatives.

### 3.2 Estimation of the assigned values

The assigned values for each pesticide were based on the median level of all the reported results, excluding outliers. Individual results without any absolute values reported, such as detected (D), were not considered. The results for each pesticide were tested for multimodality.

### 3.3 Fixed target standard deviations

Based on experience from previous EU proficiency tests and recommendations from the Advisory Group, a fixed relative standard deviation (FFP RSD) of 25 % was chosen [4]. This is in line with the internationally-accepted target Measurement Uncertainty of 50% for multiresidue analysis of pesticides [5], which is derived from, and linked to, the EUPTs. The same target RSD has been applied to all the pesticides, independent of concentration. The target standard deviation ($\sigma$) for each individual pesticide was calculated by multiplying this FFP RSD by the assigned value. FFP-RSD for each pesticide was compared to Qn RSD [6].

### 3.4 z-Scores

A z-score for each laboratory/pesticide combination was calculated according to the following equation:

$$z = (x-X) / \sigma \qquad \text{Eq.1}$$

Where:

- x is the result reported by the participant, the MRRL or the RL (which ever one is lower) for those labs not having detected the presence of the pesticide in the sample
- X is the assigned value
- σ is the target standard deviation (the FFP-RSD of 25% multiplied by the assigned value)

z-Score classification is as follows:

$|z| \leq 2$ Acceptable

$2<|z|\leq 3$ Questionable

$|z|>3$ Unacceptable

- Any z-score values of $|z| > 5$ have been reported as '5'.
- No z-score calculations have been performed for false positive results.
- For false negative results, the MRRL (or RL) has been used to calculate the z-score. These z-scores have also been included in the graphical representation, and are marked with an asterisk.

### 3.5 Combined z-Scores

In order to evaluate each laboratory's overall performance according to the quality of its results and its scope, two classifications - Category A and B – have been used. To be in Category A, laboratories had to detect (that is sought and detected) 90% or more of the total number of pesticides present in the test material and reported no false positives. If these two requirements were fulfilled then the combined z-scores was calculated. This year a new overall assessment criterion, the 'Sum of Squared z-Scores' ($SZ^2$), has been introduced in this report for informative purposes [7]. Results and graphical representation are included. Classification of laboratories was performed only using the SWZ formula.

#### 3.5.1 The Sum of Weighted z-Scores (SWZ)

The 'Sum of Weighted z-Scores' - first introduced in EUPT 6 - was used. This formula consists of a weighting factor ω defined as follows:

$$\omega|Z_i| = \begin{cases} 1 & \text{if} \quad |Z| \le 2 \\ 3 & \text{if} \quad 2 < |Z| \le 3 \\ 5 & \text{if} \quad |Z| > 3 \end{cases}$$

Therefore, the 'Sum of Weighted z-Scores' (SWZ) formula is:

$$|SWZ| = \frac{\sum_{i=1}^{n} |Z_i| \omega(Z_i)}{n}$$

So for each lab:

- The first term is the sum of absolute values of z-scores between zero and two, multiplied by one.
- The second term is the sum of absolute values of z-scores greater than two, but less than or equal to three, multiplied by three.
- The third term is the sum of absolute values of z-scores greater than three, multiplied by five.

The sum is then divided by the number of z-scores (n) for each laboratory, including false negatives.

The 'Sum of Weighted z-Scores' has subsequently been used to produce an overall classification of laboratories with three sub-classifications: 'good', 'satisfactory' and 'unsatisfactory'.

$$|SWZ| \le 2 \quad \text{Good}$$

$$2 < |SWZ| \le 3 \quad \text{Satisfactory}$$

$$|SWZ| > 3 \quad \text{Unsatisfactory}$$

In this way, a simple, single, combined value is produced.

3.5.1 The Sum of Squared z-Scores ($SZ^2$)

The 'Sum of Squared z-Scores' has been introduced for the first time. This formula, analogous to the SWZ, also consists of a weighting factor $\omega$ defined as follows:

$$\omega(Z_i) = Z_i$$

But now the resultant Sum of Squared z-Score formula ($SZ^2$) is:

$$SZ^2 = \frac{\sum_{i=1}^{n} |Z_i| \omega(Z_i)}{n}$$

The resultant formula is the sum of the z-score value, multiplied by itself and divided by the number of z-scores (n) detected by each laboratory, including those coming from false negatives.

As with the previous formula, it is subsequently used to produce an overall classification of laboratories with three sub-classifications: 'good', 'satisfactory' and 'unsatisfactory'.

$$|SZ^2| \leq 2 \text{ Good}$$
$$2 < |SZ^2| \leq 3 \text{ Satisfactory}$$
$$|SZ^2| > 3 \text{ Unsatisfactory}$$

In this way, a simple, single, combined value is also achieved, as with the previous formula, but, this time, it is more mathematically justifiable as it uses the actual z-score value rather than the factors 1, 3 and 5. Again, the aim is to encourage laboratories to not only improve the accuracy of their results, but also to analyse a greater number of pesticides.

Laboratories not having detected sufficient pesticides, or having reported a false positive, have been placed in Category B and no combined z-score has been calculated. This year, this formula has been introduced purely for informative purposes. In Appendices 7 and 8 respectively only results of laboratories in Category A and their graphical representation have been presented in this report.

## 4. RESULTS

### 4.1 Summary of reported results

One hundred and fifty-three laboratories agreed to participate in this proficiency test. However, four of them did not submit results. The results reported by all the laboratories are presented in this report. However, only results reported by laboratories from EU-countries and EFTA-countries (Norway, Iceland and Switzerland) have been included in the statistical treatment. The results from the laboratories in Brazil, Egypt, Turkey, Singapore and Uruguay have not been included. This last group totals 9 laboratories.

Eighteen pesticides were used to treat the sample. Out of these, fifteen have been used to evaluate the laboratories' performance. Amitraz, cadusafos and chlorothalonil have been taken out of the statistical treatment. Although, information on these three pesticides can be found in the report.

A summary of the reported results can be seen below in Table 4.1.

Table 4.1 Summary of Reported Results

| Pesticides | No. of Reported Results | No. of False Negative Results | No. of Not Analysed Results | % of Reported Results * |
|---|---|---|---|---|
| Aldicarb sum | 81 | 5 | 54 | 58 |
| Azinphos-methyl | 104 | 19 | 17 | 74 |
| Carbendazim | 100 | 0 | 40 | 71 |
| Chlorpyrifos-ethyl | 137 | 2 | 1 | 98 |
| Dimethoate sum | 96 | 14 | 30 | 69 |
| EPN | 64 | 5 | 71 | 46 |
| Ethion | 128 | 1 | 11 | 91 |
| Fenpropathrin | 106 | 5 | 29 | 76 |
| Imidacloprid | 98 | 0 | 42 | 70 |
| Kresoxim-methyl | 124 | 1 | 15 | 89 |
| Methamidophos | 104 | 4 | 32 | 74 |
| Oxamyl | 93 | 2 | 45 | 66 |
| Prothiofos | 75 | 1 | 64 | 54 |
| Thiacloprid | 90 | 0 | 50 | 64 |
| Triflumuron | 69 | 3 | 68 | 49 |

* The % of Reported Results comes from 140 laboratories, and does not take into account of the 9 laboratories from Brazil, Egypt, Turkey, Singapore and Uruguay.

The laboratories that agreed to participate are listed in Annex 2. All analytical results reported by the participants are given in Appendix 3, whilst the analytical methods used are given in Appendix 9. For an explanation of the symbols used in these appendices, see Annex 1.

4.1.1 False positives

Twelve laboratories reported results for additional pesticides that had not been used to treat the test material. These pesticides and the residue levels reported are presented in Table 4.2 together with the MRRL. Where the reported residue level of the erroneously-detected pesticide was higher than the assigned MRRL value in the Target Pesticide List (Annex 1), the result has been considered to be a false positive.

Any laboratory that reported even a single false positive result has not been classified into Category A.

Table 4.2 Laboratories that reported results for pesticides that were not present in the treated test material

| Laboratory Code | Pesticide | Concentration (mg/kg) | Determination Technique | RL (mg/Kg) | MRRL (mg/Kg) |
|---|---|---|---|---|---|
| Lab031 | Endosulfan beta | 0.034 | GC-MS | 0.02 | 0.01 |
| Lab051 | Zoxamide | 0.019 | LC-MS/MS (QQQ) | 0.01 | 0.01 |
| Lab062 | Folpet | 0.405 | LC-MS/MS (QQQ) | 0.01 | 0.01 |
| Lab063 | 3-OH-carbofuran | 0.0054 | HPLC-UV | 0.003 | 0.01 |
| Lab078 | Fenpropimorph | 0.06 | GC-MSD | 0.05 | 0.01 |
| Lab080 | Hexaconazole | 0.10 | LC-MS/MS (QQQ) | 0.01 | 0.01 |
| Lab082 | Captan | 0.363 | GC-ECD | 0.01 | 0.01 |
| Lab103 | Fenhexamid | 0.330 | GC-MSD | 0.05 | 0.01 |
| | Tebuconazole | 0.063 | GC-MSD | 0.01 | 0.01 |
| Lab106 | Azoxystrobin | 0.0191 | GC-MSD | 0.01 | 0.01 |
| | Bromopropylate | 0.0141 | GC-MSD | 0.01 | 0.01 |
| | Diazinon | 0.0211 | GC-MSD | 0.01 | 0.01 |
| | Dichlorvos | 0.167 | GC-MSD | 0.01 | 0.01 |
| | Difenoconazole | 0.0137 | GC-MSD | 0.01 | 0.01 |
| | Fenarimol | 0.0309 | GC-MSD | 0.01 | 0.01 |
| | Lambda-Cyhalothrin | 0.0423 | GC-MSD | 0.01 | 0.01 |
| Lab109 | Prochloraz | 0.02 | GC-MSD | 0.02 | 0.01 |
| Lab145 | Epoxiconazole | 0.0231 | LC-MS/MS (QQQ) | 0.01 | 0.01 |
| Lab149 | Oxadixyl | 0.055 | GC-MS/MS (QQQ) | 0.01 | 0.01 |

If the residue levels reported were below the MRRLs, or if the pesticides did not appear in the pesticide list included in Annex I, then they were not considered to be false positives.

4.1.2 False negatives

Pesticides that were actually present in the test material but were reported as not-detected (ND), were considered to be false negatives. Table 4.3 summarises the results from laboratories that reported false negatives.

Table 4.3. Laboratories that failed to report pesticides that were present in the treated test material.

| Laboratory Code | Aldicarb sum | Azinphos-methyl | Chlorpyrifos-ethyl | Dimethoate sum | EPN | Ethion | Fenpropathrin | Kresoxim-methyl | Methamidophos | Oxamyl | Prothiofos | Triflumuron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | | ND | | | | | | | | | | |
| 010 | | | | | | | ND | | | | | |
| 013 | | ND | | | | | | | ND | | | |
| 014 | ND | | | | | | | | | | | |
| 020 | | ND | | | | | | | | | | |
| 022 | | | | ND | | | | | | | | |
| 023 | | | | | | | | | | | ND | |
| 038 | ND | ND | | ND | | | | | | | | ND |
| 044 | | | | ND | | | | | | | | |
| 048 | | | | ND | | | | | | | | |
| 049 | | ND | | | | | | | | | | |
| 051 | | | | | ND | | | | | | | |
| 054 | | | | ND | | | | | | | | |
| 058 | | | | ND | | | | | | | | |
| 065 | | ND | | | | | | | | | | |
| 066 | | ND | | | | | | | | | | |
| 068 | | ND | | | | | | | | | | |
| 074 | | ND | | | | | | | | | | |
| 077 | | | | ND | | | | | | | | |
| 078 | | | | | | | ND | | | | | |
| 079 | | | | ND | | | | | | | | ND |
| 080 | | | | ND | | | | | | | | |
| 082 | | ND | | | | | | | | ND | | |
| 084 | ND | | | | | | | | | | | |
| 090 | | ND | | | | | | | | | | |
| 093 | | | | ND | | | | | | | | |
| 096 | | | | ND | | | | | | | | |
| 100 | | ND | | | | | | | | ND | | |
| 101 | | ND | | ND | | | | | ND | | | |
| 103 | ND | ND | | | ND | | ND | | | | | |

| Laboratory Code | Aldicarb sum | Azinphos-methyl | Chlorpyrifos-ethyl | Dimethoate sum | EPN | Ethion | Fenpropathrin | Kresoxim-methyl | Methamidophos | Oxamyl | Prothiofos | Triflumuron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 106 | | ND | ND | | | | | | | | | |
| 107 | | ND | | | | | | | | | | |
| 113 | | | | | ND | | | | | | | |
| 117 | ND | | | | | | | | | | | ND |
| 118 | | ND | | | | | | | | | | |
| 120 | | | | ND | | | | | | | | |
| 122 | | | | | | | ND | | | | | |
| 134 | | | | | | | | | ND | | | |
| 138 | | | ND | | | ND | ND | ND | ND | | | |
| 145 | | | | | ND | | | | | | | |
| 147 | | ND | | ND | | | | | | | | |
| 148 | | | | | ND | | | | | | | |

False negatives from Brazil, Egypt, Turkey, Singapore and Uruguay have not been included in this table.

4.1.3 Distribution of data

The distributions of the residue levels of the fifteen pesticides reported by the laboratories have been plotted as histograms after removing results that were distant from the main population (results that produced z-scores above 5.0 in the first round calculation).

**4.2 Assigned values and target standard deviations**

The assigned values were based on the median values calculated using all the reported results, but excluding those values that were far from the median, i.e. outliers. The assigned values for the fifteen pesticides are presented in Table 4.4.

The target standard deviation was calculated using a fixed FFP RSD value of 25%. For comparison, a robust standard deviation (Qn) was also calculated for informative purposes. These RSDs can be seen in Table 4.4.

Table 4.4 Median values and %RSDs for all pesticides present in the test material.

| Pesticides | MRRL (mg/Kg) | Median (mg/Kg) | FFP RSD (%) | Qn RSD (%) |
|---|---|---|---|---|
| Aldicarb Sum | 0.01 | 0.041 | 25 | 23 |
| Azinphos-methyl | 0.01 | 0.048 | 25 | 23 |
| Carbendazim | 0.01 | 0.320 | 25 | 26 |
| Chlorpyrifos-ethyl | 0.01 | 0.176 | 25 | 21 |
| Dimethoate Sum | 0.003 | 0.039 | 25 | 31 |

| Pesticides | MRRL (mg/Kg) | Median (mg/Kg) | FFP RSD (%) | Qn RSD (%) |
|---|---|---|---|---|
| EPN | 0.01 | 0.061 | 25 | 19 |
| Ethion | 0.01 | 0.071 | 25 | 22 |
| Fenpropathrin | 0.01 | 0.062 | 25 | 25 |
| Imidacloprid | 0.01 | 0.249 | 25 | 20 |
| Kresoxim-methyl | 0.01 | 0.316 | 25 | 22 |
| Methamidophos | 0.01 | 0.227 | 25 | 32 |
| Oxamyl | 0.01 | 0.342 | 25 | 19 |
| Prothiofos | 0.01 | 0.279 | 25 | 17 |
| Thiacloprid | 0.01 | 0.310 | 25 | 23 |
| Triflumuron | 0.01 | 0.244 | 25 | 22 |

### 4.3 Assessment of laboratory performance

4.3.1 z-Scores

z-Scores were calculated using the FFP RSD of 25% for all the pesticides present. In Appendix 3, the individual z-scores are presented for each laboratory, together with the median values for each pesticide. Brazil, Egypt, Turkey, Singapore and Uruguay z-scores have been represented in Appendix 3 and considered in the following table.

Table 4.5 Classification of z-scores for the pesticides reported

| Pesticides | Acceptable (%) | Questionable (%) | Unacceptable (%) |
|---|---|---|---|
| Aldicarb Sum | 89 | 1 | 10 |
| Azinphos-methyl | 81 | 1 | 18 |
| Carbendazim | 88 | 7 | 5 |
| Chlorpyrifos-ethyl | 93 | 4 | 3 |
| Dimethoate Sum | 78 | 6 | 16 |
| EPN | 90 | 1 | 9 |
| Ethion | 95 | 3 | 2 |
| Fenpropathrin | 90 | 1 | 9 |
| Imidacloprid | 97 | 1 | 2 |
| Kresoxim-methyl | 95 | 2 | 3 |
| Methamidophos | 83 | 7 | 10 |
| Oxamyl | 95 | 3 | 2 |
| Prothiofos | 96 | 0 | 4 |
| Thiacloprid | 97 | 3 | 0 |
| Triflumuron | 88 | 5 | 7 |

z-Scores for false negative results have been calculated using the MRRL value reported in the Target Pesticide List (Annex 1).

In Appendix 4, graphical representations of the z-scores are presented. No z-scores have been calculated for false positive results. z-Scores for false negative results have been included on the chart and are indicated by an asterisk. The charts have been constructed using different colour bars according to the determination technique used for each particular pesticide.

The Organiser considers it important to clarify the Scientific Committee's decisions on three of the pesticides used to treat the sample, which were then included in this test. They are as follows:

- *Amitraz*: the sample was treated with amitraz as the parent compound. Amitraz is not stable, it degrades very rapidly, resulting in the appearance in the sample of its two main metabolites: DMPF and DMF. The degradation route is complicated. The amitraz residue definition is based on the complete degradation to DMA and the use of a single residue method. However, when a multiresidue method is used, laboratories are able to detect amitraz, DMPF and DMF. Because of this, laboratories were requested to report individual concentration results for each of these compounds. As the degradation root is not clear for each of the compounds generated, the Scientific Committee decided not to evaluate the results for this pesticide, or its degradation products. The recommendation given to the laboratories is that when searching for amitraz as part of their MRM method, they should also perform analyses for DMPF and DMF. If either one was found, a second analysis should be conducted, this time degrading all the amitraz to DMA so as to ensure that the current residue definition is followed – or at least until EFSA revises it. Further recommendations for the analysis are: to preferably use an alkaline medium during extraction and to avoid putting the parent compound and DMPF and DMF together in the same spiking solution to be used for recovery experiments.
  For informative purposes only, the median achieved by the laboratories for each of the degradation compounds are: DMF = 0.029 mg/kg and DMPF = 0.071 mg/kg.

- *Cadusafos* was used to treat the sample. Due to the fact that the assigned value was 0.018 mg/Kg and close to the MRRL of 0.006 mg/kg, no reliable statistical analysis could be performed, especially with regard to identifying false negatives.

- *Chlorothalonil* was used to treat the sample. This pesticide normally does not cause extraction problems but because in its structure there is a CN group, when it is present in matrices that contain sulphur atoms, such as in leeks, the extraction process becomes difficult. Both temperature and pH can influence the process: if they are not controlled, the pesticide can react with the sulphur compounds in the matrix and/or be degraded. Particular suggestions given by the Scientific Committee for improvement of extraction procedures are:

- When using Quechers method: acidify the sample with sulfuric acid to pH 1-2 prior to extraction and reduce the length of time taken for the extraction process by avoiding PSA clean-up steps.
- When using Ethyl Acetate method: add acetic acid to the extract.

The z-score has been calculated for informative purposes only. It can be seen in Appendix 3. Furthermore, z-score graphical representation has been done by colouring each bar result according not only to the determination technique but also to the extraction method used. This can be seen in Appendix 4.

4.3.2 Combined z-Scores

As previously mentioned in Section 3.5, this year, two combined z-score formulas have been applied. SWZ has been used to categorise the laboratories into Category A and B whereas $SZ^2$ has been introduced for the first time for informative purposes.

The table in Appendix 5 shows the values of individual z-scores for each pesticide and the combined 'Sum of Weighted z-Scores' for those laboratories in Category A. In this category are the laboratories that sought and detected 13 or more compounds and did not report any false positive results. A graphical representation of the results for these laboratories can also be found in Appendix 6.

The new criterion introduced this year will not be used for the final overall assessment of laboratories performance. However, the 'Sum of Squared z-Scores' ($SZ^2$) has been calculated and presented in this report. Appendix 7 shows a table with the values of individual z-scores for each pesticide and the combined 'Sum of Squared z-Scores' for those laboratories that would have been in Category A if this combined z-score formula had been used. Laboratories that sought and detected 13 or more results and did not report any false positive results would have been included in this category. A graphical representation of the results for these laboratories can be found in Appendix 8.

Sixty-three of the one hundred and forty laboratories that submitted results have been classified into Category A (45%). Seventy-five percent of these were subdivided as 'good', twelve and a half percent as 'satisfactory' and twelve and a half percent as 'unsatisfactory'.
Of the seventy-seven laboratories in Category B, three would have been in Category A if they had not reported a false positive result.

Table 4.6.1 shows the laboratories in Category A, the number of pesticides reported, the SWZ value and their subclassification. Laboratories that reported false negative results in Category A are marked with an asterisk and laboratories with SWZ values greater than 3.0 have been marked with an '↑'.

Table 4.6.2 shows the laboratories in Category B, the number of results reported, and the number of acceptable z-scores. Laboratories reporting a false negative are marked with an asterisk and laboratories reporting a false positive are marked with a '+'.

A SWZ graphical representation for laboratories classified into Category A can be seen in Appendix 6. As was the case last year, the National Reference Laboratories for Fruit and Vegetables have been plotted on the graph using a different colour.

The performance of the laboratories in the last three EUPTs has been summarised as follows:

- For EUPT-FV-12, out of 140 laboratories (EU and EFTA), 63 are in Category A with the following subdivisions: 8 'unsatisfactory', 8 'satisfactory' and 47 'good'.
- For EUPT-FV-11, out of 148 laboratories, 76 were in Category A with the following subdivisions: 9 'unsatisfactory', 7 'satisfactory' and 60 'good'.
- For EUPT-FV-10, out of 129 laboratories, 66 were in Category A with the following subdivisions: 8 'unsatisfactory', 6 'satisfactory' and 52 'good'.

Table 4.6.1 Performance and subclassification of laboratories in Category A

| Lab Code EUPT-FV12 | No. of z-scores detected | No. of z-score achieved in total (n) | SWZ | Classification |
|---|---|---|---|---|
| Lab036 | 15 | 15 | 0.2 | Good |
| Lab144 | 15 | 15 | 0.2 | Good |
| Lab012 | 15 | 15 | 0.3 | Good |
| Lab016 | 15 | 15 | 0.3 | Good |
| Lab053 | 15 | 15 | 0.3 | Good |
| Lab006 | 15 | 15 | 0.3 | Good |
| Lab071 | 15 | 15 | 0.4 | Good |
| Lab085 | 15 | 15 | 0.4 | Good |
| Lab114 | 15 | 15 | 0.4 | Good |
| Lab045 | 15 | 15 | 0.4 | Good |
| Lab060 | 13 | 13 | 0.4 | Good |
| Lab047 | 15 | 15 | 0.5 | Good |
| Lab024 | 15 | 15 | 0.5 | Good |
| Lab028 | 15 | 15 | 0.5 | Good |
| Lab057 | 15 | 15 | 0.6 | Good |
| Lab017 | 15 | 15 | 0.6 | Good |
| Lab018 | 15 | 15 | 0.6 | Good |
| Lab055 | 15 | 15 | 0.6 | Good |
| Lab041 | 15 | 15 | 0.6 | Good |
| Lab011 | 15 | 15 | 0.6 | Good |
| Lab067 | 15 | 15 | 0.6 | Good |
| Lab030 | 14 | 14 | 0.6 | Good |
| Lab070 | 15 | 15 | 0.7 | Good |
| Lab050 | 15 | 15 | 0.7 | Good |
| Lab097 | 15 | 15 | 0.7 | Good |
| Lab015 | 15 | 15 | 0.8 | Good |

| Lab Code EUPT-FV12 | No. of z-scores detected | No. of z-score achieved in total (n) | SWZ | Classification |
|---|---|---|---|---|
| Lab042 | 14 | 14 | 0.8 | Good |
| Lab025 | 15 | 15 | 0.9 | Good |
| Lab005 | 14 | 14 | 0.9 | Good |
| Lab019 | 15 | 15 | 1.0 | Good |
| Lab034 | 15 | 15 | 1.1 | Good |
| Lab121 | 14 | 14 | 1.1 | Good |
| Lab029 | 15 | 15 | 1.2 | Good |
| Lab113* | 14 | 15 | 1.3 | Good |
| Lab020* | 14 | 15 | 1.4 | Good |
| Lab118* | 14 | 15 | 1.4 | Good |
| Lab065* | 14 | 15 | 1.5 | Good |
| Lab008 | 15 | 15 | 1.6 | Good |
| Lab061 | 15 | 15 | 1.6 | Good |
| Lab049* | 14 | 15 | 1.6 | Good |
| Lab110 | 15 | 15 | 1.7 | Good |
| Lab068* | 14 | 15 | 1.8 | Good |
| Lab043 | 15 | 15 | 1.9 | Good |
| Lab066* | 14 | 15 | 1.9 | Good |
| Lab148* | 14 | 15 | 2.0 | Good |
| Lab136 | 15 | 15 | 2.0 | Good |
| Lab048* | 14 | 15 | 2.0 | Good |
| Lab134* | 14 | 15 | 2.3 | Satisfactory |
| Lab089 | 14 | 14 | 2.3 | Satisfactory |
| Lab081 | 15 | 15 | 2.4 | Satisfactory |
| Lab133 | 15 | 15 | 2.4 | Satisfactory |
| Lab099 | 15 | 15 | 2.7 | Satisfactory |
| Lab117* | 13 | 15 | 2.7 | Satisfactory |
| Lab023* | 14 | 15 | 2.8 | Satisfactory |
| Lab052 | 15 | 15 | 3.0 | Satisfactory |
| Lab058↑* | 14 | 15 | 3.1 | Unsatisfactory |
| Lab003↑ | 14 | 14 | 3.1 | Unsatisfactory |
| Lab009↑ | 15 | 15 | 3.2 | Unsatisfactory |
| Lab115↑ | 13 | 13 | 3.4 | Unsatisfactory |
| Lab046↑ | 15 | 15 | 3.8 | Unsatisfactory |
| Lab100↑* | 13 | 15 | 4.1 | Unsatisfactory |
| Lab079↑* | 13 | 15 | 4.4 | Unsatisfactory |
| Lab116↑ | 15 | 15 | 5.0 | Unsatisfactory |

* Laboratories reporting a false negative result.
↑ Laboratories with SWZ values > 3

Table 4.6.2 Performance of laboratories in Category B.

| Lab Code | No. of z-score achieved in total | No. of acceptable z-scores | % (No. of detected z-score / No. of pesticides present = 15). |
|---|---|---|---|
| Lab145+* | 15 | 14 | 93% |
| Lab051+* | 15 | 11 | 93% |
| Lab022* | 13 | 12 | 80% |
| Lab122* | 13 | 10 | 80% |
| Lab062 | 12 | 12 | 80% |
| Lab098 | 12 | 12 | 80% |
| Lab146 | 12 | 12 | 80% |
| Lab072 | 12 | 11 | 80% |
| Lab002 | 12 | 10 | 80% |
| Lab001* | 12 | 11 | 73% |
| Lab014* | 12 | 11 | 73% |
| Lab107* | 12 | 11 | 73% |
| Lab074* | 12 | 10 | 73% |
| Lab032 | 11 | 11 | 73% |
| Lab056 | 11 | 11 | 73% |
| Lab137 | 11 | 11 | 73% |
| Lab149 | 11 | 11 | 73% |
| Lab142 | 11 | 8 | 73% |
| Lab103+* | 14 | 9 | 67% |
| Lab038* | 14 | 9 | 67% |
| Lab120* | 11 | 10 | 67% |
| Lab054* | 11 | 9 | 67% |
| Lab080* | 11 | 8 | 67% |
| Lab131 | 10 | 7 | 67% |
| Lab082* | 11 | 8 | 60% |
| Lab104 | 9 | 9 | 60% |
| Lab111 | 9 | 9 | 60% |
| Lab091 | 9 | 8 | 60% |
| Lab127 | 9 | 8 | 60% |
| Lab004 | 9 | 7 | 60% |
| Lab126 | 9 | 7 | 60% |
| Lab027 | 8 | 8 | 53% |
| Lab063 | 8 | 8 | 53% |
| Lab021 | 8 | 7 | 53% |
| Lab105 | 8 | 7 | 53% |
| Lab129 | 8 | 7 | 53% |
| Lab084* | 8 | 4 | 47% |
| Lab007 | 7 | 7 | 47% |
| Lab102 | 7 | 7 | 47% |
| Lab124 | 7 | 7 | 47% |
| Lab152 | 7 | 7 | 47% |
| Lab040 | 7 | 5 | 47% |
| Lab095 | 6 | 6 | 40% |
| Lab128 | 6 | 6 | 40% |
| Lab151 | 6 | 6 | 40% |
| Lab026 | 6 | 5 | 40% |
| Lab033 | 6 | 5 | 40% |
| Lab083 | 6 | 5 | 40% |
| Lab101* | 8 | 3 | 33% |

| Lab Code | No. of z-score achieved in total | No. of acceptable z-scores | % (No. of detected z-score / No. of pesticides present = 15). |
|---|---|---|---|
| Lab147* | 7 | 3 | 33% |
| Lab044* | 6 | 5 | 33% |
| Lab096* | 6 | 5 | 33% |
| Lab031 | 5 | 5 | 33% |
| Lab037 | 5 | 5 | 33% |
| Lab059 | 5 | 5 | 33% |
| Lab073 | 5 | 5 | 33% |
| Lab087 | 5 | 5 | 33% |
| Lab125 | 5 | 5 | 33% |
| Lab013* | 6 | 4 | 27% |
| Lab078* | 5 | 4 | 27% |
| Lab010* | 5 | 3 | 27% |
| Lab075 | 4 | 4 | 27% |
| Lab130 | 4 | 4 | 27% |
| Lab132 | 4 | 3 | 27% |
| Lab077* | 4 | 3 | 20% |
| Lab090* | 4 | 3 | 20% |
| Lab119 | 3 | 3 | 20% |
| Lab141 | 3 | 2 | 20% |
| Lab109 | 3 | 1 | 20% |
| Lab106* | 4 | 1 | 13% |
| Lab093* | 3 | 2 | 13% |
| Lab039 | 2 | 2 | 13% |
| Lab064 | 2 | 2 | 13% |
| Lab088 | 2 | 1 | 13% |
| Lab143 | 2 | 2 | 13% |
| Lab150 | 1 | 1 | 7% |
| Lab138* | 5 | 0 | 0% |

* Laboratories reporting a false negative result.
+ Laboratories reporting a false positive result.

## 5. CONCLUSIONS

One hundred and fifty-three laboratories agreed to participate in EUPT-FV-12, out of these, one hundred and forty-nine submitted results following the analysis of the treated leek homogenate test material. Nine of those submitting results were not from EU or EFTA countries so no statistical analysis has been conducted on them.

The pesticide residue levels in the treated leek test material were in close agreement with the target levels proposed by the Quality Control Group.

For each laboratory/pesticide combination, z-scores based on the FFP RSD of 25% have been calculated. The different separation techniques used by the participant laboratories, either gas chromatography or liquid chromatography, are shown in the z-score graphs. Asterisks have been used to mark each bar of the chart to represent a false negative result reported as 'ND' by a laboratory. Subclassification of z-score values into 'acceptable', 'questionable' or 'unacceptable' has also been undertaken.

The criterion of using the Sum of Weighted z-Score formula, first introduced in the EUPT 6 Proficiency Test Report, was applied to the laboratory results and continues to demonstrate their overall performance. Those laboratories reporting thirteen or more results, and no false positive results, were considered to have sufficient scope and were therefore classified into Category A. Those laboratories that reported less than thirteen results were considered to have insufficient scope and were automatically classified into Category B. Laboratories in Category A were also subclassified into 'good', 'satisfactory' or 'unsatisfactory'. Laboratories in Category A that reported false negatives were marked with an asterisk and those obtaining an SWZ value greater than 3 were marked with an '↑'.

Parallel to this, a second criterion using the Sum of Squared z-Scores formula has been introduced for the first time to revise and update the statistical formulas used by the Scientific Panel. This year, it has been calculated for informative purposes only so laboratories can familiarise themselves with it.

The median value for each pesticide was used to obtain the assigned value or "true" concentration, which was also used to calculate the z-scores. Results were required from the laboratories not only for the pesticides as defined by the MRL definition, but also for all the individual components that are included in the MRL definition.
The difficulties experienced over recent years with the application of conversion factors were not encountered in this PT as all conversions were done correctly.

The Quality Control Group agreed that the leeks should be treated with chlorothalonil although they were aware of the potential difficulties inexperienced laboratories may be faced with: indeed, one of their aims was to see how laboratories could manage with a 'tricky', but important, pesticide. Only thirty-six percent of laboratories were able to detect and quantify

chlorothalonil –, which was considered to be a disappointing outcome. This has resulted in a lot of discussions, not only considering laboratories' opinions expressed in the workshops, or in e-mails, but also internally, within the Scientific Group. The eventual decision for chlorothalonil not being evaluated took into account a number of factors: (1) the Qn RSD was 45%, so statistical analysis using 25% FFP RSD would be close to half the dispersion of the results, (2) the fact that out of the three main extraction solvents used by participants, one of them (acetonitrile) proved ineffective unless a number of precautions were taken during the extraction step, making it closer to a Single Residue Method rather than a Multiresidue Method (which was the aim of the exercise). This has highlighted the fact that laboratories will have to adjust their extraction and/or clean-up procedures when analysing certain pesticides in matrices that contain very high levels of potentially interfering compounds.

Amitraz was used to treat the sample (only the parent compound). This was done to evaluate the capability of laboratories to analyse this pesticide. Because of its degradation route, laboratories have at least been given some idea of how to conduct the MRM, that is, if a main metabolite is detected (DMPF or DMF), further analysis should be conducted following the residue definition; in any case, until a revision is undertaken.

Cadusafos was not evaluated statistically because its median (0.018 mg/kg) was too close to the MRRL (0.006 mg/kg). This meant that it was not possible to make an evaluation of z-scores for false negatives..

Overall the results, with regard to each pesticide present in the test material z-scores, were very good (with the exception of chlorothalonil). Most of the pesticides had only a few unacceptable z-scores. Therefore, laboratories generally achieved accurate results for the fifteen pesticides - above 85% overall, except methamidophos, azinphos-methyl and dimethoate sum (omethoate used to treat the sample).

This year, some MRRLs were lowered to: 0.006 mg/kg (cadusafos), 0.003 mg/kg (dimethoate), 0.008 mg/kg (ethoprophos), 0.004 mg/kg (fipronil) and 0.006 mg/kg (oxydemeton-methyl) to encourage laboratories to lower their RLs.

A comparison of previous years' percentages for 'good' laboratories in Category A shows a slight decrease from 51%, for the previous two years, to 45% this year. The number of participant laboratories was very similar to last year. This was probably due to matrix difficulties or to the fact that laboratories did not actually validate their method on this matrix, by using the blank sample.

This year, marking pesticides with an asterisk in the Target Pesticide List was avoided as all of the pesticides present are also in the EU-coordinated monitoring programme and therefore considered by the QCG, and the Commission, to be necessarily present in the scope of the laboratories when monitoring fruits and vegetables.

The use of certain pesticides to treat the sample such as EPN and prothiofos, which are not in the EU-Coordinated Monitoring Programme but present in the new regulation (669/2009), was as a result of the high number of positive findings and sanitary alarms given on imported food from third countries.

Participation in this year's European Proficiency Test 12 involved at least one laboratory from all Member States. The additional participation of Iceland, Norway and Switzerland was confirmed as EFTA countries. Non-European laboratories in Egypt, Turkey and Uruguay also participated, as in previous years, although this year Brazil and Singapore participated for the first time. These Non-EU laboratories are however, official laboratories in their own countries. As is laid down in Article 32 of Regulation (EC) N° 882/2004, one of the EURL's duties is to collaborate with laboratories in third countries that are responsible for analysing feed and food samples and to help them improve the quality of their analyses.

## 6. SUGGESTIONS FOR FUTURE WORK

The following suggestions were made by the Organiser and the Scientific Committee for EUPT-FV12.

As a result of the continuing trend for performance improvement, the stricter conditions applied to EUPT-FV-12 will be carried forward to next year. The aim is that laboratories continue to increase the scope of their methods in order that they may fully enforce EU legislation.

The harmonised MRRL will be maintained for all pesticides. The Target Pesticide List will contain individual analytes that must be sought and reported, as well as the MRL residue definition. This will allow a better statistical treatment of the data to be undertaken, and easier traceability of any possible analytical errors by the laboratories.

A numerical result must be reported for at least 90% of the pesticides present in the test material in order to have demonstrated sufficient scope. Tabulated figures that constitute 90% will be presented in the General Protocol depending on the number of pesticides present in the treated tes material.

Next year the NRL-OfL network will be strengthened further by providing additional information to the NRLs on the performance of all the official laboratories from their country. This information will then be pssed onto OfIs and also be displayed on the EURL web site. Nonetheless, this new measure will encourage more frequent communication and permanently updated information.

The use of the new $SZ^2$ formula next year will result in a better evaluation of the laboratories' overall performance.

These changes are aimed at ensuring, year on year, that laboratories strive evermore to increase the scope of their methods, improve their performance (both in terms of correctly detecting the pesticides present in the test material, and also in accurately quantifying the residue levels present). It is recommended that laboratories should continue to evaluate and adopt new techniques/instrumentation that will help them to attain, or maintain, a Category A classification.

## 7. REFERENCES


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## 8. ACKNOWLEDGEMENTS

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The Organiser wishes to give a special thank-you to Almeria University for the use of their facilities.

**APPENDIX 1. Homogeneity Data**

| Aldicarb sulfone (mg/Kg) | | Azinphos-methyl (mg/Kg) | | Cadusafos (mg/Kg) | | Carbendazim (mg/Kg) | |
|---|---|---|---|---|---|---|---|
| Sample 1 | Sample 2 | Sample 1 | Sample 2 | Sample 1 | Sample 2 | Sample 1 | Sample 2 |
| 0.056 | 0.070 | 0.051 | 0.033 | 0.013 | 0.012 | 0.380 | 0.520 |
| 0.060 | 0.030 | 0.061 | 0.052 | 0.012 | 0.011 | 0.690 | 0.280 |
| 0.040 | 0.060 | 0.028 | 0.058 | 0.011 | 0.010 | 0.360 | 0.680 |
| 0.043 | 0.065 | 0.030 | 0.054 | 0.012 | 0.012 | 0.290 | 0.600 |
| 0.040 | 0.058 | 0.052 | 0.060 | 0.012 | 0.013 | 0.280 | 0.200 |
| 0.044 | 0.028 | 0.056 | 0.070 | 0.014 | 0.012 | 0.480 | 0.690 |
| 0.041 | 0.050 | 0.064 | 0.028 | 0.011 | 0.094 | 0.300 | 0.190 |
| 0.041 | 0.055 | 0.040 | 0.070 | 0.013 | 0.011 | 0.600 | 0.110 |
| 0.064 | 0.043 | 0.039 | 0.067 | 0.012 | 0.094 | 0.700 | 0.090 |
| 0.042 | 0.050 | 0.058 | 0.025 | 0.012 | 0.012 | 0.270 | 0.119 |

| Chlorpyrifos-ethyl (mg/Kg) | | Chlorothalonil (mg/Kg) | | DMF (mg/Kg) | | DMPF (mg/Kg) | |
|---|---|---|---|---|---|---|---|
| Sample 1 | Sample 2 | Sample 1 | Sample 2 | Sample 1 | Sample 2 | Sample 1 | Sample 2 |
| 0.250 | 0.150 | 0.216 | 0.170 | 0.036 | 0.031 | 0.071 | 0.062 |
| 0.270 | 0.134 | 0.125 | 0.220 | 0.031 | 0.026 | 0.066 | 0.065 |
| 0.100 | 0.290 | 0.190 | 0.190 | 0.031 | 0.026 | 0.060 | 0.056 |
| 0.220 | 0.260 | 0.225 | 0.194 | 0.025 | 0.028 | 0.052 | 0.054 |
| 0.150 | 0.270 | 0.197 | 0.334 | 0.032 | 0.030 | 0.065 | 0.058 |
| 0.160 | 0.120 | 0.220 | 0.199 | 0.030 | 0.031 | 0.066 | 0.062 |
| 0.250 | 0.300 | 0.180 | 0.212 | 0.032 | 0.029 | 0.064 | 0.065 |
| 0.240 | 0.390 | 0.267 | 0.128 | 0.030 | 0.029 | 0.063 | 0.064 |
| 0.260 | 0.170 | 0.190 | 0.198 | 0.033 | 0.031 | 0.066 | 0.062 |
| 0.138 | 0.290 | 0.180 | 0.215 | 0.030 | 0.032 | 0.062 | 0.060 |

| EPN (mg/Kg) | | Ethion (mg/Kg) | | Fenpropathrin (mg/Kg) | | Imidacloprid (mg/Kg) | |
|---|---|---|---|---|---|---|---|
| Sample 1 | Sample 2 | Sample 1 | Sample 2 | Sample 1 | Sample 2 | Sample 1 | Sample 2 |
| 0.060 | 0.050 | 0.130 | 0.080 | 0.060 | 0.080 | 0.250 | 0.120 |
| 0.040 | 0.060 | 0.090 | 0.040 | 0.090 | 0.040 | 0.300 | 0.180 |
| 0.040 | 0.060 | 0.120 | 0.090 | 0.120 | 0.090 | 0.328 | 0.149 |
| 0.060 | 0.080 | 0.080 | 0.040 | 0.068 | 0.040 | 0.432 | 0.459 |
| 0.040 | 0.060 | 0.090 | 0.070 | 0.090 | 0.070 | 0.125 | 0.080 |
| 0.075 | 0.080 | 0.075 | 0.060 | 0.075 | 0.085 | 0.248 | 0.300 |
| 0.055 | 0.035 | 0.075 | 0.035 | 0.075 | 0.035 | 0.397 | 0.320 |
| 0.079 | 0.060 | 0.089 | 0.080 | 0.059 | 0.025 | 0.375 | 0.375 |
| 0.065 | 0.040 | 0.125 | 0.070 | 0.125 | 0.060 | 0.348 | 0.480 |
| 0.040 | 0.040 | 0.100 | 0.090 | 0.070 | 0.040 | 0.291 | 0.490 |

**APPENDIX 1. Homogeneity Data**

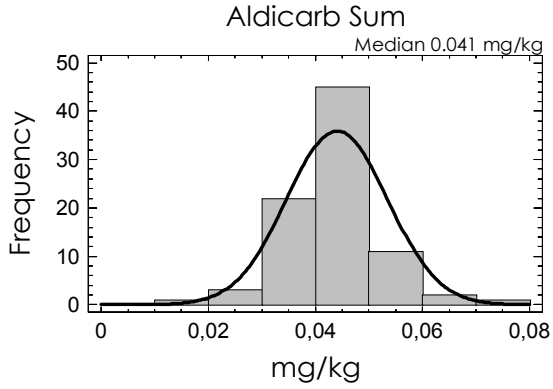
| Kresoxim-Methyl (mg/Kg) | | Metamidophos (mg/Kg) | | Omethoate (mg/Kg) | | Oxamyl (mg/Kg) | |
|---|---|---|---|---|---|---|---|
| Sample 1 | Sample 2 | Sample 1 | Sample 2 | Sample 1 | Sample 2 | Sample 1 | Sample 2 |
| 0.320 | 0.120 | 0.220 | 0.195 | 0.030 | 0.050 | 0.345 | 0.246 |
| 0.250 | 0.180 | 0.300 | 0.238 | 0.020 | 0.020 | 0.300 | 0.249 |
| 0.418 | 0.149 | 0.418 | 0.349 | 0.040 | 0.030 | 0.428 | 0.357 |
| 0.432 | 0.259 | 0.342 | 0.299 | 0.030 | 0.040 | 0.375 | 0.426 |
| 0.269 | 0.080 | 0.369 | 0.296 | 0.020 | 0.030 | 0.249 | 0.367 |
| 0.253 | 0.300 | 0.283 | 0.340 | 0.035 | 0.040 | 0.333 | 0.469 |
| 0.349 | 0.320 | 0.249 | 0.240 | 0.025 | 0.015 | 0.251 | 0.348 |
| 0.378 | 0.375 | 0.478 | 0.255 | 0.049 | 0.030 | 0.498 | 0.349 |
| 0.316 | 0.480 | 0.316 | 0.240 | 0.035 | 0.020 | 0.349 | 0.458 |
| 0.287 | 0.490 | 0.247 | 0.369 | 0.020 | 0.020 | 0.346 | 0.249 |

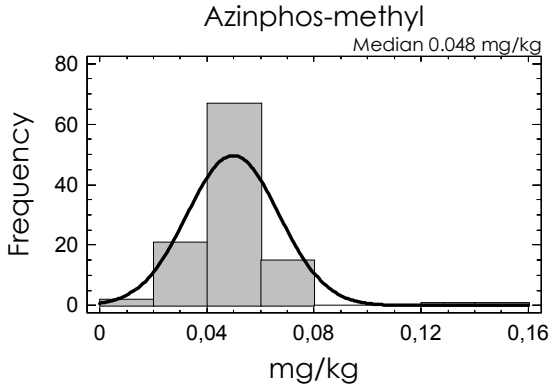
| Prothiofos (mg/Kg) | | Thiacloprid (mg/Kg) | | Triflumuron (mg/Kg) | |
|---|---|---|---|---|---|
| Sample 1 | Sample 2 | Sample 1 | Sample 2 | Sample 1 | Sample 2 |
| 0.280 | 0.176 | 0.310 | 0.208 | 0.255 | 0.245 |
| 0.329 | 0.149 | 0.394 | 0.534 | 0.360 | 0.364 |
| 0.517 | 0.437 | 0.287 | 0.267 | 0.291 | 0.248 |
| 0.420 | 0.271 | 0.312 | 0.314 | 0.364 | 0.348 |
| 0.128 | 0.287 | 0.378 | 0.349 | 0.348 | 0.249 |
| 0.383 | 0.469 | 0.389 | 0.294 | 0.319 | 0.197 |
| 0.341 | 0.245 | 0.457 | 0.254 | 0.387 | 0.349 |
| 0.249 | 0.291 | 0.410 | 0.391 | 0.420 | 0.247 |
| 0.316 | 0.227 | 0.325 | 0.398 | 0.298 | 0.200 |
| 0.276 | 0.183 | 0.314 | 0.320 | 0.246 | 0.429 |

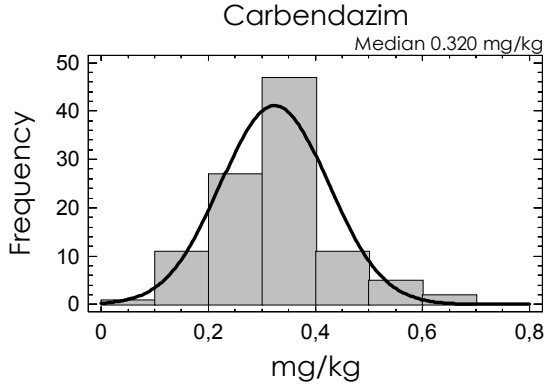
The sample numbers used for this test were: 5, 8, 89, 154, 156, 169, 196, 208, 222 and 243.

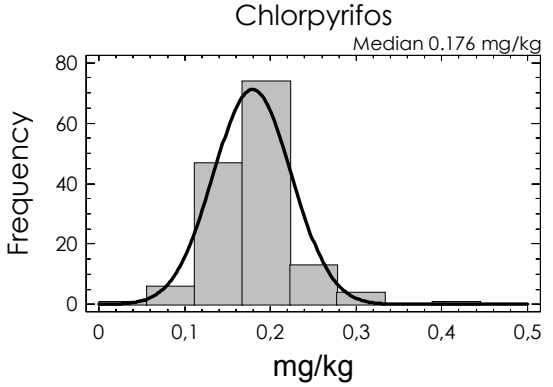
**APPENDIX 2. Histograms of residue data for each pesticide from all the laboratories.**

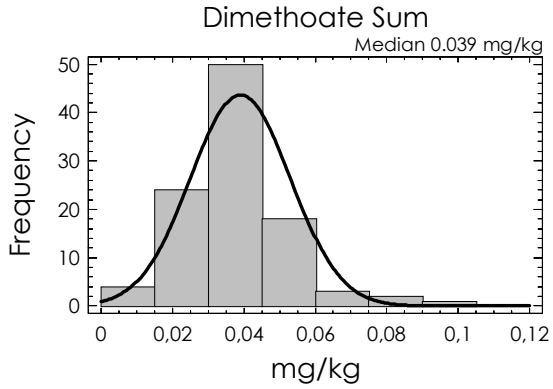
Results presented as histograms.

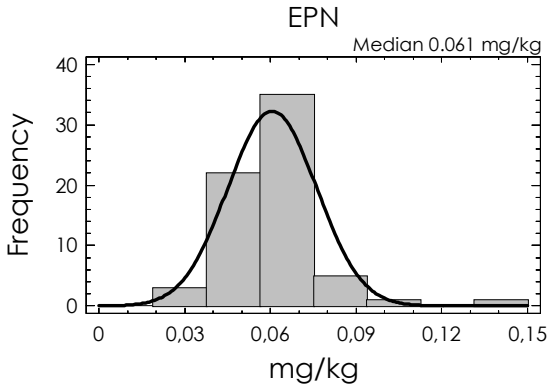


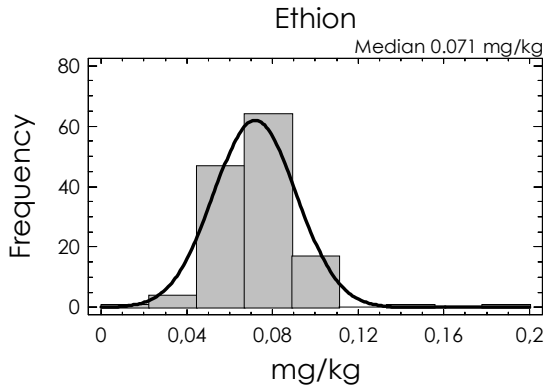



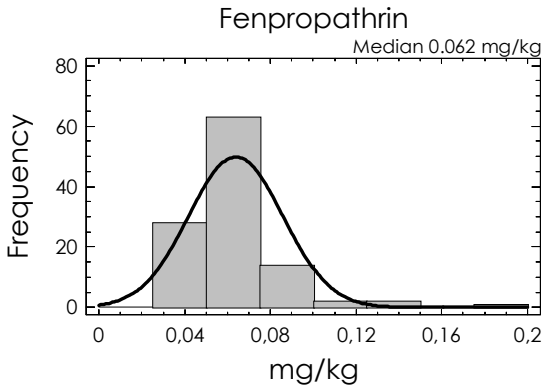



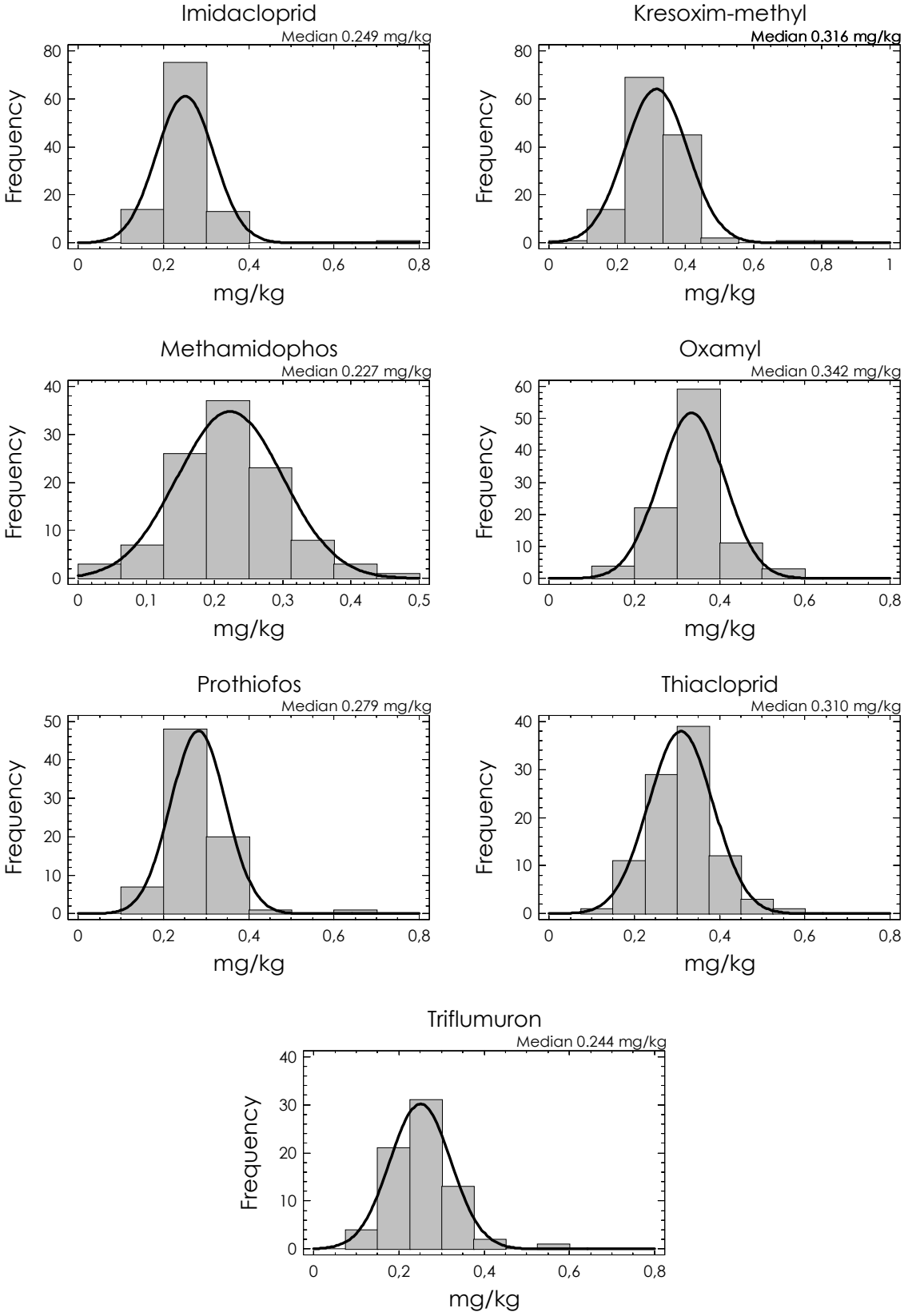



**APPENDIX 2. Histograms of residue data for each pesticide from all the laboratories.**



**APPENDIX 3. Results (mg/kg) and z-scores for FFP RSD (25%).**

**Results given by the laboratories (mg/kg) and their calculated z-score value using FFP RSD 25%**

| Lab Code | Aldicarb Sum | z-Score (FFP RSD 25%) | Azinphos-methyl | z-Score (FFP RSD 25%) | Carbendazim | z-Score (FFP RSD 25%) | Chlorothalonil | z-Score (FFP RSD 25%) | Chlorpyrifos-ethyl | z-Score (FFP RSD 25%) | Dimethoate Sum | z-Score (FFP RSD 25%) | EPN | z-Score (FFP RSD 25%) | Ethion | z-Score (FFP RSD 25%) | Fenpropathrin | z-Score (FFP RSD 25%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MRRL** | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.003** | | **0.01** | | **0.01** | | **0.01** | |
| **Median (mg/kg)** | **0.041** | | **0.048** | | **0.320** | | **0.216** | | **0.176** | | **0.039** | | **0.061** | | **0.071** | | **0.062** | |
| Lab001 | 0.039 | -0.2 | ND | -3.2 | 0.450 | 1.6 | 0.152 | -1.2 | 0.180 | 0.1 | 0.032 | -0.7 | NA | | 0.084 | 0.8 | 0.064 | 0.1 |
| Lab002 | 0.049 | 0.8 | 0.045 | -0.2 | 0.503 | 2.3 | | | 0.214 | 0.8 | 0.036 | -0.3 | NA | | 0.090 | 1.1 | NA | |
| Lab003 | 0.052 | 1.1 | 0.043 | -0.4 | 0.640 | 4.0 | | | 0.160 | -0.4 | 0.037 | -0.2 | NA | | 0.063 | -0.4 | 0.063 | 0.1 |
| Lab004 | NA | | 0.045 | -0.2 | NA | | | -3.8 | 0.175 | 0.0 | 0.019 | -2.1 | 0.095 | 2.2 | 0.089 | 1.0 | 0.080 | 1.2 |
| Lab005 | 0.042 | 0.1 | 0.044 | -0.3 | 0.360 | 0.5 | | -3.8 | 0.241 | 1.5 | 0.049 | 1.0 | 0.063 | 0.1 | 0.105 | 1.9 | 0.077 | 1.0 |
| Lab006 | 0.042 | 0.1 | 0.038 | -0.8 | 0.324 | 0.1 | | -3.8 | 0.168 | -0.2 | 0.048 | 0.9 | 0.051 | -0.6 | 0.071 | 0.0 | 0.063 | 0.1 |
| Lab007 | NA | | NA | | NA | | | | 0.110 | -1.5 | 0.029 | -1.0 | NA | | 0.045 | -1.5 | 0.050 | -0.8 |
| Lab008 | 0.046 | 0.5 | 0.044 | -0.3 | 0.339 | 0.2 | | -3.8 | 0.192 | 0.4 | 0.044 | 0.5 | 0.060 | -0.1 | 0.076 | 0.3 | 0.045 | -1.1 |
| Lab009 | 0.073 | 3.1 | 0.067 | 1.6 | 0.440 | 1.5 | | -3.8 | 0.245 | 1.6 | 0.054 | 1.5 | 0.080 | 1.2 | 0.094 | 1.3 | 0.060 | -0.1 |
| Lab010 | 0.022 | -1.9 | NA | | NA | | 0.575 | 6.6 | 0.227 | 1.1 | NA | | NA | | NA | | ND | -3.4 |
| Lab011 | 0.040 | -0.1 | 0.054 | 0.5 | 0.373 | 0.7 | | | 0.140 | -0.8 | 0.049 | 1.0 | 0.038 | -1.5 | 0.063 | -0.4 | 0.045 | -1.1 |
| Lab012 | 0.045 | 0.4 | 0.047 | -0.1 | 0.303 | -0.2 | 0.242 | 0.5 | 0.168 | -0.2 | 0.039 | 0.0 | 0.062 | 0.1 | 0.072 | 0.1 | 0.076 | 0.9 |
| Lab013 | NA | | ND | -3.2 | NA | | | -3.8 | 0.186 | 0.2 | NA | | NA | | 0.073 | 0.1 | 0.076 | 0.9 |
| Lab014 | ND | -3.0 | 0.040 | -0.7 | 0.300 | -0.3 | | -3.8 | 0.200 | 0.5 | 0.027 | -1.2 | NA | | 0.070 | 0.0 | 0.050 | -0.8 |
| Lab015 | 0.028 | -1.3 | 0.045 | -0.2 | 0.307 | -0.2 | 0.299 | 1.5 | 0.163 | -0.3 | 0.023 | -1.6 | 0.063 | 0.1 | 0.074 | 0.2 | 0.091 | 1.9 |
| Lab016 | 0.043 | 0.2 | 0.038 | -0.8 | 0.274 | -0.6 | 0.232 | 0.3 | 0.175 | 0.0 | 0.039 | 0.0 | 0.054 | -0.5 | 0.068 | -0.2 | 0.068 | 0.4 |
| Lab017 | 0.056 | 1.5 | 0.056 | 0.7 | 0.419 | 1.2 | | -3.8 | 0.191 | 0.3 | 0.047 | 0.8 | 0.066 | 0.3 | 0.073 | 0.1 | 0.066 | 0.3 |
| Lab018 | 0.044 | 0.3 | 0.041 | -0.6 | 0.437 | 1.5 | | | 0.182 | 0.1 | 0.041 | 0.2 | 0.054 | -0.5 | 0.067 | -0.2 | 0.063 | 0.1 |
| Lab019 | 0.041 | 0.0 | 0.032 | -1.3 | 0.318 | 0.0 | 0.249 | 0.6 | 0.119 | -1.3 | 0.026 | -1.4 | 0.039 | -1.5 | 0.051 | -1.1 | 0.044 | -1.2 |
| Lab020 | 0.033 | -0.8 | ND | -3.2 | 0.375 | 0.7 | | -3.8 | 0.176 | 0.0 | 0.034 | -0.5 | 0.059 | -0.1 | 0.072 | 0.1 | 0.055 | -0.5 |
| Lab021 | NA | | NA | | NA | | | | 0.165 | -0.3 | 0.054 | 1.5 | NA | | 0.073 | 0.1 | NA | |
| Lab022 | 0.033 | -0.8 | 0.053 | 0.4 | 0.336 | 0.2 | 0.282 | 1.2 | 0.184 | 0.2 | ND | -3.7 | 0.066 | 0.3 | 0.063 | -0.4 | NA | |
| Lab023 | 0.044 | 0.3 | 0.045 | -0.2 | 0.507 | 2.3 | 0.240 | 0.4 | 0.126 | -1.1 | 0.042 | 0.3 | 0.060 | -0.1 | 0.052 | -1.1 | 0.045 | -1.1 |
| Lab024 | 0.048 | 0.7 | 0.052 | 0.3 | 0.335 | 0.2 | | -3.8 | 0.192 | 0.4 | 0.045 | 0.6 | 0.081 | 1.3 | 0.072 | 0.0 | 0.075 | 0.8 |
| Lab025 | 0.043 | 0.2 | 0.055 | 0.6 | 0.520 | 2.5 | 0.330 | 2.1 | 0.160 | -0.4 | 0.041 | 0.2 | 0.046 | -1.0 | 0.061 | -0.5 | 0.048 | -0.9 |
| Lab026 | NA | | 0.040 | -0.7 | NA | | | -3.8 | 0.140 | -0.8 | 0.027 | -1.2 | NA | | 0.150 | 4.5 | 0.040 | -1.4 |
| Lab027 | NA | | 0.047 | -0.1 | NA | | | | 0.159 | -0.4 | NA | | NA | | NA | | NA | |
| Lab028 | 0.027 | -1.4 | 0.047 | -0.1 | 0.328 | 0.1 | 0.311 | 1.8 | 0.186 | 0.2 | 0.032 | -0.7 | 0.064 | 0.2 | 0.076 | 0.3 | 0.075 | 0.9 |
| Lab029 | 0.051 | 1.0 | 0.025 | -1.9 | 0.252 | -0.9 | 0.131 | -1.6 | 0.111 | -1.5 | 0.028 | -1.1 | 0.037 | -1.6 | 0.049 | -1.2 | 0.044 | -1.2 |
| Lab030 | 0.060 | 1.9 | 0.060 | 1.0 | 0.340 | 0.3 | 0.055 | -3.0 | 0.155 | -0.5 | 0.040 | 0.1 | NA | | 0.063 | -0.4 | 0.055 | -0.5 |
| Lab031 | NA | | 0.066 | 1.5 | NA | | | | 0.115 | -1.4 | 0.041 | 0.2 | NA | | NA | | 0.050 | -0.8 |
| Lab032 | 0.043 | 0.2 | 0.058 | 0.9 | 0.338 | 0.2 | 0.227 | 0.2 | 0.187 | 0.2 | 0.044 | 0.5 | NA | | 0.071 | 0.0 | NA | |
| Lab033 | NA | | 0.051 | 0.3 | 0.140 | -2.3 | 0.326 | 2.0 | 0.200 | 0.5 | NA | | NA | | 0.067 | -0.2 | 0.066 | 0.3 |
| Lab034 | 0.045 | 0.4 | 0.062 | 1.1 | 0.267 | -0.7 | 0.170 | -0.9 | 0.169 | -0.2 | 0.066 | 2.8 | 0.056 | -0.3 | 0.067 | -0.2 | 0.065 | 0.2 |
| Lab035 | No Results Reported | | | | | | | | | | | | | | | | | |
| Lab036 | 0.045 | 0.4 | 0.046 | -0.2 | 0.330 | 0.1 | 0.292 | 1.4 | 0.171 | -0.1 | 0.043 | 0.4 | 0.067 | 0.4 | 0.070 | -0.1 | 0.064 | 0.1 |
| Lab037 | NA | | 0.050 | 0.2 | 0.300 | -0.3 | 0.350 | 2.5 | 0.200 | 0.5 | NA | | NA | | 0.070 | 0.0 | NA | |
| Lab038 | ND | -3.0 | ND | -3.2 | 0.074 | -3.1 | | -3.8 | 0.177 | 0.0 | ND | -3.7 | 0.039 | -1.5 | 0.072 | 0.1 | 0.066 | 0.2 |
| Lab039 | NA | | NA | | NA | | | | 0.236 | 1.3 | NA | | NA | | NA | | NA | |
| Lab040 | NA | | 0.033 | -1.2 | NA | | | | 0.034 | -3.2 | 0.048 | 0.9 | NA | | 0.052 | -1.1 | 0.279 | 14.0 |
| Lab041 | 0.051 | 1.0 | 0.044 | -0.3 | 0.346 | 0.3 | | -3.8 | 0.220 | 1.0 | 0.054 | 1.5 | 0.053 | -0.5 | 0.064 | -0.4 | 0.075 | 0.8 |

**APPENDIX 3. Results (mg/Kg) and z-scores for FFP RSD (25%).**

| Lab Code | Aldicarb Sum | z-Score (FFP RSD 25%) | Azinphos-methyl | z-Score (FFP RSD 25%) | Carbendazim | z-Score (FFP RSD 25%) | Chlorothalonil | z-Score (FFP RSD 25%) | Chlorpyrifos-ethyl | z-Score (FFP RSD 25%) | Dimethoate Sum | z-Score (FFP RSD 25%) | EPN | z-Score (FFP RSD 25%) | Ethion | z-Score (FFP RSD 25%) | Fenpropathrin | z-Score (FFP RSD 25%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MRRL** | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.003** | | **0.01** | | **0.01** | | **0.01** | |
| **Median (mg/kg)** | **0.041** | | **0.048** | | **0.320** | | **0.216** | | **0.176** | | **0.039** | | **0.061** | | **0.071** | | **0.062** | |
| Lab042 | 0.046 | 0.5 | 0.033 | -1.2 | 0.325 | 0.1 | | -3.8 | 0.152 | -0.6 | 0.056 | 1.7 | 0.062 | 0.1 | 0.058 | -0.7 | 0.059 | -0.2 |
| Lab043 | 0.045 | 0.4 | 0.060 | 1.0 | 0.162 | -2.0 | | -3.8 | 0.182 | 0.1 | 0.077 | 3.9 | 0.061 | 0.0 | 0.075 | 0.2 | 0.044 | -1.2 |
| Lab044 | NA | | NA | | NA | | | -3.8 | 0.160 | -0.4 | ND | -3.7 | NA | | 0.060 | -0.6 | 0.050 | -0.8 |
| Lab045 | 0.050 | 0.9 | 0.055 | 0.6 | 0.326 | 0.1 | | -3.8 | 0.189 | 0.3 | 0.039 | 0.0 | 0.059 | -0.2 | 0.079 | 0.5 | 0.076 | 0.9 |
| Lab046 | 0.049 | 0.8 | 0.060 | 1.0 | 1.450 | 14.1 | | -3.8 | 0.207 | 0.7 | 0.046 | 0.7 | 0.064 | 0.2 | 0.061 | -0.5 | 0.190 | 8.3 |
| Lab047 | 0.047 | 0.6 | 0.048 | 0.0 | 0.343 | 0.3 | | -3.8 | 0.191 | 0.3 | 0.036 | -0.4 | 0.063 | 0.1 | 0.081 | 0.6 | 0.073 | 0.7 |
| Lab048 | 0.041 | 0.0 | 0.029 | -1.6 | 0.288 | -0.4 | | -3.8 | 0.114 | -1.4 | ND | -3.7 | 0.052 | -0.6 | 0.037 | -1.9 | 0.050 | -0.8 |
| Lab049 | 0.049 | 0.8 | ND | -3.2 | 0.320 | 0.0 | 0.063 | -2.8 | 0.245 | 1.6 | 0.043 | 0.4 | 0.058 | -0.2 | 0.099 | 1.6 | 0.069 | 0.4 |
| Lab050 | 0.044 | 0.3 | 0.044 | -0.3 | 0.339 | 0.2 | 0.356 | 2.6 | 0.239 | 1.4 | 0.041 | 0.2 | 0.078 | 1.1 | 0.100 | 1.7 | 0.076 | 0.9 |
| Lab051 | 0.069 | 2.7 | 0.049 | 0.1 | 0.470 | 1.9 | | -3.8 | 0.230 | 1.2 | 0.037 | -0.2 | ND | -3.3 | 0.107 | 2.1 | 0.111 | 3.2 |
| Lab052 | 0.039 | -0.2 | 0.053 | 0.4 | 2.430 | 26.4 | | -3.8 | 0.203 | 0.6 | 0.038 | -0.1 | 0.065 | 0.3 | 0.076 | 0.3 | 0.110 | 3.1 |
| Lab053 | 0.047 | 0.6 | 0.043 | -0.4 | 0.301 | -0.2 | 0.064 | -2.8 | 0.168 | -0.2 | 0.047 | 0.8 | 0.049 | -0.8 | 0.071 | 0.0 | 0.059 | -0.2 |
| Lab054 | 0.035 | -0.6 | 0.053 | 0.4 | 0.218 | -1.3 | | -3.8 | 0.112 | -1.5 | ND | -3.7 | NA | | 0.043 | -1.6 | 0.050 | -0.8 |
| Lab055 | 0.038 | -0.3 | 0.040 | -0.6 | 0.321 | 0.0 | | -3.8 | 0.119 | -1.3 | 0.051 | 1.2 | 0.052 | -0.6 | 0.055 | -0.9 | 0.056 | -0.4 |
| Lab056 | NA | | 0.061 | 1.1 | 0.369 | 0.6 | | -3.8 | 0.193 | 0.4 | 0.028 | -1.1 | NA | | 0.071 | 0.0 | 0.060 | -0.1 |
| Lab057 | 0.036 | -0.5 | 0.044 | -0.3 | 0.340 | 0.3 | 0.260 | 0.8 | 0.220 | 1.0 | 0.043 | 0.4 | 0.050 | -0.7 | 0.080 | 0.5 | 0.068 | 0.4 |
| Lab058 | 0.050 | 0.9 | 0.033 | -1.2 | 0.528 | 2.6 | | -3.8 | 0.295 | 2.7 | ND | -3.7 | 0.064 | 0.2 | 0.075 | 0.2 | 0.085 | 1.5 |
| Lab059 | NA | | 0.058 | 0.8 | NA | | 0.138 | -1.4 | 0.170 | -0.1 | NA | | NA | | 0.072 | 0.1 | 0.060 | -0.1 |
| Lab060 | 0.036 | -0.5 | 0.037 | -0.9 | 0.329 | 0.1 | | | 0.148 | -0.6 | 0.037 | -0.2 | NA | | 0.061 | -0.5 | 0.067 | 0.3 |
| Lab061 | 0.044 | 0.3 | 0.062 | 1.2 | 0.262 | -0.7 | | -3.8 | 0.184 | 0.2 | 0.075 | 3.6 | 0.063 | 0.1 | 0.076 | 0.3 | 0.058 | -0.3 |
| Lab062 | 0.047 | 0.6 | 0.057 | 0.8 | 0.264 | -0.7 | | -3.8 | 0.243 | 1.5 | 0.042 | 0.2 | NA | | 0.093 | 1.2 | 0.083 | 1.3 |
| Lab063 | 0.055 | 1.4 | 0.040 | -0.7 | 0.313 | -0.1 | 0.085 | -2.4 | 0.135 | -0.9 | NA | | NA | | NA | | 0.046 | -1.0 |
| Lab064 | NA | | NA | | NA | | | | 0.176 | 0.0 | NA | | NA | | NA | | NA | |
| Lab065 | 0.041 | 0.0 | ND | -3.2 | 0.409 | 1.1 | | -3.8 | 0.172 | -0.1 | 0.051 | 1.2 | 0.054 | -0.5 | 0.079 | 0.5 | 0.068 | 0.4 |
| Lab066 | 0.048 | 0.7 | ND | -3.2 | 0.360 | 0.5 | | -3.8 | 0.210 | 0.8 | 0.052 | 1.3 | 0.067 | 0.4 | 0.096 | 1.4 | 0.089 | 1.7 |
| Lab067 | 0.050 | 0.9 | 0.052 | 0.3 | 0.354 | 0.4 | 0.084 | -2.4 | 0.217 | 0.9 | 0.029 | -1.0 | 0.075 | 0.9 | 0.084 | 0.8 | 0.073 | 0.7 |
| Lab068 | 0.031 | -1.0 | ND | -3.2 | 0.341 | 0.3 | | -3.8 | 0.207 | 0.7 | 0.035 | -0.4 | 0.044 | -1.1 | 0.090 | 1.1 | 0.085 | 1.5 |
| Lab069 | NA | | ND | -3.2 | 0.185 | -1.7 | 0.060 | -2.9 | 0.110 | -1.5 | 0.011 | -2.9 | NA | | 0.040 | -1.7 | ND | -3.4 |
| Lab070 | 0.037 | -0.4 | 0.068 | 1.7 | 0.178 | -1.8 | 0.097 | -2.2 | 0.185 | 0.2 | 0.035 | -0.4 | 0.059 | -0.1 | 0.073 | 0.1 | 0.059 | -0.2 |
| Lab071 | 0.044 | 0.3 | 0.061 | 1.1 | 0.302 | -0.2 | 0.209 | -0.1 | 0.184 | 0.2 | 0.039 | 0.0 | 0.062 | 0.1 | 0.074 | 0.2 | 0.068 | 0.4 |
| Lab072 | 0.038 | -0.3 | 0.064 | 1.3 | 0.687 | 4.6 | | -3.8 | 0.183 | 0.1 | 0.021 | -1.9 | NA | | 0.068 | -0.2 | 0.055 | -0.5 |
| Lab073 | NA | | 0.051 | 0.3 | NA | | | | 0.155 | -0.5 | NA | | NA | | 0.068 | -0.2 | 0.043 | -1.2 |
| Lab074 | 0.069 | 2.7 | ND | -3.2 | 0.269 | -0.6 | | -3.8 | 0.212 | 0.8 | 0.023 | -1.6 | NA | | 0.051 | -1.1 | 0.047 | -1.0 |
| Lab075 | NA | | 0.049 | 0.1 | NA | | | | 0.168 | -0.2 | NA | | NA | | 0.080 | 0.5 | NA | |
| Lab076 | ND | -3.0 | NA | | ND | -3.9 | | -3.8 | 0.170 | -0.1 | ND | -3.7 | NA | | 0.083 | 0.7 | 0.149 | 5.6 |
| Lab077 | NA | | 0.066 | 1.5 | NA | | 0.217 | 0.0 | 0.249 | 1.6 | ND | -3.7 | NA | | 0.097 | 1.5 | NA | |
| Lab078 | NA | | 0.040 | -0.7 | NA | | | -3.8 | 0.250 | 1.7 | NA | | NA | | 0.080 | 0.5 | ND | -3.4 |
| Lab079 | 0.056 | 1.5 | 0.048 | 0.0 | 0.449 | 1.6 | | -3.8 | 0.197 | 0.5 | ND | -3.7 | 0.073 | 0.8 | 0.071 | 0.0 | 0.053 | -0.6 |
| Lab080 | 0.044 | 0.3 | 0.044 | -0.3 | 0.220 | -1.3 | 0.060 | -2.9 | 0.120 | -1.3 | ND | -3.7 | NA | | 0.060 | -0.6 | NA | |
| Lab081 | 0.040 | -0.1 | 0.288 | 20.0 | 0.390 | 0.9 | | -3.8 | 0.157 | -0.4 | 0.020 | -2.0 | 0.057 | -0.3 | 0.057 | -0.8 | 0.051 | -0.7 |
| Lab082 | NA | | ND | -3.2 | 0.239 | -1.0 | | -3.8 | 0.195 | 0.4 | NA | | 0.077 | 1.1 | 0.080 | 0.5 | 0.079 | 1.1 |
| Lab083 | NA | | 0.055 | 0.6 | NA | | | | 0.140 | -0.8 | NA | | NA | | 0.063 | -0.4 | NA | |
| Lab084 | ND | -3.0 | NA | | 0.170 | -1.9 | | -3.8 | 0.190 | 0.3 | NA | | NA | | 0.110 | 2.2 | NA | |
| Lab085 | 0.045 | 0.4 | 0.047 | -0.1 | 0.319 | 0.0 | | -3.8 | 0.196 | 0.4 | 0.031 | -0.8 | 0.062 | 0.1 | 0.086 | 0.9 | 0.065 | 0.2 |

**APPENDIX 3. Results (mg/kg) and z-scores for FFP RSD (25%).**

| Lab Code | Aldicarb Sum | z-Score (FFP RSD 25%) | Azinphos-methyl | z-Score (FFP RSD 25%) | Carbendazim | z-Score (FFP RSD 25%) | Chlorothalonil | z-Score (FFP RSD 25%) | Chlorpyrifos-ethyl | z-Score (FFP RSD 25%) | Dimethoate Sum | z-Score (FFP RSD 25%) | EPN | z-Score (FFP RSD 25%) | Ethion | z-Score (FFP RSD 25%) | Fenpropathrin | z-Score (FFP RSD 25%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MRRL** | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.003** | | **0.01** | | **0.01** | | **0.01** | |
| **Median (mg/kg)** | **0.041** | | **0.048** | | **0.320** | | **0.216** | | **0.176** | | **0.039** | | **0.061** | | **0.071** | | **0.062** | |
| Lab086 | No Results Reported | | | | | | | | | | | | | | | | | |
| Lab087 | NA | | 0.044 | -0.3 | 0.343 | 0.3 | | | 0.164 | -0.3 | 0.041 | 0.2 | NA | | NA | | 0.053 | -0.6 |
| Lab088 | NA | | NA | | NA | | | | NA | | NA | | NA | | 0.080 | 0.5 | NA | |
| Lab089 | NA | | 0.029 | -1.6 | 0.194 | -1.6 | | -3.8 | 0.188 | 0.3 | 0.035 | -0.4 | 0.053 | -0.5 | 0.072 | 0.1 | 0.064 | 0.1 |
| Lab090 | NA | | ND | -3.2 | NA | | | -3.8 | 0.132 | -1.0 | NA | | NA | | 0.062 | -0.5 | NA | |
| Lab091 | 0.034 | -0.7 | NA | | NA | | 0.225 | 0.2 | 0.270 | 2.1 | 0.032 | -0.7 | NA | | 0.070 | 0.0 | NA | |
| Lab092 | NA | | 0.009 | -3.2 | 0.294 | -0.3 | | | 0.138 | -0.9 | 0.030 | -1.0 | NA | | 0.076 | 0.3 | NA | |
| Lab093 | NA | | NA | | NA | | 0.132 | -1.6 | 0.174 | -0.1 | ND | -3.7 | NA | | NA | | NA | |
| Lab094 | 0.047 | 0.6 | 0.048 | 0.0 | 0.316 | -0.1 | 0.257 | 0.8 | 0.158 | -0.4 | 0.045 | 0.6 | 0.036 | -1.6 | 0.062 | -0.5 | NA | |
| Lab095 | NA | | 0.052 | 0.4 | 0.318 | 0.0 | | | 0.147 | -0.7 | NA | | NA | | 0.078 | 0.4 | 0.067 | 0.3 |
| Lab096 | NA | | 0.041 | -0.6 | NA | | 0.248 | 0.6 | 0.170 | -0.1 | ND | -3.7 | NA | | 0.061 | -0.5 | 0.071 | 0.6 |
| Lab097 | 0.040 | -0.1 | 0.036 | -1.0 | 0.304 | -0.2 | 0.267 | 0.9 | 0.138 | -0.9 | 0.033 | -0.6 | 0.046 | -1.0 | 0.051 | -1.1 | 0.055 | -0.5 |
| Lab098 | 0.040 | -0.1 | 0.046 | -0.2 | 0.320 | 0.0 | | | 0.176 | 0.0 | 0.041 | 0.2 | NA | | 0.065 | -0.3 | 0.066 | 0.3 |
| Lab099 | 0.060 | 1.9 | 0.043 | -0.4 | 0.360 | 0.5 | | -3.8 | 0.155 | -0.5 | 0.013 | -2.7 | 0.050 | -0.7 | 0.056 | -0.8 | 0.052 | -0.6 |
| Lab100 | 0.041 | 0.0 | ND | -3.2 | 0.236 | -1.1 | | -3.8 | 0.310 | 3.0 | 0.049 | 1.0 | 0.045 | -1.0 | 0.088 | 1.0 | 0.040 | -1.4 |
| Lab101 | NA | | ND | -3.2 | NA | | | -3.8 | 0.074 | -2.3 | ND | -3.7 | 0.087 | 1.7 | 0.046 | -1.4 | 0.036 | -1.7 |
| Lab102 | NA | | 0.052 | 0.3 | 0.320 | 0.0 | 0.078 | -2.6 | 0.176 | 0.0 | 0.037 | -0.2 | NA | | 0.067 | -0.2 | 0.062 | 0.0 |
| Lab103 | ND | -3.0 | ND | -3.2 | 0.542 | 2.8 | 0.070 | -2.7 | 0.172 | -0.1 | 0.050 | 1.1 | ND | -3.3 | 0.083 | 0.7 | ND | -3.4 |
| Lab104 | 0.033 | -0.8 | 0.058 | 0.8 | 0.280 | -0.5 | 0.095 | -2.2 | 0.183 | 0.1 | 0.039 | 0.0 | NA | | 0.060 | -0.6 | 0.054 | -0.5 |
| Lab105 | NA | | NA | | 0.260 | -0.8 | | -3.8 | 0.200 | 0.5 | NA | | NA | | 0.080 | 0.5 | NA | |
| Lab106 | NA | | ND | -3.2 | NA | | | -3.8 | ND | -3.8 | NA | | NA | | 0.056 | -0.9 | NA | |
| Lab107 | 0.041 | 0.0 | ND | -3.2 | 0.240 | -1.0 | | -3.8 | 0.190 | 0.3 | 0.046 | 0.7 | NA | | 0.061 | -0.5 | 0.066 | 0.3 |
| Lab108 | 0.055 | 1.4 | NA | | 0.296 | -0.3 | | | 0.160 | -0.4 | 0.027 | -1.2 | 0.070 | 0.6 | 0.066 | -0.3 | 0.060 | -0.1 |
| Lab109 | NA | | NA | | NA | | | | 0.290 | 2.6 | NA | | NA | | 0.020 | -2.9 | NA | |
| Lab110 | 0.034 | -0.7 | 0.070 | 1.8 | 0.430 | 1.4 | | -3.8 | 0.145 | -0.7 | 0.017 | -2.3 | 0.045 | -1.0 | 0.052 | -1.1 | 0.050 | -0.8 |
| Lab111 | 0.039 | -0.2 | 0.048 | 0.0 | 0.426 | 1.3 | 0.148 | -1.3 | 0.168 | -0.2 | NA | | NA | | 0.064 | -0.4 | 0.062 | 0.0 |
| Lab112 | 0.049 | 0.8 | ND | -3.2 | 0.270 | -0.6 | | -3.8 | 0.162 | -0.3 | 0.043 | 0.4 | NA | | 0.084 | 0.8 | 0.057 | -0.3 |
| Lab113 | 0.043 | 0.2 | 0.049 | 0.1 | 0.262 | -0.7 | | -3.8 | 0.170 | -0.1 | 0.043 | 0.4 | ND | -3.3 | 0.072 | 0.1 | 0.066 | 0.3 |
| Lab114 | 0.046 | 0.5 | 0.044 | -0.3 | 0.325 | 0.1 | 0.216 | 0.0 | 0.161 | -0.4 | 0.044 | 0.5 | 0.053 | -0.5 | 0.066 | -0.3 | 0.061 | -0.1 |
| Lab115 | 0.011 | -2.9 | 0.065 | 1.4 | 0.167 | -1.9 | | -3.8 | 0.263 | 2.0 | 0.026 | -1.3 | NA | | 0.064 | -0.4 | 0.095 | 2.1 |
| Lab116 | 0.031 | -1.0 | 0.130 | 6.8 | 0.250 | -0.9 | 0.340 | 2.3 | 0.400 | 5.0 | 0.076 | 3.7 | 0.140 | 5.0 | 0.180 | 6.2 | 0.140 | 5.0 |
| Lab117 | ND | -3.0 | 0.037 | -0.9 | 0.366 | 0.6 | 0.255 | 0.7 | 0.183 | 0.1 | 0.037 | -0.2 | 0.054 | -0.5 | 0.067 | -0.2 | 0.063 | 0.1 |
| Lab118 | 0.042 | 0.1 | ND | -3.2 | 0.291 | -0.4 | | -3.8 | 0.196 | 0.4 | 0.029 | -1.0 | 0.065 | 0.3 | 0.081 | 0.6 | 0.072 | 0.6 |
| Lab119 | NA | | 0.025 | -1.9 | NA | | | | 0.151 | -0.6 | NA | | NA | | 0.061 | -0.6 | NA | |
| Lab120 | NA | | 0.056 | 0.7 | 0.419 | 1.2 | 0.138 | -1.4 | 0.142 | -0.8 | ND | -3.7 | 0.060 | -0.1 | 0.058 | -0.7 | 0.057 | -0.3 |
| Lab121 | NA | | 0.065 | 1.4 | 0.190 | -1.6 | | -3.8 | 0.203 | 0.6 | 0.029 | -1.0 | 0.061 | 0.0 | 0.102 | 1.8 | 0.038 | -1.5 |
| Lab122 | 0.046 | 0.5 | 0.041 | -0.6 | 0.201 | -1.5 | 0.074 | -2.6 | 0.147 | -0.7 | 0.057 | 1.8 | NA | | 0.055 | -0.9 | ND | -3.4 |
| Lab123 | 0.050 | 0.9 | 0.024 | -2.0 | NA | | | | 0.153 | -0.5 | 0.038 | -0.1 | 0.063 | 0.1 | 0.063 | -0.4 | 0.050 | -0.8 |
| Lab124 | NA | | 0.053 | 0.4 | NA | | 0.292 | 1.4 | 0.169 | -0.2 | 0.032 | -0.7 | NA | | 0.048 | -1.3 | NA | |
| Lab125 | NA | | 0.060 | 1.0 | NA | | | | 0.200 | 0.5 | NA | | NA | | 0.070 | 0.0 | 0.060 | -0.1 |
| Lab126 | NA | | 0.048 | 0.0 | NA | | | | 0.159 | -0.4 | 0.014 | -2.6 | 0.037 | -1.6 | 0.054 | -1.0 | 0.038 | -1.6 |
| Lab127 | NA | | NA | | 0.467 | 1.8 | | | 0.158 | -0.4 | 0.028 | -1.1 | NA | | 0.064 | -0.4 | 0.052 | -0.7 |
| Lab128 | NA | | 0.039 | -0.7 | NA | | | | 0.146 | -0.7 | 0.019 | -2.0 | NA | | 0.099 | 1.6 | 0.044 | -1.2 |
| Lab129 | NA | | 0.042 | -0.5 | NA | | 0.255 | 0.7 | 0.145 | -0.7 | 0.069 | 3.0 | NA | | 0.060 | -0.6 | 0.038 | -1.5 |

**APPENDIX 3. Results (mg/Kg) and z-scores for FFP RSD (25%).**

| Lab Code | Aldicarb Sum | z-Score (FFP RSD 25%) | Azinphos-methyl | z-Score (FFP RSD 25%) | Carbendazim | z-Score (FFP RSD 25%) | Chlorothalonil | z-Score (FFP RSD 25%) | Chlorpyrifos-ethyl | z-Score (FFP RSD 25%) | Dimethoate Sum | z-Score (FFP RSD 25%) | EPN | z-Score (FFP RSD 25%) | Ethion | z-Score (FFP RSD 25%) | Fenpropathrin | z-Score (FFP RSD 25%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MRRL** | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.003** | | **0.01** | | **0.01** | | **0.01** | |
| **Median (mg/kg)** | **0.041** | | **0.048** | | **0.320** | | **0.216** | | **0.176** | | **0.039** | | **0.061** | | **0.071** | | **0.062** | |
| Lab130 | NA | | 0.046 | -0.2 | NA | | 0.171 | -0.8 | 0.172 | -0.1 | NA | | NA | | 0.082 | 0.6 | NA | |
| Lab131 | NA | | 0.015 | -2.8 | 0.342 | 0.3 | | | 0.106 | -1.6 | 0.015 | -2.5 | NA | | 0.034 | -2.1 | 0.030 | -2.0 |
| Lab132 | NA | | 0.070 | 1.8 | NA | | | | 0.180 | 0.1 | NA | | NA | | 0.073 | 0.1 | NA | |
| Lab133 | 0.040 | -0.1 | 0.070 | 1.8 | 0.200 | -1.5 | | -3.8 | 0.140 | -0.8 | 0.097 | 5.9 | 0.070 | 0.6 | 0.080 | 0.5 | 0.040 | -1.4 |
| Lab134 | 0.057 | 1.6 | 0.049 | 0.1 | 0.387 | 0.8 | | | 0.293 | 2.6 | 0.037 | -0.2 | 0.068 | 0.5 | 0.077 | 0.4 | 0.071 | 0.6 |
| Lab135 | No Results Reported | | | | | | | | | | | | | | | | | |
| Lab136 | NA | | 0.051 | 0.3 | 0.179 | -1.8 | | -3.8 | 0.178 | 0.0 | 0.027 | -1.2 | 0.075 | 0.9 | 0.097 | 1.5 | 0.054 | -0.5 |
| Lab137 | 0.044 | 0.3 | 0.056 | 0.6 | 0.288 | -0.4 | | | 0.176 | 0.0 | 0.045 | 0.6 | NA | | 0.054 | -1.0 | NA | |
| Lab138 | NA | | NA | | NA | | | -3.8 | ND | -3.8 | NA | | NA | | ND | -3.4 | ND | -3.4 |
| Lab139 | ND | -3.0 | ND | -3.2 | 0.390 | 0.9 | | -3.8 | 0.160 | -0.4 | ND | -3.7 | ND | -3.3 | ND | -3.4 | 0.061 | -0.1 |
| Lab140 | NA | | 0.150 | 8.5 | NA | | 0.120 | -1.8 | 0.110 | -1.5 | NA | | NA | | ND | -3.4 | NA | |
| Lab141 | NA | | ND | -3.2 | NA | | | -3.8 | 0.140 | -0.8 | NA | | NA | | NA | | NA | |
| Lab142 | NA | | 0.080 | 2.7 | 0.150 | -2.1 | 0.210 | -0.1 | 0.210 | 0.8 | 0.023 | -1.7 | NA | | 0.079 | 0.5 | 0.057 | -0.3 |
| Lab143 | NA | | 0.048 | 0.0 | NA | | 0.175 | -0.8 | 0.180 | 0.1 | NA | | NA | | NA | | NA | |
| Lab144 | 0.037 | -0.4 | 0.044 | -0.3 | 0.337 | 0.2 | 0.261 | 0.8 | 0.218 | 0.9 | 0.037 | -0.2 | 0.062 | 0.1 | 0.073 | 0.2 | 0.064 | 0.1 |
| Lab145 | 0.048 | 0.7 | 0.045 | -0.3 | 0.201 | -1.5 | | -3.8 | 0.225 | 1.1 | 0.044 | 0.5 | ND | -3.3 | 0.094 | 1.3 | 0.046 | -1.0 |
| Lab146 | 0.043 | 0.2 | 0.046 | -0.2 | 0.240 | -1.0 | 0.149 | -1.2 | 0.192 | 0.4 | 0.040 | 0.1 | NA | | 0.057 | -0.8 | 0.052 | -0.6 |
| Lab147 | NA | | ND | -3.2 | NA | | 0.078 | -2.6 | 0.216 | 0.9 | ND | -3.7 | NA | | 0.102 | 1.8 | 0.090 | 1.8 |
| Lab148 | 0.048 | 0.7 | 0.056 | 0.7 | 0.381 | 0.8 | 0.113 | -1.9 | 0.187 | 0.2 | 0.043 | 0.4 | ND | -3.3 | 0.075 | 0.2 | 0.062 | 0.0 |
| Lab149 | 0.051 | 1.0 | NA | | 0.300 | -0.3 | | | 0.151 | -0.6 | 0.032 | -0.7 | NA | | 0.058 | -0.7 | 0.052 | -0.6 |
| Lab150 | NA | | NA | | NA | | | | 0.140 | -0.8 | NA | | NA | | NA | | NA | |
| Lab151 | NA | | NA | | NA | | | -3.8 | 0.200 | 0.5 | 0.030 | -0.9 | NA | | 0.080 | 0.5 | 0.070 | 0.5 |
| Lab152 | NA | | 0.030 | -1.5 | 0.360 | 0.5 | 0.290 | 1.4 | 0.150 | -0.6 | 0.030 | -0.9 | NA | | 0.050 | -1.2 | NA | |
| Lab153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 3. Results (mg/kg) and z-scores for FFP RSD (25%).**

| Lab Code | Imidacloprid | z-Score (FFP RSD 25%) | Kresoxim-methyl | z-Score (FFP RSD 25%) | Methamidophos | z-Score (FFP RSD 25%) | Oxamyl | z-Score (FFP RSD 25%) | Prothiofos | z-Score (FFP RSD 25%) | Thiacloprid | z-Score (FFP RSD 25%) | Trifluмuron | z-Score (FFP RSD 25%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MRRL** | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | |
| **Median (mg/kg)** | **0.249** | | **0.316** | | **0.227** | | **0.342** | | **0.279** | | **0.310** | | **0.244** | |
| Lab001 | NA | | 0.331 | 0.2 | 0.257 | 0.5 | 0.286 | -0.7 | 0.243 | -0.5 | NA | | 0.199 | -0.7 |
| Lab002 | 0.218 | -0.5 | 0.307 | -0.1 | 0.407 | 3.2 | 0.403 | 0.7 | NA | | 0.288 | -0.3 | 0.304 | 1.0 |
| Lab003 | 0.240 | -0.1 | 0.400 | 1.1 | 0.250 | 0.4 | 0.440 | 1.2 | 0.280 | 0.0 | 0.420 | 1.4 | 0.440 | 3.2 |
| Lab004 | NA | | 0.360 | 0.6 | 0.160 | -1.2 | NA | | 0.308 | 0.4 | NA | | NA | |
| Lab005 | 0.310 | 1.0 | 0.367 | 0.6 | 0.310 | 1.5 | 0.430 | 1.0 | 0.362 | 1.2 | 0.370 | 0.8 | NA | |
| Lab006 | 0.270 | 0.3 | 0.251 | -0.8 | 0.212 | -0.3 | 0.339 | 0.0 | 0.269 | -0.1 | 0.273 | -0.5 | 0.231 | -0.2 |
| Lab007 | 0.340 | 1.5 | NA | | NA | | 0.297 | -0.5 | NA | | 0.163 | -1.9 | NA | |
| Lab008 | 0.251 | 0.0 | 0.338 | 0.3 | 0.434 | 3.6 | 0.363 | 0.3 | 0.264 | -0.2 | 0.310 | 0.0 | 0.323 | 1.3 |
| Lab009 | 0.374 | 2.0 | 0.375 | 0.7 | 0.350 | 2.2 | 0.410 | 0.8 | 0.355 | 1.1 | 0.422 | 1.4 | 0.109 | -2.2 |
| Lab010 | NA | | NA | | NA | | 0.135 | -2.4 | 0.232 | -0.7 | NA | | NA | |
| Lab011 | 0.278 | 0.5 | 0.259 | -0.7 | 0.256 | 0.5 | 0.362 | 0.2 | 0.238 | -0.6 | 0.356 | 0.6 | 0.259 | 0.3 |
| Lab012 | 0.235 | -0.2 | 0.300 | -0.2 | 0.259 | 0.6 | 0.305 | -0.4 | 0.283 | 0.1 | 0.280 | -0.4 | 0.234 | -0.2 |
| Lab013 | NA | | 0.330 | 0.2 | ND | -3.8 | NA | | NA | | NA | | NA | |
| Lab014 | 0.250 | 0.0 | 0.330 | 0.2 | 0.150 | -1.4 | 0.360 | 0.2 | NA | | 0.280 | -0.4 | NA | |
| Lab015 | 0.182 | -1.1 | 0.251 | -0.8 | 0.149 | -1.4 | 0.220 | -1.4 | 0.311 | 0.5 | 0.258 | -0.7 | 0.223 | -0.3 |
| Lab016 | 0.269 | 0.3 | 0.342 | 0.3 | 0.235 | 0.1 | 0.329 | -0.1 | 0.282 | 0.0 | 0.319 | 0.1 | 0.268 | 0.4 |
| Lab017 | 0.313 | 1.0 | 0.368 | 0.7 | 0.242 | 0.3 | 0.402 | 0.7 | 0.278 | 0.0 | 0.350 | 0.5 | 0.241 | 0.0 |
| Lab018 | 0.283 | 0.5 | 0.327 | 0.1 | 0.291 | 1.1 | 0.326 | -0.2 | 0.269 | -0.1 | 0.464 | 2.0 | 0.311 | 1.1 |
| Lab019 | 0.226 | -0.4 | 0.183 | -1.7 | 0.147 | -1.4 | 0.340 | 0.0 | 0.191 | -1.3 | 0.261 | -0.6 | 0.155 | -1.5 |
| Lab020 | 0.249 | 0.0 | 0.334 | 0.2 | 0.206 | -0.4 | 0.340 | 0.0 | 0.236 | -0.6 | 0.322 | 0.2 | 0.210 | -0.6 |
| Lab021 | 0.298 | 0.8 | 0.290 | -0.3 | 0.218 | -0.2 | 0.364 | 0.3 | NA | | NA | | 0.395 | 2.5 |
| Lab022 | 0.267 | 0.3 | 0.341 | 0.3 | 0.206 | -0.4 | 0.342 | 0.0 | 0.270 | -0.1 | 0.293 | -0.2 | NA | |
| Lab023 | 0.213 | -0.6 | 0.528 | 2.7 | 0.209 | -0.3 | 0.322 | -0.2 | ND | -3.9 | 0.463 | 2.0 | 0.251 | 0.1 |
| Lab024 | 0.256 | 0.1 | 0.315 | 0.0 | 0.304 | 1.4 | 0.341 | 0.0 | 0.256 | -0.3 | 0.325 | 0.2 | 0.271 | 0.5 |
| Lab025 | 0.250 | 0.0 | 0.270 | -0.6 | 0.230 | 0.1 | 0.330 | -0.1 | 0.260 | -0.3 | 0.180 | -1.7 | 0.230 | -0.2 |
| Lab026 | NA | | 0.280 | -0.5 | NA | | NA | | NA | | NA | | NA | |
| Lab027 | 0.224 | -0.4 | 0.301 | -0.2 | 0.154 | -1.3 | 0.375 | 0.4 | NA | | 0.333 | 0.3 | 0.327 | 1.4 |
| Lab028 | 0.178 | -1.1 | 0.282 | -0.4 | 0.188 | -0.7 | 0.297 | -0.5 | 0.293 | 0.2 | 0.242 | -0.9 | 0.225 | -0.3 |
| Lab029 | 0.149 | -1.6 | 0.196 | -1.5 | 0.186 | -0.7 | 0.303 | -0.5 | 0.194 | -1.2 | 0.175 | -1.7 | 0.188 | -0.9 |
| Lab030 | 0.290 | 0.7 | 0.280 | -0.5 | 0.272 | 0.8 | 0.370 | 0.3 | 0.253 | -0.4 | 0.340 | 0.4 | 0.220 | -0.4 |
| Lab031 | NA | | NA | | 0.280 | 0.9 | NA | | NA | | NA | | NA | |
| Lab032 | 0.224 | -0.4 | 0.305 | -0.1 | 0.254 | 0.5 | 0.283 | -0.7 | NA | | 0.308 | 0.0 | NA | |
| Lab033 | NA | | 0.338 | 0.3 | NA | | NA | | NA | | NA | | NA | |
| Lab034 | 0.201 | -0.8 | 0.332 | 0.2 | 0.303 | 1.3 | 0.406 | 0.8 | 0.271 | -0.1 | 0.231 | -1.0 | 0.265 | 0.4 |
| Lab035 | No Results Reported | | | | | | | | | | | | | |
| Lab036 | 0.226 | -0.4 | 0.313 | 0.0 | 0.245 | 0.3 | 0.356 | 0.2 | 0.262 | -0.2 | 0.260 | -0.6 | 0.243 | 0.0 |
| Lab037 | NA | | 0.360 | 0.6 | NA | | NA | | NA | | NA | | NA | |
| Lab038 | 0.253 | 0.1 | 0.358 | 0.5 | 0.281 | 1.0 | NA | | 0.247 | -0.5 | 0.328 | 0.2 | ND | -3.8 |
| Lab039 | NA | | 0.253 | -0.8 | NA | | NA | | NA | | NA | | NA | |
| Lab040 | NA | | 0.324 | 0.1 | 0.140 | -1.5 | NA | | NA | | NA | | NA | |
| Lab041 | 0.294 | 0.7 | 0.397 | 1.0 | 0.248 | 0.4 | 0.365 | 0.3 | 0.351 | 1.0 | 0.314 | 0.1 | 0.251 | 0.1 |
| Lab042 | 0.178 | -1.1 | 0.392 | 1.0 | 0.173 | -1.0 | 0.225 | -1.4 | NA | | 0.255 | -0.7 | 0.190 | -0.9 |
| Lab043 | 0.255 | 0.1 | 0.330 | 0.2 | 0.188 | -0.7 | 0.332 | -0.1 | 0.307 | 0.4 | 0.338 | 0.4 | 0.142 | -1.7 |

**APPENDIX 3. Results (mg/Kg) and z-scores for FFP RSD (25%).**

| Lab Code | Imidacloprid | z-Score (FFP RSD 25%) | Kresoxim-methyl | z-Score (FFP RSD 25%) | Methamidophos | z-Score (FFP RSD 25%) | Oxamyl | z-Score (FFP RSD 25%) | Prothiofos | z-Score (FFP RSD 25%) | Thiacloprid | z-Score (FFP RSD 25%) | Triflumuron | z-Score (FFP RSD 25%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MRRL** | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | |
| **Median (mg/kg)** | **0.249** | | **0.316** | | **0.227** | | **0.342** | | **0.279** | | **0.310** | | **0.244** | |
| Lab044 | NA | | 0.290 | -0.3 | 0.230 | 0.1 | NA | | NA | | NA | | NA | |
| Lab045 | 0.263 | 0.2 | 0.385 | 0.9 | 0.232 | 0.1 | 0.385 | 0.5 | 0.268 | -0.2 | 0.386 | 1.0 | 0.244 | 0.0 |
| Lab046 | 0.260 | 0.2 | 0.357 | 0.5 | 0.212 | -0.3 | 0.350 | 0.1 | 0.315 | 0.5 | 0.365 | 0.7 | 0.307 | 1.0 |
| Lab047 | 0.285 | 0.6 | 0.361 | 0.6 | 0.237 | 0.2 | 0.369 | 0.3 | 0.323 | 0.6 | 0.374 | 0.8 | 0.284 | 0.7 |
| Lab048 | 0.217 | -0.5 | 0.247 | -0.9 | 0.185 | -0.7 | 0.392 | 0.6 | 0.165 | -1.6 | 0.269 | -0.5 | 0.227 | -0.3 |
| Lab049 | 0.205 | -0.7 | 0.388 | 0.9 | 0.236 | 0.2 | 0.351 | 0.1 | 0.304 | 0.4 | 0.342 | 0.4 | 0.211 | -0.5 |
| Lab050 | 0.242 | -0.1 | 0.428 | 1.4 | 0.200 | -0.5 | 0.301 | -0.5 | 0.331 | 0.7 | 0.305 | -0.1 | 0.303 | 1.0 |
| Lab051 | 0.279 | 0.5 | 0.434 | 1.5 | 0.223 | -0.1 | 0.307 | -0.4 | 0.412 | 1.9 | 0.438 | 1.7 | 0.295 | 0.8 |
| Lab052 | 0.264 | 0.2 | 0.340 | 0.3 | 0.218 | -0.2 | 0.312 | -0.3 | 0.306 | 0.4 | 0.393 | 1.1 | 0.259 | 0.3 |
| Lab053 | 0.236 | -0.2 | 0.324 | 0.1 | 0.227 | 0.0 | 0.349 | 0.1 | 0.246 | -0.5 | 0.286 | -0.3 | 0.223 | -0.3 |
| Lab054 | NA | | 0.329 | 0.2 | 0.740 | 9.0 | 0.331 | -0.1 | NA | | 0.348 | 0.5 | NA | |
| Lab055 | 0.234 | -0.2 | 0.304 | -0.2 | 0.222 | -0.1 | 0.313 | -0.3 | 0.169 | -1.6 | 0.289 | -0.3 | 0.204 | -0.6 |
| Lab056 | 0.238 | -0.2 | 0.400 | 1.1 | 0.186 | -0.7 | NA | | 0.261 | -0.3 | 0.338 | 0.4 | NA | |
| Lab057 | 0.240 | -0.1 | 0.400 | 1.1 | 0.270 | 0.8 | 0.330 | -0.1 | 0.310 | 0.4 | 0.340 | 0.4 | 0.330 | 1.4 |
| Lab058 | 0.216 | -0.5 | 0.342 | 0.3 | 0.226 | 0.0 | 0.343 | 0.0 | 0.314 | 0.5 | 0.326 | 0.2 | 0.373 | 2.1 |
| Lab059 | NA | | 0.347 | 0.4 | NA | | NA | | NA | | NA | | NA | |
| Lab060 | 0.213 | -0.6 | 0.264 | -0.7 | 0.249 | 0.4 | 0.394 | 0.6 | 0.265 | -0.2 | 0.319 | 0.1 | NA | |
| Lab061 | 0.326 | 1.2 | 0.363 | 0.6 | 0.241 | 0.2 | 0.357 | 0.2 | 0.263 | -0.2 | 0.322 | 0.2 | 0.253 | 0.2 |
| Lab062 | 0.230 | -0.3 | 0.406 | 1.1 | 0.278 | 0.9 | 0.390 | 0.6 | NA | | 0.376 | 0.9 | NA | |
| Lab063 | 0.159 | -1.4 | 0.185 | -1.7 | NA | | 0.347 | 0.1 | NA | | NA | | NA | |
| Lab064 | NA | | 0.326 | 0.1 | NA | | NA | | NA | | NA | | NA | |
| Lab065 | 0.284 | 0.6 | 0.344 | 0.4 | 0.207 | -0.4 | 0.338 | 0.0 | 0.294 | 0.2 | 0.403 | 1.2 | 0.247 | 0.1 |
| Lab066 | 0.310 | 1.0 | 0.430 | 1.4 | 0.271 | 0.8 | 0.382 | 0.5 | 0.350 | 1.0 | 0.358 | 0.6 | 0.318 | 1.2 |
| Lab067 | 0.256 | 0.1 | 0.322 | 0.1 | 0.325 | 1.7 | 0.349 | 0.1 | 0.296 | 0.2 | 0.348 | 0.5 | 0.304 | 1.0 |
| Lab068 | 0.272 | 0.4 | 0.227 | -1.1 | 0.233 | 0.1 | 0.205 | -1.6 | 0.283 | 0.1 | 0.408 | 1.3 | 0.239 | -0.1 |
| Lab069 | ND | -3.8 | 0.270 | -0.6 | 0.070 | -2.8 | 0.210 | -1.5 | ND | -3.9 | 0.170 | -1.8 | NA | |
| Lab070 | 0.258 | 0.1 | 0.239 | -1.0 | 0.327 | 1.8 | 0.391 | 0.6 | 0.251 | -0.4 | 0.278 | -0.4 | 0.292 | 0.8 |
| Lab071 | 0.230 | -0.3 | 0.283 | -0.4 | 0.255 | 0.5 | 0.300 | -0.5 | 0.283 | 0.1 | 0.282 | -0.4 | 0.185 | -1.0 |
| Lab072 | 0.220 | -0.5 | 0.276 | -0.5 | 0.162 | -1.1 | 0.399 | 0.7 | NA | | 0.287 | -0.3 | NA | |
| Lab073 | NA | | NA | | 0.180 | -0.8 | NA | | NA | | NA | | NA | |
| Lab074 | 0.209 | -0.6 | 0.198 | -1.5 | NA | | 0.324 | -0.2 | NA | | 0.253 | -0.7 | 0.213 | -0.5 |
| Lab075 | NA | | 0.317 | 0.0 | NA | | NA | | NA | | NA | | NA | |
| Lab076 | NA | | 0.233 | -1.1 | NA | | NA | | NA | | NA | | 0.351 | 1.8 |
| Lab077 | NA | | NA | | NA | | NA | | NA | | NA | | NA | |
| Lab078 | NA | | 0.390 | 0.9 | NA | | NA | | NA | | NA | | NA | |
| Lab079 | 0.290 | 0.7 | 0.279 | -0.5 | 0.452 | 4.0 | 0.429 | 1.0 | 0.294 | 0.2 | 0.419 | 1.4 | ND | -3.8 |
| Lab080 | 1.050 | 12.9 | 0.250 | -0.8 | 0.054 | -3.0 | 0.240 | -1.2 | NA | | 0.370 | 0.8 | NA | |
| Lab081 | 0.236 | -0.2 | 0.339 | 0.3 | 0.114 | -2.0 | 0.276 | -0.8 | 0.194 | -1.2 | 0.310 | 0.0 | 0.192 | -0.8 |
| Lab082 | 0.119 | -2.1 | 0.351 | 0.4 | NA | | ND | -3.9 | 0.282 | 0.0 | 0.181 | -1.7 | NA | |
| Lab083 | 0.230 | -0.3 | 0.300 | -0.2 | NA | | 1.040 | 8.2 | NA | | NA | | NA | |
| Lab084 | 0.150 | -1.6 | 0.310 | -0.1 | NA | | 0.160 | -2.1 | NA | | 0.130 | -2.3 | NA | |
| Lab085 | 0.262 | 0.2 | 0.229 | -1.1 | 0.227 | 0.0 | 0.390 | 0.6 | 0.328 | 0.7 | 0.318 | 0.1 | 0.259 | 0.3 |
| Lab086 | No Results Reported | | | | | | | | | | | | | |
| Lab087 | NA | | NA | | NA | | NA | | NA | | NA | | NA | |

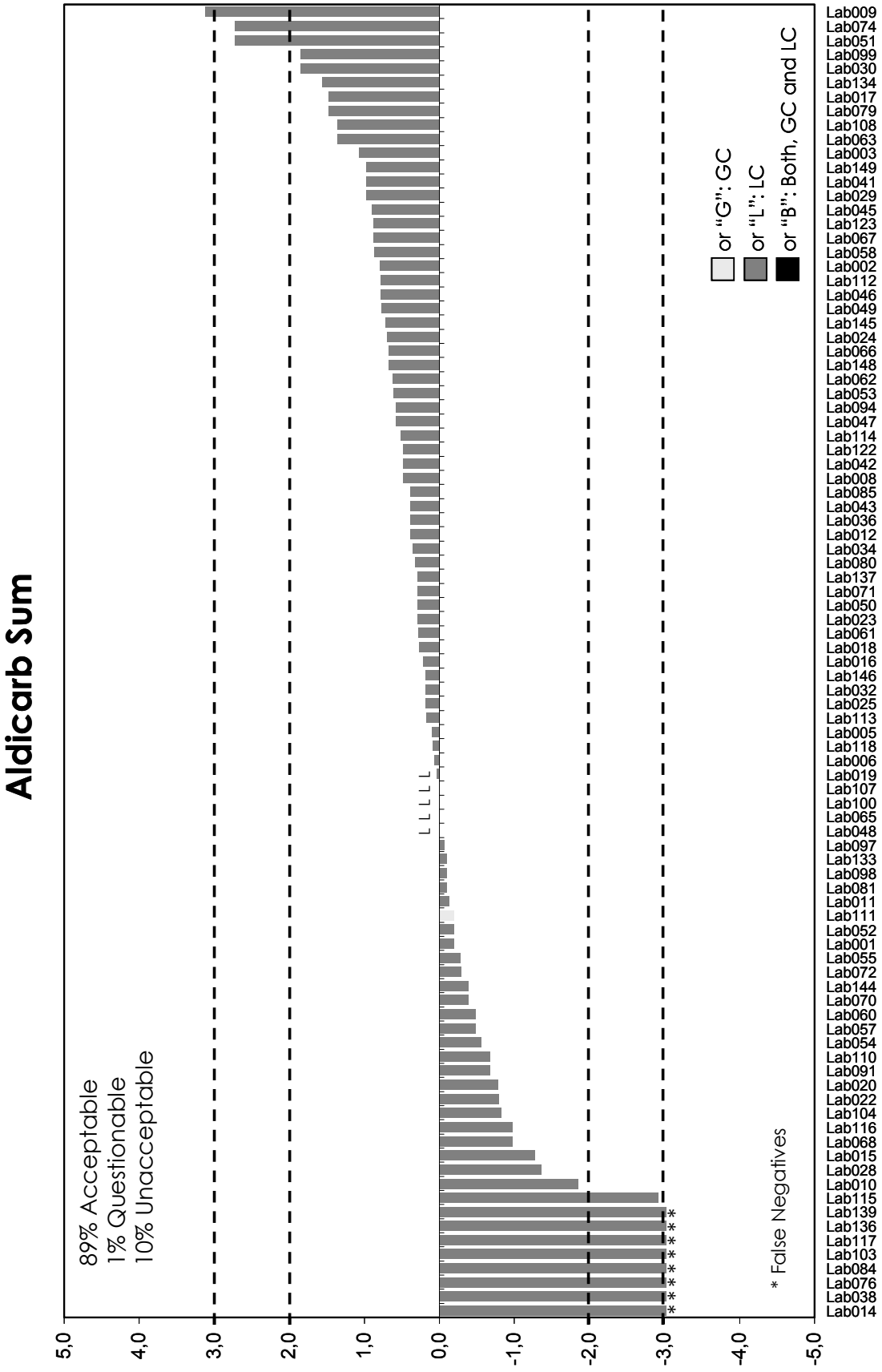
**APPENDIX 3. Results (mg/kg) and z-scores for FFP RSD (25%).**

| Lab Code | Imidacloprid | z-Score (FFP RSD 25%) | Kresoxim-methyl | z-Score (FFP RSD 25%) | Methamidophos | z-Score (FFP RSD 25%) | Oxamyl | z-Score (FFP RSD 25%) | Prothiofos | z-Score (FFP RSD 25%) | Thiacloprid | z-Score (FFP RSD 25%) | Triflumuron | z-Score (FFP RSD 25%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MRRL** | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | |
| **Median (mg/kg)** | **0.249** | | **0.316** | | **0.227** | | **0.342** | | **0.279** | | **0.310** | | **0.244** | |
| Lab088 | NA | | 0.500 | 2.3 | NA | | NA | | NA | | NA | | NA | |
| Lab089 | 0.202 | -0.8 | 0.316 | 0.0 | 0.163 | -1.1 | 0.280 | -0.7 | 0.214 | -0.9 | 0.248 | -0.8 | 0.531 | 4.7 |
| Lab090 | NA | | 0.332 | 0.2 | NA | | NA | | NA | | NA | | NA | |
| Lab091 | 0.340 | 1.5 | 0.302 | -0.2 | 0.317 | 1.6 | 0.329 | -0.1 | NA | | 0.192 | -1.5 | NA | |
| Lab092 | 0.328 | 1.3 | 0.204 | -1.4 | NA | | 0.595 | 3.0 | NA | | 0.412 | 1.3 | NA | |
| Lab093 | NA | | NA | | 0.317 | 1.6 | NA | | NA | | NA | | NA | |
| Lab094 | 0.231 | -0.3 | 0.277 | -0.5 | 0.221 | -0.1 | 0.244 | -1.1 | NA | | 0.212 | -1.3 | NA | |
| Lab095 | NA | | 0.314 | 0.0 | NA | | NA | | NA | | NA | | NA | |
| Lab096 | NA | | 0.312 | -0.1 | NA | | NA | | NA | | NA | | NA | |
| Lab097 | 0.212 | -0.6 | 0.222 | -1.2 | 0.187 | -0.7 | 0.296 | -0.5 | 0.178 | -1.4 | 0.270 | -0.5 | 0.218 | -0.4 |
| Lab098 | 0.242 | -0.1 | 0.308 | -0.1 | 0.270 | 0.8 | 0.315 | -0.3 | NA | | 0.270 | -0.5 | NA | |
| Lab099 | 0.280 | 0.5 | 0.240 | -1.0 | 0.052 | -3.1 | 0.510 | 2.0 | 0.390 | 1.6 | 0.470 | 2.1 | 0.250 | 0.1 |
| Lab100 | 0.185 | -1.0 | 0.352 | 0.5 | 0.280 | 0.9 | ND | | 0.319 | 0.6 | 0.222 | -1.1 | 0.186 | -0.9 |
| Lab101 | NA | | 0.141 | -2.2 | ND | -3.8 | NA | | NA | | NA | | NA | |
| Lab102 | NA | | 0.276 | -0.5 | NA | | NA | | NA | | NA | | NA | |
| Lab103 | 0.264 | 0.2 | 0.383 | 0.8 | 0.182 | -0.8 | 0.346 | 0.1 | 0.300 | 0.3 | 0.338 | 0.4 | NA | |
| Lab104 | 0.210 | -0.6 | NA | | NA | | 0.428 | 1.0 | NA | | NA | | NA | |
| Lab105 | 0.160 | -1.4 | 0.350 | 0.4 | NA | | 0.200 | -1.7 | NA | | 0.160 | -1.9 | 0.090 | -2.5 |
| Lab106 | NA | | 0.878 | 7.1 | NA | | NA | | NA | | NA | | NA | |
| Lab107 | 0.188 | -1.0 | 0.292 | -0.3 | 0.227 | 0.0 | 0.310 | -0.4 | NA | | NA | | 0.243 | 0.0 |
| Lab108 | 0.231 | -0.3 | 0.224 | -1.2 | 0.137 | -1.6 | 0.249 | -1.1 | 0.280 | 0.0 | 0.344 | 0.4 | 0.215 | -0.5 |
| Lab109 | NA | | 0.160 | -2.0 | NA | | NA | | NA | | NA | | NA | |
| Lab110 | 0.240 | -0.1 | 0.287 | -0.4 | 0.082 | -2.6 | 0.446 | 1.2 | 0.220 | -0.8 | 0.288 | -0.3 | 0.320 | 1.3 |
| Lab111 | 0.238 | -0.2 | 0.360 | 0.6 | 0.318 | 1.6 | NA | | NA | | NA | | NA | |
| Lab112 | 0.234 | -0.2 | 0.291 | -0.3 | 0.235 | 0.1 | 0.420 | 0.9 | 0.299 | 0.3 | 0.269 | -0.5 | 0.091 | -2.5 |
| Lab113 | 0.246 | 0.0 | 0.307 | -0.1 | 0.232 | 0.1 | 0.264 | -0.9 | 0.276 | 0.0 | 0.307 | 0.0 | 0.244 | 0.0 |
| Lab114 | 0.249 | 0.0 | 0.235 | -1.0 | 0.259 | 0.6 | 0.352 | 0.1 | 0.246 | -0.5 | 0.257 | -0.7 | 0.199 | -0.7 |
| Lab115 | 0.161 | -1.4 | 0.073 | -3.1 | 0.140 | -1.5 | 0.202 | -1.6 | 0.273 | -0.1 | 0.166 | -1.9 | NA | |
| Lab116 | 0.190 | -0.9 | 0.710 | 5.0 | 0.410 | 3.2 | 0.270 | -0.8 | 0.670 | 5.6 | 0.240 | -0.9 | 0.160 | -1.4 |
| Lab117 | 0.283 | 0.5 | 0.385 | 0.9 | 0.181 | -0.8 | 0.392 | 0.6 | 0.255 | -0.3 | 0.356 | 0.6 | ND | -3.8 |
| Lab118 | 0.219 | -0.5 | 0.302 | -0.2 | 0.185 | -0.7 | 0.345 | 0.0 | 0.297 | 0.3 | 0.298 | -0.2 | 0.251 | 0.1 |
| Lab119 | NA | | NA | | NA | | NA | | NA | | NA | | NA | |
| Lab120 | 0.327 | 1.3 | 0.242 | -0.9 | 0.164 | -1.1 | NA | | 0.309 | 0.4 | NA | | NA | |
| Lab121 | 0.358 | 1.8 | 0.350 | 0.4 | 0.308 | 1.4 | 0.510 | 2.0 | 0.286 | 0.1 | 0.243 | -0.9 | 0.227 | -0.3 |
| Lab122 | 0.715 | 7.5 | 0.207 | -1.4 | 0.199 | -0.5 | 0.375 | 0.4 | NA | | 0.535 | 2.9 | 0.292 | 0.8 |
| Lab123 | 0.108 | -2.3 | 0.237 | -1.0 | 0.163 | -1.1 | 0.253 | -1.0 | ND | -3.9 | NA | | NA | |
| Lab124 | 0.249 | 0.0 | 0.242 | -0.9 | 0.199 | -0.5 | NA | | NA | | NA | | NA | |
| Lab125 | NA | | 0.390 | 0.9 | NA | | NA | | NA | | NA | | NA | |
| Lab126 | NA | | 0.181 | -1.7 | 0.077 | -2.6 | NA | | 0.198 | -1.2 | NA | | NA | |
| Lab127 | NA | | 0.227 | -1.1 | 0.251 | 0.4 | 0.125 | -2.5 | 0.229 | -0.7 | NA | | NA | |
| Lab128 | NA | | 0.284 | -0.4 | NA | | NA | | NA | | NA | | NA | |
| Lab129 | 0.288 | 0.6 | 0.270 | -0.6 | 0.167 | -1.1 | NA | | NA | | NA | | NA | |
| Lab130 | NA | | NA | | 0.164 | -1.1 | NA | | NA | | NA | | NA | |
| Lab131 | 0.252 | 0.0 | 0.182 | -1.7 | 0.259 | 0.6 | NA | | NA | | 0.343 | 0.4 | NA | |

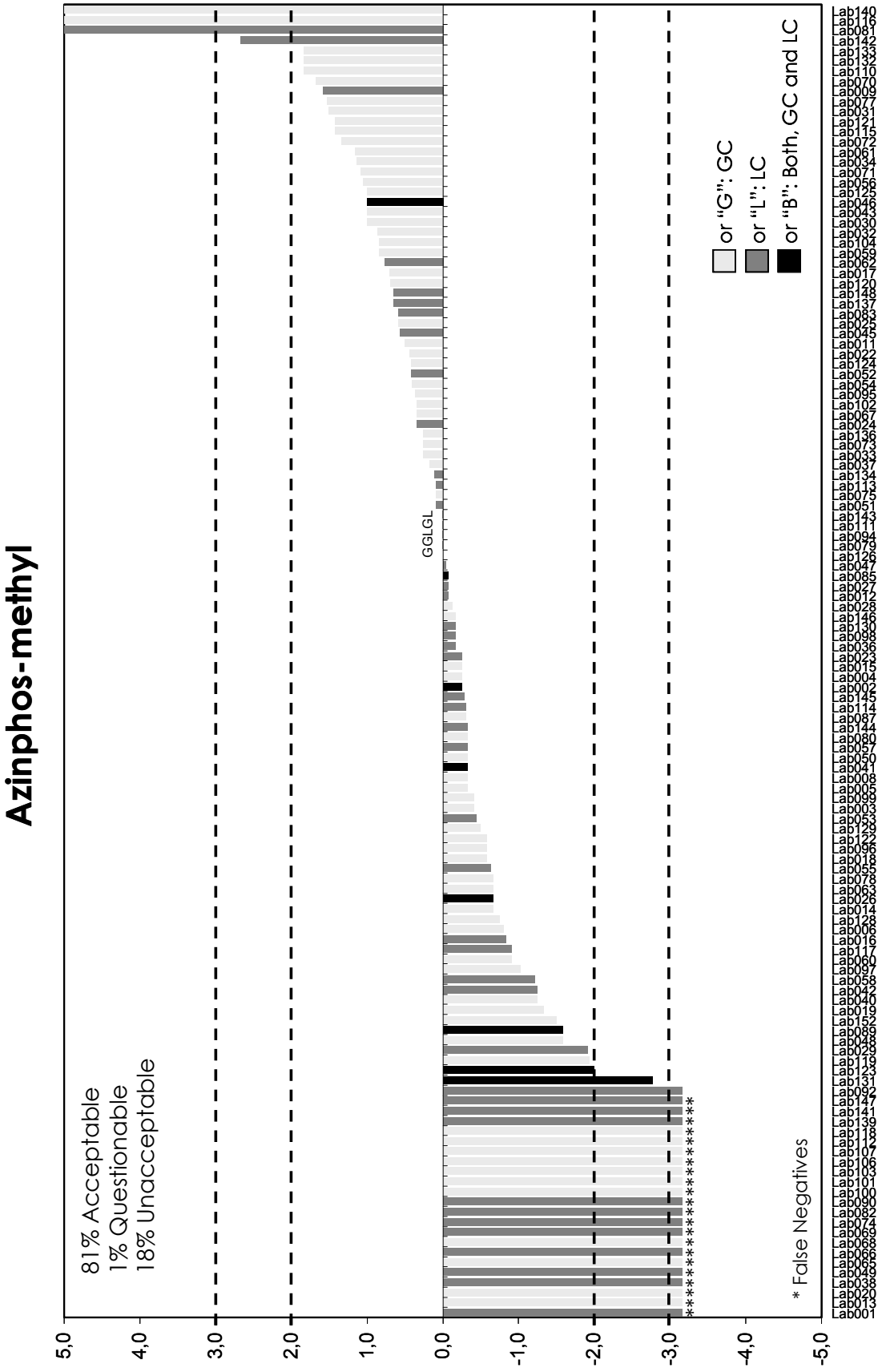
**APPENDIX 3. Results (mg/Kg) and z-scores for FFP RSD (25%).**

| Lab Code | Imidacloprid | z-Score (FFP RSD 25%) | Kresoxim-methyl | z-Score (FFP RSD 25%) | Methamidophos | z-Score (FFP RSD 25%) | Oxamyl | z-Score (FFP RSD 25%) | Prothiofos | z-Score (FFP RSD 25%) | Thiacloprid | z-Score (FFP RSD 25%) | Triflumuron | z-Score (FFP RSD 25%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MRRL** | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | | **0.01** | |
| **Median (mg/kg)** | **0.249** | | **0.316** | | **0.227** | | **0.342** | | **0.279** | | **0.310** | | **0.244** | |
| Lab132 | NA | | NA | | 0.030 | -3.5 | NA | | NA | | NA | | NA | |
| Lab133 | 0.250 | 0.0 | 0.300 | -0.2 | 0.300 | 1.3 | 0.480 | 1.6 | 0.270 | -0.1 | 0.310 | 0.0 | 0.200 | -0.7 |
| Lab134 | 0.340 | 1.5 | 0.373 | 0.7 | ND | -3.8 | 0.369 | 0.3 | 0.316 | 0.5 | 0.372 | 0.8 | 0.246 | 0.0 |
| Lab135 | No Results Reported | | | | | | | | | | | | | |
| Lab136 | 0.237 | -0.2 | 0.304 | -0.2 | 0.100 | -2.2 | 0.342 | 0.0 | 0.261 | -0.3 | 0.255 | -0.7 | 0.197 | -0.8 |
| Lab137 | 0.301 | 0.8 | 0.396 | 1.0 | NA | | 0.300 | -0.5 | NA | | 0.192 | -1.5 | 0.265 | 0.4 |
| Lab138 | NA | | ND | -3.9 | ND | -3.8 | NA | | NA | | NA | | NA | |
| Lab139 | 0.236 | -0.2 | 0.294 | -0.3 | ND | -3.8 | 0.356 | 0.2 | 0.280 | 0.0 | 0.264 | -0.6 | ND | -3.8 |
| Lab140 | NA | | 0.220 | -1.2 | NA | | NA | | NA | | NA | | NA | |
| Lab141 | NA | | NA | | 0.330 | 1.8 | NA | | NA | | NA | | NA | |
| Lab142 | 0.200 | -0.8 | 0.350 | 0.4 | 0.110 | -2.1 | 0.230 | -1.3 | NA | | 0.310 | 0.0 | NA | |
| Lab143 | NA | | NA | | NA | | NA | | NA | | NA | | NA | |
| Lab144 | 0.243 | -0.1 | 0.327 | 0.1 | 0.235 | 0.1 | 0.320 | -0.3 | 0.317 | 0.5 | 0.306 | -0.1 | 0.241 | 0.0 |
| Lab145 | 0.298 | 0.8 | 0.395 | 1.0 | 0.276 | 0.9 | 0.311 | -0.4 | 0.295 | 0.2 | 0.378 | 0.9 | 0.329 | 1.4 |
| Lab146 | 0.293 | 0.7 | 0.298 | -0.2 | 0.183 | -0.8 | 0.362 | 0.2 | NA | | 0.301 | -0.1 | NA | |
| Lab147 | NA | | NA | | 0.109 | -2.1 | NA | | 0.876 | 8.6 | NA | | NA | |
| Lab148 | 0.312 | 1.0 | 0.336 | 0.3 | 0.343 | 2.0 | 0.398 | 0.7 | 0.251 | -0.4 | 0.386 | 1.0 | 0.234 | -0.2 |
| Lab149 | 0.240 | -0.1 | 0.201 | -1.5 | 0.146 | -1.4 | 0.220 | -1.4 | NA | | 0.320 | 0.1 | NA | |
| Lab150 | NA | | NA | | NA | | NA | | NA | | NA | | NA | |
| Lab151 | NA | | 0.350 | 0.4 | 0.170 | -1.0 | NA | | NA | | NA | | NA | |
| Lab152 | NA | | 0.220 | -1.2 | 0.240 | 0.2 | NA | | NA | | NA | | NA | |
| Lab153 | No Results Reported | | | | | | | | | | | | | |

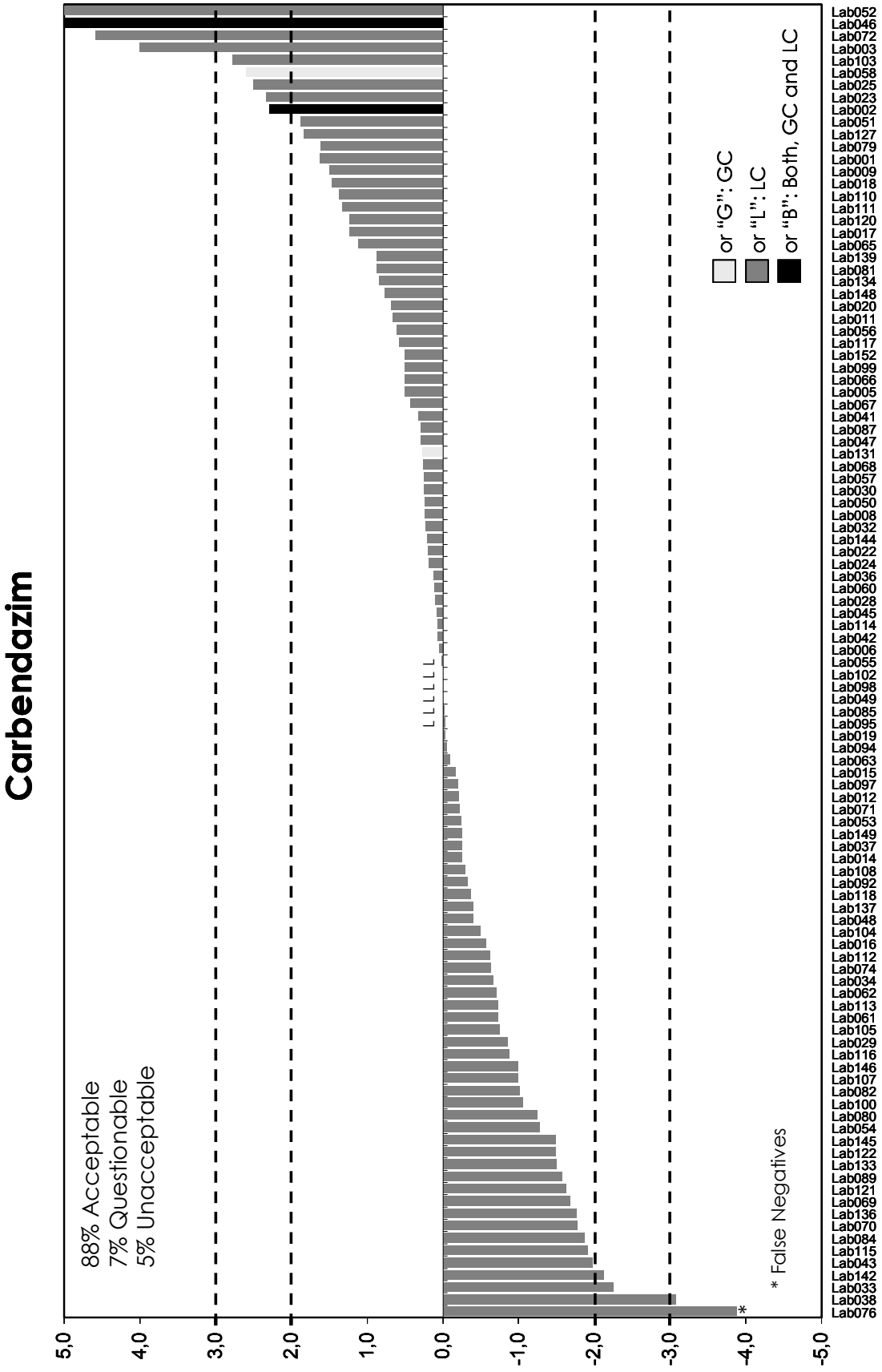
**APPENDIX 4. Graphical representation of z-scores for FFP RSD (25%).**



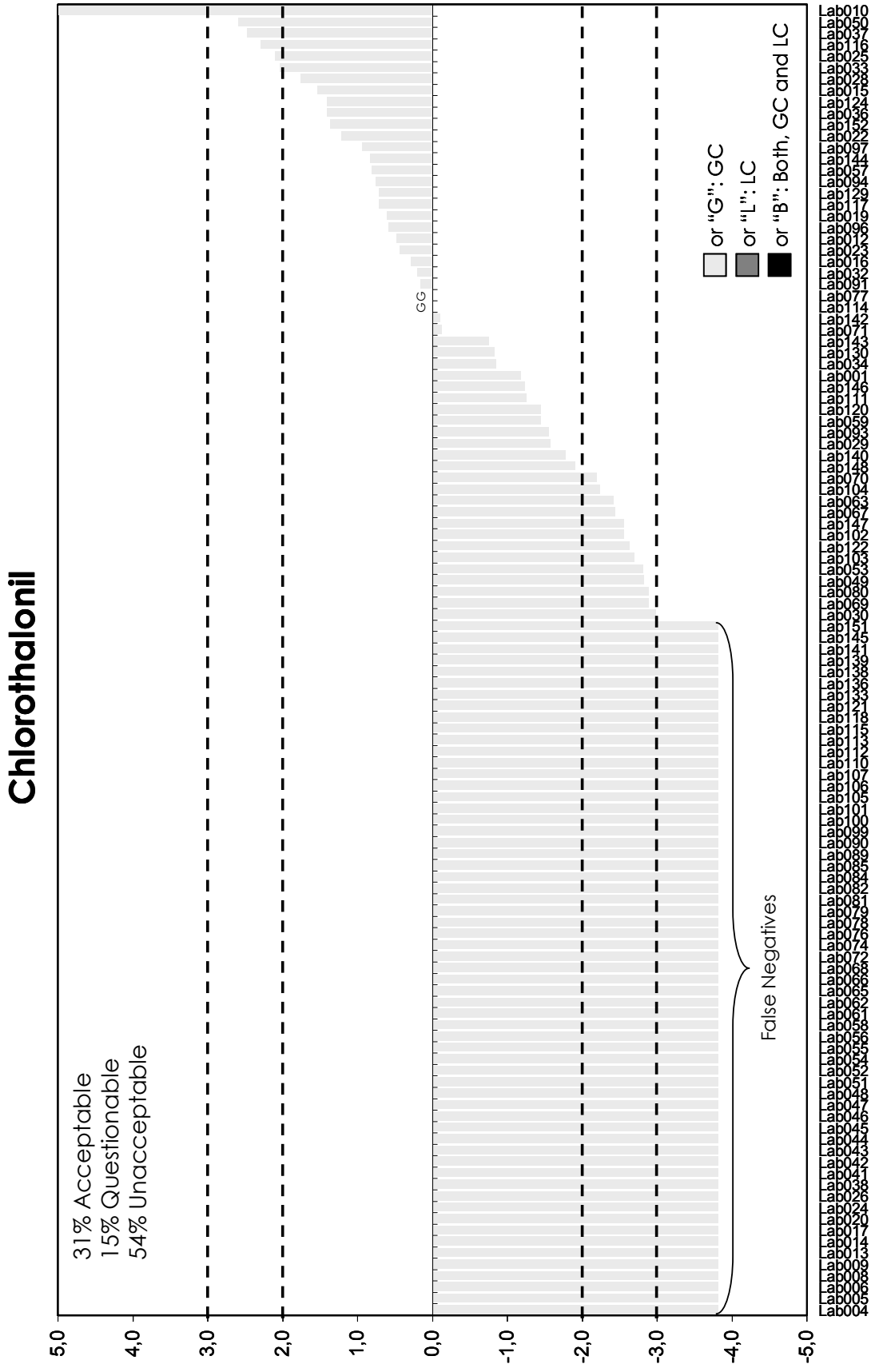
**APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).**



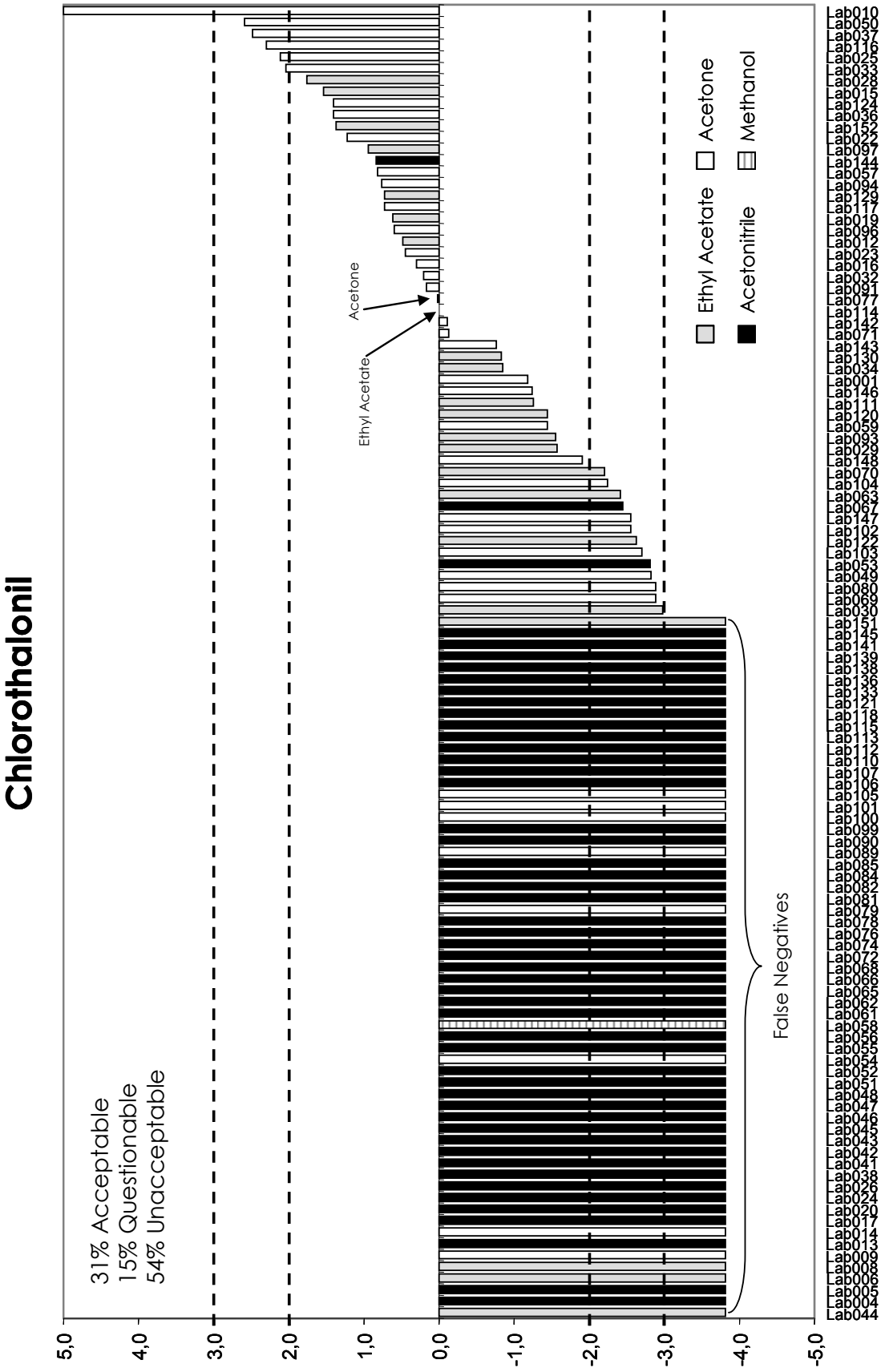
**APPENDIX 4. Graphical representation of z-scores for FFP RSD (25%).**



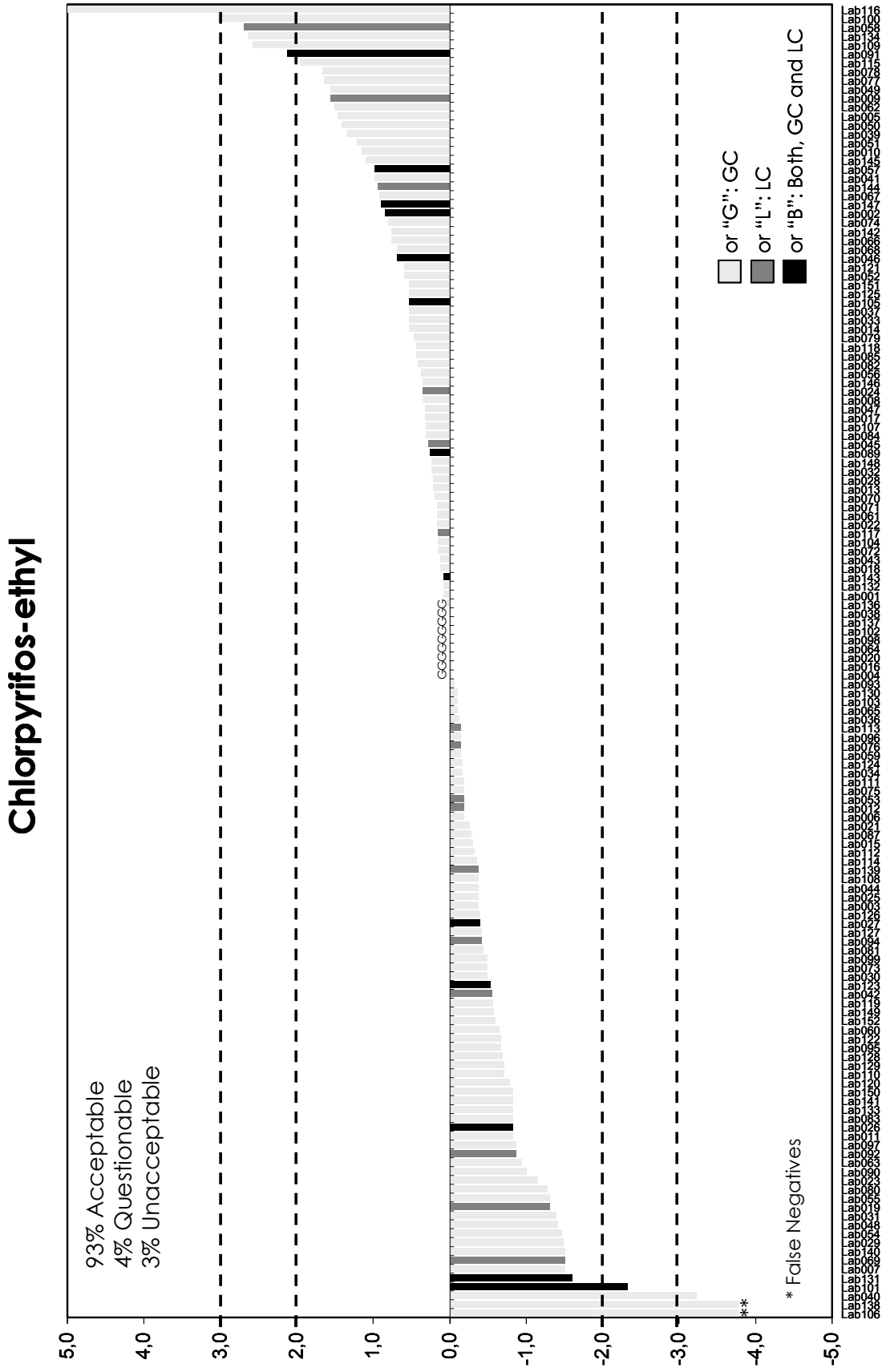
**APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).**



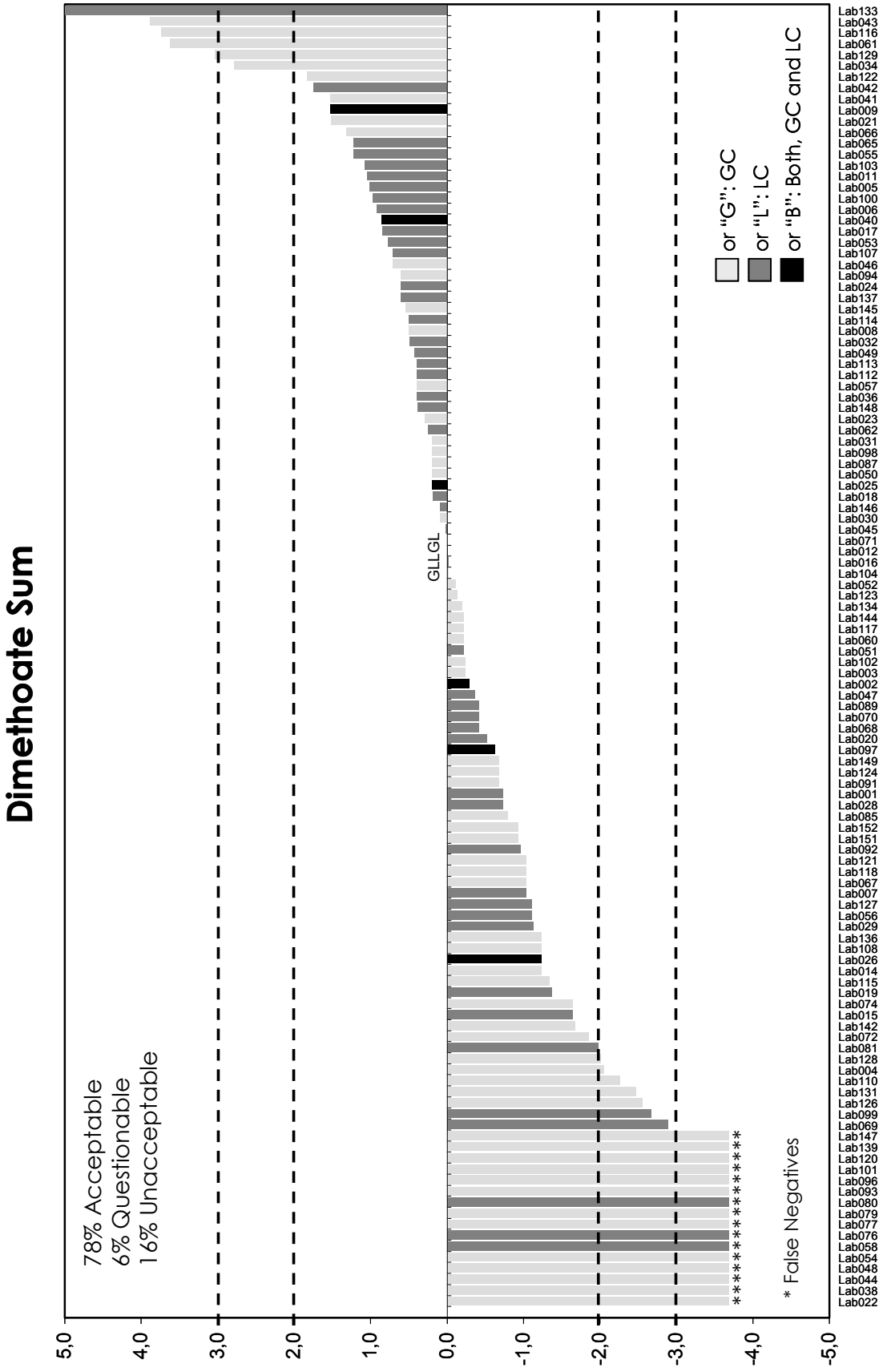
**APPENDIX 4. Graphical representation of z-scores for FFP RSD (25%).**



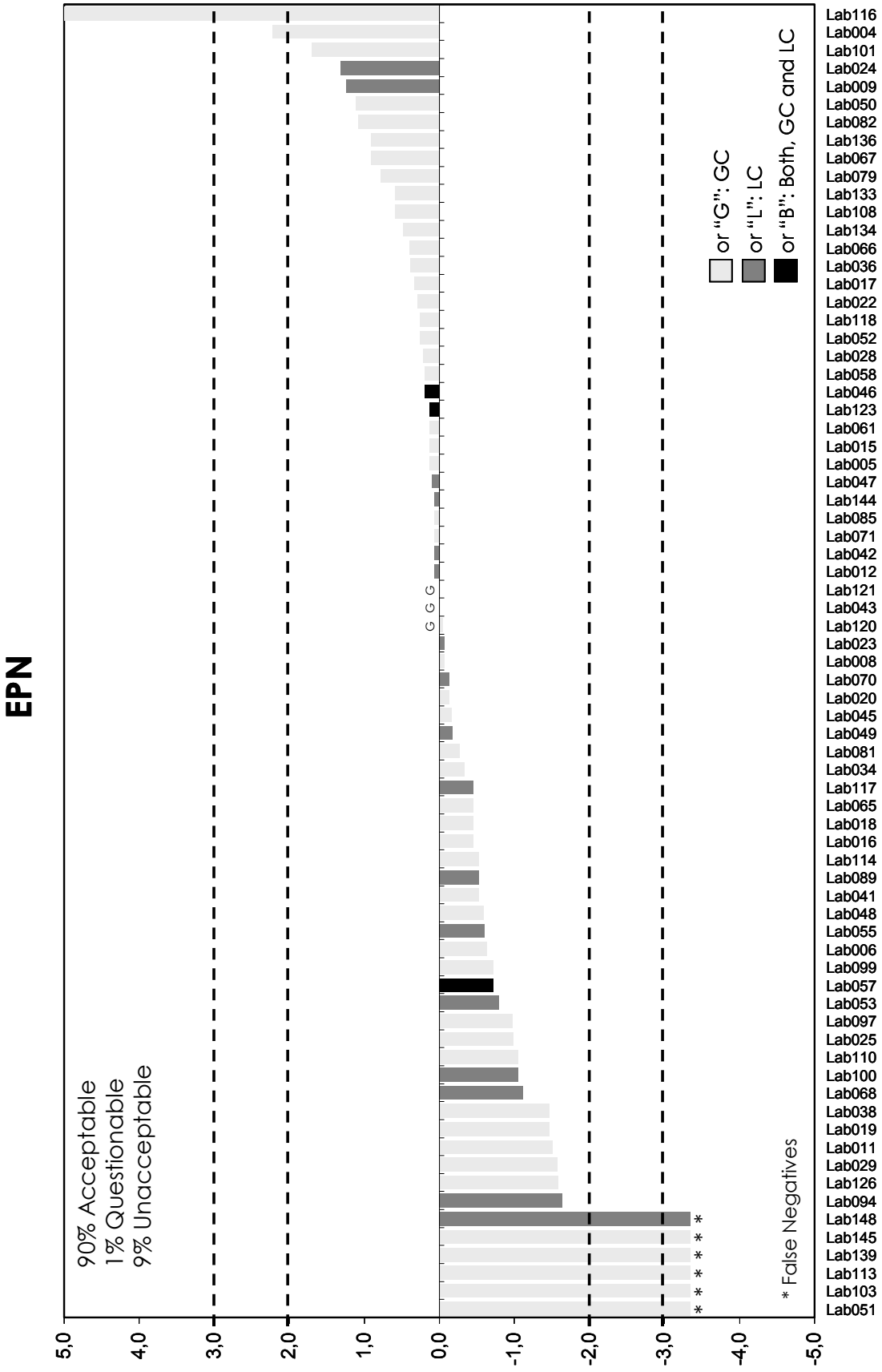
**APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).**



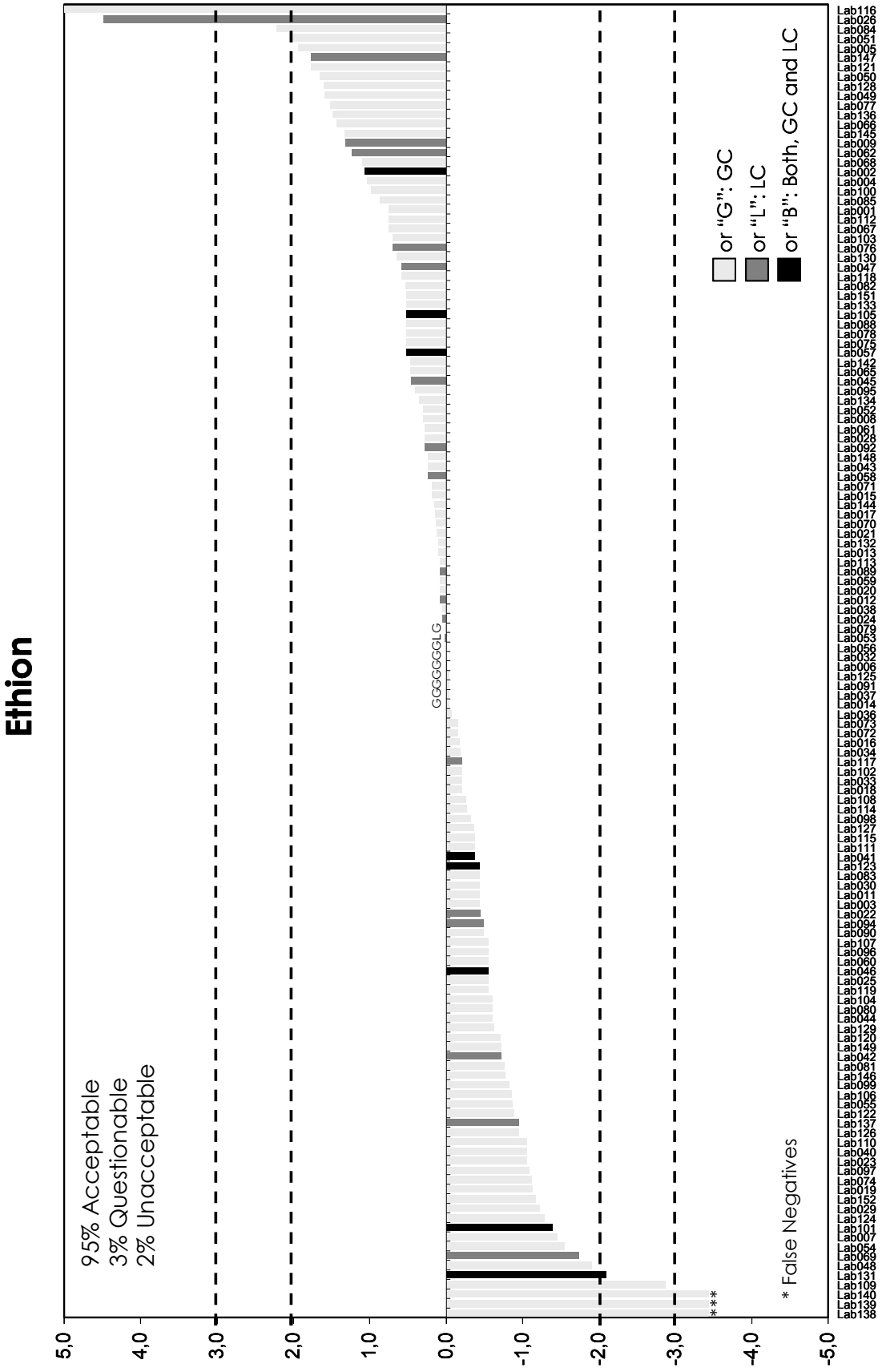
**APPENDIX 4. Graphical representation of z-scores for FFP RSD (25%).**



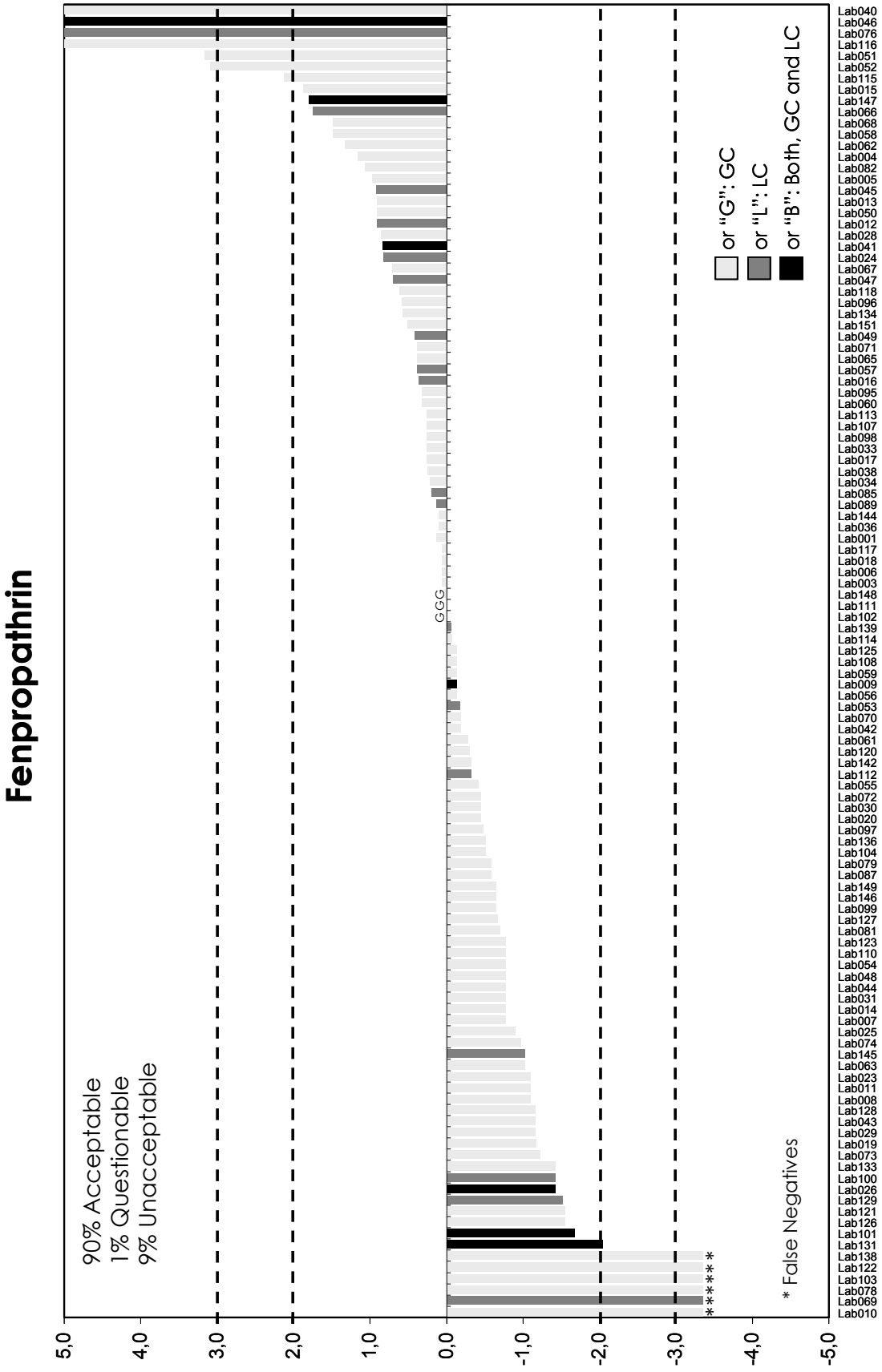
**APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).**



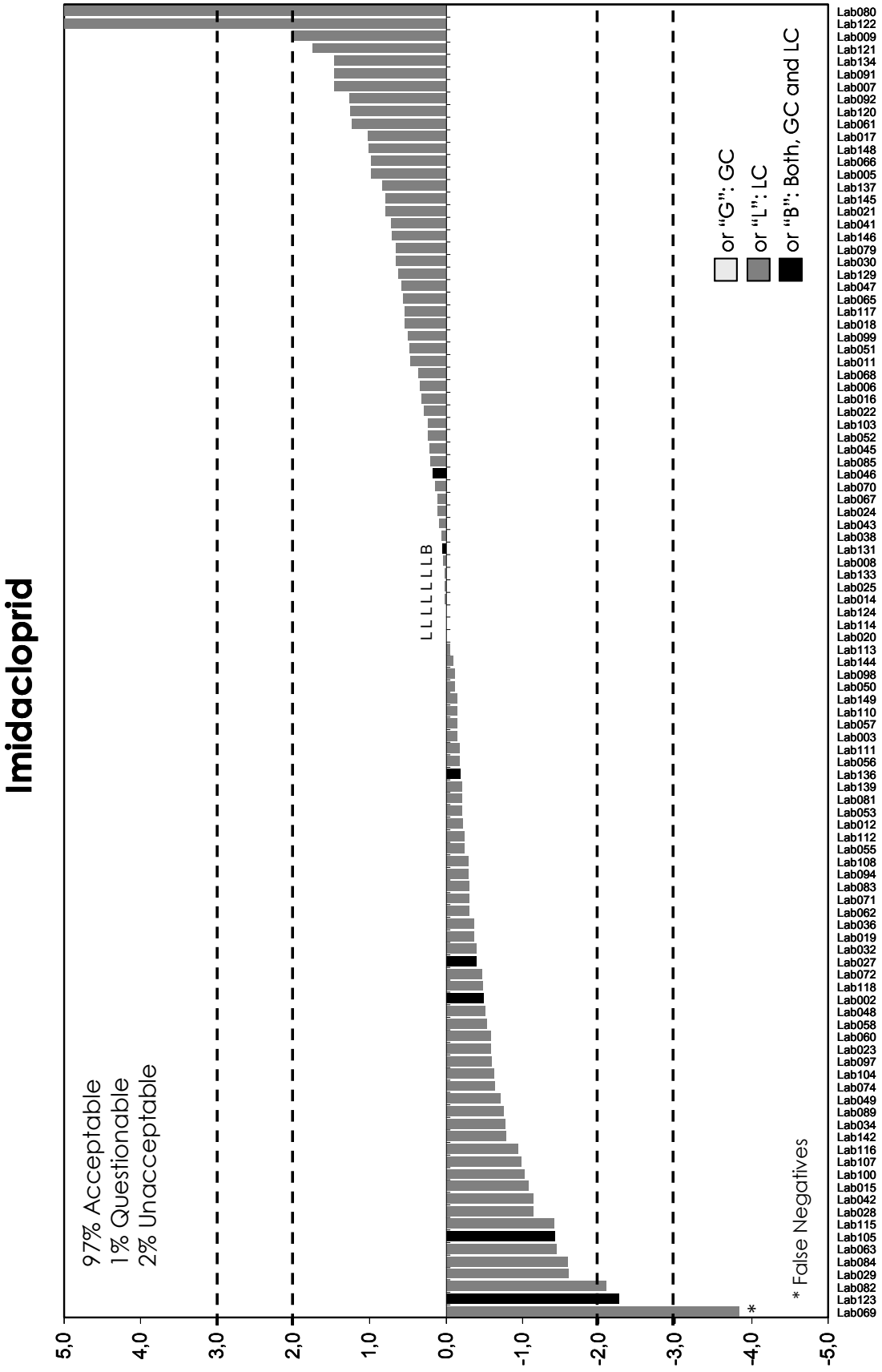
**APPENDIX 4. Graphical representation of z-scores for FFP RSD (25%).**



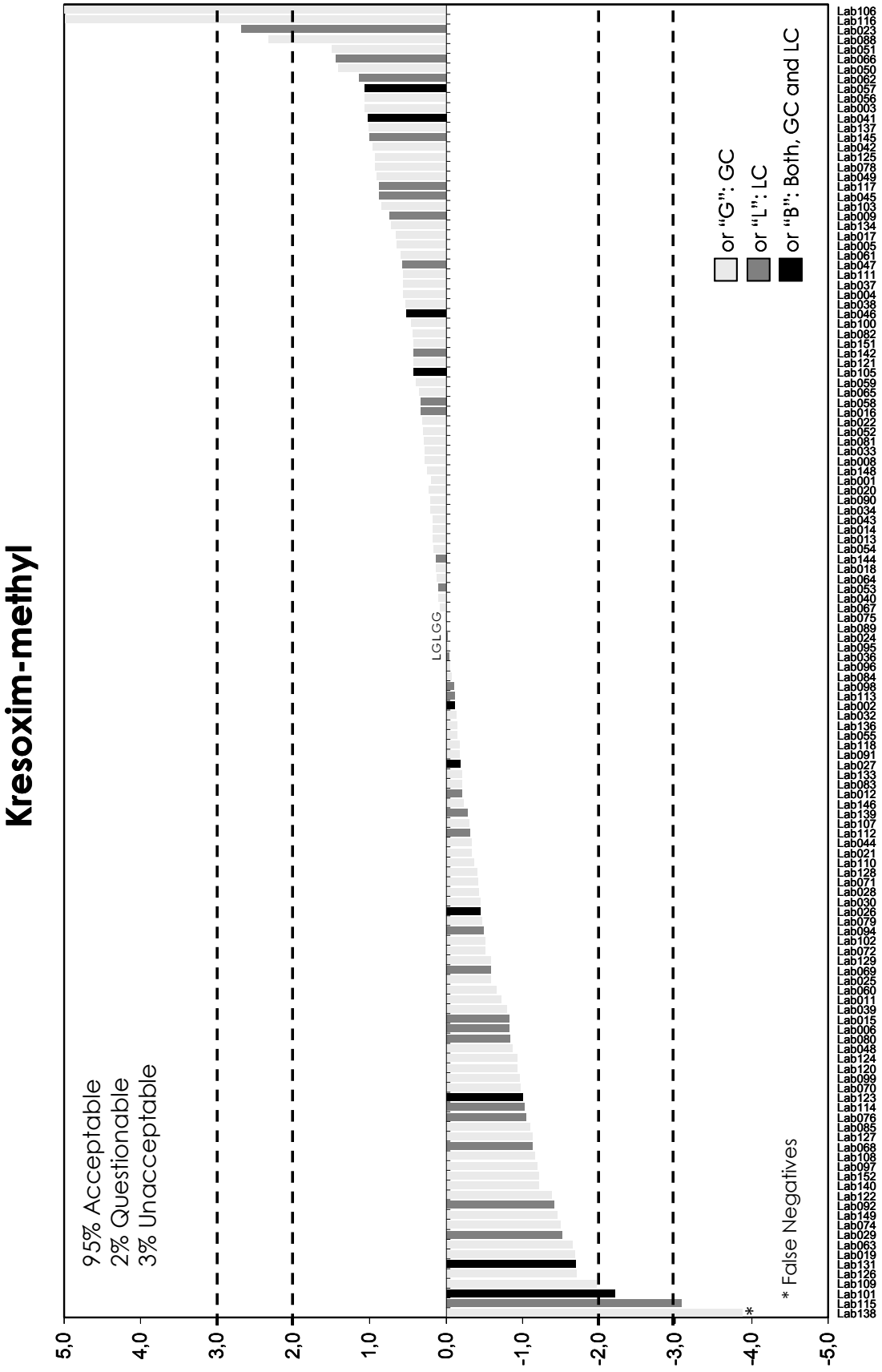
**APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).**



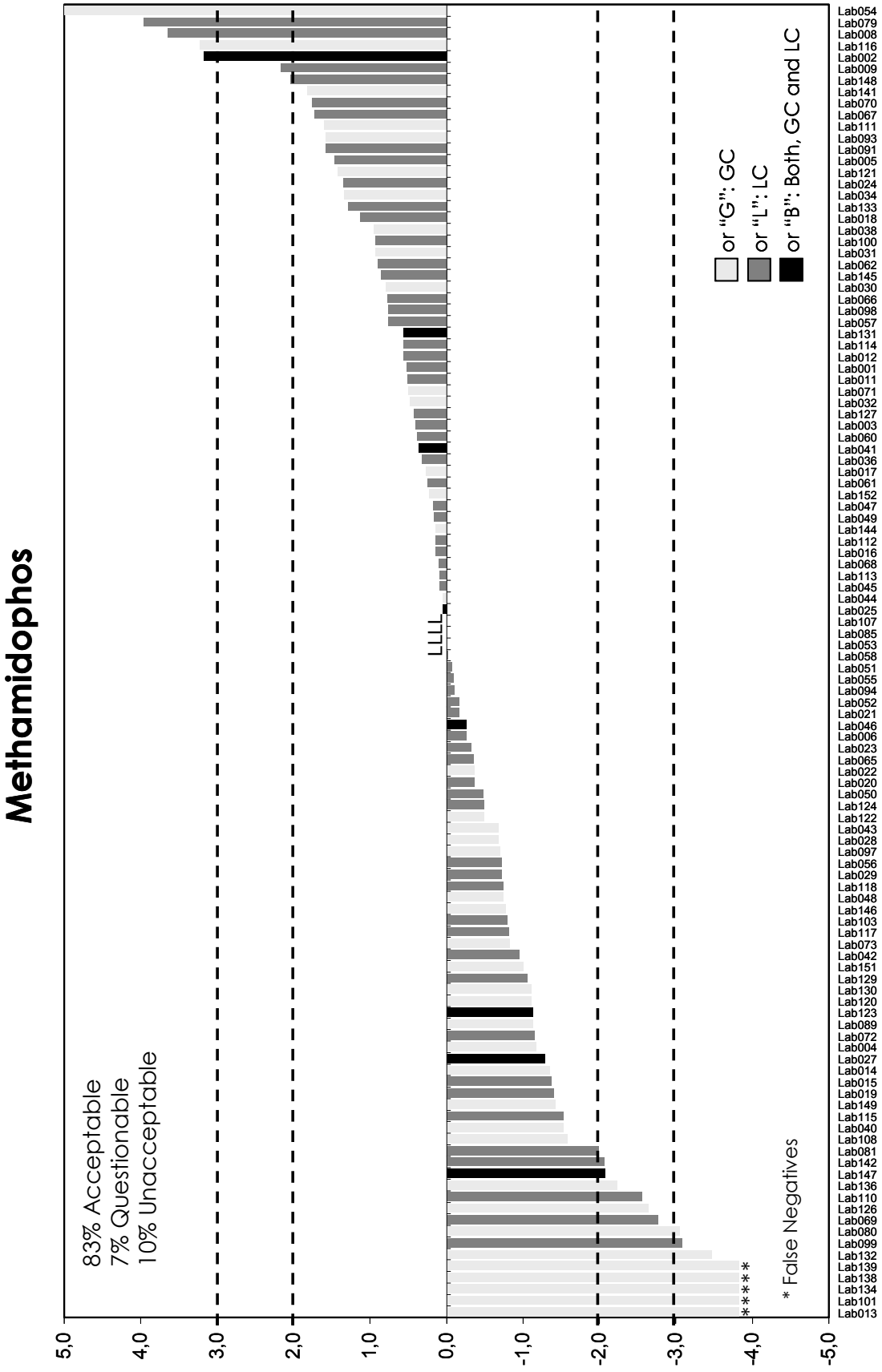
**APPENDIX 4. Graphical representation of z-scores for FFP RSD (25%).**



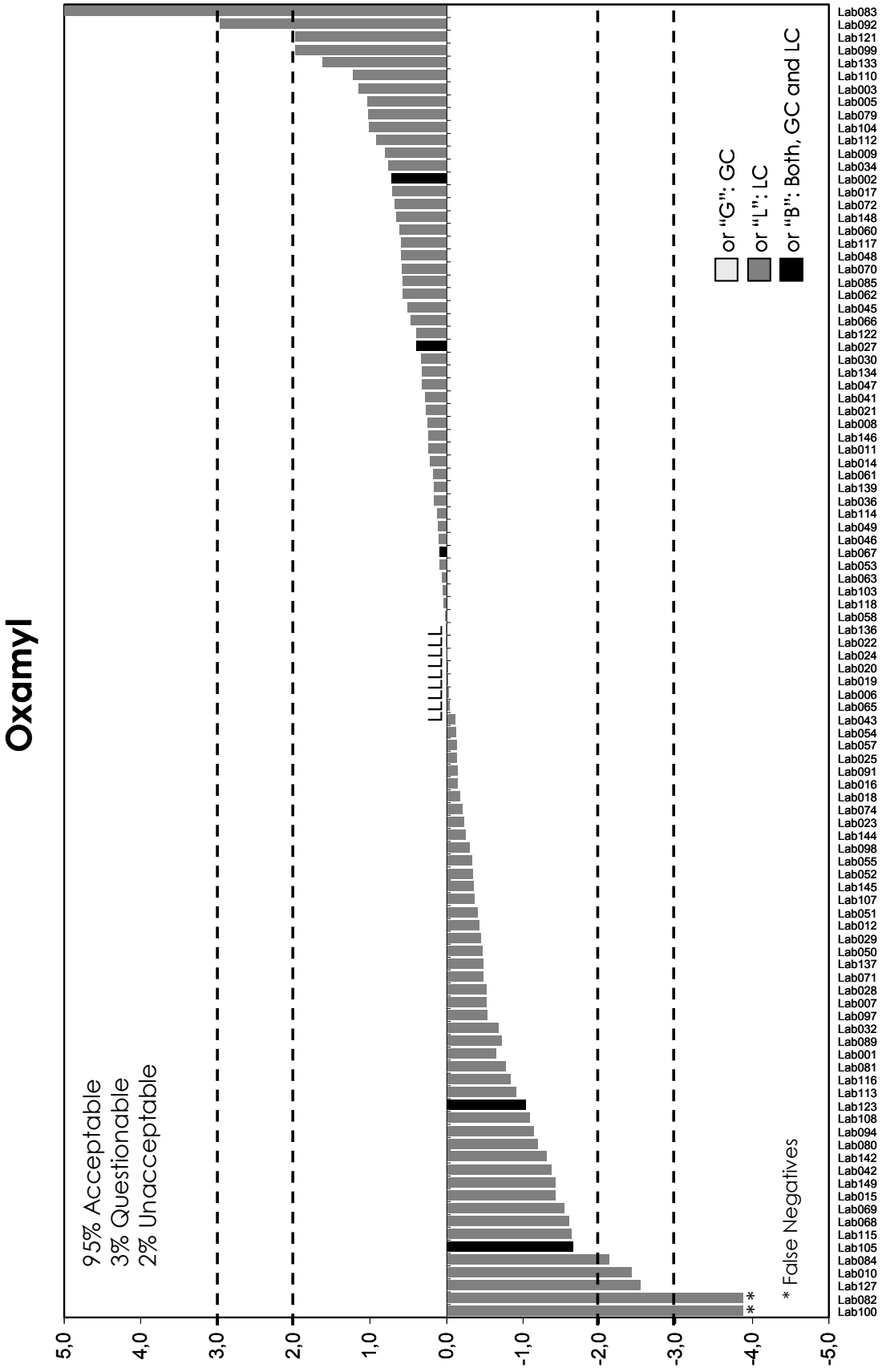
**APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).**



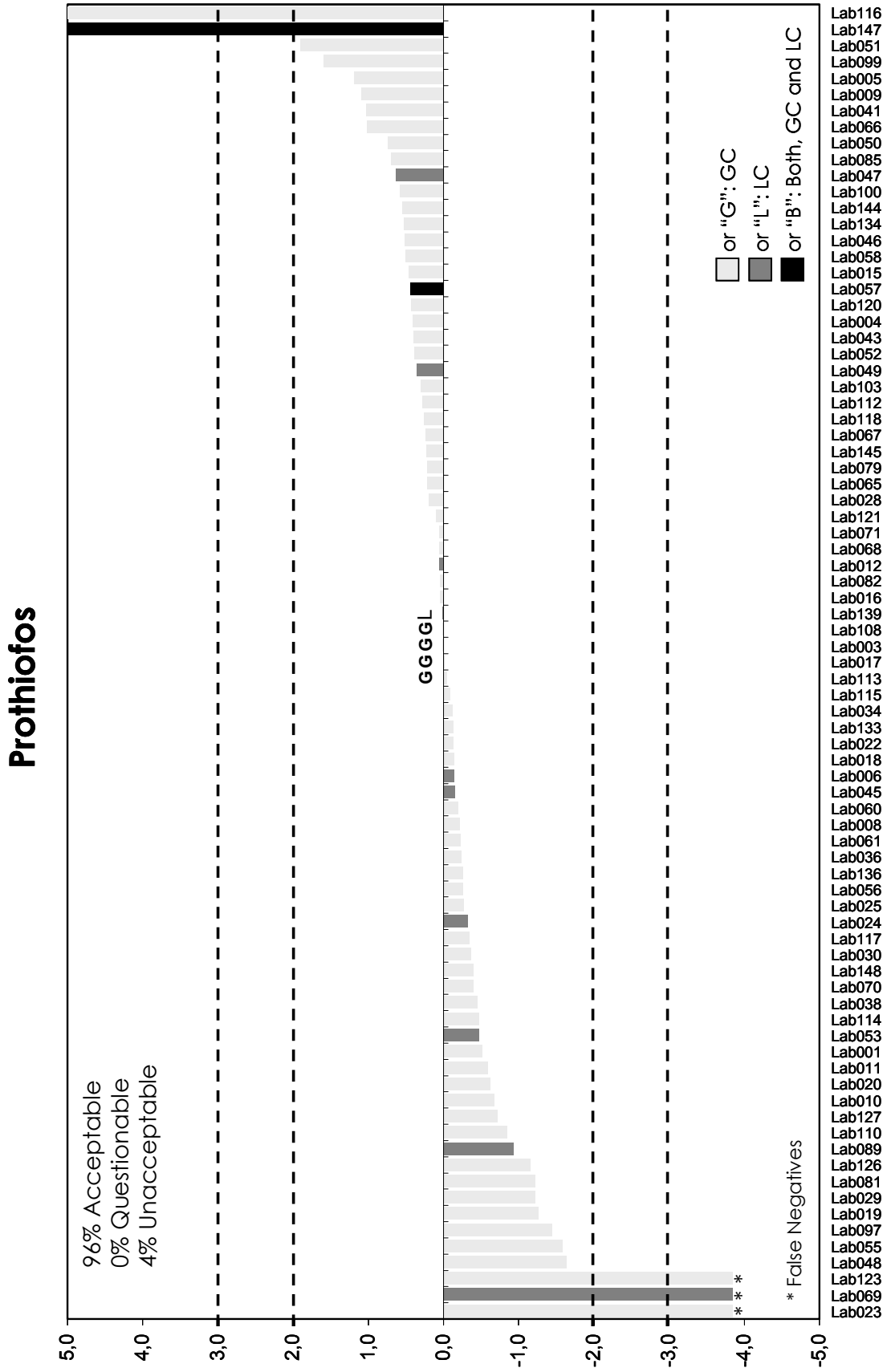
**APPENDIX 4. Graphical representation of z-scores for FFP RSD (25%).**



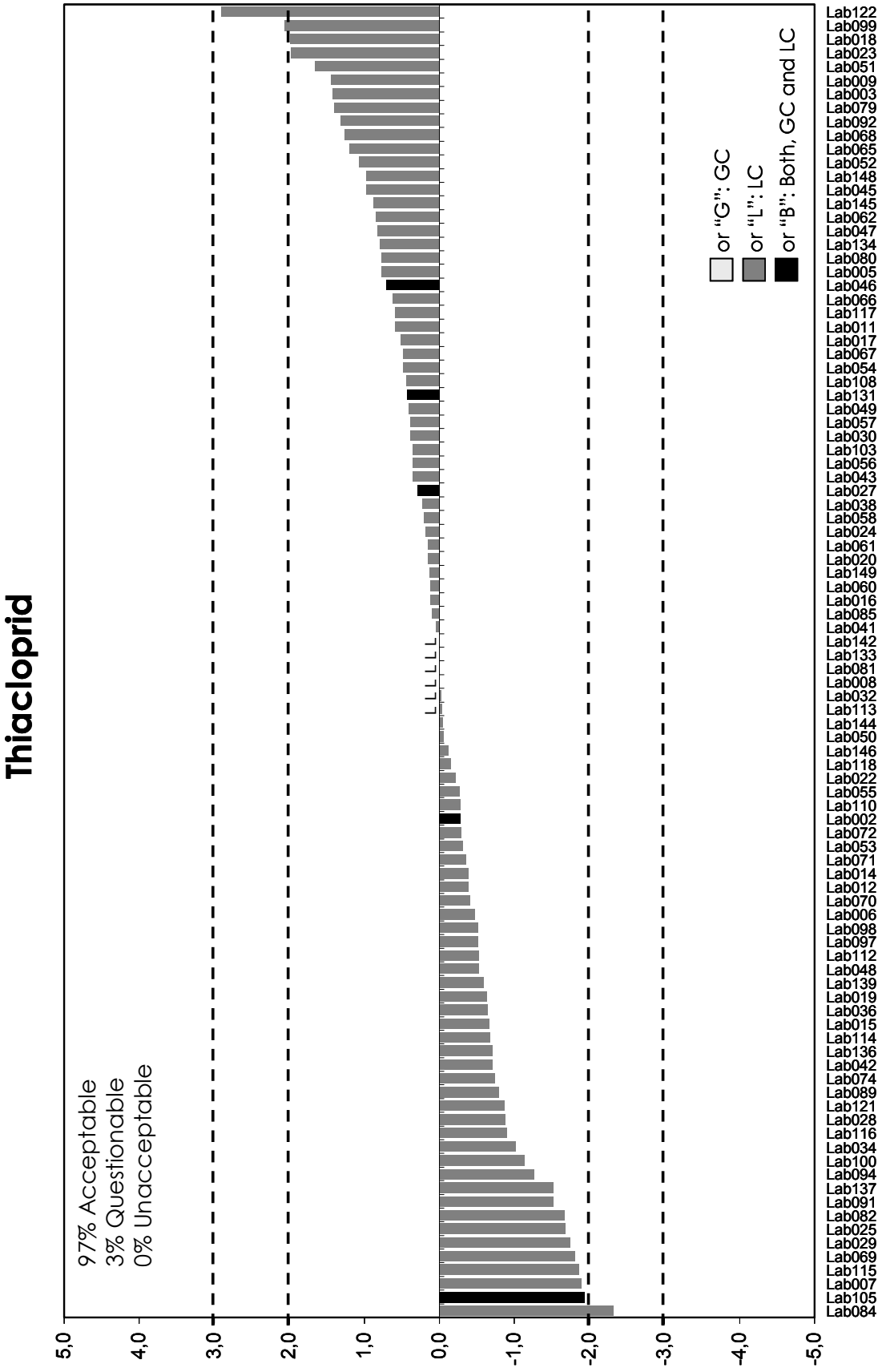
**APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).**



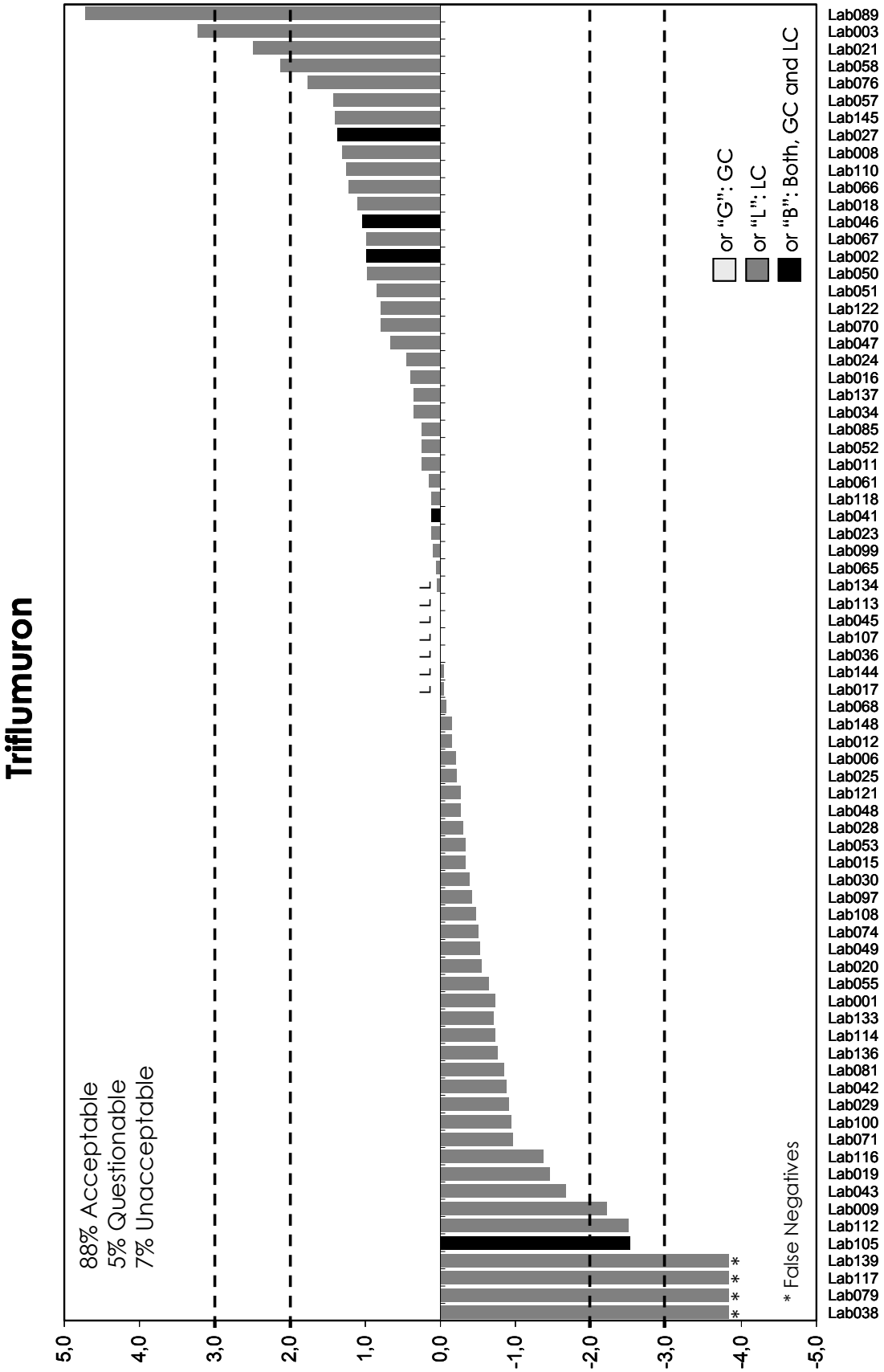
**APPENDIX 4. Graphical representation of z-scores for FFP RSD (25%).**



**APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).**



**APPENDIX 4. Graphical representation of z-scores for FFP RSD (25%).**



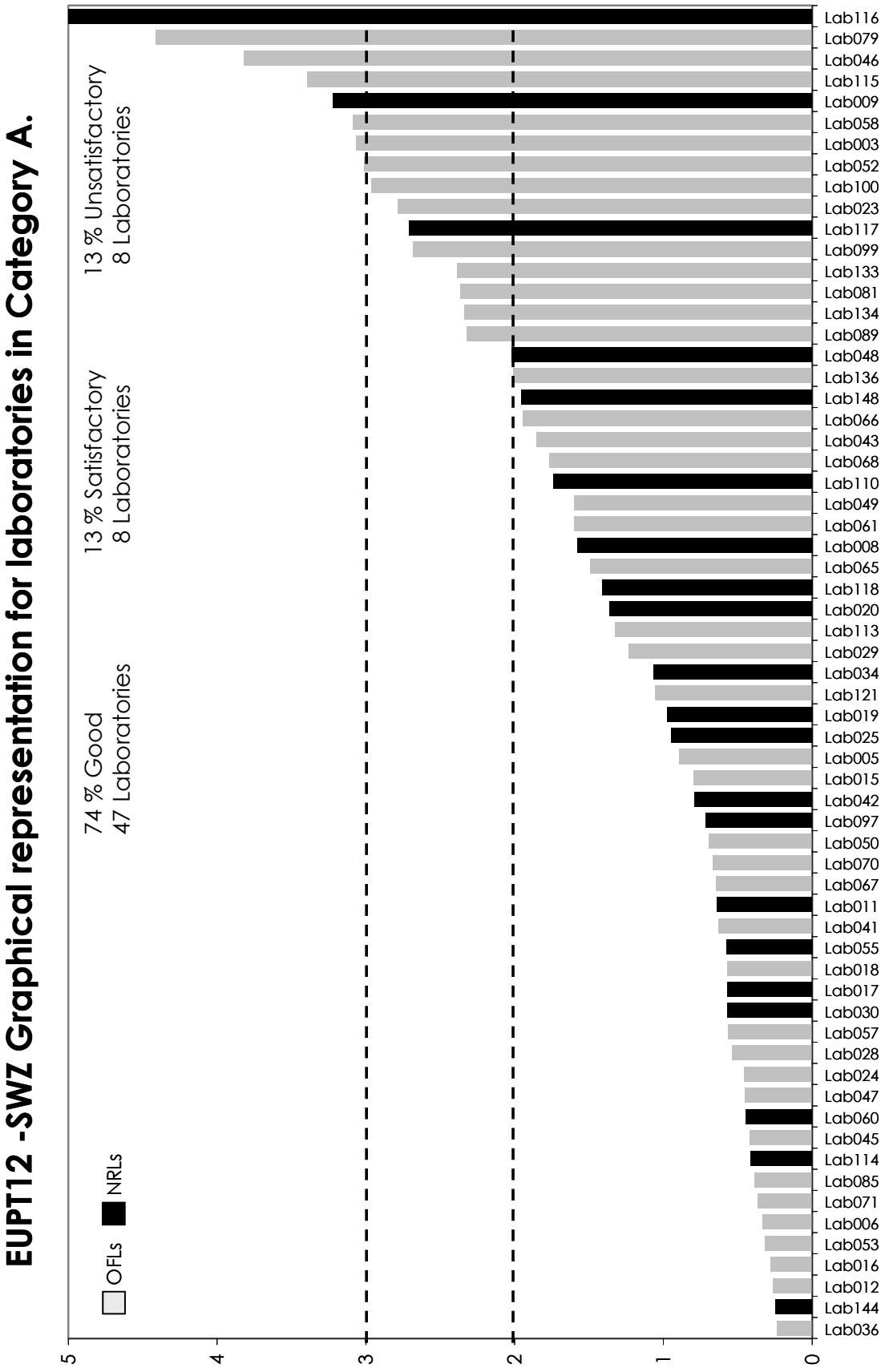
**APPENDIX 5. 'Sum of Weighted z-Scores' (SWZ) for laboratories in Category A.**

| Lab Code | Aldicarb Sum | Azinphos-methyl | Carbendazim | Chlorpyrifos | Dimethoate Sum | EPN | Ethion | Fenpropathrin | Imidacloprid | Kresoxim-methyl | Methamidophos | Oxamyl | Prothiofos | Thiacloprid | Triflumuron | No. of Pesticides | SWZ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | z-score | | | | | | | | | | | | | | | | |
| 003 | 1.1 | -0.4 | 4.0 | -0.4 | -0.2 | | -0.4 | 0.1 | -0.1 | 1.1 | 0.4 | 1.2 | 0.0 | 1.4 | 3.2 | 14 | 3.1 |
| 005 | 0.1 | -0.3 | 0.5 | 1.5 | 1.0 | 0.1 | 1.9 | 1.0 | 1.0 | 0.6 | 1.5 | 1.0 | 1.2 | 0.8 | | 14 | 0.9 |
| 006 | 0.1 | -0.8 | 0.1 | -0.2 | 0.9 | -0.6 | 0.0 | 0.1 | 0.3 | -0.8 | -0.3 | 0.0 | -0.1 | -0.5 | -0.2 | 15 | 0.3 |
| 008 | 0.5 | -0.3 | 0.2 | 0.4 | 0.5 | -0.1 | 0.3 | -1.1 | 0.0 | 0.3 | 3.6 | 0.3 | -0.2 | 0.0 | 1.3 | 15 | 1.6 |
| 009 | 3.1 | 1.6 | 1.5 | 1.6 | 1.5 | 1.2 | 1.3 | -0.1 | 2.0 | 0.7 | 2.2 | 0.8 | 1.1 | 1.4 | -2.2 | 15 | 3.2 |
| 011 | -0.1 | 0.5 | 0.7 | -0.8 | 1.0 | -1.5 | -0.4 | -1.1 | 0.5 | -0.7 | 0.5 | 0.2 | -0.6 | 0.6 | 0.3 | 15 | 0.6 |
| 012 | 0.4 | -0.1 | -0.2 | -0.2 | 0.0 | 0.1 | 0.1 | 0.9 | -0.2 | -0.2 | 0.6 | -0.4 | 0.1 | -0.4 | -0.2 | 15 | 0.3 |
| 015 | -1.3 | -0.2 | -0.2 | -0.3 | -1.6 | 0.1 | 0.2 | 1.9 | -1.1 | -0.8 | -1.4 | -1.4 | 0.5 | -0.7 | -0.3 | 15 | 0.8 |
| 016 | 0.2 | -0.8 | -0.6 | 0.0 | 0.0 | -0.5 | -0.2 | 0.4 | 0.3 | 0.3 | 0.1 | -0.1 | 0.0 | 0.1 | 0.4 | 15 | 0.3 |
| 017 | 1.5 | 0.7 | 1.2 | 0.3 | 0.8 | 0.3 | 0.1 | 0.3 | 1.0 | 0.7 | 0.3 | 0.7 | 0.0 | 0.5 | 0.0 | 15 | 0.6 |
| 018 | 0.3 | -0.6 | 1.5 | 0.1 | 0.2 | -0.5 | -0.2 | 0.1 | 0.5 | 0.1 | 1.1 | -0.2 | -0.1 | 2.0 | 1.1 | 15 | 0.6 |
| 019 | 0.0 | -1.3 | 0.0 | -1.3 | -1.4 | -1.5 | -1.1 | -1.2 | -0.4 | -1.7 | -1.4 | 0.0 | -1.3 | -0.6 | -1.5 | 15 | 1.0 |
| 020 | -0.8 | -3.2 | 0.7 | 0.0 | -0.5 | -0.1 | 0.1 | -0.5 | 0.0 | 0.2 | -0.4 | 0.0 | -0.6 | 0.2 | -0.6 | 15 | 1.4 |
| 023 | 0.3 | -0.2 | 2.3 | -1.1 | 0.3 | -0.1 | -1.1 | -1.1 | -0.6 | 2.7 | -0.3 | -0.2 | -3.9 | 2.0 | 0.1 | 15 | 2.8 |
| 024 | 0.7 | 0.3 | 0.2 | 0.4 | 0.6 | 1.3 | 0.0 | 0.8 | 0.1 | 0.0 | 1.4 | 0.0 | -0.3 | 0.2 | 0.5 | 15 | 0.5 |
| 025 | 0.2 | 0.6 | 2.5 | -0.4 | 0.2 | -1.0 | -0.5 | -0.9 | 0.0 | -0.6 | 0.1 | -0.1 | -0.3 | -1.7 | -0.2 | 15 | 0.9 |
| 028 | -1.4 | -0.1 | 0.1 | 0.2 | -0.7 | 0.2 | 0.3 | 0.9 | -1.1 | -0.4 | -0.7 | -0.5 | 0.2 | -0.9 | -0.3 | 15 | 0.5 |
| 029 | 1.0 | -1.9 | -0.9 | -1.5 | -1.1 | -1.6 | -1.2 | -1.2 | -1.6 | -1.5 | -0.7 | -0.5 | -1.2 | -1.7 | -0.9 | 15 | 1.2 |
| 030 | 1.9 | 1.0 | 0.3 | -0.5 | 0.1 | | -0.4 | -0.5 | 0.7 | -0.5 | 0.8 | 0.3 | -0.4 | 0.4 | -0.4 | 14 | 0.6 |
| 034 | 0.4 | 1.1 | -0.7 | -0.2 | 2.8 | -0.3 | -0.2 | 0.2 | -0.8 | 0.2 | 1.3 | 0.8 | -0.1 | -1.0 | 0.4 | 15 | 1.1 |
| 036 | 0.4 | -0.2 | 0.1 | -0.1 | 0.4 | 0.4 | -0.1 | 0.1 | -0.4 | 0.0 | 0.3 | 0.2 | -0.2 | -0.6 | 0.0 | 15 | 0.2 |
| 041 | 1.0 | -0.3 | 0.3 | 1.0 | 1.5 | -0.5 | -0.4 | 0.8 | 0.7 | 1.0 | 0.4 | 0.3 | 1.0 | 0.1 | 0.1 | 15 | 0.6 |
| 042 | 0.5 | -1.2 | 0.1 | -0.6 | 1.7 | 0.1 | -0.7 | -0.2 | -1.1 | 1.0 | -1.0 | -1.4 | | -0.7 | -0.9 | 14 | 0.8 |
| 043 | 0.4 | 1.0 | -2.0 | 0.1 | 3.9 | 0.0 | 0.2 | -1.2 | 0.1 | 0.2 | -0.7 | -0.1 | 0.4 | 0.4 | -1.7 | 15 | 1.9 |
| 045 | 0.9 | 0.6 | 0.1 | 0.3 | 0.0 | -0.2 | 0.5 | 0.9 | 0.2 | 0.9 | 0.1 | 0.5 | -0.2 | 1.0 | 0.0 | 15 | 0.4 |
| 046 | 0.8 | 1.0 | 5.0 | 0.7 | 0.7 | 0.2 | -0.5 | 5.0 | 0.2 | 0.5 | -0.3 | 0.1 | 0.5 | 0.7 | 1.0 | 15 | 3.8 |
| 047 | 0.6 | 0.0 | 0.3 | 0.3 | -0.4 | 0.1 | 0.6 | 0.7 | 0.6 | 0.6 | 0.2 | 0.3 | 0.6 | 0.8 | 0.7 | 15 | 0.5 |
| 048 | 0.0 | -1.6 | -0.4 | -1.4 | -3.7 | -0.6 | -1.9 | -0.8 | -0.5 | -0.9 | -0.7 | 0.6 | -1.6 | -0.5 | -0.3 | 15 | 2.0 |
| 049 | 0.8 | -3.2 | 0.0 | 1.6 | 0.4 | -0.2 | 1.6 | 0.4 | -0.7 | 0.9 | 0.2 | 0.1 | 0.4 | 0.4 | -0.5 | 15 | 1.6 |
| 050 | 0.3 | -0.3 | 0.2 | 1.4 | 0.2 | 1.1 | 1.7 | 0.9 | -0.1 | 1.4 | -0.5 | -0.5 | 0.7 | -0.1 | 1.0 | 15 | 0.7 |
| 052 | -0.2 | 0.4 | 5.0 | 0.6 | -0.1 | 0.3 | 0.3 | 3.1 | 0.2 | 0.3 | -0.2 | -0.3 | 0.4 | 1.1 | 0.3 | 15 | 3.0 |
| 053 | 0.6 | -0.4 | -0.2 | -0.2 | 0.8 | -0.8 | 0.0 | -0.2 | -0.2 | 0.1 | 0.0 | 0.1 | -0.5 | -0.3 | -0.3 | 15 | 0.3 |

**APPENDIX 5. 'Sum of Weighted z-Scores' (SWZ) for laboratories in Category A.**

| Lab Code | Aldicarb Sum | Azinphos-methyl | Carbendazim | Chlorpyrifos | Dimethoate Sum | EPN | Ethion | Fenpropathrin | Imidacloprid | Kresoxim-methyl | Methamidophos | Oxamyl | Prothiofos | Thiacloprid | Triflumuron | No. of Pesticides | SWZ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | z-score | | | | | | | | | | | | | | | | |
| 055 | -0.3 | -0.6 | 0.0 | -1.3 | 1.2 | -0.6 | -0.9 | -0.4 | -0.2 | -0.2 | -0.1 | -0.3 | -1.6 | -0.3 | -0.6 | 15 | 0.6 |
| 057 | -0.5 | -0.3 | 0.3 | 1.0 | 0.4 | -0.7 | 0.5 | 0.4 | -0.1 | 1.1 | 0.8 | -0.1 | 0.4 | 0.4 | 1.4 | 15 | 0.6 |
| 058 | 0.9 | -1.2 | 2.6 | 2.7 | -3.7 | 0.2 | 0.2 | 1.5 | -0.5 | 0.3 | 0.0 | 0.0 | 0.5 | 0.2 | 2.1 | 15 | 3.1 |
| 060 | -0.5 | -0.9 | 0.1 | -0.6 | -0.2 | | -0.5 | 0.3 | -0.6 | -0.7 | 0.4 | 0.6 | -0.2 | 0.1 | | 13 | 0.4 |
| 061 | 0.3 | 1.2 | -0.7 | 0.2 | 3.6 | 0.1 | 0.3 | -0.3 | 1.2 | 0.6 | 0.2 | 0.2 | -0.2 | 0.2 | 0.2 | 15 | 1.6 |
| 065 | 0.0 | -3.2 | 1.1 | -0.1 | 1.2 | -0.5 | 0.5 | 0.4 | 0.6 | 0.4 | -0.4 | 0.0 | 0.2 | 1.2 | 0.1 | 15 | 1.5 |
| 066 | 0.7 | -3.2 | 0.5 | 0.8 | 1.3 | 0.4 | 1.4 | 1.7 | 1.0 | 1.4 | 0.8 | 0.5 | 1.0 | 0.6 | 1.2 | 15 | 1.9 |
| 067 | 0.9 | 0.3 | 0.4 | 0.9 | -1.0 | 0.9 | 0.8 | 0.7 | 0.1 | 0.1 | 1.7 | 0.1 | 0.2 | 0.5 | 1.0 | 15 | 0.6 |
| 068 | -1.0 | -3.2 | 0.3 | 0.7 | -0.4 | -1.1 | 1.1 | 1.5 | 0.4 | -1.1 | 0.1 | -1.6 | 0.1 | 1.3 | -0.1 | 15 | 1.8 |
| 070 | -0.4 | 1.7 | -1.8 | 0.2 | -0.4 | -0.1 | 0.1 | -0.2 | 0.1 | -1.0 | 1.8 | 0.6 | -0.4 | -0.4 | 0.8 | 15 | 0.7 |
| 071 | 0.3 | 1.1 | -0.2 | 0.2 | 0.0 | 0.1 | 0.2 | 0.4 | -0.3 | -0.4 | 0.5 | -0.5 | 0.1 | -0.4 | -1.0 | 15 | 0.4 |
| 079 | 1.5 | 0.0 | 1.6 | 0.5 | -3.7 | 0.8 | 0.0 | -0.6 | 0.7 | -0.5 | 4.0 | 1.0 | 0.2 | 1.4 | -3.8 | 15 | 4.4 |
| 081 | -0.1 | 5.0 | 0.9 | -0.4 | -2.0 | -0.3 | -0.8 | -0.7 | -0.2 | 0.3 | -2.0 | -0.8 | -1.2 | 0.0 | -0.8 | 15 | 2.4 |
| 085 | 0.4 | -0.1 | 0.0 | 0.4 | -0.8 | 0.1 | 0.9 | 0.2 | 0.2 | -1.1 | 0.0 | 0.6 | 0.7 | 0.1 | 0.3 | 15 | 0.4 |
| 089 | | -1.6 | -1.6 | 0.3 | -0.4 | -0.5 | 0.1 | 0.1 | -0.8 | 0.0 | -1.1 | -0.7 | -0.9 | -0.8 | 4.7 | 14 | 2.3 |
| 097 | -0.1 | -1.0 | -0.2 | -0.9 | -0.6 | -1.0 | -1.1 | -0.5 | -0.6 | -1.2 | -0.7 | -0.5 | -1.4 | -0.5 | -0.4 | 15 | 0.7 |
| 099 | 1.9 | -0.4 | 0.5 | -0.5 | -2.7 | -0.7 | -0.8 | -0.6 | 0.5 | -1.0 | -3.1 | 2.0 | 1.6 | 2.1 | 0.1 | 15 | 2.7 |
| 100 | 0.0 | -3.2 | -1.1 | 3.0 | 1.0 | -1.0 | 1.0 | -1.4 | -1.0 | 0.5 | 0.9 | -3.9 | 0.6 | -1.1 | -0.9 | 15 | 4.1 |
| 110 | -0.7 | 1.8 | 1.4 | -0.7 | -2.3 | -1.0 | -1.1 | -0.8 | -0.1 | -0.4 | -2.6 | 1.2 | -0.8 | -0.3 | 1.3 | 15 | 1.7 |
| 113 | 0.2 | 0.1 | -0.7 | -0.1 | 0.4 | -3.3 | 0.1 | 0.3 | 0.0 | -0.1 | 0.1 | -0.9 | 0.0 | 0.0 | 0.0 | 15 | 1.3 |
| 114 | 0.5 | -0.3 | 0.1 | -0.4 | 0.5 | -0.5 | -0.3 | -0.1 | 0.0 | -1.0 | 0.6 | 0.1 | -0.5 | -0.7 | -0.7 | 15 | 0.4 |
| 115 | -2.9 | 1.4 | -1.9 | 2.0 | -1.3 | | -0.4 | 2.1 | -1.4 | -3.1 | -1.5 | -1.6 | -0.1 | -1.9 | | 13 | 3.4 |
| 116 | -1.0 | 5.0 | -0.9 | 5.0 | 3.7 | 5.0 | 5.0 | 5.0 | -0.9 | 5.0 | 3.2 | -0.8 | 5.0 | -0.9 | -1.4 | 15 | 14.4 |
| 117 | -3.0 | -0.9 | 0.6 | 0.1 | -0.2 | -0.5 | -0.2 | 0.1 | 0.5 | 0.9 | -0.8 | 0.6 | -0.3 | 0.6 | -3.8 | 15 | 2.7 |
| 118 | 0.1 | -3.2 | -0.4 | 0.4 | -1.0 | 0.3 | 0.6 | 0.6 | -0.5 | -0.2 | -0.7 | 0.0 | 0.3 | -0.2 | 0.1 | 15 | 1.4 |
| 121 | | 1.4 | -1.6 | 0.6 | -1.0 | 0.0 | 1.8 | -1.5 | 1.8 | 0.4 | 1.4 | 2.0 | 0.1 | -0.9 | -0.3 | 14 | 1.1 |
| 133 | -0.1 | 1.8 | -1.5 | -0.8 | 5.0 | 0.6 | 0.5 | -1.4 | 0.0 | -0.2 | 1.3 | 1.6 | -0.1 | 0.0 | -0.7 | 15 | 2.4 |
| 134 | 1.6 | 0.1 | 0.8 | 2.6 | -0.2 | 0.5 | 0.4 | 0.6 | 1.5 | 0.7 | -3.8 | 0.3 | 0.5 | 0.8 | 0.0 | 15 | 2.3 |
| 136 | -3.0 | 0.3 | -1.8 | 0.0 | -1.2 | 0.9 | 1.5 | -0.5 | -0.2 | -0.2 | -2.2 | 0.0 | -0.3 | -0.7 | -0.8 | 15 | 2.0 |
| 144 | -0.4 | -0.3 | 0.2 | 0.9 | -0.2 | 0.1 | 0.2 | 0.1 | -0.1 | 0.1 | 0.1 | -0.3 | 0.5 | -0.1 | 0.0 | 15 | 0.2 |
| 148 | 0.7 | 0.7 | 0.8 | 0.2 | 0.4 | -3.3 | 0.2 | 0.0 | 1.0 | 0.3 | 2.0 | 0.7 | -0.4 | 1.0 | -0.2 | 15 | 2.0 |

**APPENDIX 6. 'EUPT9 - graphical representation for laboratories in Category A.**



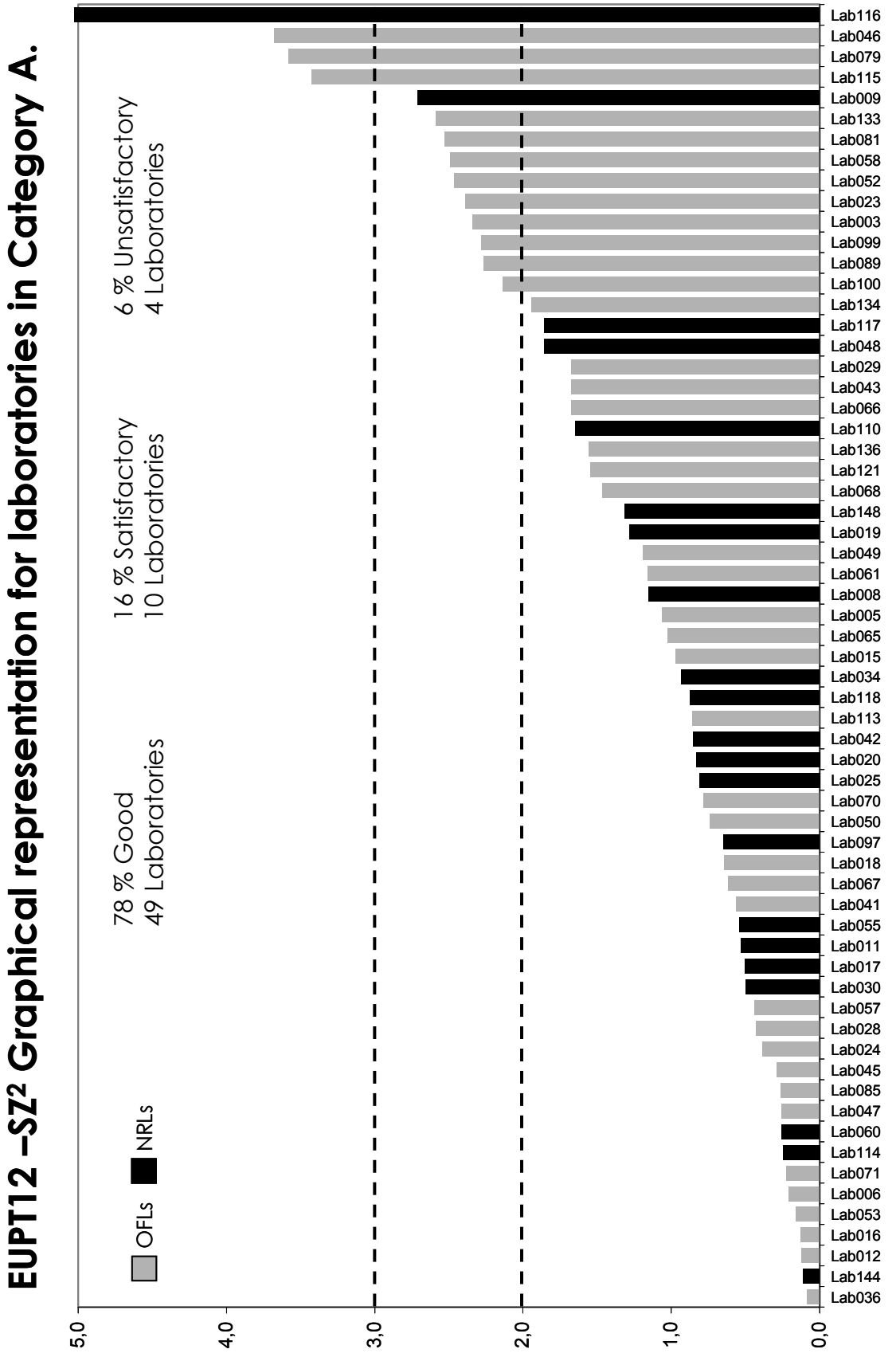
**APPENDIX 7. 'Squared Sum of z-Scores' ($SZ^2$) for laboratories in Category A.**

| Lab Code | Aldicarb Sum | Azinphos-methyl | Carbendazim | Chlorpyrifos | Dimethoate Sum | EPN | Ethion | Fenpropathrin | Imidacloprid | Kresoxim-methyl | Methamidophos | Oxamyl | Prothiofos | Thiacloprid | Triflumuron | No. of Pesticides | $SZ^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | z-score | | | | | | | | | | | | | | | | |
| 003 | 1.1 | -0.4 | 4.0 | -0.4 | -0.2 | | -0.4 | 0.1 | -0.1 | 1.1 | 0.4 | 1.2 | 0.0 | 1.4 | 3.2 | 14 | 2.3 |
| 005 | 0.1 | -0.3 | 0.5 | 1.5 | 1.0 | 0.1 | 1.9 | 1.0 | 1.0 | 0.6 | 1.5 | 1.0 | 1.2 | 0.8 | | 14 | 1.1 |
| 006 | 0.1 | -0.8 | 0.1 | -0.2 | 0.9 | -0.6 | 0.0 | 0.1 | 0.3 | -0.8 | -0.3 | 0.0 | -0.1 | -0.5 | -0.2 | 15 | 0.2 |
| 008 | 0.5 | -0.3 | 0.2 | 0.4 | 0.5 | -0.1 | 0.3 | -1.1 | 0.0 | 0.3 | 3.6 | 0.3 | -0.2 | 0.0 | 1.3 | 15 | 1.2 |
| 009 | 3.1 | 1.6 | 1.5 | 1.6 | 1.5 | 1.2 | 1.3 | -0.1 | 2.0 | 0.7 | 2.2 | 0.8 | 1.1 | 1.4 | -2.2 | 15 | 2.7 |
| 011 | -0.1 | 0.5 | 0.7 | -0.8 | 1.0 | -1.5 | -0.4 | -1.1 | 0.5 | -0.7 | 0.5 | 0.2 | -0.6 | 0.6 | 0.3 | 15 | 0.5 |
| 012 | 0.4 | -0.1 | -0.2 | -0.2 | 0.0 | 0.1 | 0.1 | 0.9 | -0.2 | -0.2 | 0.6 | -0.4 | 0.1 | -0.4 | -0.2 | 15 | 0.1 |
| 015 | -1.3 | -0.2 | -0.2 | -0.3 | -1.6 | 0.1 | 0.2 | 1.9 | -1.1 | -0.8 | -1.4 | -1.4 | 0.5 | -0.7 | -0.3 | 15 | 1.0 |
| 016 | 0.2 | -0.8 | -0.6 | 0.0 | 0.0 | -0.5 | -0.2 | 0.4 | 0.3 | 0.3 | 0.1 | -0.1 | 0.0 | 0.1 | 0.4 | 15 | 0.1 |
| 017 | 1.5 | 0.7 | 1.2 | 0.3 | 0.8 | 0.3 | 0.1 | 0.3 | 1.0 | 0.7 | 0.3 | 0.7 | 0.0 | 0.5 | 0.0 | 15 | 0.5 |
| 018 | 0.3 | -0.6 | 1.5 | 0.1 | 0.2 | -0.5 | -0.2 | 0.1 | 0.5 | 0.1 | 1.1 | -0.2 | -0.1 | 2.0 | 1.1 | 15 | 0.6 |
| 019 | 0.0 | -1.3 | 0.0 | -1.3 | -1.4 | -1.5 | -1.1 | -1.2 | -0.4 | -1.7 | -1.4 | 0.0 | -1.3 | -0.6 | -1.5 | 15 | 1.3 |
| 020 | -0.8 | -3.2 | 0.7 | 0.0 | -0.5 | -0.1 | 0.1 | -0.5 | 0.0 | 0.2 | -0.4 | 0.0 | -0.6 | 0.2 | -0.6 | 15 | 0.8 |
| 023 | 0.3 | -0.2 | 2.3 | -1.1 | 0.3 | -0.1 | -1.1 | -1.1 | -0.6 | 2.7 | -0.3 | -0.2 | -3.9 | 2.0 | 0.1 | 15 | 2.4 |
| 024 | 0.7 | 0.3 | 0.2 | 0.4 | 0.6 | 1.3 | 0.0 | 0.8 | 0.1 | 0.0 | 1.4 | 0.0 | -0.3 | 0.2 | 0.5 | 15 | 0.4 |
| 025 | 0.2 | 0.6 | 2.5 | -0.4 | 0.2 | -1.0 | -0.5 | -0.9 | 0.0 | -0.6 | 0.1 | -0.1 | -0.3 | -1.7 | -0.2 | 15 | 0.8 |
| 028 | -1.4 | -0.1 | 0.1 | 0.2 | -0.7 | 0.2 | 0.3 | 0.9 | -1.1 | -0.4 | -0.7 | -0.5 | 0.2 | -0.9 | -0.3 | 15 | 0.4 |
| 029 | 1.0 | -1.9 | -0.9 | -1.5 | -1.1 | -1.6 | -1.2 | -1.2 | -1.6 | -1.5 | -0.7 | -0.5 | -1.2 | -1.7 | -0.9 | 15 | 1.7 |
| 030 | 1.9 | 1.0 | 0.3 | -0.5 | 0.1 | | -0.4 | -0.5 | 0.7 | -0.5 | 0.8 | 0.3 | -0.4 | 0.4 | -0.4 | 14 | 0.5 |
| 034 | 0.4 | 1.1 | -0.7 | -0.2 | 2.8 | -0.3 | -0.2 | 0.2 | -0.8 | 0.2 | 1.3 | 0.8 | -0.1 | -1.0 | 0.4 | 15 | 0.9 |
| 036 | 0.4 | -0.2 | 0.1 | -0.1 | 0.4 | 0.4 | -0.1 | 0.1 | -0.4 | 0.0 | 0.3 | 0.2 | -0.2 | -0.6 | 0.0 | 15 | 0.1 |
| 041 | 1.0 | -0.3 | 0.3 | 1.0 | 1.5 | -0.5 | -0.4 | 0.8 | 0.7 | 1.0 | 0.4 | 0.3 | 1.0 | 0.1 | 0.1 | 15 | 0.6 |
| 042 | 0.5 | -1.2 | 0.1 | -0.6 | 1.7 | 0.1 | -0.7 | -0.2 | -1.1 | 1.0 | -1.0 | -1.4 | | -0.7 | -0.9 | 14 | 0.9 |
| 043 | 0.4 | 1.0 | -2.0 | 0.1 | 3.9 | 0.0 | 0.2 | -1.2 | 0.1 | 0.2 | -0.7 | -0.1 | 0.4 | 0.4 | -1.7 | 15 | 1.7 |
| 045 | 0.9 | 0.6 | 0.1 | 0.3 | 0.0 | -0.2 | 0.5 | 0.9 | 0.2 | 0.9 | 0.1 | 0.5 | -0.2 | 1.0 | 0.0 | 15 | 0.3 |
| 046 | 0.8 | 1.0 | 5.0 | 0.7 | 0.7 | 0.2 | -0.5 | 5.0 | 0.2 | 0.5 | -0.3 | 0.1 | 0.5 | 0.7 | 1.0 | 15 | 3.7 |
| 047 | 0.6 | 0.0 | 0.3 | 0.3 | -0.4 | 0.1 | 0.6 | 0.7 | 0.6 | 0.6 | 0.2 | 0.3 | 0.6 | 0.8 | 0.7 | 15 | 0.3 |
| 048 | 0.0 | -1.6 | -0.4 | -1.4 | -3.7 | -0.6 | -1.9 | -0.8 | -0.5 | -0.9 | -0.7 | 0.6 | -1.6 | -0.5 | -0.3 | 15 | 1.9 |
| 049 | 0.8 | -3.2 | 0.0 | 1.6 | 0.4 | -0.2 | 1.6 | 0.4 | -0.7 | 0.9 | 0.2 | 0.1 | 0.4 | 0.4 | -0.5 | 15 | 1.2 |
| 050 | 0.3 | -0.3 | 0.2 | 1.4 | 0.2 | 1.1 | 1.7 | 0.9 | -0.1 | 1.4 | -0.5 | -0.5 | 0.7 | -0.1 | 1.0 | 15 | 0.7 |
| 052 | -0.2 | 0.4 | 5.0 | 0.6 | -0.1 | 0.3 | 0.3 | 3.1 | 0.2 | 0.3 | -0.2 | -0.3 | 0.4 | 1.1 | 0.3 | 15 | 2.5 |
| 053 | 0.6 | -0.4 | -0.2 | -0.2 | 0.8 | -0.8 | 0.0 | -0.2 | -0.2 | 0.1 | 0.0 | 0.1 | -0.5 | -0.3 | -0.3 | 15 | 0.2 |

**APPENDIX 7. 'Squared Sum of z-Scores' ($SZ^2$) for laboratories in Category A.**

| Lab Code | Aldicarb Sum | Azinphos-methyl | Carbendazim | Chlorpyrifos | Dimethoate Sum | EPN | Ethion | Fenpropathrin | Imidacloprid | Kresoxim-methyl | Methamidophos | Oxamyl | Prothiofos | Thiacloprid | Triflumuron | No. of Pesticides | $SZ^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | z-score | | | | | | | | | | | | | | | | |
| 055 | -0.3 | -0.6 | 0.0 | -1.3 | 1.2 | -0.6 | -0.9 | -0.4 | -0.2 | -0.2 | -0.1 | -0.3 | -1.6 | -0.3 | -0.6 | 15 | 0.5 |
| 057 | -0.5 | -0.3 | 0.3 | 1.0 | 0.4 | -0.7 | 0.5 | 0.4 | -0.1 | 1.1 | 0.8 | -0.1 | 0.4 | 0.4 | 1.4 | 15 | 0.4 |
| 058 | 0.9 | -1.2 | 2.6 | 2.7 | -3.7 | 0.2 | 0.2 | 1.5 | -0.5 | 0.3 | 0.0 | 0.0 | 0.5 | 0.2 | 2.1 | 15 | 2.5 |
| 060 | -0.5 | -0.9 | 0.1 | -0.6 | -0.2 | | -0.5 | 0.3 | -0.6 | -0.7 | 0.4 | 0.6 | -0.2 | 0.1 | | 13 | 0.3 |
| 061 | 0.3 | 1.2 | -0.7 | 0.2 | 3.6 | 0.1 | 0.3 | -0.3 | 1.2 | 0.6 | 0.2 | 0.2 | -0.2 | 0.2 | 0.2 | 15 | 1.2 |
| 065 | 0.0 | -3.2 | 1.1 | -0.1 | 1.2 | -0.5 | 0.5 | 0.4 | 0.6 | 0.4 | -0.4 | 0.0 | 0.2 | 1.2 | 0.1 | 15 | 1.0 |
| 066 | 0.7 | -3.2 | 0.5 | 0.8 | 1.3 | 0.4 | 1.4 | 1.7 | 1.0 | 1.4 | 0.8 | 0.5 | 1.0 | 0.6 | 1.2 | 15 | 1.7 |
| 067 | 0.9 | 0.3 | 0.4 | 0.9 | -1.0 | 0.9 | 0.8 | 0.7 | 0.1 | 0.1 | 1.7 | 0.1 | 0.2 | 0.5 | 1.0 | 15 | 0.6 |
| 068 | -1.0 | -3.2 | 0.3 | 0.7 | -0.4 | -1.1 | 1.1 | 1.5 | 0.4 | -1.1 | 0.1 | -1.6 | 0.1 | 1.3 | -0.1 | 15 | 1.5 |
| 070 | -0.4 | 1.7 | -1.8 | 0.2 | -0.4 | -0.1 | 0.1 | -0.2 | 0.1 | -1.0 | 1.8 | 0.6 | -0.4 | -0.4 | 0.8 | 15 | 0.8 |
| 071 | 0.3 | 1.1 | -0.2 | 0.2 | 0.0 | 0.1 | 0.2 | 0.4 | -0.3 | -0.4 | 0.5 | -0.5 | 0.1 | -0.4 | -1.0 | 15 | 0.2 |
| 079 | 1.5 | 0.0 | 1.6 | 0.5 | -3.7 | 0.8 | 0.0 | -0.6 | 0.7 | -0.5 | 4.0 | 1.0 | 0.2 | 1.4 | -3.8 | 15 | 3.6 |
| 081 | -0.1 | 5.0 | 0.9 | -0.4 | -2.0 | -0.3 | -0.8 | -0.7 | -0.2 | 0.3 | -2.0 | -0.8 | -1.2 | 0.0 | -0.8 | 15 | 2.5 |
| 085 | 0.4 | -0.1 | 0.0 | 0.4 | -0.8 | 0.1 | 0.9 | 0.2 | 0.2 | -1.1 | 0.0 | 0.6 | 0.7 | 0.1 | 0.3 | 15 | 0.3 |
| 089 | | -1.6 | -1.6 | 0.3 | -0.4 | -0.5 | 0.1 | 0.1 | -0.8 | 0.0 | -1.1 | -0.7 | -0.9 | -0.8 | 4.7 | 14 | 2.3 |
| 097 | -0.1 | -1.0 | -0.2 | -0.9 | -0.6 | -1.0 | -1.1 | -0.5 | -0.6 | -1.2 | -0.7 | -0.5 | -1.4 | -0.5 | -0.4 | 15 | 0.6 |
| 099 | 1.9 | -0.4 | 0.5 | -0.5 | -2.7 | -0.7 | -0.8 | -0.6 | 0.5 | -1.0 | -3.1 | 2.0 | 1.6 | 2.1 | 0.1 | 15 | 2.3 |
| 100 | 0.0 | -3.2 | -1.1 | 3.0 | 1.0 | -1.0 | 1.0 | -1.4 | -1.0 | 0.5 | 0.9 | | 0.6 | -1.1 | -0.9 | 14 | 2.1 |
| 110 | -0.7 | 1.8 | 1.4 | -0.7 | -2.3 | -1.0 | -1.1 | -0.8 | -0.1 | -0.4 | -2.6 | 1.2 | -0.8 | -0.3 | 1.3 | 15 | 1.6 |
| 113 | 0.2 | 0.1 | -0.7 | -0.1 | 0.4 | -3.3 | 0.1 | 0.3 | 0.0 | -0.1 | 0.1 | -0.9 | 0.0 | 0.0 | 0.0 | 15 | 0.9 |
| 114 | 0.5 | -0.3 | 0.1 | -0.4 | 0.5 | -0.5 | -0.3 | -0.1 | 0.0 | -1.0 | 0.6 | 0.1 | -0.5 | -0.7 | -0.7 | 15 | 0.2 |
| 115 | -2.9 | 1.4 | -1.9 | 2.0 | -1.3 | | -0.4 | 2.1 | -1.4 | -3.1 | -1.5 | -1.6 | -0.1 | -1.9 | | 13 | 3.4 |
| 116 | -1.0 | 5.0 | -0.9 | 5.0 | 3.7 | 5.0 | 5.0 | 5.0 | -0.9 | 5.0 | 3.2 | -0.8 | 5.0 | -0.9 | -1.4 | 15 | 13.7 |
| 117 | -3.0 | -0.9 | 0.6 | 0.1 | -0.2 | -0.5 | -0.2 | 0.1 | 0.5 | 0.9 | -0.8 | 0.6 | -0.3 | 0.6 | -3.8 | 15 | 1.9 |
| 118 | 0.1 | -3.2 | -0.4 | 0.4 | -1.0 | 0.3 | 0.6 | 0.6 | -0.5 | -0.2 | -0.7 | 0.0 | 0.3 | -0.2 | 0.1 | 15 | 0.9 |
| 121 | | 1.4 | -1.6 | 0.6 | -1.0 | 0.0 | 1.8 | -1.5 | 1.8 | 0.4 | 1.4 | 2.0 | 0.1 | -0.9 | -0.3 | 14 | 1.5 |
| 133 | -0.1 | 1.8 | -1.5 | -0.8 | 5.0 | 0.6 | 0.5 | -1.4 | 0.0 | -0.2 | 1.3 | 1.6 | -0.1 | 0.0 | -0.7 | 15 | 2.6 |
| 134 | 1.6 | 0.1 | 0.8 | 2.6 | -0.2 | 0.5 | 0.4 | 0.6 | 1.5 | 0.7 | -3.8 | 0.3 | 0.5 | 0.8 | 0.0 | 15 | 1.9 |
| 136 | -3.0 | 0.3 | -1.8 | 0.0 | -1.2 | 0.9 | 1.5 | -0.5 | -0.2 | -0.2 | -2.2 | 0.0 | -0.3 | -0.7 | -0.8 | 15 | 1.6 |
| 144 | -0.4 | -0.3 | 0.2 | 0.9 | -0.2 | 0.1 | 0.2 | 0.1 | -0.1 | 0.1 | 0.1 | -0.3 | 0.5 | -0.1 | 0.0 | 15 | 0.1 |
| 148 | 0.7 | 0.7 | 0.8 | 0.2 | 0.4 | -3.3 | 0.2 | 0.0 | 1.0 | 0.3 | 2.0 | 0.7 | -0.4 | 1.0 | -0.2 | 15 | 1.3 |

**APPENDIX 8. EUPT 12 - $SZ^2$ - Graphical representation for laboratories in Category A.**



**APPENDIX 9. Methods used by participants for determining pesticides.**

| ALDICARB SUM | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | 0.02 | D | 0.039 | 100 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 002 | 0.01 | D | 0.049 | 99 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.005 | D | 0.052 | 96 | | AcN | AcN | AcN | 10 | Yes | PSA | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 004 | | NA | | | | | | | | | | | | | | | | |
| 005 | 0.005 | D | 0.042 | 90 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Dimethoat D6 |
| 006 | 0.01 | D | 0.042 | 78 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | | NA | | | | | | | | | | | | | | | | |
| 008 | 0.01 | D | 0.046 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | ITQ | LC-ITQ | Rec. from same batch | | |
| 009 | 0.01 | D | 0.073 | 115 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | 0.01 | D | 0.022 | 34 | | DCM | | | 50 | | SPE | Pure solvent - Single level | | Fluorescence | | Rec. from same batch | | |
| 011 | 0.01 | D | 0.040 | 96.7 | | Water | MeOH | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 012 | 0.002 | D | 0.045 | 90 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | | NA | | | | | | | | | | | | | | | | |
| 014 | 0.004 | ND | | | | | | | | | | | | | | | | |
| 015 | 0.005 | D | 0.028 | 82 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbendazim D4 |
| 016 | 0.01 | D | 0.043 | 90.1 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.01 | D | 0.056 | 99.7 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.044 | 103 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 019 | 0.01 | D | 0.041 | 95.8 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.033 | 69 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 021 | | NA | | | | | | | | | | | | | | | | |
| 022 | 0.003 | D | 0.033 | 89.0 | | Acetone | DCM | Petroleum Ether | 20 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 023 | 0.01 | D | 0.044 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.048 | 94 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.043 | 92 | | AcN | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 026 | | NA | | | | | | | | | | | | | | | | |
| 027 | | NA | | | | | | | | | | | | | | | | |
| 028 | 0.01 | D | 0.027 | 93 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.051 | 100 | Yes | EtOAc | | | 15 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.060 | 97.4 | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | 0.01 | D | 0.043 | 105 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 033 | | NA | | | | | | | | | | | | | | | | |
| 034 | 0.005 | D | 0.045 | 83 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Single level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.045 | 89 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TTP |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | 0.02 | ND | | | | | | | | | | | | | | | | |
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | | NA | | | | | | | | | | | | | | | | |
| 041 | 0.02 | D | 0.051 | 115 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| ALDICARB SUM | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **042** | 0.01 | D | 0.046 | 104 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TRIS |
| **043** | 0.01 | D | 0.045 | 86 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | UV | DAD | Rec. from same batch | | |
| **044** | | NA | | | | | | | | | | | | | | | | |
| **045** | 0.01 | D | 0.050 | 84 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **046** | | D | 0.049 | 80 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **047** | 0.005 | D | 0.047 | 91 | | AcN | | | 5.0 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | Linuron-D6 |
| **048** | 0.02 | D | 0.041 | 95 | | Acetone | DCM | | 25 | | SPE | Pure solvent - Multiple level | | Fluorescence | LC-MS | Rec. from same batch | | |
| **049** | 0.005 | D | 0.049 | 104 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **050** | 0.01 | D | 0.044 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **051** | 0.01 | D | 0.069 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Atrazin D5 |
| **052** | 0.01 | D | 0.039 | 78.2 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **053** | 0.01 | D | 0.047 | 95 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| **054** | 0.01 | D | 0.035 | 81.1 | | Acetone | DCM | Petroleum Ether | 3 | | | Pure solvent - Single level | | Fluorescence | GC-TOF | Rec. from same batch | | |
| **055** | 0.01 | D | 0.038 | 93 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **056** | | NA | | | | | | | | | | | | | | | | |
| **057** | | D | 0.036 | 100 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **058** | 0.025 | D | 0.050 | 84 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **059** | | NA | | | | | | | | | | | | | | | | |
| **060** | 0.01 | D | 0.036 | 113 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbaryl-C13 |
| **061** | 0.01 | D | 0.044 | 84.9 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **062** | 0.01 | D | 0.047 | 91 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| **063** | 0.004 | D | 0.055 | 91 | | DCM | | | 20 | | SPE | Pure solvent - Multiple level | | Fluorescence | | Rec. from same batch | | |
| **064** | | NA | | | | | | | | | | | | | | | | |
| **065** | 0.01 | D | 0.041 | 113 | | AcN | | | 10 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Pirimicarb D6 |
| **066** | 0.01 | D | 0.048 | 111 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |
| **067** | 0.01 | D | 0.050 | 91 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| **068** | 0.01 | D | 0.031 | 106 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **069** | | NA | | | | | | | | | | | | | | | | |
| **070** | 0.01 | D | 0.037 | 101 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **071** | 0.01 | D | 0.044 | 116.0 | | MeOH | | | 5 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **072** | 0.02 | D | 0.038 | 85 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **073** | | NA | | | | | | | | | | | | | | | | |
| **074** | 0.01 | D | 0.069 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | TPP |
| **075** | | NA | | | | | | | | | | | | | | | | |
| **076** | | ND | | | | AcN | MeOH | | 5 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **077** | | NA | | | | | | | | | | | | | | | | |
| **078** | | NA | | | | | | | | | | | | | | | | |
| **079** | 0.01 | D | 0.056 | 96.8 | | MeOH | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Cyprodinil , Thiabendazol |
| **080** | 0.01 | D | 0.044 | 100 | Yes | Acetone | DCM | Petroleum Ether | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| **081** | 0.01 | D | 0.040 | 104 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Orbitrap | Rec. from same batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| ALDICARB SUM | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 082 | | NA | | | | | | | | | | | | | | | | |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | 0.02 | ND | | | | | | | | | | | | | | | | |
| 085 | 0.01 | D | 0.045 | 92 | | AcN | Water | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | | NA | | | | | | | | | | | | | | | | |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | 0.025 | D | 0.034 | 100.1 | | | | | | | | | | | | | | |
| 092 | | NA | | | | | | | | | | | | | | | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | 0.01 | D | 0.047 | 91 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | | NA | | | | | | | | | | | | | | | | |
| 097 | 0.01 | D | 0.040 | 96 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.01 | D | 0.040 | 94 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.012 | D | 0.060 | 91 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 100 | 0.048 | D | 0.041 | 65 | Yes | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 101 | | NA | | | | | | | | | | | | | | | | |
| 102 | | NA | | | | | | | | | | | | | | | | |
| 103 | 0.02 | ND | | | | AcN | | | 10 | | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 104 | 0.003 | D | 0.033 | 98 | | Acetone | DCM | | 15 | | SPE | Pure solvent - Multiple level | | Fluorescence | | Rec. from validation data | Yes | 2,3,5-Trimethacarb |
| 105 | | NA | | | | | | | | | | | | | | | | |
| 106 | | NA | | | | | | | | | | | | | | | | |
| 107 | 0.02 | D | 0.041 | 76.6 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 108 | | NA | 0.055 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.02 | D | 0.034 | 95 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 111 | 0.02 | D | 0.039 | 92 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | TOF | | | Rec. from same batch | Yes | TPP |
| 112 | 0.005 | D | 0.049 | 92 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 113 | 0.01 | D | 0.043 | 98.8 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.01 | D | 0.046 | 93 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 115 | 0.01 | D | 0.011 | 45 | Yes | EtOAc | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 116 | 10 | D | 0.031 | 90.5 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Ethoprophos |
| 117 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 118 | 0.005 | D | 0.042 | 72 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | | NA | | | | | | | | | | | | | | | | |
| 121 | | NA | | | | | | | | | | | | | | | | |
| 122 | 0.01 | D | 0.046 | 111 | | EtOAc | | | 10 | Yes | GPC | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## ALDICARB SUM

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 123 | 0.02 | D | 0.050 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | | NA | | | | | | | | | | | | | | | | |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | | NA | | | | | | | | | | | | | | | | |
| 127 | | NA | | | | | | | | | | | | | | | | |
| 128 | | NA | | | | | | | | | | | | | | | | |
| 129 | | NA | | | | | | | | | | | | | | | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | | NA | | | | | | | | | | | | | | | | |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.040 | 90 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.057 | 118 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | | NA | | | | | | | | | | | | | | | | |
| 137 | 0.0512 | D | 0.044 | 90.14 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | | NA | | | | | | | | | | | | | | | | |
| 139 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | | NA | | | | | | | | | | | | | | | | |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.008 | D | 0.037 | 104 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.048 | 70 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.02 | D | 0.043 | 112 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 147 | | NA | | | | | | | | | | | | | | | | |
| 148 | 0.01 | D | 0.048 | 91.5 | | MeOH | Water | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | 0.01 | D | 0.051 | 84 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | | NA | | | | | | | | | | | | | | | | |
| 152 | | NA | | | | | | | | | | | | | | | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

## AZIMPHOS-METHYL

## APPENDIX 9. Methods used by participants for determining pesticides.

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | 0.1 | ND | | | | MeOH | Water | | 10 | | filter | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 002 | 0.01 | D | 0.045 | 78 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.043 | 94 | | AcN | AcN | AcN | 10 | Yes | PSA | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 004 | 0.01 | D | 0.045 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TDCPP |
| 005 | 0.02 | D | 0.044 | 83 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TBP, TPP |
| 006 | 0.01 | D | 0.038 | 105 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | MS/MS (QQQ) | | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | | NA | | | | | | | | | | | | | | | | |
| 008 | 0.02 | D | 0.044 | 100 | | EtOAc | | | 37.5 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 009 | 0.01 | D | 0.067 | 115 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.054 | 85 | | Acetone | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 012 | 0.002 | D | 0.047 | 96 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | 0.05 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 014 | 0.02 | D | 0.040 | 99.1 | | Acetone | MeOH | | 50 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Fenchlorphos |
| 015 | 0.005 | D | 0.045 | 102 | | EtOAc | | | | Yes | SPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | Trifluralin D14 |
| 016 | 0.01 | D | 0.038 | 70.5 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.01 | D | 0.056 | 86.4 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | FPD | | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.041 | 94 | | AcN | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Phenanthrene-d10 |
| 019 | 0.01 | D | 0.032 | 65.4 | | EtOAc | | | 10 | Yes | | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 021 | | NA | | | | | | | | | | | | | | | | |
| 022 | 0.01 | D | 0.053 | 89.6 | | Acetone | DCM | Petroleum Ether | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 023 | 0.01 | D | 0.045 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.052 | 94 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.055 | 80 | | Acetone | DCM | Petroleum Ether | 15 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 026 | 0.01 | D | 0.040 | 80 | Yes | AcN | AcN | AcN | 10 | | DSPE | Pure solvent - Single level | NPD | UV | GC-MS | Rec. from validation data | Yes | TPP |
| 027 | 0.01 | D | 0.047 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | MS/MS (QQQ) | | Rec. from same batch | | |
| 028 | 0.01 | D | 0.047 | 95 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.025 | 100 | Yes | EtOAc | | | 15 | | DSPE | Standard addition | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.060 | 104.7 | | | | | | | | | | | | | | |
| 031 | 0.02 | D | 0.066 | 100 | Yes | DCM | Cyclohexane | EtOAc | 10 | | GPC | | | | | | | |
| 032 | 0.02 | D | 0.058 | 86 | | EtOAc | | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 033 | 0.01 | D | 0.051 | 103.4 | Yes | Acetone | | | 2 | | | Matrix matched - Single level | NPD | | | | | |
| 034 | 0.01 | D | 0.062 | 117 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | FPD | | GC-MS | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.046 | 86 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TTP |
| 037 | 0.02 | D | 0.050 | 99.8 | | DCM | Acetone | | 5 | | MSPD, silica gel/alumina | Pure solvent - Single level | NPD | | GC/NPD, GC/ECD | Rec. from validation data | | |
| 038 | 0.02 | ND | | | | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | | Diode Array Detector | | Via Standard addition | | |
| 039 | | | | | | | | | | | | | | | | | | |
| 040 | 0.02 | D | 0.033 | 150 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| AZIMPHOS-METHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **041** | 0.02 | D | 0.044 | 111 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **042** | 0.01 | D | 0.033 | 88 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **043** | 0.01 | D | 0.060 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| **044** | | NA | | | | | | | | | | | | | | | | |
| **045** | 0.01 | D | 0.055 | 81 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from validation data | | |
| **046** | 0.01 | D | 0.060 | 95 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **047** | 0.01 | D | 0.048 | 95 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | Linuron-D6 |
| **048** | 0.02 | D | 0.029 | 105 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| **049** | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **050** | 0.01 | D | 0.044 | 80 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **051** | 0.01 | D | 0.049 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Atrazin D5 |
| **052** | 0.01 | D | 0.053 | 90.8 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **053** | 0.01 | D | 0.043 | 107 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| **054** | 0.01 | D | 0.053 | 107 | | Acetone | DCM | Petroleum Ether 40-60 | 12 | | | Matrix matched - Single level | FPD | | GC-TOF | Rec. from same batch | | |
| **055** | 0.01 | D | 0.040 | 103 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **056** | 0.0606 | D | 0.061 | 97 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | | Rec. from validation data | Yes | TPP |
| **057** | | D | 0.044 | 82 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **058** | 0.01 | D | 0.033 | 60 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **059** | 0.05 | D | 0.058 | 94 | | Acetone | DCM | | 100 | | florisil column | Matrix matched - Single level | ECD | | Two columns | Rec. from same batch | | |
| **060** | 0.01 | D | 0.037 | 78 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | | |
| **061** | 0.01 | D | 0.062 | 75.1 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TDCPP |
| **062** | 0.01 | D | 0.057 | 88 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| **063** | 0.01 | D | 0.040 | 81 | | EtOAc | | | 75 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from validation data | | |
| **064** | | NA | | | | | | | | | | | | | | | | |
| **065** | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | GC-TOF | | Yes | PCB 138, Mirex |
| **066** | 0.1 | ND | | | | | | | | | | | | | | | | |
| **067** | 0.01 | D | 0.052 | 96 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | | |
| **068** | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | |
| **069** | 0.01 | ND | | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazin |
| **070** | 0.01 | D | 0.068 | 101 | | EtOAc | Cyclohexane | Acetone | 75 | | GPC | Matrix matched - Multiple level | NPD | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **071** | 0.01 | D | 0.061 | 95.7 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **072** | 0.05 | D | 0.064 | 100 | | Acetone | DCM | | 10 | Yes | | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| **073** | 0.01 | D | 0.051 | 82 | | Acetone | DCM | | 7.5 | | | Matrix matched - Single level | NPD | | Two columns | Rec. from same batch | | |
| **074** | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | TPP |
| **075** | 0.01 | D | 0.049 | 86 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TDCPP |
| **076** | | NA | | | | | | | | | | | | | | | | |
| **077** | 0.01 | D | 0.066 | 85 | | DCM | | | 10 | | GPC | Pure solvent - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | Biphenyl |
| **078** | 0.02 | D | 0.040 | 93 | | AcN | AcN | AcN | 12 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | | | |
| **079** | 0.01 | D | 0.048 | | | Acetone | Cyclohexane/ EtOAc | | 20 | Yes | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | Nitrofen, Triclosanmethyl , TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| AZIMPHOS-METHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 080 | 0.01 | D | 0.044 | 99 | Yes | Acetone | DCM | Petroleum Ether | 15 | | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | Hexabromobenzene |
| 081 | 0.01 | D | 0.288 | 77 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Orbitrap | Rec. from same batch | | |
| 082 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 083 | 0.01 | D | 0.055 | 92 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 084 | | NA | | | | | | | | | | | | | | | | |
| 085 | 0.01 | D | 0.047 | 96 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | 0.05 | D | 0.044 | 78 | | Acetone | DCM | EtOAc, Cyclohexane | 100 | | GPC | Matrix matched - Multiple level | NPD | | GC/ECD | Rec. from same batch | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.029 | 80 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | NPD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 091 | | NA | | | | | | | | | | | | | | | | |
| 092 | 0.0075 | D | 0.009 | 103.4 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 093 | | | | | | | | | | | | | | | | | | |
| 094 | 0.01 | D | 0.048 | 110 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | 0.01 | D | 0.052 | 99.2 | | Acetone | DCM | EtOAc | 10 | | GPC | Matrix matched - Multiple level | NPD | | | Rec. from same batch | | |
| 096 | 0.01 | D | 0.041 | 76 | | Acetone | DCM | | 5 | | SPE | Matrix matched - Single level | NPD | | GC-MS | Rec. from validation data | | |
| 097 | 0.01 | D | 0.036 | 90 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | MSD | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.01 | D | 0.046 | 90 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.02 | D | 0.043 | 92 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | TPP |
| 100 | | ND | | | | Hexane | | | 25 | | Liquid/liquid partitioning | Pure solvent - Multiple level | IDT | | GC-MS | Rec. from same batch | | |
| 101 | 0.02 | ND | | | | DCM | EtOAc | Cyclohexane | 15 | | GPC | Pure solvent - Multiple level | MSD | Not using | GC-MS | Rec. from validation data | Yes | Fenclorfos |
| 102 | 0.052 | D | 0.052 | 76 | | Acetone | DCM | EtOAc | 100 | | GPC/SPE | Pure solvent - Multiple level | NPD | | GC-MS | Rec. from validation data | | |
| 103 | 0.05 | ND | | | | Acetone | | | 50 | | Liquid/liquid partitioning | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Bromophos Methyl |
| 104 | 0.01 | D | 0.058 | 86 | Yes | Acetone | DCM | EtOAc | 50 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from validation data | | |
| 105 | | NA | | | | | | | | | | | | | | | | |
| 106 | | ND | | | | AcN | used | used | 10 | | | Matrix matched - Multiple level | MSD | used | GC-MS | Rec. from validation data | Yes | PCB 198 |
| 107 | 0.05 | ND | | | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | IDT | | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Trichloronate |
| 108 | | NA | | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.02 | D | 0.070 | 85 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | Two columns | Rec. from same batch | | |
| 111 | 0.05 | D | 0.048 | 100 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | TOF | | | Rec. from same batch | Yes | TPP |
| 112 | 0.01 | ND | | | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 113 | 0.01 | D | 0.049 | 105.2 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.02 | D | 0.044 | 98 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 115 | 0.05 | D | 0.065 | | | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Matrix matched - Multiple level | FPD | | GC-MS | Via Standard addition | Yes | Diazinon |
| 116 | 50 | D | 0.130 | 78.1 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| AZIMPHOS-METHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 117 | 0.01 | D | 0.037 | 84 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | ECD/NPD | | GC-MS | Rec. from same batch | | |
| 119 | 0.01 | D | 0.025 | 81 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | PCB153, Anthracene, Ditalimphos |
| 120 | 0.02 | D | 0.056 | 126 | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.01 | D | 0.065 | 106 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | Yes | TDCP |
| 122 | 0.01 | D | 0.041 | 109 | | EtOAc | | | 10 | | GPC | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | Ditalimphos (only for GC sensitivity check) |
| 123 | 0.02 | D | 0.024 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | 0.05 | D | 0.053 | 110 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | HCB |
| 125 | 0.03 | D | 0.060 | 85 | | DCM | Acetone | | 5 | | SPE | Matrix matched - Single level | ECD | | | Rec. from same batch | | |
| 126 | 0.02 | D | 0.048 | 90 | | DCM | | | 10 | | DSPE | Pure solvent - Single level | NPD | | GC-MS | Rec. from validation data | Yes | TPP |
| 127 | | NA | | | | | | | | | | | | | | | | |
| 128 | 0.01 | D | 0.039 | 66 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | GC-MS/MS (Ion Trap) | | GCMS/MS (Ion Trap) | Rec. from same batch | | |
| 129 | 0.01 | D | 0.042 | 101 | | EtOAc | | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 130 | 0.02 | D | 0.046 | 88 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | | GC-MS | Other pesticide | | |
| 131 | 0.01 | D | 0.015 | 75 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |
| 132 | 0.05 | D | 0.070 | 126.3 | | EtOAc | | | 50 | | | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 133 | 0.01 | D | 0.070 | 91 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | PFPD | | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.049 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.051 | 86 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | 0.0557 | D | 0.056 | 88.36 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | | NA | | | | | | | | | | | | | | | | |
| 139 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 140 | | NA | 0.150 | | | | | | | | | | | | | | | |
| 141 | 0.06 | ND | | | | | | | | | | | | | | | | |
| 142 | 0.01 | D | 0.080 | 66 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 143 | 0.02 | D | 0.048 | 107 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Single level | ECD | MS/MS (QQQ) | Two columns | Rec. from same batch | | |
| 144 | 0.002 | D | 0.044 | 98 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.045 | 71 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.01 | D | 0.046 | 92 | | Acetone | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | NPD | | ECD, Two columns | Rec. from same batch | | |
| 147 | 0.02 | ND | | | | | | | | | | | | | | | | |
| 148 | 0.01 | D | 0.056 | 93.6 | | MeOH | Water | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | | NA | | | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| AZIMPHOS-METHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 152 | 0.03 | D | 0.030 | 69.3 | | EtOAc | | | 25 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## CARBENDAZIM

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | 0.01 | D | 0.450 | 98 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 002 | 0.01 | D | 0.503 | 120 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.640 | 71 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 004 | | NA | | | | | | | | | | | | | | | | |
| 005 | 0.005 | D | 0.360 | 80 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Dimethoate D6 |
| 006 | 0.01 | D | 0.324 | 86 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | | NA | | | | | | | | | | | | | | | | |
| 008 | 0.01 | D | 0.339 | 117 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 009 | 0.01 | D | 0.440 | 120 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.373 | 89.9 | | | MeOH | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 012 | 0.002 | D | 0.303 | 94 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | | NA | | | | | | | | | | | | | | | | |
| 014 | 0.01 | D | 0.300 | 77 | | EtOAc | | | 20 | | Liquid/liquid partitioning | Pure solvent - Multiple level | | Diode Array Detector | | Rec. from validation data | | |
| 015 | 0.005 | D | 0.307 | 72 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbendazim D4 |
| 016 | 0.01 | D | 0.274 | 64.5 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.01 | D | 0.419 | 89.8 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.437 | 95 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 019 | 0.01 | D | 0.318 | 95.1 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.375 | 91 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 021 | | NA | | | | | | | | | | | | | | | | |
| 022 | 0.01 | D | 0.336 | 95.3 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 023 | 0.01 | D | 0.507 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.335 | 89 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.520 | 82 | | AcN | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 026 | | NA | | | | | | | | | | | | | | | | |
| 027 | | NA | | | | | | | | | | | | | | | | |
| 028 | 0.01 | D | 0.328 | 78 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.252 | 100 | Yes | EtOAc | | | 15 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.340 | 87.0 | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | 0.01 | D | 0.338 | 89 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 033 | 0.02 | D | 0.140 | 97.5 | Yes | Acetone | AcN | DCM | 20 | | SPE | Matrix matched - Multiple level | | Diode Array Detector | | | | |
| 034 | 0.01 | D | 0.267 | 70 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Single level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.330 | 104 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | 0.1 | D | 0.300 | 55.8 | Yes | MeOH+HCl | DCM | | 10 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | Diode Array Detector | HPLC | Rec. from validation data | | |
| 038 | 0.05 | D | 0.074 | 71 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | | Diode Array Detector | | Via Standard addition | | |
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | | NA | | | | | | | | | | | | | | | | |
| 041 | 0.01 | D | 0.346 | 97 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| CARBENDAZIM | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **042** | 0.01 | D | 0.325 | 90 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **043** | 0.01 | D | 0.162 | 84 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | UV | DAD | Rec. from same batch | | |
| **044** | | NA | | | | | | | | | | | | | | | | |
| **045** | 0.01 | D | 0.326 | 78 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **046** | 0.005 | D | 1.450 | 78 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **047** | 0.005 | D | 0.343 | 77 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | Linuron-D6 |
| **048** | 0.01 | D | 0.288 | 83 | | EtOAc | | | 25 | Yes | | Pure solvent - Multiple level | | Fluorescence | LC-MS | Rec. from same batch | | |
| **049** | 0.01 | D | 0.320 | 94 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **050** | 0.01 | D | 0.339 | 90 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **051** | 0.01 | D | 0.470 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Atrazin D5 |
| **052** | 0.01 | D | 2.430 | 73.2 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **053** | 0.01 | D | 0.301 | 92 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| **054** | 0.01 | D | 0.218 | 65.5 | | EtOAc | | | 25 | | Liquid/liquid partitioning | Pure solvent - Single level | | Fluorescence | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **055** | 0.01 | D | 0.321 | 95 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **056** | 0.369 | D | 0.369 | 102 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | | |
| **057** | | D | 0.340 | 90 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **058** | 0.01 | D | 0.528 | 106 | | Acetone | | | 20 | Yes | | Matrix matched - Single level | MSD | | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Mirex |
| **059** | | NA | | | | | | | | | | | | | | | | |
| **060** | 0.01 | D | 0.329 | 102 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbaryl-C13 |
| **061** | 0.01 | D | 0.262 | 85.5 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **062** | 0.01 | D | 0.264 | 95 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| **063** | 0.001 | D | 0.313 | 91 | | MeOH | DCM | | 50 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | UV | | Rec. from same batch | | |
| **064** | | NA | | | | | | | | | | | | | | | | |
| **065** | 0.01 | D | 0.409 | 91 | | AcN | | | 10 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Pirimicarb D6 |
| **066** | 0.01 | D | 0.360 | 104 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |
| **067** | 0.01 | D | 0.354 | 91 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| **068** | 0.01 | D | 0.341 | 93 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **069** | 0.005 | D | 0.185 | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazim |
| **070** | 0.01 | D | 0.178 | 109 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **071** | 0.005 | D | 0.302 | 96.9 | | MeOH | | | 5 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **072** | 0.02 | D | 0.687 | 76 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **073** | | NA | | | | | | | | | | | | | | | | |
| **074** | 0.01 | D | 0.269 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | TPP |
| **075** | | NA | | | | | | | | | | | | | | | | |
| **076** | | ND | | | | AcN | MeOH | | 5 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **077** | | NA | | | | | | | | | | | | | | | | |
| **078** | | NA | | | | | | | | | | | | | | | | |
| **079** | 0.01 | D | 0.449 | 87.8 | | MeOH | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Cyprodinil , Thiabendazol |
| **080** | 0.01 | D | 0.220 | 97 | Yes | Acetone | DCM | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| **081** | 0.01 | D | 0.390 | 94 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Orbitrap | Rec. from same batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| CARBENDAZIM | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 082 | 0.01 | D | 0.239 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | | | |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | 0.05 | D | 0.170 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TPP |
| 085 | 0.01 | D | 0.319 | 86 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | 0.05 | D | 0.343 | 90 | | EtOAc | Water | | 75 | | Liquid/liquid partitioning | Pure solvent - Multiple level | | Fluorescence | HPLC/PDA | Rec. from same batch | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.194 | 116.3 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | | NA | | | | | | | | | | | | | | | | |
| 092 | 0.0075 | D | 0.294 | 79.9 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | 0.01 | D | 0.316 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | 0.01 | D | 0.318 | 78.8 | | EtOAc | EtOAc | MeOH | 10 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | Fluorescence | | Rec. from same batch | | |
| 096 | | NA | | | | | | | | | | | | | | | | |
| 097 | 0.01 | D | 0.304 | 88 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.01 | D | 0.320 | 94 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.005 | D | 0.360 | 95 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 100 | 0.236 | D | 0.236 | 100 | | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 101 | | NA | | | | | | | | | | | | | | | | |
| 102 | 0.320 | D | 0.320 | 85 | | EtOAc | MeOH | MeOH | 75 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | UV | LC-MS | Rec. from same batch | | |
| 103 | 0.01 | D | 0.542 | 115 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 104 | 0.005 | D | 0.280 | 98 | | Acetone | EtOAc | MeOH | 50 | Yes | GPC | | | UV | | Rec. from validation data | | |
| 105 | 0.01 | D | 0.260 | 90 | | Acetone | DCM | MeOH | 15 | | | Pure solvent - Multiple level | MS/MS (QQQ) | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 106 | | NA | | | | | | | | | | | | | | | | |
| 107 | 0.01 | D | 0.240 | 69.2 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 108 | | NA | 0.296 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.01 | D | 0.430 | 95 | | Acetone | DCM | Petroleum Spirit | 15 | Yes | SPE | Pure solvent - Multiple level | | MS | LC-MS | Rec. from same batch | | |
| 111 | 0.04 | D | 0.426 | 113.7 | | EtOAc | | | 50 | Yes | GPC | Pure solvent - Multiple level | | Diode Array Detector | | Rec. from same batch | | |
| 112 | 0.01 | D | 0.270 | 94 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 113 | 0.01 | D | 0.262 | 94.5 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.01 | D | 0.325 | 92 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 115 | 0.01 | D | 0.167 | 107.2 | | EtOAc | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 116 | 10 | D | 0.250 | 96.8 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Ethoprophos |
| 117 | 0.01 | D | 0.366 | 83 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.005 | D | 0.291 | 77 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | 0.02 | D | 0.419 | 119 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS | LC-MS | Rec. from same batch | | |
| 121 | 0.01 | D | 0.190 | 79 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | | Diode Array Detector | Two columns | Rec. from same batch | | |
| 122 | 0.01 | D | 0.201 | 101 | | EtOAc | | | 10 | Yes | GPC | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| CARBENDAZIM | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 123 | | NA | | | | | | | | | | | | | | | | |
| 124 | | NA | | | | | | | | | | | | | | | | |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | | NA | | | | | | | | | | | | | | | | |
| 127 | 0.01 | D | 0.467 | 86.6 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 128 | | NA | | | | | | | | | | | | | | | | |
| 129 | | NA | | | | | | | | | | | | | | | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | 0.01 | D | 0.342 | 83 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.200 | 90 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.387 | 98 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.179 | 99 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from validation data | | |
| 137 | 0.288 | D | 0.288 | 104.70 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | | NA | | | | | | | | | | | | | | | | |
| 139 | 0.01 | D | 0.390 | 75 | | AcN | | | 15 | | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | 0.01 | D | 0.150 | 56 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.008 | D | 0.337 | 106 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.201 | 81 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.01 | D | 0.240 | 71 | | Acetone | | | 20 | | SPE | Pure solvent - Multiple level | | Diode Array Detector | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 147 | | NA | | | | | | | | | | | | | | | | |
| 148 | 0.01 | D | 0.381 | 125.3 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | 0.01 | D | 0.300 | 93 | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | | NA | | | | | | | | | | | | | | | | |
| 152 | 0.1 | D | 0.360 | 80.4 | | EtOAc | | | 25 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | | | Rec. from same batch | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## CHLOROTHALONIL

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **001** | 0.01 | D | 0.152 | 41 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **002** | | NA | | | | | | | | | | | | | | | | |
| **003** | | NA | | | | | | | | | | | | | | | | |
| **004** | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from validation data | Yes | TDCPP |
| **005** | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TPP, TBP |
| **006** | 0.01 | ND | | | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Multiple level | MS/MS (QQQ) | | | | Yes | Pirimicarb-D6 |
| **007** | | NA | | | | | | | | | | | | | | | | |
| **008** | 0.01 | ND | | | | EtOAc | | | 37,5 | | GPC | Pure solvent - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| **009** | 0.01 | ND | | | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | ECD | | Two columns | Rec. from same batch | | |
| **010** | 0.05 | D | 0.575 | 110 | | Acetone | DCM | | 15 | | | Pure solvent - Multiple level | IDT | | GC-MS | Rec. from same batch | | |
| **011** | | NA | | | | | | | | | | | | | | | | |
| **012** | 0.010 | D | 0.242 | 85 | | EtOAc | | | 12.5 | | GPC | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TPP |
| **013** | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **014** | 0.01 | ND | | | | | | | | | | | | | | | | |
| **015** | 0.005 | D | 0.299 | 93 | | EtOAc | | | | Yes | SPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | Trifluralin D14 |
| **016** | 0.05 | D | 0.232 | 116.6 | | Acetone | DCM | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **017** | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | PCB 209 |
| **018** | | NA | | | | | | | | | | | | | | | | |
| **019** | 0.01 | D | 0.249 | 95.7 | | EtOAc | | | 10 | Yes | | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **020** | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| **021** | | NA | | | | | | | | | | | | | | | | |
| **022** | 0.01 | D | 0.282 | 96.3 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **023** | 0.01 | D | 0.240 | | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | IDT | | GC-MS | | | |
| **024** | 0.01 | ND | | | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | MSD | | | Rec. from validation data | Yes | TDCPP |
| **025** | | D | 0.330 | 80 | | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **026** | 0.01 | ND | | | | AcN | AcN | AcN | 10 | | DSPE | Pure solvent - Single level | NPD | Diode Array Detector | GC-MS | Rec. from validation data | Yes | TPP |
| **027** | | NA | | | | | | | | | | | | | | | | |
| **028** | 0.01 | D | 0.311 | 61 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | |
| **029** | 0.01 | D | 0.131 | 100 | Yes | EtOAc | | | 15 | | DSPE | Standard addition | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | | |
| **030** | 0.01 | D | 0.055 | 111.6 | | | | | | | | | | | | | | |
| **031** | | NA | | | | | | | | | | | | | | | | |
| **032** | 0.05 | D | 0.227 | 48 | Yes | Toluene | Isopropanol | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | ECD | | Two columns | Rec. from same batch | | |
| **033** | 0.01 | D | 0.326 | 107.5 | Yes | Acetone | | | 2 | | | Matrix matched - Single level | ECD | | | | | |
| **034** | 0.01 | D | 0.170 | 70 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | MSD | | | Rec. from same batch | | |
| **035** | No Results Reported | | | | | | | | | | | | | | | | | |
| **036** | 0.01 | D | 0.292 | 95 | | Acetone | EtOAc | | 5 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **037** | 0.05 | D | 0.350 | 93.6 | | DCM | Acetone | | 5 | | MSPD, silica gel/alumina | Pure solvent - Single level | NPD | | GC/NPD, GC/ECD | Rec. from validation data | | |
| **038** | 0.01 | ND | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## CHLOROTHALONIL

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | | NA | | | | | | | | | | | | | | | | |
| 041 | 0.01 | ND | | | | AcN | | | | | DSPE | | MSD | | | | | |
| 042 | 0.10 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| 043 | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| 044 | 0.05 | D | | 109.6 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 045 | 0.05 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-TOF | Rec. from validation data | | |
| 046 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 047 | 0.01 | ND | | | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from validation data | Yes | TDCPP |
| 048 | 0.02 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| 049 | 0.01 | D | 0.063 | 89 | | Acetone | Cyclohexane | EtOAc | 100 | | GPC | Standard addition | ECD | | GC-MS | Rec. from validation data | | |
| 050 | 0.01 | D | 0.356 | 110 | | Acetone | DCM | | 50 | | GPC | Matrix matched - Single level | ECD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 051 | 0.1 | ND | | | | AcN | | | 10 | Yes | DSPE | Standard addition | MSD | | GC-MS | Via Standard addition | | |
| 052 | 0.01 | ND | | | | AcN | | | 10 | Yes | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | TPP |
| 053 | 0.01 | D | 0.064 | 96 | | AcN | | | 10 | Yes | | Matrix matched - Single level | MSD | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | PCB 138 |
| 054 | 0.01 | ND | | | | Acetone | DCM | Petroleum Ether | 6 | | | Pure solvent - Single level | ECD | | GC-TOF | Other pesticide | | |
| 055 | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 056 | | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | | Rec. from validation data | Yes | TPP |
| 057 | | D | 0.260 | 50 | Yes | Acetone | DCM | | 50 | | GPC | Matrix matched - Multiple level | TOF | | GC-TOF | Rec. from validation data | | |
| 058 | 0.01 | ND | | | | MeOH | DCM | | 50 | | GPC | Matrix matched - Multiple level | ECD | | | Rec. from validation data | Yes | Mirex, TPP |
| 059 | 0.01 | D | 0.138 | 120 | | Acetone | DCM | | 100 | | florisil column | Matrix matched - Single level | ECD | | Two columns | Rec. from same batch | | |
| 060 | | NA | | | | | | | | | | | | | | | | |
| 061 | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| 062 | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 063 | 0.002 | D | 0.085 | 83 | | EtOAc | | | 75 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from validation data | | |
| 064 | | NA | | | | | | | | | | | | | | | | |
| 065 | 0.05 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | GC-TOF | | Yes | PCB 138, Mirex |
| 066 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 067 | 0.01 | D | 0.084 | 76 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | | |
| 068 | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | |
| 069 | 0.05 | D | 0.060 | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | | Yes | Thionazim |
| 070 | 0.01 | D | 0.097 | 26 | | EtOAc | Cyclohexane | Acetone | 75 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 071 | 0.005 | D | 0.209 | 65.3 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| 072 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 073 | | NA | | | | | | | | | | | | | | | | |
| 074 | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | | Yes | TPP |
| 075 | | NA | | | | | | | | | | | | | | | | |
| 076 | | ND | | | | AcN | MeOH | | 5 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 077 | 0.01 | D | 0.217 | 85 | | DCM | | | 10 | | GPC | Pure solvent - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | Biphenyl |
| 078 | 0.01 | ND | | | | AcN | | | 12 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | subsequent batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## CHLOROTHALONIL

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 079 | 0.01 | ND | | | | Acetone | EtOAc/ Cyclohexane | | 20 | Yes | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | Yes | Nitrofen,TPP, Triclosanmethyl |
| 080 | 0.01 | D | 0.060 | 86 | Yes | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | Hexabromo benzene |
| 081 | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 082 | 0.01 | ND | | | | QuEChERS | | | | | | | MSD | | | | | |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 085 | 0.03 | ND | | | | | | | | | | | | | | | | |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | ND | | | | DCM | | | 15 | | GPC | Pure solvent - Single level | NPD | | | Rec. from validation data | | |
| 090 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 091 | 0.01 | D | 0.225 | 99.1 | | Acetone | DCM | Petroleum Ether | 7.5 | | Liquid/liquid partitioning | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from same batch | Yes | HCB |
| 092 | | NA | | | | | | | | | | | | | | | | |
| 093 | 0.05 | D | 0.132 | 102 | | EtOAc | | | 50 | | GPC | Pure solvent - Multiple level | ECD | | Two columns | Rec. from same batch | | |
| 094 | 0.03 | D | 0.257 | 119 | | Acetone | DCM | | 15 | | Liquid/liquid partitioning | Matrix matched - Multiple level | ECD | | GC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | 0.01 | D | 0.248 | 72 | | Acetone | DCM | | 5 | | SPE | Matrix matched - Single level | ECD | | GC-MS | Rec. from validation data | | |
| 097 | 0.01 | D | 0.267 | 91 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| 098 | | NA | | | | | | | | | | | | | | | | |
| 099 | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 100 | | ND | | | | Hexane | | | 25 | | Liquid/liquid partitioning | Pure solvent - Multiple level | IDT | | GC-MS | Rec. from same batch | | |
| 101 | 0.02 | ND | | | | DCM | EtOAc | Cyclohexane | 15 | | GPC | Pure solvent - Multiple level | MSD | Not using | GC-MS | Rec. from validation data | Yes | Fenclorfos |
| 102 | 0.078 | D | 0.078 | 73 | | Acetone | DCM | EtOAc | 100 | | GPC/SPE | Pure solvent - Multiple level | NPD | | GC-MS | Rec. from validation data | | |
| 103 | 0.01 | D | 0.070 | 80 | | Acetone | | | 50 | | Liquid/liquid partitioning | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Bromophos-Me |
| 104 | 0.007 | D | 0.095 | | | Acetone | DCM | | 50 | | | Pure solvent - Multiple level | ECD | | | | | |
| 105 | 0.02 | ND | | | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 106 | | ND | | | | AcN | used | used | 10 | | | Matrix matched - Multiple level | MSD | used | GC-MS | Rec. from validation data | Yes | PCB 198 |
| 107 | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | IDT | | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Trichloronate |
| 108 | | NA | | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | MSD | | ECD | Rec. from same batch | Yes | DCIP |
| 111 | 0.01 | D | 0.148 | 108 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | TOF | | | Rec. from same batch | Yes | TPP |
| 112 | 0.01 | ND | | | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 113 | 0.01 | ND | | | | AcN | | | 15 | Yes | DSPE | Matrix matched - Single level | MSD | | | Via Standard addition | Yes | TDCPP/mirex |
| 114 | 0.01 | D | 0.216 | 53 | | EtOAc | | | 30 | Yes | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Tetraphenyl ethylene |
| 115 | 0.01 | ND | | | | EtOAc | | | | | | | ECD | | | | | |
| 116 | 20 | D | 0.340 | 68.75 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## CHLOROTHALONIL

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117 | 0.01 | D | 0.255 | 68 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | | GC-MS | Rec. from same batch | | |
| 118 | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | ECD/NPD | | GC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | 0.01 | D | 0.138 | 130 | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.01 | ND | | | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | ECD | | Two columns | Rec. from same batch | | |
| 122 | 0.01 | D | 0.074 | 115 | | EtOAc | | | 10 | | GPC | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | Ditalimphos (only for GC sensitivity check) |
| 123 | | NA | | | | | | | | | | | | | | | | |
| 124 | 0.02 | D | 0.292 | 80 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | HCB |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | | NA | | | | | | | | | | | | | | | | |
| 127 | | NA | | | | | | | | | | | | | | | | |
| 128 | | NA | | | | | | | | | | | | | | | | |
| 129 | 0.01 | D | 0.255 | 80 | | EtOAc | | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 130 | 0.5 | D | 0.171 | 88 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | | GC-MS | Other pesticide | | |
| 131 | | NA | | | | | | | | | | | | | | | | |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | ECD | | | Rec. from validation data | | |
| 134 | | NA | | | | | | | | | | | | | | | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 137 | | NA | | | | | | | | | | | | | | | | |
| 138 | | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | Antracene |
| 139 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 140 | | NA | 0.120 | | | | | | | | | | | | | | | |
| 141 | 0.2 | ND | | | | | | | | | | | | | | | | |
| 142 | 0.02 | D | 0.210 | | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | IDT | | GC-MS-MS (ITD) | Rec. from same batch | Yes | TPP |
| 143 | 0.01 | D | 0.175 | 75 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Single level | ECD | MS/MS (QQQ) | Two columns | Rec. from same batch | | |
| 144 | 0.008 | D | 0.261 | 98 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 146 | 0.05 | D | 0.149 | 81 | | Acetone | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | NPD | | | Rec. from same batch | | |
| 147 | 0.01 | D | 0.078 | 80 | | Acetone | DCM | Petroleum Ether | 15 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | GC-MS | Via Standard addition | | |
| 148 | 0.01 | D | 0.113 | 55.7 | | Acetone | | | 50 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 149 | | NA | | | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | 0.01 | ND | | | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 152 | 0.02 | D | 0.290 | 18.7 | Yes | EtOAc | EtOAc | | 25 | | | Matrix matched - Multiple level | ECD | | Two columns | Rec. from same batch | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| CHLORPYRIFOS-ETHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **001** | 0.01 | D | 0.180 | 103 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **002** | 0.01 | D | 0.214 | 78 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **003** | 0.01 | D | 0.160 | 71 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **004** | 0.01 | D | 0.175 | 98 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TDCPP |
| **005** | 0.04 | D | 0.241 | 100 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TBP, TPP |
| **006** | 0.01 | D | 0.168 | 110 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | MS/MS (QQQ) | | | Rec. from same batch | Yes | Pirimicarb-D6 |
| **007** | 0.01 | D | 0.110 | 76 | | AcN | | | 25 | Yes | Freezing out | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | ChlorpyriphosMe-D6 |
| **008** | 0.01 | D | 0.192 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | IDT | | | Rec. from same batch | Yes | TPP |
| **009** | 0.01 | D | 0.245 | 109 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **010** | 0.05 | D | 0.227 | 118 | | Acetone | DCM | | 15 | | | Pure solvent - Multiple level | IDT | | GC-MS | Rec. from same batch | | |
| **011** | 0.01 | D | 0.140 | 93 | | Acetone | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **012** | 0.002 | D | 0.168 | 93 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| **013** | 0.01 | D | 0.186 | 78 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **014** | 0.01 | D | 0.200 | 78.1 | | Acetone | MeOH | | 50 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Fenchlorphos |
| **015** | 0.005 | D | 0.163 | 93 | | EtOAc | | | | Yes | SPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | Trifluralin D14 |
| **016** | 0.01 | D | 0.175 | 94.9 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **017** | 0.01 | D | 0.191 | 96.9 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | TPP |
| **018** | 0.01 | D | 0.182 | 91 | | AcN | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Phenanthrene-d10 |
| **019** | 0.01 | D | 0.119 | 75.4 | | EtOAc | | | 10 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **020** | 0.01 | D | 0.176 | 100 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| **021** | 0.01 | D | 0.165 | 103.4 | | AcN | | | 9.926 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **022** | 0.01 | D | 0.184 | 94.0 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **023** | 0.01 | D | 0.126 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | | | |
| **024** | 0.01 | D | 0.192 | 101 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | TDCPP |
| **025** | | D | 0.160 | 91 | | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **026** | 0.01 | D | 0.140 | 85 | Yes | AcN | AcN | AcN | 10 | | DSPE | Pure solvent - Single level | NPD | UV | GC-MS | Rec. from validation data | Yes | TPP |
| **027** | 0.01 | D | 0.159 | 92 | | AcN | | | 10,0 | | DSPE | Pure solvent - Multiple level | MSD | MS/MS (QQQ) | | Rec. from same batch | | |
| **028** | 0.01 | D | 0.186 | 76 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | |
| **029** | 0.01 | D | 0.111 | 100 | Yes | EtOAc | | | 15 | | DSPE | Standard addition | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | | |
| **030** | 0.01 | D | 0.155 | 88.4 | | | | | | | | | | | | | | |
| **031** | 0.02 | D | 0.115 | 90 | Yes | DCM | Cyclohexane | EtOAc | 10 | | GPC | | | | | | | |
| **032** | 0.01 | D | 0.187 | 113 | | Toluene | Isopropanol | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | ECD | | Two columns | Rec. from same batch | | |
| **033** | 0.01 | D | 0.200 | 104.2 | Yes | Acetone | | | 2 | | | Matrix matched - Single level | ECD | | | | | |
| **034** | 0.01 | D | 0.169 | 97 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | FPD | | GC-MS | Rec. from same batch | | |
| **035** | No Results Reported | | | | | | | | | | | | | | | | | |
| **036** | 0.005 | D | 0.171 | 94 | | Acetone | EtOAc | | 5 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **037** | 0.01 | D | 0.200 | 98.4 | | DCM | Acetone | | 5 | | MSPD, silica gel/alumina | Pure solvent - Single level | NPD | | GC/NPD, GC/ECD | Rec. from validation data | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| CHLORPYRIFOS-ETHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **038** | 0.01 | D | 0.177 | 101 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | MSD | | | Via Standard addition | | |
| **039** | 0.01 | D | 0.236 | 120 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | TPP |
| **040** | 0.01 | D | 0.034 | 90 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| **041** | 0.01 | D | 0.220 | 106 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **042** | 0.01 | D | 0.152 | 116 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **043** | 0.01 | D | 0.182 | 97 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| **044** | 0.05 | D | 0.160 | 107.3 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **045** | 0.01 | D | 0.189 | 101 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from validation data | | |
| **046** | 0.01 | D | 0.207 | 94 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **047** | 0.01 | D | 0.191 | 99 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Triphenylmethan |
| **048** | 0.01 | D | 0.114 | 90 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| **049** | 0.01 | D | 0.245 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from validation data | | |
| **050** | 0.01 | D | 0.239 | 100 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **051** | 0.01 | D | 0.230 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | MSD | | GC-MS | Via Standard addition | | |
| **052** | 0.01 | D | 0.203 | 99.5 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **053** | 0.01 | D | 0.168 | 100 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| **054** | 0.01 | D | 0.112 | 76 | | Acetone | DCM | | 12 | | | Matrix matched - Single level | NPD | | Two columns | Rec. from same batch | | |
| **055** | 0.01 | D | 0.119 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **056** | 0.193 | D | 0.193 | 97 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | | Rec. from validation data | | |
| **057** | | D | 0.220 | 81 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | TOF | MS/MS (QQQ) | GC-TOF | Rec. from validation data | | |
| **058** | 0.01 | D | 0.295 | 115 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **059** | 0.01 | D | 0.170 | 103 | | Acetone | DCM | | 100 | | florisil column | Matrix matched - Single level | NPD | | Two columns | Rec. from same batch | | |
| **060** | 0.01 | D | 0.148 | 91 | | AcN | | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | | |
| **061** | 0.01 | D | 0.184 | 97.3 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TDCPP |
| **062** | 0.01 | D | 0.243 | 97 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Via Standard addition | | |
| **063** | 0.004 | D | 0.135 | 81 | | EtOAc | | | 75 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from validation data | | |
| **064** | 0.02 | D | 0.176 | 80 | | Acetone | | | 15 | | | Matrix matched - Multiple level | NPD | | GC-MS | Rec. from same batch | | |
| **065** | 0.01 | D | 0.172 | 103 | | AcN | | | 10 | | DSPE | Standard addition | MSD | | GC-TOF | Rec. from same batch | Yes | PCB 138 |
| **066** | 0.01 | D | 0.210 | 105 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Desmetryn |
| **067** | 0.01 | D | 0.217 | 106 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | | |
| **068** | 0.01 | D | 0.207 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | TPP |
| **069** | 0.01 | D | 0.110 | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazim |
| **070** | 0.01 | D | 0.185 | 96 | | EtOAc | Cyclohexane | Acetone | 75 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **071** | 0.005 | D | 0.184 | 82.3 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **072** | 0.03 | D | 0.183 | 90 | | Acetone | DCM | | 10 | Yes | | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| **073** | 0.01 | D | 0.155 | 87 | | Acetone | DCM | | 7.5 | | | Matrix matched - Single level | NPD | | Two columns | Rec. from same batch | | |
| **074** | 0.01 | D | 0.212 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | IDT | | GC-MS/MS (QQQ) | | Yes | TPP |
| **075** | 0.05 | D | 0.168 | 98 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TDCPP |
| **076** | 0.170 | D | 0.170 | 101 | | AcN | MeOH | MeOH | 5 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | Not used |
| **077** | 0.01 | D | 0.249 | 85 | | DCM | | | 10 | | GPC | Pure solvent - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | Biphenyl |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| CHLORPYRIFOS-ETHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 078 | 0.05 | D | 0.250 | 95 | | AcN | AcN | AcN | 12 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | | | |
| 079 | 0.01 | D | 0.197 | 100 | | Acetone | Cyclohexane EtOAc | | 20 | Yes | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | Yes | Nitrofen , Triclosanmethyl , TPP |
| 080 | 0.01 | D | 0.120 | 93 | Yes | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | Hexabromobenzene |
| 081 | 0.01 | D | 0.157 | 116 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | LC-Orbitrap | Rec. from same batch | | |
| 082 | 0.01 | D | 0.195 | 100.8 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 083 | 0.01 | D | 0.140 | 83 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TDCPP |
| 084 | 0.05 | D | 0.190 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | | | Rec. from validation data | Yes | TPM |
| 085 | 0.01 | D | 0.196 | 98 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | 0.05 | D | 0.164 | 124 | Yes | Acetone | DCM | EtOAc, cyklohexane | 100 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS | Rec. from same batch | | |
| 088 | | | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.188 | 102.3 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | NPD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | 0.01 | D | 0.132 | 90 | Yes | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | PCB 198 |
| 091 | 0.01 | D | 0.270 | 89 | | Acetone | DCM | | 7.5 | | Liquid/liquid partitioning | Pure solvent - Multiple level | NPD | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 092 | 0.0075 | D | 0.138 | 96.2 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 093 | 0.05 | D | 0.174 | 112 | | EtOAc | | | 50 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 094 | 0.01 | D | 0.158 | 97 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | 0.01 | D | 0.147 | 77.4 | | Acetone | DCM | EtOAc | 10 | | GPC | Matrix matched - Multiple level | NPD | | | Rec. from same batch | | |
| 096 | 0.01 | D | 0.170 | 85 | | Acetone | DCM | | 5 | | SPE | Matrix matched - Single level | ECD | | GC-MS | Rec. from validation data | | |
| 097 | 0.01 | D | 0.138 | 92 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | MSD | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.02 | D | 0.176 | 80 | | AcN | | | 10 | | | Pure solvent - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.005 | D | 0.155 | 96 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | TPP |
| 100 | 0.310 | D | 0.310 | 60 | Yes | Hexane | | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | ITD | | GC-ITD | Rec. from same batch | | |
| 101 | 0.02 | D | 0.074 | 50 | | DCM | DCM | DCM | 15 | | GPC | Pure solvent - Multiple level | MSD | Diode Array Detector | GC-MS | Rec. from same batch | Yes | Fenclorfos (Normally ethion) |
| 102 | 0.176 | D | 0.176 | 78 | | Acetone | DCM | EtOAc | 100 | | GPC/SPE | Pure solvent - Multiple level | NPD | | GC-MS | Rec. from validation data | | |
| 103 | 0.05 | D | 0.172 | 90 | | Acetone | | | 50 | | Liquid/liquid partitioning | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Bromophos methyl |
| 104 | 0.01 | D | 0.183 | 82 | Yes | Acetone | DCM | EtOAc | 50 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from validation data | | |
| 105 | 0.02 | D | 0.200 | 85 | | Acetone | DCM | MeOH | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 106 | | ND | | | | AcN | used | used | 10 | | | Matrix matched - Multiple level | MSD | used | GC-MS | Rec. from validation data | Yes | PCB 198 |
| 107 | 0.01 | D | 0.190 | 91.1 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | IDT | | | Rec. from same batch | Yes | Trichloronate |
| 108 | | NA | 0.160 | | | | | | | | | | | | | | | |
| 109 | 0.29 | D | 0.290 | 94.21 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | PCB 198; 1,1` - Biphenyl, 2,2`,3,3`,4,4`,6,6` - octachloro |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| CHLORPYRIFOS-ETHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 110 | 0.01 | D | 0.145 | 99 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 111 | 0.05 | D | 0.168 | 100 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | TOF | | | Rec. from same batch | Yes | TPP |
| 112 | 0.005 | D | 0.162 | 87 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 113 | 0.01 | D | 0.170 | 90.8 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.01 | D | 0.161 | 91 | | EtOAc | | | 30 | Yes | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | tetraphenylethylene |
| 115 | 0.01 | D | 0.263 | 91.6 | | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Matrix matched - Multiple level | FPD | | GC-MS | Via Standard addition | Yes | Diazinon |
| 116 | 20 | D | 0.400 | 92.5 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 117 | 0.01 | D | 0.183 | 104 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.01 | D | 0.196 | 98.5 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | ECD/NPD | | GC-MS | Rec. from same batch | | |
| 119 | 0.01 | D | 0.151 | 138 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | PCB153, Anthracene, Ditalimphos |
| 120 | 0.01 | D | 0.142 | 127 | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.01 | D | 0.203 | 120 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | Yes | TDCP |
| 122 | 0.01 | D | 0.147 | 111 | | EtOAc | | | 10 | | GPC | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | Ditalimphos (only for GC sensitivity check) |
| 123 | 0.02 | D | 0.153 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | 0.02 | D | 0.169 | 89 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | HCB |
| 125 | 0.03 | D | 0.200 | 90 | | DCM | Acetone | | 5 | | SPE | Matrix matched - Single level | NPD | | | Rec. from same batch | | |
| 126 | 0.05 | D | 0.159 | 88 | | DCM | | | 10 | | DSPE | Pure solvent - Single level | NPD | | GC-MS | Rec. from validation data | Yes | TPP |
| 127 | 0.01 | D | 0.158 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | ITD/MS/MS | | GC/ITD/MS/MS | Rec. from same batch | | |
| 128 | 0.01 | D | 0.146 | 97 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | GC-MS/MS (Ion Trap) | | GCMS/MS (Ion Trap) | Rec. from same batch | | |
| 129 | 0.01 | D | 0.145 | 107 | | EtOAc | | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 130 | 0.02 | D | 0.172 | 88 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | | GC-MS | Other pesticide | | |
| 131 | 0.01 | D | 0.106 | 70 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |
| 132 | 0.05 | D | 0.180 | 84.65 | | EtOAc | | | 50 | | | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 133 | 0.01 | D | 0.140 | 94 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | PFPD | | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.293 | 98 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.178 | 85 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | 0.176 | D | 0.176 | 87.84 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | 0.141 | D | | | | | | | | | | | | | | | | |
| 139 | 0.01 | D | 0.160 | 92 | | AcN | | | 15 | | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 140 | | NA | 0.110 | | | | | | | | | | | | | | | |
| 141 | 0.06 | D | 0.140 | 100 | | DCM | DCM | DCM | 10 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS | Rec. from validation data | | |
| 142 | 0.05 | D | 0.210 | 82 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | IDT | | GC-MS-MS (ITD) | Rec. from same batch | Yes | TPP |
| 143 | 0.01 | D | 0.180 | 101 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Single level | ECD | MS/MS (QQQ) | Two columns | Rec. from same batch | | |
| 144 | 0.002 | D | 0.218 | 105 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| CHLORPYRIFOS-ETHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **145** | 0.01 | D | 0.225 | 104 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **146** | 0.01 | D | 0.192 | 98 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| **147** | 0.01 | D | 0.216 | 85 | | Acetone | DCM | Petroleum Ether | 15 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | GC-MS | Via Standard addition | | |
| **148** | 0.01 | D | 0.187 | 97.3 | | Acetone | | | 50 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **149** | 0.01 | D | 0.151 | 113 | | EtOAc | | | 10 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **150** | 0.01 | D | 0.140 | | Yes | EtOAc | | | | | | | MS/MS (QQQ) | | | | | |
| **151** | 0.01 | D | 0.200 | 75.3 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **152** | 0.02 | D | 0.150 | 110.8 | | EtOAc | | | 25 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| **153** | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## DIMETHOATE SUM

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | 0.01 | D | 0.032 | 100 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 002 | 0.01 | D | 0.036 | 87 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.037 | 84 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 004 | 0.01 | D | 0.019 | 92 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TDCPP |
| 005 | 0.005 | D | 0.049 | 76 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Dimethoate D6 |
| 006 | 0.003 | D | 0.048 | 98 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | 0.01 | D | 0.029 | 60 | | AcN | | | 25 | Yes | Freezing out | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Isoproturon-D6 |
| 008 | 0.01 | D | 0.044 | 65 | Yes | EtOAc | | | 37.5 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 009 | 0.003 | D | 0.054 | 35 | Yes | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.049 | 89.3 | | | MeOH | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 012 | 0.002 | D | 0.039 | 98 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | | NA | | | | | | | | | | | | | | | | |
| 014 | | NA | 0.027 | | | | | | | | | | | | | | | |
| 015 | 0.005 | D | 0.023 | 74 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbendazim D4 |
| 016 | 0.003 | D | 0.039 | 83.9 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.003 | D | 0.047 | 84.2 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 018 | 0.003 | D | 0.041 | 100 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 019 | 0.01 | D | 0.026 | 77.3 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.034 | 73 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 021 | 0.01 | D | 0.054 | 60.56 | | AcN | | | 9.965 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 022 | 0.04 | ND | | | | Acetone | DCM | Petroleum Ether | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 023 | 0.01 | D | 0.042 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.003 | D | 0.045 | 97 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.041 | 79 | | AcN | | | 10 | Yes | SPE | Matrix matched - Multiple level | FPD | MS/MS (QQQ) | | Rec. from same batch | | |
| 026 | 0.01 | D | 0.027 | 75 | Yes | AcN | AcN | AcN | 10 | | DSPE | Pure solvent - Single level | NPD | UV | GC-MS | Rec. from validation data | Yes | TPP |
| 027 | | NA | | | | | | | | | | | | | | | | |
| 028 | 0.003 | D | 0.032 | 74 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 029 | 0.003 | D | 0.028 | 100 | Yes | EtOAc | | | 15 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.040 | 84.7 | | | | | | | | | | | | | | |
| 031 | 0.02 | D | 0.041 | 95 | Yes | DCM | Cyclohexane | EtOAc | 10 | | GPC | | | | | | | |
| 032 | 0.01 | D | 0.044 | 83 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 033 | | NA | | | | | | | | | | | | | | | | |
| 034 | 0.005 | D | 0.066 | 88 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | FPD | | GC-MS | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.003 | D | 0.043 | 85 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | 0.02 | ND | | | | | | | | | | | | | | | | |
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | 0.05 | D | 0.048 | 130 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| DIMETHOATE SUM | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **041** | 0.01 | D | 0.054 | 87 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **042** | 0.01 | D | 0.056 | 86 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **043** | 0.01 | D | 0.077 | 89 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| **044** | 0.05 | D | | 84.4 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **045** | 0.003 | D | 0.039 | 83 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from validation data | | |
| **046** | 0.01 | D | 0.046 | 85 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **047** | 0.003 | D | 0.036 | 82 | | AcN | | | 5,0 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | Linuron-D6 |
| **048** | 0.02 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| **049** | 0.0015 | D | 0.043 | 89 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **050** | 0.01 | D | 0.041 | 82 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **051** | 0.01 | D | 0.037 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Atrazin D5 |
| **052** | 0.01 | D | 0.038 | 66.8 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **053** | 0.003 | D | 0.047 | 86 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| **054** | 0.05 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Single level | FPD | | GC-TOF | Other pesticide | | |
| **055** | 0.003 | D | 0.051 | 94 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **056** | 0.026 | D | 0.028 | 99 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | | |
| **057** | | D | 0.043 | 84 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| **058** | 0.01 | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **059** | | NA | | | | | | | | | | | | | | | | |
| **060** | 0.003 | D | 0.037 | 77 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | | |
| **061** | 0.003 | D | 0.075 | 74.2 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **062** | 0.003 | D | 0.042 | 79 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| **063** | | NA | | | | | | | | | | | | | | | | |
| **064** | | NA | | | | | | | | | | | | | | | | |
| **065** | 0.003 | D | 0.051 | 100 | | AcN | | | 10 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Pirimicarb D6 |
| **066** | 0.01 | D | 0.052 | 105 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |
| **067** | 0.003 | D | 0.029 | 102 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| **068** | 0.01 | D | 0.035 | 106 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **069** | 0.01 | D | 0.011 | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazim |
| **070** | 0.003 | D | 0.035 | 97 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **071** | 0.003 | D | 0.039 | 77.3 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **072** | 0.02 | D | 0.021 | 81 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **073** | | NA | | | | | | | | | | | | | | | | |
| **074** | 0.01 | D | 0.023 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | IDT | | GC-MS/MS (QQQ) | | Yes | TPP |
| **075** | | NA | | | | | | | | | | | | | | | | |
| **076** | | ND | | | | AcN | MeOH | | 5 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **077** | 0.01 | ND | | | | | | | | | | | | | | | | |
| **078** | 0.05 | ND | | | | AcN | | | 12 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | subsequent batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| DIMETHOATE SUM | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 079 | 0.003 | ND | | | | Acetone | EtOAc/ Cyclohexane | | 20 | Yes | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | Nitrofen,TPP, Triclosanmethyl |
| 080 | 0.01 | ND | | | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Single level | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Via Standard addition | | |
| 081 | 0.01 | D | 0.020 | 65 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | LC-Orbitrap | Rec. from same batch | | |
| 082 | | NA | | | | | | | | | | | | | | | | |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | | NA | | | | | | | | | | | | | | | | |
| 085 | 0.01 | D | 0.031 | 87 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | 0.01 | D | 0.041 | 68 | Yes | Acetone | DCM | EtOAc, cyklohexane | 100 | | GPC | Matrix matched - Multiple level | NPD | | | Rec. from same batch | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.035 | 82.4 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | 0.02 | D | 0.032 | 63 | | AcN | | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TFP |
| 092 | 0.0075 | D | 0.030 | 92.9 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 093 | 0.03 | ND | | | | EtOAc | | | 50 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 094 | 0.01 | D | 0.045 | 96 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | 0.01 | ND | | | | Acetone | DCM | | 5 | | SPE | Pure solvent - Single level | NPD | | | | | |
| 097 | 0.003 | D | 0.033 | 96 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | MSD | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.01 | D | 0.041 | 83 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.005 | D | 0.013 | 89 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 100 | 0.045 | D | 0.049 | 119 | | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 101 | 0.05 | ND | | | | DCM | EtOAc | Cyclohexane | 15 | | GPC | Pure solvent - Multiple level | MSD | Not using | GC-MS | Rec. from validation data | Yes | Fenclorfos |
| 102 | 0.034 | D | 0.037 | 73 | | Acetone | DCM | EtOAc | 100 | | GPC/SPE | Pure solvent - Multiple level | NPD | | GC-MS | Rec. from validation data | | |
| 103 | 0.01 | D | 0.050 | 109 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 104 | 0.01 | D | 0.039 | 84 | Yes | Acetone | DCM | EtOAc | 50 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from validation data | | |
| 105 | | NA | | | | | | | | | | | | | | | | |
| 106 | 0.0583 | D | | 87.0 | Yes | AcN | used | used | 10 | | | Matrix matched - Multiple level | MSD | used | GC-MS | Rec. from validation data | Yes | PCB 198 |
| 107 | 0.025 | D | 0.046 | 61.9 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 108 | | NA | 0.027 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.02 | D | 0.017 | 75 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 111 | | NA | | | | | | | | | | | | | | | | |
| 112 | 0.005 | D | 0.043 | 72 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 113 | 0.01 | D | 0.043 | 101.5 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.01 | D | 0.044 | 93 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 115 | 0.01 | D | 0.026 | 7.0 | Yes | EtOAc | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 116 | 20 | D | 0.076 | 67.0 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| DIMETHOATE SUM | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 117 | 0.003 | D | 0.037 | 78 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.005 | D | 0.029 | 83 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | 0.01 | ND | | | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.01 | D | 0.029 | 103 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | Yes | TDCP |
| 122 | 0.003 | D | 0.057 | 90 | | EtOAc | | | 10 | | GPC | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | Ditalimphos (only for GC sensitivity check) |
| 123 | 0.02 | D | 0.038 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | 0.02 | D | 0.032 | 127 | | Acetone | DCM | Petroleum Ether | 7.5 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | 0.01 | D | 0.014 | 80 | | DCM | | | 10 | | DSPE | Pure solvent - Single level | NPD | | GC-MS | Rec. from validation data | Yes | TPP |
| 127 | 0.01 | D | 0.028 | 86.8 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 128 | 0.01 | D | 0.019 | 68 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | GC-MS/MS (Ion Trap) | | GCMS/MS (Ion Trap) | Rec. from same batch | | |
| 129 | 0.01 | D | 0.069 | 114 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | 0.01 | D | 0.015 | 72 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.003 | D | 0.097 | 81 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS | | Rec. from same batch | | |
| 134 | 0.002 | D | 0.037 | 98 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.027 | 88 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | 0.0416 | D | 0.045 | 83.84 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | | ND | | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | Anthacene |
| 139 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | 0.01 | D | 0.023 | 51 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.002 | D | 0.037 | 98 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.003 | D | 0.044 | 77 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.01 | D | 0.040 | 113 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 147 | 0.02 | ND | | | | | | | | | | | | | | | | |
| 148 | 0.01 | D | 0.043 | 105.3 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | 0.01 | D | 0.032 | 101 | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | 0.01 | D | 0.030 | 71.4 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 152 | 0.02 | D | 0.030 | 72.3 | | EtOAc | | | 25 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| EPN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | | NA | | | | | | | | | | | | | | | | |
| 002 | | NA | | | | | | | | | | | | | | | | |
| 003 | | NA | | | | | | | | | | | | | | | | |
| 004 | 0.01 | D | 0.095 | 103 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TDCPP |
| 005 | 0.02 | D | 0.063 | 119 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TBP, TPP |
| 006 | 0.01 | D | 0.051 | 107 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | MS/MS (QQQ) | | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | | NA | | | | | | | | | | | | | | | | |
| 008 | 0.02 | D | 0.060 | 89 | | EtOAc | | | 37.5 | | GPC | Matrix matched - Multiple level | FPD | | | Rec. from same batch | | |
| 009 | 0.01 | D | 0.080 | 105 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.038 | 85 | | Acetone | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 012 | 0.010 | D | 0.062 | 95 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | | NA | | | | | | | | | | | | | | | | |
| 014 | | NA | | | | | | | | | | | | | | | | |
| 015 | 0.005 | D | 0.063 | 103 | | EtOAc | | | | Yes | SPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | Trifluralin D14 |
| 016 | 0.01 | D | 0.054 | 100.1 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 017 | 0.01 | D | 0.066 | 90.6 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.054 | 94 | | AcN | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Phenanthrene-d10 |
| 019 | 0.01 | D | 0.039 | 75.6 | | EtOAc | | | 10 | Yes | | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.059 | 104 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 021 | | NA | | | | | | | | | | | | | | | | |
| 022 | 0.02 | D | 0.066 | 90.4 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 023 | 0.01 | D | 0.060 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.081 | 96 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.046 | 90 | | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 026 | | NA | | | | | | | | | | | | | | | | |
| 027 | | NA | | | | | | | | | | | | | | | | |
| 028 | 0.01 | D | 0.064 | 85 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.037 | 100 | Yes | EtOAc | | | 15 | | DSPE | Standard addition | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | | NA | | | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | | NA | | | | | | | | | | | | | | | | |
| 033 | | NA | | | | | | | | | | | | | | | | |
| 034 | 0.01 | D | 0.056 | 91 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | MSD | | | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.067 | 110 | | Acetone | EtOAc | | 5 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | 0.01 | D | 0.039 | 109 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | MSD | | | Via Standard addition | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| EPN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | | NA | | | | | | | | | | | | | | | | |
| 041 | 0.01 | D | 0.053 | 102 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 042 | 0.01 | D | 0.062 | 86 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TRIS |
| 043 | 0.01 | D | 0.061 | 91 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 044 | | NA | | | | | | | | | | | | | | | | |
| 045 | 0.01 | D | 0.059 | 88 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 046 | 0.01 | D | 0.064 | 85 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 047 | 0.01 | D | 0.063 | 97 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.01 | D | 0.052 | 100 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| 049 | 0.005 | D | 0.058 | 87 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 050 | 0.01 | D | 0.078 | 102 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 051 | 0.01 | ND | | | | AcN | | | 10 | Yes | DSPE | Standard addition | MSD | | GC-MS | Via Standard addition | | |
| 052 | 0.01 | D | 0.065 | 80.0 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | D | 0.049 | 98 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | | NA | | | | | | | | | | | | | | | | |
| 055 | 0.01 | D | 0.052 | 91 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 056 | | NA | | | | | | | | | | | | | | | | |
| 057 | | D | 0.050 | 87 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | TOF | MS/MS (QQQ) | GC-TOF | Rec. from validation data | | |
| 058 | 0.01 | D | 0.064 | | | MeOH | DCM | | 50 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS | Other pesticide | Yes | TPP, Mirex |
| 059 | | NA | | | | | | | | | | | | | | | | |
| 060 | | NA | | | | | | | | | | | | | | | | |
| 061 | 0.01 | D | 0.063 | 92.4 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| 062 | | NA | | | | | | | | | | | | | | | | |
| 063 | | NA | | | | | | | | | | | | | | | | |
| 064 | | NA | | | | | | | | | | | | | | | | |
| 065 | 0.01 | D | 0.054 | 107 | | AcN | | | 10 | | DSPE | Standard addition | MSD | | GC-TOF | Rec. from same batch | Yes | PCB 138 |
| 066 | 0.01 | D | 0.067 | 96 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Desmetryn |
| 067 | 0.01 | D | 0.075 | 115 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | | |
| 068 | 0.01 | D | 0.044 | 63 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 069 | | NA | | | | | | | | | | | | | | | | |
| 070 | 0.01 | D | 0.059 | 91 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 071 | 0.005 | D | 0.062 | 87.5 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 072 | | NA | | | | | | | | | | | | | | | | |
| 073 | | NA | | | | | | | | | | | | | | | | |
| 074 | | NA | | | | | | | | | | | | | | | | |
| 075 | | NA | | | | | | | | | | | | | | | | |
| 076 | | NA | | | | | | | | | | | | | | | | |
| 077 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| EPN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 078 | | NA | | | | | | | | | | | | | | | | |
| 079 | 0.01 | D | 0.073 | 73.9 | | Acetone | Cyclohexane EtOAc | | 20 | Yes | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | Yes | Nitrofen , Triclosanmethyl , TPP |
| 080 | | NA | | | | | | | | | | | | | | | | |
| 081 | 0.01 | D | 0.057 | 112 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 082 | 0.01 | D | 0.077 | 74.5 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | | NA | | | | | | | | | | | | | | | | |
| 085 | 0.01 | D | 0.062 | 101 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.053 | 95 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | | NA | | | | | | | | | | | | | | | | |
| 092 | | NA | | | | | | | | | | | | | | | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | 0.01 | D | 0.036 | 83 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | | NA | | | | | | | | | | | | | | | | |
| 097 | 0.01 | D | 0.046 | 86 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | MSD | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | | NA | | | | | | | | | | | | | | | | |
| 099 | 0.01 | D | 0.050 | 95 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | TPP |
| 100 | 0.045 | D | 0.045 | 33 | Yes | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 101 | 0.02 | D | 0.087 | 95 | | DCM | DCM | DCM | 15 | | GPC | Pure solvent - Multiple level | MSD | Diode Array Detector | GC-MS | Rec. from same batch | Yes | Fenclorfos (Normally ethion) |
| 102 | | NA | | | | | | | | | | | | | | | | |
| 103 | | ND | | | | | | | | | | | | | | | | |
| 104 | | NA | | | | | | | | | | | | | | | | |
| 105 | | NA | | | | | | | | | | | | | | | | |
| 106 | | NA | | | | | | | | | | | | | | | | |
| 107 | | NA | | | | | | | | | | | | | | | | |
| 108 | | NA | 0.070 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.01 | D | 0.045 | 110 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 111 | | NA | | | | | | | | | | | | | | | | |
| 112 | | NA | | | | | | | | | | | | | | | | |
| 113 | 0.01 | D | | | | AcN | | | 15 | Yes | DSPE | Matrix matched - Single level | MSD | | GC-MS | Via Standard addition | Yes | Mirex, TDCCP |
| 114 | 0.01 | D | 0.053 | 91 | | EtOAc | | | 30 | Yes | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Tetraphenylethylene |
| 115 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| EPN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 116 | 20 | D | 0.140 | 82.8 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 117 | 0.01 | D | 0.054 | 95 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.01 | D | 0.065 | 103 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | ECD/NPD | | GC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | 0.01 | D | 0.060 | 120 | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.01 | D | 0.061 | 101 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | Yes | TDCP |
| 122 | | NA | | | | | | | | | | | | | | | | |
| 123 | 0.02 | D | 0.063 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | | NA | | | | | | | | | | | | | | | | |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | 0.02 | D | 0.037 | 99 | | DCM | | | 10 | | DSPE | Pure solvent - Single level | ECD | | GC-MS | Rec. from validation data | Yes | Endosulfan lactone |
| 127 | | NA | | | | | | | | | | | | | | | | |
| 128 | | NA | | | | | | | | | | | | | | | | |
| 129 | | NA | | | | | | | | | | | | | | | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | | NA | | | | | | | | | | | | | | | | |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.070 | 86 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | PFPD | | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.068 | 113 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.075 | 88 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | | NA | | | | | | | | | | | | | | | | |
| 138 | | NA | | | | | | | | | | | | | | | | |
| 139 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | | NA | | | | | | | | | | | | | | | | |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.002 | D | 0.062 | 104 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 146 | | NA | | | | | | | | | | | | | | | | |
| 147 | | NA | | | | | | | | | | | | | | | | |
| 148 | 0.01 | ND | | | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | | NA | | | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | | NA | | | | | | | | | | | | | | | | |
| 152 | | NA | | | | | | | | | | | | | | | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| ETHION | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | 0.01 | D | 0.084 | 143 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 002 | 0.01 | D | 0.090 | 87 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.063 | 63 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 004 | 0.01 | D | 0.089 | 104 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TDCPP |
| 005 | 0.01 | D | 0.105 | 112 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TBP, TPP |
| 006 | 0.01 | D | 0.071 | 85 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | 0.01 | D | 0.045 | 102 | | AcN | | | 25 | Yes | Freezing out | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | ChlorpyriphosMe-D6 |
| 008 | 0.005 | D | 0.076 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | IDT | | | Rec. from same batch | Yes | TPP |
| 009 | 0.01 | D | 0.094 | 106 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.063 | 88 | | Acetone | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 012 | 0.002 | D | 0.072 | 96 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | 0.01 | D | 0.073 | 82 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 014 | 0.01 | D | 0.070 | 70.4 | | Acetone | MeOH | | 50 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Fenchlorphos |
| 015 | 0.005 | D | 0.074 | 94 | | EtOAc | | | | Yes | SPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | Trifluralin D14 |
| 016 | 0.01 | D | 0.068 | 91.6 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 017 | 0.01 | D | 0.073 | 91.1 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.067 | 90 | | AcN | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Phenanthrene-d10 |
| 019 | 0.01 | D | 0.051 | 73.8 | | EtOAc | | | 10 | Yes | | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.072 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 021 | 0.01 | D | 0.073 | 99.96 | | AcN | | | 9.926 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 022 | 0.04 | D | 0.063 | 90.3 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 023 | 0.01 | D | 0.052 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.072 | 99 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.061 | 91 | | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 026 | 0.01 | D | 0.150 | 65 | Yes | AcN | AcN | AcN | 10 | | DSPE | Pure solvent - Single level | NPD | UV | GC-MS | Rec. from validation data | Yes | TPP |
| 027 | | NA | | | | | | | | | | | | | | | | |
| 028 | 0.01 | D | 0.076 | 86 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.049 | 100 | Yes | EtOAc | | | 15 | | DSPE | Standard addition | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.063 | 91.9 | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | 0.02 | D | 0.071 | 101 | | EtOAc | | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 033 | 0.01 | D | 0.067 | 104.6 | Yes | Acetone | | | 2 | | | Matrix matched - Single level | NPD | | | | | |
| 034 | 0.01 | D | 0.067 | 91 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | FPD | | GC-MS | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.070 | 92 | | Acetone | EtOAc | | 5 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | 0.01 | D | 0.070 | 93.2 | | DCM | Acetone | | 5 | | MSPD, silica gel/alumina | Pure solvent - Single level | NPD | | GC/NPD, GC/ECD | Rec. from validation data | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| ETHION | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 038 | 0.01 | D | 0.072 | 99 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | MSD | | | Via Standard addition | | |
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | 0.02 | D | 0.052 | 125 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 041 | 0.01 | D | 0.064 | 104 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 042 | 0.01 | D | 0.058 | 98 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 043 | 0.01 | D | 0.075 | 94 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 044 | 0.01 | D | 0.060 | 103.6 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 045 | 0.01 | D | 0.079 | 83 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from validation data | | |
| 046 | 0.01 | D | 0.061 | 103 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 047 | 0.005 | D | 0.081 | 92 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.01 | D | 0.037 | 95 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| 049 | 0.01 | D | 0.099 | 96 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from validation data | | |
| 050 | 0.01 | D | 0.100 | 103 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 051 | 0.01 | D | 0.107 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | MSD | | GC-MS | Via Standard addition | | |
| 052 | 0.01 | D | 0.076 | 85.2 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | D | 0.071 | 101 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | 0.01 | D | 0.043 | 96 | | Acetone | DCM | | 12 | | | Matrix matched - Single level | NPD | | Two columns | Rec. from same batch | | |
| 055 | 0.01 | D | 0.055 | 112 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 056 | 0.0707 | D | 0.071 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | | Rec. from validation data | Yes | TPP |
| 057 | | D | 0.080 | 96 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | TOF | MS/MS (QQQ) | GC-TOF | Rec. from validation data | | |
| 058 | 0.01 | D | 0.075 | 81 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 059 | 0.01 | D | 0.072 | 101 | | Acetone | DCM | | 100 | | florisil column | Matrix matched - Single level | ECD | | Two columns | Rec. from same batch | | |
| 060 | 0.01 | D | 0.061 | 92 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | | |
| 061 | 0.01 | D | 0.076 | 91.4 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TDCPP |
| 062 | 0.01 | D | 0.093 | 81 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| 063 | | NA | | | | | | | | | | | | | | | | |
| 064 | | NA | | | | | | | | | | | | | | | | |
| 065 | 0.01 | D | 0.079 | 94 | | AcN | | | 10 | | DSPE | Standard addition | MSD | | GC-TOF | Rec. from same batch | Yes | Pirimicarb D6 |
| 066 | 0.01 | D | 0.096 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Desmetryn |
| 067 | 0.01 | D | 0.084 | 94 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | | |
| 068 | 0.01 | D | 0.090 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | TPP |
| 069 | 0.01 | D | 0.040 | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazim |
| 070 | 0.01 | D | 0.073 | 115 | | EtOAc | Cyclohexane | Acetone | 75 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 071 | 0.005 | D | 0.074 | 85.1 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 072 | 0.01 | D | 0.068 | 85 | | Acetone | DCM | | 10 | Yes | | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 073 | 0.01 | D | 0.068 | 82 | | Acetone | DCM | | 7.5 | | | Matrix matched - Single level | NPD | | Two columns | Rec. from same batch | | |
| 074 | 0.01 | D | 0.051 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | IDT | | GC-MS/MS (QQQ) | | Yes | TPP |
| 075 | 0.05 | D | 0.080 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TDCPP |
| 076 | 0.083 | D | 0.083 | 102 | | AcN | MeOH | MeOH | 5 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | Not used |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## ETHION

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 077 | 0.01 | D | 0.097 | 85 | | DCM | | | 10 | | GPC | Pure solvent - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | Biphenyl |
| 078 | 0.05 | D | 0.080 | 92 | | AcN | AcN | AcN | 12 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | | | |
| 079 | 0.01 | D | 0.071 | 87.9 | | Acetone | Cyclohexane EtOAc | | 20 | Yes | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | Yes | Nitrofen , Triclosanmethyl , TPP |
| 080 | 0.01 | D | 0.060 | 86 | Yes | Acetone | DCM | | 15 | | | | MS/MS (QQQ) | | LC-MS/MS (QQQ) | Via Standard addition | Yes | Hexabromobenzene |
| 081 | 0.01 | D | 0.057 | 107 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | LC-Orbitrap | Rec. from same batch | | |
| 082 | 0.01 | D | 0.080 | 97.8 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 083 | 0.01 | D | 0.063 | 88 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TDCPP |
| 084 | 0.01 | D | 0.110 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | | | Rec. from validation data | Yes | TPP |
| 085 | 0.01 | D | 0.086 | 99 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | 0.01 | D | 0.080 | 105 | Yes | AcN | AcN | AcN | 4 | | DSPE | Matrix matched - Single level | MSD | | GC-MS | Rec. from same batch | Yes | PSB 198 |
| 089 | 0.01 | D | 0.072 | 89.2 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | 0.01 | D | 0.062 | 88 | Yes | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | PCB 198 |
| 091 | 0.01 | D | 0.070 | 95 | | Acetone | DCM | | 7.5 | | Liquid/liquid partitioning | Pure solvent - Multiple level | NPD | | GC-MS/MS (QQQ) | Rec. from validation data | | |
| 092 | 0.0075 | D | 0.076 | 105 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | 0.01 | D | 0.062 | 81 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | 0.01 | D | 0.078 | 108.6 | | Acetone | DCM | EtOAc | 10 | | GPC | Matrix matched - Multiple level | ECD | | | Rec. from same batch | | |
| 096 | 0.01 | D | 0.061 | 79 | | Acetone | DCM | | 5 | | SPE | Matrix matched - Single level | NPD | | GC-MS | Rec. from validation data | | |
| 097 | 0.01 | D | 0.051 | 93 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | MSD | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.02 | D | 0.065 | 80 | | AcN | | | 10 | | | Pure solvent - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.01 | D | 0.056 | 93 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | TPP |
| 100 | 0.088 | D | 0.088 | 100 | | Hexane | | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | ITD | | GC-ITD | Rec. from same batch | | |
| 101 | 0.02 | D | 0.046 | 63 | | DCM | DCM | DCM | 15 | | GPC | Pure solvent - Multiple level | MSD | Diode Array Detector | GC-MS | Rec. from same batch | Yes | Fenclorfos (Normally ethion) |
| 102 | 0.067 | D | 0.067 | 77 | | AcN | AcN | AcN | 10 | | DSPE | Pure solvent - Multiple level | MSD | | GC-MS/MS (QQQ) | Rec. from validation data | | |
| 103 | 0.01 | D | 0.083 | 70 | | Acetone | | | 50 | | Liquid/liquid partitioning | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Bromophos methyl |
| 104 | 0.01 | D | 0.060 | 93 | | Acetone | DCM | EtOAc | 50 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from validation data | | |
| 105 | 0.01 | D | 0.080 | 92 | | Acetone | DCM | MeOH | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 106 | 0.05056 | D | 0.056 | 91.0 | Yes | AcN | used | used | 10 | | | Matrix matched - Multiple level | MSD | used | GC-MS | Rec. from validation data | Yes | PCB 198 |
| 107 | 0.01 | D | 0.061 | 95.0 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | IDT | | | Rec. from same batch | Yes | Trichloronate |
| 108 | | NA | 0.066 | | | | | | | | | | | | | | | |
| 109 | 0.02 | D | 0.020 | 95.14 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | PCB 198;1,1` - Biphenyl, 2,2`,3,3`,4,4`,6,6` - octachloro |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| ETHION | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 110 | 0.01 | D | 0.052 | 99 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 111 | 0.05 | D | 0.064 | 88 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | TOF | | | Rec. from same batch | Yes | TPP |
| 112 | 0.01 | D | 0.084 | 90 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 113 | 0.01 | D | 0.072 | 105 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Single level | MSD | | GC-MS | Via Standard addition | Yes | Mirex, TDCCP |
| 114 | 0.01 | D | 0.066 | 91 | | EtOAc | | | 30 | Yes | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Tetraphenylethylene |
| 115 | 0.01 | D | 0.064 | | | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Matrix matched - Multiple level | FPD | | GC-MS | Via Standard addition | Yes | Diazinon |
| 116 | 20 | D | 0.180 | 101.8 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 117 | 0.01 | D | 0.067 | 94 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.01 | D | 0.081 | 95.6 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | ECD/NPD | | GC-MS | Rec. from same batch | | |
| 119 | 0.01 | D | 0.061 | 123 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | PCB153, Anthracene, Ditalimphos |
| 120 | 0.01 | D | 0.058 | 93 | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.01 | D | 0.102 | 115 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | Yes | TDCP |
| 122 | 0.01 | D | 0.055 | 105 | | EtOAc | | | 10 | | GPC | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | Ditalimphos (only for GC sensitivity check) |
| 123 | 0.02 | D | 0.063 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | 0.01 | D | 0.048 | 80 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | HCB |
| 125 | 0.03 | D | 0.070 | 87 | | DCM | Acetone | | 5 | | SPE | Matrix matched - Single level | ECD | | | Rec. from same batch | | |
| 126 | 0.02 | D | 0.054 | 82 | | DCM | | | 10 | | DSPE | Pure solvent - Single level | NPD | | GC-MS | Rec. from validation data | Yes | TPP |
| 127 | 0.01 | D | 0.064 | 88.6 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | ITD/MS/MS | | GC/ITD/MS/MS | Rec. from same batch | | |
| 128 | 0.01 | D | 0.099 | 99 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | GC-MS/MS (Ion Trap) | | GCMS/MS (Ion Trap) | Rec. from same batch | | |
| 129 | 0.01 | D | 0.060 | 113 | | EtOAc | | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 130 | 0.02 | D | 0.082 | 88 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | | GC-MS | Other pesticide | | |
| 131 | 0.01 | D | 0.034 | 96 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |
| 132 | 0.02 | D | 0.073 | 83.12 | | EtOAc | | | 50 | | | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 133 | 0.01 | D | 0.080 | 79 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | PFPD | | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.077 | 109 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.097 | 98 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | 0.0539 | D | 0.054 | 78.72 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | 0.064 | D | | | | | | | | | | | | | | | | |
| 139 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | 0.01 | D | 0.079 | 73 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | IDT | | GC-MS-MS (ITD) | Rec. from same batch | Yes | TPP |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.002 | D | 0.073 | 83 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | TOF | | GC-TOF | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| ETHION | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 145 | 0.01 | D | 0.094 | 108 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 146 | 0.01 | D | 0.057 | 108 | | Acetone | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | NPD | | | Rec. from same batch | | |
| 147 | 0.02 | D | 0.102 | 80 | | Acetone | DCM | Petroleum Ether | 15 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | GC-MS | Via Standard addition | | |
| 148 | 0.01 | D | 0.075 | 99.8 | | Acetone | | | 50 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 149 | 0.01 | D | 0.058 | 104 | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | 0.01 | D | 0.080 | 73.1 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 152 | 0.02 | D | 0.050 | 78.2 | | EtOAc | | | 25 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| FENPROPATHRIN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **001** | 0.01 | D | 0.064 | 124 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **002** | | NA | | | | | | | | | | | | | | | | |
| **003** | 0.01 | D | 0.063 | 71 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **004** | 0.01 | D | 0.080 | 97 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TDCPP |
| **005** | 0.02 | D | 0.077 | 117 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TBP, TPP |
| **006** | 0.01 | D | 0.063 | 106 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | MS/MS (QQQ) | | | Rec. from same batch | Yes | Pirimicarb-D6 |
| **007** | 0.01 | D | 0.050 | 104 | | AcN | | | 25 | Yes | Freezing out | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | PCB170 |
| **008** | 0.01 | D | 0.045 | 98 | | EtOAc | | | 37.5 | | GPC | Matrix matched - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| **009** | 0.01 | D | 0.060 | 102 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **010** | 0.5 | ND | | | | DCM | Acetone | | 15 | | | Pure solvent - Multiple level | IDT | | GC-MS | Rec. from same batch | | |
| **011** | 0.01 | D | 0.045 | 85 | | Acetone | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **012** | 0.002 | D | 0.076 | 99 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| **013** | 0.01 | D | 0.076 | 100 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **014** | 0.01 | D | 0.050 | 86.1 | | Acetone | MeOH | | 50 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Fenchlorphos |
| **015** | 0.005 | D | 0.091 | 92 | | EtOAc | | | | Yes | SPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | Trifluralin D14 |
| **016** | 0.01 | D | 0.068 | 100.7 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **017** | 0.01 | D | 0.066 | 98.9 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **018** | 0.01 | D | 0.063 | 95 | | AcN | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Phenanthrene-d10 |
| **019** | 0.01 | D | 0.044 | 75.6 | | EtOAc | | | 10 | Yes | | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **020** | 0.01 | D | 0.055 | 105 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| **021** | | NA | | | | | | | | | | | | | | | | |
| **022** | | NA | | | | | | | | | | | | | | | | |
| **023** | 0.01 | D | 0.045 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | | | |
| **024** | 0.01 | D | 0.075 | 101 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | TDCPP |
| **025** | | D | 0.048 | 92 | | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **026** | 0.01 | D | 0.040 | 78 | Yes | AcN | AcN | AcN | 10 | | DSPE | Pure solvent - Single level | NPD | UV | GC-MS | Rec. from validation data | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| FENPROPATHRIN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 027 | | NA | | | | | | | | | | | | | | | | |
| 028 | 0.01 | D | 0.075 | 76 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.044 | 100 | Yes | EtOAc | | | 15 | | DSPE | Standard addition | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.055 | 88.4 | | | | | | | | | | | | | | |
| 031 | 0.02 | D | 0.050 | 55 | Yes | DCM | Cyclohexane | | 10 | | GPC | | | | | | | |
| 032 | | NA | | | | | | | | | | | | | | | | |
| 033 | 0.01 | D | 0.066 | 103.7 | Yes | Acetone | | | 2 | | | Matrix matched - Single level | ECD | | | | | |
| 034 | 0.01 | D | 0.065 | 108 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | MSD | | | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.064 | 99 | | Acetone | EtOAc | | 5 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | 0.01 | D | 0.066 | 92 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | MSD | | | Via Standard addition | | |
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | 0.02 | D | 0.279 | 119 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 041 | 0.01 | D | 0.075 | 104 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 042 | 0.01 | D | 0.059 | 100 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Tris |
| 043 | 0.01 | D | 0.044 | 87 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| 044 | 0.01 | D | 0.050 | 94.5 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 045 | 0.01 | D | 0.076 | 85 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from validation data | | |
| 046 | 0.01 | D | 0.190 | 94 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 047 | 0.01 | D | 0.073 | 102 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.02 | D | 0.050 | 88 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| 049 | 0.01 | D | 0.069 | 92 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | | |
| 050 | 0.01 | D | 0.076 | 106 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 051 | 0.01 | D | 0.111 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | MSD | | GC-MS | Via Standard addition | | |
| 052 | 0.01 | D | 0.110 | 83.2 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | D | 0.059 | 104 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| FENPROPATHRIN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **054** | 0.01 | D | 0.050 | 117 | | Acetone | DCM | | 6 | | | | | | | | | |
| **055** | 0.01 | D | 0.056 | 109 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **056** | 0.0599 | D | 0.060 | 98 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | | Rec. from validation data | Yes | TPP |
| **057** | | D | 0.068 | 74 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | TOF | MS/MS (QQQ) | GC-TOF | Rec. from validation data | | |
| **058** | 0.01 | D | 0.085 | 103 | | MeOH | DCM | | 50 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS | Rec. from validation data | Yes | TPP, Mirex |
| **059** | 0.01 | D | 0.060 | 108 | | Acetone | DCM | | 100 | | florisil column | Matrix matched - Single level | ECD | | Two columns | Rec. from same batch | | |
| **060** | 0.01 | D | 0.067 | 100 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from validation data | | |
| **061** | 0.01 | D | 0.058 | 95.0 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| **062** | 0.01 | D | 0.083 | 78 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Via Standard addition | | |
| **063** | 0.002 | D | 0.046 | 88 | | EtOAc | | | 75 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from validation data | | |
| **064** | | NA | | | | | | | | | | | | | | | | |
| **065** | 0.01 | D | 0.068 | 96 | | AcN | | | 10 | | DSPE | Standard addition | MSD | | GC-TOF | Rec. from same batch | Yes | Pirimicarb D6 |
| **066** | 0.01 | D | 0.089 | 106 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |
| **067** | 0.01 | D | 0.073 | 87 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | | |
| **068** | 0.01 | D | 0.085 | 121 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | TPP |
| **069** | 0.01 | ND | | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazin |
| **070** | 0.01 | D | 0.059 | 100 | | EtOAc | Cyclohexane | Acetone | 75 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **071** | 0.01 | D | 0.068 | 88.7 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **072** | 0.02 | D | 0.055 | 75 | | Acetone | DCM | | 10 | Yes | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **073** | 0.01 | D | 0.043 | 89 | | Acetone | DCM | | 7.5 | | | Matrix matched - Single level | ECD | | Two columns | Rec. from same batch | | |
| **074** | 0.01 | D | 0.047 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | IDT | | GC-MS/MS (QQQ) | | Yes | TPP |
| **075** | | NA | | | | | | | | | | | | | | | | |
| **076** | 0.149 | D | 0.149 | 131 | | AcN | MeOH | MeOH | 5 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | Not used |
| **077** | | NA | | | | | | | | | | | | | | | | |
| **078** | 0.05 | ND | | | | AcN | | | 12 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | subsequent batch | | |
| **079** | 0.01 | D | 0.053 | 76.7 | | Acetone | Cyclohexane EtOAc | | 20 | Yes | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | Yes | Nitrofen , Triclosanmethyl , TPP |
| **080** | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| FENPROPATHRIN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 081 | 0.01 | D | 0.051 | 102 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | LC-Orbitrap | Rec. from same batch | | |
| 082 | 0.01 | D | 0.079 | 102.7 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | TPP |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | | NA | | | | | | | | | | | | | | | | |
| 085 | 0.01 | D | 0.065 | 99 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | 0.01 | D | 0.053 | 72 | | Acetone | DCM | EtOAc, Cyclohexane | 100 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS | Rec. from same batch | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.064 | 118.3 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | | NA | | | | | | | | | | | | | | | | |
| 092 | | NA | | | | | | | | | | | | | | | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | | NA | | | | | | | | | | | | | | | | |
| 095 | 0.01 | D | 0.067 | 110.8 | | Acetone | DCM | EtOAc | 10 | | GPC | Matrix matched - Multiple level | ECD | | | Rec. from same batch | | |
| 096 | 0.01 | D | 0.071 | 81 | | Acetone | DCM | | 5 | | SPE | Matrix matched - Single level | ECD | | GC-MS | Rec. from validation data | | |
| 097 | 0.01 | D | 0.055 | 84 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| 098 | 0.02 | D | 0.066 | 102 | | AcN | | | 10 | | | Matrix matched - Multiple level | ECD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.01 | D | 0.052 | 92 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | TPP |
| 100 | 0.040 | D | 0.040 | 43 | Yes | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 101 | 0.02 | D | 0.036 | 50 | | DCM | DCM | DCM | 15 | | GPC | Pure solvent - Multiple level | MSD | Diode Array Detector | GC-MS | Rec. from same batch | Yes | Fenclorfos (Normally ethion) |
| 102 | 0.062 | D | 0.062 | 75 | | Acetone | DCM | EtOAc | 100 | | GPC/SPE | Pure solvent - Multiple level | NPD | | GC-MS | Rec. from validation data | | |
| 103 | 0.02 | ND | | | | Acetone | | | 50 | | Liquid/liquid partitioning | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Bromophos Methyl |
| 104 | 0.01 | D | 0.054 | 90 | | Acetone | DCM | | 50 | | GPC | Pure solvent - Multiple level | ECD | | Two columns | Rec. from validation data | | |
| 105 | | NA | | | | | | | | | | | | | | | | |
| 106 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| FENPROPATHRIN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 107 | 0.01 | D | 0.066 | 91.1 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | IDT | | | Rec. from same batch | Yes | Trichloronate |
| 108 | | NA | 0.060 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.01 | D | 0.050 | 92 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Bromophos methyl |
| 111 | 0.05 | D | 0.062 | 108 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | TOF | | | Rec. from same batch | Yes | TPP |
| 112 | 0.01 | D | 0.057 | 82 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 113 | 0.01 | D | 0.066 | 96 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Single level | MSD | | GC-MS | Via Standard addition | Yes | mirex, TDCCP |
| 114 | 0.01 | D | 0.061 | 93 | | EtOAc | | | 30 | Yes | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Tetraphenylethylene |
| 115 | 0.01 | D | 0.095 | | | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Matrix matched - Multiple level | ECD | | GC-MS | Via Standard addition | Yes | Diazinon |
| 116 | 20 | D | 0.140 | 92.3 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 117 | 0.01 | D | 0.063 | 105 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | | GC-MS | Rec. from same batch | | |
| 118 | 0.01 | D | 0.072 | 97.4 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | ECD/NPD | | GC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | 0.02 | D | 0.057 | 130 | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.01 | D | 0.038 | 79 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | ECD | | Two columns | Rec. from same batch | Yes | TDCP |
| 122 | 0.01 | ND | | | | EtOAc | | | 5 | | GPC | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | Ditalimphos (for GC sensitivity check only) |
| 123 | 0.02 | D | 0.050 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | | NA | | | | | | | | | | | | | | | | |
| 125 | 0.04 | D | 0.060 | 80 | | DCM | Acetone | | 5 | | SPE | Matrix matched - Single level | NPD | | | Rec. from same batch | | |
| 126 | 0.02 | D | 0.038 | 90 | | DCM | | | 10 | | DSPE | Pure solvent - Single level | ECD | | GC-MS | Rec. from validation data | Yes | Endosulfan lactone |
| 127 | 0.01 | D | 0.052 | 88.2 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | ITD/MS/MS | | GC/ITD/MS/MS | Rec. from same batch | | |
| 128 | 0.01 | D | 0.044 | 84 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | GC-MS/MS (Ion Trap) | | GCMS/MS (Ion Trap) | Rec. from same batch | | |
| 129 | 0.01 | D | 0.038 | 76 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 130 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| FENPROPATHRIN | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 131 | 0.01 | D | 0.030 | 82 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.040 | 85 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | ECD | | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.071 | 96 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.054 | 91 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | | NA | | | | | | | | | | | | | | | | |
| 138 | 0.045 | D | | | | | | | | | | | | | | | | |
| 139 | 0.01 | D | 0.061 | 95 | | AcN | | | 15 | | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | 0.01 | D | 0.057 | 68 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | IDT | | GC-MS-MS (ITD) | Rec. from same batch | Yes | TPP |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.002 | D | 0.064 | 88 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | TOF | | GC-TOF | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.046 | 110 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.005 | D | 0.052 | 97 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 147 | 0.02 | D | 0.090 | 85 | | Acetone | DCM | Petroleum Ether | 15 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | GC-MS | Via Standard addition | | - |
| 148 | 0.01 | D | 0.062 | 81.2 | | Acetone | | | 50 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 149 | 0.01 | D | 0.052 | 101 | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | 0.01 | D | 0.070 | 85.7 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 152 | | NA | | | | | | | | | | | | | | | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| IMIDACLOPRID | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | | NA | | | | | | | | | | | | | | | | |
| 002 | 0.01 | D | 0.218 | 76 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.240 | 106 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 004 | | NA | | | | | | | | | | | | | | | | |
| 005 | 0.005 | D | 0.310 | 98 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Dimethoate D6 |
| 006 | 0.01 | D | 0.270 | 103 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | 0.01 | D | 0.340 | 105 | | AcN | | | 25 | Yes | Freezing out | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Propiconazole-D5 |
| 008 | 0.01 | D | 0.251 | 93 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | ITQ | LC-ITQ | Rec. from same batch | | |
| 009 | 0.01 | D | 0.374 | 122 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.278 | 92.7 | | | MeOH | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 012 | 0.002 | D | 0.235 | 93 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | | NA | | | | | | | | | | | | | | | | |
| 014 | 0.04 | D | 0.250 | 83 | | DCM | | | 20 | | GPC | Pure solvent - Multiple level | | Diode Array Detector | LC-MS | Rec. from validation data | | |
| 015 | 0.005 | D | 0.182 | 87 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | carbendazim D4 |
| 016 | 0.01 | D | 0.269 | 96.4 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.01 | D | 0.313 | 96.4 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.283 | 115 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 019 | 0.01 | D | 0.226 | 93.8 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.249 | 99 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 021 | 0.01 | D | 0.298 | 75.46 | | AcN | | | 9.965 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 022 | 0.05 | D | 0.267 | 91.4 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 023 | 0.01 | D | 0.213 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.256 | 97 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.250 | 90 | | AcN | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 026 | | NA | | | | | | | | | | | | | | | | |
| 027 | 0.01 | D | 0.224 | 107 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | MS/MS (QQQ) | | Rec. from same batch | | |
| 028 | 0.01 | D | 0.178 | 95 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.149 | 100 | Yes | EtOAc | | | 15 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.290 | 101.1 | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | 0.01 | D | 0.224 | 92 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 033 | | NA | | | | | | | | | | | | | | | | |
| 034 | 0.01 | D | 0.201 | 73 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Single level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.226 | 93 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | 0.02 | D | 0.253 | 88 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | | Diode Array Detector | | Via Standard addition | | |
| 039 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| IMIDACLOPRID | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 040 | | NA | | | | | | | | | | | | | | | | |
| 041 | 0.01 | D | 0.294 | 99 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 042 | 0.01 | D | 0.178 | 85 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 043 | 0.01 | D | 0.255 | 99 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | UV | DAD | Rec. from same batch | | |
| 044 | | NA | | | | | | | | | | | | | | | | |
| 045 | 0.01 | D | 0.263 | 78 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 046 | 0.01 | D | 0.260 | 96 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 047 | 0.005 | D | 0.285 | 96 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.05 | D | 0.217 | 98 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | Diode Array Detector | LC-MS | Rec. from same batch | | |
| 049 | 0.01 | D | 0.205 | 96 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 050 | 0.01 | D | 0.242 | 96 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 051 | 0.01 | D | 0.279 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Atrazin D5 |
| 052 | 0.01 | D | 0.264 | 85.8 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | D | 0.236 | 98 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | | NA | | | | | | | | | | | | | | | | |
| 055 | 0.01 | D | 0.234 | 104 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 056 | 0.238 | D | 0.238 | 106 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | | |
| 057 | | D | 0.240 | 98 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 058 | 0.025 | D | 0.216 | 82 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 059 | | NA | | | | | | | | | | | | | | | | |
| 060 | 0.01 | D | 0.213 | 129 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbaryl-C13 |
| 061 | 0.01 | D | 0.326 | 108.5 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 062 | 0.01 | D | 0.230 | 101 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| 063 | 0.01 | D | 0.159 | 85 | | MeOH | DCM | | 50 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | UV | | Rec. from same batch | | |
| 064 | | NA | | | | | | | | | | | | | | | | |
| 065 | 0.01 | D | 0.284 | 98 | | AcN | | | 10 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Pirimicarb D6 |
| 066 | 0.01 | D | 0.310 | 116 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |
| 067 | 0.01 | D | 0.256 | 96 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 068 | 0.01 | D | 0.272 | 104 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 069 | 0.01 | ND | | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazin |
| 070 | 0.01 | D | 0.258 | 98 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 071 | 0.02 | D | 0.230 | 113.0 | | MeOH | | | 5 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 072 | 0.02 | D | 0.220 | 75 | Yes | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 073 | | NA | | | | | | | | | | | | | | | | |
| 074 | 0.01 | D | 0.209 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | TPP |
| 075 | | NA | | | | | | | | | | | | | | | | |
| 076 | | NA | | | | | | | | | | | | | | | | |
| 077 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| IMIDACLOPRID | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 078 | | NA | | | | | | | | | | | | | | | | |
| 079 | 0.01 | D | 0.290 | 95.3 | | MeOH | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Cyprodinil , Thiabendazol |
| 080 | 0.01 | D | 1.050 | 85 | Yes | Acetone | DCM | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| 081 | 0.01 | D | 0.236 | 112 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Orbitrap | Rec. from same batch | | |
| 082 | 0.01 | D | 0.119 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | | | |
| 083 | 0.01 | D | 0.230 | 94 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 084 | 0.05 | D | 0.150 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TPP |
| 085 | 0.01 | D | 0.262 | 96 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.202 | 115.7 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | 0.025 | D | 0.340 | 101 | | AcN | | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TFP |
| 092 | 0.0075 | D | 0.328 | 107.6 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | 0.01 | D | 0.231 | 103 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | | NA | | | | | | | | | | | | | | | | |
| 097 | 0.01 | D | 0.212 | 92 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.01 | D | 0.242 | 105 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.002 | D | 0.280 | 93 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 100 | 0.185 | D | 0.185 | 82 | | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 101 | | NA | | | | | | | | | | | | | | | | |
| 102 | | NA | | | | | | | | | | | | | | | | |
| 103 | 0.01 | D | 0.264 | 114 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 104 | 0.005 | D | 0.210 | 99 | | Acetone | EtOAc | MeOH | 50 | Yes | GPC | | | UV | | Rec. from validation data | | |
| 105 | 0.01 | D | 0.160 | 93 | | Acetone | DCM | MeOH | 15 | | | Pure solvent - Multiple level | MS/MS (QQQ) | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 106 | | NA | | | | | | | | | | | | | | | | |
| 107 | 0.01 | D | 0.188 | 80.6 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 108 | | NA | 0.231 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.01 | D | 0.240 | 83 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 111 | 0.03 | D | 0.238 | 88.8 | | EtOAc | | | 50 | Yes | GPC | Pure solvent - Multiple level | | Diode Array Detector | | Rec. from same batch | | |
| 112 | 0.01 | D | 0.234 | 93 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 113 | 0.01 | D | 0.246 | 104 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.01 | D | 0.249 | 98 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 115 | 0.01 | D | 0.161 | 88.8 | | EtOAc | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 116 | 10 | D | 0.190 | 103.7 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Ethoprophos |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| IMIDACLOPRID | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 117 | 0.01 | D | 0.283 | 99 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.005 | D | 0.219 | 83 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | 0.02 | D | 0.327 | 112 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS | LC-MS | Rec. from same batch | | |
| 121 | 0.01 | D | 0.358 | 78 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | | Diode Array Detector | Two columns | Rec. from same batch | | |
| 122 | 0.01 | D | 0.715 | 115 | | EtOAc | | | 10 | Yes | GPC | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 123 | 0.02 | D | 0.108 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | 0.02 | D | 0.249 | 105 | | Acetone | DCM | Petroleum Ether | 7.5 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | | NA | | | | | | | | | | | | | | | | |
| 127 | | NA | | | | | | | | | | | | | | | | |
| 128 | | NA | | | | | | | | | | | | | | | | |
| 129 | 0.01 | D | 0.288 | 123 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | 0.01 | D | 0.252 | 84 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.250 | 90 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.340 | 119 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.237 | 90 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | 0.301 | D | 0.301 | 88.21 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | | NA | | | | | | | | | | | | | | | | |
| 139 | 0.01 | D | 0.236 | 90 | | AcN | | | 15 | | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | 0.01 | D | 0.200 | 82 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.002 | D | 0.243 | 97 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.298 | 72 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.01 | D | 0.293 | 118 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 147 | | NA | | | | | | | | | | | | | | | | |
| 148 | 0.01 | D | 0.312 | 134.2 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | 0.01 | D | 0.240 | 99 | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | | NA | | | | | | | | | | | | | | | | |
| 152 | | NA | | | | | | | | | | | | | | | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| KRESOXIM-METHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | 0.01 | D | 0.331 | 100 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 002 | 0.01 | D | 0.307 | 70 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.400 | 99 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 004 | 0.01 | D | 0.360 | 98 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TDCPP |
| 005 | 0.01 | D | 0.367 | 109 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TBP, TPP |
| 006 | 0.01 | D | 0.251 | 88 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | | NA | | | | | | | | | | | | | | | | |
| 008 | 0.02 | D | 0.338 | 91 | | EtOAc | | | 37.5 | | GPC | Matrix matched - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| 009 | 0.01 | D | 0.375 | 110 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.259 | 98 | | Acetone | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 012 | 0.002 | D | 0.300 | 95 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | 0.01 | D | 0.330 | 85 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 014 | 0.01 | D | 0.330 | 100 | | Acetone | MeOH | | 50 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Fenchlorphos |
| 015 | 0.005 | D | 0.251 | 77 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | carbendazim D4 |
| 016 | 0.01 | D | 0.342 | 77.4 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.01 | D | 0.368 | 90.3 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.327 | 94 | | AcN | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Phenanthrene-d10 |
| 019 | 0.01 | D | 0.183 | 97.6 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.334 | 89 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 021 | 0.01 | D | 0.290 | 91.34 | | AcN | | | 9.926 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 022 | 0.01 | D | 0.341 | 91.5 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 023 | 0.01 | D | 0.528 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.315 | 101 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.270 | 90 | | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 026 | 0.01 | D | 0.280 | 68 | Yes | AcN | AcN | AcN | 10 | | DSPE | Pure solvent - Single level | NPD | UV | GC-MS | Rec. from validation data | Yes | TPP |
| 027 | 0.01 | D | 0.301 | 98 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | MS/MS (QQQ) | | Rec. from same batch | | |
| 028 | 0.01 | D | 0.282 | 79 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.196 | 100 | Yes | EtOAc | | | 15 | | DSPE | Standard addition | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.280 | 98.9 | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | 0.02 | D | 0.305 | 95 | | EtOAc | | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 033 | 0.01 | D | 0.338 | 104.8 | Yes | Acetone | | | 2 | | | Matrix matched - Single level | ECD | | | | | |
| 034 | 0.01 | D | 0.332 | 106 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | MSD | | | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.313 | 101 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | 0.05 | D | 0.360 | 90.3 | | DCM | Acetone | | 5 | | MSPD, silica gel/alumina | Pure solvent - Single level | NPD | | GC/NPD, GC/ECD | Rec. from validation data | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| KRESOXIM-METHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| **038** | 0.05 | D | 0.358 | 96 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | MSD | | | Via Standard addition | | |
| **039** | 0.01 | D | 0.253 | 82 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | TPP |
| **040** | 0.05 | D | 0.324 | 100 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| **041** | 0.01 | D | 0.397 | 115 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **042** | 0.01 | D | 0.392 | 104 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Tris |
| **043** | 0.01 | D | 0.330 | 97 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| **044** | 0.01 | D | 0.290 | 110.6 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **045** | 0.01 | D | 0.385 | 91 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from validation data | | |
| **046** | 0.01 | D | 0.357 | 98 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **047** | 0.005 | D | 0.361 | 100 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | Linuron-D6 |
| **048** | 0.01 | D | 0.247 | 86 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| **049** | 0.01 | D | 0.388 | 97 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from validation data | | |
| **050** | 0.01 | D | 0.428 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **051** | 0.01 | D | 0.434 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | MSD | | GC-MS | Via Standard addition | | |
| **052** | 0.01 | D | 0.340 | 85.2 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| **053** | 0.01 | D | 0.324 | 101 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| **054** | 0.01 | D | 0.329 | 108 | | Acetone | DCM | | 6 | | | Pure solvent - Single level | ECD | | GC-TOF | Rec. from same batch | | |
| **055** | 0.01 | D | 0.304 | 117 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **056** | 0.400 | D | 0.400 | 100 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | | Rec. from validation data | Yes | TPP |
| **057** | | D | 0.400 | 88 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | TOF | MS/MS (QQQ) | GC-TOF | Rec. from validation data | | |
| **058** | 0.01 | D | 0.342 | 81 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **059** | 0.01 | D | 0.347 | 75 | | Acetone | DCM | | 100 | | florisil column | Matrix matched - Single level | ECD | | Two columns | Rec. from same batch | | |
| **060** | 0.01 | D | 0.264 | 0.86 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | | |
| **061** | 0.01 | D | 0.363 | 92.7 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | ECD | | GC-MS | Rec. from same batch | | |
| **062** | 0.01 | D | 0.406 | 87 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| **063** | 0.01 | D | 0.185 | 78 | | EtOAc | | | 75 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from validation data | | |
| **064** | 0.02 | D | 0.326 | 80 | | Acetone | | | 15 | | | Matrix matched - Multiple level | ECD | | GC-MS | Rec. from validation data | | |
| **065** | 0.01 | D | 0.344 | 99 | | AcN | | | 10 | | DSPE | Standard addition | MSD | | GC-TOF | Rec. from same batch | Yes | PCB 138 |
| **066** | 0.01 | D | 0.430 | 87 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |
| **067** | 0.01 | D | 0.322 | 84 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | | |
| **068** | 0.01 | D | 0.227 | 99 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **069** | 0.01 | D | 0.270 | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazim |
| **070** | 0.01 | D | 0.239 | 105 | | EtOAc | Cyclohexane | Acetone | 75 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **071** | 0.005 | D | 0.283 | 71.4 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| **072** | 0.04 | D | 0.276 | 90 | | Acetone | DCM | | 10 | Yes | | Matrix matched - Multiple level | NPD | | GC-MS | Rec. from same batch | | |
| **073** | | NA | | | | | | | | | | | | | | | | |
| **074** | 0.01 | D | 0.198 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | IDT | | GC-MS/MS (QQQ) | | Yes | TPP |
| **075** | 0.05 | D | 0.317 | 110 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TDCPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| KRESOXIM-METHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 076 | 0.233 | D | 0.233 | 96.4 | | AcN | MeOH | MeOH | 5 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | Not used |
| 077 | | | | | | | | | | | | | | | | | | |
| 078 | 0.05 | D | 0.390 | 88 | | AcN | AcN | AcN | 12 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | | | |
| 079 | 0.01 | D | 0.279 | | | Acetone | | | 20 | Yes | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | Nitrofen, Triclosanmethyl , TPP |
| 080 | 0.01 | D | 0.250 | 101 | Yes | Acetone | DCM | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| 081 | 0.01 | D | 0.339 | 120 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | LC-Orbitrap | Rec. from same batch | | |
| 082 | 0.01 | D | 0.351 | 99.2 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 083 | 0.01 | D | 0.300 | 84 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TDCPP |
| 084 | 0.05 | D | 0.310 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | | | Rec. from validation data | Yes | TPP |
| 085 | 0.01 | D | 0.229 | 98 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | 0.01 | D | 0.500 | 96 | Yes | AcN | AcN | AcN | 4 | | DSPE | Matrix matched - Single level | MSD | | GC-MS | Rec. from same batch | Yes | PSB 198 |
| 089 | 0.01 | D | 0.316 | 92.5 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | NPD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | 0.01 | D | 0.332 | 92 | Yes | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | PCB 198 |
| 091 | 0.025 | D | 0.302 | 100 | | Acetone | DCM | | 7.5 | | Liquid/liquid partitioning | Matrix matched - Multiple level | ECD | | | | Yes | HCB |
| 092 | 0.0075 | D | 0.204 | 79.3 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | 0.01 | D | 0.277 | 99 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | 0.01 | D | 0.314 | 92.0 | | Acetone | DCM | EtOAc | 10 | | GPC | Matrix matched - Multiple level | NPD | | | Rec. from same batch | | |
| 096 | 0.01 | D | 0.312 | 89 | | Acetone | DCM | | 5 | | SPE | Matrix matched - Single level | ECD | | GC-MS | Rec. from validation data | | |
| 097 | 0.01 | D | 0.222 | 91 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | MSD | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.01 | D | 0.308 | 92 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.01 | D | 0.240 | 92 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | TPP |
| 100 | 0.352 | D | 0.352 | 94 | | Hexane | | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | ITD | | GC-ITD | Rec. from same batch | | |
| 101 | 0.02 | D | 0.141 | 50 | | DCM | DCM | DCM | 15 | | GPC | Pure solvent - Multiple level | MSD | Diode Array Detector | GC-MS | Rec. from same batch | Yes | Fenclorfos (Normally ethion) |
| 102 | 0.276 | D | 0.276 | 74 | | AcN | AcN | AcN | 10 | | DSPE | Pure solvent - Multiple level | MSD | | GC-MS/MS (QQQ) | Rec. from validation data | | |
| 103 | 0.05 | D | 0.383 | 80 | | Acetone | | | 50 | | Liquid/liquid partitioning | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Bromophos methyl |
| 104 | | NA | | | | | | | | | | | | | | | | |
| 105 | 0.02 | D | 0.350 | 92 | | Acetone | DCM | MeOH | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 106 | 0.799<br>0.799 | D | 0.878 | 91.0 | Yes | AcN | used | used | 10 | | | Matrix matched - Multiple level | MSD | used | GC-MS | Rec. from validation data | Yes | PCB 198 |
| 107 | 0.01 | D | 0.292 | 97.7 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | IDT | | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Trichloronate |
| 108 | | NA | 0.224 | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| KRESOXIM-METHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 109 | 0.16 | D | 0.160 | 107.26 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | PCB 198; 1,1` - Biphenyl, 2,2`,3,3`,4,4`,6,6` - octachloro |
| 110 | 0.01 | D | 0.287 | 97 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Bromophos Methyl |
| 111 | 0.05 | D | 0.360 | 100 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | TOF | | | Rec. from same batch | Yes | TPP |
| 112 | 0.01 | D | 0.291 | 86 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 113 | 0.01 | D | 0.307 | 98.8 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.01 | D | 0.235 | 97 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 115 | 0.01 | D | 0.073 | 68.3 | Yes | EtOAc | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 116 | 20 | D | 0.710 | 76.3 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 117 | 0.01 | D | 0.385 | 93 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.01 | D | 0.302 | 98.6 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | ECD/NPD | | GC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | 0.01 | D | 0.242 | 107 | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.01 | D | 0.350 | 95 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | ECD | | Two columns | Rec. from same batch | Yes | TDCP |
| 122 | 0.01 | D | 0.207 | 90 | | EtOAc | | | 10 | | GPC | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | Ditalimphos (only for GC sensitivity check) |
| 123 | 0.02 | D | 0.237 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | 0.02 | D | 0.242 | 86 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | HCB |
| 125 | 0.03 | D | 0.390 | 92 | | DCM | Acetone | | 5 | | SPE | Matrix matched - Single level | NPD | | | Rec. from same batch | | |
| 126 | 0.05 | D | 0.181 | 89 | | DCM | | | 10 | | DSPE | Pure solvent - Single level | ECD | | GC-MS | Rec. from validation data | Yes | Endosulfan lactone |
| 127 | 0.01 | D | 0.227 | 92.9 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | ITD/MS/MS | | GC/ITD/MS/MS | Rec. from same batch | | |
| 128 | 0.01 | D | 0.284 | 88 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | GC-MS/MS (Ion Trap) | | GCMS/MS (Ion Trap) | Rec. from same batch | | |
| 129 | 0.01 | D | 0.270 | 109 | | EtOAc | | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | 0.01 | D | 0.182 | 79 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.300 | 94 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | ECD | | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.373 | 106 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.304 | 89 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | 0.396 | D | 0.396 | 99.13 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | 0.293 | D | | | | | | | | | | | | | | | | |
| 139 | 0.01 | D | 0.294 | 95 | | AcN | | | 15 | | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 140 | | NA | 0.220 | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | 0.01 | D | 0.350 | 105 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| KRESOXIM-METHYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.002 | D | 0.327 | 96 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.395 | 89 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.01 | D | 0.298 | 93 | | Acetone | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | NPD | | | Rec. from same batch | | |
| 147 | | NA | | | | | | | | | | | | | | | | |
| 148 | 0.01 | D | 0.336 | 100.2 | | Acetone | | | 50 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 149 | 0.01 | D | 0.201 | 91 | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | 0.01 | D | 0.350 | 87.0 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 152 | 0.02 | D | 0.220 | 84.8 | | | | | 25 | | | Matrix matched - Multiple level | ECD | | Two columns | Rec. from same batch | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| METHAMIDOPHOS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | 0.01 | D | 0.257 | 106 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 002 | 0.01 | D | 0.407 | 70 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.250 | 110 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 004 | 0.01 | D | 0.160 | 82 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TDCPP |
| 005 | 0.005 | D | 0.310 | 67 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Dimethoate D6 |
| 006 | 0.01 | D | 0.212 | 90 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | | NA | | | | | | | | | | | | | | | | |
| 008 | 0.005 | D | 0.434 | 70 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 009 | 0.01 | D | 0.350 | 27 | Yes | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.256 | 74.6 | | | MeOH | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 012 | 0.005 | D | 0.259 | 83 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | 0.02 | ND | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 014 | 0.1 | D | 0.150 | 100 | | DCM | | | 20 | | GPC | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Fenchlorphos |
| 015 | 0.005 | D | 0.149 | 66 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbendazim D4 |
| 016 | 0.01 | D | 0.235 | 74.0 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.01 | D | 0.242 | 85.5 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.291 | 77 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 019 | 0.01 | D | 0.147 | 71.7 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.206 | 74 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 021 | 0.01 | D | 0.218 | 68.23 | | AcN | | | 9.965 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 022 | 0.02 | D | 0.206 | 95.0 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 023 | 0.01 | D | 0.209 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.304 | 80 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.230 | 98 | | AcN | | | 10 | Yes | SPE | Matrix matched - Multiple level | FPD | MS/MS (QQQ) | | Rec. from same batch | | |
| 026 | | NA | | | | | | | | | | | | | | | | |
| 027 | 0.01 | D | 0.154 | 85 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | MS/MS (QQQ) | | Rec. from same batch | | |
| 028 | 0.01 | D | 0.188 | 84 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.186 | 100 | Yes | EtOAc | | | 15 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.272 | 79.2 | | | | | | | | | | | | | | |
| 031 | 0.02 | D | 0.280 | 100 | Yes | DCM | Cyclohexane | EtOAc | 10 | | GPC | | | | | | | |
| 032 | 0.01 | D | 0.254 | 85 | | EtOAc | | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| METHAMIDOPHOS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 033 | | NA | | | | | | | | | | | | | | | | |
| 034 | 0.01 | D | 0.303 | 94 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | FPD | | GC-MS | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.245 | 78 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | 0.03 | D | 0.281 | 75 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | MSD | | | Via Standard addition | | |
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | 0.02 | D | 0.140 | 30 | Yes | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 041 | 0.01 | D | 0.248 | 80 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 042 | 0.01 | D | 0.173 | 79 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 043 | 0.01 | D | 0.188 | 94 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 044 | 0.01 | D | 0.230 | 74.3 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 045 | 0.01 | D | 0.232 | 71 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | GC-TOF | Rec. from validation data | | |
| 046 | 0.01 | D | 0.212 | 88 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 047 | 0.01 | D | 0.237 | 82 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.02 | D | 0.185 | 85 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| 049 | 0.01 | D | 0.236 | 79 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 050 | 0.01 | D | 0.200 | 70 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 051 | 0.01 | D | 0.223 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Atrazin D5 |
| 052 | 0.01 | D | 0.218 | 51.4 | Yes | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | D | 0.227 | 80 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | 0.01 | D | 0.740 | 40 | | AcN | | | 10 | | DSPE | Standard addition | TOF | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 055 | 0.01 | D | 0.222 | 87 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 056 | 0.186 | D | 0.186 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | | |
| 057 | | D | 0.270 | 70 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 058 | 0.05 | D | 0.226 | 51 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 059 | | NA | | | | | | | | | | | | | | | | |
| 060 | 0.1 | D | 0.249 | 67 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbaryl-C13 |
| 061 | 0.01 | D | 0.241 | 72.0 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 062 | 0.01 | D | 0.278 | 97 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| 063 | | NA | | | | | | | | | | | | | | | | |
| 064 | | NA | | | | | | | | | | | | | | | | |
| 065 | 0.01 | D | 0.207 | 84 | | AcN | | | 10 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Pirimicarb D6 |
| 066 | 0.01 | D | 0.271 | 94 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| METHAMIDOPHOS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 067 | 0.01 | D | 0.325 | 102 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 068 | 0.01 | D | 0.233 | 95 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 069 | 0.01 | D | 0.070 | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazim |
| 070 | 0.01 | D | 0.327 | 96 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 071 | 0.005 | D | 0.255 | 90.7 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 072 | 0.05 | D | 0.162 | 67 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 073 | | NA | 0.180 | | | | | | | | | | | | | | | |
| 074 | 0.01 | D | | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | IDT | | GC-MS/MS (QQQ) | | Yes | TPP |
| 075 | | NA | | | | | | | | | | | | | | | | |
| 076 | | NA | | | | | | | | | | | | | | | | |
| 077 | | NA | | | | | | | | | | | | | | | | |
| 078 | | NA | | | | | | | | | | | | | | | | |
| 079 | 0.01 | D | 0.452 | 77.2 | | MeOH | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Cyprodinil , Thiabendazol |
| 080 | 0.01 | D | 0.054 | 72 | Yes | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | Hexabromobenzene |
| 081 | 0.01 | D | 0.114 | 51 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Orbitrap | Rec. from same batch | | |
| 082 | | NA | | | | | | | | | | | | | | | | |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | | NA | | | | | | | | | | | | | | | | |
| 085 | 0.01 | D | 0.227 | 74 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.02 | D | 0.163 | 100 | | DCM | | | 15 | Yes | GPC | Pure solvent - Single level | NPD | | GC-MS | Rec. from validation data | Yes | Bromophos Methyl |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | 0.025 | D | 0.317 | 95.7 | | AcN | | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TFP |
| 092 | | NA | | | | | | | | | | | | | | | | |
| 093 | 0.02 | D | 0.317 | 112 | | EtOAc | | | 50 | | GPC | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 094 | 0.01 | D | 0.221 | 71 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | | NA | | | | | | | | | | | | | | | | |
| 097 | 0.01 | D | 0.187 | 84 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | MSD | | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.01 | D | 0.270 | 83 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.006 | D | 0.052 | 63 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## METHAMIDOPHOS

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **100** | 0.280 | D | 0.280 | 10 | Yes | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **101** | 0.05 | ND | | | | DCM | EtOAc | Cyclohexane | 15 | | GPC | Pure solvent - Multiple level | MSD | Not using | GC-MS | Rec. from validation data | Yes | Fenclorfos |
| **102** | | NA | | | | | | | | | | | | | | | | |
| **103** | 0.01 | D | 0.182 | 94 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **104** | | NA | | | | | | | | | | | | | | | | |
| **105** | | NA | | | | | | | | | | | | | | | | |
| **106** | | NA | | | | | | | | | | | | | | | | |
| **107** | 0.01 | D | 0.227 | 69.9 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| **108** | | NA | 0.137 | | | | | | | | | | | | | | | |
| **109** | | NA | | | | | | | | | | | | | | | | |
| **110** | 0.02 | D | 0.082 | 60 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **111** | 0.05 | D | 0.318 | 104 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | TOF | | | Rec. from same batch | Yes | TPP |
| **112** | 0.01 | D | 0.235 | 88 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **113** | 0.01 | D | 0.232 | 85.5 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| **114** | 0.01 | D | 0.259 | 85 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **115** | 0.01 | D | 0.140 | 16.1 | Yes | EtOAc | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **116** | 50 | D | 0.410 | 69.0 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| **117** | 0.01 | D | 0.181 | 60 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **118** | 0.005 | D | 0.185 | 82 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from same batch | | |
| **119** | | NA | | | | | | | | | | | | | | | | |
| **120** | 0.02 | D | 0.164 | 113 | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| **121** | 0.01 | D | 0.308 | 81 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | Yes | TDCP |
| **122** | 0.01 | D | 0.199 | 83 | | EtOAc | | | 10 | | GPC | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | Ditalimphos (only for GC sensitivity check) |
| **123** | 0.02 | D | 0.163 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| **124** | 0.02 | D | 0.199 | 113 | | Acetone | DCM | Petroleum Ether | 7.5 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| **125** | | NA | | | | | | | | | | | | | | | | |
| **126** | 0.05 | D | 0.077 | 77 | | DCM | | | 10 | | DSPE | Pure solvent - Single level | NPD | | GC-MS | Rec. from validation data | Yes | TPP |
| **127** | 0.01 | D | 0.251 | 91.4 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from same batch | | |
| **128** | | NA | | | | | | | | | | | | | | | | |
| **129** | 0.01 | D | 0.167 | 96 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| **130** | 0.02 | D | 0.164 | 88 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | | GC-MS | Other pesticide | | |
| **131** | 0.01 | D | 0.259 | 73 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| METHAMIDOPHOS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 132 | 0.02 | D | 0.030 | 59.72 | | EtOAc | | | 50 | | | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 133 | 0.01 | D | 0.300 | 70 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS | | Rec. from same batch | | |
| 134 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.100 | 85 | Yes | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | | NA | | | | | | | | | | | | | | | | |
| 138 | 0.167 | D | | | | | | | | | | | | | | | | |
| 139 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | 0.02 | D | 0.330 | 100 | | DCM | DCM | DCM | 10 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS | Rec. from validation data | | |
| 142 | 0.01 | D | 0.110 | 46 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.008 | D | 0.235 | 113 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | TOF | | GC-TOF | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.276 | 70 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.005 | D | 0.183 | 88 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 147 | 0.01 | D | 0.109 | 75 | | Acetone | DCM | Petroleum Ether | 15 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | GC-MS | Via Standard addition | | |
| 148 | 0.01 | D | 0.343 | 120.2 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | 0.01 | D | 0.146 | 60 | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | 0.01 | D | 0.170 | 74.7 | | EtOAc | | | 15 | | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 152 | 0.05 | D | 0.240 | 79.6 | | EtOAc | | | 25 | | | Matrix matched - Multiple level | NPD | | Two columns | Rec. from same batch | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| OXAMYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | 0.01 | D | 0.286 | 100 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 002 | 0.01 | D | 0.403 | 93 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.440 | 135 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 004 | | NA | | | | | | | | | | | | | | | | |
| 005 | 0.005 | D | 0.430 | 82 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Dimethoate D6 |
| 006 | 0.01 | D | 0.339 | 96 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | 0.01 | D | 0.297 | 123 | | AcN | | | 25 | Yes | Freezing out | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Isoproturon-D6 |
| 008 | 0.005 | D | 0.363 | 100 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 009 | 0.01 | D | 0.410 | 109 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | 0.01 | D | 0.135 | 33 | | DCM | | | 50 | | SPE | Pure solvent - Single level | | Fluorescence | GC-MS | Rec. from same batch | | |
| 011 | 0.01 | D | 0.362 | 99.5 | | | MeOH | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 012 | 0.002 | D | 0.305 | 97 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | | NA | | | | | | | | | | | | | | | | |
| 014 | 0.004 | D | 0.360 | 108 | | DCM | | | 20 | | GPC | Pure solvent - Multiple level | | Fluorescence | | Rec. from validation data | | |
| 015 | 0.005 | D | 0.220 | 75 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbendazim D4 |
| 016 | 0.01 | D | 0.329 | 91.0 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.01 | D | 0.402 | 93.0 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.326 | 109 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 019 | 0.01 | D | 0.340 | 93.4 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.340 | 96 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 021 | 0.01 | D | 0.364 | 89.7 | | AcN | | | 9.965 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 022 | 0.01 | D | 0.342 | 82.9 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 023 | 0.01 | D | 0.322 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.341 | 94 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TDCPP |
| 025 | 0.01 | D | 0.330 | 90 | | AcN | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 026 | | NA | | | | | | | | | | | | | | | | |
| 027 | 0.01 | D | 0.375 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | MS/MS (QQQ) | | Rec. from same batch | | |
| 028 | 0.01 | D | 0.297 | 84 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.303 | 100 | Yes | EtOAc | | | 15 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.02 | D | 0.370 | 89.3 | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | 0.01 | D | 0.283 | 83 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 033 | | NA | | | | | | | | | | | | | | | | |
| 034 | 0.01 | D | 0.406 | 94 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Single level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.356 | 84 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | | NA | | | | | | | | | | | | | | | | |
| 039 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| OXAMYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 040 | | NA | | | | | | | | | | | | | | | | |
| 041 | 0.01 | D | 0.365 | 111 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 042 | 0.01 | D | 0.225 | 75 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 043 | 0.01 | D | 0.332 | 72 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | UV | DAD | Rec. from same batch | | |
| 044 | | NA | | | | | | | | | | | | | | | | |
| 045 | 0.01 | D | 0.385 | 93 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 046 | 0.01 | D | 0.350 | 95 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 047 | 0.005 | D | 0.369 | 87 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.02 | D | 0.392 | 97 | | Acetone | DCM | | 25 | | SPE | Pure solvent - Multiple level | | Fluorescence | LC-MS | Rec. from same batch | | |
| 049 | 0.01 | D | 0.351 | 100 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 050 | 0.01 | D | 0.301 | 107 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 051 | 0.01 | D | 0.307 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Atrazin D5 |
| 052 | 0.01 | D | 0.312 | 91.1 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | D | 0.349 | 95 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | 0.01 | D | 0.331 | 84 | | Acetone | DCM | | 3 | | | Pure solvent - Single level | | Fluorescence | two mobil phases | Rec. from same batch | | |
| 055 | 0.01 | D | 0.313 | 89 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 056 | | NA | | | | | | | | | | | | | | | | |
| 057 | | D | 0.330 | 110 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 058 | 0.025 | D | 0.343 | 94 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 059 | | NA | | | | | | | | | | | | | | | | |
| 060 | 0.01 | D | 0.394 | 95 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbaryl-C13 |
| 061 | 0.01 | D | 0.357 | 86.8 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 062 | 0.01 | D | 0.390 | 86 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| 063 | 0.002 | D | 0.347 | 87 | | DCM | | | 20 | | SPE | Pure solvent - Multiple level | | Fluorescence | | Rec. from same batch | | |
| 064 | | NA | | | | | | | | | | | | | | | | |
| 065 | 0.01 | D | 0.338 | 87 | | AcN | | | 10 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Pirimicarb D6 |
| 066 | 0.01 | D | 0.382 | 111 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |
| 067 | 0.01 | D | 0.349 | 92 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 068 | 0.01 | D | 0.205 | 100 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 069 | 0.01 | D | 0.210 | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazim |
| 070 | 0.01 | D | 0.391 | 102 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 071 | 0.005 | D | 0.300 | 109.0 | | MeOH | | | 5 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 072 | 0.01 | D | 0.399 | 118 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 073 | | NA | | | | | | | | | | | | | | | | |
| 074 | 0.01 | D | 0.324 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | TPP |
| 075 | | NA | | | | | | | | | | | | | | | | |
| 076 | | NA | | | | | | | | | | | | | | | | |
| 077 | | NA | | | | | | | | | | | | | | | | |
| 078 | | NA | | | | | | | | | | | | | | | | |
| 079 | 0.01 | D | 0.429 | 95.2 | | MeOH | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Cyprodinil , Thiabendazol |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| OXAMYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 080 | 0.01 | D | 0.240 | 101 | Yes | Acetone | DCM | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| 081 | 0.01 | D | 0.276 | 102 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Orbitrap | Rec. from same batch | | |
| 082 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 083 | 0.01 | D | 1.040 | 120 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 084 | 0.01 | D | 0.160 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TPP |
| 085 | 0.01 | D | 0.390 | 94 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.280 | 110 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | 0.025 | D | 0.329 | 105 | | AcN | | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TFP |
| 092 | 0.0075 | D | 0.595 | 92.6 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | 0.01 | D | 0.244 | 89 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | | NA | | | | | | | | | | | | | | | | |
| 097 | 0.01 | D | 0.296 | 88 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.01 | D | 0.315 | 93 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.004 | D | 0.510 | 92 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 100 | | ND | | | | MeOH | | | 5 | | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 101 | | NA | | | | | | | | | | | | | | | | |
| 102 | | NA | | | | | | | | | | | | | | | | |
| 103 | 0.02 | D | 0.346 | 103 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 104 | 0.006 | D | 0.428 | 93 | | Acetone | DCM | | 15 | | SPE | Pure solvent - Multiple level | | Fluorescence | | Rec. from validation data | Yes | 2,3,5-Trimethacarb |
| 105 | 0.01 | D | 0.200 | 85 | | Acetone | DCM | MeOH | 15 | | | Pure solvent - Multiple level | MS/MS (QQQ) | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 106 | | NA | | | | | | | | | | | | | | | | |
| 107 | 0.01 | D | 0.310 | 79.8 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 108 | | NA | 0.249 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.02 | D | 0.446 | 98 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 111 | | NA | | | | | | | | | | | | | | | | |
| 112 | 0.01 | D | 0.420 | 91 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 113 | 0.01 | D | 0.264 | 96.6 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.01 | D | 0.352 | 91 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 115 | 0.01 | D | 0.202 | 49.4 | Yes | EtOAc | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 116 | 10 | D | 0.270 | 89.1 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Ethoprophos |
| 117 | 0.01 | D | 0.392 | 96 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.005 | D | 0.345 | 76 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| OXAMYL | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 120 | | NA | | | | | | | | | | | | | | | | |
| 121 | 0.01 | D | 0.510 | 81 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | | Diode Array Detector | Two columns | Rec. from same batch | | |
| 122 | 0.01 | D | 0.375 | 99 | | EtOAc | | | 10 | Yes | GPC | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 123 | 0.02 | D | 0.253 | 90 | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | MS/MS (QQQ) | | Rec. from same batch | | |
| 124 | | NA | | | | | | | | | | | | | | | | |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | | NA | | | | | | | | | | | | | | | | |
| 127 | 0.01 | D | 0.125 | 99.2 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 128 | | NA | | | | | | | | | | | | | | | | |
| 129 | | NA | | | | | | | | | | | | | | | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | | NA | | | | | | | | | | | | | | | | |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.480 | 85 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.369 | 121 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.342 | 90 | Yes | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from validation data | | |
| 137 | 0.300 | D | 0.300 | 86.95 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | | NA | | | | | | | | | | | | | | | | |
| 139 | 0.01 | D | 0.356 | 85 | | AcN | | | 15 | | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | 0.01 | D | 0.230 | 70 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.002 | D | 0.320 | 101 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.311 | 78 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.01 | D | 0.362 | 107 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 147 | | NA | | | | | | | | | | | | | | | | |
| 148 | 0.01 | D | 0.398 | 114.6 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | 0.01 | D | 0.220 | 90 | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | | NA | | | | | | | | | | | | | | | | |
| 152 | | NA | | | | | | | | | | | | | | | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| PROTHIOFOS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | 0.01 | D | 0.243 | 100 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 002 | | NA | | | | | | | | | | | | | | | | |
| 003 | 0.01 | D | 0.280 | 79 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 004 | 0.01 | D | 0.308 | 103 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TDCPP |
| 005 | 0.02 | D | 0.362 | 102 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | Yes | TBP, TPP |
| 006 | 0.01 | D | 0.269 | 97 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | | NA | | | | | | | | | | | | | | | | |
| 008 | 0.02 | D | 0.264 | 94 | | EtOAc | | | 37.5 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 009 | 0.01 | D | 0.355 | 102 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | ECD | | Two columns | Rec. from same batch | | |
| 010 | 0.05 | D | 0.232 | 106 | | Acetone | DCM | | 15 | | | Pure solvent - Multiple level | IDT | | GC-MS | Rec. from same batch | | |
| 011 | 0.01 | D | 0.238 | 87 | | Acetone | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 012 | 0.002 | D | 0.283 | 93 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | | NA | | | | | | | | | | | | | | | | |
| 014 | | NA | | | | | | | | | | | | | | | | |
| 015 | 0.005 | D | 0.311 | 95 | | EtOAc | | | | Yes | SPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | Trifluralin D14 |
| 016 | 0.01 | D | 0.282 | 95.9 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 017 | 0.01 | D | 0.278 | 96.3 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.269 | 91 | | AcN | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Phenanthrene-d10 |
| 019 | 0.01 | D | 0.191 | 72.7 | | EtOAc | | | 10 | Yes | | Matrix matched - Single level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.236 | 98 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 021 | | NA | | | | | | | | | | | | | | | | |
| 022 | 0.03 | D | 0.270 | 92.3 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 023 | 0.01 | D | | 100 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.256 | 98 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.260 | 95 | | Acetone | DCM | | 15 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 026 | | NA | | | | | | | | | | | | | | | | |
| 027 | | NA | | | | | | | | | | | | | | | | |
| 028 | 0.01 | D | 0.293 | 89 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | MSD | | GC-TOF | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.194 | 100 | Yes | EtOAc | | | 15 | | DSPE | Standard addition | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.253 | 80.2 | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | | NA | | | | | | | | | | | | | | | | |
| 033 | | NA | | | | | | | | | | | | | | | | |
| 034 | 0.01 | D | 0.271 | 99 | | EtOAc | | | 25 | Yes | | Matrix matched - Single level | FPD | | GC-MS | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.262 | 86 | | Acetone | EtOAc | | 5 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | 0.01 | D | 0.247 | 101 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | MSD | | | Via Standard addition | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| PROTHIOFOS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | | NA | | | | | | | | | | | | | | | | |
| 041 | 0.01 | D | 0.351 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 042 | | NA | | | | | | | | | | | | | | | | |
| 043 | 0.01 | D | 0.307 | 87 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 044 | | NA | | | | | | | | | | | | | | | | |
| 045 | 0.01 | D | 0.268 | 100 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | GC-TOF | Rec. from validation data | | |
| 046 | 0.01 | D | 0.315 | 102 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 047 | 0.005 | D | 0.323 | 97 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.01 | D | 0.165 | 84 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TRIS |
| 049 | 0.01 | D | 0.304 | 96 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 050 | 0.01 | D | 0.331 | 99 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | FPD | | GC-MS | Rec. from same batch | | |
| 051 | 0.01 | D | 0.412 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | MSD | | GC-MS | Via Standard addition | | |
| 052 | 0.01 | D | 0.306 | 101.8 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | D | 0.246 | 96 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | | NA | | | | | | | | | | | | | | | | |
| 055 | 0.01 | D | 0.169 | 96 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 056 | 0.261 | D | 0.261 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | MSD | | | Rec. from validation data | Yes | TPP |
| 057 | | D | 0.310 | 70 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | TOF | MS/MS (QQQ) | GC-TOF | Rec. from validation data | | |
| 058 | 0.01 | D | 0.314 | 100 | | MeOH | DCM | | 50 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS | Rec. from validation data | Yes | TPP, Mirex |
| 059 | | NA | | | | | | | | | | | | | | | | |
| 060 | 0.01 | D | 0.265 | 92 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | | |
| 061 | 0.01 | D | 0.263 | 95.8 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TDCPP |
| 062 | | NA | | | | | | | | | | | | | | | | |
| 063 | | NA | | | | | | | | | | | | | | | | |
| 064 | | NA | | | | | | | | | | | | | | | | |
| 065 | 0.01 | D | 0.294 | 84 | | AcN | | | 10 | | DSPE | Standard addition | MSD | | GC-TOF | Rec. from same batch | Yes | PCB 138 |
| 066 | 0.01 | D | 0.350 | 100 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Desmetryn |
| 067 | 0.01 | D | 0.296 | 104 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | | |
| 068 | 0.01 | D | 0.283 | 93 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | | | Rec. from same batch | Yes | TPP |
| 069 | 0.01 | ND | | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazin |
| 070 | 0.01 | D | 0.251 | 95 | | EtOAc | Cyclohexane | Acetone | 75 | | GPC | Matrix matched - Multiple level | NPD | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 071 | 0.005 | D | 0.283 | 86.4 | | Acetone | EtOAc | Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | | |
| 072 | | NA | | | | | | | | | | | | | | | | |
| 073 | | NA | | | | | | | | | | | | | | | | |
| 074 | | NA | | | | | | | | | | | | | | | | |
| 075 | | NA | | | | | | | | | | | | | | | | |
| 076 | | NA | | | | | | | | | | | | | | | | |
| 077 | | NA | | | | | | | | | | | | | | | | |
| 078 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| PROTHIOFOS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 079 | 0.01 | D | 0.294 | 107.1 | | Acetone | Cyclohexane EtOAc | | 20 | Yes | GPC | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Via Standard addition | Yes | Nitrofen, Triclosanmethyl , TPP |
| 080 | | NA | | | | | | | | | | | | | | | | |
| 081 | 0.01 | D | 0.194 | 105 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 082 | 0.01 | D | 0.282 | 99.4 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | | NA | | | | | | | | | | | | | | | | |
| 085 | 0.01 | D | 0.328 | 96 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.214 | 104 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | | NA | | | | | | | | | | | | | | | | |
| 092 | | NA | | | | | | | | | | | | | | | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | | NA | | | | | | | | | | | | | | | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | | NA | | | | | | | | | | | | | | | | |
| 097 | 0.01 | D | 0.178 | 96 | | EtOAc | | | 50 | | GPC | Matrix matched - Multiple level | FPD | | GC-MS | Rec. from same batch | | |
| 098 | | NA | | | | | | | | | | | | | | | | |
| 099 | 0.05 | D | 0.390 | 91 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | TPP |
| 100 | 0.319 | D | 0.319 | 79 | Yes | Hexane | | | 25 | | Liquid/liquid partitioning | Matrix matched - Multiple level | ITD | | GC-ITD | Rec. from same batch | | |
| 101 | | NA | | | | | | | | | | | | | | | | |
| 102 | | NA | | | | | | | | | | | | | | | | |
| 103 | 0.05 | D | 0.300 | 70 | | Acetone | | | 50 | | Liquid/liquid partitioning | Pure solvent - Multiple level | MSD | | GC-MS | Rec. from validation data | Yes | Bromophos methyl |
| 104 | | NA | | | | | | | | | | | | | | | | |
| 105 | | NA | | | | | | | | | | | | | | | | |
| 106 | | NA | | | | | | | | | | | | | | | | |
| 107 | | NA | | | | | | | | | | | | | | | | |
| 108 | | NA | 0.280 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.01 | D | 0.220 | 93 | | AcN | | | 10.0 | | DSPE | Pure solvent - Multiple level | FPD | | Two columns | Rec. from same batch | | |
| 111 | | NA | | | | | | | | | | | | | | | | |
| 112 | 0.01 | D | 0.299 | 92 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 113 | 0.01 | D | 0.276 | 90.0 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Single level | MSD | | GC-MS | Via Standard addition | Yes | Mirex, TDCCP |
| 114 | 0.01 | D | 0.246 | 93 | | EtOAc | | | 30 | Yes | GPC | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | Tetraphenylethylene |
| 115 | 0.01 | D | 0.273 | 94.3 | | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Matrix matched - Multiple level | FPD | | GC-MS | Via Standard addition | Yes | Diazinon |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| PROTHIOFOS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 116 | 20 | D | 0.670 | 92.1 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 117 | 0.01 | D | 0.255 | 98 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | | GC-MS | Rec. from same batch | | |
| 118 | 0.01 | D | 0.297 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | ECD/NPD | | GC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | 0.01 | D | 0.309 | 125 | | EtOAc | DCM | | 25 | | | Pure solvent - Multiple level | FPD | | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.01 | D | 0.286 | 103 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | NPD | | Two columns | Rec. from same batch | Yes | TDCP |
| 122 | | NA | | | | | | | | | | | | | | | | |
| 123 | 0.02 | ND | | | | AcN | | | 10 | Yes | DSPE | Standard addition | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 124 | | NA | | | | | | | | | | | | | | | | |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | 0.05 | D | 0.198 | 90 | | DCM | | | 10 | | DSPE | Pure solvent - Single level | NPD | | GC-MS | Rec. from validation data | Yes | TPP |
| 127 | 0.01 | D | 0.229 | 88.4 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | ITD/MS/MS | | GC/ITD/MS/MS | Rec. from same batch | | |
| 128 | | NA | | | | | | | | | | | | | | | | |
| 129 | | NA | | | | | | | | | | | | | | | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | | NA | | | | | | | | | | | | | | | | |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.270 | 101 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | PFPD | | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.316 | 102 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.261 | 90 | | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS | Rec. from validation data | | |
| 137 | | NA | | | | | | | | | | | | | | | | |
| 138 | | NA | | | | | | | | | | | | | | | | |
| 139 | 0.01 | D | 0.280 | 95 | | AcN | | | 15 | | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | | NA | | | | | | | | | | | | | | | | |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.008 | D | 0.317 | 84 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | TOF | | GC-TOF | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.295 | 108 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | | GC-MS | Rec. from same batch | Yes | TPP |
| 146 | | NA | | | | | | | | | | | | | | | | |
| 147 | 0.02 | D | 0.876 | 85 | | Acetone | DCM | Petroleum Ether | 15 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | GC-MS | Via Standard addition | | |
| 148 | 0.01 | D | 0.251 | 87.6 | | Acetone | | | 50 | | Liquid/liquid partitioning | Matrix matched - Multiple level | MS/MS (QQQ) | | GC-MS/MS (QQQ) | Rec. from same batch | | |
| 149 | | NA | | | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | | NA | | | | | | | | | | | | | | | | |
| 152 | | NA | | | | | | | | | | | | | | | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

**APPENDIX 9. Methods used by participants for determining pesticides.**

| THIACLOPRID | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | | NA | | | | | | | | | | | | | | | | |
| 002 | 0.01 | D | 0.288 | 70 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.420 | 130 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 004 | | NA | | | | | | | | | | | | | | | | |
| 005 | 0.005 | D | 0.370 | 94 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Dimethoate D6 |
| 006 | 0.01 | D | 0.273 | 84 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | 0.01 | D | 0.163 | 140 | | AcN | | | 25 | Yes | Freezing out | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Isoproturon-D6 |
| 008 | 0.01 | D | 0.310 | 92 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | ITQ | LC-ITQ | Rec. from same batch | | |
| 009 | 0.01 | D | 0.422 | 128 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.356 | 96.1 | | | MeOH | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 012 | 0.002 | D | 0.280 | 94 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | | NA | | | | | | | | | | | | | | | | |
| 014 | 0.04 | D | 0.280 | 77 | | DCM | | | 20 | | GPC | Pure solvent - Multiple level | | Diode Array Detector | LC-MS | Rec. from validation data | | |
| 015 | 0.005 | D | 0.258 | 102 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbendazim D4 |
| 016 | 0.01 | D | 0.319 | 86.1 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.01 | D | 0.350 | 92.5 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.464 | 107 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 019 | 0.01 | D | 0.261 | 97.6 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.322 | 97 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 021 | | NA | | | | | | | | | | | | | | | | |
| 022 | 0.01 | D | 0.293 | 90.7 | | Acetone | DCM | | 20 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 023 | 0.01 | D | 0.463 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.325 | 99 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.180 | 92 | | AcN | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 026 | | NA | | | | | | | | | | | | | | | | |
| 027 | 0.01 | D | 0.333 | 117 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | MS/MS (QQQ) | | Rec. from same batch | | |
| 028 | 0.01 | D | 0.242 | 99 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.175 | 100 | Yes | EtOAc | | | 15 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.01 | D | 0.340 | 97.8 | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | 0.01 | D | 0.308 | 63 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 033 | | NA | | | | | | | | | | | | | | | | |
| 034 | 0.01 | D | 0.231 | 74 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Single level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.260 | 83 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | 0.05 | D | 0.328 | 94 | Yes | AcN | | | 5 | Yes | Liquid/liquid partitioning | Standard addition | | Diode Array Detector | | Via Standard addition | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

## THIACLOPRID

| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | | NA | | | | | | | | | | | | | | | | |
| 041 | 0.01 | D | 0.314 | 111 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 042 | 0.01 | D | 0.255 | 103 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 043 | 0.01 | D | 0.338 | 94 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | UV | DAD | Rec. from same batch | | |
| 044 | | NA | | | | | | | | | | | | | | | | |
| 045 | 0.01 | D | 0.386 | 100 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 046 | 0.005 | D | 0.365 | 104 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 047 | 0.005 | D | 0.374 | 93 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.05 | D | 0.269 | 110 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | Diode Array Detector | LC-MS | Rec. from same batch | | |
| 049 | 0.01 | D | 0.342 | 94 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 050 | 0.01 | D | 0.305 | 101 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 051 | 0.01 | D | 0.438 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Atrazin D5 |
| 052 | 0.01 | D | 0.393 | 84.2 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | D | 0.286 | 97 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | 0.01 | D | 0.348 | 93 | | AcN | | | 10 | | DSPE | Pure solvent - Single level | | MS/MS (QQQ) | two mobil phases | Rec. from same batch | | |
| 055 | 0.01 | D | 0.289 | 101 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 056 | 0.338 | D | 0.338 | 95 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | GC-MS | Rec. from validation data | | |
| 057 | | D | 0.340 | 104 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 058 | 0.01 | D | 0.326 | 83 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 059 | | NA | | | | | | | | | | | | | | | | |
| 060 | 0.01 | D | 0.319 | 87 | | AcN | | | 15 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbaryl-C13 |
| 061 | 0.01 | D | 0.322 | 98.6 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 062 | 0.01 | D | 0.376 | 93 | Yes | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| 063 | | NA | | | | | | | | | | | | | | | | |
| 064 | | NA | | | | | | | | | | | | | | | | |
| 065 | 0.01 | D | 0.403 | 96 | | AcN | | | 10 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Pirimicarb D6 |
| 066 | 0.01 | D | 0.358 | 110 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |
| 067 | 0.01 | D | 0.348 | 96 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 068 | 0.01 | D | 0.408 | 110 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 069 | 0.01 | D | 0.170 | | | Acetone | | | 100 | | GPC | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | Thionazim |
| 070 | 0.01 | D | 0.278 | 100 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 071 | 0.005 | D | 0.282 | 92.0 | | MeOH | | | 5 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 072 | 0.02 | D | 0.287 | 88 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 073 | | NA | | | | | | | | | | | | | | | | |
| 074 | 0.01 | D | 0.253 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | TPP |
| 075 | | NA | | | | | | | | | | | | | | | | |
| 076 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| THIACLOPRID | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 077 | | NA | | | | | | | | | | | | | | | | |
| 078 | | NA | | | | | | | | | | | | | | | | |
| 079 | 0.01 | D | 0.419 | 103.5 | | MeOH | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Cyprodinil , Thiabendazol |
| 080 | 0.01 | D | 0.370 | 80 | Yes | Acetone | DCM | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | | Via Standard addition | | |
| 081 | 0.02 | D | 0.310 | 90 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Orbitrap | Rec. from same batch | | |
| 082 | 0.01 | D | 0.181 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | | | |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | 0.02 | D | 0.130 | 90 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TPP |
| 085 | 0.01 | D | 0.318 | 95 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.248 | 92.4 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | 0.025 | D | 0.192 | 98 | | AcN | | | 15 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TFP |
| 092 | 0.0075 | D | 0.412 | 105 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | 0.01 | D | 0.212 | 101 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | | NA | | | | | | | | | | | | | | | | |
| 097 | 0.01 | D | 0.270 | 84 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | 0.01 | D | 0.270 | 89 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 099 | 0.006 | D | 0.470 | 92 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 100 | 0.222 | D | 0.222 | 88 | | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 101 | | NA | | | | | | | | | | | | | | | | |
| 102 | | NA | | | | | | | | | | | | | | | | |
| 103 | 0.01 | D | 0.338 | 96 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 104 | | NA | | | | | | | | | | | | | | | | |
| 105 | 0.01 | D | 0.160 | 90 | | Acetone | DCM | MeOH | 15 | | | Pure solvent - Multiple level | MS/MS (QQQ) | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 106 | | NA | | | | | | | | | | | | | | | | |
| 107 | | NA | | | | | | | | | | | | | | | | |
| 108 | | NA | 0.344 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.02 | D | 0.288 | 70 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 111 | | NA | | | | | | | | | | | | | | | | |
| 112 | 0.01 | D | 0.269 | 95 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 113 | 0.01 | D | 0.307 | 100.3 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.01 | D | 0.257 | 98 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| THIACLOPRID | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 115 | 0.01 | D | 0.166 | 77.5 | | EtOAc | | | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 116 | 10 | D | 0.240 | 96.2 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Ethoprophos |
| 117 | 0.01 | D | 0.356 | 103 | | Acetone | DCM | | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 118 | 0.005 | D | 0.298 | 71 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | | NA | | | | | | | | | | | | | | | | |
| 121 | 0.01 | D | 0.243 | 71 | | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | | Diode Array Detector | Two columns | Rec. from same batch | | |
| 122 | 0.01 | D | 0.535 | 116 | | EtOAc | | | 10 | Yes | GPC | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 123 | | NA | | | | | | | | | | | | | | | | |
| 124 | | NA | | | | | | | | | | | | | | | | |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | | NA | | | | | | | | | | | | | | | | |
| 127 | | NA | | | | | | | | | | | | | | | | |
| 128 | | NA | | | | | | | | | | | | | | | | |
| 129 | | NA | | | | | | | | | | | | | | | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | 0.01 | D | 0.343 | 87 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MS/MS (QQQ) | ITQ | | Rec. from validation data | Yes | TPP |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.310 | 88 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.372 | 99 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.255 | 85 | Yes | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from validation data | | |
| 137 | 0.192 | D | 0.192 | 89.34 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | | NA | | | | | | | | | | | | | | | | |
| 139 | 0.01 | D | 0.264 | 75 | | AcN | | | 15 | | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | 0.01 | D | 0.310 | 91 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.002 | D | 0.306 | 94 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 145 | 0.01 | D | 0.378 | 70 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | 0.01 | D | 0.301 | 108 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 147 | | NA | | | | | | | | | | | | | | | | |
| 148 | 0.01 | D | 0.386 | 115.0 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | 0.01 | D | 0.320 | 106 | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | | NA | | | | | | | | | | | | | | | | |
| 152 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| THIACLOPRID | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 153 | | | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| TRIFLUMURON | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 001 | 0.01 | D | 0.199 | 98 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 002 | 0.01 | D | 0.304 | 92 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | ECD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 003 | 0.01 | D | 0.440 | 162 | | AcN | AcN | AcN | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 004 | | NA | | | | | | | | | | | | | | | | |
| 005 | | NA | | | | | | | | | | | | | | | | |
| 006 | 0.01 | D | 0.231 | 104 | | EtOAc | | | 10 | Yes | Filter | Matrix matched - Single level | | MS/MS (QQQ) | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | | NA | | | | | | | | | | | | | | | | |
| 008 | 0.02 | D | 0.323 | 96 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 009 | 0.01 | D | 0.109 | 98 | | Acetone | DCM | Petroleum Ether | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 010 | | NA | | | | | | | | | | | | | | | | |
| 011 | 0.01 | D | 0.259 | 72.5 | | | MeOH | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 012 | 0.002 | D | 0.234 | 98 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 013 | | NA | | | | | | | | | | | | | | | | |
| 014 | | NA | | | | | | | | | | | | | | | | |
| 015 | 0.005 | D | 0.223 | 96 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Carbendazim D4 |
| 016 | 0.01 | D | 0.268 | 81.7 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 017 | 0.01 | D | 0.241 | 101.0 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | D | 0.311 | 100 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 019 | 0.01 | D | 0.155 | 92.9 | | EtOAc | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 020 | 0.01 | D | 0.210 | 95 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 021 | 0.01 | D | 0.395 | 88.25 | | AcN | | | 9.965 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 022 | | NA | | | | | | | | | | | | | | | | |
| 023 | 0.01 | D | 0.251 | | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | | |
| 024 | 0.01 | D | 0.271 | 99 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | TDCPP |
| 025 | | D | 0.230 | 94 | | AcN | | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 026 | | NA | | | | | | | | | | | | | | | | |
| 027 | 0.01 | D | 0.327 | 113 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | MSD | MS/MS (QQQ) | | Rec. from same batch | | |
| 028 | 0.01 | D | 0.225 | 67 | | EtOAc | | | 10 | | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | |
| 029 | 0.01 | D | 0.188 | 100 | Yes | EtOAc | | | 15 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 030 | 0.02 | D | 0.220 | 97.7 | | | | | | | | | | | | | | |
| 031 | | NA | | | | | | | | | | | | | | | | |
| 032 | | NA | | | | | | | | | | | | | | | | |
| 033 | | NA | | | | | | | | | | | | | | | | |
| 034 | 0.01 | D | 0.265 | 105 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Single level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 035 | No Results Reported | | | | | | | | | | | | | | | | | |
| 036 | 0.01 | D | 0.243 | 95 | | Acetone | DCM | | 10 | | | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| TRIFLUMURON | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 037 | | NA | | | | | | | | | | | | | | | | |
| 038 | 0.05 | ND | | | | | | | | | | | | | | | | |
| 039 | | NA | | | | | | | | | | | | | | | | |
| 040 | | NA | | | | | | | | | | | | | | | | |
| 041 | 0.01 | D | 0.251 | 94 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Nicarbazin |
| 042 | 0.01 | D | 0.190 | 110 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 043 | 0.01 | D | 0.142 | 84 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | UV | DAD | Rec. from same batch | | |
| 044 | | NA | | | | | | | | | | | | | | | | |
| 045 | 0.01 | D | 0.244 | 102 | | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 046 | 0.01 | D | 0.307 | 98 | | AcN | AcN | AcN | 10 | | DSPE | Matrix matched - Multiple level | MSD | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 047 | 0.005 | D | 0.284 | 96 | | AcN | | | 5 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.02 | D | 0.227 | 74 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS | | Rec. from same batch | | |
| 049 | 0.01 | D | 0.211 | 92 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 050 | 0.01 | D | 0.303 | 104 | | AcN | | | 10 | | DSPE | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 051 | 0.01 | D | 0.295 | | Yes | AcN | | | 10 | Yes | DSPE | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Atrazin D5 |
| 052 | 0.01 | D | 0.259 | 95.7 | | AcN | AcN | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | D | 0.223 | 105 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | | NA | | | | | | | | | | | | | | | | |
| 055 | 0.01 | D | 0.204 | 103 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 056 | | NA | | | | | | | | | | | | | | | | |
| 057 | | D | 0.330 | 118 | Yes | MeOH | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | | |
| 058 | 0.01 | D | 0.373 | 86 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 059 | | NA | | | | | | | | | | | | | | | | |
| 060 | | NA | | | | | | | | | | | | | | | | |
| 061 | 0.01 | D | 0.253 | 106.8 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 062 | | NA | | | | | | | | | | | | | | | | |
| 063 | | NA | | | | | | | | | | | | | | | | |
| 064 | | NA | | | | | | | | | | | | | | | | |
| 065 | 0.01 | D | 0.247 | 104 | | AcN | | | 10 | | | Standard addition | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Nicarbazin |
| 066 | 0.01 | D | 0.318 | 114 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Desmetryn |
| 067 | 0.01 | D | 0.304 | 94 | | AcN | AcN | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 068 | 0.01 | D | 0.239 | 84 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 069 | | NA | | | | | | | | | | | | | | | | |
| 070 | 0.01 | D | 0.292 | 95 | | MeOH | | | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 071 | 0.005 | D | 0.185 | 84.9 | | MeOH | | | 5 | | Liquid/liquid partitioning | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 072 | | NA | | | | | | | | | | | | | | | | |
| 073 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| TRIFLUMURON | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 074 | 0.01 | D | 0.213 | | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | | Yes | TPP |
| 075 | | NA | | | | | | | | | | | | | | | | |
| 076 | 0.351 | D | 0.351 | 117 | | AcN | MeOH | MeOH | 5 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | Not used |
| 077 | | NA | | | | | | | | | | | | | | | | |
| 078 | | NA | | | | | | | | | | | | | | | | |
| 079 | 0.01 | ND | | | | MeOH | DCM | | 10 | Yes | SPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | Cyprodinil,Thiabendazol |
| 080 | | NA | | | | | | | | | | | | | | | | |
| 081 | 0.01 | D | 0.192 | 119 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-Orbitrap | Rec. from same batch | | |
| 082 | | NA | | | | | | | | | | | | | | | | |
| 083 | | NA | | | | | | | | | | | | | | | | |
| 084 | | NA | | | | | | | | | | | | | | | | |
| 085 | 0.01 | D | 0.259 | 100 | | AcN | | | 10 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | Yes | TPP |
| 086 | No Results Reported | | | | | | | | | | | | | | | | | |
| 087 | | NA | | | | | | | | | | | | | | | | |
| 088 | | NA | | | | | | | | | | | | | | | | |
| 089 | 0.01 | D | 0.531 | 61.6 | Yes | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | TPP |
| 090 | | NA | | | | | | | | | | | | | | | | |
| 091 | | NA | | | | | | | | | | | | | | | | |
| 092 | | NA | | | | | | | | | | | | | | | | |
| 093 | | NA | | | | | | | | | | | | | | | | |
| 094 | | NA | | | | | | | | | | | | | | | | |
| 095 | | NA | | | | | | | | | | | | | | | | |
| 096 | | NA | | | | | | | | | | | | | | | | |
| 097 | 0.01 | D | 0.218 | 98 | | EtOAc | | | 50 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 098 | | NA | | | | | | | | | | | | | | | | |
| 099 | 0.005 | D | 0.250 | 91 | | AcN | | | 10 | | SPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 100 | 0.186 | D | 0.186 | 43 | Yes | EtOAc | | | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 101 | | NA | | | | | | | | | | | | | | | | |
| 102 | | NA | | | | | | | | | | | | | | | | |
| 103 | | NA | | | | | | | | | | | | | | | | |
| 104 | | NA | | | | | | | | | | | | | | | | |
| 105 | 0.01 | D | 0.090 | 91 | | Acetone | DCM | MeOH | 15 | | | Pure solvent - Multiple level | MS/MS (QQQ) | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 106 | | NA | | | | | | | | | | | | | | | | |
| 107 | 0.05 | D | 0.243 | 97.0 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | Yes | TPP |
| 108 | | NA | 0.215 | | | | | | | | | | | | | | | |
| 109 | | NA | | | | | | | | | | | | | | | | |
| 110 | 0.01 | D | 0.320 | 92 | | AcN | | | 10 | | DSPE | Pure solvent - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| TRIFLUMURON | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 111 | | NA | | | | | | | | | | | | | | | | |
| 112 | 0.01 | D | 0.091 | 88 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 113 | 0.01 | D | 0.244 | 108.5 | | AcN | | | 15 | Yes | | Matrix matched - Single level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Via Standard addition | | |
| 114 | 0.01 | D | 0.199 | 97 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 115 | | NA | | | | | | | | | | | | | | | | |
| 116 | 10 | D | 0.160 | 107.4 | | AcN | | | 15 | Yes | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Ethoprophos |
| 117 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 118 | 0.04 | D | 0.251 | 78 | | AcN | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from same batch | | |
| 119 | | NA | | | | | | | | | | | | | | | | |
| 120 | | NA | | | | | | | | | | | | | | | | |
| 121 | 0.01 | D | 0.227 | 88 | Yes | AcN | | | 15 | | DSPE | Pure solvent - Multiple level | | Diode Array Detector | Two columns | Rec. from same batch | | |
| 122 | 0.01 | D | 0.292 | 108 | | EtOAc | | | 10 | Yes | GPC | Pure solvent - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 123 | | NA | | | | | | | | | | | | | | | | |
| 124 | | NA | | | | | | | | | | | | | | | | |
| 125 | | NA | | | | | | | | | | | | | | | | |
| 126 | | NA | | | | | | | | | | | | | | | | |
| 127 | | NA | | | | | | | | | | | | | | | | |
| 128 | | NA | | | | | | | | | | | | | | | | |
| 129 | | NA | | | | | | | | | | | | | | | | |
| 130 | | NA | | | | | | | | | | | | | | | | |
| 131 | | NA | | | | | | | | | | | | | | | | |
| 132 | | NA | | | | | | | | | | | | | | | | |
| 133 | 0.01 | D | 0.200 | 98 | | AcN | | | 10 | Yes | DSPE | Pure solvent - Multiple level | | MS | | Rec. from same batch | | |
| 134 | 0.01 | D | 0.246 | 113 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | | Rec. from same batch | | |
| 135 | No Results Reported | | | | | | | | | | | | | | | | | |
| 136 | 0.01 | D | 0.197 | 87 | Yes | DCM | DCM | DCM | 15 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS | Rec. from validation data | | |
| 137 | 0.265 | D | 0.265 | 85.78 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | | |
| 138 | | NA | | | | | | | | | | | | | | | | |
| 139 | 0.01 | ND | | | | | | | | | | | | | | | | |
| 140 | | NA | | | | | | | | | | | | | | | | |
| 141 | | NA | | | | | | | | | | | | | | | | |
| 142 | | NA | | | | | | | | | | | | | | | | |
| 143 | | NA | | | | | | | | | | | | | | | | |
| 144 | 0.008 | D | 0.241 | 103 | | AcN | | | 10 | Yes | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Nicarbazin, Bentazon-6D |
| 145 | 0.01 | D | 0.329 | 80 | | AcN | | | 10 | | DSPE | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from validation data | Yes | TPP |
| 146 | | NA | | | | | | | | | | | | | | | | |
| 147 | | NA | | | | | | | | | | | | | | | | |

**APPENDIX 9. Methods used by participants for determining pesticides.**

| TRIFLUMURON | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent 1 | Solvent 2 | Solvent 3 | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | GC Detector | HPLC Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 148 | 0.01 | D | 0.234 | 109.0 | | MeOH | | | 10 | | | Matrix matched - Multiple level | | MS/MS (QQQ) | LC-MS/MS (QQQ) | Rec. from same batch | Yes | Oxfendazole |
| 149 | | NA | | | | | | | | | | | | | | | | |
| 150 | | NA | | | | | | | | | | | | | | | | |
| 151 | | NA | | | | | | | | | | | | | | | | |
| 152 | | NA | | | | | | | | | | | | | | | | |
| 153 | No Results Reported | | | | | | | | | | | | | | | | | |

**ANNEX 1. Protocol and Instructions. List of pesticides to be sought.**

# GENERAL PROTOCOL

## for EU proficiency Tests for Pesticide Residues in Food and Feed

**Introduction**

This protocol contains general procedures valid for all European Union proficiency tests (EUPTs) organised on behalf of the European Commission, Health & Consumer Protection Directorate-General (DG-SANCO) by the four Community Reference Laboratories (CRLs) for pesticide residues in food and feed. These EUPTs are directed at all National Reference Laboratories (NRLs) and Official Laboratories (OfLs) in the EU Member States. Laboratories outside this CRL/NRL/OfL-Network[5] may be permitted to participate on a case-by-case basis after consultation with DG SANCO.

The following four CRLs for pesticides were appointed by DG-SANCO based on regulation 882/2004/EC[6]:

- CRL for Fruits and Vegetables (CRL-FV),
- CRL for Cereals and Feedingstuff (CRL-CF),
- CRL for Food of Animal Origin and Commodities with high Fat Content (CRL-AO) and
- CRL for Single Residue Methods (CRL-SRM)

NRLs are appointed by the National Food or Feed Authorities based on the provisions of Regulation 882/2004/EC, whereas OfLs are laboratories that are actively involved in providing residue data for the national control programme and/or the co-ordinated multiannual Community control programme.

According to Regulation 396/2005/EC[7] all laboratories analysing samples for the official controls on pesticide residues shall participate in the Community proficiency test(s) organised by the Commission. The aim of these EUPTs is to obtain information regarding the quality, accuracy and comparability of the pesticide residue data in food and feed sent to the European Commission within the framework of the national control programmes and the co-ordinated multiannual community control programme. Participating laboratories will be provided with an assessment of their analytical performance and the reliability of their data - compared to the other participating laboratories.

**EUPT-organisation**

EUPTs are organised by individual CRLs or by more than one CRL in cooperation with one another.

For each EUPT an Organising Team is appointed by the CRL(s) that is responsible for the EUPT. This team is then responsible for all administrative and technical matters concerning the organisation of the PT, e.g. PT-announcement, production of the test material, undertaking the homogeneity

[5] For more information about the CRL/NRL/OfL-Network please refer to the CRL-Web-portal under: http://www.crl-pesticides.eu

[6] Regulation (EC) No 882/2004 of the European Parliament and of the Council on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. Published at OJ of the EU L191 of 28.05.2004

[7] Regulation (EC) No 396/2005, published at OJ of the EU L70 of 16.03.2005, as last amended by Regulation 839/2008 published at OJ of the EU L234 of 30.08.2008.

and stability tests, packing and shipment of test material, and the handling and first assessment of participant's results.

A common Scientific Committee entailing the following two subgroups:

a) An Advisory Group (AG) and

b) An independent Quality Control Group (QCG)

consisting of expert scientists with long experience in pesticide residue analysis that have been appointed by the CRLs and approved by the DG-SANCO.

The role of the AG is to help the organisers in making decisions concerning the design of the EUPT: selection of pesticides to be included in the Target Pesticide List (see below), the establishment of the minimum required reporting levels (MRRLs), the evaluation and statistical treatment of the results and the drafting of the protocol anf final report. The QCG has the additional function of supervising the quality of the EUPT and to assisting the CRLs with confidential aspects such as the choice of the pesticides, and levels to be present in the test material.

The EUPT-Organising Team, AG and QCG together form the **EUPT-Panel**.

**Confidentiality:**

In each EUPT the laboratories are given a unique code only known to themselves, the Organisers, and DG-SANCO. In the final EUPT-Report the list of participating laboratories will not be linked to their laboratory codes. It should be noted that the organisers, at the request of the Commission may present the results to the Standing Committee on the Food Chain and Animal Health on a country-to-country basis. It is therefore possible that a link between codes and National Reference Laboratories could be made, especially for those Member States where only one laboratory has participated. The owner of all EUPT data is DG SANCO.

**Communication**

The official language used in all EUPTs is English.

Communication between participating laboratories during the test on matters concerning this PT exercise is not permitted.

**Announcement**

The announcement of the individual EUPT will be issued at least 3 months before the test material is distributed to the laboratories. The announcement will be published on the CRL portal and distributed via mail to the NRL/OfL mailing list available to the CRLs. The announcement will contain an invitation letter, details on how to register and where to locate additional related documents, and some preliminary information on the specific protocol such as the tentative calendar, the name of the commodity expected to be used, and the tentative Target Pesticide List.

**Specific Protocol**

For each PT a Specific Protocol will be published at least 2 weeks before the test material is distributed to the laboratories. This protocol will contain all information the included in the invitation in its final version, information on payment for delivery service and/or participation.

Furthermore, it will also include instructions on how to handle the test material upon receipt, on how to submit results, and other relevant information.

**General procedures for reporting results**

Laboratories are responsible for reporting their results to the Organiser within the stipulated deadlines. Each laboratory must only report one result for each of the pesticides present in the test material, using the analytical procedure(s) that they would routinely use for each compound for monitoring purposes. More than one method may be used to cover all the compounds to be sought. The results (residue levels of the pesticides detected) must be, expressed in mg/kg.

**Correction of results for recovery**

According to the Method Validation and Quality Control Procedures for Pesticide Residues Analysis in Food and Feed, (Document SANCO in force each year) residues data should not normally be adjusted for recovery, when the mean recovery is within the range of 70-120%. If residues data are adjusted for recovery, then this must be clearly stated. Therefore laboratories are required to report whether their results were adjusted for recovery and if this was the case, the recovery factor used. No recovery factors are required where recovery adjustments resulted from using the 'standard addition(s)' approach, or from the use of isotopically labelled internal standards (with spiking of the test material at the beginning of the extraction procedures). In this case, the laboratories should report the technique used for calculation of the results instead of the recovery factor.

**Evaluation of the Results**

The procedures used for the treatment and assessment of results are described below.

– ***False Positives***

These are the results that show the apparent presence of pesticides that were listed in the Target Pesticide List, but which were (i) not used in the sample treatment, (ii) and not detected by the organiser, even after a repeat analysis. However, if a number of participants do detect the same additional pesticide, or if the concentration is above the MRRL, then a decision as to whether, or not, this should be considered to be a false positive result will be made on a case-by-case basis. Any results reported that are lower than the MRRL will not be considered as false positives, even though these results should not have been reported.

– ***False Negatives***

These are results for pesticides reported by the laboratories as "analysed" but that no numerical values were given, although they were used by the Organiser to treat the test material and were detected by the majority of participants at or above the MRRL.

– ***Estimation of the true concentration (μ)***

The "true" concentration will be typically estimated using the median of all the results. Therefore a **median value** for every compound present will be calculated and used as the assigned value. In

special justifiable cases, the EUPT Panel may decide to use only part of the population of results to establish the median (e.g. using only results with z-scores ≤ 5.0).

– ***Establishing the standard deviation of the assigned value (target standard deviation)***

The target standard deviation (δ) of the median will be calculated using a Fit-For-Purpose Relative Standard Deviation (FFP-RSD) approach, as follows:

$$\delta = b_i * \mu_i \quad \text{with } b_i \text{ i = FFP-RSD (= 0.25)}$$

The percentage FFP-RSD is typically set at 25% based on experience from previous EUPTs. The EUPT-Panel reserves the right to also employ other approaches on a case-by-case basis considering analytical difficulties, and experience gained from previous proficiency tests.

– ***z-scores***

This parameter is calculated using the following formula:

$$z_i = (x_i - \mu_i) / \delta_i$$

Where $x_i$ is the value reported by the laboratory, $\mu_i$ the assigned value, and $\delta_i$ the standard deviation at that level for each pesticide (i).

Any z-scores of > 5 will be reported as "+5" particularly where summed z-scores of many pesticides are calculated (see SWZ below).

z-scores will be interpreted in the following way:

$|z| \leq 2$ Acceptable

$2 < |z| \leq 3$ Questionable

$|z| > 3$ Unacceptable

For results that are considered to be false negatives, z-scores will be calculated using the MRRL or RL (the laboratory's Reporting Limit), if the RL < MRRL.

The EUPT-Panel will consider whether, or not, these values should appear in the z-score histograms.

However, a z-score will not be calculated for any false positive result.

– ***Category A and B classification***

The EUPT-Panel will decide whether to classify the laboratories in two groups, A and B. Laboratories that detected a sufficiently high percentage of the pesticides present in the test material (e.g. at least 90%), reported no false positives, and sought all the pesticides on the Target Pesticide List marked with an asterisk that were present in the test material, will have demonstrated 'sufficient scope' and will therefore be classified in Category A.

– ***Combined z-scores***

For evaluation of the overall performance of the laboratories within Category A, a ranking according to the sum of weighted z-scores (SWZ) will be calculated.

The sum of weighted z-scores formula uses the z-scores with a fixed maximum value of 5 for individual z-scores, using the following formula:

$$\text{'Sum of weighted z-scores' (Z)} = \frac{\sum_{i=0}^{i\leq 2}|z|\cdot 1+\sum_{i>2}^{i\leq 3}|z|\cdot 3+\sum_{i>3}^{\infty}|z|\cdot 5}{n}.$$

n = number of reported results

So for each laboratory:

– The first summation is the sum of all their /z-scores/ between zero to two, multiplied by 1.

– The second summation is the sum of all their /z-scores/ greater than two but less than or equal to, three, multiplied by 3.

– The third summation is the sum of all their z-scores greater than three, multiplied by 5.

This SWZ has the following classification similar to the z-score:

$Z \leq 2$ Good

$2 < Z \leq 3$ Satisfactory

$Z > 3$ Unsatisfactory

The sum of weighted z-scores is considered to be of lesser importance than the individual z-scores. Therefore the organiser, in agreement with the EUPT-Panel, retains the right not to use them if they are considered to be unhelpful.

**Publication of results**

The preliminary results from the EUPTs will be published within 2 months from the deadline for result submission.

The final report will be published shortly after the organiser and the EUPT-Panel have discussed the results. Taking into account that the EUPT-Panel normally only meets once a year, the final report may be published up to 8 months after the deadline for results submission.

**Disclaimer**

The EUPT-Panel retains the right to change any parts of this EUPT - General Protocol based on new scientific or technical information. Any changes will be communicated in due course.

# EUPT-FV12 SPECIFIC PROTOCOL

## For EU Proficiency Test for Pesticide Residues in Fruit and Vegetables

## (2010)

**Introduction**

This protocol is complementary to the General protocol for EU Proficiency Tests (EUPT) for Pesticide Residues in Food and Feed. This Proficiency Test is organised by the EU-RL[8] for Pesticide Residues in Fruits and Vegetables and covers Multiresidue Methods (MRM) of analysis.

**Test material**

This proficiency test is based on the pesticide residues analysis of leeks. The leeks are being grown in Catalunya, Spain.

The pesticide treatments will be carried out post-harvest using either commercial formulation in micro-spray solutions or using standard solutions. The test material will be frozen (using liquid nitrogen), chopped, homogenized and sub-sampled into polyethylene bottles that have previously been coded.

Ten of these bottles containing the test material, will be chosen randomly, and analysed to check for homogeneity.

The test material will be stored frozen (–20ºC) prior to shipment to participants.

Two bottles, again chosen randomly, will be analysed over a period of time to confirm the stability of the pesticides in the test material (firstly when the test materials are shipped, and then a few days after the deadline for receipt of participants´ results). There will be an extra analysis during this period after maintaining the sample at room temperature for a few days to see if there is any degradation of any of the pesticides present in the sample.

These results will not be included in the statistical analysis of the proficiency test. The aim is solely to check stability during the shipping process and for the duration of the proficiency test.

This year, the Organiser will not send a standard solution of the pesticides used to treat the test material after receipt of participant's results. No significant interest has been shown through the last years.

[8] By the Treaty of Lisbon approved on the 1st of December 2009, the Community Union becomes the European Union.

**ANNEX 1. Protocol and Instructions. List of pesticides to be sought.**

**Steps to follow**

This Proficiency Test will be made up of the following 6 essential steps:

1. To participate, each laboratory must complete the Application Form on-line, available on the CRL-FV Web page, before the deadline stipulated on the Calendar. It is recommended that laboratories download the Target Pesticide List from this web site. Laboratories should carefully read the Target Pesticide List, where important information about the reporting of the results, as well as the MRRLs is given. Labs should take note that the pesticide residue definitions within this exercise do not always follow Regulation 396/2005. Also, the MRRLs do not always correspond with the MRLs set for leeks.

2. Laboratories will then receive an e-mail confirming their participation in this exercise, and assigning them a Laboratory Code. Laboratories with this information will be able to access the restricted area containing the replying forms using their login information - consisting of their **USER NAME** which is the Laboratory Code expressed as **Labxxx** (three digits with no spaces between them) and their **PASSWORD**, as chosen on the application form.

3. The sample delivery will cost **150 Euros**. The payment procedure must have started before the 5th April. An e-mail showing the bank transfer confirmation, or similar,must have been sent beforehand. Payments without a **Laboratory Code** or **Invoice Number** to identify them will not be considered as paid.

4. When the participant laboratories receive the test material (and not before), they must enter the restricted area and submit the **Sample Receipt Form** on-line to inform the Organiser that they have accepted the test material. This Form has a deadline: 16th April 2010, that must be met. If no test material has been received by this deadline, please contact the Organiser by e-mail (pmedina@ual.es or omalato@ual.es)

5. The participant laboratories must respect the deadline for submitting the results - 7th May 2010 - using the '**Analysed for**, **Results** and **Methods Form'** on-line.

6. The Organiser will evaluate the results at the end of the proficiency test, once the deadline for receipt of results has passed. The Organiser will send a hard copy of the Final Report to each participant laboratory, before this, an electronic version will be uploaded on the CRL-FV web site. This report will include information regarding the design of the test, the homogeneity and stability test results, a statistical evaluation of the participant's results as well as graphical displays of the results and any conclusions. Any other relevant information considered of valuemay also be included.

**Analytical parameters**

The test material will contain several pesticides from the Target Pesticide List. Laboratories should carefully read through the Target Pesticide List, where important information about the reporting

of the results, as well as the Minimum Required Reporting Levels (MRRLs) is given. Where the residue definition in the Target Pesticide List, includes more than one component, the results for the individual components, as well as the respective sum of components, calculated as stated in the residue definition, are to be reported.

For each pesticide and the relevant compounds included in the residue definitions, MRRL values have been set. The MRRL values will be used to help to identify false negative results and for z-score calculations.

**Amount of Sample**

Participants will receive:

- Approximately 300 g of leek test material with incurred pesticides
- Approximately 300 g of 'blank' leek test material.

**Shipment of Samples**

All samples will be frozen and packed in polyethylene boxes surrounded with dry ice and packed in boxes.

The shipment of the test materials will be carried out over a one-week period on the 12th April 2010. The Organiser will try to ensure that all the packages arrive at once. An information message will be sent out by e-mail before shipment. Laboratories must make their own arrangements for the reception of the package. They must inform the Organiser of any public holidays in their country/city during the delivery period given in the calendar, as well as making the necessary arrangements to receive the shipment, even if the laboratory is closed.

**Advice on Sample Handling**

Once received, the test material should be stored deep frozen (-18°C or less) before analysis to avoid any possible deterioration/spoilage. The test material should be mixed thoroughly, before taking the analytical portion(s).

All participants should use their own routine standard operating procedures for extraction, clean-up and analytical measurement and use their own reference standards for identification and quantification.

**Sample Receipt – Form 0**

Once the laboratory has received the test materials it must be reported to the organiser via Form 0 in http://www.eupt.es/crl/ by filling in the date of receipt, the condition of the test material, and its acceptance. The deadline for acceptance, or not, is the 16th April 2010. If the laboratory does not respond by this deadline the organiser will assume that the sample has been received and accepted.

If any laboratory has not received the test material by 16th April, they must inform the Organiser **immediately** by e-mail (pmedina@ual.es or omalato@ual.es)

**ANNEX 1. Protocol and Instructions. List of pesticides to be sought.**

**Submission of results:**

Once the laboratory has analysed the test material and is ready to submit their data, they must enter their results in 3 different steps on 3 forms by accessing the private area in the CRL –FV web site: http://www.crl-pesticides.eu

**Analysed for – Form 1**

In this step, the laboratory should indicate the pesticides that have been analysed for and which have not, and which have been detected and which have not. For those pesticides analysed for, the reporting level in mg/Kg should be indicated. This field will not be obligatory for those pesticides that are the sum of different metabolites. The laboratory must save every page of results that are entered. This form can be filled at different stages, so if entered, the data will be safe, and you can finish entering afterwards.

**Results – Form 2**

In this step, the laboratory reports the concentrations measured for each determination. This year it is requested to report three different concentrations, one without correcting for recovery, a second after correcting for recovery and the third one, as you would normally do in routine analyses, in other words the one from the two previous concentrations that you report to your customer(s). All concentrations must be expressed in mg/Kg together with the percentage recovery.

Significant Figures: based on SANCO/10684/2009 additional significant figures may be recorded for the purpose of statistical analysis. So bare this in mind when reporting data:

- Residue levels <0.010 mg/kg - to be expressed to two significant figures (e.g. 0.0058 mg/kg)
- Residue levels ≥ 0.010 mg/Kg - to be expressed to three significant figures (e.g. 0.0792, 0.156, 1.64, 10.3 mg/kg)

Results should not be reported where a pesticide was not detected or was detected below the RL (Reporting Limit) of the laboratory. In each case, it should be recorded as 'ND'. If a pesticide was not sought, it should be recorded as 'NA'. The results/residue levels must be reported as numbers.

**Methods – Form 3**

In this step, the laboratory must report the analytical methods used. A list with all the pesticides sought will show-up with a pesticide reference number. Laboratories may describe a method for the first pesticide and use this pesticide reference number to refer to other pesticides using the same method.

On the Reference Method field a published reference is needed to the method used. Use either one of those listed or give your own one. It is not necessary to give internal country references as it is of less use for the final report.

Again in this form, information must always be saved so that you can come back to it and continue at any time before the deadline, which for all the forms is the 7th May 2010. Any results reported after the deadline will not be included in the statistical treatment, or in the final report.

Before entering the results please read carefully the Target Pesticide List to be aware of the residue definitions requested. For pesticides where the residue definition is a sum of a parent

pesticide and other components, results for both the sum and the individual components must be reported.

It should **not** be assumed that only pesticides registered for use on leeks are present in the test material.

**A further consideration for this PT (only) that is different from the General Protocol is:**

- ***Category A and B classification***

The use of asterisks to marki pesticides is no longer necessary in the target pesticide list as all the pesticides in the coordinated programme are included. In order to avoid confusion, asterisks have been deleted. No pesticide is more important than any other. All on the monitoring list should be included in the scope of analysis of official laboratories. So in order to be in Category A, the laboratory must detect 90% of the pesticides present in the sample and report no false positive, thus demonstrating sufficient scope to be classified in this category.

**CALENDAR**

| ACTIVITY | DATE |
|---|---|
| Publishing the Target Pesticide List, Calendar and Matrix on the Web page. | December 2009 |
| Receiving Application Form from invited laboratories. | 17th March 2010 |
| Specific Protocol published on the Web site. | 29th March 2010 at the latest |
| Sample distribution. | 12th April 2010 |
| Deadline for acknowledgement of Sample receipt – Form 0 | 16th April 2010 |
| Deadline for receiving results: Analysed for – Form1, Results - Form 2 and Methods – Form 3 | 7th May 2010 |
| Preliminary Report: only results, no statistical treatment. ***Document uploaded on the EU-RL web site*** | July 2010 |
| Final Report: **electronic version uploaded on EU-RL web site and distributed to the Laboratories as hard copy.** | December 2010 |

**Cost for shipment of the test material**

**All** laboratories will be charged **150€** for the cost of shipment. For the payment procedures, each laboratory can specify their details and requests for invoices when applying for the test. Payment details are as follows:

BANK NAME: CAJAMAR - Caja Rural Sociedad Corporativa de Crédito
BANK ACCOUNT OWNER: Universidad de Almeria
BANK ADDRESS: Office Number 990. Universidad de Almeria. Spain
ACCOUNT NUMBER: 30580130172731005000 NEW FROM LAST YEAR!!
IBAN: ES0730580130172731005000 NEW FROM LAST YEAR!!
SWIFT: CCRIES2A NEW FROM LAST YEAR!!
CONCEPT: Invoice No. or Lab Code

**Contact information**

The official organising group details are as follows:

Universidad de Almería. Edificio Químicas CITE I
Ctra. Sacramento s/n
04120 Almería - Spain
Fax No.: +34 950015483

**ANNEX 1. Protocol and Instructions. List of pesticides to be sought.**

**Organising team (e-mail and phone no.):**

Amadeo R. Fernández-Alba. CRL-FV amadeo@ual.es +34 950015034
Paula Medina Pastor. CRL-FV pmedina@ual.es +34 950014102
Octavio Malato Rodríguez. CRL-FV omalato@ual.es +34 950015531

**Quality Control Group**

Dr. Antonio Valverde, University of Almería, Spain.
Mr. Arne Andersson, Head of Division NFA, Uppsala, Sweden – with great sorrow and hoping for a prompt recovery, Mr. Stewart Reynolds, senior Chemist FERA, York, United Kingdom, will take his place.

**Statistical Group**

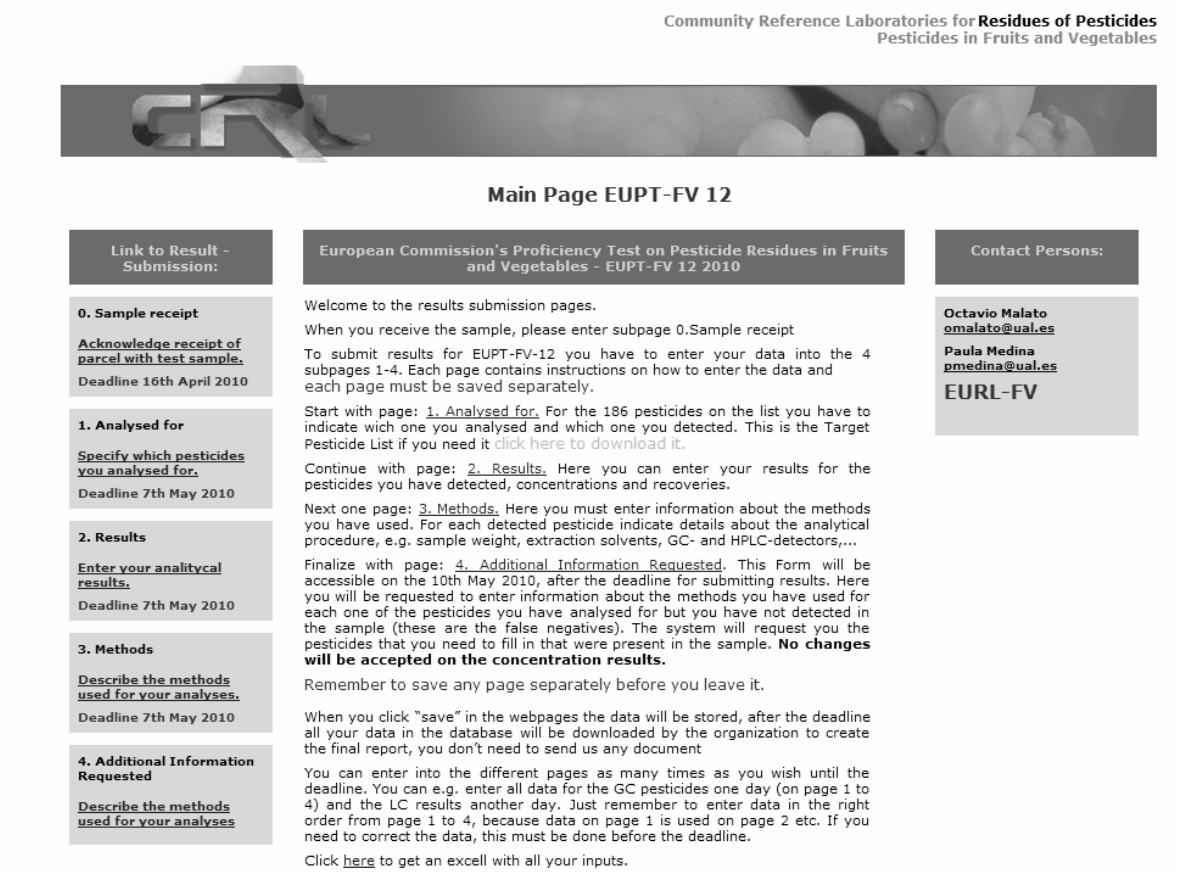
Dr. Carmelo Rodriguez, senior Mathematics. University of Almeria, Spain

**Advisory Group**

Dr. Miguel Gamón, senior Chemist Laboratorio Agroalimentario, Valencia, Spain.
Dr. Tuija Pihlström, senior Chemist NFA, Uppsala, Sweden.
Dr. André de Kok, senior Chemist VWA, Amsterdam, The Netherlands.
Dr. Sonja Masselter, senior Chemist, AGES, Innsbruck, Austria
Dr. Michelangelo Anastassiades, senior Chemist CVUA, Stuttgart, Germany.
Dr. Metter Erecius Poulsen, senior Chemist NFI, Copenhagen, Denmark.
Dr. Ralf Lippold, senior Chemist CVUA, Freiburg, Germany.

# EUPT-FV-12 WEBPAGE

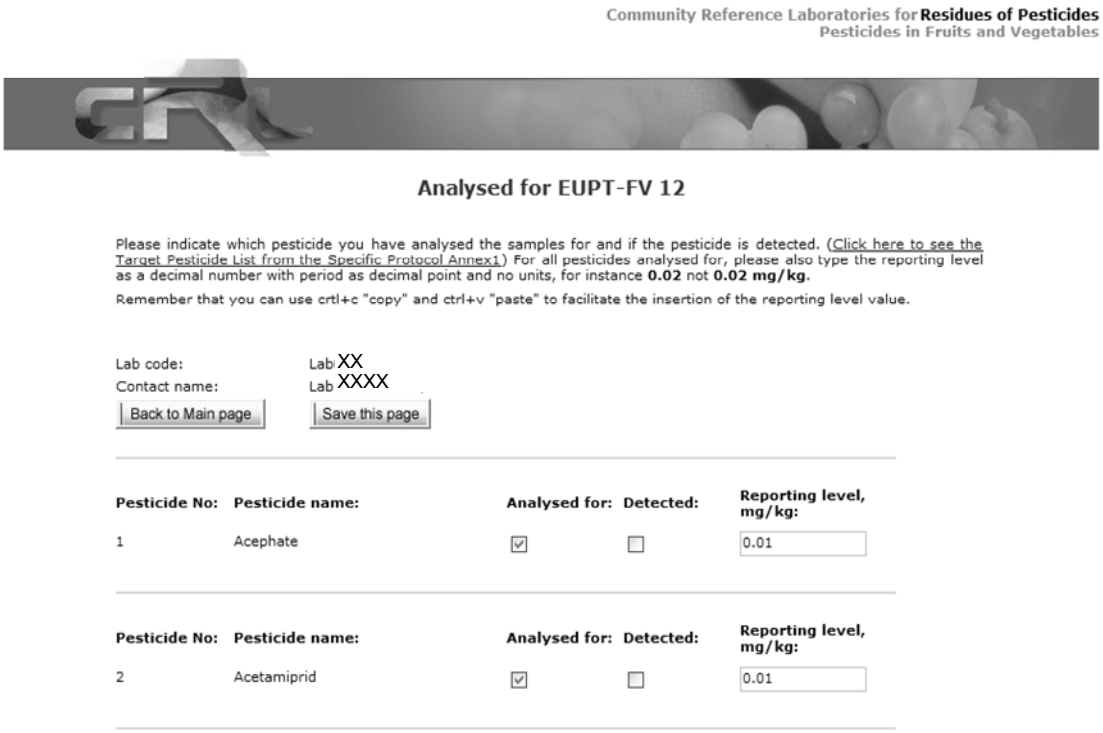
## EUPT-FV-12 Main Page




## EUPT-FV-12 Form 0 – "Sample Receipt"

**ANNEX 1. Protocol and Instructions. List of pesticides to be sought.**

## EUPT-FV-12 Form 1 – "Analysed for"



Community Reference Laboratories for **Residues of Pesticides**
Pesticides in Fruits and Vegetables

### Analysed for EUPT-FV 12

Please indicate which pesticide you have analysed the samples for and if the pesticide is detected. (Click here to see the Target Pesticide List from the Specific Protocol Annex1) For all pesticides analysed for, please also type the reporting level as a decimal number with period as decimal point and no units, for instance **0.02** not **0.02 mg/kg**.

Remember that you can use crtl+c "copy" and ctrl+v "paste" to facilitate the insertion of the reporting level value.

Lab code: Lab XX
Contact name: Lab XXXX

Back to Main page | Save this page

| Pesticide No: | Pesticide name: | Analysed for: | Detected: | Reporting level, mg/kg: |
|---|---|---|---|---|
| 1 | Acephate | ☑ | ☐ | 0.01 |

| Pesticide No: | Pesticide name: | Analysed for: | Detected: | Reporting level, mg/kg: |
|---|---|---|---|---|
| 2 | Acetamiprid | ☑ | ☐ | 0.01 |

## EUPT-FV-12 Form 2 – "Results"

Community Reference Laboratories for **Residues of Pesticides**
Pesticides in Fruits and Vegetables

### Results EUPT-FV 12

Please enter your results for the pesticide residue concentrations in the sample both in colum one (without correction for recovery) and in colum two (after correction for recovery) Check the residue definitions in the protocol before you enter data. If you routinely correct for recovery. In text fields enter numbers only, not units, for instance **1.2** not **1.2 mg/kg**.

Lab code: Lab XX
Contact number: Lab XXXX

Back to Main page | Save this page

| Pesticide No: | Pesticide name: | D: | Conc. without correction for recovery mg/kg: | Conc.after correction for recovery mg/kg: | Your official concentration mg/kg: | Recovery %: | Do you apply recovery correction in routine work?: |
|---|---|---|---|---|---|---|---|
| 7 | Aldicarb Sulfone | D | 0.040 | 0.041 | 0.041 | 100 | Yes |

| Pesticide No: | Pesticide name: | D: | Conc. without correction for recovery mg/kg: | Conc.after correction for recovery mg/kg: | Your official concentration mg/kg: | Recovery %: | Do you apply recovery correction in routine work?: |
|---|---|---|---|---|---|---|---|
| 12 | Azinphos-methyl | D | 0.044 | 0.044 | 0.044 | 99 | Yes |

## EUPT-FV-12 Form 3 – "Methods"


### Methods EUPT-FV 12

Please specify the methods used for each detected pesticide. When you have described a method for one pesticide (source) and the same method is used for other pesticides (targets), you don't need to put in all the details again. In the colum "Method as pesticide No", simply write the number of the source pesticide, where details of the methods are already given. When you save the page, all fields with methods are copied from the source to the targets pesticide, start to copy all the fields as you described.

Sample weight should be specified in grams as an integer number, max. 3 digits. Most other values can be selected from drop-down lists, but if the used method is not found in the list, please select "Other" and specify details in the adjacent free text field.

IMPORTANT: If you analyse different pesticides by the same method, type in the first box 'Method as pesticide No.' only the number of the pesticide detailed previously and automatically all fields will be filled in.

Remember to save the page frequently to allow the database update the information for the pesticides with reference to another pesticide.

Lab code: Lab XX
Contact number: Lab XXXX

Back to Main page | Save this page

| Pesticide No: | Pesticide name: | Methods as pesticide No.: | Reference method: | Sample weight, g: | Extraction solvent 1: | Extraction solvent 2: |
|---|---|---|---|---|---|---|
| 7 | Aldicarb Sulfone | | Mini Luke | 15 | acetone | diclhoromethane |

| Extraction solvent 3: | Ph adjusted: | Clean up: | Calibration: | GC detector: | HPLC detector: |
|---|---|---|---|---|---|
| Other (Petr. Ether) | no | none | Pure solvent - Multiple level | | MS/MS (QQQ) |

Petr. Ether

| Confirmation: | Recovery approach: | ISTD used: | ISTD details: |
|---|---|---|---|
| | Via Standard addition | No | |

## EUPT-FV-12 Form 4 – "Additional Information Requested"


### Additional Information EUPT-FV12

Please, specify the methods used for each one of the pesticides included in this page. These pesticides are the pesticides you have analysed for but you have not detected in the sample (False Negatives).

When you have described a method for one pesticide (source) and the same method is used for other pesticides (targets), you don't need to put in all the details again. In the colum "Method as pesticide No", simply write the number of the source pesticide, where details of the methods are already given. When you save the page, all fields with methods are copied from the source to the targets pesticide, start to copy all the fields as you described.

Sample weight should be specified in grams as an integer number, max. 3 digits. Most other values can be selected from drop-down lists, but if the used method is not found in the list, please select "Other" and specify details in the adjacent free text field.

IMPORTANT: If you analyse different pesticides by the same method, type in the first box 'Method as pesticide No.' only the number of the pesticide detailed previously and automatically all fields will be filled in.

Remember to save the page frequently to allow the database update the information for the pesticides with reference to another pesticide.

Lab code: Lab XX
Contact number: Lab XXXX

Back to Main page | Save this page

| Pesticide No: | Pesticide name: | Method as pesticide No.: | Reference method: | Sample weight, g: | Extraction solvent 1: | Extraction solvent 2: |
|---|---|---|---|---|---|---|
| 6 | Aldicarb Sulfoxide | | mini luke | 15 | acetone | diclhoromethane |

| Extraction solvent 3: | Ph adjusted: | Clean up: | Calibration: | GC detector: | HPLC detector: |
|---|---|---|---|---|---|
| Other (Petr Ether) | no | | Matrix matched - Single level | | MS/MS (QQQ) |
| Petr Ether | | | | | |

| Confirmation: | Recovery approach: | ISTD used: | ISTD details: |
|---|---|---|---|
| | Via Standard addition | No | |

**ANNEX 1. Protocol and Instructions. List of pesticides to be sought.**

# TARGET PESTICIDE LIST FOR THE EUPT-FV 12

**This year no asterisks have been used in order to avoid misunderstanding of prioritisation of pesticides as all are prior, according to Commission Regulation (EC) No. 901/2009**

| Pesticide<br>Highlighted in grey are the new pesticides included this year | MRRL (mg/Kg) |
|---|---|
| Acephate | 0.01 |
| Acetamiprid | 0.01 |
| Acrinathrin | 0.01 |
| Aldicarb (sum of aldicarb + aldicarb sulfoxide + aldicarb sulfone expressed as aldicarb) | 0.01 |
| Aldicarb | |
| Aldicarb Sulfoxide | |
| Aldicarb Sulfone | |
| Amitraz (do not converted to amitraz - expressed the three individual determinations) | 0.01 |
| Amitraz | |
| DMPF (N-2,4-Dimethylphenyl-N-Methyl-formamidine) | |
| DMF (2,4-Dimethylformanilide) | |
| Azinphos-methyl | 0.01 |
| Azoxystrobin | 0.01 |
| Benfuracarb | 0.01 |
| Bifenthrin | 0.01 |
| Bitertanol | 0.01 |
| Boscalid | 0.01 |
| Bromopropylate | 0.01 |
| Bromuconazole | 0.01 |
| Bupirimate | 0.01 |
| Buprofezin | 0.01 |
| Cadusafos | 0.006 |
| Captan | 0.01 |
| Carbaryl | 0.01 |
| Carbendazim (sum of benomyl and carbendazim expressed as carbendazim) | 0.01 |
| Carbofuran (sum of carbofuran and 3-hydroxy-carbofuran expressed as carbofuran) | 0.01 |
| Carbofuran | |
| 3-hydroxy-carbofuran | |
| Carbosulfan | 0.01 |
| Chlorfenapyr | 0.01 |
| Chlorfenvinphos | 0.01 |
| Chlorobenzilate | 0.01 |
| Chlorothalonil | 0.01 |
| Chlorpropham (only parent compound) | 0.01 |
| Chlorpyrifos | 0.01 |
| Chlorpyrifos-methyl | 0.01 |
| Clofentezine (only parent compound) | 0.01 |
| Cyfluthrin (cyfluthrin incl. other mixtures of constituent isomers (sum of isomers)) | 0.01 |
| Cypermethrin (cypermethrin incl. other mixtures of constituent isomers (sum of isomers)) | 0.01 |
| Cyproconazole | 0.01 |
| Cyprodinil | 0.01 |
| Deltamethrin | 0.01 |
| Diazinon | 0.01 |
| Dichlofluanid (only parent compound) | 0.01 |
| Dichlorvos | 0.01 |
| Dicloran | 0.01 |
| Dicofol | 0.01 |
| Difenoconazole | 0.01 |
| Dimethoate (sum of dimethoate and omethoate expressed as dimethoate) | 0.003 |
| Dimethoate | |
| Omethoate | |
| Dimethomorph | 0.01 |
| Diphenylamine | 0.01 |
| Endosulfan (sum of alpha- and beta-isomers and endosulfan sulfate expressed as endosulfan) | 0.01 |
| Endosulfan alpha | |
| Endosulfan beta | |
| Endosulfan sulfate | |
| EPN | 0.01 |
| Epoxiconazole | 0.01 |
| Ethion | 0.01 |
| Etofenprox | 0.01 |
| Ethoprophos | 0.008 |
| Fenamiphos (sum of fenamiphos and its sulfoxide and sulfone expressed as fenamiphos) | 0.01 |
| Fenamiphos | |
| Fenamiphos sulfoxide | |
| Fenamiphos sulfone | |
| Fenarimol | 0.01 |
| Fenazaquin | 0.01 |

**ANNEX 1. Protocol and Instructions. List of pesticides to be sought.**

| Pesticide<br>Highlighted in grey are the new pesticides included this year | MRRL<br>(mg/Kg) |
|---|---|
| Fenbuconazole | 0.01 |
| Fenhexamid | 0.01 |
| Fenitrothion | 0.01 |
| Fenoxycarb | 0.01 |
| Fenpropathrin | 0.01 |
| Fenpropimorph | 0.01 |
| Fenthion (sum of fenthion and its oxigen analogue, their sulfoxides and sulfone expressed as fenthion) | 0.01 |
| Fenthion | |
| Fenthion sulfoxide | |
| Fenthion sulfone | |
| Fenthion oxon | |
| Fenthion oxon sulfoxide | |
| Fenthion oxon sulfone | |
| Fipronil (only parent compound) | 0.004 |
| Fludioxonil | 0.01 |
| Flufenoxuron | 0.01 |
| Fluquinconazole | 0.01 |
| Flusilazole | 0.01 |
| Flutriafol | 0.01 |
| Folpet | 0.01 |
| Fosthiazate | 0.01 |
| Hexaconazole | 0.01 |
| Hexythiazox | 0.01 |
| Imazalil | 0.01 |
| Imidacloprid | 0.01 |
| Indoxacarb (Indoxacarb as sum of the isomers S and R) | 0.01 |
| Iprodione | 0.01 |
| Iprovalicarb | 0.01 |
| Isofenphos-methyl | 0.01 |
| Kresoxim-methyl | 0.01 |
| Lambda-Cyhalothrin | 0.01 |
| Linuron | 0.01 |
| Lufenuron | 0.01 |
| Malathion (sum of malathion and malaoxon expressed as malathion) | 0.01 |
| Malathion | |
| Malaoxon | |
| Mepanipyrim (only parent compound) | 0.01 |
| Metalaxyl and metalaxyl-M | 0.01 |
| Metaflumizone | 0.01 |
| Metconazole | 0.01 |
| Methamidophos | 0.01 |
| Methidathion | 0.01 |
| Methiocarb (sum of methiocarb + methiocarb sulfone + methiocarb sulfoxide expressed as methiocarb) | 0.01 |
| Methiocarb | |
| Methiocarb sulfone | |
| Methiocarb sulfoxide | |
| Methomyl and Thiodicarb (sum of methomyl and thiodicarb expressed as methomyl) | 0.01 |
| Methomyl | |
| Thiodicarb | |
| Methoxyfenozide | 0.01 |
| Monocrotophos | 0.01 |
| Myclobutanil | 0.01 |
| Orthophenylphenol | 0.01 |
| Oxadixyl | 0.01 |
| Oxamyl | 0.01 |
| Oxydemeton-methyl (sum of oxydemeton-methyl and demeton-S-methylsulfone expressed as oxydemeton-methyl) | 0.006 |
| Oxydemeton-methyl | |
| Demeton-S-methylsulfone | |
| Paclobutrazole | 0.01 |
| Parathion-ethyl | 0.01 |
| Parathion-methyl (sum of parathion-methyl and paraoxon-methyl expressed as parathion-methyl) | 0.01 |
| Parathion-methyl | |
| Paraoxon-methyl | |
| Pencycuron | 0.01 |
| Penconazole | 0.01 |
| Pendimethalin | 0.01 |
| Phenthoate | 0.01 |
| Phosalone | 0.01 |
| Phosmet (Phosmet and Phosmet oxon expr. as Phosmet) | 0.01 |
| Phosmet | |
| Phosmet oxon | |
| Phoxim | 0.01 |
| Pyraclostrobin | 0.01 |

**ANNEX 1. Protocol and Instructions. List of pesticides to be sought.**

| Pesticide<br>Highlighted in grey are the new pesticides included this year | MRRL<br>(mg/Kg) |
|---|---|
| Pirimicarb (sum of pirimicarb and desmethyl pirimicarb expr. as pirimicarb) | 0.01 |
| Pirimicarb | |
| Desmethyl-pirimicarb | |
| Pirimiphos-methyl | 0.01 |
| Prochloraz (only parent compound) | 0.01 |
| Procymidone | 0.01 |
| Profenofos | 0.01 |
| Propargite | 0.01 |
| Propiconazole | 0.01 |
| Propyzamide | 0.01 |
| Prothioconazole (Prothioconazole-desthio) | 0.01 |
| Prothiofos | 0.01 |
| Pyridaben | 0.01 |
| Pyrimethanil | 0.01 |
| Pyriproxyfen | 0.01 |
| Quinoxyfen | 0.01 |
| Spinosad (sum of spinosyn A and spinosyn D, expr. as spinosad) | 0.01 |
| Spiroxamine | 0.01 |
| Tau-Fluvalinate | 0.01 |
| Tebuconazole | 0.01 |
| Tebufenozide | 0.01 |
| Tebufenpyrad | 0.01 |
| Teflubenzuron | 0.01 |
| Tefluthrin | 0.01 |
| Tetraconazole | 0.01 |
| Tetradifon | 0.01 |
| Thiabendazole | 0.01 |
| Thiamethoxam (sum of thiamethoxam and clothianidin expressed as thiamethoxam) | 0.01 |
| Thiamethoxam | |
| Clothianidin | |
| Thiacloprid | 0.01 |
| Thiophanate-methyl | 0.01 |
| Tolclofos-methyl | 0.01 |
| Tolylfluanid (only parent compound) | 0.01 |
| Triadimefon and Triadimenol (sum of triadimefon and triadimenol) | 0.01 |
| Triadimefon | |
| Triadimenol | |
| Triazophos | 0.01 |
| Trichlorfon (only parent compound) | 0.01 |
| Trifloxystrobin | 0.01 |
| Triflumuron | 0.01 |
| Trifluralin | 0.01 |
| Triticonazole | 0.01 |
| Vinclozolin (only parent compound) | 0.01 |
| Zoxamide | 0.01 |

This list is based on Commission Regulation (EC) No 901/2009 and 669/2009.
The MRRLs are based in Regulation (EC) No. 396/2005 and Commission Directive 2006/125/EC.

**ANNEX 2. List of laboratories that agreed to participate in EUPT-FV12.**

| COUNTRY | LABORATORY NAME | CITY | REPORTED RESULTS |
|---|---|---|---|
| AUSTRIA | AGES GMBH, COMPETENCE CENTER FOR RESIDUES OF PLANT PROTECTION PRODUCTS | INNSBRUCK | YES |
| BELGIUM | FYTOLAB | ZWIJNAARDE | YES |
| BELGIUM | LOVAP NV | GEEL | YES |
| BELGIUM | SCIENTIFIC INSTITUTE OF PUBLIC HEALTH | BRUXELLES | YES |
| BRAZIL | EUROFINS DO BRASIL. ANÁLISES DE ALIMENTOS LTDA. | INDAIATUBA/SP/BRAZIL | YES |
| BRAZIL | BIOENSAIOS ANÁLISES E CONSULTORIA AMBIENTAL LTDA. | VIAMÃO | YES |
| BRAZIL | LABORATÓRIO NACIONAL AGROPECUÁRIO - LANAGRO/MG | PEDRO LEOPOLDO/MG | YES |
| BRAZIL | INSTITURE OF TECHNOLOGY OF PERNAMBUCO. LABTOX | RECIFE | YES |
| BULGARIA | CENTRAL LABORATORY FOR CHEMICAL TESTING AND CONTROL | SOFIA | YES |
| BULGARIA | LABORATORY ANALYSIS DIRECTORATE, REGIONAL INSPECTORATE FOR PUBLIC HEALTH PROTECTION AND CONTROL - PLEVEN | PLEVEN | YES |
| BULGARIA | REGIONAL INSPECTORATE FOR PUBLIC HEALTH PROTECTION - VELIKO TARNOVO | VELIKO TARNOVO | YES |
| BULGARIA | REGIONAL INSPECTORATE FOR PUBLIC HEALTH PROTECTION AND CONTROL | PLOVDIV | YES |
| BULGARIA | REGIONAL INSPECTORATE FOR PUBLIC HEALT PROTECTION AND CONTROL, DIRECTORATE LABORATORY ANALISES | SOFIA | YES |
| BULGARIA | RIOKOZ BURGAS | BURGAS | YES |
| CYPRUS | PESTICIDE RESIDUES LABORATORY OF THE STATE GENERAL LABORATORY (SGL) OF MINISTRY OF HEALTH | NICOSIA | YES |
| CZECH REPUBLIC | INSTITUTE OF CHEMICAL TECHNOLOGY PRAGUE, DEPT. OF FOOD CHEMISTRY AND ANALYSIS | PRAGUE | YES |
| CZECH REPUBLIC | CZECH AGRICULTURE AND FODD INSPECTION AUTHORITY | PRAHA 5 | YES |
| DENMARK | DANISH VET AND FOOD ADM REGION EAST | RINGSTED | YES |
| DENMARK | NATIONAL FOOD ADMINISTRATION | SOEBORG | YES |
| EGYPT | CENTRAL LAB OF RESIDUE ANALYSIS OF PESTICIDES AND HEAVY METALS IN FOODS | GIZA | YES |
| ESTONIA | LABORATORY FOR RESIDUES AND CONTAMINANTS, AGRICULTURAL RESEARCH CENTRE (ARC) | SAKU | YES |
| ESTONIA | TARTU LABORATORY OF HEALTH BOARD | TARTU | YES |
| FINLAND | FINNISH CUSTOMS LABORATORY | ESPOO | YES |
| FINLAND | METROPOLILAB | HELSINKI | YES |
| FRANCE | LABORATOIRE DEPAREMENTAL DE LA SARTHE | LE MANS CEDEX | YES |
| FRANCE | SCL LABORATOIRE D\'ILDE FRANCE - MASSY | MASSY | YES |
| FRANCE | SCL STRASBOURG | ILLKIRCH | YES |

**ANNEX 2. List of laboratories that agreed to participate in EUPT-FV12.**

| COUNTRY | LABORATORY NAME | CITY | REPORTED RESULTS |
|---|---|---|---|
| FRANCE | SCL RENNES | RENNES | YES |
| FRANCE | LABORATOIRE DU SCL DE MONTPELLIER | MONTPELLIER | YES |
| FRANCE | CERECO SUD | GARONS | YES |
| FRANCE | SCL BORDEAUX | PESSAC | YES |
| FRANCE (LA REUNION) | SERVICE COMMUN DES LABORATOIRES SAINT DENIS REUNION | SAINT DENIS | YES |
| GERMANY | CVUA-RRW CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT RHEIN-RUHR-WUPPER | ESSEN | YES |
| GERMANY | LANDESAMT FÜR LANDWIRTSCHAFT, LEBENSMITTELSICHERHEIT UND FISCHEREI MECKLENBURG-VORPOMMERN | ROSTOCK | YES |
| GERMANY | FEDERAL OFFICE OF CONSUMER PROTECTION AND FOOD SAFETY (BVL) | BERLIN | YES |
| GERMANY | LUA SACHSEN, DEUTSCHLAND | DRESDEN | YES |
| GERMANY | CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT OSTWESTFALEN-LIPPE - CVUA-OWL | BIELEFELD | YES |
| GERMANY | BAYERISCHES LANDESAMT FÜR GESUNDHEIT UND LEBENSMITTELSICHERHEIT | ERLANGEN | YES |
| GERMANY | LANDESUNTERSUCHUNGSAMT FÜR CHEMIE, HYGIENE UND VETERINÄRMEDIZIN BREMEN | BREMEN | YES |
| GERMANY | AMT FÜR UMWELT, VERBRAUCHERSCHUTZ UND LOKALE AGENDA DER STADT BONN, AMTLICHE LEBENSMITTELUNTERSUCHUNG | BONN | YES |
| GERMANY | AMT FÜR VERBRAUCHERSCHUTZ DÜSSELDORF - ABT. CHEMISCHE- UND LEBENSMITTELUNTERSUCHUNG | DÜSSELDORF | YES |
| GERMANY | CHEMISCHES UND LEBENSMITTELUNTERSUCHUNGSAMT DER STADT DORTMUND | BOCHUM | YES |
| GERMANY | CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT STUTTGART (CVUAS) | FELLBACH | YES |
| GERMANY | BERLIN-BRANDENBURG STATE LABORATORY (LLBB) | FRANKFURT(ODER) | YES |
| GERMANY | LANDESUNTERSUCHUNGSAMT RHEINLAND-PFALZ | SPEYER | YES |
| GERMANY | NIEDERSAECHSISCHES LANDESAMT FUER VERBRAUCHERSCHUTZ UND LEBENMITTELSICHERHEIT | OLDENBURG | YES |
| GERMANY | LANDESBETRIEB HESSISCHES LANDESLABOR, STANDORT KASSEL | KASSEL | YES |
| GERMANY | LUFA-ITL GMBH | KIEL | YES |
| GERMANY | INSTITUT FÜR HYGIENE UND UMWELT | HAMBURG | YES |
| GERMANY | THUERINGER LANDESAMT FUER LEBENSMITTELSICHERHEIT UND VERBRAUCHERSCHUTZ | BAD LANGENSALZA | YES |
| GERMANY | LAV SACHSEN-ANHALT | HALLE/SAALE | YES |
| GERMANY | LANDESAMT FÜR SOZIALES, GESUNDHEIT UND VERBRAUCHERSCHUTZ | SAARBRÜCKEN | YES |
| GERMANY | CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT MÜNSTERLAND-EMSCHER-LIPPE (CVUA-MEL) | MÜNSTER | YES |
| GERMANY | LANDESLABOR SCHLESWIG-HOLSTEIN | NEUMÜNSTER | YES |
| GREECE | PESTICIDE RESIDUES LAB., BENAKI PHYTOPATHOLOGICAL INSTITUTE | KIFISSIA, ATHENS | YES |

**ANNEX 2. List of laboratories that agreed to participate in EUPT-FV12.**

| COUNTRY | LABORATORY NAME | CITY | REPORTED RESULTS |
|---|---|---|---|
| GREECE | MINISTRY OF RURAL DEVELOPMENT & FOOD,RURAL CENTRE OF CROP PROTECTION & QUALITY CONTROL OF IOANNINA LABORATORY OF PESTICIDE ANALYSES | IOANNINA | YES |
| GREECE | REGIONAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL. LABORATORY OF PESTICIDE RESIDUES | THESSALONIKI | YES |
| GREECE | PERIPHERAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL OF KAVALA - MINISTRY OF RURAL DEVELOPMENT | KAVALA | YES |
| GREECE | REGIONAL CENTER OF PLANT PROTECTION & QUALITY CONTROL OF MAGNESIA, LAB OF PESTICIDES RESIDUES | VOLOS | YES |
| GREECE | GENERAL CHEMICAL STATE LABORATORY | ATHENS | YES |
| GREECE | REGIONAL CENTRE OF PLANT PROTECTION & QUALITY CONTROL OF IRAKLION | IRAKLION CRETE | YES |
| GREECE | LAB OF PESTICIDE RESIDUES OF NAFPLIO | NAFPLIO | YES |
| GREECE | PESTICIDE RESIDUES LABORATORY OF REGIONAL CENTER OF PLANT PROTECTION & QUALITY CONTROL OF LYKOVRISSI | LYKOVRISSI-ATHENS | YES |
| HUNGARY | AGRICULTURAL OFFICE OF BAZ COUNTY PLANT PROTECTION AND SOIL CONSERVATION DIRECTORATE PESTICIDE RESIDUE ANALYTICAL LABORATORY | MISKOLC | YES |
| HUNGARY | AGRICULTURAL OFFICE OF COUNTY SOMOGY - PPSCD-PESTICIDE RESIDUE ANALYTICAL LABORATORY | KAPOSVAR | YES |
| HUNGARY | AGRICULTURAL OFFICE OF COUNTY FEJER, PPSCD, PESTICIDE RESIDUE ANALYTICAL LABORATORY | VELENCE | YES |
| HUNGARY | PLANT PROTECTION AND SOIL CONSERVATION DIRECTORATE OF JASZ-NAGYKUN-SZOLNOK COUNTY | SZOLNOK | NO |
| HUNGARY | AGRICULTURAL OFFICE OF COUNTY CSONGRÁD DIRECTORATE OF PLANT PROTECTION AND SOIL CONSERVATION | HODMEZOVASARHELY | YES |
| HUNGARY | AGRICULTURAL OFFICE OF VAS COUNTY , PLANT PROTECTION AND SOILCONSERVATION DIRECTORATE PESTICIDE RESIDUE ANALYTICALLABORATORY | TANAKAJD | YES |
| ICELAND | MATÍS | AKUREYRI | YES |
| IRELAND | PESTICIDE CONTROL LABORATORY | CELBRIDGE | YES |
| ITALY | REPARTO CHIMICA DEGLI ALIMENTI DI ORIGINE ANIMALE - ISTITUTO ZOOPROFILATTICO DELLA LOMBARDIA E DELL\'EMILIA ROMAGNA | BRESCIA | YES |
| ITALY | ARPA PUGLIA - DIPARTIMENTO DI BARI | BARI | YES |
| ITALY | AGENZIA REGIONALE PER LA PROTEZIONE AMBIENTALE DELLA TOSCANA - DIPARTIMENTO DI AREZZO (ARPAT-AREZZO) | AREZZO | YES |
| ITALY | ARPA PIEMONTE POLO REGIONALE ALIMENTI | LA LOGGIA | YES |
| ITALY | LANDESAGENTUR FÜR UMWELT - LABOR FÜR CHROMATOGRAPHIE | BOZEN | YES |
| ITALY | LABORATORIO DI SANITA | BERGAMO | YES |
| ITALY | RAR FITOFARMACI ARPA EMILIA-ROMAGNA | FERRARA | YES |
| ITALY | ISTITUTO SUPERIORE DI SANITA | ROME | YES |
| ITALY | ARPAL DIPARTIMENTO LA SPEZIA | LA SPEZIA | YES |

**ANNEX 2. List of laboratories that agreed to participate in EUPT-FV12.**

| COUNTRY | LABORATORY NAME | CITY | REPORTED RESULTS |
|---|---|---|---|
| ITALY | ARPA-FVG DIPARTIMENTO DI PORDENONE | PORDENONE | YES |
| ITALY | ARPA MARCHE- DIP. MACERATA | VILLAPOTENZA-MACERATA | YES |
| ITALY | ARPA UMBRIA - UOLM PERUGIA | PERUGIA | YES |
| ITALY | ARPACAL - DIPARTIMENTO DI REGGIO CALABRIA | REGGIO CALABRIA | YES |
| ITALY | A.R.P.A.V - SERVIZIO LABORATORI VERONA | VERONA | YES |
| ITALY | ARPA VALLE D | SAINT CHRISTOPHE | YES |
| ITALY | APPA TRENTO | TRENTO | YES |
| ITALY | ARPAT DIPARTIMENTO DI LIVORNO | LIVORNO | YES |
| ITALY | ARPA SICILIA DAP RAGUSA AUSL N.7 RAGUSA | RAGUSA | YES |
| ITALY | ISTITUTO ZOOPROFILATTICO SPERIMENTALE DELLE VENEZIE - SC2 CHIMICA | LEGNARO (PADOVA) | YES |
| ITALY | ASL DELLA PROVINCIA DI VARESE - U.O. LABORATORIO CHIMICO | VARESE | YES |
| ITALY | LABORATORIO SPECIALIZZATO FITOFARMACI-DIPARTIMENTO TECNICO DI NAPOLI- ARPACAMPANIA | NAPLES | NO |
| LATVIA | INSTITUTE OF FOOD SAFETY, ANIMAL HEALTH AND ENVIRONMENT (BIOR) | RIGA | YES |
| LITHUANIA | NATIONAL FOOD AND VETERINARY RISK ASSESSMENT INSTITUTE | VILNIUS | YES |
| LUXEMBURG | LABORATOIRE NATIONAL DE SANTE - ALI | LUXEMBOURG | YES |
| NORWAY | BIOFORSK, PLANT HEALTH AND PLANT PROTECTION, PESTICIDE CHEMISTRY | AAS | YES |
| POLAND | LABORATORY OF VOIVODSHIP SANITARY-EPIDEMIOLOGICAL STATION | WARSAW | YES |
| POLAND | WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W OLSZTYN | OLSZTYN | YES |
| POLAND | LABORATORIUM BADANIA POZOSTAŁOŚCI ŚRODKÓW OCHRONY ROSLIN W BIAŁYMSTOKU | BIALYSTOK | YES |
| POLAND | MAIN INSPECTORATE OF PLANT HEALTH AND SEED INSPECTION, CENTRAL LABORATORY | TORUN | YES |
| POLAND | FOOD SAFETY LABORATORY, RESEARCH INSTITUTE OF POMOLOGY AND FLORICULTURE | SKIERNIEWICE | YES |
| POLAND | INSTITUTE OF PLANT PROTECTION – NATIONAL RESEARCH INSTITUTE, RESIDUE ANALYSES LABORATORY | RZESZOW | YES |
| POLAND | WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W KRAKOWIE | KRAKOW | YES |
| POLAND | WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA WE WROCŁAWIU - DZIAL LABORATORYJNY | WROCLAW | YES |
| POLAND | WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W OPOLU | OPOLE | YES |
| POLAND | INSTITUTE OF PLANT PROTECTION-NATIONAL INSTITUTE SOSNICOWICE BRUNCH | SOSNICOWICE | YES |
| POLAND | WOJEWÓDZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W ŁODZI | ŁÓDŹ | YES |
| POLAND | WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W RZESZOWIE | RZESZOW | YES |

**ANNEX 2. List of laboratories that agreed to participate in EUPT-FV12.**

| COUNTRY | LABORATORY NAME | CITY | REPORTED RESULTS |
|---|---|---|---|
| POLAND | INSTITUTE OF PLANT PROTECTION - NATIONAL RESEARCH INSTITUTE | TRZEBNICA | YES |
| POLAND | PLANT PROTECTION INSTITUTE, DEPARTMENT OF PESTICIDE RESIDUE RESEARCH | POZNAN | YES |
| PORTUGAL | LABORATÓRIO REGIONAL DE VETERINÁRIA E SEGURANÇA ALIMENTAR | FUNCHAL | YES |
| PORTUGAL | LABORATÓRIO DE QUALIDADE ALIMENTAR DA DRAPN | SENHORA DA HORA | YES |
| PORTUGAL | L-INIA - LABORATÓRIO DE RESÍDUOS DE PESTICIDAS | OEIRAS | YES |
| ROMANIA | SANITARY VETERINARY AND FOOD SAFETY DIRECTORATE | BUCHAREST | YES |
| ROMANIA | CENTRAL LABORATORY FOR PESTICIDES RESIDUES CONTROL | BUCHAREST | YES |
| SINGAPORE | VETERINARY PUBLIC HEALTH LABORATORY | SINGAPORE | YES |
| SLOVAKIA | STATE VETERINARY AND FOOD INSTITUTE BRATISLAVA | BRATISLAVA | YES |
| SLOVAKIA | NATIONAL REFERENCE CENTRE FOR PESTICIDE RESIDUES, PUBLIC HEALTH AUTHORITY OF THE SLOVAK REPUBLIC | BRATISLAVA | YES |
| SLOVENIA | INSTITUTE OF PUBLIC HEALTH | LJUBLJANA | YES |
| SLOVENIA | INSTITUTE OF PUBLIC HEALTH MARIBOR | MARIBOR | YES |
| SLOVENIA | AGRICULTURAL INSTITUTE OF SLOVENIA | LJUBLJANA | YES |
| SLOVENIA | INSTSTITUTE OF PUBLIC HEALTH KRANJ | KRANJ | NO |
| SPAIN | LABORATORIO AGROALIMENTARIO Y DE SANIDAD ANIMAL | EL PALMAR, MURCIA | YES |
| SPAIN | LABORATORIO DE PRODUCCIÓN Y SANIDAD VEGETAL DE HUELVA | HUELVA | YES |
| SPAIN | LABORATORIO AGROALIMENTARIO DE LA GENERALITAT VALENCIANA | BURJASSOT | YES |
| SPAIN | LABORATORIO ARBITRAL AGROALIMENTARIO | MADRID | YES |
| SPAIN | LABORATORIO DEL SOIVRE ALMERÍA | ALMERÍA | YES |
| SPAIN | LABORATORIO DE SANIDAD VEGETAL DE OVIEDO | OVIEDO | YES |
| SPAIN | CENTRO NACIONAL DE ALIMENTACIÓN (AESAN) | MAJADAHONDA-MADRID | YES |
| SPAIN | LABORATORIO DE PRODUCCION Y SANIDAD VEGETAL | MENGÍBAR ( JAÉN ) | YES |
| SPAIN | LABORATORIO AGROALIMENTARIO DE GRANADA | SANTA FE (GRANADA) | YES |
| SPAIN | LABORATORIO REGIONAL CCAA LA RIOJA | LOGROÑO | YES |
| SPAIN | LABORATORIO DE RESIDUOS - INSTITUTO TECNOLÓGICO DE CANARIAS | POLÍGONO INDUSTRIAL DE ARINAGA - AGÜIMES | YES |
| SPAIN | LABORATORI AGROALIMENTARI - DAR | CABRILS (BARCELONA) - SPAIN | YES |
| SPAIN | LABORATORIO AGRARIO REGIONAL JUNTA DE CASTILLA Y LEÓN | BURGOS | NO |
| SPAIN | LABORATORIO AGROALIMENTARIO | ZARAGOZA | YES |

**ANNEX 2. List of laboratories that agreed to participate in EUPT-FV12.**

| COUNTRY | LABORATORY NAME | CITY | REPORTED RESULTS |
|---|---|---|---|
| SPAIN | INGACAL (LABORATORIO AGRARIO Y FITOPATOLÓGICO DE GALICIA) | A CORUÑA | YES |
| SPAIN | DELEGACIÓN PROVINCIAL DE SALUD PÚBLICA DE ALMERIA | ALMERÍA | YES |
| SPAIN | LABORATORIO DE SALUD PÚBLICA DE MADRID, AYTMO. DE MADRID | MADRID | YES |
| SPAIN | LABORATORIO DE PRODUCCION Y SANIDAD VEGETAL DE ALMERIA | LA MOJONERA | YES |
| SWEDEN | EUROFINS FOOD&AGRO SWEDEN AB | LIDKÖPING | YES |
| SWEDEN | CHEMISTRY DIVISION 1, NATIONAL FOOD ADMINISTRATION | UPPSALA | YES |
| SWITZERLAND | KANTONALES LABOR ZÜRICH | ZÜRICH | YES |
| SWITZERLAND | SERVICE DE LA CONSOMMATION ET DES AFFAIRES VETERINAIRES (SCAV) | GENÈVE | YES |
| THE NETHERLANDS | LAB DR A VERWEY. SILLIKER NL | ROTTERDAM | YES |
| THE NETHERLANDS | VWA - FOOD AND CONSUMER PRODUCT SAFETY AUTHORITY | AMSTERDAM | YES |
| TURKEY | PRIVATE MSM FOOD CONTROL LABORATORY INC | MERSIN | YES |
| TURKEY | HATAY IL KONTROL LABORATUVARI | HATAY | YES |
| UNITED KINGDOM | SASA | EDINBURGH | YES |
| UNITED KINGDOM | LABORATORY OF THE GOVERNMENT CHEMIST (LGC) | TEDDINGTON | YES |
| UNITED KINGDOM | THE FOOD AND ENVIRONMENT AGENCY (FERA) | YORK | YES |
| UNITED KINGDOM | CONTAMINANTS LABORATORY, EUROFINS LABORATORIES LTD | WOLVERHAMPTON | YES |
| URUGUAY | FARMACOGNOSIA Y PRODUCTOS NATURALES | MONTEVIDEO | YES |

**ANNEX III.A Concentrations and methods used by participants for determining Amitraz, DMPF and DMF.**

The laboratories not listed in the table have reported NA (not analysed) for the three pesticides: Amitraz, DMPF and DMF except for the four not having reported results: 35, 86,135 and 153.

| AMITRAZ, DMPF and DMF | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Amitraz | | DMPF | | DMF | | Solvents | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| | | Concentration (mg/kg) | Recovery % | Concentration (mg/kg) | Recovery % | Concentration (mg/kg) | Recovery % | | | | | | | | | | |
| 002 | 0.01 | **0.023** | 38 | **0.089** | 80 | **0.027** | 78 | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | GC-ECD, LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 004 | 0.01 | **ND** | | **NA** | | **NA** | | AcN | 10 | | DSPE | Matrix matched - Single level | GC-MS/MS | GC-MS/MS | Rec. from validation data | Yes | TCDPP |
| 006 | 0.01 | **0.029** | 103 | **0.046** | 70 | **0.034** | 93 | EtOAc | 10 | Yes | Filter | Matrix matched - Single level | LC-MS/MS | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 008 | 0.01 | **0.018** | 118 | **0.112** | 101 | **NA** | | AcN | 10 | | DSPE | Matrix matched - Single level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 009 | 0.01 | **0.023** | 74 | **0.082** | 62 | **0.030** | 85 | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 012 | 0.002 | **0.022** | 97 | **0.115** | 101 | **0.029** | 110 | AcN | 10 | | | Matrix matched - Multiple level | LC-MS/MS | | Rec. from same batch | Yes | TPP |
| 015 | 0.005 | **0.031** | 79 | **0.044** | 95 | **0.020** | 95 | EtOAc | 10 | Yes | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Carbendazim D4 |
| 016 | 0.01 | **ND** | | **0.075** | 104.2 | **0.025** | 82.8 | AcN | 10 | | DSPE | Pure solvent - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 017 | 0.01 | **0.016** | 70.3 | **0.092** | 92.9 | **0.031** | 92.8 | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | GC-MS/MS | Rec. from same batch | Yes | TPP |
| 018 | 0.01 | **0.020** | 79 | **0.043** | 70 | **0.028** | 78 | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | Yes | Phenanthrene-d10 |
| 019 | 0.01 | **0.024** | 96.3 | **0.061** | 83.5 | **0.028** | 96.9 | EtOAc | 10 | Yes | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 020 | 0.01 | **ND** | | **0.066** | 79 | **0.030** | 83 | AcN | 10 | | | Matrix matched - Multiple level | LC-MS/MS | | Rec. from same batch | | |
| 023 | 0.01 | **ND** | | **0.320** | | **0.025** | | | | | | | | | | | |
| 024 | 0.01 | **ND** | | **0.112** | 93 | **0.044** | 93 | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | | Rec. from validation data | Yes | TCDPP |
| 025 | | **0.035** | 84 | **0.048** | 78 | **0.017** | 92 | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | LC-MS/MS | | Rec. from same batch | | |
| 028 | 0.01 | **0.019** | 82 | **0.040** | 89 | **0.014** | 110 | AcN | 5 | | | Matrix matched - Single level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 029 | 0.01 | **0.025** | 100 | **0.043** | 100 | **0.021** | 100 | EtOAc | 15 | | | Standard addition | LC-MS/MS | LC-MS/MS | Via Standard addition | | |
| 030 | 0.02 | **0.030** | 86.1 | **0.060** | 83.9 | **NA** | | | | | | | | | | | |
| 032 | 0.01 | **0.070** | 43 | **NA** | | **0.029** | 104 | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 034 | 0.01 | **ND** | | **NA** | | **NA** | | EtOAc | 25 | | | | GC-MSD | | Other pesticide | | |
| 036 | 0.01 | **0.031** | 95 | **0.058** | 95 | **NA** | | AcN | 10 | | | Pure solvent - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 038 | 0.01 | **ND** | | **NA** | | **NA** | | | | | | | | | | | |
| 041 | 0.01 | **0.073** | 82 | **0.057** | 84 | **0.041** | 106 | AcN | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | TPP |
| 043 | 0.01 | **0.049** | 47 | **0.030** | | **0.011** | | AcN | 10 | | DSPE | Pure solvent - Multiple level | GC-NPD | GC-MS | Rec. from same batch | | |
| 045 | 0.01 | **0.015** | 120 | **0.035** | 71 | **NA** | | AcN | 10 | Yes | DSPE | Standard addition | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 046 | 0.005 | **0.010** | 30 | **0.114** | 85 | **0.044** | 84 | AcN | 10 | | DSPE | Matrix matched - Multiple level | GC-MSD, LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 047 | 0.005 | **ND** | | **0.200** | 67 | **0.025** | | AcN | 5 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.01 | **ND** | | **NA** | | **0.024** | 85 | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | Yes | TRIS |
| 049 | 0.008 | **0.008** | 112 | **0.085** | 82 | **0.019** | 105 | AcN | 10 | | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from validation data | | |
| 050 | 0.01 | **0.033** | 96 | **0.074** | 81 | **0.029** | 120 | AcN | 10 | | DSPE | Matrix matched - Single level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 051 | 0.01 | **ND** | | **0.316** | | **0.044** | | AcN | 10 | Yes | DSPE | Standard addition | LC-MS/MS | LC-MS/MS | Via Standard addition | Yes | Atrazin D5 |
| 052 | 0.01 | **0.034** | 0 | **0.202** | 0 | **NA** | | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | TPP |
| 053 | 0.01 | **0.031** | 95 | **0.069** | 102 | **0.025** | 98 | AcN | 10 | Yes | DSPE | Matrix matched - Single level | LC-MS/MS | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | 0.04 | **ND** | | **NA** | | **NA** | | Acetone, DCM, Petr Ether | 12 | | | Matrix matched - Single level | GC-NPD | GC-TOF | Other pesticide | | |
| 055 | 0.01 | **0.028** | 77 | **0.068** | 79 | **0.030** | 94 | AcN | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 057 | | **0.040** | 16 | **0.050** | 40 | **0.036** | 116 | MeOH | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from validation data | | |
| 058 | | **NA** | | **0.094** | 76 | **NA** | | AcN | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | | Rec. from same batch | | |
| 060 | 0.01 | **ND** | | **0.126** | 86 | **ND** | | | | | | | | | | | |

**ANNEX III.A Concentrations and methods used by participants for determining Amitraz, DMPF and DMF.**

| AMITRAZ, DMPF and DMF | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Amitraz | | DMPF | | DMF | | Solvents | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| | | Concentration (mg/kg) | Recovery % | Concentration (mg/kg) | Recovery % | Concentration (mg/kg) | Recovery % | | | | | | | | | | |
| 061 | 0.01 | **0.142** | 96.7 | **0.142** | 96.7 | **ND** | | AcN | 10 | Yes | DSPE | Pure solvent - Multiple level | LC-MS/MS | | Rec. from same batch | | |
| 062 | 0.01 | **ND** | | **NA** | | **NA** | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | | |
| 065 | 0.01 | **0.022** | 97 | **0.073** | 92 | **0.040** | 99 | AcN | 10 | | | Standard addition | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Pirimicarb D6 |
| 066 | 0.01 | **NA** | | **0.104** | 171 | **NA** | | AcN | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Desmetryn |
| 067 | 0.01 | **0.066** | 98 | **0.066** | 98 | **NA** | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Via Standard addition | | |
| 068 | 0.01 | **ND** | | **0.151** | 50 | **0.049** | 82 | AcN | 10 | | DSPE | Matrix matched - Multiple level | GC-MS/MS | | Rec. from same batch | Yes | |
| 069 | 0.01 | **0.320** | | **NA** | | **NA** | | Acetone | 100 | | GPC | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | | Yes | Thionazim |
| 070 | 0.01 | **0.033** | 98 | **0.061** | 103 | **0.026** | 96 | AcN | 10 | | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | | | |
| 071 | 0.01 | **0.068** | 61.4 | **NA** | | **NA** | | | 30 | | | Pure solvent - Multiple level | GC-MSD | GC-MS | Rec. from same batch | Yes | Chlormethylanilin |
| 074 | 0.01 | **ND** | | **0.153** | | **NA** | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | | Yes | TPP |
| 079 | 0.01 | **NA** | | **0.035** | 19.8 | **0.057** | 99.2 | MeOH | 10 | Yes | SPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Via Standard addition | Yes | Cyprodinil, Thiabendazol |
| 081 | 0.01 | **ND** | | **0.126** | 95 | **ND** | | AcN | 10 | | DSPE | Matrix matched - Multiple level | Orbitrap | | Rec. from same batch | | |
| 085 | 0.01 | **NA** | | **0.088** | 100 | **0.037** | | AcN, Water | 10 | | DSPE | Matrix matched - Single level | LC-MS/MS | LC-MS/MS | Via Standard addition | Yes | TPP |
| 089 | 0.01 | **ND** | | **NA** | | **NA** | | AcN | 10 | Yes | DSPE | Pure solvent - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | TPP |
| 097 | 0.01 | **0.008** | 90.0 | **0.031** | 82 | **NA** | | EtOAc | 50 | | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 098 | 0.01 | **ND** | | **0.068** | 88 | **ND** | | | | | | | | | | | |
| 099 | 0.008 | **0.020** | 72 | **0.060** | 63 | **ND** | | Acetone, DCM | 50 | | | Pure solvent - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from validation data | Yes | TPP |
| 100 | | **ND** | | **0.111** | 18 | **0.028** | 75 | EtOAc | 20 | Yes | Liquid/liquid partitioning | Pure solvent - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 103 | 0.01 | **ND** | | **NA** | | **NA** | | AcN | 10 | | DSPE | Standard addition | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 107 | | **0.062** | 68.2 | **0.062** | 68.2 | **ND** | | AcN | 10 | | DSPE | Pure solvent - Multiple level | LC-MS/MS | | Rec. from same batch | Yes | TPP |
| 110 | 0.01 | **0.020** | 87 | **0.070** | 90 | **NA** | | AcN | 10 | | DSPE | Pure solvent - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 112 | 0.01 | **0.033** | 82 | **0.072** | | **0.038** | | AcN | 15 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 114 | 0.01 | **ND** | | **0.071** | 84 | **0.033** | 111 | AcN | 10 | Yes | | Matrix matched - Multiple level | LC-MS/MS | | Rec. from same batch | | NA |
| 115 | 0.01 | **ND** | 51.6 | **NA** | | **NA** | | EtOAc | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 117 | 0.01 | **0.099** | 100 | **0.068** | 100 | **0.031** | 150 | AcN | 10 | | | Pure solvent - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 118 | 0.005 | **ND** | | **0.054** | 79 | **0.025** | 75 | AcN | 10 | | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 122 | 0.01 | **ND** | | **NA** | | **NA** | | EtOAc | 5 | | GPC | Matrix matched - Multiple level | GC-MSD | | Rec. from same batch | Yes | Ditalimphos |
| 129 | 0.01 | **ND** | | **0.243** | 100 | **0.023** | 100 | | | | | | | | | | |
| 133 | 0.01 | **0.072** | 80 | **0.072** | 80 | **ND** | | AcN | 10 | Yes | DSPE | Pure solvent - Multiple level | LC-MS/MS | | Rec. from same batch | | |
| 136 | 0.01 | **ND** | | **NA** | | **NA** | | | | | | | | | | | |
| 138 | | **ND** | | **NA** | | **NA** | | AcN | 10 | | DSPE | Matrix matched - Multiple level | GC-MSD | GC-MS | Via Standard addition | Yes | Anthacene |
| 139 | 0.01 | **ND** | | **0.048** | 85 | **0.026** | 85 | | | | | | | | | | |
| 145 | 0.01 | **ND** | | **NA** | | **NA** | | | | | | | | | | | |
| 148 | 0.01 | **0.012** | 104.6 | **0.071** | 112.6 | **0.032** | 105.8 | EtOAc | 10 | Yes | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Oxfendazole |
| 148 | 0.01 | **NA** | | **NA** | | **NA** | | EtOAc | 10 | Yes | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Oxfendazole |
| 148 | 0.01 | **NA** | | **NA** | | **NA** | | EtOAc | 10 | Yes | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Oxfendazole |
| 151 | 0.01 | **ND** | | **NA** | | **NA** | | EtOAc | 15 | | | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | Yes | TPP |

**ANNEX III.B Concentrations and methods used by participants for determining Cadusafos.**

In this ANNEX the concentrations and methods given by the participants that analysed Cadusafos are presented, the missing laboratories reported NA (not analyzed) for this pesticide, except for laboratories 35, 86,135 and 153 that did not report results.

| CADUSAFOS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 003 | 0.010 | D | **0.012** | 84 | | AcN | 10 | Yes | | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | Yes | TPP |
| 004 | 0.010 | D | **0.038** | 95 | | AcN | 10 | | DSPE | Matrix matched - Single level | GC-MS/MS | GC-MS/MS | Rec. from same batch | Yes | TCDPP |
| 005 | 0.020 | ND | | | | | | | | | | | | | |
| 006 | 0.006 | D | **0.014** | 107 | | EtOAc | 10 | Yes | Filter | Matrix matched - Single level | GC-MS/MS | | Rec. from same batch | Yes | Pirimicarb-D6 |
| 007 | 0.010 | D | **0.012** | 88 | | AcN | 25 | Yes | Freezing out | Matrix matched - Multiple level | GC-MS/MS | GC-MS/MS | Rec. from same batch | Yes | HCH-r-D6 |
| 008 | 0.010 | D | **0.023** | 60 | Yes | AcN | 10 | | DSPE | Matrix matched - Multiple level | GC-IDT | | Rec. from same batch | Yes | TPP |
| 009 | 0.006 | D | **0.024** | 104 | | Acetone, DCM | 15 | | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 011 | 0.010 | D | **0.014** | 93 | | Acetone | 10 | | SPE | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | Yes | TPP |
| 012 | 0.002 | D | **0.019** | 101 | | AcN | 10 | | | Matrix matched - Multiple level | LC-MS/MS | | Rec. from same batch | Yes | TPP |
| 015 | 0.005 | D | **0.016** | 92 | | EtOAc | | Yes | SPE | Matrix matched - Multiple level | GC-MS/MS | GC-MS/MS | Rec. from same batch | Yes | Trifluralin D14 |
| 016 | 0.006 | D | **0.016** | 83.0 | | AcN | 10 | | DSPE | Pure solvent - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 017 | 0.005 | D | **0.020** | 96.4 | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | GC-FPD | GC-MS/MS | Rec. from same batch | Yes | TPP |
| 018 | 0.006 | D | **0.018** | 111 | | AcN | 10 | Yes | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 019 | 0.005 | D | **0.010** | 69.5 | | EtOAc | 10 | Yes | | Matrix matched - Single level | GC-MS/MS | GC-MS/MS | Rec. from same batch | | |
| 020 | 0.010 | D | **0.017** | 82 | | AcN | 10 | | DSPE | Matrix matched - Multiple level | GC-MSD | | Rec. from same batch | | |
| 022 | 0.020 | ND | | | | | | | | | | | | | |
| 023 | 0.010 | D | **0.017** | | | AcN | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | | | |
| 024 | 0.006 | D | **0.019** | 97 | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | | Rec. from validation data | Yes | TDCPP |
| 025 | | D | **0.016** | 85 | | Acetone, DCM, Petr Ether | 15 | | GPC | Matrix matched - Multiple level | GC-MSD | GC-MS/MS | Rec. from same batch | | |
| 026 | 0.010 | D | **0.010** | 70 | Yes | AcN AcN AcN | 10 | | DSPE | Pure solvent - Single level | GC-NPD UV | GC-MS | Rec. from validation data | Yes | TPP |
| 028 | 0.006 | D | **16.500** | 76 | | EtOAc | 10 | | SPE | Matrix matched - Multiple level | GC-MSD | GC-TOF | Rec. from same batch | Yes | |
| 029 | 0.006 | D | **0.009** | 100 | Yes | EtOAc | 15 | | | Standard addition | LC-MS/MS | LC-MS/MS | Via Standard addition | | |
| 030 | 0.005 | D | **0.010** | 81.8 | | EtOAc | 10 | | | Matrix matched - Multiple level | GC-IDT | | Rec. from same batch | Yes | TPP |
| 032 | 0.010 | D | **0.018** | 93 | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 034 | 0.010 | ND | | | | | | | | | | | | | |
| 036 | 0.006 | D | **0.015** | 88 | | Acetone, EtOAc | 5 | | | Matrix matched - Multiple level | GC-MS/MS | GC-MS/MS | Rec. from same batch | Yes | TPP |
| 038 | 0.010 | ND | | | | | | | | | | | | | |
| 040 | 0.020 | D | **0.014** | 129 | | Acetone, DCM, Petr Ether | 15 | | | Matrix matched - Multiple level | GC-NPD | Two columns | Rec. from same batch | | |
| 041 | 0.010 | D | **0.021** | 111 | | AcN | 10 | | DSPE | Matrix matched - Multiple level | GC-MSD LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | TPP |
| 042 | 0.010 | D | **0.015** | 110 | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 043 | 0.005 | D | **0.017** | 87 | | AcN | 10 | | DSPE | Pure solvent - Multiple level | GC-FPD | GC-MS | Rec. from same batch | | |
| 045 | 0.005 | D | **0.017** | 98 | | AcN | 10 | Yes | DSPE | Standard addition | LC-MS/MS | GC-MS/MS | Rec. from validation data | | |
| 046 | 0.01 | D | **0.033** | 88 | | AcN | 10 | | DSPE | Matrix matched - Multiple level | GC-MSD LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 047 | 0.005 | D | **0.020** | 97 | | AcN | 5 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | GC-MS | Rec. from validation data | Yes | Linuron-D6 |
| 048 | 0.008 | D | **0.018** | 105 | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | Yes | TRIS |
| 049 | 0.006 | D | **0.023** | 108 | | AcN | 10 | | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from validation data | | |
| 050 | 0.006 | D | **0.018** | 90 | | AcN | 10 | | DSPE | Matrix matched - Single level | GC-MSD | GC-MS/MS | Rec. from same batch | | |
| 051 | 0.01 | D | **0.028** | | Yes | AcN | 10 | Yes | DSPE | Standard addition | GC-MSD | GC-MS | Via Standard addition | | |
| 052 | 0.010 | D | **0.020** | 96.9 | | AcN | 10 | Yes | SPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | TPP |
| 053 | 0.006 | D | **0.019** | 98 | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-Q-TOF | Rec. from same batch | Yes | TPP |
| 054 | 0.010 | D | **0.012** | 51.8 | | Acetone, DCM | 12 | | | Matrix matched - Single level | GC-NPD | GC-TOF | Rec. from same batch | | |
| 055 | 0.006 | D | **0.014** | 94 | | AcN | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |

**ANNEX III.B Concentrations and methods used by participants for determining Cadusafos.**

| CADUSAFOS | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab. Code | Reporting Level (mg/kg) | Scope of Method | Official Concentration (mg/kg) | Recovery % | Recovery Correction in Routine Work? | Solvent | Sample Weight (g) | pH Adjustement | Clean Up | Calibration | Detector | Confirmation Method | Recovery Approach | ISTD Used | ISTD Details |
| 057 | | D | **0.020** | 96 | Yes | MeOH | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from validation data | | |
| 058 | 0.010 | D | **0.020** | 82 | | AcN | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | | Rec. from same batch | | |
| 060 | 0.006 | D | **0.019** | 95 | | AcN | 15 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Carbaryl-C13 |
| 061 | 0.006 | D | **0.019** | 77.7 | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | GC-FPD | GC-MS | Rec. from same batch | Yes | TCDPP |
| 062 | 0.006 | D | **0.016** | 85 | Yes | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | | Via Standard addition | | |
| 065 | 0.006 | D | **0.018** | 101 | | AcN | 10 | | | Standard addition | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Pirimicarb D6 |
| 066 | 0.010 | D | **0.023** | 111 | | AcN | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Desmetryn |
| 067 | 0.006 | D | **0.021** | 98 | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | GC-MSD | GC-MS | Via Standard addition | | |
| 068 | 0.006 | D | **0.011** | 67 | | MeOH | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | LC-MS/MS | | Rec. from same batch | | |
| 069 | 0.010 | D | **0.010** | | | Acetone | 100 | | GPC | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | | Yes | Thionazim |
| 070 | 0.006 | D | **0.017** | 91 | | MeOH | 10 | | Liquid/liquid partitioning | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 071 | 0.010 | D | **0.023** | 103.7 | | Acetone, EtOAc, Cyclohexane | 25 | | GPC | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | | |
| 072 | 0.010 | D | **0.017** | 90 | | Acetone, DCM | 10 | Yes | | Matrix matched - Multiple level | GC-FPD | GC-MS | Rec. from same batch | | |
| 078 | 0.010 | ND | | | | | | | | | | | | | |
| 079 | 0.006 | D | **0.025** | 68.6 | Yes | MeOH | 10 | Yes | SPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Via Standard addition | Yes | Cyprodinil , Thiabendazol |
| 081 | 0.010 | D | **0.016** | 120 | | AcN | 10 | | DSPE | Matrix matched - Multiple level | Orbitrap | | Rec. from same batch | | |
| 085 | 0.010 | D | **0.018** | 99 | | AcN | 10 | Yes | DSPE | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Via Standard addition | Yes | TPP |
| 089 | 0.010 | D | **0.015** | 89.8 | | AcN | 10 | Yes | DSPE | Pure solvent - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | TPP |
| 097 | 0.010 | D | **0.015** | 96 | | EtOAc | 50 | | GPC | Matrix matched - Multiple level | GC-FPD | GC-MS | Rec. from same batch | | |
| 098 | 0.010 | D | **0.015** | 92 | | AcN | 10 | | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 099 | 0.010 | D | **0.030** | 82 | | AcN | 10 | | SPE | Pure solvent - Multiple level | GC-MSD | GC-MS | Rec. from validation data | Yes | TPP |
| 100 | | ND | | | | | | | | | | | | | |
| 101 | 0.020 | ND | | | | | | | | | | | | | |
| 110 | 0.010 | D | **0.024** | 82 | | AcN | 10 | | DSPE | Pure solvent - Multiple level | GC-FPD | Two columns | Rec. from same batch | | |
| 112 | 0.01 | ND | | | | | | | | | | | | | |
| 113 | 0.010 | D | **0.014** | 102 | | AcN | 15 | Yes | DSPE | Matrix matched - Single level | GC-MSD | GC-MS | Via Standard addition | Yes | Mirex, TDCCP |
| 114 | 0.010 | D | **0.014** | 85 | | EtOAc | 30 | Yes | GPC | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | Yes | Tetraphenylethylene |
| 115 | 0.010 | D | **<0.010** | 102 | | EtOAc | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | | |
| 116 | 20 | D | **0.041** | 89.7 | | Acetone, DCM | 15 | | | Matrix matched - Multiple level | GC-MS/MS | GC-MS/MS | Rec. from same batch | Yes | TPP |
| 117 | 0.006 | ND | | | | | | | | | | | | | |
| 118 | 0.010 | D | **0.019** | 92.1 | | AcN | 10 | | DSPE | Matrix matched - Single level | GC-ECD/NPD | GC-MS | Rec. from same batch | | |
| 120 | 0.010 | D | **0.024** | 125 | | EtOAc, DCM | 25 | | | Pure solvent - Multiple level | GC-FPD | GC-MS | Rec. from same batch | Yes | TPP |
| 121 | 0.010 | D | **0.018** | 67 | | AcN | 15 | | DSPE | Pure solvent - Multiple level | GC-NPD | Two columns | Rec. from same batch | Yes | TDCP |
| 122 | 0.005 | D | **0.014** | 101 | | EtOAc | 10 | | GPC | Matrix matched - Multiple level | GC-MSD | | Rec. from same batch | Yes | Ditalimphos |
| 126 | 0.010 | D | **0.013** | 86 | | DCM | 10 | | DSPE | Pure solvent - Single level | GC-NPD | GC-MS | Rec. from validation data | Yes | TPP |
| 128 | 0.010 | D | **0.014** | 117 | | EtOAc | 15 | | | Matrix matched - Multiple level | GC-MS/MS (Ion Trap) | GCMS/MS (Ion Trap) | Rec. from same batch | | |
| 133 | 0.006 | D | **0.012** | 85 | | AcN | 10 | Yes | DSPE | Pure solvent - Multiple level | GC-PFPD | | Rec. from same batch | | |
| 134 | 0.002 | D | **0.018** | 100 | | AcN | 10 | | DSPE | Matrix matched - Multiple level | LC-MS/MS | | Rec. from same batch | | |
| 136 | 0.010 | D | **0.011** | 83 | | DCM | 15 | | | Matrix matched - Multiple level | LC-MS/MS | LC-MS | Rec. from validation data | | |
| 138 | | ND | | | | | | | | | | | | | |
| 144 | 0.002 | D | **0.018** | 105 | | AcN | 10 | Yes | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | TPP |
| 145 | 0.006 | D | **0.030** | 118 | | AcN | 10 | | DSPE | Matrix matched - Multiple level | GC-MSD | GC-MS | Rec. from same batch | yes, | TPP |
| 146 | 0.010 | D | **0.010** | 94 | | Acetone | 20 | | Liquid/liquid partitioning | Matrix matched - Multiple level | GC-NPD | Two columns | Rec. from same batch | | |
| 148 | 0.010 | D | **0.028** | 60.2 | | MeOH, Water | 10 | | | Matrix matched - Multiple level | LC-MS/MS | LC-MS/MS | Rec. from same batch | Yes | Oxfendazole |