CRL-PROFICIENCY TEST-FV-10, 2008

Pesticide Residues in Carrot Homogenate

Final Report

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QCG: Quality Control Group
AG: Advisory Group

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CRL-EUROPEAN COMMISSION PROFICIENCY TEST 10
FOR THE DETERMININATION OF PESTICIDES IN FRUIT AND VEGETABLES USING MULTIRESIDUE METHODS
2008

According to Article 28 of Regulation 396/2005/EC of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin[1], all laboratories analysing samples for the official controls on pesticide residues shall participate in the European Community Proficiency Tests (EUPTs) for pesticide residues organised by the Commission. 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 Commission as well as other Member States.

Regulation (EC) No 882/2004[2] lays down the general tasks, duties and requirements for Community Reference Laboratories (CRLs) for Food, Feed and Animal Health. Among these tasks is the provision of independently organised comparative tests. The European Proficiency Test 10 has been organised by the CRL in Fruit and Vegetables at the University of Almería, Spain[3]. The Proficiency Test is carried out annually on the same basis of previous EUPTs.

At the time of preparation of this EUPT-FV-10, Regulation 396/2005 was not fully in force, so participation in this European Proficiency Test 10 was mandatory only for all National Reference Laboratories, as well as being open to all other official EU laboratories involved in the determination of pesticide residues in fruit and vegetables for the EU-coordinated monitoring programme or for their own national programme. Additionally, laboratories from Iceland, Norway, Switzerland, Egypt and Uruguay, who had been invited to take part in the previous test, again participated.

This report will be presented to the European Commission Standing Committee for Animal Health and the Food Chain.

[1] 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.

[2] 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

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

1. INTRODUCTION

One hundred and thirty two laboratories agreed to participate in the European Commission Proficiency Test 10.

This proficiency test was performed in 2008 using carrot homogenate. The carrots were grown in Almería, in the south of Spain, and were treated post-harvest, using commercial formulations and analytical standards - both were applied using a microspray technique. Nineteen pesticides were used for the treatments (nine as diluted commercial formulations and ten as standards dissolved in solvent). Eighteen pesticides were to be assessed in total as two of those used were part of the same residue definition: methiocarb and methiocarb sulfone, and therefore expressed as one single residue, methiocarb sum. Participating laboratories were also provided with a 'blank' carrot homogenate as well as the treated test material.

The test materials, 300 g of carrot homogenate containing residues of pesticides, together with 300 g of 'blank' carrot homogenate, were shipped to participants on the 14th and 15th of April 2008. The deadline for submission of results to the Organiser was the 14th May 2008. The participants were provided with a list of ninety possible 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 concentrations for each of the pesticides that they detected. This list of possible pesticides also contained the Minimum Required Reporting Level (MRRL) for each pesticide fixed at 0.01 mg/Kg.

Participants were asked to analyse the blank test material and report residues of any of the pesticides they found which were included in the list. This 'blank' material was intended to be used for 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 eighteen pesticide residues present. A fit-for-purpose relative target standard deviation (FFP RSD) of 25% was chosen to calculate the target standard deviations (σ) as well as the z-scores for each pesticide.

For the assessment of the overall laboratory performance, the Sum of Weighted z-Scores (SWZ) as used in the last Proficiency Test, has been applied with some additional criteria. Only laboratories that detected at least 90% of the pesticides present in the test material, reported no false positives and sought all the pesticides marked with an asterisk on the Pesticide List, have been considered to have demonstrated 'sufficient scope' and have therefore been classified in Category A. Within this category, the laboratories have also been sub-classified as 'good', 'satisfactory' or 'unsatisfactory'. All the other laboratories have been classified in 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.

Laboratories that did not report results have not been classified into any category and are indicated in Annex 2.
Classical procedures for summing z-scores (SSZ and RSZ) were employed using the individual z-scores of the participating laboratories.

As was the case last year, a ring test was organised in order to estimate the contribution of participants' calibration solutions to the overall accuracy of their reported test results.
Laboratories that requested to participate when applying for the proficiency test, received a vial containing a solution of the pesticides that were present in the treated carrot test material after the deadline for submitting the PT results had passed. One hundred and three laboratories agreed to participate in this additional ring test of standard solutions, and eighty three reported results. Participants and their results are presented in Annex 3.

2. TEST MATERIALS

2.1 Analytical methods

The two analytical methods, described briefly below, were used by the Organiser for the homogeneity and stability tests performed by the University of Almeria. These were:

- GC method [1, 2]: liquid-liquid partitioning with buffered acetonitrile and $MgSO_4$ anh. followed by dispersive solid phase extraction with PSA and $MgSO_4$ anh. Evaporation and re-dissolution with cylclohexane and determination by GC-MS/MS.
- LC method [3]: liquid-liquid partitioning with buffered acetonitrile and $MgSO_4$ anh. followed by dispersive solid phase extraction with PSA and $MgSO_4$ anh. Evaporation and re -dissolution in acetonitrile/water (1:9) and determination by LC-MS/MS.

Acetamiprid, boscalid, hexythiazox, methamidophos, methiocarb, methiocarb sulfone, methomyl, oxamyl, quinoxyfen and triadimenol were determined using the LC method described above. All other pesticides (chlorpyrifos-methyl, diazinon, endosulfan sulfate, isofenphos-methyl, kresoxim-methyl, malathion, pendimethalin, phosmet and vinclozolin), were analysed using the GC method describe above. For confirmation purposes, MS/MS spectra were used.

2.2 Preparation of 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 10. One hundred and twenty kilograms of carrots had their stems removed and were treated; some with post-harvest commercial pesticide formulations dissolved in water (diazinon, acetamiprid, hexythiazox, malathion, methomyl, oxamyl, quinoxyfen, triadimenol and vinclozolin), and others with analytical standards dissolved in solvent (methiocarb, methiocarb sulfone, kresoxim-methyl, pendimethalin, chlorpyrifos-methyl, phosmet, boscalid, endosulfan sulfate, metamidophos and isofenphos-methyl). Both the formulations and the standard solutions were applied to the carrots using a microspray. After all the pesticides had been applied,a portion of the treated carrot 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 carrots 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 carrots 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.

Traces of metalaxyl (0.006 mg/Kg) were detected by the Organiser after the treatment with the commercial pesticide formulations. Nevertheless, the test material was sent to participants as this level was below the MRRL fixed by the Organiser.

2.3 Preparation of 'blank' test material

The carrots 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' carrots test material. A single standard mixture was used, for both GC and LC calibrations.

The statistical evaluation was performed according to the International Harmonized Protocol published by IUPAC, ISO and AOAC [4]. The individual residue data from the homogeneity tests are given in Appendix 1. The results of the statistical analyses are given in Tables 2.1. The acceptance criteria for the test material to be sufficiently homogenous for the proficiency test were that $S_s/\sigma < 0.3$, where S_s is the between bottle sampling standard deviation and σ = RSD (25%) multiplied by the analytical sampling mean for all pesticides.

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

	Acetamiprid	Boscalid	Chlorpyrifos-methyl	Diazinon	Endosulfan Sum	Hexythiazox	Isofenphos-methyl	Kresoxim-methyl	Malathion Sum
Mean Conc. (mg/Kg)	0.421	0.240	0.079	0.604	0.106	0.510	0.501	0.049	0.769
S_s/σ	0.029	0.020	0.075	0.027	0.111	0.017	0.053	0.267	0.018
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

S_s: Between Sampling Standard Deviation

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

	Methamidophos	Methiocarb Sum	Methomyl Sum	Oxamyl	Pendimethalin	Phosmet	Quinoxyfen	Triadimenol Sum	Vinclozolin
Mean Conc. (mg/Kg)	0.344	0.159	0.737	0.324	0.076	0.233	0.300	0.333	1.03
S_s/σ	0.020	0.077	0.023	0.040	0.144	0.059	0.057	0.032	0.047
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

S_s: Between Sampling Standard Deviation

2.5 Stability tests

The two analytical methods described briefly above (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 14th April 2008.
- Day 2: shortly after the deadline for reporting results, on 16th May 2008.

The individual results are given in Tables 2.2. In general, these tests did not show any significant decrease in the levels of the pesticides. This demonstrates that, for the duration of the proficiency test and provided that the storage conditions prescribed were followed, the time elapsed until analysis was performed by the participants would not have influenced their results.

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

	Acetamiprid (mg/Kg)	Boscalid (mg/Kg)	Chlorpyrifos-methyl (mg/Kg)	Diazinon (mg/Kg)	Endosulfan Sum (mg/Kg)	Hexythiazox (mg/Kg)	Isofenphos-methyl (mg/Kg)	Kresoxim-methyl (mg/Kg)	Malathion Sum (mg/Kg)
Day 1 (1st sample)	0.425	0.24	0.081	0.608	0.100	0.515	0.507	0.050	0.780
Day 1 (2nd sample)	0.422	0.24	0.080	0.605	0.112	0.510	0.503	0.054	0.779
Mean 1	0.424	0.24	0.081	0.607	0.106	0.513	0.505	0.052	0.780
Day 2 (1st sample)	0.420	0.25	0.078	0.600	0.108	0.498	0.500	0.053	0.772
Day 2 (2nd sample)	0.415	0.23	0.077	0.609	0.105	0.490	0.495	0.052	0.756
Mean 2	0.418	0.24	0.078	0.605	0.107	0.494	0.498	0.053	0.764
(M1-M2)/M1	0.014	-0.004	0.037	0.003	-0.005	0.036	0.015	-0.010	0.020
%	1.42	-0.42	3.73	0.33	-0.47	3.61	1.49	-0.96	1.99

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

	Methamidophos (mg/Kg)	Methiocarb Sum (mg/Kg)	Methomyl Sum (mg/Kg)	Oxamyl (mg/Kg)	Pendimethalin (mg/Kg)	Phosmet (mg/Kg)	Quinoxyfen (mg/Kg)	Triadimenol Sum (mg/Kg)	Vinclozolin (mg/Kg)
Day 1 (1st sample)	0.350	0.164	0.742	0.332	0.071	0.165	0.305	0.340	1.00
Day 1 (2nd sample)	0.348	0.162	0.740	0.330	0.075	0.166	0.290	0.342	1.06
Mean 1	0.349	0.163	0.741	0.331	0.073	0.166	0.298	0.341	1.03
Day 2 (1st sample)	0.339	0.160	0.729	0.329	0.072	0.164	0.295	0.328	0.994
Day 2 (2nd sample)	0.335	0.155	0.730	0.325	0.076	0.163	0.298	0.330	1.03
Mean 2	0.337	0.158	0.730	0.327	0.074	0.164	0.297	0.33	1.01
(M1-M2)/M1	0.034	0.034	0.016	0.012	-0.014	0.012	0.003	0.035	0.017
%	3.44	3.37	1.55	1.21	-1.37	1.21	0.34	3.52	1.75

2.6 Distribution of test material and protocol to participants

One bottle of treated test material and one bottle of 'blank' material were shipped to each participant in boxes containing dry ice. The samples were sent on the 14th and 15th April, 2008.

Before shipment of the samples, 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 CRL-FV web page as the Protocol, in a restricted area constructed especially for this Proficiency Test. The Application Form was available on the open site of the CRL-FV. When applying for the test, each laboratory decided their own password, which was required in order to enter the restricted zone where the Protocol and Forms 1, 2 and 3 could be accessed on-line. This information was made accessible when laboratories received an e-mail from the Organiser confirming their acceptance to be able to participate in the test: this ensured that confidentiality was maintained throughout the duration of Proficiency Test 10. The Pesticide List, together with the Minimum Required Reporting Level (MRRL) established by the Organiser, was uploaded on the CRL-FV open web site to allow laboratories sufficient time to purchase standards and validate their methods.

3. STATISTICAL METHODS

3.1 Background

3.1.1 Proficiency Tests 6-9

In these recent proficiency tests, the median has been used to obtain the assigned values for each pesticide. This was then used to calculate the z-scores. The target standard deviations (σ) were calculated using the FFP (fit-for-purpose) RSD value, which was assigned as 25%. Furthermore, the Qn RSDs were calculated for comparison with the FFP RSD and used, only in EUPT 6, to calculate the z-scores.

For EUPT6, in order to achieve a new overall classification of laboratories a new formula as agreed by the Advisory Group and DG SANCO was used; the Weighted Sum of z-Scores. This new approach has been carried forward from EUPT 6 to the present EUPT, and used as the basis for classifying the labs into two categories, A and B. To be classified in Category A, sufficient scope had to be demonstrated, which meant that results for at least 90% of the pesticides present in the test material including all the pesticides marked with asterisk in the target Pesticide List had to be sought for. Additionally, no false positive results must be reported.

The Sum of Weighted z-Scores (SWZ) where each z-score is multiplied by a weighting factor (see 3.6.1) was calculated for those laboratories classified in Category A.

The classical summed z-scores, RSZ and SSZ, were also calculated.

3.1.2 Proficiency Test 10

In this proficiency test, the median has also been used as the assigned (true) value, together with a FFP RSD of 25%, as well as the SWZ for those laboratories classified in Category A. Moreover, the Qn RSD has also been reported for comparison.

This year, to encourage laboratories to expand their scope, it was mandatory for laboratories to look for all the pesticides marked with an asterisk in the target Pesticide List (41 out of 90) and report results for those that were subsequently present in the test material (10 out of 18). This was, therefore, new in addition to the requirement of reporting at least 90% of the pesticides present in the sample, as well as reporting no false positives. If laboratories did not meet these criteria, they have been classified in Category B. A sub-division based on individual z-scores within Category A was maintained – those being 'good', 'satisfactory' or 'unsatisfactory'.

3.2 False positives and negatives

3.2.1 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 0.01 mg/Kg 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 in Category B.

3.2.2 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.

3.3 Estimation of the assigned values

The assigned values 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.

3.4 Fixed target standard deviations

Based on experience from previous EU proficiency tests and recommendations by the Advisory Group, a fixed relative standard deviation (FFP RSD) of 25 % was chosen. 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, and is independent of the residue level. The target standard deviation (σ) for each individual pesticide was calculated by multiplying this FFP RSD by the assigned value.

3.5 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, or the MRRL 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 (= 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', or '-5'.
- No calculations of z-scores have been performed for false positive results.
- For false negative results, the MRRL 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.

3.6 Combined z-Scores

In order to evaluate each laboratory's overall performance, and to take into account all the results reported, the 'Sum of Weighted z-Scores' - as introduced in EUPT 6 - has been used. This year the Scientific Committee, considered a change in the wording of this formula name, from the 'Weighted Sum of z-Scores' (WSZ) to the 'Sum of Weighted z-Scores' (SWZ).

The re-scaled sum of z-scores (RSZ) and the sum of squared z-scores (SSZ) were also calculated.

3.6.1 Sum of Weighted z-Scores

This overall assessment was only applied to labs with sufficient scope (those in Category A), i.e. those labs that have reported 90% or more of the total number of pesticides present in the test material, reported no false positives, and detected all the pesticides in the test material marked with an asterisk in the target Pesticide List. The weighting factor ω is defined as follows:

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

Therefore, the 'Sum of Weighted z-Scores' $|z|$ formula is:

$$\text{'Sum of Weighted z-Scores' (SWZ)} \quad |z| = \frac{\sum_{i=1}^{n} |Z_i| \omega(Z_i)}{n}$$

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 reported results (n) by each laboratory.

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

$\|SWZ\| \leq 2$	Good
$2 < \|SWZ\| \leq 3$	Satisfactory
$\|SWZ\| > 3$	Unsatisfactory

In this way, a simple, single combined value is produced, that should encourage laboratories to not only improve the accuracy of their results, but also to analyse a greater number of pesticides.

This SWZ-evaluation has not been applied to those laboratories with insufficient scope, i.e. those in Category B, which is for those laboratories reporting less than 90% of the pesticides present in the test material, reporting any false positives and/or not having sought all the pesticides marked with an asterisk in the target pesticide list.

3.6.2 RSZ

The RSZ was calculated for all z-score values for each laboratory according to:

$$RSZ = \Sigma |z| / (n)^{1/2}$$

where n is the number of z-scores.

The RSZ gives an averaged score for all pesticides analysed and indicates if a laboratory has a consistent bias in its results.

3.6.3 SSZ

The SSZ is the sum of all squared z-scores. It was calculated for all z-scores for each laboratory according to:

$$SSZ = (\text{z-score}_1)^2 + (\text{z-score}_2)^2 + ...+ (\text{z-score}_n)^2$$

where n is the number of z-scores.

4. RESULTS

4.1 Summary of reported results

One hundred and thirty-two laboratories agreed to participate in this proficiency test. However, three 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 laboratories in Egypt and Uruguay have not been used. Nineteen pesticides were used to treat the sample, although eighteen have been used to evaluate the laboratories performance.

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 Not Analysed Results	No. of False Negatives Results	% of Reported Results *
Acetamiprid	85	39	5	66
Boscalid	74	55	0	57
Chlorpyrifos-methyl	126	2	1	98
Diazinon	125	3	1	97
Endosulfan Sum	110	9	10	85
Hexythiazox	80	48	1	62
Isofenphos-methyl	69	57	3	53
Kresoxim-methyl	113	16	0	88
Malathion Sum	124	3	2	96
Methamidophos	103	18	8	80
Methiocarb Sum	65	63	1	51
Methomyl Sum	88	38	3	68
Oxamyl	84	44	1	65
Pendimethalin	96	30	3	74
Phosmet	95	30	4	74
Quinoxyfen	95	34	0	74
Triadimenol Sum	103	24	2	80
Vinclozolin	124	5	0	96

* The % of Reported Results has been calculated relative to the total number of laboratories submitting results (129 including results from Egypt and Uruguay for information purposes only).

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 8. For an explanation of the symbols used in these Appendixes, see Annex 1.

4.1.1 False positives

Eight 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 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 in 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)	RL (mg/Kg)	MRRL (mg/Kg)
EUPT-FV-10-Lab-001	Azinphos-methyl	0.050	0.01	0.01
	Monocrotophos	0.011*	0.02	0.01
EUPT-FV-10-Lab-018	Azinphos-methyl	1.71	0.01	0.01
	Monocrotophos	0.465	0.01	0.01
EUPT-FV-10-Lab-024	Triadimefon	0.137	0.01	0.01
EUPT-FV-10-Lab-032	3-hydroxy-carbofuran	0.400	0.01	0.01
EUPT-FV-10-Lab-037	Iprodione	0.120	0.002	0.01
EUPT-FV-10-Lab-082	Phosalone	0.230	0.01	0.01
EUPT-FV-10-Lab-098	Oxydemeton-methyl	0.105	0.01	0.01
EUPT-FV-10-Lab-113	Iprodione	0.075	0.01	0.01
	Thiabendazole	0.027	0.01	0.01

** Residue level reported below the RL of the laboratory – this lab should have taken more care in reporting their results - it was still considered to be a false positive as it was above the MRRL.*

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.

Traces of metalaxyl were detected by the Organiser in the treated test material. This low residue level was assumed to have arisen from contamination of one, or more, of the commercial formulations used to treat the carrots. Results for this pesticide were reported by 14 laboratories, but because they were below the MRRL stipulated in the Pesticide List, the EUPT-FV-10 Committee decided not to include them in the assessment.

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 summarizes 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 EUPT-FV-10-	Acetamiprid	Boscalid	Chlorpyrifos-methyl	Diazinon	Endosulfan Sum	Hexythiazox	Isofenphos-methyl	Kresoxim-methyl	Malathion Sum	Methamidophos	Methiocarb Sum	Methomyl Sum	Oxamyl	Pendimethalin	Phosmet	Quinoxyfen	Triadimenol Sum	Vinclozolin
1					ND													
6										ND								
14														ND				
24					ND												ND	
25														ND				
29										ND								
30					ND													
34	ND																	
37										ND		ND						
38												ND						
41										ND								
44										ND								
46															ND			
55					ND													
58	ND																	
61										ND				ND	ND			
65													ND					
76					ND													
82					ND										ND			
85	ND																	
86	ND										ND						ND	
87					ND													
88							ND											
91					ND													
93			ND															
95	ND					ND												
100					ND													
101										ND								
103				ND														
112									ND									
116							ND											
119					ND		ND		ND									
120																		
125												ND						
129										ND								
132															ND			

4.1.3 Distribution of data

The distributions of the residue levels of the eighteen pesticides reported by the laboratories have been plotted as histograms after removing results that were distant from the main population (values that were greater than 10 times the median results).

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 distant from the median, i.e. outliers. The assigned values for all 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 (%)
Acetamiprid	0.01	0.419	25	18
Boscalid	0.01	0.238	25	22
* Chlorpyrifos-methyl	0.01	0.078	25	26
* Diazinon	0.01	0.603	25	24
* Endosulfan Sum	0.01	0.102	25	29
Hexythiazox	0.01	0.509	25	29
Isofenphos-methyl	0.01	0.499	25	17
Kresoxim-methyl	0.01	0.050	25	22
* Malathion Sum	0.01	0.692	25	32
* Metamidophos	0.01	0.342	25	37
* Methiocarb Sum	0.01	0.157	25	31
* Methomyl Sum	0.01	0.739	25	22
* Oxamyl	0.01	0.322	25	19
Pendimethalin	0.01	0.074	25	21
Phosmet	0.01	0.236	25	28
Quinoxyfen	0.01	0.298	25	23
* Triadimenol Sum	0.01	0.331	25	27
* Vinclozolin	0.01	1.04	25	24

* Pesticides marked with an asterisk had to be sought by laboratories in order to be considered for classification in Category A.

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. In Table 4.5, a summary of the z-scores is presented.

Table 4.5 Classification of z-scores for the pesticides reported

Pesticides	Acceptable (%)	Questionable (%)	Unacceptable (%)
Acetamiprid	92	1	7
Boscalid	96	3	1
* Chlorpyrifos-methyl	94	3	3
* Diazinon	93	5	2
* Endosulfan Sum	79	7	14
Hexythiazox	86	10	4
Isofenphos-methyl	90	3	7
Kresoxim-methyl	96	4	0
* Malathion Sum	81	15	4
* Metamidophos	77	11	12
* Methiocarb Sum	80	12	8
* Methomyl Sum	92	2	5
* Oxamyl	92	4	5
Pendimethalin	93	4	3
Phosmet	91	5	4
Quinoxyfen	93	6	1
* Triadimenol Sum	90	2	9
* Vinclozolin	93	7	0

* Pesticides marked with an asterisk had to be sought by laboratories in order to be considered for classification in Category A.

z-Scores for false negative results have been calculated using the MRRL value reported in the 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 to be important to clarify the Scientific Committee decisions on three of the eighteen pesticide evaluations performed in this test. They are as follows:

- *Endosulfan Sum*: the sample was treated with endosulfan sulfate. Some laboratories converted the concentration found correctly to endosulfan sum, but others did not. In

order to assess the results for this pesticide fairly, the scientific committee decided to calculate an endosulfan sum theoretical median from the endosulfan sulfate median achieved by all of the laboratories reporting a result for endosulfan sulfate and converting it to endosulfan sum by applying the correction factor of 0.962. Therefore, the z-score for endosulfan sum has been calculated using the theoretical median and applying it to all the laboratories submitting results for endosulfan - even if the overall results were corrected, or not, to endosulfan sum.

- *Malathion Sum*: the sample was treated with malathion. Some laboratories reported malaoxon, which was also present. In order to assess the results fairly, the medians for both malathion and for malaoxon were calculated. The median for malathion sum was calculated by summing the median for malathion and the theoretically - converted median for malaoxon into malathion, using the correction factor of 1.05. The z-score for malathion sum was calculated for all of the laboratories by either determining the malaoxon contribution and converting it to malathion, or by just reporting malathion per se.

- *Methiocarb Sum*: the residue definition for this pesticide is the sum of methiocarb + methiocarb sulfone + methiocarb sulfoxide expressed as methiocarb. The sample was treated with methiocarb and methiocarb sulfone. The first consideration made by the scientific committee, was that in order to be able to determine all three components , a laboratory should perform the analysis using a method based on a liquid chromatographic separation (as the sulfoxide and sulfone are too polar to be amenable to gas chromatography). Therefore, for all the laboratories that had submitted results using gas chromatography,the committee considered their results to be unacceptable. These results, belonging to sixteen laboratories, have been considered as not analysed (NA) in this report, and therefore the z-scores were not calculated.
  Furthermore, if any laboratory has been given a 'not analysed' (NA) result for any of the three individual contributions, their results have not been used to calculate the methiocarb sum. This means that a total of twelve laboratories were recorded as NA for the overall results.

  The median for methiocarb sum has been calculated from the laboratories results for methiocarb sum that reported the three contributions separately, converted them to methiocarb, and then summed them. z-Scores have been calculated only for these laboratories. z-Score graphs for each individual component of methiocarb have been included for information purposes only.

  Thirteen laboratories had a NA result for Methiocarb Sum and should therefore not be classified in Category A, as this pesticide was marked with an asterisk in the pesticide list. However, this year, because they reported a result for methiocarb, it was decided that

they should be classified in Category A, but will be marked with a ‡ sign in Table 4.6.1 - Performance and sub-classification of laboratories in Category A.

4.3.2 Combined z-Scores

Appendix 5 shows a table with 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 reported 16 or more results, including all the target pesticides marked with an asterisk, and did not report any false positive results. A graphical representation of the results for these laboratories can also be found in Appendix 6.

Sixty-six of the one hundred and twenty-nine laboratories that submitted results have been classified in Category A (51%). Seventy-nine percent were sub-divided as 'good', nine percent as 'satisfactory' and twelve percent as 'unsatisfactory'.
Of the sixty-three laboratories in Category B, four could have been in Category A if they had not reported a false positive result.

Laboratories in Category A must have analysed all the pesticides marked with an asterisk that were present in the test material following the MRL definition and given results for all the individual components, too. Because of this, thirteen laboratories could have been classified in Category B, but remain just for this year in Category A. Seven laboratories determined methiocarb by gas chromatography, and six laboratories did not analyse this pesticide according to the MRL residue definition.

Table 4.6.1 shows the laboratories in Category A, the number of pesticides reported, the SWZ value and the sub-classification. 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 in 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-10, out of 129 laboratories, 66 are in Category A with the following sub-divisions: 8 'unsatisfactory', 6 'satisfactory' and 52 'good'.
- For EUPT-FV-9, out of 132 laboratories, 68 are in Category A with the following sub-divisions: 7 'unsatisfactory', 13 'satisfactory' and 48 'good'.

- For EUPT-FV-8, out of 128 laboratories, 90 were in Category A with the following sub-divisions: 11 'unsatisfactory', 7 'satisfactory' and 72 'good'.

The classical combined z-scores, RSZ and the SSZ, values are listed in Appendix 7 for all laboratories.

Table 4.6.1 Performance and sub-classification of laboratories in Category A

Lab Code	No. of Pesticides sought	SWZ	Classification
EUPT-FV-10-Lab-121	18	0.3	Good
EUPT-FV-10-Lab-062	18	0.4	Good
EUPT-FV-10-Lab-045	18	0.4	Good
EUPT-FV-10-Lab-068	18	0.4	Good
EUPT-FV-10-Lab-028	18	0.4	Good
EUPT-FV-10-Lab-078	18	0.4	Good
EUPT-FV-10-Lab-090	18	0.4	Good
EUPT-FV-10-Lab-067	18	0.5	Good
EUPT-FV-10-Lab-013	18	0.5	Good
EUPT-FV-10-Lab-050	18	0.5	Good
EUPT-FV-10-Lab-060	18	0.5	Good
EUPT-FV-10-Lab-036	18	0.5	Good
EUPT-FV-10-Lab-023	18	0.5	Good
EUPT-FV-10-Lab-042	18	0.5	Good
EUPT-FV-10-Lab-064	18	0.5	Good
EUPT-FV-10-Lab-074	18	0.6	Good
EUPT-FV-10-Lab-011	18	0.6	Good
EUPT-FV-10-Lab-020	18	0.6	Good
EUPT-FV-10-Lab-007	18	0.6	Good
EUPT-FV-10-Lab-070	18	0.7	Good
EUPT-FV-10-Lab-105	18	0.7	Good
EUPT-FV-10-Lab-003	18	0.7	Good
EUPT-FV-10-Lab-056	18	0.7	Good
EUPT-FV-10-Lab-084	18	0.8	Good
EUPT-FV-10-Lab-047	18	0.9	Good
EUPT-FV-10-Lab-063	18	1.0	Good
EUPT-FV-10-Lab-035	18	1.0	Good
EUPT-FV-10-Lab-048	18	1.1	Good
EUPT-FV-10-Lab-069	18	1.2	Good
EUPT-FV-10-Lab-017	18	1.2	Good

Lab Code	No. of Pesticides sought	SWZ	Classification
EUPT-FV-10-Lab-099	18	1.4	Good
EUPT-FV-10-Lab-038*	18	1.5	Good
EUPT-FV-10-Lab-072	18	1.6	Good
EUPT-FV-10-Lab-065	18	1.8	Good
EUPT-FV-10-Lab-115	18	1.8	Good
EUPT-FV-10-Lab-097	18	2.1	Satisfactory
EUPT-FV-10-Lab-132*	18	2.2	Satisfactory
EUPT-FV-10-Lab-118	18	2.5	Satisfactory
EUPT-FV-10-Lab-059	18	2.9	Satisfactory
EUPT-FV-10-Lab-019↑	18	3.4	Unsatisfactory
EUPT-FV-10-Lab-040↑	18	3.8	Unsatisfactory
EUPT-FV-10-Lab-008↑	18	4.1	Unsatisfactory
EUPT-FV-10-Lab-110‡	17	0.3	Good
EUPT-FV-10-Lab-009‡	17	0.4	Good
EUPT-FV-10-Lab-027‡	17	0.5	Good
EUPT-FV-10-Lab-089‡	17	0.5	Good
EUPT-FV-10-Lab-107	17	0.6	Good
EUPT-FV-10-Lab-004	17	0.7	Good
EUPT-FV-10-Lab-054‡	17	0.7	Good
EUPT-FV-10-Lab-002	17	0.8	Good
EUPT-FV-10-Lab-052	17	0.9	Good
EUPT-FV-10-Lab-092	17	0.9	Good
EUPT-FV-10-Lab-022	17	1.7	Good
EUPT-FV-10-Lab-076‡*	17	1.8	Good
EUPT-FV-10-Lab-030‡*	17	2.0	Good
EUPT-FV-10-Lab-080	17	2.1	Satisfactory
EUPT-FV-10-Lab-025‡*	17	2.1	Satisfactory
EUPT-FV-10-Lab-046‡↑*	17	3.1	Unsatisfactory
EUPT-FV-10-Lab-095↑*	17	4.0	Unsatisfactory
EUPT-FV-10-Lab-073‡↑	17	4.1	Unsatisfactory
EUPT-FV-10-Lab-043	16	1.3	Good
EUPT-FV-10-Lab-127	16	1.5	Good
EUPT-FV-10-Lab-026‡↑	16	3.8	Unsatisfactory
EUPT-FV-10-Lab-125↑*	16	4.6	Unsatisfactory
EUPT-FV-10-Lab-102‡	15	0.6	Good
EUPT-FV-10-Lab-010‡	15	1.7	Good

‡ Laboratories that have failed in the analysis of methiocarb sum
* Laboratories reporting a false negative result.
↑ Laboratories with SWZ values of > 3

Table 4.6.2 Performance of laboratories in Category B.

Lab Code	No. of Pesticides sought	No. of acceptable z-scores
EUPT-FV-10-Lab-098+	18	18
EUPT-FV-10-Lab-024+*	18	13
EUPT-FV-10-Lab-082+*	17	10
EUPT-FV-10-Lab-001+*	16	12
EUPT-FV-10-Lab-104	15	15
EUPT-FV-10-Lab-085*	15	13
EUPT-FV-10-Lab-103*	15	13
EUPT-FV-10-Lab-044*	15	12
EUPT-FV-10-Lab-039	14	14
EUPT-FV-10-Lab-012	14	14
EUPT-FV-10-Lab-018	14	13
EUPT-FV-10-Lab-088*	14	13
EUPT-FV-10-Lab-130	14	13
EUPT-FV-10-Lab-079	14	12
EUPT-FV-10-Lab-111	14	12
EUPT-FV-10-Lab-091*	14	9
EUPT-FV-10-Lab-077	13	9
EUPT-FV-10-Lab-031	13	10
EUPT-FV-10-Lab-061*	13	10
EUPT-FV-10-Lab-014*	13	7
EUPT-FV-10-Lab-021	13	5
EUPT-FV-10-Lab-057	12	12
EUPT-FV-10-Lab-131	12	12
EUPT-FV-10-Lab-116*	12	11
EUPT-FV-10-Lab-041*	12	10
EUPT-FV-10-Lab-086*	12	8
EUPT-FV-10-Lab-033	11	11
EUPT-FV-10-Lab-087*	11	6
EUPT-FV-10-Lab-029*	10	9
EUPT-FV-10-Lab-101*	10	9
EUPT-FV-10-Lab-123	10	9
EUPT-FV-10-Lab-100*	10	7
EUPT-FV-10-Lab-034*	10	6

Lab Code	No. of Pesticides sought	No. of acceptable z-scores
EUPT-FV-10-Lab-126	9	9
EUPT-FV-10-Lab-053	9	9
EUPT-FV-10-Lab-006*	9	8
EUPT-FV-10-Lab-058*	9	8
EUPT-FV-10-Lab-083	9	8
EUPT-FV-10-Lab-129*	9	7
EUPT-FV-10-Lab-120*	9	6
EUPT-FV-10-Lab-071	9	6
EUPT-FV-10-Lab-119*	9	5
EUPT-FV-10-Lab-015	9	2
EUPT-FV-10-Lab-081	8	8
EUPT-FV-10-Lab-096	8	8
EUPT-FV-10-Lab-005	8	7
EUPT-FV-10-Lab-114	8	7
EUPT-FV-10-Lab-037*	8	6
EUPT-FV-10-Lab-094	8	6
EUPT-FV-10-Lab-016	7	7
EUPT-FV-10-Lab-066	7	7
EUPT-FV-10-Lab-051	7	6
EUPT-FV-10-Lab-113	7	5
EUPT-FV-10-Lab-112*	7	2
EUPT-FV-10-Lab-117	5	5
EUPT-FV-10-Lab-124	5	5
EUPT-FV-10-Lab-055*	5	4
EUPT-FV-10-Lab-128	5	4
EUPT-FV-10-Lab-093*	5	3
EUPT-FV-10-Lab-108	4	4
EUPT-FV-10-Lab-109	4	3
EUPT-FV-10-Lab-122	2	2
EUPT-FV-10-Lab-032	2	0

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

5. CONCLUSIONS

One hundred and thirty two laboratories agreed to participate in EUPT-FV-10, and 129 of them submitted results following the analysis of the treated carrot homogenate test material.

The pesticide residue levels in the treated carrot test material were in 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. Sub-classification of z-score values into 'acceptable', 'questionable' and 'unacceptable' has also been undertaken. For the first time in this series of PTs the median for each pesticide has been included in the chart.

It was considered that the name of the statistical treatment used to calculate the sum of z-scores should be changed to a more appropriate version. Therefore, the 'Weighted Sum of z-Scores', with the WSZ abbreviation, has been changed in this report to the more appropriate 'Sum of Weighted z-Scores', (SWZ). The criterion was first introduced in the EUPT 6 Proficiency Test report, and application of this formula has continued to be used to demonstrate the overall performance of the laboratories. Those laboratories reporting sixteen or more results (at least 90%), including all the target pesticides marked with an asterisk in the Pesticide List, and no false positive results, were considered to have sufficient scope and were therefore classified in Category A. Those laboratories that reported less than sixteen results were considered to have insufficient scope and were automatically classified in Category B. Laboratories in Category A were also sub-classified into 'good', 'satisfactory' and 'unsatisfactory'. Laboratories in Category A that reported false negatives were marked with an asterisk and those obtaining a SWZ value greater than 3 were marked with an '↑'.

Methiocarb sum was assessed as the sum of the results for: methiocarb, methiocarb sulfone and methiocarb sulfoxide. Laboratories using methods based on gas chromatography have been given a not analysed (NA) result, together with those laboratories reporting not analysed for in any of the determinations. As methiocarb was a pesticide marked with an asterisk, the laboratories that have a NA result, due to the way this pesticide was handled, would have gone into Category B. However, it has been decided that they will remain in Category A but will be marked with a ‡ symbol - as not being able to report a complete determination on this pesticide.
For the remainder of the laboratories (those classified in Category B) the combined Sum of Weighted z-Scores were not calculated. However, the number of satisfactory z-scores achieved has been presented.

The median value of 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.

Low residue levels of metalaxyl (below the MRRL) were detected in the treated carrot test material by fourteen laboratories. These residues were assumed to have arisen from impurities (contaminants) present in one, or more, of the commercial formulations used to treat the carrots. These results were not statistically assessed, because the levels were well below the MRRL, and therefore no medians/assigned values have been calculated for this pesticide.

The overall results with regard to the z-scores for each pesticide present in the test material were very good. In a couple of cases, the number of false negative results reported was relatively high (e.g. Endosulfan 10 and Methamidophos 8).

One possible reason for the high number of false negative results is the co-elution of endosulfan sulfate and quinoxyfen when performing gas chromatography. However, not enough information is available given that laboratories reporting false negative results for endosulfan have mostly reported NA for quinoxyfen.

In the case of methamidophos, a possible reason could be due to its high polarity: making it more difficult to extract using low polarity solvents; or because of poor partitioning between aqueous and organic solvents during solvent exchange.

Ever since the introduction of the MRRL in EUPT 6, laboratories' 'reporting levels' have been continuously decreasing and their overall performances have improved. The increased use of mass spectrometry, particularly modern LC-MS/MS instrumentation, is probably one of the main reasons why the results from more participating laboratories have continued to show an overall improvement year after year. This year, lowering the MRRL to a fixed value of 0.01mg/Kg seems to have forced laboratories to lower their limits of detection and quantification and therefore, fewer false negative results have been reported. Compared to last year's results, the percentage of 'good' laboratories in Category A has not changed greatly: from 68 laboratories in EUPT 9 to 66 laboratories in this PT. As with last year, the extra demand on laboratories to analyse all the pesticides marked with an asterisk in the target list was maintained, and no laboratory failed to comply with this instruction, therefore none failed to comply with this particular requirement criterion for Category A classification.

The scientific committee for this test strongly recommends that laboratories are equipped with LC-MS/MS as many very important pesticides (particularly the polar compounds) can only be analysed using liquid chromatography.

The pesticides marked with an asterisk in the target list were considered of the utmost importance with regard to the monitoring of fruits and vegetables by both the Quality Control Group and the European Commission. Each year, laboratories will be encouraged to further enlarge the scope

of their methods, and to ensure that the pesticides listed in the coordinated EU-monitoring programme are included.

For the first time, in the same test material, both low concentration and non-approved pesticides were used. Those at low concentrations were: chlorpyrifos-methyl, kresoxim-methyl and pendimethalin - and they had the highest percentage of acceptable z-scores. This means that laboratories can accurately measure residues at low concentrations. Isofenphos-methyl, an illegal/banned substance in Europe, had a percentage of ninety acceptable z-scores which again reflects that laboratories accurately measure this residue, although forty-four of the participating laboratories did not include this pesticide in their scope.

Participation in this year's European Proficiency Test 10 involved laboratories from 26 of the 27 EU member states (the missing member state was Malta, which was represented by the UK NRL), plus Iceland, Norway and Switzerland, who regularly participate in the EU-monitoring programmes. Non-European laboratories in Egypt and Uruguay also participated, the same as last year. These Non-EU laboratories are official laboratories in their own countries. As is laid down in Article 32 of Regulation (EC) N° 882/2004, one of the CRL'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-FV11.

After the continuing trend of improvement in performance, the stricter conditions applied to EUPT-FV-10 will be carried forward to next year. The aim is that laboratories continue to increase the scope of their methods, in order to be able to fully enforce EU legislation. Consequently, the number of pesticides that will be mandatory to analyse (marked with an asterisk in the Target Pesticide List) will further increase next year along with the total number of pesticides in the Target Pesticide List. The new target Pesticide Lists will be published well in advance for the laboratories to validate their methods before FV-11 begins. Ultimately, the intention is to publish the Pesticide List at the same time every year, about 6 months prior to the shipment of the next proficiency test materials. The (tentative) shipment date for EUPT-FV-11 will be around May 2009.

The harmonised MRRL will be maintained for all pesticides. The 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 error by the laboratories.

Next year, an additional stability test will be carried out by the Organiser on the test material after it has been stored for several days at room temperature. This should ensure that no participant has to reject the test material because it arrived at the laboratory not completely frozen. This test may just be performed on some of the potentially less stable pesticides present in the sample.

For 2009, the criteria for classification in Category A will be even stricter.

False positive results will still be based on MRRL values only, and not on the RL of each laboratory. However, any concentration reported above the MRRL will be considered a false positive if the Organiser has not used that pesticide, or if it is not reported by the majority of the participants.

A numerical result for at least 90% of the pesticides present in the test material, including all those marked with an asterisk, must be reported. Any false negatives, although they may be given a z-score will not count for the classification.

These changes are aimed at ensuring that each year laboratories strive further to increase the scope of their methods, and to 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.

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9. ISO/IEC 43:1997 Proficiency Testing by Interlaboratory Comparisons. Part 1: Development and operation of proficiency testing schemes. Part 2: Selection and use of proficiency testing schemes by laboratory accreditation bodies.

8. ACKNOWLEDGEMENTS

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The Organiser wishes to thank the members of the Quality Control Group and the Scientific Committee for their invaluable and knowledgeable advice. Many thanks also to the Statistical Group for their cooperation.

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

APPENDIX 1. Homogeneity Data

Acetamiprid (mg/Kg)		Boscalid (mg/Kg)		Clorpyrifos-methyl (mg/Kg)		Diazinon (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.418	0.419	0.250	0.234	0.081	0.087	0.596	0.615
0.420	0.411	0.245	0.237	0.080	0.090	0.604	0.599
0.410	0.418	0.236	0.250	0.085	0.084	0.601	0.594
0.418	0.418	0.250	0.238	0.075	0.072	0.620	0.612
0.420	0.426	0.237	0.250	0.072	0.082	0.606	0.599
0.417	0.420	0.230	0.238	0.072	0.085	0.610	0.596
0.450	0.421	0.234	0.234	0.086	0.074	0.605	0.603
0.420	0.430	0.231	0.230	0.090	0.078	0.614	0.611
0.420	0.425	0.240	0.245	0.072	0.074	0.598	0.600
0.419	0.416	0.248	0.241	0.070	0.080	0.597	0.600

Endosulfan Sum (mg/Kg)		Hexythiazox (mg/Kg)		Isofenphos-methyl (mg/Kg)		Kresoxim-methyl (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.106	0.106	0.516	0.518	0.486	0.491	0.050	0.044
0.110	0.110	0.510	0.513	0.496	0.493	0.057	0.050
0.108	0.109	0.510	0.510	0.492	0.489	0.038	0.040
0.110	0.100	0.495	0.505	0.500	0.498	0.055	0.047
0.098	0.110	0.505	0.501	0.505	0.491	0.056	0.052
0.109	0.115	0.498	0.520	0.505	0.498	0.053	0.057
0.100	0.106	0.510	0.516	0.493	0.520	0.042	0.052
0.112	0.115	0.500	0.512	0.491	0.515	0.043	0.051
0.097	0.100	0.509	0.515	0.520	0.521	0.052	0.050
0.110	0.098	0.510	0.519	0.506	0.505	0.055	0.045

Malathion Sum (mg/Kg)		Metamidophos (mg/Kg)		Methiocarb Sum (mg/Kg)		Methomyl Sum (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.773	0.786	0.337	0.347	0.158	0.164	0.740	0.743
0.764	0.765	0.342	0.338	0.160	0.167	0.745	0.746
0.775	0.768	0.342	0.334	0.165	0.160	0.741	0.749
0.775	0.762	0.349	0.338	0.157	0.167	0.740	0.735
0.762	0.766	0.350	0.355	0.154	0.153	0.735	0.730
0.764	0.773	0.346	0.341	0.155	0.152	0.736	0.731
0.761	0.769	0.342	0.342	0.160	0.162	0.734	0.734
0.774	0.761	0.345	0.348	0.159	0.157	0.739	0.732
0.771	0.760	0.338	0.348	0.154	0.156	0.734	0.728
0.780	0.779	0.347	0.341	0.157	0.154	0.733	0.742

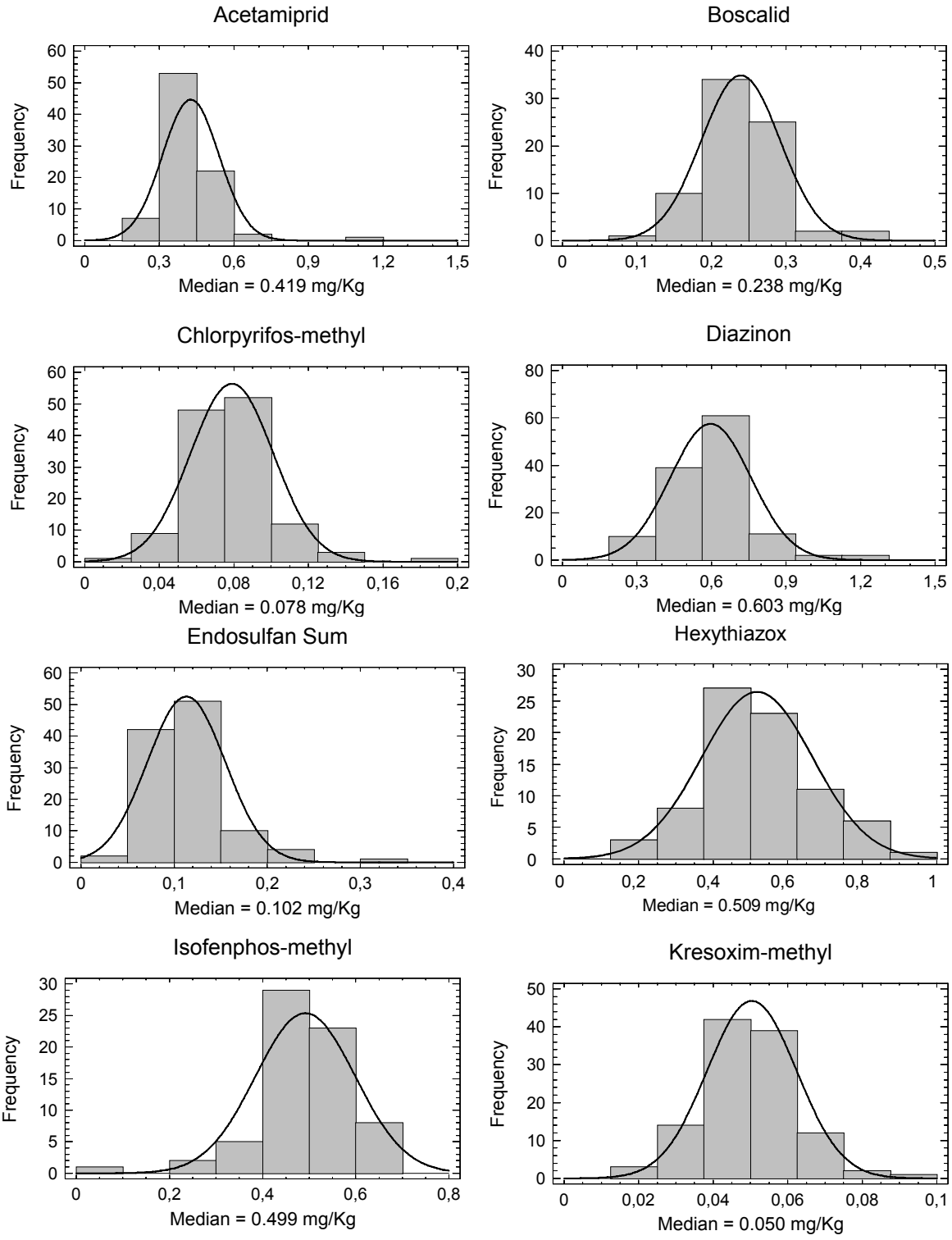
APPENDIX 1. Homogeneity Data

Oxamyl (mg/Kg)		Pendimethalin (mg/Kg)		Phosmet (mg/Kg)		Quinoxyfen (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.320	0.324	0.079	0.073	0.235	0.229	0.295	0.305
0.320	0.321	0.078	0.069	0.240	0.231	0.298	0.294
0.324	0.320	0.068	0.071	0.227	0.224	0.294	0.297
0.336	0.334	0.074	0.073	0.237	0.224	0.294	0.295
0.327	0.318	0.074	0.075	0.238	0.234	0.298	0.294
0.329	0.324	0.065	0.073	0.237	0.235	0.300	0.310
0.321	0.321	0.070	0.080	0.237	0.223	0.305	0.315
0.319	0.331	0.076	0.084	0.245	0.224	0.302	0.305
0.318	0.328	0.089	0.076	0.248	0.245	0.303	0.298
0.317	0.321	0.086	0.078	0.220	0.230	0.295	0.294

Triadimenol Sum (mg/Kg)		Vinclozolin (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2
0.341	0.328	1.00	1.03
0.334	0.338	1.01	1.04
0.324	0.334	1.04	1.04
0.330	0.331	1.04	1.03
0.324	0.326	1.02	1.01
0.335	0.341	1.04	1.00
0.326	0.334	1.00	1.01
0.331	0.334	1.05	1.05
0.334	0.330	1.05	1.04
0.336	0.341	1.00	1.02

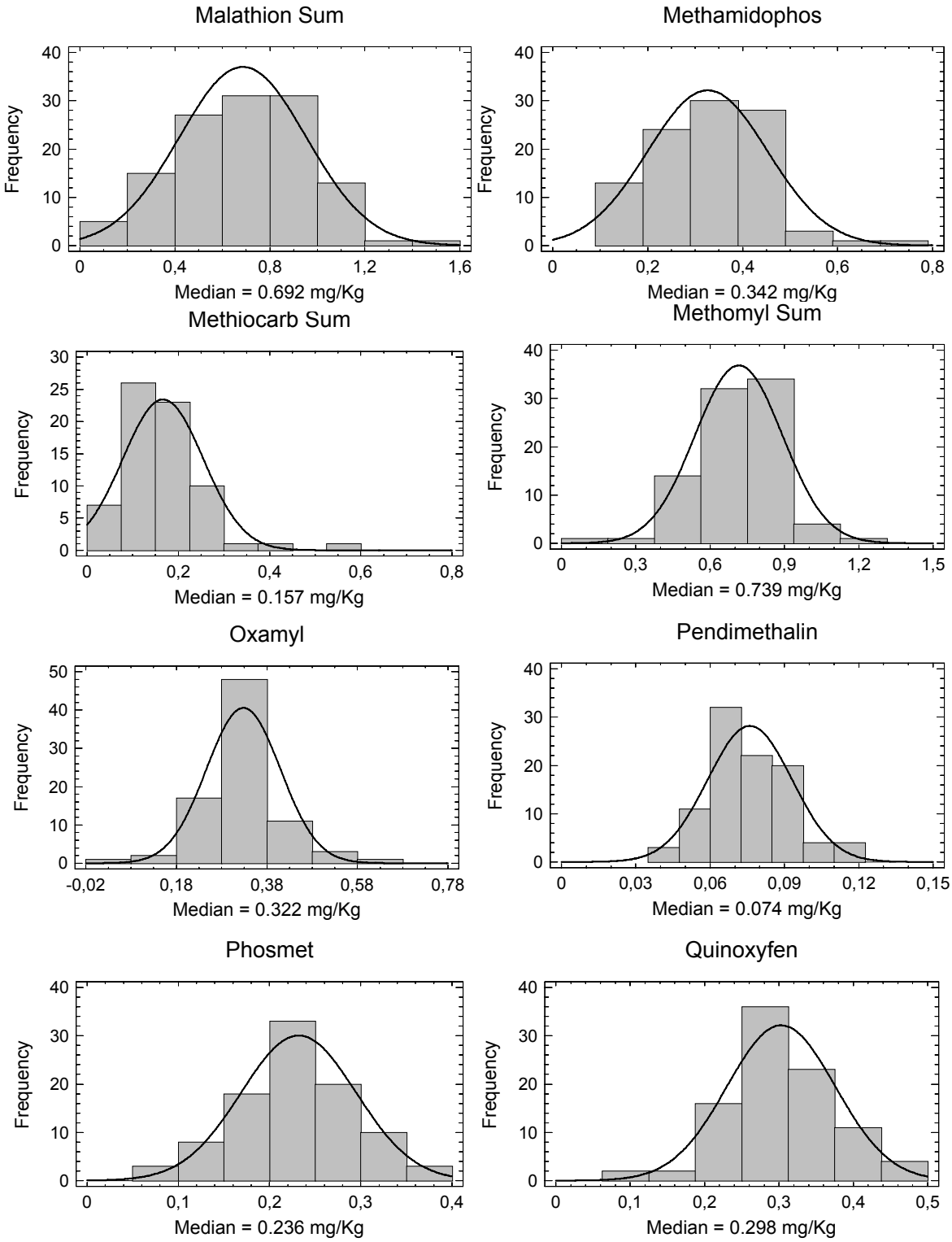
APPENDIX 2. Histograms of residue data for each pesticide from all the laboratories.

Results presented as histograms.



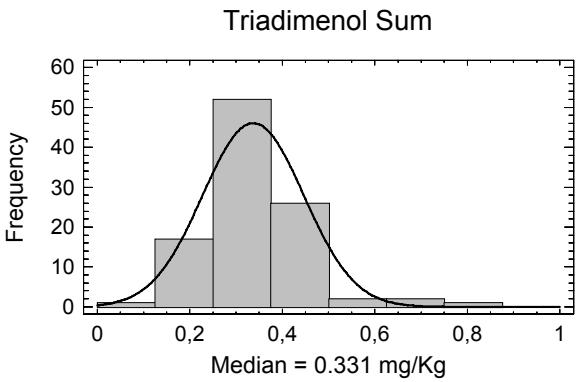
APPENDIX 2. Histograms of residue data for each pesticide from all the laboratories.

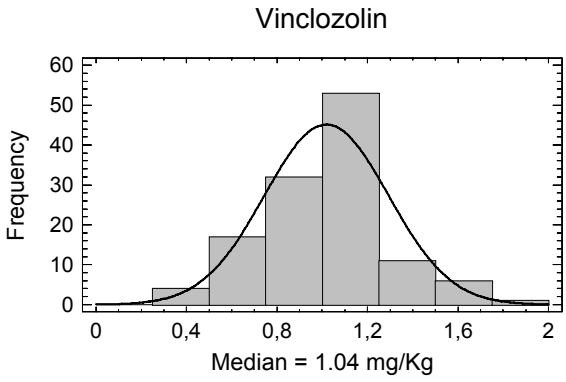
Results presented as histograms.



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

Results presented as histograms.





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	Acetamiprid	z-Score (FFP RSD 25%)	Boscalid	z-Score (FFP RSD 25%)	Chlorpyrifos-methyl	z-Score (FFP RSD 25%)	Diazinon	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/kg)	0.419		0.238		0.078		0.603	
Lab-001	0.557	1.3	0.252	0.2	0.092	0.7	0.56	-0.3
Lab-002	0.450	0.3	0.200	-0.6	0.088	0.5	0.426	-1.2
Lab-003	0.323	-0.9	0.210	-0.5	0.084	0.3	0.763	1.1
Lab-004	0.441	0.2	NA		0.087	0.5	0.437	-1.1
Lab-005	NA		NA		0.105	1.4	0.478	-0.8
Lab-006	NA		0.159	-1.3	0.061	-0.9	0.689	0.6
Lab-007	0.420	0.0	0.212	-0.4	0.075	-0.2	0.626	0.2
Lab-008	0.311	-1.0	0.151	-1.5	0.047	-1.6	0.375	-1.5
Lab-009	0.431	0.1	0.252	0.2	0.084	0.3	0.602	0.0
Lab-010	0.400	-0.2	0.250	0.2	0.080	0.1	0.650	0.3
Lab-011	0.450	0.3	0.209	-0.5	0.067	-0.6	0.561	-0.3
Lab-012	0.340	-0.8	0.220	-0.3	0.040	-1.9	0.450	-1.0
Lab-013	0.400	-0.2	0.263	0.4	0.083	0.3	0.690	0.6
Lab-014	NA		NA		0.085	0.3	0.577	-0.2
Lab-015	NA		NA		0.149	3.6	1.25	4.3
Lab-016	NA		NA		0.101	1.2	0.605	0.0
Lab-017	0.356	-0.6	0.168	-1.2	0.046	-1.6	0.480	-0.8
Lab-018	0.410	-0.1	NA		0.069	-0.5	0.720	0.8
Lab-019	0.460	0.4	0.285	0.8	0.130	2.7	0.757	1.0
Lab-020	0.418	0.0	0.283	0.8	0.080	0.1	0.479	-0.8
Lab-021	0.181	-2.3	0.119	-2.0	0.022	-2.9	0.276	-2.2
Lab-022	0.549	1.2	0.320	1.4	0.104	1.3	0.851	1.6
Lab-023	0.348	-0.7	0.232	-0.1	0.063	-0.8	0.457	-1.0
Lab-024	0.361	-0.6	0.168	-1.2	0.104	1.3	0.786	1.2
Lab-025	0.470	0.5	0.210	-0.5	0.110	1.6	0.550	-0.4
Lab-026	0.500	0.8	0.158	-1.3	0.058	-1.0	0.360	-1.6
Lab-027	0.440	0.2	0.208	-0.5	0.071	-0.4	0.614	0.1
Lab-028	0.460	0.4	0.210	-0.5	0.080	0.1	0.620	0.1
Lab-029	NA		0.262	0.4	0.116	1.9	0.667	0.4
Lab-030	0.39	-0.3	0.310	1.2	0.100	1.1	0.610	0.0
Lab-031	NA		NA		0.190	5.0	1.18	3.8
Lab-032	NA		NA		NA		NA	
Lab-033	0.430	0.1	NA		0.090	0.6	0.640	0.2
Lab-034	ND	-3.9	NA		0.095	0.9	0.568	-0.2
Lab-035	0.337	-0.8	0.139	-1.7	0.056	-1.1	0.412	-1.3
Lab-036	0.428	0.1	0.215	-0.4	0.064	-0.7	0.569	-0.2
Lab-037	NA		NA		0.070	-0.4	0.660	0.4
Lab-038	0.404	-0.1	0.250	0.2	0.070	-0.4	0.603	0.0
Lab-039	0.260	-1.5	0.220	-0.3	0.061	-0.9	0.461	-0.9
Lab-040	0.603	1.8	0.419	3.1	0.067	-0.6	0.720	0.8
Lab-041	NA		0.215	-0.4	0.079	0.1	0.520	-0.6
Lab-042	0.396	-0.2	0.237	0.0	0.084	0.3	0.615	0.1
Lab-043	0.451	0.3	NA		0.080	0.1	0.440	-1.1
Lab-044	NA		NA		0.050	-1.4	0.373	-1.5
Lab-045	0.458	0.4	0.226	-0.2	0.075	-0.2	0.547	-0.4
Lab-046	0.572	1.5	0.242	0.1	0.071	-0.4	0.689	0.6

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

Lab Code	Acetamiprid	z-Score (FFP RSD 25%)	Boscalid	z-Score (FFP RSD 25%)	Chlorpyrifos-methyl	z-Score (FFP RSD 25%)	Diazinon	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/kg)	0.419		0.238		0.078		0.603	
Lab-047	0.449	0.3	0.276	0.6	0.060	-0.9	0.583	-0.1
Lab-048	0.582	1.6	0.284	0.8	0.080	0.1	0.563	-0.3
Lab-049	No Results Given							
Lab-050	0.376	-0.4	0.213	-0.4	0.071	-0.4	0.531	-0.5
Lab-051	NA		NA		0.060	-0.9	0.690	0.6
Lab-052	0.410	-0.1	NA		0.081	0.2	0.620	0.1
Lab-053	NA		NA		0.093	0.8	0.730	0.8
Lab-054	0.372	-0.4	0.287	0.8	0.089	0.6	0.649	0.3
Lab-055	NA		NA		0.100	1.1	0.610	0.0
Lab-056	0.362	-0.5	0.187	-0.9	0.067	-0.6	0.478	-0.8
Lab-057	NA		0.195	-0.7	0.061	-0.9	0.612	0.1
Lab-058	ND	-3.9	NA		0.080	0.1	0.690	0.6
Lab-059	0.419	0.0	0.301	1.1	0.099	1.1	0.833	1.5
Lab-060	0.395	-0.2	0.220	-0.3	0.079	0.1	0.735	0.9
Lab-061	NA		0.238	0.0	0.087	0.5	0.478	-0.8
Lab-062	0.421	0.0	0.277	0.7	0.080	0.1	0.605	0.0
Lab-063	0.453	0.3	0.232	-0.1	0.059	-1.0	0.456	-1.0
Lab-064	0.387	-0.3	0.243	0.1	0.064	-0.7	0.450	-1.0
Lab-065	0.522	1.0	0.292	0.9	0.060	-0.9	0.821	1.4
Lab-066	NA		NA		0.065	-0.7	0.400	-1.3
Lab-067	0.387	-0.3	0.241	0.1	0.073	-0.3	0.552	-0.3
Lab-068	0.403	-0.2	0.233	-0.1	0.087	0.5	0.604	0.0
Lab-069	0.327	-0.9	0.275	0.6	0.076	-0.1	0.554	-0.3
Lab-070	0.422	0.0	0.236	0.0	0.054	-1.2	0.638	0.2
Lab-071	0.520	1.0	0.290	0.9	0.074	-0.2	0.960	2.4
Lab-072	0.500	0.8	0.287	0.8	0.096	0.9	0.762	1.1
Lab-073	0.437	0.2	0.309	1.2	0.113	1.8	0.735	0.9
Lab-074	0.468	0.5	0.197	-0.7	0.064	-0.7	0.489	-0.8
Lab-075	No Results Given							
Lab-076	0.473	0.5	0.206	-0.5	0.078	0.0	0.856	1.7
Lab-077	0.410	-0.1	NA		0.070	-0.4	0.474	-0.9
Lab-078	0.407	-0.1	0.280	0.7	0.075	-0.2	0.656	0.4
Lab-079	0.435	0.2	NA		0.056	-1.1	0.467	-0.9
Lab-080	0.431	0.1	0.251	0.2	0.065	-0.7	1.02	2.8
Lab-081	NA		NA		0.100	1.1	0.650	0.3
Lab-082	1.12	5.0	0.256	0.3	0.085	0.4	0.522	-0.5
Lab-083	NA		NA		0.090	0.6	0.589	-0.1
Lab-084	0.454	0.3	0.319	1.4	0.106	1.4	0.674	0.5
Lab-085	ND	-3.9	NA		0.048	-1.5	0.338	-1.8
Lab-086	ND	-3.9	NA		0.070	-0.4	0.670	0.4
Lab-087	NA		NA		0.043	-1.8	0.272	-2.2
Lab-088	0.345	-0.7	NA		0.067	-0.6	0.505	-0.7
Lab-089	0.418	0.0	0.246	0.1	0.091	0.7	0.621	0.1
Lab-090	0.410	-0.1	0.273	0.6	0.077	-0.1	0.602	0.0
Lab-091	0.349	-0.7	NA		0.084	0.3	0.653	0.3
Lab-092	0.404	-0.1	NA		0.077	-0.1	0.597	0.0
Lab-093	NA		NA		ND	-3.5	0.72	0.8

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

Lab Code	Acetamiprid	z-Score (FFP RSD 25%)	Boscalid	z-Score (FFP RSD 25%)	Chlorpyrifos-methyl	z-Score (FFP RSD 25%)	Diazinon	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/kg)	0.419		0.238		0.078		0.603	
Lab-094	NA		NA		0.079	0.1	0.528	-0.5
Lab-095	ND	-3.9	NA		0.050	-1.4	0.273	-2.2
Lab-096	NA		NA		0.081	0.2	0.681	0.5
Lab-097	0.298	-1.2	0.400	2.7	0.064	-0.7	0.580	-0.2
Lab-098	0.563	1.4	0.225	-0.2	0.082	0.2	0.603	0.0
Lab-099	0.380	-0.4	0.260	0.4	0.080	0.1	0.610	0.0
Lab-100	0.211	-2.0	NA		0.065	-0.7	0.488	-0.8
Lab-101	NA		NA		0.087	0.5	0.860	1.7
Lab-102	0.444	0.2	NA		0.061	-0.9	0.462	-0.9
Lab-103	0.570	1.4	NA		0.065	-0.7	ND	-3.9
Lab-104	0.382	-0.4	NA		0.084	0.3	0.749	1.0
Lab-105	0.550	1.3	0.259	0.4	0.082	0.2	0.643	0.3
Lab-106	No Results Given							
Lab-107	0.271	-1.4	0.225	-0.2	0.067	-0.6	0.475	-0.8
Lab-108	NA		NA		0.050	-1.4	0.386	-1.4
Lab-109	NA		NA		NA		0.536	-0.4
Lab-110	0.420	0.0	0.269	0.5	0.084	0.3	0.593	-0.1
Lab-111	0.209	-2.0	NA		0.075	-0.2	0.362	-1.6
Lab-112	NA		NA		0.120	2.2	0.804	1.3
Lab-113	NA		NA		0.089	0.6	NA	
Lab-114	NA		NA		0.068	-0.5	0.424	-1.2
Lab-115	0.396	-0.2	0.277	0.7	0.140	3.2	0.691	0.6
Lab-116	0.520	1.0	NA		0.075	-0.2	0.750	1.0
Lab-117	NA		NA		0.078	0.0	0.694	0.6
Lab-118	0.470	0.5	0.160	-1.3	0.065	-0.7	0.460	-0.9
Lab-119	NA		NA		0.046	-1.6	0.606	0.0
Lab-120	NA		NA		0.066	-0.6	0.559	-0.3
Lab-121	0.403	-0.2	0.237	0.0	0.086	0.4	0.613	0.1
Lab-122	NA		NA		0.080	0.1	0.720	0.8
Lab-123	NA		0.179	-1.0	0.120	2.2	0.331	-1.8
Lab-124	NA		NA		0.095	0.9	0.622	0.1
Lab-125	0.617	1.9	NA		0.059	-1.0	0.211	-2.6
Lab-126	NA		NA		0.080	0.1	0.770	1.1
Lab-127	0.257	-1.5	0.190	-0.8	0.064	-0.7	0.490	-0.7
Lab-128	NA		NA		0.106	1.4	0.679	0.5
Lab-129	NA		NA		0.104	1.3	0.600	0.0
Lab-130	0.375	-0.4	NA		0.060	-0.9	NA	
Lab-131	NA		0.242	0.1	0.061	-0.9	0.391	-1.4
Lab-132	0.431	0.1	0.165	-1.2	0.091	0.7	0.621	0.1

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	Endosulfan Sum	z-Score (FFP RSD 25%)	Hexythiazox	z-Score (FFP RSD 25%)	Isofenphos-methyl	z-Score (FFP RSD 25%)	Kresoxim-methyl	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/kg)	0.102		0.509		0.499		0.050	
Lab-001	ND	-3.6	0.669	1.3	NA		0.066	1.3
Lab-002	0.074	-1.1	0.316	-1.5	NA		0.045	-0.4
Lab-003	0.093	-0.4	0.345	-1.3	0.632	1.1	0.056	0.5
Lab-004	0.127	1.0	0.530	0.2	0.465	-0.3	0.058	0.6
Lab-005	0.093	-0.4	NA		NA		0.041	-0.7
Lab-006	0.085	-0.7	NA		NA		0.042	-0.6
Lab-007	0.096	-0.2	0.433	-0.6	0.474	-0.2	0.049	-0.1
Lab-008	0.225	4.8	0.844	2.6	0.334	-1.3	0.031	-1.5
Lab-009	0.101	0.0	0.514	0.0	0.495	0.0	0.050	0.0
Lab-010	0.100	-0.1	0.800	2.3	NA		0.050	0.0
Lab-011	0.087	-0.6	0.410	-0.8	0.436	-0.5	0.044	-0.5
Lab-012	0.060	-1.6	0.391	-0.9	NA		0.030	-1.6
Lab-013	0.114	0.5	0.760	2.0	0.551	0.4	0.053	0.2
Lab-014	0.162	2.4	6.23	5.0	4.55	5.0	0.066	1.3
Lab-015	0.179	3.0	NA		NA		0.088	3.0
Lab-016	0.102	0.0	0.593	0.7	NA		NA	
Lab-017	0.062	-1.6	0.390	-0.9	0.620	1.0	0.048	-0.2
Lab-018	0.310	5.0	NA		NA		0.062	1.0
Lab-019	0.235	5.0	0.456	-0.4	0.588	0.7	0.055	0.4
Lab-020	0.078	-0.9	0.550	0.3	0.353	-1.2	0.051	0.1
Lab-021	0.048	-2.1	NA		0.201	-2.4	0.025	-2.0
Lab-022	0.130	1.1	0.837	2.6	NA		0.065	1.2
Lab-023	0.075	-1.1	0.429	-0.6	0.472	-0.2	0.038	-1.0
Lab-024	ND	-3.6	0.215	-2.3	0.588	0.7	0.059	0.7
Lab-025	0.110	0.3	0.640	1.0	0.530	0.2	0.046	-0.3
Lab-026	0.070	-1.3	0.589	0.6	NA		0.041	-0.7
Lab-027	0.111	0.4	0.480	-0.2	0.506	0.1	0.033	-1.4
Lab-028	0.102	0.0	0.560	0.4	0.590	0.7	0.047	-0.2
Lab-029	0.128	1.0	NA		NA		0.058	0.6
Lab-030	ND	-3.6	0.610	0.8	0.460	-0.3	0.050	0.0
Lab-031	NA		0.708	1.6	0.467	-0.3	0.042	-0.6
Lab-032	NA		NA		NA		NA	
Lab-033	0.080	-0.9	NA		0.520	0.2	0.050	0.0
Lab-034	0.047	-2.2	NA		NA		0.076	2.1
Lab-035	0.062	-1.6	0.396	-0.9	0.436	-0.5	0.028	-1.8
Lab-036	0.100	-0.1	0.488	-0.2	0.479	-0.2	0.045	-0.4
Lab-037	0.150	1.9	NA		NA		0.040	-0.8
Lab-038	0.091	-0.4	0.466	-0.3	0.461	-0.3	0.041	-0.7
Lab-039	0.071	-1.2	NA		NA		0.034	-1.3
Lab-040	0.120	0.7	0.911	3.2	0.588	0.7	0.057	0.6
Lab-041	0.121	0.7	NA		NA		0.050	0.0
Lab-042	0.106	0.2	0.303	-1.6	0.500	0.0	0.052	0.2
Lab-043	0.163	2.4	0.504	0.0	NA		0.054	0.3
Lab-044	0.072	-1.2	0.479	-0.2	NA		0.044	-0.5
Lab-045	0.071	-1.2	0.560	0.4	0.453	-0.4	0.044	-0.5
Lab-046	0.157	2.2	0.509	0.0	0.406	-0.7	0.052	0.2

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

Lab Code	Endosulfan Sum	z-Score (FFP RSD 25%)	Hexythiazox	z-Score (FFP RSD 25%)	Isofenphos-methyl	z-Score (FFP RSD 25%)	Kresoxim-methyl	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/kg)	0.102		0.509		0.499		0.050	
Lab-047	0.108	0.2	0.458	-0.4	0.218	-2.3	0.054	0.3
Lab-048	0.125	0.9	0.464	-0.4	0.540	0.3	0.062	1.0
Lab-049	No Results Given							
Lab-050	0.096	-0.2	0.478	-0.2	0.460	-0.3	0.050	0.0
Lab-051	0.070	-1.3	NA		NA		NA	
Lab-052	0.097	-0.2	0.640	1.0	0.600	0.8	0.066	1.3
Lab-053	0.146	1.7	NA		NA		0.055	0.4
Lab-054	0.151	1.9	0.652	1.1	0.499	0.0	0.055	0.4
Lab-055	ND	-3.6	NA		NA		NA	
Lab-056	0.086	-0.6	0.415	-0.7	0.388	-0.9	0.043	-0.6
Lab-057	0.075	-1.1	NA		NA		0.041	-0.7
Lab-058	0.152	2.0	NA		NA		0.050	0.0
Lab-059	0.223	4.7	0.771	2.1	0.679	1.4	0.075	2.0
Lab-060	0.120	0.7	0.446	-0.5	0.532	0.3	0.039	-0.9
Lab-061	0.107	0.2	NA		0.469	-0.2	0.065	1.2
Lab-062	0.113	0.4	0.522	0.1	0.524	0.2	0.049	-0.1
Lab-063	0.081	-0.8	0.592	0.7	0.345	-1.2	0.054	0.3
Lab-064	0.114	0.5	0.570	0.5	0.429	-0.6	0.042	-0.6
Lab-065	0.112	0.4	0.485	-0.2	0.554	0.4	0.054	0.3
Lab-066	0.120	0.7	NA		NA		0.046	-0.3
Lab-067	0.101	0.0	0.550	0.3	0.488	-0.1	0.066	1.3
Lab-068	0.110	0.3	0.524	0.1	0.508	0.1	0.055	0.4
Lab-069	0.119	0.7	0.245	-2.1	0.462	-0.3	0.059	0.7
Lab-070	0.105	0.1	0.518	0.1	0.505	0.0	0.055	0.4
Lab-071	NA		0.530	0.2	NA		NA	
Lab-072	0.116	0.5	0.656	1.2	0.679	1.4	0.056	0.5
Lab-073	0.185	3.3	0.658	1.2	0.637	1.1	0.065	1.2
Lab-074	0.099	-0.1	0.443	-0.5	0.524	0.2	0.042	-0.6
Lab-075	No Results Given							
Lab-076	ND	-3.6	0.461	-0.4	0.694	1.6	0.057	0.6
Lab-077	NA		0.542	0.3	NA		0.050	0.0
Lab-078	0.113	0.4	0.434	-0.6	0.528	0.2	0.057	0.6
Lab-079	0.079	-0.9	NA		0.443	-0.4	0.036	-1.1
Lab-080	0.070	-1.3	0.485	-0.2	NA		0.050	0.0
Lab-081	0.115	0.5	NA		NA		0.065	1.2
Lab-082	ND	-3.6	0.201	-2.4	0.485	-0.1	0.060	0.8
Lab-083	NA		NA		NA		0.054	0.3
Lab-084	0.088	-0.5	0.378	-1.0	0.555	0.4	0.054	0.3
Lab-085	0.250	5.0	NA		NA		0.060	0.8
Lab-086	0.160	2.3	NA		NA		0.070	1.6
Lab-087	ND	-3.6	NA		NA		0.034	-1.3
Lab-088	0.074	-1.1	0.405	-0.8	ND	-3.9	0.028	-1.8
Lab-089	0.115	0.5	0.564	0.4	0.545	0.4	0.050	0.0
Lab-090	0.106	0.2	0.561	0.4	0.521	0.2	0.052	0.2
Lab-091	ND	-3.6	NA		NA		0.083	2.6
Lab-092	0.113	0.4	0.837	2.6	0.490	-0.1	0.053	0.2
Lab-093	NA		NA		NA		NA	

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

Lab Code	Endosulfan Sum	z-Score (FFP RSD 25%)	Hexythiazox	z-Score (FFP RSD 25%)	Isofenphos-methyl	z-Score (FFP RSD 25%)	Kresoxim-methyl	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/kg)	0.102		0.509		0.499		0.050	
Lab-094	0.159	2.2	NA		NA		NA	
Lab-095	0.096	-0.2	ND	-3.9	0.448	-0.4	0.036	-1.1
Lab-096	0.147	1.8	NA		NA		0.058	0.6
Lab-097	0.085	-0.7	0.362	-1.2	0.450	-0.4	0.041	-0.7
Lab-098	0.115	0.5	0.712	1.6	0.504	0.0	0.046	-0.3
Lab-099	0.127	1.0	0.500	-0.1	0.500	0.0	0.060	0.8
Lab-100	ND	-3.6	NA		NA		0.046	-0.3
Lab-101	0.090	-0.5	NA		NA		0.045	-0.4
Lab-102	0.127	1.0	0.557	0.4	0.385	-0.9	0.034	-1.3
Lab-103	0.067	-1.4	0.680	1.3	0.459	-0.3	0.046	-0.3
Lab-104	0.116	0.5	0.444	-0.5	NA		0.043	-0.6
Lab-105	0.115	0.5	0.705	1.5	0.540	0.3	0.061	0.9
Lab-106	No Results Given							
Lab-107	0.115	0.5	0.385	-1.0	NA		0.045	-0.4
Lab-108	NA		NA		NA		NA	
Lab-109	0.085	-0.7	NA		NA		NA	
Lab-110	0.104	0.1	0.515	0.0	0.501	0.0	0.053	0.2
Lab-111	0.135	1.3	0.371	-1.1	NA		0.037	-1.0
Lab-112	0.192	3.5	NA		NA		0.066	1.3
Lab-113	0.121	0.7	NA		NA		0.058	0.6
Lab-114	0.104	0.1	NA		NA		NA	
Lab-115	0.125	0.9	0.670	1.3	0.628	1.0	0.062	1.0
Lab-116	0.095	-0.3	NA		ND	-3.9	0.059	0.7
Lab-117	0.106	0.2	NA		NA		NA	
Lab-118	0.115	0.5	0.290	-1.7	0.490	-0.1	0.070	1.6
Lab-119	ND	-3.6	NA		ND	-3.9	NA	
Lab-120	0.086	-0.6	NA		0.058	-3.5	0.048	-0.2
Lab-121	0.122	0.8	0.530	0.2	0.499	0.0	0.055	0.4
Lab-122	NA		NA		NA		NA	
Lab-123	0.059	-1.7	NA		NA		0.025	-2.0
Lab-124	0.121	0.7	NA		NA		NA	
Lab-125	0.084	-0.7	0.266	-1.9	NA		0.024	-2.1
Lab-126	0.130	1.1	NA		NA		0.059	0.7
Lab-127	0.081	-0.8	NA		NA		0.035	-1.2
Lab-128	NA		NA		NA		NA	
Lab-129	0.106	0.2	NA		NA		NA	
Lab-130	0.097	-0.2	0.413	-0.8	0.414	-0.7	0.043	-0.6
Lab-131	0.081	-0.8	NA		NA		0.033	-1.4
Lab-132	0.145	1.7	0.368	-1.1	0.661	1.3	0.036	-1.1

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	Malathion Sum	z-Score (FFP RSD 25%)	Methamidophos	z-Score (FFP RSD 25%)	Methiocarb	Methiocarb Sulfone	Methiocarb Sulfoxide	Methiocarb Sum	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01	0.01	0.01	0.01	
Median (mg/kg)	0.692		0.342		0.044	0.067	0.052	0.157	
Lab-001	0.683	-0.1	0.543	2.4	0.043	0.155	0.074	0.272	3.0
Lab-002	0.583	-0.6	0.240	-1.2	0.034	0.064	0.041	0.139	-0.4
Lab-003	0.630	-0.4	0.226	-1.4	0.044	0.067	0.072	0.180	0.6
Lab-004	0.445	-1.4	0.360	0.2	0.037	0.073	0.058	0.155	0.0
Lab-005	0.218	-2.7	0.399	0.7	NA	NA	NA	NA	
Lab-006	0.672	-0.1	ND	-3.9	NA	NA	NA	NA	
Lab-007	0.738	0.3	0.430	1.0	0.051	0.089	0.107	0.229	1.9
Lab-008	1.09	2.3	0.131	-2.5	0.027	0.056	0.038	0.121	-0.9
Lab-009	0.974	1.6	0.452	1.3	0.113	NA	NA	GC	‡
Lab-010	0.650	-0.2	0.400	0.7	0.050	NA	NA	GC	‡
Lab-011	0.937	1.4	0.387	0.5	0.045	0.064	0.048	0.157	0.0
Lab-012	0.602	-0.5	0.231	-1.3	NA	NA	NA	NA	
Lab-013	0.644	-0.3	0.323	-0.2	0.040	0.063	0.042	0.134	-0.6
Lab-014	0.645	-0.3	1.87	5.0	0.044	NA	NA	GC	‡
Lab-015	0.678	-0.1	0.426	1.0	NA	NA	NA	NA	
Lab-016	0.935	1.4	NA		0.049	NA	NA	GC	‡
Lab-017	0.690	0.0	0.225	-1.4	0.036	0.124	0.068	0.228	1.8
Lab-018	1.04	2.0	0.472	1.5	0.055	0.066	0.081	0.202	1.2
Lab-019	0.540	-0.9	0.429	1.0	0.070	0.187	0.058	0.288	3.4
Lab-020	0.525	-1.0	0.471	1.5	0.035	0.107	0.068	0.192	0.9
Lab-021	0.184	-2.9	0.226	-1.4	NA	NA	NA	NA	
Lab-022	0.886	1.1	0.482	1.6	0.054	0.084	0.070	0.208	1.3
Lab-023	0.773	0.5	0.308	-0.4	0.037	0.113	0.036	0.169	0.3
Lab-024	0.600	-0.5	0.358	0.2	0.032	0.441	0.520	0.993	5.0
Lab-025	1.10	2.4	0.200	-1.7	0.035	NA	NA	NA	
Lab-026	0.460	-1.3	0.474	1.6	1.11	0.100	ND	GC	‡
Lab-027	1.03	1.9	0.307	-0.4	0.050	NA	NA	GC	‡
Lab-028	0.500	-1.1	0.470	1.5	0.045	0.053	0.045	0.133	-0.6
Lab-029	1.01	1.8	ND	-3.9	NA	NA	NA	NA	
Lab-030	0.940	1.4	0.230	-1.3	0.040	NA	NA	GC	‡
Lab-031	0.271	-2.4	0.369	0.3	0.037	NA	NA	NA	
Lab-032	NA		NA		0.430	NA	NA	NA	
Lab-033	0.610	-0.5	0.380	0.5	0.050	NA	NA	NA	
Lab-034	0.191	-2.9	NA		NA	NA	NA	NA	
Lab-035	0.697	0.0	0.245	-1.1	0.022	0.051	0.032	0.096	-1.5
Lab-036	0.379	-1.8	0.446	1.2	0.046	0.062	0.046	0.143	-0.3
Lab-037	0.430	-1.5	ND	-3.9	ND	NA	NA	NA	
Lab-038	0.769	0.4	0.318	-0.3	0.050	0.047	0.043	0.131	-0.7
Lab-039	0.501	-1.1	0.259	-1.0	0.047	NA	NA	NA	
Lab-040	1.05	2.0	0.209	-1.6	0.068	0.113	0.096	0.257	2.6
Lab-041	0.851	0.9	ND	-3.9	0.131	NA	NA	GC	‡
Lab-042	0.876	1.1	0.187	-1.8	0.041	0.096	0.054	0.176	0.5
Lab-043	0.379	-1.8	0.385	0.5	0.042	0.063	0.053	0.147	-0.2
Lab-044	0.746	0.3	ND	-3.9	0.030	0.042	0.327	0.372	5.0

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

Lab Code	Malathion Sum	z-Score (FFP RSD 25%)	Methamidophos	z-Score (FFP RSD 25%)	Methiocarb	Methiocarb Sulfone	Methiocarb Sulfoxide	Methiocarb Sum	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01	0.01	0.01	0.01	
Median (mg/kg)	0.692		0.342		0.044	0.067	0.052	0.157	
Lab-045	0.640	-0.3	0.375	0.4	0.037	0.086	0.053	0.162	0.1
Lab-046	1.37	3.9	0.267	-0.9	0.032	NA	NA	NA	
Lab-047	0.691	0.0	0.460	1.4	0.041	0.049	0.012	0.096	-1.5
Lab-048	0.226	-2.7	0.478	1.6	0.035	0.076	0.058	0.156	0.0
Lab-049	No Results Given								
Lab-050	0.855	0.9	0.407	0.8	0.040	0.059	0.039	0.129	-0.7
Lab-051	0.730	0.2	NA		0.050	NA	NA	GC	‡
Lab-052	1.12	2.5	0.370	0.3	0.046	0.045	0.046	0.140	-0.4
Lab-053	0.913	1.3	NA		NA	NA	NA	NA	
Lab-054	0.509	-1.1	0.445	1.2	0.038	NA	NA	NA	
Lab-055	0.540	-0.9	NA		NA	NA	NA	NA	
Lab-056	0.513	-1.0	0.397	0.7	0.037	0.033	0.041	0.104	-1.3
Lab-057	0.812	0.7	0.403	0.7	0.070	NA	NA	GC	‡
Lab-058	0.990	1.7	NA		NA	NA	NA	NA	
Lab-059	0.936	1.4	0.330	-0.1	0.052	0.075	0.045	0.160	0.1
Lab-060	0.772	0.5	0.203	-1.6	0.046	0.095	0.041	0.167	0.3
Lab-061	0.846	0.9	ND	-3.9	NA	NA	NA	NA	
Lab-062	1.01	1.8	0.270	-0.8	0.047	0.044	0.036	0.120	-0.9
Lab-063	0.259	-2.5	0.269	-0.8	0.041	0.060	0.052	0.142	-0.4
Lab-064	0.943	1.5	0.301	-0.5	0.040	0.043	0.037	0.113	-1.1
Lab-065	0.765	0.4	0.343	0.0	0.058	ND	0.052	0.107	-1.3
Lab-066	0.600	-0.5	NA		NA	NA	NA	NA	
Lab-067	0.938	1.4	0.318	-0.3	0.042	0.058	0.053	0.157	0.0
Lab-068	0.874	1.1	0.371	0.3	0.049	0.059	0.062	0.170	0.3
Lab-069	1.03	2.0	0.414	0.8	0.023	0.050	0.025	0.090	-1.7
Lab-070	0.224	-2.7	0.440	1.2	0.040	0.062	0.059	0.149	-0.2
Lab-071	1.10	2.4	NA		0.043	3.30	0.100	3.40	5.0
Lab-072	1.08	2.2	0.234	-1.3	0.054	0.148	0.057	0.237	2.1
Lab-073	1.44	4.3	0.393	0.6	0.054	NA	NA	NA	
Lab-074	0.417	-1.6	0.349	0.1	0.035	0.073	0.074	0.168	0.3
Lab-075	No Results Given								
Lab-076	0.902	1.2	0.351	0.1	0.051	0.070	ND	GC	‡
Lab-077	0.310	-2.2	0.378	0.4	0.043	NA	0.009	NA	
Lab-078	0.836	0.8	0.420	0.9	0.048	0.068	0.052	0.156	0.0
Lab-079	0.304	-2.2	0.028	-3.7	ND	NA	NA	NA	
Lab-080	0.418	-1.6	0.411	0.8	0.043	0.178	0.065	0.285	3.3
Lab-081	0.850	0.9	NA		NA	NA	NA	NA	
Lab-082	0.947	1.5	0.245	-1.1	0.070	0.130	0.048	0.248	2.3
Lab-083	0.649	-0.2	0.384	0.5	NA	NA	NA	NA	
Lab-084	0.569	-0.7	0.456	1.3	0.074	0.084	0.070	0.213	1.4
Lab-085	0.519	-1.0	0.169	-2.0	0.026	0.035	0.031	0.092	-1.6
Lab-086	0.760	0.4	NA		ND	ND	ND	ND	-3.7
Lab-087	0.424	-1.5	0.160	-2.1	0.034	NA	NA	GC	‡
Lab-088	0.594	-0.6	0.346	0.1	NA	NA	NA	NA	
Lab-089	0.874	1.1	0.506	1.9	0.043	0.099	NA	NA	
Lab-090	0.988	1.7	0.213	-1.5	0.044	0.049	0.039	0.132	-0.6

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

Lab Code	Malathion Sum	z-Score (FFP RSD 25%)	Methamidophos	z-Score (FFP RSD 25%)	Methiocarb	Methiocarb Sulfone	Methiocarb Sulfoxide	Methiocarb Sum	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01	0.01	0.01	0.01	
Median (mg/kg)	0.692		0.342		0.044	0.067	0.052	0.157	
Lab-091	0.852	0.9	0.540	2.3	0.065	0.050	0.448	0.562	5.0
Lab-092	0.849	0.9	0.239	-1.2	0.030	0.050	0.050	0.129	-0.7
Lab-093	0.790	0.6	0.750	4.8	NA	NA	NA	NA	
Lab-094	0.902	1.2	0.133	-2.4	NA	NA	NA	NA	
Lab-095	0.184	-2.9	0.339	0.0	ND	0.033	0.023	0.056	-2.6
Lab-096	0.710	0.1	NA		NA	NA	NA	NA	
Lab-097	0.831	0.8	0.260	-1.0	0.033	0.027	ND	0.060	-2.5
Lab-098	0.874	1.1	0.356	0.2	0.035	0.075	0.025	0.135	-0.5
Lab-099	0.610	-0.5	0.240	-1.2	0.043	0.200	0.078	0.291	3.4
Lab-100	0.175	-3.0	0.121	-2.6	NA	NA	NA	NA	
Lab-101	0.747	0.3	ND	-3.9	0.083	ND	ND	0.083	-1.9
Lab-102	0.626	-0.4	0.426	1.0	0.077	0.104	NA	NA	
Lab-103	0.677	-0.1	0.480	1.6	0.049	0.092	0.050	0.191	0.9
Lab-104	1.04	2.0	0.280	-0.7	0.047	0.056	0.042	0.135	-0.5
Lab-105	0.534	-0.9	0.441	1.2	0.052	ND	0.062	0.110	-1.2
Lab-106	No Results Given								
Lab-107	0.639	-0.3	0.215	-1.5	0.035	0.085	0.053	0.173	0.4
Lab-108	0.370	-1.9	0.238	-1.2	0.035	NA	NA	NA	
Lab-109	NA		0.055	-3.4	NA	NA	NA	NA	
Lab-110	0.896	1.2	0.304	-0.4	0.050	ND	ND	GC	‡
Lab-111	0.506	-1.1	0.104	-2.8	0.028	NA	NA	GC	‡
Lab-112	NA	-3.9	NA		NA	NA	NA	NA	
Lab-113	0.580	-0.6	0.615	3.2	NA	NA	NA	NA	
Lab-114	0.378	-1.8	0.464	1.4	NA	NA	NA	NA	
Lab-115	1.05	2.1	0.187	-1.8	0.054	0.068	0.047	0.157	0.0
Lab-116	0.850	0.9	NA		NA	NA	NA	NA	
Lab-117	0.534	-0.9	NA		NA	NA	NA	NA	
Lab-118	0.710	0.1	0.110	-2.7	0.060	0.034	0.050	0.137	-0.5
Lab-119	ND	-3.9	0.103	-2.8	NA	NA	NA	NA	
Lab-120	0.266	-2.5	0.125	-2.5	ND	NA	NA	NA	
Lab-121	0.935	1.4	0.340	0.0	0.047	0.063	0.046	0.156	0.0
Lab-122	NA		NA		NA	NA	NA	NA	
Lab-123	0.393	-1.7	0.362	0.2	NA	NA	NA	NA	
Lab-124	0.635	-0.3	NA		NA	NA	NA	NA	
Lab-125	0.131	-3.2	0.317	-0.3	0.039	0.087	0.134	0.260	2.6
Lab-126	0.550	-0.8	NA		0.045	NA	NA	NA	
Lab-127	0.391	-1.7	0.230	-1.3	0.036	0.091	0.062	0.189	0.8
Lab-128	0.232	-2.7	0.353	0.1	NA	NA	NA	NA	
Lab-129	0.858	1.0	ND	-3.9	0.046	NA	NA	GC	‡
Lab-130	0.522	-1.0	0.153	-2.2	NA	NA	NA	NA	
Lab-131	0.490	-1.2	0.331	-0.1	0.048	NA	NA	GC	‡
Lab-132	0.513	-1.0	0.162	-2.1	0.062	0.100	0.054	0.200	1.1

‡ Not appropiated chromatographic technique used.

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	Methomyl Sum	z-Score (FFP RSD 25%)	Oxamyl	z-Score (FFP RSD 25%)	Pendimethalin	z-Score (FFP RSD 25%)	Phosmet	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/kg)	0.739		0.322		0.074		0.236	
Lab-001	0.851	0.6	0.377	0.7	0.088	0.8	0.090	-2.5
Lab-002	0.583	-0.8	0.287	-0.4	0.061	-0.7	0.296	1.0
Lab-003	0.587	-0.8	0.273	-0.6	0.088	0.8	0.231	-0.1
Lab-004	0.789	0.3	0.320	0.0	0.097	1.2	0.156	-1.4
Lab-005	NA		NA		NA		0.154	-1.4
Lab-006	NA		NA		0.090	0.9	NA	
Lab-007	0.726	-0.1	0.352	0.4	0.072	-0.1	0.228	-0.1
Lab-008	0.426	-1.7	0.386	0.8	0.119	2.4	0.188	-0.8
Lab-009	0.688	-0.3	0.331	0.1	0.070	-0.2	0.272	0.6
Lab-010	1.20	2.5	0.500	2.2	0.070	-0.2	NA	
Lab-011	0.790	0.3	0.350	0.3	0.066	-0.4	0.204	-0.5
Lab-012	NA		NA		0.052	-1.2	0.271	0.6
Lab-013	0.623	-0.6	0.300	-0.3	0.074	0.0	0.272	0.6
Lab-014	NA		NA		ND	-3.5	0.196	-0.7
Lab-015	NA		NA		NA		NA	
Lab-016	NA		NA		NA		0.246	0.2
Lab-017	0.725	-0.1	0.250	-0.9	0.052	-1.2	0.320	1.4
Lab-018	0.863	0.7	0.309	-0.2	0.063	-0.6	NA	
Lab-019	0.870	0.7	0.422	1.2	0.079	0.3	0.264	0.5
Lab-020	0.716	-0.1	0.280	-0.5	0.069	-0.3	0.191	-0.8
Lab-021							0.153	-1.4
Lab-022	0.798	0.3	0.173	-1.9	0.096	1.2	0.298	1.1
Lab-023	0.764	0.1	0.249	-0.9	0.067	-0.4	0.211	-0.4
Lab-024	0.563	-1.0	0.355	0.4	0.062	-0.6	0.248	0.2
Lab-025	0.440	-1.6	0.320	0.0	ND	-3.5	0.280	0.7
Lab-026	0.837	0.5	0.653	4.1	0.060	-0.8	0.180	-0.9
Lab-027	0.793	0.3	0.294	-0.3	0.065	-0.5	0.240	0.1
Lab-028	0.780	0.2	0.310	-0.1	0.070	-0.2	0.200	-0.6
Lab-029	NA		NA		NA		NA	
Lab-030	0.600	-0.8	0.270	-0.6	0.070	-0.2	0.240	0.1
Lab-031	NA		0.276	-0.6	0.076	0.1	0.125	-1.9
Lab-032	12.0	5.0	4.90	5.0	NA		NA	
Lab-033	0.990	1.4	0.360	0.5	NA		NA	
Lab-034	NA		NA		0.080	0.3	0.132	-1.8
Lab-035	0.538	-1.1	0.274	-0.6	0.056	-1.0	0.139	-1.6
Lab-036	0.762	0.1	0.348	0.3	0.063	-0.6	0.304	1.2
Lab-037	ND	-3.9	NA		NA		NA	
Lab-038	ND	-3.9	0.270	-0.6	0.067	-0.4	0.228	-0.1
Lab-039	0.450	-1.6	NA		0.044	-1.6	0.209	-0.5
Lab-040	0.841	0.6	0.365	0.5	0.118	2.4	0.246	0.2
Lab-041	NA		NA		0.087	0.7	0.204	-0.5
Lab-042	0.684	-0.3	0.265	-0.7	0.075	0.1	0.269	0.6
Lab-043	0.768	0.2	0.325	0.0	0.089	0.8	0.276	0.7
Lab-044	0.596	-0.8	0.019	-3.8	0.063	-0.6	0.165	-1.2
Lab-045	0.817	0.4	0.369	0.6	0.071	-0.2	0.230	-0.1
Lab-046	0.894	0.8	0.382	0.7	0.083	0.5	ND	-3.8

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

Lab Code	Methomyl Sum	z-Score (FFP RSD 25%)	Oxamyl	z-Score (FFP RSD 25%)	Pendimethalin	z-Score (FFP RSD 25%)	Phosmet	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/kg)	0.739		0.322		0.074		0.236	
Lab-047	0.934	1.1	0.377	0.7	0.066	-0.4	0.221	-0.3
Lab-048	0.876	0.7	0.390	0.8	0.073	-0.1	0.285	0.8
Lab-049	No Results Given							
Lab-050	0.642	-0.5	0.310	-0.1	0.062	-0.6	0.151	-1.4
Lab-051	NA		NA		NA		0.330	1.6
Lab-052	0.710	-0.2	0.380	0.7	0.083	0.5	0.230	-0.1
Lab-053	NA		NA		0.090	0.9	0.331	1.6
Lab-054	0.478	-1.4	0.310	-0.1	0.093	1.0	0.247	0.2
Lab-055	NA		NA		NA		NA	
Lab-056	0.576	-0.9	0.262	-0.7	0.067	-0.4	0.225	-0.2
Lab-057	NA		NA		0.059	-0.8	0.190	-0.8
Lab-058	NA		NA		0.110	1.9	0.300	1.1
Lab-059	0.527	-1.1	0.310	-0.1	0.096	1.2	0.364	2.2
Lab-060	0.602	-0.7	0.254	-0.8	0.075	0.1	0.246	0.2
Lab-061	NA		NA		ND	-3.5	ND	-3.8
Lab-062	0.751	0.1	0.335	0.2	0.068	-0.3	0.250	0.2
Lab-063	0.878	0.8	0.353	0.4	0.062	-0.6	0.206	-0.5
Lab-064	0.699	-0.2	0.340	0.2	0.061	-0.7	0.247	0.2
Lab-065	0.607	-0.7	ND	-3.9	0.084	0.5	0.346	1.9
Lab-066	NA		NA		NA		NA	
Lab-067	0.617	-0.7	0.289	-0.4	0.078	0.2	0.232	-0.1
Lab-068	0.835	0.5	0.370	0.6	0.084	0.5	0.240	0.1
Lab-069	0.514	-1.2	0.305	-0.2	0.094	1.1	0.317	1.4
Lab-070	0.746	0.0	0.322	0.0	0.074	0.0	0.236	0.0
Lab-071	0.750	0.1	0.410	1.1	NA		NA	
Lab-072	0.762	0.1	0.337	0.2	0.095	1.1	0.317	1.4
Lab-073	0.555	-1.0	0.330	0.1	0.097	1.2	0.385	2.5
Lab-074	0.796	0.3	0.336	0.2	0.065	-0.5	0.220	-0.3
Lab-075	No Results Given							
Lab-076	0.899	0.9	0.428	1.3	0.103	1.6	0.259	0.4
Lab-077	0.658	-0.4	0.508	2.3	0.114	2.2	NA	
Lab-078	0.835	0.5	0.324	0.0	0.088	0.8	0.272	0.6
Lab-079	0.854	0.6	0.427	1.3	0.056	-1.0	0.150	-1.5
Lab-080	0.850	0.6	0.318	0.0	0.064	-0.5	0.328	1.6
Lab-081	NA		NA		0.090	0.9	0.275	0.7
Lab-082	0.130	-3.3	0.158	-2.0	NA		ND	-3.8
Lab-083	NA		NA		0.077	0.2	0.098	-2.3
Lab-084	0.762	0.1	0.416	1.2	0.078	0.2	0.283	0.8
Lab-085	0.521	-1.2	0.250	-0.9	0.110	1.9	0.142	-1.6
Lab-086	0.440	-1.6	0.230	-1.1	0.090	0.9	NA	
Lab-087	NA		NA		0.058	-0.9	0.100	-2.3
Lab-088	NA		NA		0.052	-1.2	0.187	-0.8
Lab-089	0.710	-0.2	0.327	0.1	0.087	0.7	0.279	0.7
Lab-090	0.654	-0.5	0.285	-0.5	0.072	-0.1	0.239	0.1
Lab-091	0.739	0.0	0.323	0.0	0.092	1.0	0.273	0.6
Lab-092	0.530	-1.1	0.210	-1.4	0.078	0.2	0.255	0.3
Lab-093	NA		NA		NA		NA	

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

Lab Code	Methomyl Sum	z-Score (FFP RSD 25%)	Oxamyl	z-Score (FFP RSD 25%)	Pendimethalin	z-Score (FFP RSD 25%)	Phosmet	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/kg)	0.739		0.322		0.074		0.236	
Lab-094	NA		NA		NA		0.314	1.3
Lab-095	0.915	1.0	0.328	0.1	0.078	0.2	0.176	-1.0
Lab-096	NA		NA		NA		NA	
Lab-097	0.790	0.3	0.270	-0.6	0.040	-1.8	0.230	-0.1
Lab-098	0.453	-1.5	0.252	-0.9	0.072	-0.1	0.255	0.3
Lab-099	0.750	0.1	0.320	0.0	0.075	0.1	0.245	0.2
Lab-100	0.478	-1.4	NA		NA		0.172	-1.1
Lab-101	0.652	-0.5	0.314	-0.1	NA		NA	
Lab-102	0.819	0.4	0.322	0.0	NA		0.182	-0.9
Lab-103	0.780	0.2	0.510	2.3	0.097	1.2	0.200	-0.6
Lab-104	1.08	1.8	0.308	-0.2	NA		0.186	-0.8
Lab-105	0.695	-0.2	0.358	0.4	0.088	0.8	0.280	0.7
Lab-106	No Results Given							
Lab-107	0.829	0.5	0.328	0.1	0.058	-0.9	0.211	-0.4
Lab-108	NA		NA		NA		NA	
Lab-109	NA		NA		NA		0.208	-0.5
Lab-110	0.696	-0.2	0.293	-0.4	0.067	-0.4	0.243	0.1
Lab-111	0.214	-2.8	NA		0.069	-0.3	0.353	2.0
Lab-112	NA		NA		0.114	2.2	NA	
Lab-113	NA		NA		NA		NA	
Lab-114	NA		NA		0.082	0.4	NA	
Lab-115	0.711	-0.2	0.266	-0.7	0.066	-0.4	0.226	-0.2
Lab-116	0.850	0.6	NA		0.083	0.5	NA	
Lab-117	NA		NA		NA		NA	
Lab-118	1.10	2.0	0.400	1.0	0.081	0.4	0.130	-1.8
Lab-119	NA		NA		NA		0.313	1.3
Lab-120	NA		NA		NA		NA	
Lab-121	0.730	0.0	0.308	-0.2	0.098	1.3	0.240	0.1
Lab-122	NA		NA		NA		NA	
Lab-123	NA		NA		0.077	0.2	NA	
Lab-124	NA		NA		NA		NA	
Lab-125	ND	-3.9	0.434	1.4	0.039	-1.9	0.126	-1.9
Lab-126	0.540	-1.1	NA		NA		NA	
Lab-127	0.904	0.9	0.358	0.4	0.064	-0.5	0.132	-1.8
Lab-128	NA		NA		NA		NA	
Lab-129	0.712	-0.1	NA		0.060	-0.8	NA	
Lab-130	1.02	1.5	0.302	-0.2	0.062	-0.6	NA	
Lab-131	NA		NA		0.048	-1.4	0.192	-0.7
Lab-132	0.748	0.0	0.429	1.3	0.064	-0.5	ND	-3.8

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	Quinoxyfen	z-Score (FFP RSD 25%)	Triadimenol Sum	z-Score (FFP RSD 25%)	Vinclozolin	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01	
Median (mg/kg)	0.298		0.331		1.04	
Lab-001	NA		0.367	0.4	0.690	-1.3
Lab-002	0.215	-1.1	0.356	0.3	0.830	-0.8
Lab-003	0.372	1.0	0.330	0.0	1.23	0.7
Lab-004	0.260	-0.5	0.399	0.8	0.632	-1.6
Lab-005	NA		NA		0.935	-0.4
Lab-006	NA		NA		1.19	0.6
Lab-007	0.222	-1.0	0.319	-0.1	1.11	0.3
Lab-008	0.274	-0.3	0.164	-2.0	0.857	-0.7
Lab-009	0.367	0.9	0.281	-0.6	1.03	0.0
Lab-010	0.350	0.7	0.200	-1.6	1.10	0.2
Lab-011	0.279	-0.3	0.173	-1.9	0.978	-0.2
Lab-012	0.178	-1.6	0.423	1.1	0.523	-2.0
Lab-013	0.343	0.6	0.353	0.3	1.18	0.5
Lab-014	2.57	5.0	0.213	-1.4	0.917	-0.5
Lab-015	0.463	2.2	0.653	3.9	1.76	2.8
Lab-016	NA		NA		1.05	0.1
Lab-017	0.257	-0.6	0.200	-1.6	0.885	-0.6
Lab-018	0.420	1.6	0.431	1.2	1.34	1.2
Lab-019	0.294	-0.1	0.403	0.9	1.31	1.0
Lab-020	0.266	-0.4	0.365	0.4	1.03	0.0
Lab-021	0.104	-2.6	0.364	0.4	0.446	-2.3
Lab-022	0.395	1.3	0.493	2.0	1.51	1.8
Lab-023	0.320	0.3	0.288	-0.5	1.09	0.2
Lab-024	0.403	1.4	ND	-3.9	1.72	2.6
Lab-025	0.330	0.4	0.210	-1.5	1.20	0.6
Lab-026	0.269	-0.4	2.25	5.0	0.580	-1.8
Lab-027	0.350	0.7	0.399	0.8	1.05	0.0
Lab-028	0.300	0.0	0.310	-0.3	0.950	-0.3
Lab-029	0.376	1.0	0.373	0.5	1.19	0.6
Lab-030	0.480	2.4	0.270	-0.7	1.12	0.3
Lab-031	0.264	-0.5	0.267	-0.8	1.20	0.6
Lab-032	NA		NA		NA	
Lab-033	NA		NA		1.15	0.4
Lab-034	NA		0.243	-1.1	1.17	0.5
Lab-035	0.244	-0.7	0.265	-0.8	0.900	-0.5
Lab-036	0.271	-0.4	0.270	-0.7	1.00	-0.2
Lab-037	NA		NA		1.22	0.7
Lab-038	0.326	0.4	0.180	-1.8	0.983	-0.2
Lab-039	0.189	-1.5	0.288	-0.5	0.588	-1.7
Lab-040	0.261	-0.5	0.385	0.7	1.59	2.1
Lab-041	0.284	-0.2	0.120	-2.5	0.826	-0.8
Lab-042	0.259	-0.5	0.250	-1.0	1.14	0.4
Lab-043	0.298	0.0	0.411	1.0	0.512	-2.0
Lab-044	0.231	-0.9	0.360	0.4	0.550	-1.9
Lab-045	0.298	0.0	0.312	-0.2	0.880	-0.6

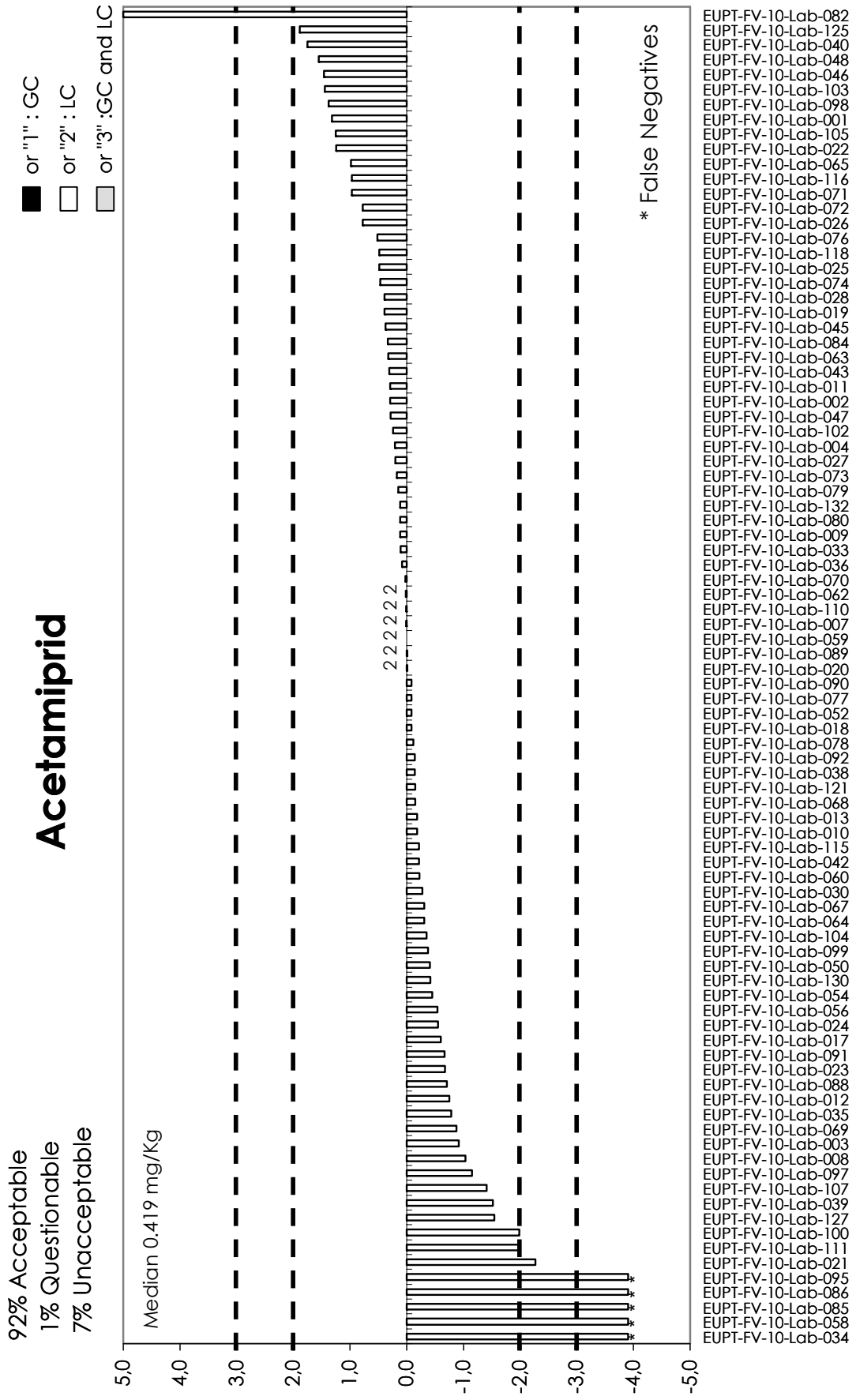
APPENDIX 3. Results (mg/Kg) and z-scores for FFP RSD (25%).

Lab Code	Quinoxyfen	z-Score (FFP RSD 25%)	Triadimenol Sum	z-Score (FFP RSD 25%)	Vinclozolin	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01	
Median (mg/kg)	0.298		0.331		1.04	
Lab-046	0.266	-0.4	0.339	0.1	0.926	-0.4
Lab-047	0.283	-0.2	0.356	0.3	0.969	-0.3
Lab-048	0.247	-0.7	0.381	0.6	0.962	-0.3
Lab-049	No Results Given					
Lab-050	0.333	0.5	0.310	-0.3	0.946	-0.4
Lab-051	NA		0.260	-0.9	0.500	-2.1
Lab-052	0.340	0.6	0.440	1.3	1.10	0.2
Lab-053	NA		0.379	0.6	1.31	1.0
Lab-054	0.308	0.1	0.390	0.7	1.10	0.2
Lab-055	NA		NA		0.630	-1.6
Lab-056	0.200	-1.3	0.333	0.0	0.814	-0.9
Lab-057	0.315	0.2	0.321	-0.1	0.721	-1.2
Lab-058	NA		NA		1.37	1.3
Lab-059	0.385	1.2	0.415	1.0	1.48	1.7
Lab-060	0.271	-0.4	0.315	-0.2	1.10	0.2
Lab-061	0.245	-0.7	0.218	-1.4	0.930	-0.4
Lab-062	0.310	0.2	0.297	-0.4	1.04	0.0
Lab-063	0.225	-1.0	0.343	0.1	0.954	-0.3
Lab-064	0.312	0.2	0.318	-0.2	0.839	-0.8
Lab-065	0.315	0.2	0.450	1.4	1.16	0.5
Lab-066	NA		0.270	-0.7	1.26	0.8
Lab-067	0.357	0.8	0.436	1.3	1.08	0.1
Lab-068	0.347	0.7	0.360	0.4	1.19	0.6
Lab-069	0.394	1.3	0.214	-1.4	1.14	0.4
Lab-070	0.304	0.1	0.362	0.4	1.03	0.0
Lab-071	NA		NA		NA	
Lab-072	0.411	1.5	0.398	0.8	1.30	1.0
Lab-073	0.455	2.1	0.425	1.1	1.58	2.1
Lab-074	0.231	-0.9	0.283	-0.6	0.786	-1.0
Lab-075	No Results Given					
Lab-076	0.401	1.4	0.347	0.2	0.972	-0.3
Lab-077	0.306	0.1	0.318	-0.2	0.485	-2.1
Lab-078	0.277	-0.3	0.323	-0.1	1.05	0.0
Lab-079	NA		0.276	-0.7	0.786	-1.0
Lab-080	0.235	-0.8	0.386	0.7	1.04	0.0
Lab-081	NA		NA		1.15	0.4
Lab-082	0.285	-0.2	0.683	4.3	0.687	-1.4
Lab-083	0.320	0.3	NA		1.21	0.7
Lab-084	0.290	-0.1	0.386	0.7	1.32	1.1
Lab-085	0.367	0.9	0.331	0.0	1.20	0.6
Lab-086	NA		ND	-3.9	0.560	-1.8
Lab-087	0.239	-0.8	0.226	-1.3	0.398	-2.5
Lab-088	0.252	-0.6	0.403	0.9	0.804	-0.9
Lab-089	0.390	1.2	0.257	-0.9	1.09	0.2
Lab-090	0.370	1.0	0.339	0.1	1.06	0.1
Lab-091	NA		2.66	5.0	1.55	2.0
Lab-092	0.325	0.4	0.358	0.3	1.09	0.2

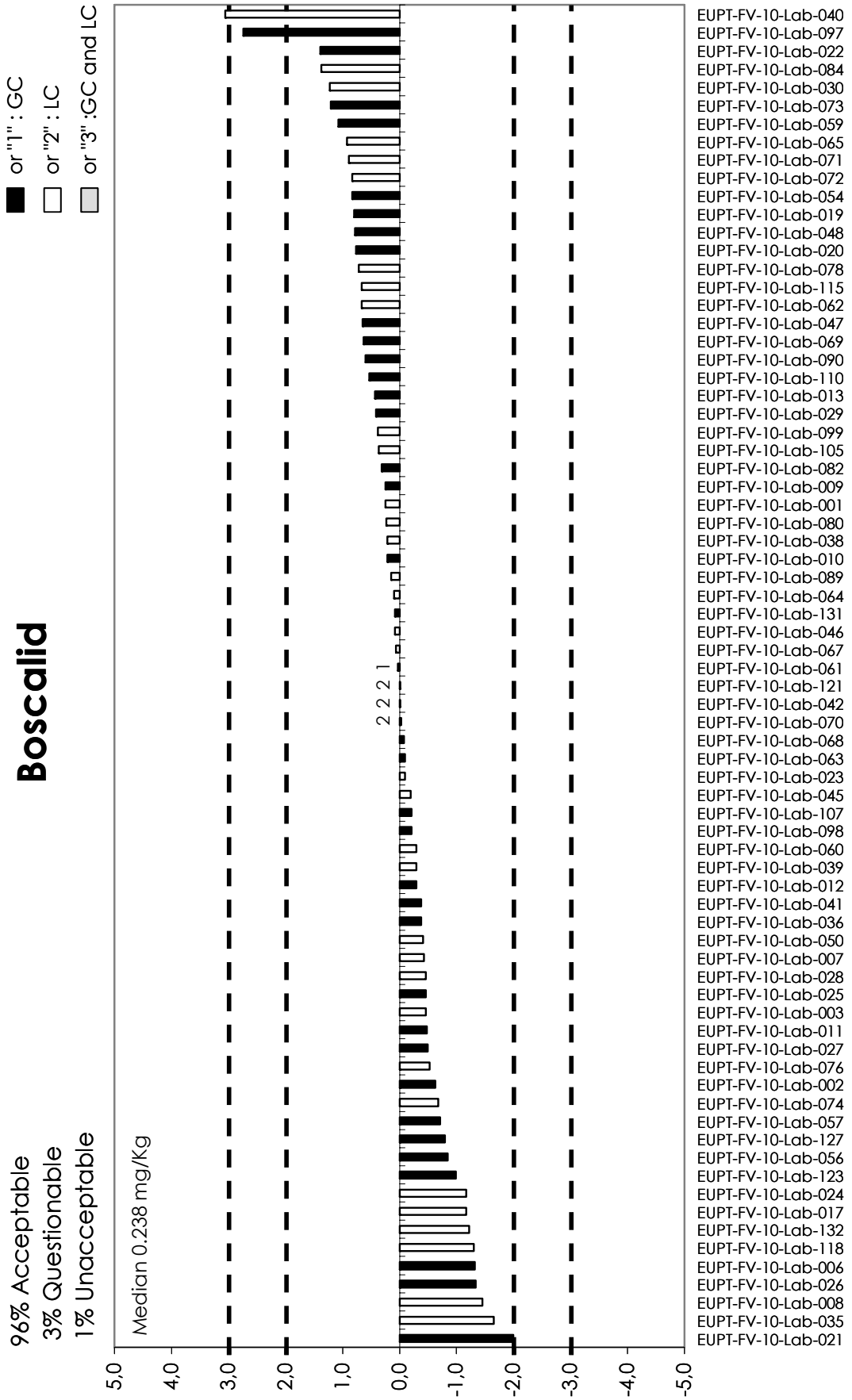
APPENDIX 3. Results (mg/kg) and z-scores for FFP RSD (25%).

Lab Code	Quinoxyfen	z-Score (FFP RSD 25%)	Triadimenol Sum	z-Score (FFP RSD 25%)	Vinclozolin	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01	
Median (mg/kg)	0.298		0.331		1.04	
Lab-093	NA		NA		0.530	-2.0
Lab-094	NA		0.302	-0.4	0.979	-0.2
Lab-095	0.274	-0.3	0.331	0.0	0.837	-0.8
Lab-096	0.369	1.0	0.270	-0.7	1.09	0.2
Lab-097	0.264	-0.5	0.298	-0.4	1.10	0.2
Lab-098	0.312	0.2	0.384	0.6	1.08	0.2
Lab-099	0.320	0.3	0.400	0.8	1.00	-0.2
Lab-100	NA		NA		0.900	-0.5
Lab-101	NA		NA		1.03	0.0
Lab-102	0.295	0.0	0.255	-0.9	0.964	-0.3
Lab-103	NA		NA		1.00	-0.2
Lab-104	0.379	1.1	0.385	0.7	1.20	0.6
Lab-105	0.341	0.6	0.311	-0.2	1.17	0.5
Lab-106	No Results Given					
Lab-107	0.243	-0.7	0.332	0.0	0.820	-0.8
Lab-108	NA		NA		NA	
Lab-109	NA		NA		NA	
Lab-110	0.284	-0.2	0.297	-0.4	1.03	0.0
Lab-111	0.295	0.0	0.177	-1.9	0.560	-1.8
Lab-112	NA		NA		1.60	2.2
Lab-113	NA		0.155	-2.1	1.21	0.7
Lab-114	NA		0.625	3.6	0.695	-1.3
Lab-115	0.276	-0.3	0.378	0.6	1.21	0.7
Lab-116	0.420	1.6	0.230	-1.2	1.44	1.5
Lab-117	NA		NA		1.04	0.0
Lab-118	0.480	2.4	0.590	3.1	1.26	0.8
Lab-119	NA		0.404	0.9	1.15	0.4
Lab-120	0.250	-0.6	NA		1.03	0.0
Lab-121	0.334	0.5	0.348	0.2	1.10	0.2
Lab-122	NA		NA		NA	
Lab-123	0.188	-1.5	NA		0.776	-1.0
Lab-124	NA		NA		1.15	0.4
Lab-125	0.161	-1.8	0.238	-1.1	0.586	-1.7
Lab-126	0.340	0.6	0.280	-0.6	1.15	0.4
Lab-127	0.098	-2.7	0.213	-1.4	0.625	-1.6
Lab-128	NA		NA		1.33	1.1
Lab-129	NA		0.822	5.0	1.01	-0.1
Lab-130	0.282	-0.2	0.296	-0.4	1.06	0.1
Lab-131	0.240	-0.8	0.321	-0.1	0.664	-1.4
Lab-132	0.311	0.2	0.467	1.6	1.13	0.3

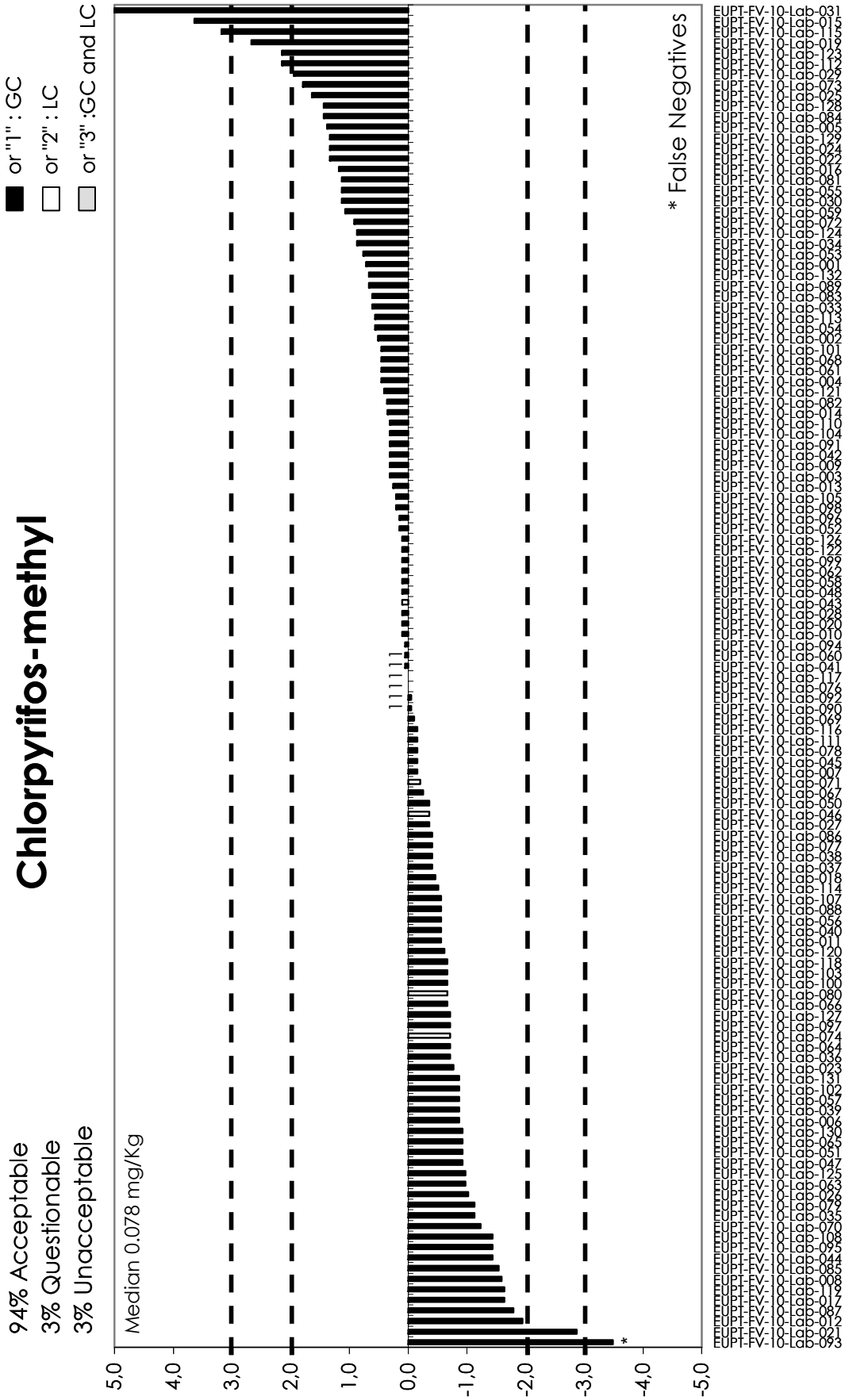
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



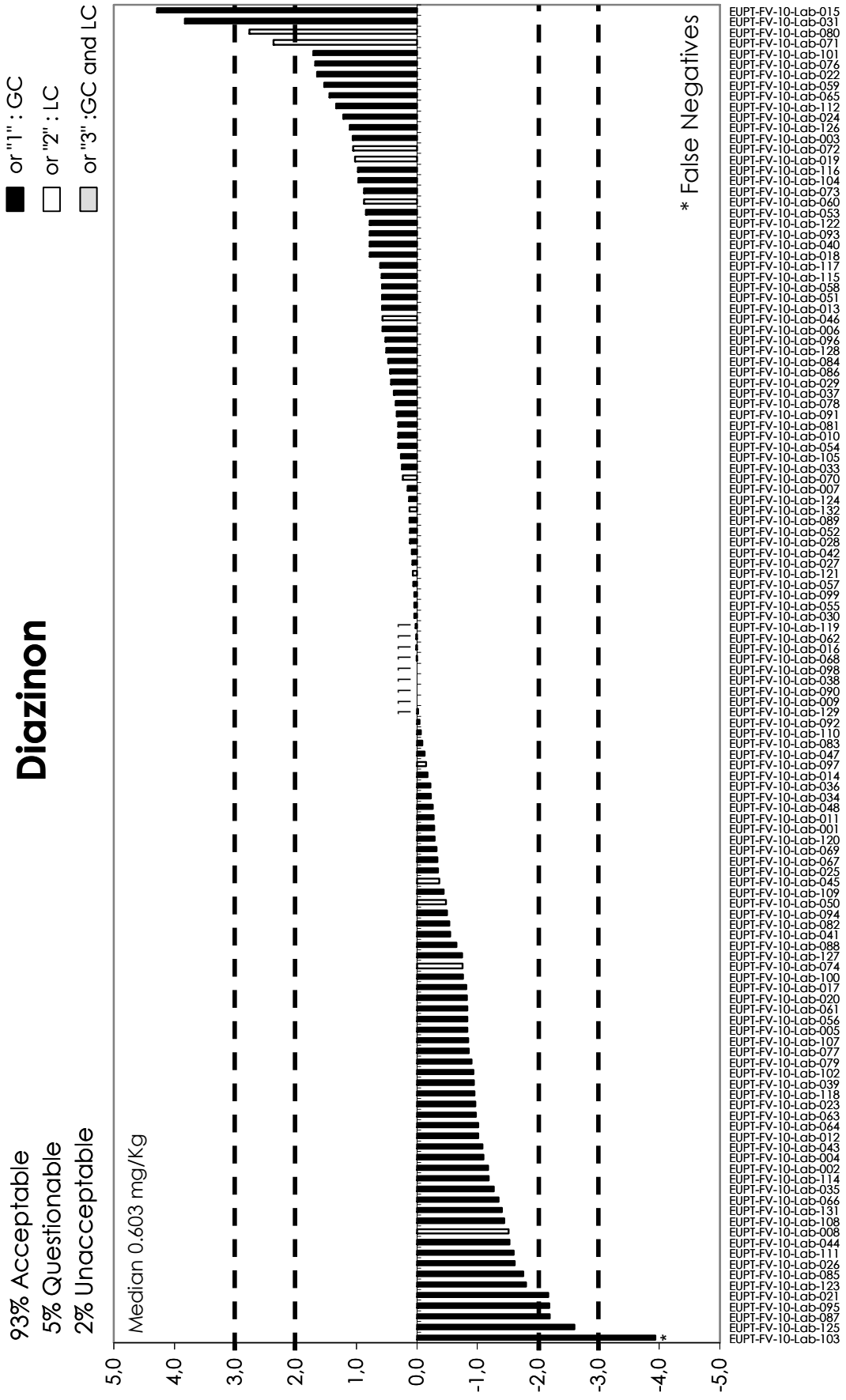
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



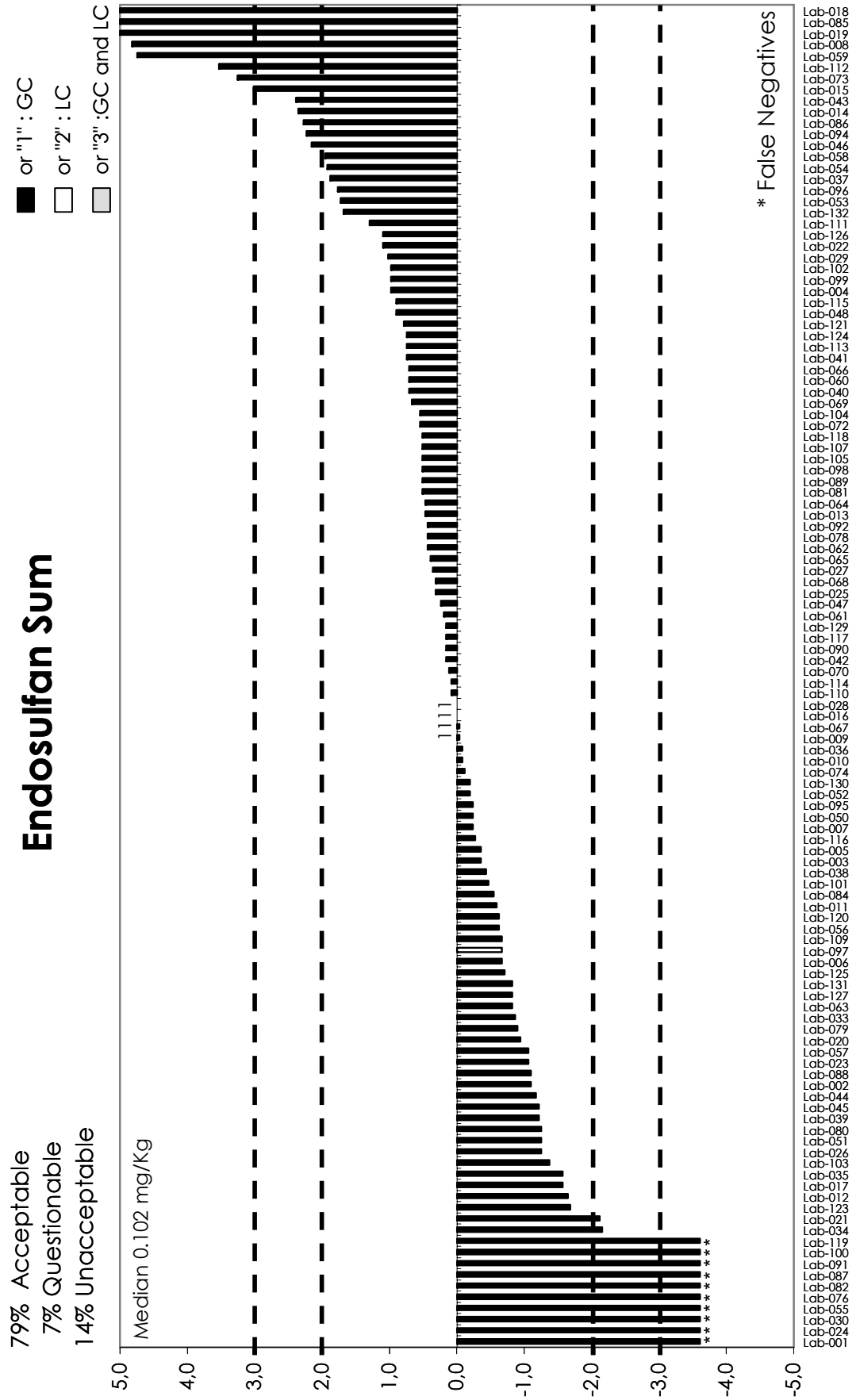
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



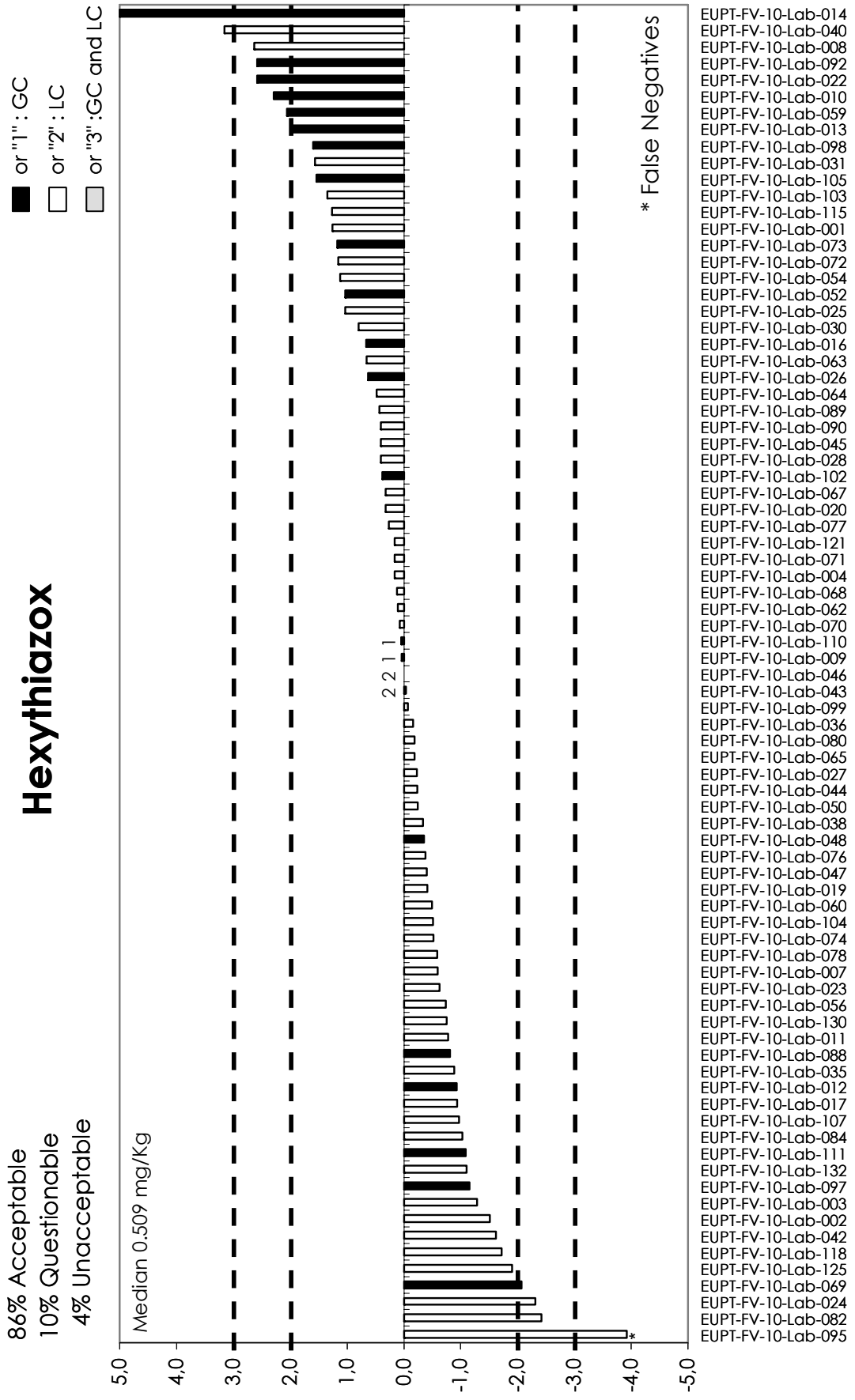
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



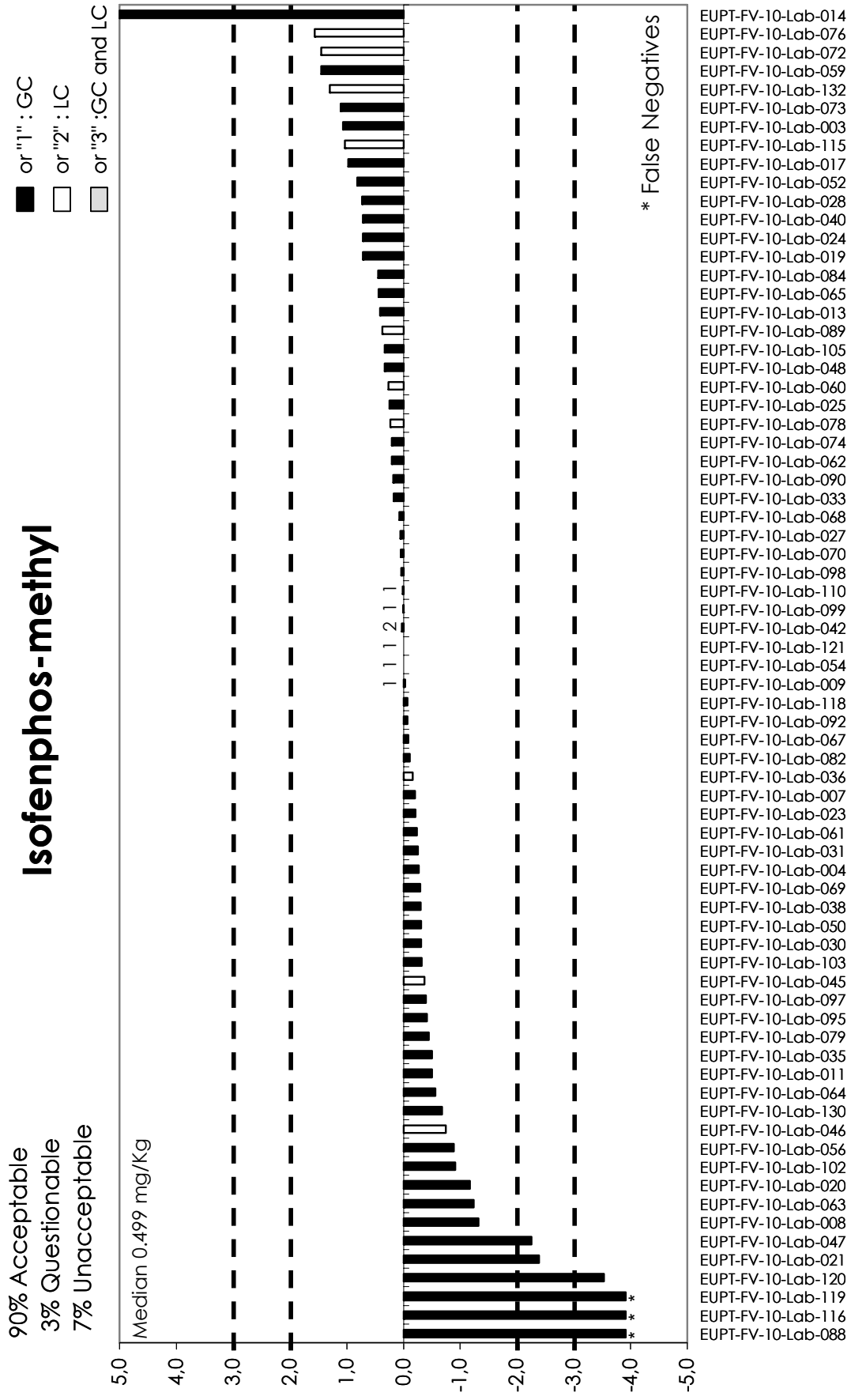
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



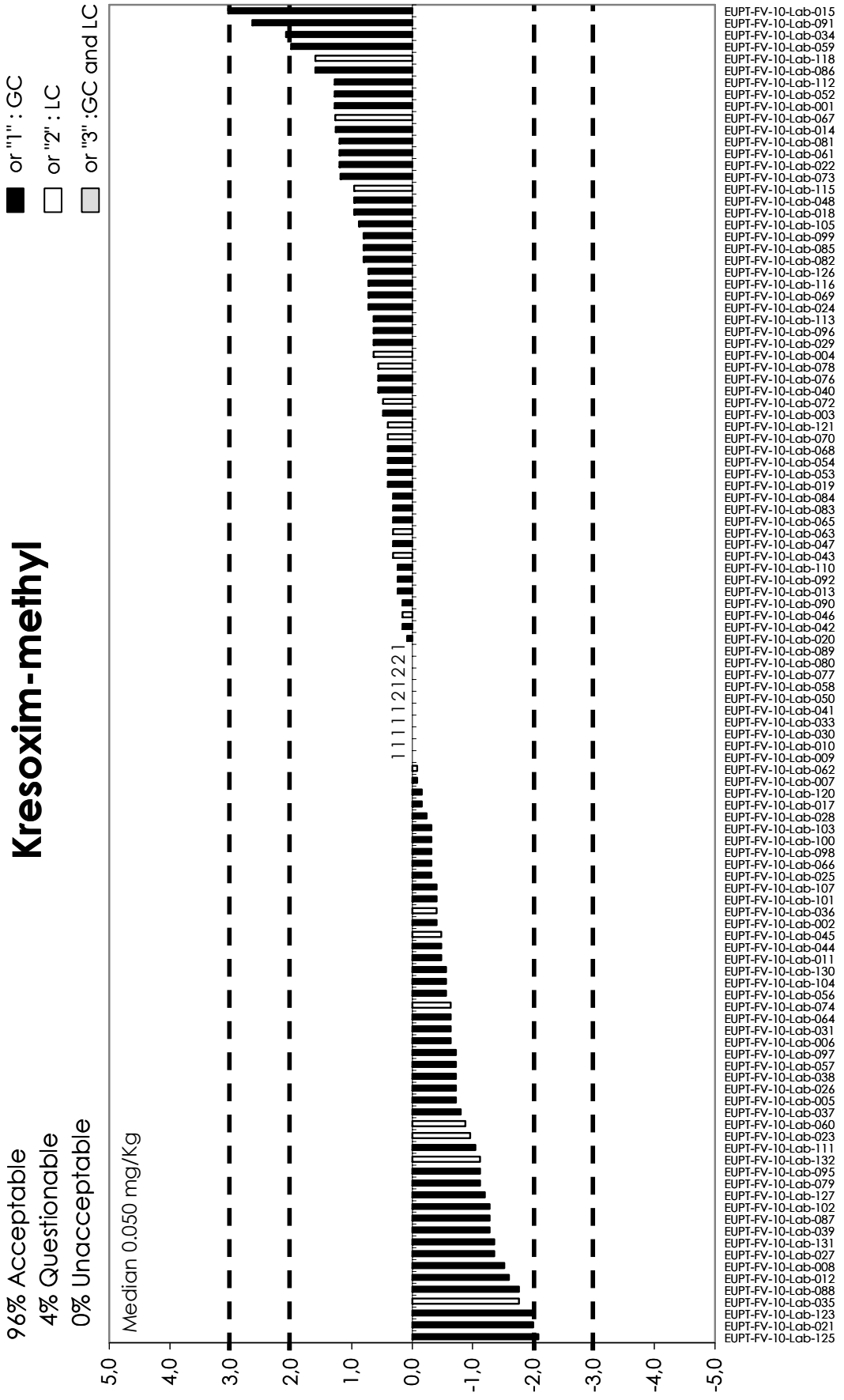
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



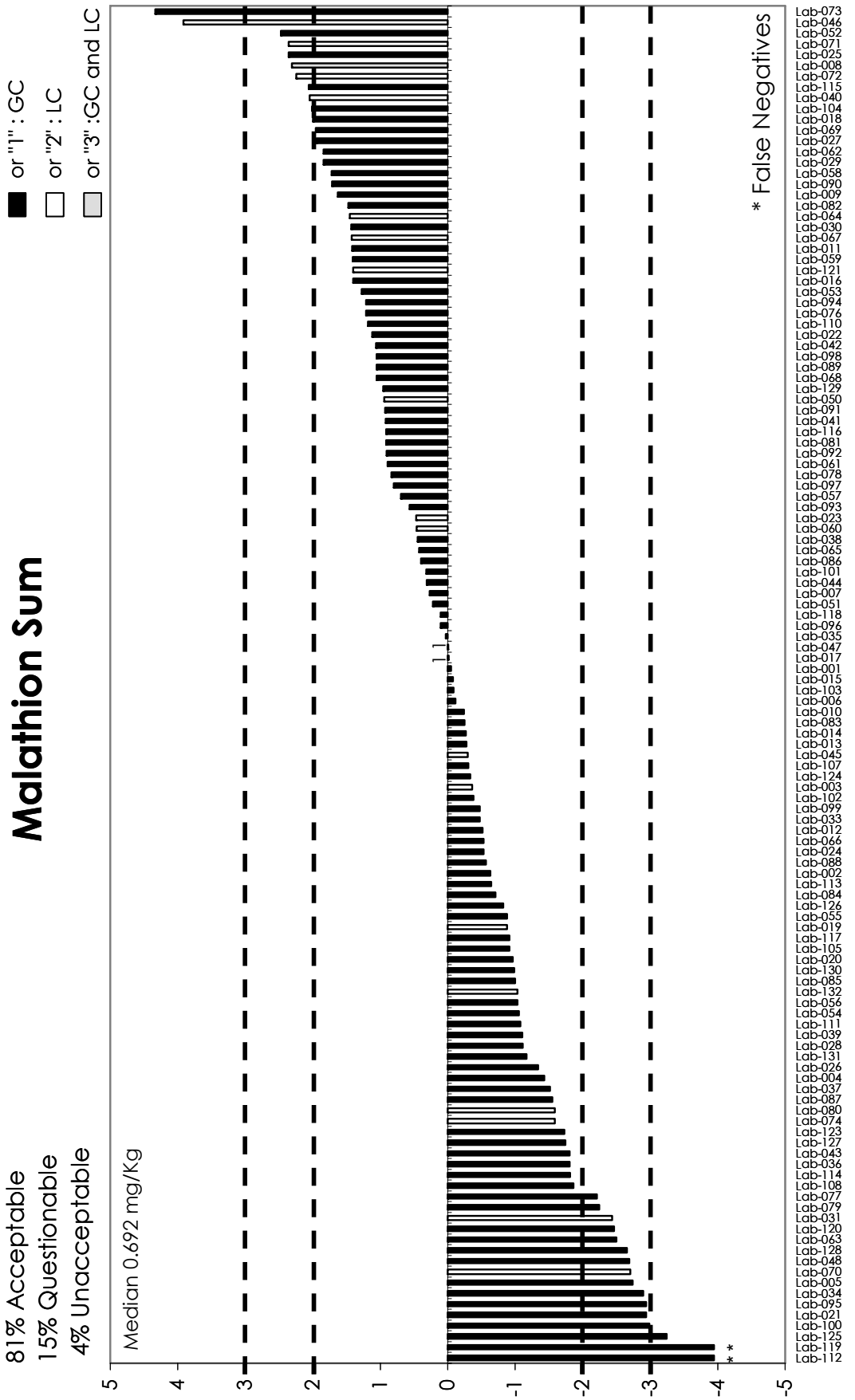
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



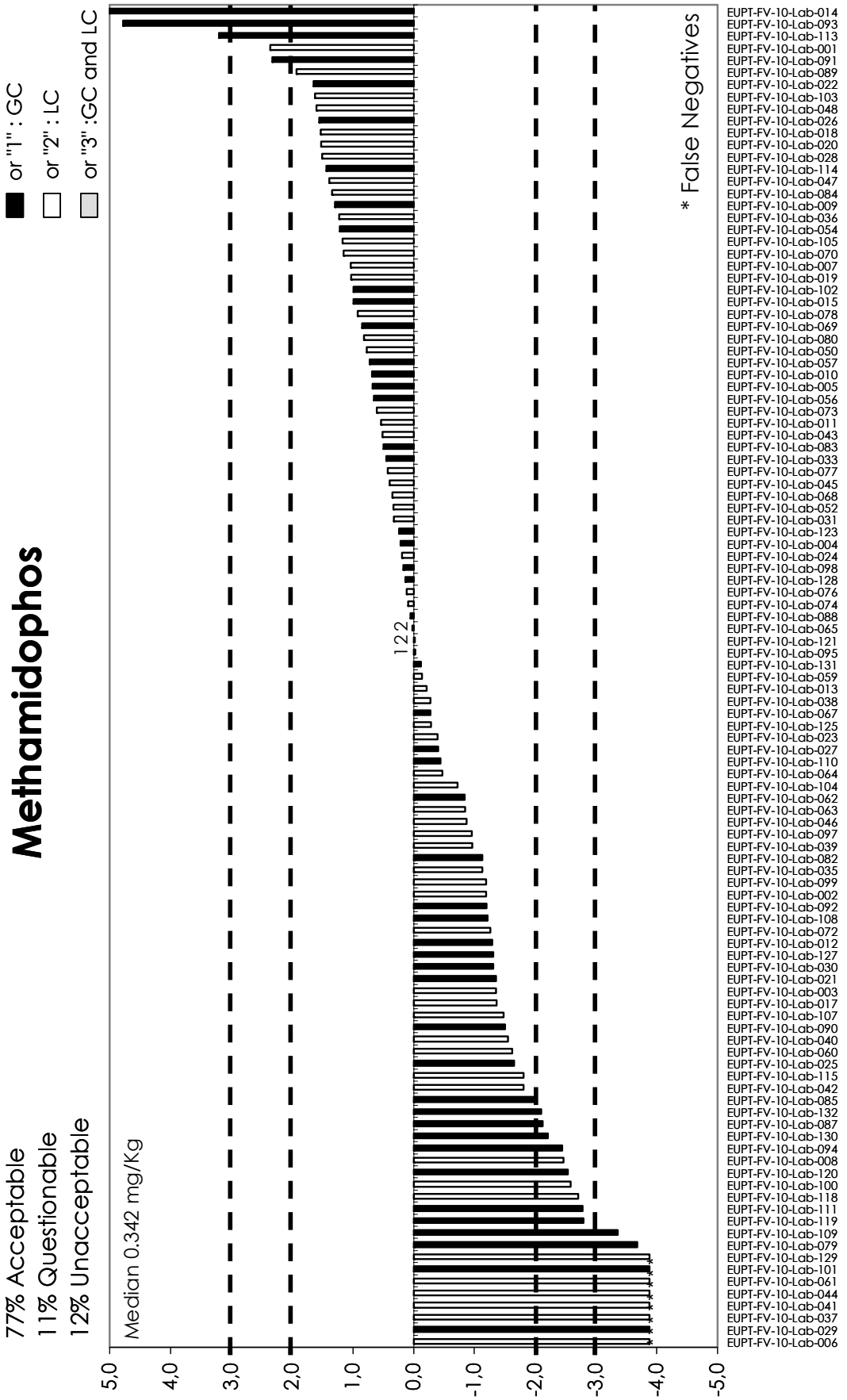
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



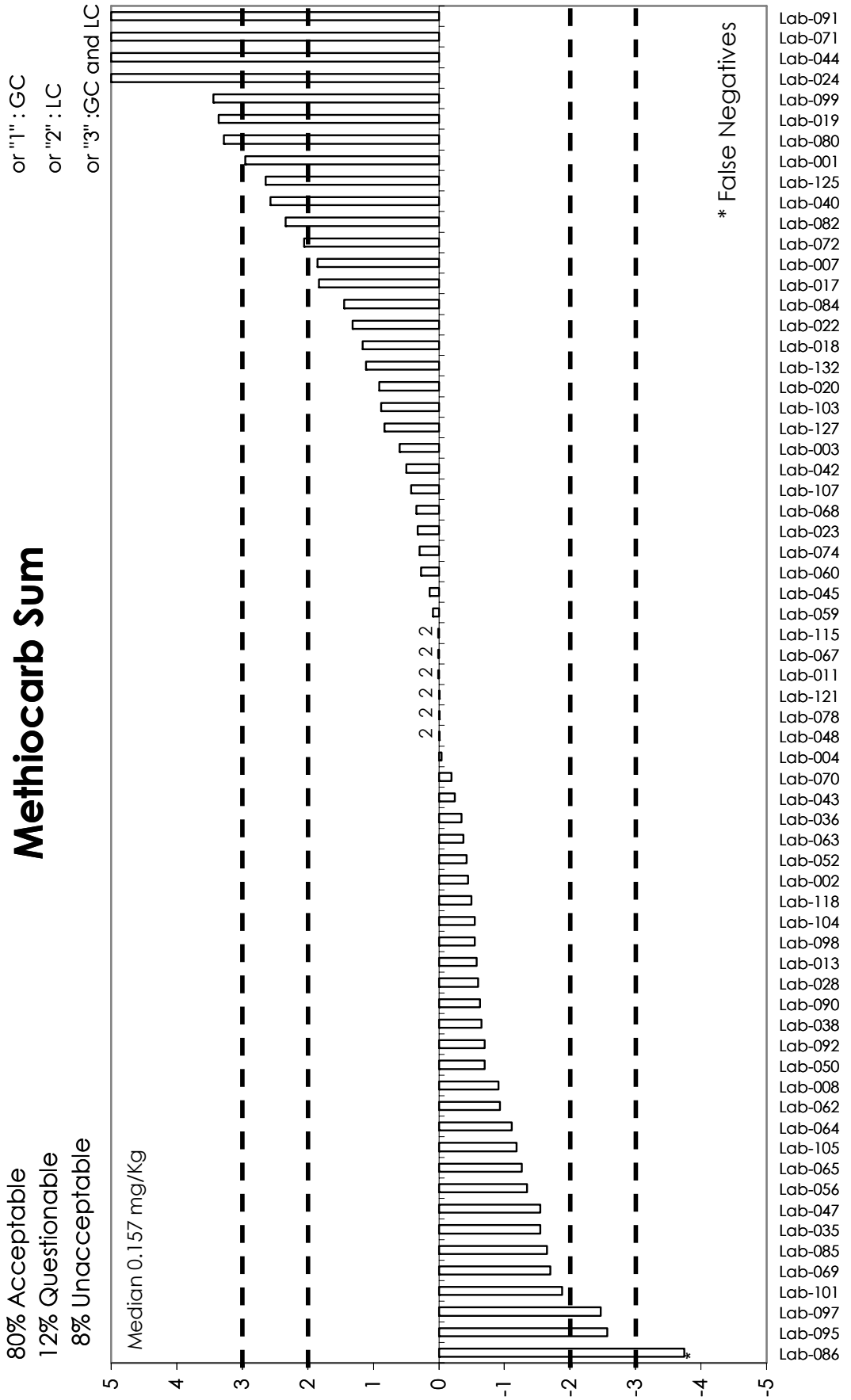
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



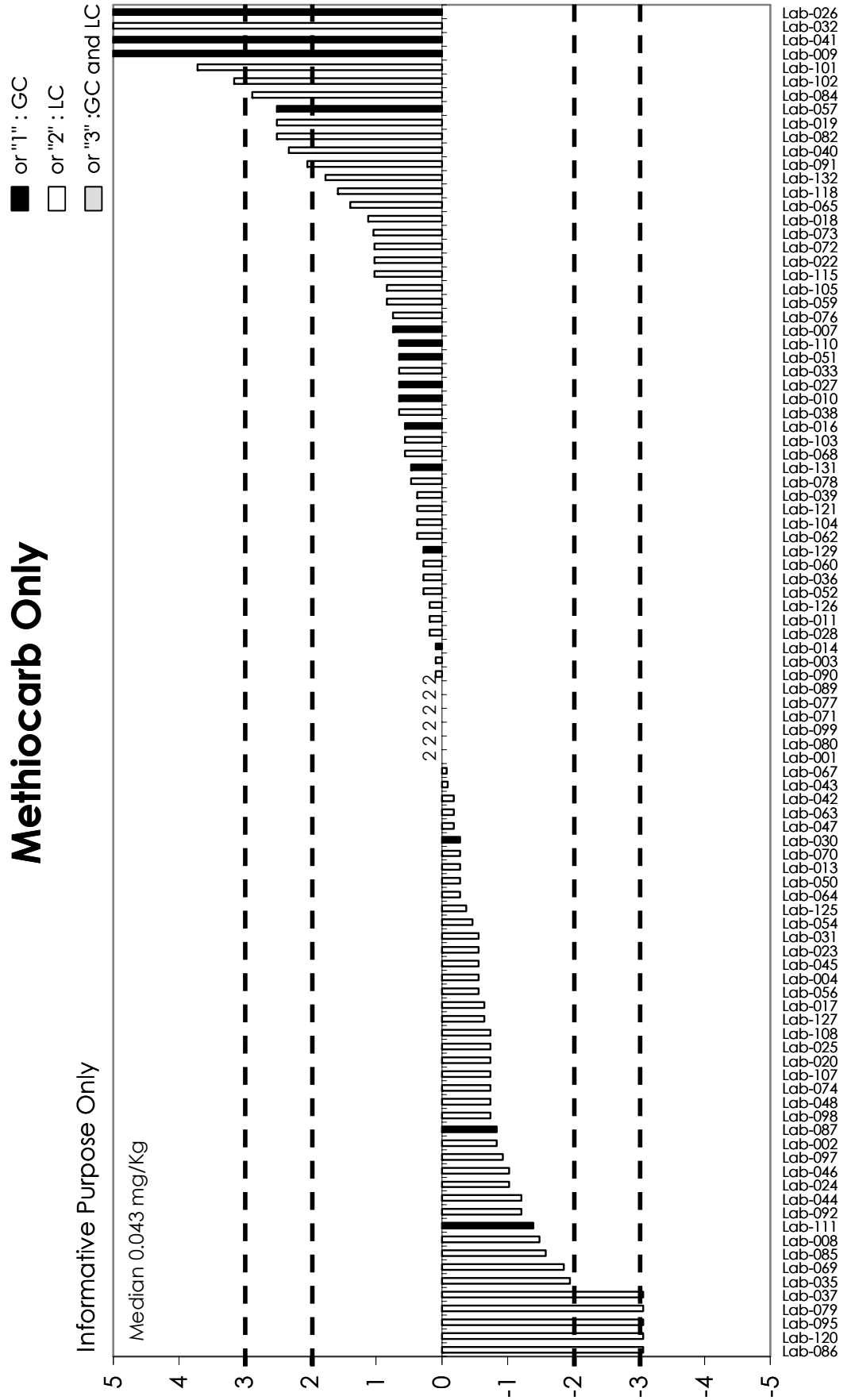
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



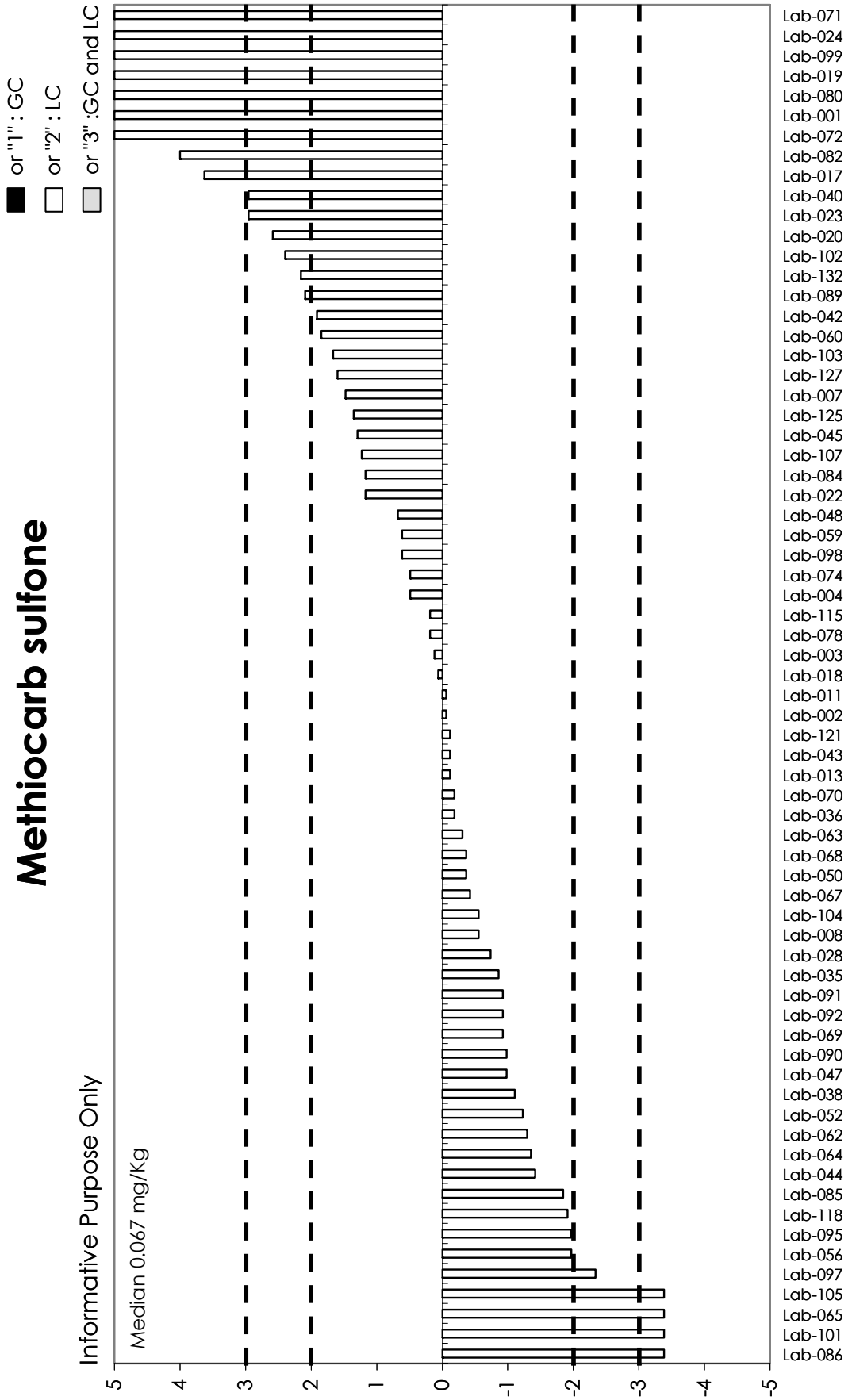
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



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



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



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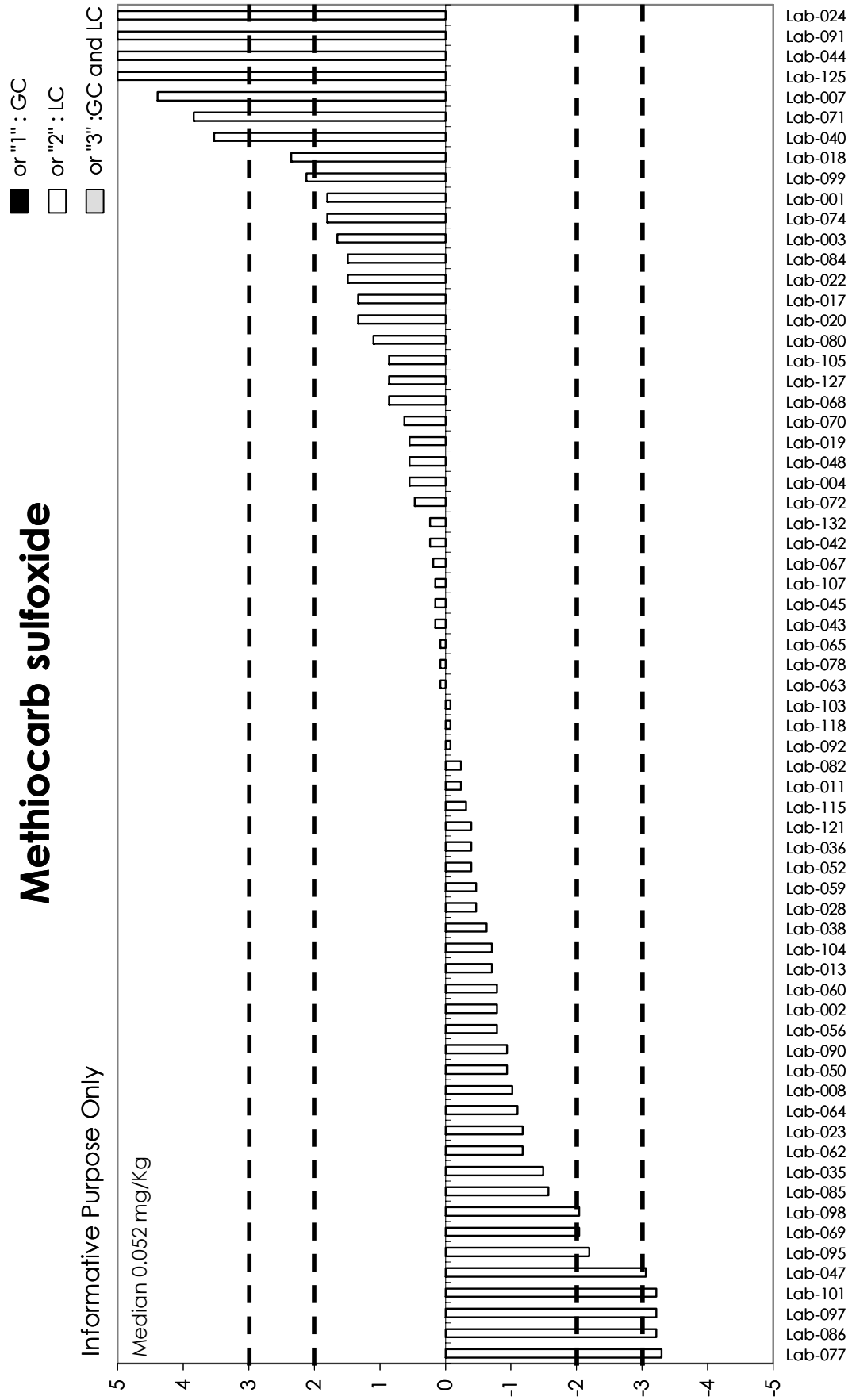
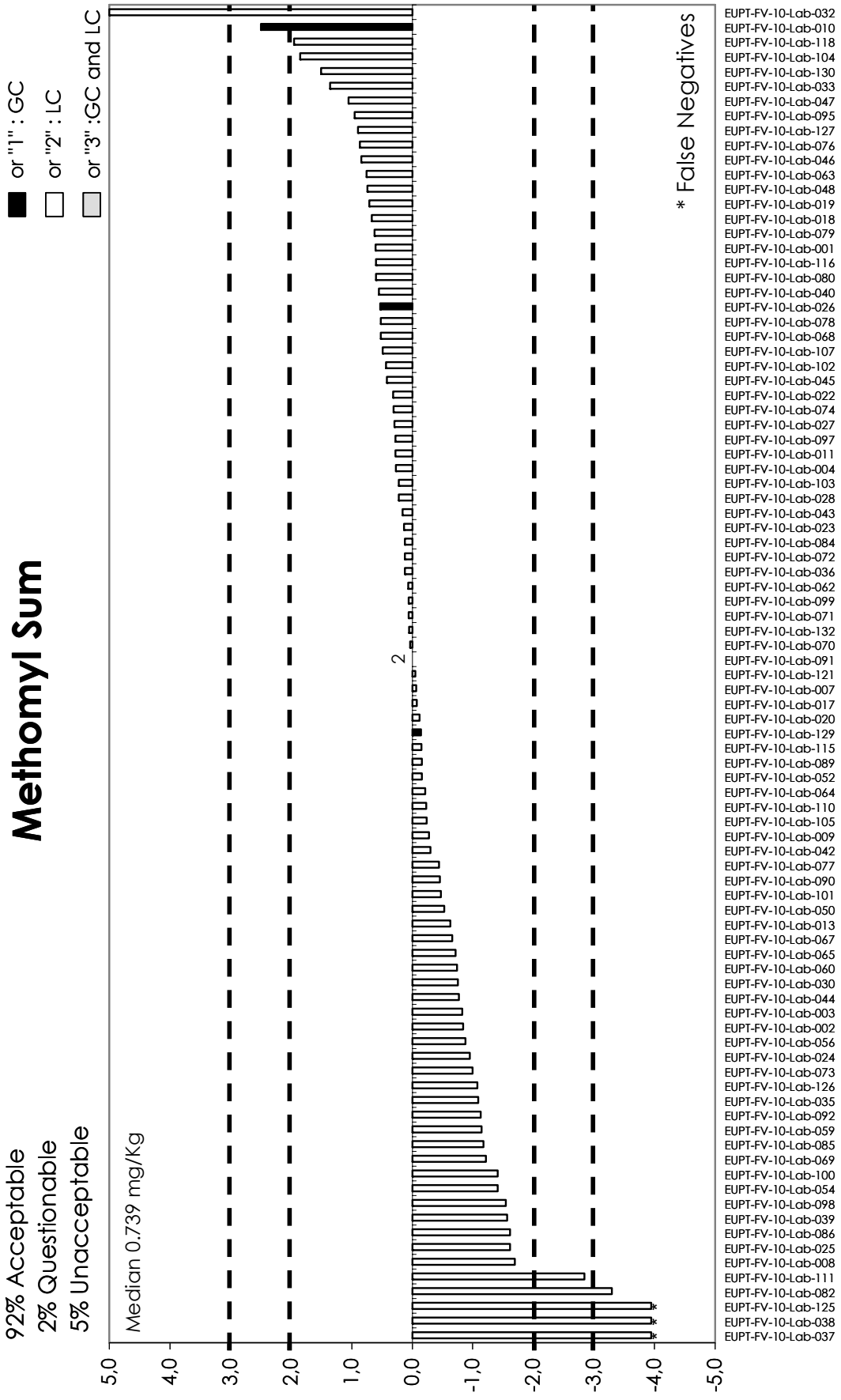
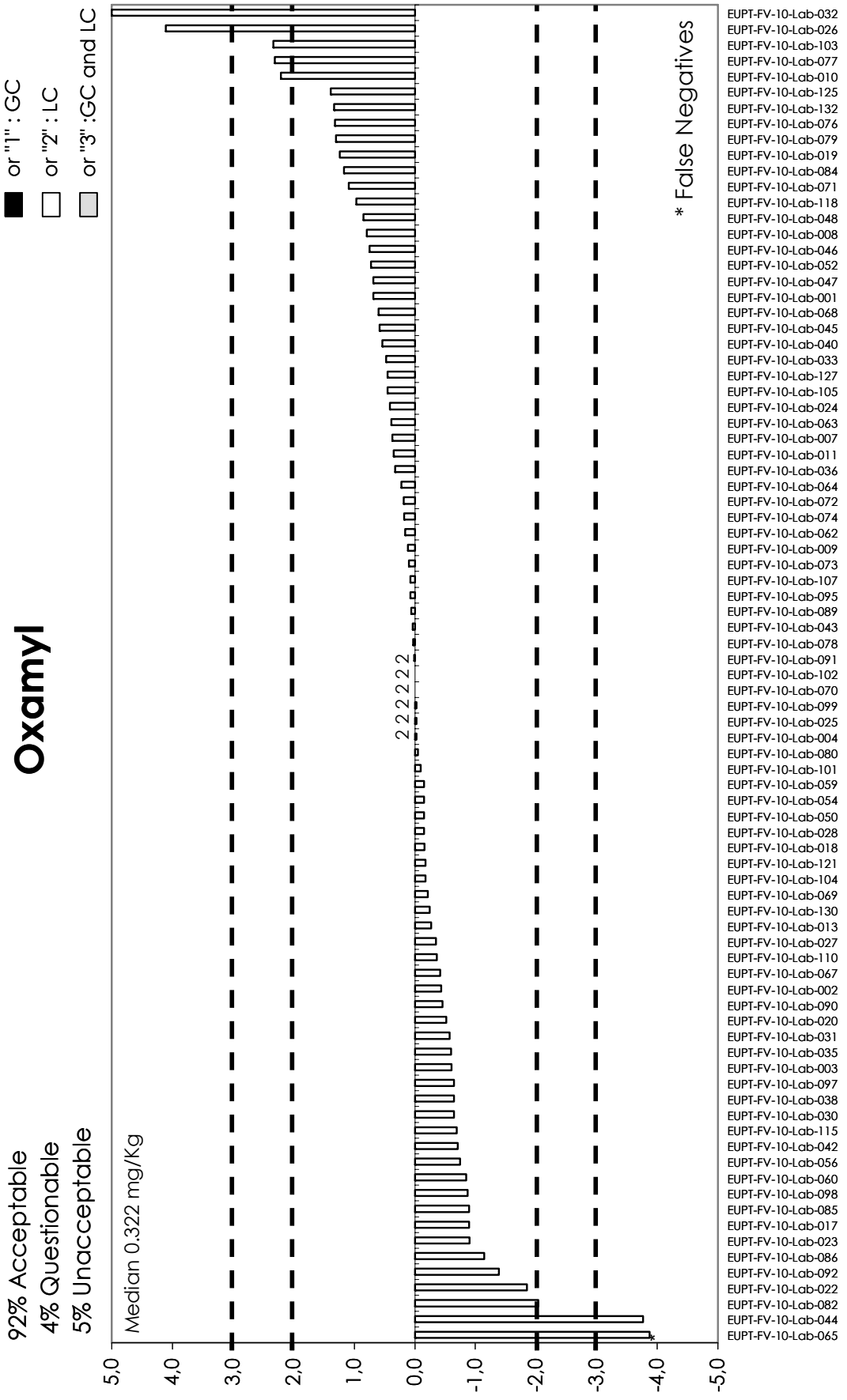


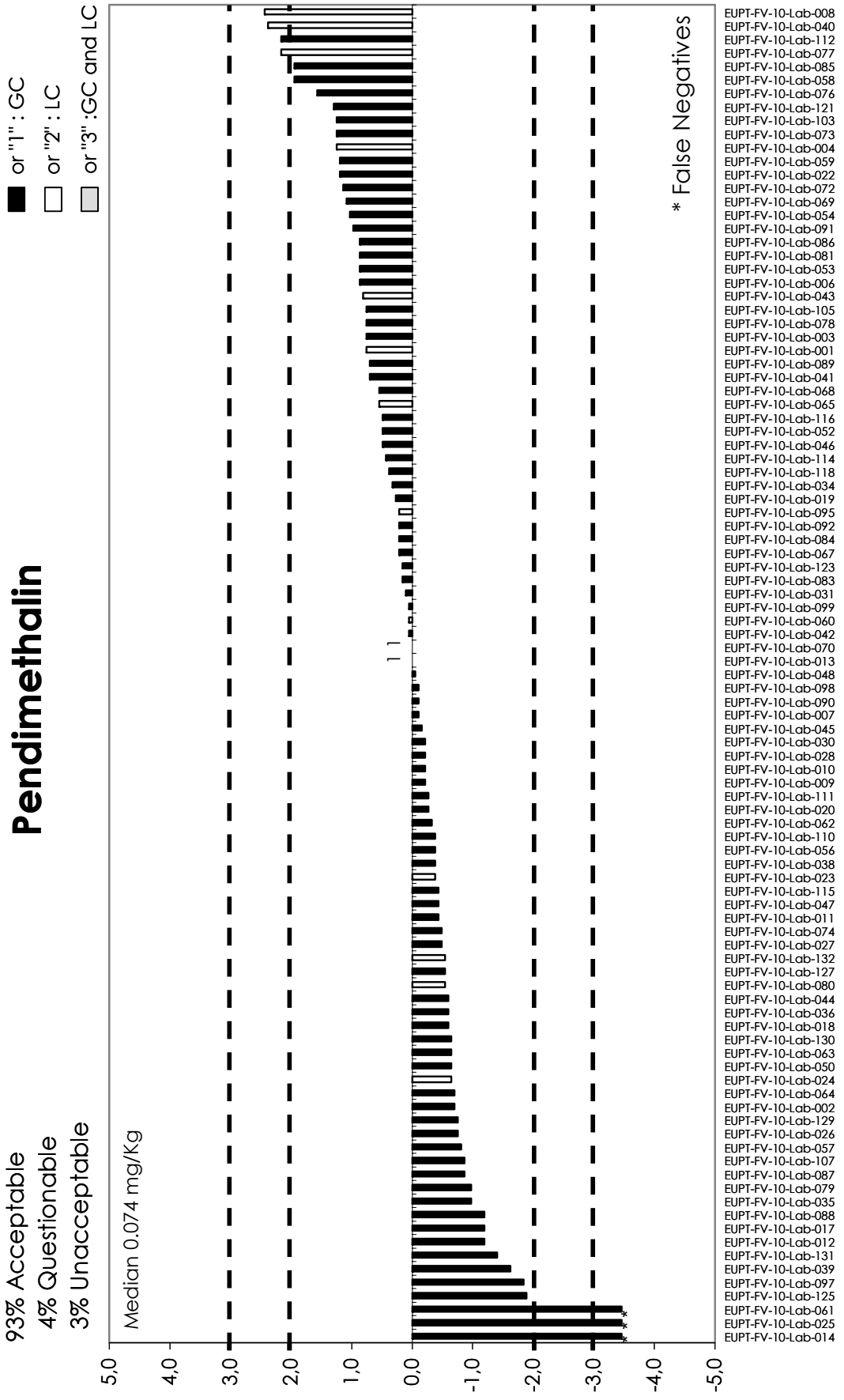
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



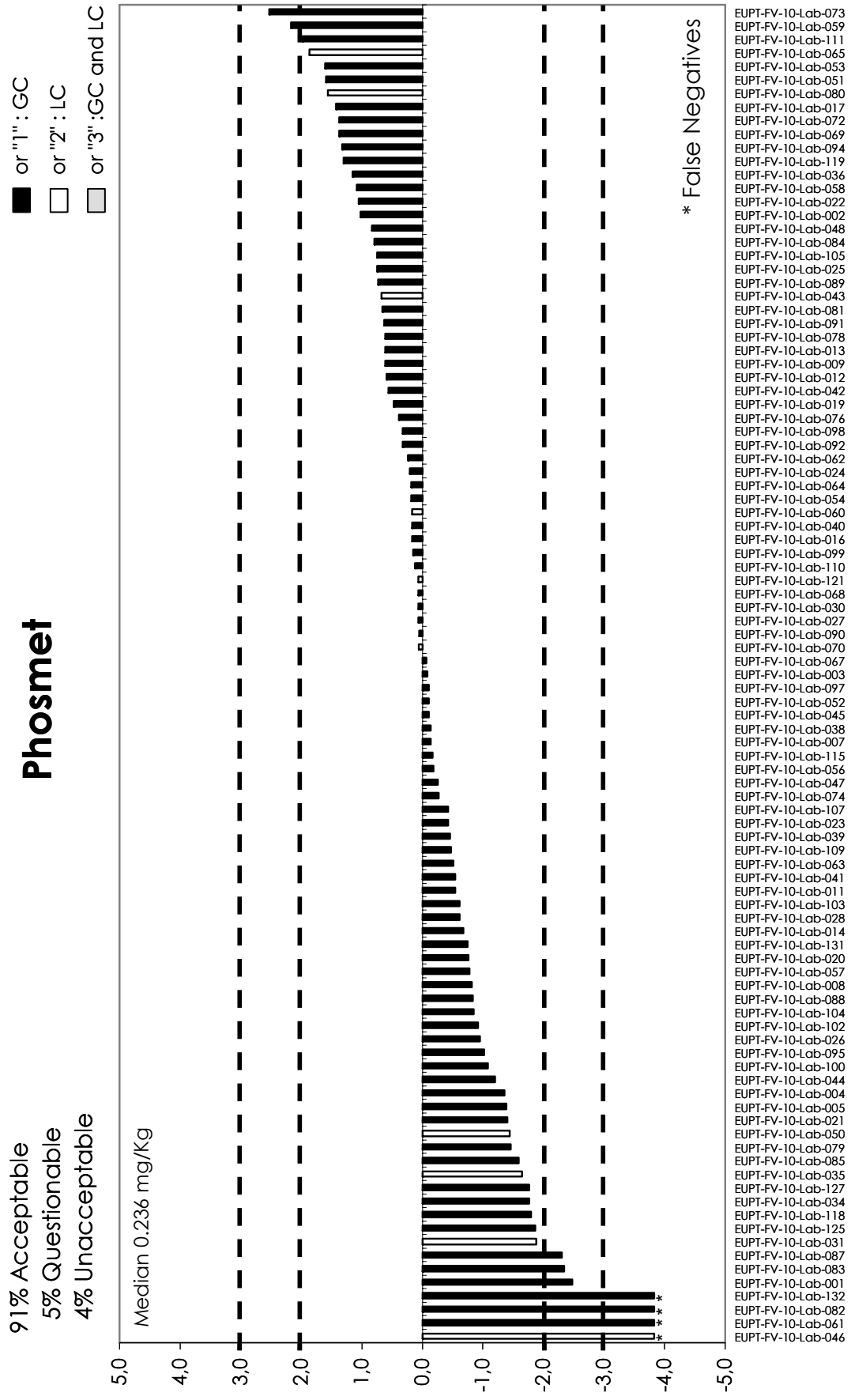
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



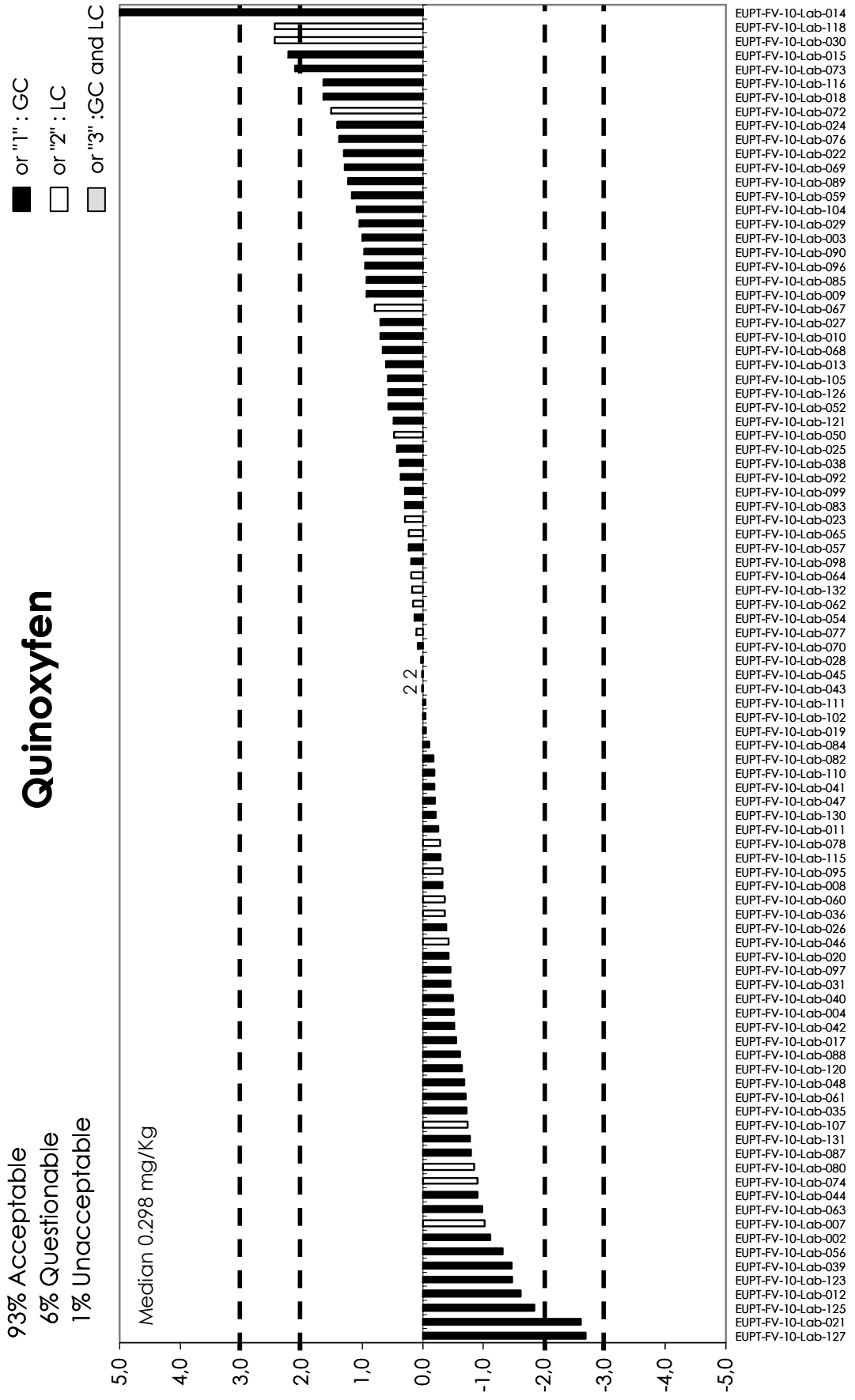
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



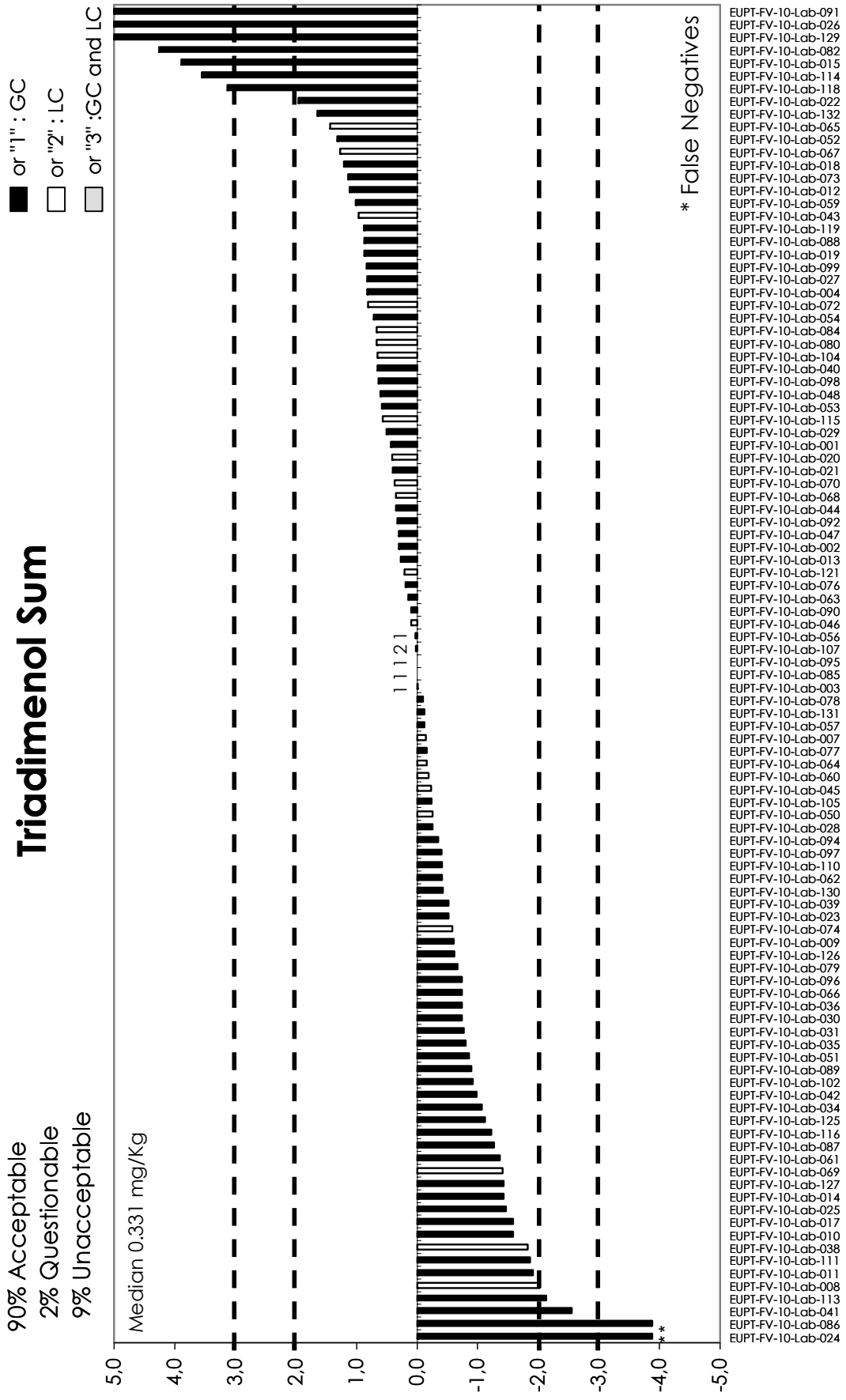
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



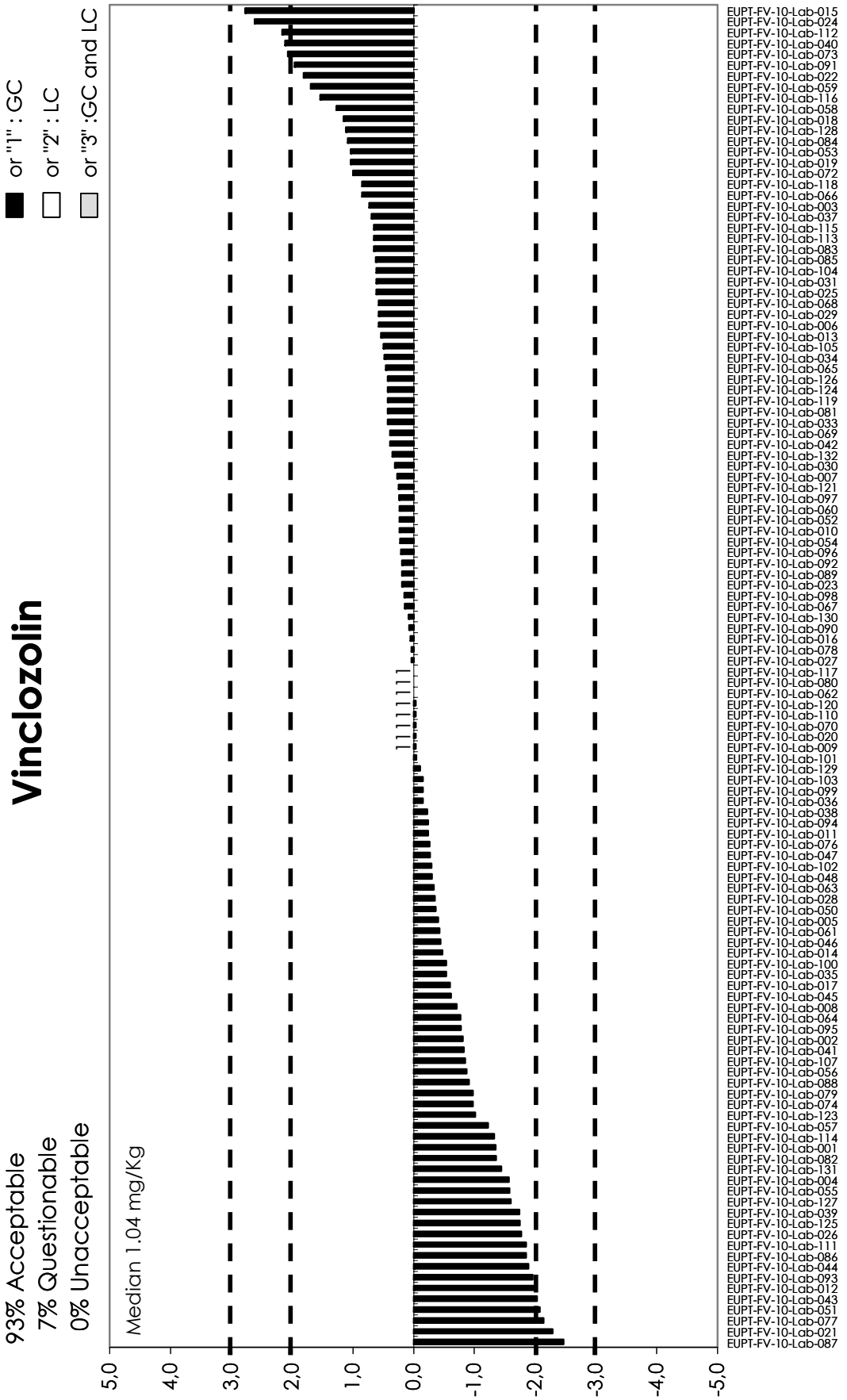
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



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



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

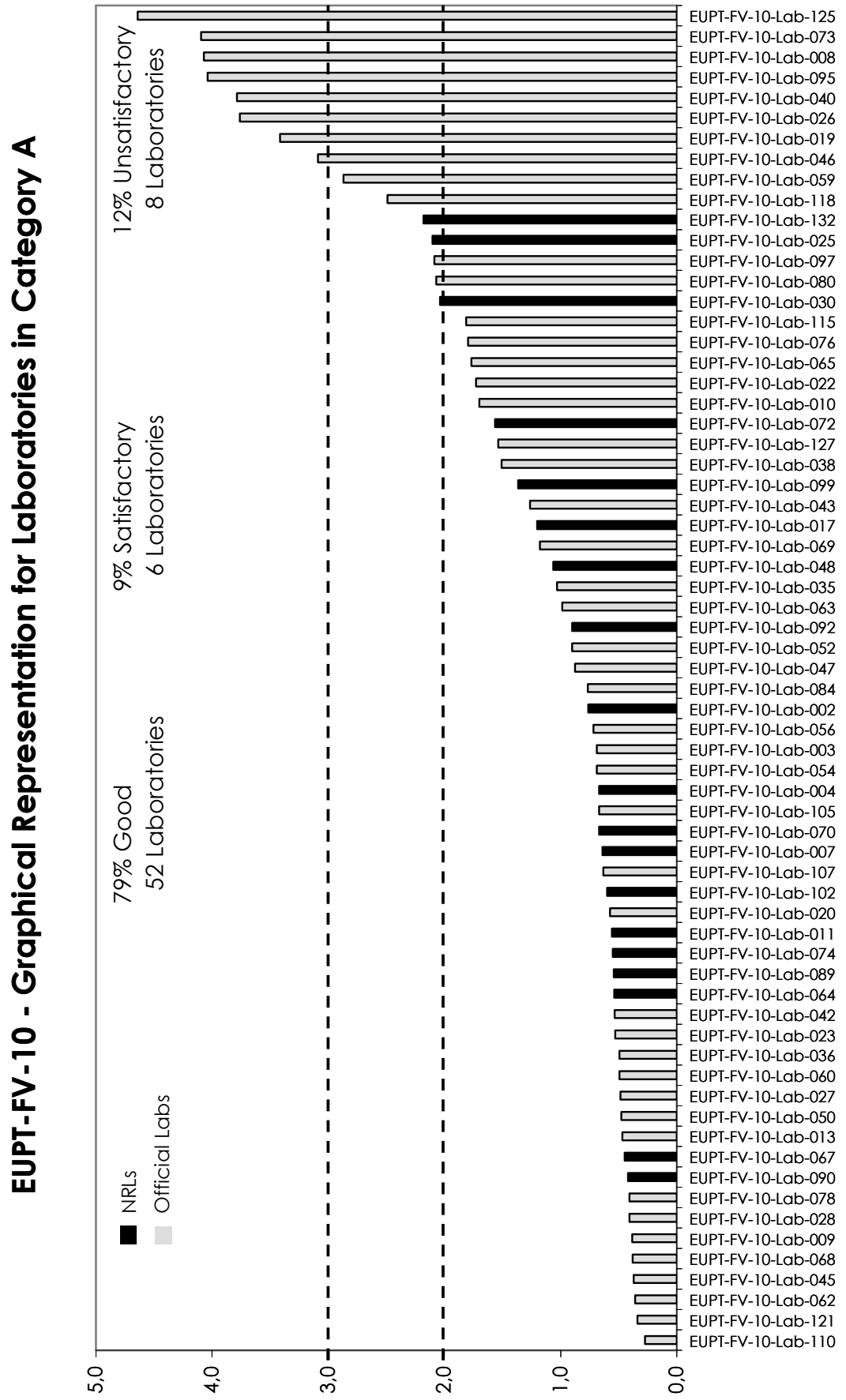


APPENDIX 5. 'Sum of Weighted z-Scores' (SWZ) for Laboratories in Category A.

Lab Code	z-Score Results																		No of Pesticides	SWZ
	Acetamiprid	Bosccalid	Chlorpyrifos-methyl	Diazinon	Endosulfan Sum	Hexythiazox	Isofenphos-methyl	Kresoxim-methyl	Malathion Sum	Methamidophos	Methiocarb Sum	Methomyl Sum	Oxamyl	Pendimethalin	Phosmet	Quinoxyfen	Triadimenol Sum	Vinclozolin		
002	0.3	-0.6	0.5	-1.2	-1.1	-1.5		-0.4	-0.6	-1.2	-0.4	-0.8	-0.4	-0.7	1.0	-1.1	0.3	-0.8	17	0.8
003	-0.9	-0.5	0.3	1.1	-0.4	-1.3	1.1	0.5	-0.4	-1.4	0.6	-0.8	-0.6	0.8	-0.1	1.0	0.0	0.7	18	0.7
004	0.2		0.5	-1.1	1.0	0.2	-0.3	0.6	-1.4	0.2	0.0	0.3	0.0	1.2	-1.4	-0.5	0.8	-1.6	17	0.7
007	0.0	-0.4	-0.2	0.2	-0.2	-0.6	-0.2	-0.1	0.3	1.0	1.9	-0.1	0.4	-0.1	-0.1	-1.0	-0.1	0.3	18	0.6
008	-1.0	-1.5	-1.6	-1.5	4.8	2.6	-1.3	-1.5	2.3	-2.5	-0.9	-1.7	0.8	2.4	-0.8	-0.3	-2.0	-0.7	18	4.1
009	0.1	0.2	0.3	0.0	0.0	0.0	0.0	0.0	1.6	1.3		-0.3	0.1	-0.2	0.6	0.9	-0.6	0.0	17	0.4
010	-0.2	0.2	0.1	0.3	-0.1	2.3		0.0	-0.2	0.7		2.5	2.2	-0.2		0.7	-1.6	0.2	15	1.7
011	0.3	-0.5	-0.6	-0.3	-0.6	-0.8	-0.5	-0.5	1.4	0.5	0.0	0.3	0.3	-0.4	-0.5	-0.3	-1.9	-0.2	18	0.6
013	-0.2	0.4	0.3	0.6	0.5	2.0	0.4	0.2	-0.3	-0.2	-0.6	-0.6	-0.3	0.0	0.6	0.6	0.3	0.5	18	0.5
017	-0.6	-1.2	-1.6	-0.8	-1.6	-0.9	1.0	-0.2	0.0	-1.4	1.8	-0.1	-0.9	-1.2	1.4	-0.6	-1.6	-0.6	18	1.2
019	0.4	0.8	2.7	1.0	5.0	-0.4	0.7	0.4	-0.9	1.0	3.4	0.7	1.2	0.3	0.5	-0.1	0.9	1.0	18	3.4
020	0.0	0.8	0.1	-0.8	-0.9	0.3	-1.2	0.1	-1.0	1.5	0.9	-0.1	-0.5	-0.3	-0.8	-0.4	0.4	0.0	18	0.6
022	1.2	1.4	1.3	1.6	1.1	2.6		1.2	1.1	1.6	1.3	0.3	-1.9	1.2	1.1	1.3	2.0	1.8	17	1.7
023	-0.7	-0.1	-0.8	-1.0	-1.1	-0.6	-0.2	-1.0	0.5	-0.4	0.3	0.1	-0.9	-0.4	-0.4	0.3	-0.5	0.2	18	0.5
025	0.5	-0.5	1.6	-0.4	0.3	1.0	0.2	-0.3	2.4	-1.7		-1.6	0.0	-3.5	0.7	0.4	-1.5	0.6	17	2.1
026	0.8	-1.3	-1.0	-1.6	-1.3	0.6		-0.7	-1.3	1.6		0.5	4.1	-0.8	-0.9	-0.4	5.0	-1.8	16	3.8
027	0.2	-0.5	-0.4	0.1	0.4	-0.2	0.1	-1.4	1.9	-0.4		0.3	-0.3	-0.5	0.1	0.7	0.8	0.0	17	0.5
028	0.4	-0.5	0.1	0.1	0.0	0.4	0.7	-0.2	-1.1	1.5	-0.6	0.2	-0.1	-0.2	-0.6	0.0	-0.3	-0.3	18	0.4
030	-0.3	1.2	1.1	0.0	-3.6	0.8	-0.3	0.0	1.4	-1.3		-0.8	-0.6	-0.2	0.1	2.4	-0.7	0.3	17	2.0
035	-0.8	-1.7	-1.1	-1.3	-1.6	-0.9	-0.5	-1.8	0.0	-1.1	-1.5	-1.1	-0.6	-1.0	-1.6	-0.7	-0.8	-0.5	18	1.0
036	0.1	-0.4	-0.7	-0.2	-0.1	-0.2	-0.2	-0.4	-1.8	1.2	-0.3	0.1	0.3	-0.6	1.2	-0.4	-0.7	-0.2	18	0.5
038	-0.1	0.2	-0.4	0.0	-0.4	-0.3	-0.3	-0.7	0.4	-0.3	-0.7	-3.9	-0.6	-0.4	-0.1	0.4	-1.8	-0.2	18	1.5
040	1.8	3.1	-0.6	0.8	0.7	3.2	0.7	0.6	2.0	-1.6	2.6	0.6	0.5	2.4	0.2	-0.5	0.7	2.1	18	3.8
042	-0.2	0.0	0.3	0.1	0.2	-1.6	0.0	0.2	1.1	-1.8	0.5	-0.3	-0.7	0.1	0.6	-0.5	-1.0	0.4	18	0.5
043	0.3		0.1	-1.1	2.4	0.0		0.3	-1.8	0.5	-0.2	0.2	0.0	0.8	0.7	0.0	1.0	-2.0	16	1.3
045	0.4	-0.2	-0.2	-0.4	-1.2	0.4	-0.4	-0.5	-0.3	0.4	0.1	0.4	0.6	-0.2	-0.1	0.0	-0.2	-0.6	18	0.4
046	1.5	0.1	-0.4	0.6	2.2	0.0	-0.7	0.2	3.9	-0.9		0.8	0.7	0.5	-3.8	-0.4	0.1	-0.4	17	3.1
047	0.3	0.6	-0.9	-0.1	0.2	-0.4	-2.3	0.3	0.0	1.4	-1.5	1.1	0.7	-0.4	-0.3	-0.2	0.3	-0.3	18	0.9
048	1.6	0.8	0.1	-0.3	0.9	-0.4	0.3	1.0	-2.7	1.6	0.0	0.7	0.8	-0.1	0.8	-0.7	0.6	-0.3	18	1.1
050	-0.4	-0.4	-0.4	-0.5	-0.2	-0.2	-0.3	0.0	0.9	0.8	-0.7	-0.5	-0.1	-0.6	-1.4	0.5	-0.3	-0.4	18	0.5
052	-0.1		0.2	0.1	-0.2	1.0	0.8	1.3	2.5	0.3	-0.4	-0.2	0.7	0.5	-0.1	0.6	1.3	0.2	17	0.9
054	-0.4	0.8	0.6	0.3	1.9	1.1	0.0	0.4	-1.1	1.2		-1.4	-0.1	1.0	0.2	0.1	0.7	0.2	17	0.7
056	-0.5	-0.9	-0.6	-0.8	-0.6	-0.7	-0.9	-0.6	-1.0	0.7	-1.3	-0.9	-0.7	-0.4	-0.2	-1.3	0.0	-0.9	18	0.7
059	0.0	1.1	1.1	1.5	4.7	2.1	1.4	2.0	1.4	-0.1	0.1	-1.1	-0.1	1.2	2.2	1.2	1.0	1.7	18	2.9
060	-0.2	-0.3	0.1	0.9	0.7	-0.5	0.3	-0.9	0.5	-1.6	0.3	-0.7	-0.8	0.1	0.2	-0.4	-0.2	0.2	18	0.5
062	0.0	0.7	0.1	0.0	0.4	0.1	0.2	-0.1	1.8	-0.8	-0.9	0.1	0.2	-0.3	0.2	0.2	-0.4	0.0	18	0.4
063	0.3	-0.1	-1.0	-1.0	-0.8	0.7	-1.2	0.3	-2.5	-0.8	-0.4	0.8	0.4	-0.6	-0.5	-1.0	0.1	-0.3	18	1.0

APPENDIX 5. 'Sum of Weighted z-Scores' (WSZ) for Laboratories in Category A.

Lab Code	z-Score Results																		No of Pesticides	SWZ
	Acetamiprid	Boscalid	Chlorpyrifos-methyl	Diazinon	Endosulfan Sum	Hexythiazox	Isofenphos-methyl	Kresoxim-methyl	Malathion Sum	Methamidophos	Methiocarb Sum	Methomyl Sum	Oxamyl	Pendimethalin	Phosmet	Quinoxyfen	Triadimenol Sum	Vinclozolin		
064	-0.3	0.1	-0.7	-1.0	0.5	0.5	-0.6	-0.6	1.5	-0.5	-1.1	-0.2	0.2	-0.7	0.2	0.2	-0.2	-0.8	18	0.5
065	1.0	0.9	-0.9	1.4	0.4	-0.2	0.4	0.3	0.4	0.0	-1.3	-0.7	-3.9	0.5	1.9	0.2	1.4	0.5	18	1.8
067	-0.3	0.1	-0.3	-0.3	0.0	0.3	-0.1	1.3	1.4	-0.3	0.0	-0.7	-0.4	0.2	-0.1	0.8	1.3	0.1	18	0.5
068	-0.2	-0.1	0.5	0.0	0.3	0.1	0.1	0.4	1.1	0.3	0.3	0.5	0.6	0.5	0.1	0.7	0.4	0.6	18	0.4
069	-0.9	0.6	-0.1	-0.3	0.7	-2.1	-0.3	0.7	2.0	0.8	-1.7	-1.2	-0.2	1.1	1.4	1.3	-1.4	0.4	18	1.2
070	0.0	0.0	-1.2	0.2	0.1	0.1	0.0	0.4	-2.7	1.2	-0.2	0.0	0.0	0.0	0.0	0.1	0.4	0.0	18	0.7
072	0.8	0.8	0.9	1.1	0.5	1.2	1.4	0.5	2.2	-1.3	2.1	0.1	0.2	1.1	1.4	1.5	0.8	1.0	18	1.6
073	0.2	1.2	1.8	0.9	3.3	1.2	1.1	1.2	4.3	0.6		-1.0	0.1	1.2	2.5	2.1	1.1	2.1	17	4.1
074	0.5	-0.7	-0.7	-0.8	-0.1	-0.5	0.2	-0.6	-1.6	0.1	0.3	0.3	0.2	-0.5	-0.3	-0.9	-0.6	-1.0	18	0.6
076	0.5	-0.5	0.0	1.7	-3.6	-0.4	1.6	0.6	1.2	0.1		0.9	1.3	1.6	0.4	1.4	0.2	-0.3	17	1.8
078	-0.1	0.7	-0.2	0.4	0.4	-0.6	0.2	0.6	0.8	0.9	0.0	0.5	0.0	0.8	0.6	-0.3	-0.1	0.0	18	0.4
080	0.1	0.2	-0.7	2.8	-1.3	-0.2		0.0	-1.6	0.8	3.3	0.6	0.0	-0.5	1.6	-0.8	0.7	0.0	17	2.1
084	0.3	1.4	1.4	0.5	-0.5	-1.0	0.4	0.3	-0.7	1.3	1.4	0.1	1.2	0.2	0.8	-0.1	0.7	1.1	18	0.8
089	0.0	0.1	0.7	0.1	0.5	0.4	0.4	0.0	1.1	1.9		-0.2	0.1	0.7	0.7	1.2	-0.9	0.2	17	0.5
090	-0.1	0.6	-0.1	0.0	0.2	0.4	0.2	0.2	1.7	-1.5	-0.6	-0.5	-0.5	-0.1	0.1	1.0	0.1	0.1	18	0.4
092	-0.1		-0.1	0.0	0.4	2.6	-0.1	0.2	0.9	-1.2	-0.7	-1.1	-1.4	0.2	0.3	0.4	0.3	0.2	17	0.9
095	-3.9		-1.4	-2.2	-0.2	-3.9	-0.4	-1.1	-2.9	0.0	-2.6	1.0	0.1	0.2	-1.0	-0.3	0.0	-0.8	17	4.0
097	-1.2	2.7	-0.7	-0.2	-0.7	-1.2	-0.4	-0.7	0.8	-1.0	-2.5	0.3	-0.6	-1.8	-0.1	-0.5	-0.4	0.2	18	2.1
099	-0.4	0.4	0.1	0.0	1.0	-0.1	0.0	0.8	-0.5	-1.2	3.4	0.1	0.0	0.1	0.2	0.3	0.8	-0.2	18	1.4
102	0.2		-0.9	-0.9	1.0	0.4	-0.9	-1.3	-0.4	1.0		0.4	0.0		-0.9	0.0	-0.9	-0.3	15	0.6
105	1.3	0.4	0.2	0.3	0.5	1.5	0.3	0.9	-0.9	1.2	-1.2	-0.2	0.4	0.8	0.7	0.6	-0.2	0.5	18	0.7
107	-1.4	-0.2	-0.6	-0.8	0.5	-1.0		-0.4	-0.3	-1.5	0.4	0.5	0.1	-0.9	-0.4	-0.7	0.0	-0.8	17	0.6
110	0.0	0.5	0.3	-0.1	0.1	0.0	0.0	0.2	1.2	-0.4		-0.2	-0.4	-0.4	0.1	-0.2	-0.4	0.0	17	0.3
115	-0.2	0.7	3.2	0.6	0.9	1.3	1.0	1.0	2.1	-1.8	0.0	-0.2	-0.7	-0.4	-0.2	-0.3	0.6	0.7	18	1.8
118	0.5	-1.3	-0.7	-0.9	0.5	-1.7	-0.1	1.6	0.1	-2.7	-0.5	2.0	1.0	0.4	-1.8	2.4	3.1	0.8	18	2.5
121	-0.2	0.0	0.4	0.1	0.8	0.2	0.0	0.4	1.4	0.0	0.0	0.0	-0.2	1.3	0.1	0.5	0.2	0.2	18	0.3
125	1.9		-1.0	-2.6	-0.7	-1.9		-2.1	-3.2	-0.3	2.6	-3.9	1.4	-1.9	-1.9	-1.8	-1.1	-1.7	16	4.6
127	-1.5	-0.8	-0.7	-0.7	-0.8			-1.2	-1.7	-1.3	0.8	0.9	0.4	-0.5	-1.8	-2.7	-1.4	-1.6	16	1.5
132	0.1	-1.2	0.7	0.1	1.7	-1.1	1.3	-1.1	-1.0	-2.1	1.1	0.0	1.3	-0.5	-3.8	0.2	1.6	0.3	18	2.2


EUPT-FV-10 - Graphical Representation for Laboratories in Category A
12% Unsatisfactory
8 Laboratories
9% Satisfactory
6 Laboratories
79% Good
52 Laboratories
NRLs
Official Labs
5,0
4,0
3,0
2,0
1,0
0,0
EUPT-FV-10-Lab-125
EUPT-FV-10-Lab-073
EUPT-FV-10-Lab-008
EUPT-FV-10-Lab-095
EUPT-FV-10-Lab-040
EUPT-FV-10-Lab-026
EUPT-FV-10-Lab-019
EUPT-FV-10-Lab-046
EUPT-FV-10-Lab-059
EUPT-FV-10-Lab-118
EUPT-FV-10-Lab-132
EUPT-FV-10-Lab-025
EUPT-FV-10-Lab-097
EUPT-FV-10-Lab-080
EUPT-FV-10-Lab-030
EUPT-FV-10-Lab-115
EUPT-FV-10-Lab-076
EUPT-FV-10-Lab-065
EUPT-FV-10-Lab-022
EUPT-FV-10-Lab-010
EUPT-FV-10-Lab-072
EUPT-FV-10-Lab-127
EUPT-FV-10-Lab-038
EUPT-FV-10-Lab-099
EUPT-FV-10-Lab-043
EUPT-FV-10-Lab-017
EUPT-FV-10-Lab-069
EUPT-FV-10-Lab-048
EUPT-FV-10-Lab-035
EUPT-FV-10-Lab-063
EUPT-FV-10-Lab-092
EUPT-FV-10-Lab-052
EUPT-FV-10-Lab-047
EUPT-FV-10-Lab-084
EUPT-FV-10-Lab-002
EUPT-FV-10-Lab-056
EUPT-FV-10-Lab-003
EUPT-FV-10-Lab-054
EUPT-FV-10-Lab-004
EUPT-FV-10-Lab-105
EUPT-FV-10-Lab-070
EUPT-FV-10-Lab-007
EUPT-FV-10-Lab-107
EUPT-FV-10-Lab-102
EUPT-FV-10-Lab-020
EUPT-FV-10-Lab-011
EUPT-FV-10-Lab-074
EUPT-FV-10-Lab-089
EUPT-FV-10-Lab-064
EUPT-FV-10-Lab-042
EUPT-FV-10-Lab-023
EUPT-FV-10-Lab-036
EUPT-FV-10-Lab-060
EUPT-FV-10-Lab-027
EUPT-FV-10-Lab-050
EUPT-FV-10-Lab-013
EUPT-FV-10-Lab-067
EUPT-FV-10-Lab-090
EUPT-FV-10-Lab-078
EUPT-FV-10-Lab-028
EUPT-FV-10-Lab-009
EUPT-FV-10-Lab-068
EUPT-FV-10-Lab-045
EUPT-FV-10-Lab-062
EUPT-FV-10-Lab-121
EUPT-FV-10-Lab-110

APPENDIX 7. Combined z-scores RSZ and SSZ.

Lab Code	No. of Pesticides Sought (n)	RSZ	SSZ
001	16	5.16	44.01
002	17	3.15	12.12
003	18	2.93	11.13
004	17	2.76	11.89
005	8	3.00	13.30
006	9	3.17	19.86
007	18	1.73	7.41
008	18	7.13	69.07
009	17	1.57	6.24
010	15	2.98	20.16
011	18	2.38	8.91
012	14	4.41	23.11
013	18	1.98	6.85
014	13	8.44	122.04
015	9	7.98	78.74
016	7	1.32	3.83
017	18	4.15	22.83
018	14	4.70	41.19
019	18	5.09	53.97
020	18	2.44	9.35
021	13	7.43	60.88
022	17	5.88	38.33
023	18	2.25	6.64
024	18	6.47	75.04
025	17	4.18	30.74
026	16	5.94	59.68
027	17	2.00	8.02
028	18	1.73	5.54
029	10	3.89	25.74
030	17	3.71	27.99
031	13	5.12	53.66
032	2	7.07	50.00
033	11	1.56	3.90
034	10	4.99	38.00
035	18	4.37	22.89
036	18	2.10	8.25
037	8	4.78	37.91
038	18	2.67	21.37
039	14	4.16	20.03
040	18	5.80	50.55
041	12	3.27	24.93
042	18	2.26	9.95
043	16	2.84	16.85
044	15	6.29	76.56
045	18	1.57	3.66
046	17	4.17	40.50
047	18	2.65	12.85
048	18	3.24	17.79
049	No Results Given		

APPENDIX 7. Combined z-scores RSZ and SSZ.

Lab Code	No. of Pesticides Sought (n)	RSZ	SSZ
050	18	2.03	5.93
051	7	2.84	10.40
052	17	2.51	12.65
053	9	3.04	10.83
054	17	2.84	12.70
055	5	3.24	17.55
056	18	3.05	11.11
057	12	2.31	6.75
058	9	4.19	28.98
059	18	5.71	52.25
060	18	2.10	7.04
061	13	4.85	47.50
062	18	1.53	5.84
063	18	3.00	14.27
064	18	2.28	7.45
065	18	3.85	28.40
066	7	1.95	4.40
067	18	1.91	7.04
068	18	1.61	3.81
069	18	4.03	22.18
070	18	1.55	10.55
071	9	4.37	39.15
072	18	4.51	26.19
073	17	6.28	58.16
074	18	2.34	7.78
075	No Results Given		
076	17	3.91	27.88
077	14	3.79	27.71
078	18	1.74	4.44
079	14	4.43	29.48
080	17	3.74	29.79
081	8	2.13	5.27
082	17	8.07	104.75
083	9	1.74	6.81
084	18	3.26	14.63
085	15	6.60	72.31
086	12	6.38	60.58
087	11	6.11	44.01
088	14	3.89	25.97
089	17	2.23	9.30
090	18	1.79	7.45
091	14	6.52	82.09
092	17	2.47	13.16
093	5	5.18	39.83
094	8	2.95	14.61
095	17	5.35	56.62
096	8	1.80	5.32
097	18	4.04	31.63
098	18	2.29	9.94

APPENDIX 7. Combined z-scores RSZ and SSZ.

Lab Code	No. of Pesticides Sought (n)	RSZ	SSZ
099	18	2.29	18.13
100	10	5.04	37.15
101	10	3.05	22.16
102	15	2.47	8.35
103	15	4.32	33.10
104	15	3.00	12.92
105	18	2.83	10.72
106	No Results Given		
107	17	2.60	9.51
108	4	2.97	9.07
109	4	2.47	12.13
110	17	1.13	2.58
111	14	5.31	38.38
112	7	6.26	45.40
113	7	3.24	16.92
114	8	3.66	21.60
115	18	3.73	24.46
116	12	3.87	25.83
117	5	0.75	1.22
118	18	5.19	41.18
119	9	6.18	57.08
120	9	3.64	26.29
121	18	1.43	5.05
122	2	0.62	0.61
123	10	4.19	21.99
124	5	1.12	1.62
125	16	7.59	70.95
126	9	2.18	5.67
127	16	4.81	28.16
128	5	2.62	10.65
129	9	4.12	43.41
130	14	2.63	11.23
131	12	2.98	11.89
132	18	4.64	35.74

APPENDIX 8. Methods used by participants for determining pesticides.

These were the explanations to fill in appendix 8 tables.

PARAMETER	EXPLANATION
Pesticide	Pesticide Name
Scope of your Method	NA, ND, D
Residue Level	(mg/kg)
Reference Number	Number assigned by the laboratory
Analytical Procedure Used	Table F1
Sample Weight	(g)
Extraction Solvent/s	Table F2
Clean-up step	Table F3
Quantification Using Standards	S or M S: Standard/calibration in pure solvent M: Standard/calibration in matrix extract
Internal Standard	YES or NO
Injection Volume	(µL)
Injection Type	Split, Splitless, PTV, PTV-LVI or On-Column
Determination Technique	GC-ECD,GC-NPD, GC-FPD,GC-Q-MS, GC-QQQ-MS/MS,GC-ITD-MS/MS,GC-TOF/MS, HPLC-FL,HPLC-UV,HPLC-DAD,LC-MS,LC-MS/MS, LC-TOF/MS, …
Confirmation Method	Give the confirmation technique used if any. e.g. GC-ECD,GC-NPD, GC-FPD,GC-Q-MS, GC-QQQ-MS/MS,GC-ITD-MS/MS,GC-TOF/MS, HPLC-FL,HPLC-UV,HPLC-DAD,LC-MS,LC-MS/MS, LC-TOF/MS
RL	(mg/Kg) RL: Reporting Level must be given for all pesticides. For pesticides with metabolites/degradation products, give it for the full residue definition of the pesticide as well as for individual compounds when required.
Was your result adjusted for recovery?	YES or NO In general, results are not adjusted for recovery, when the mean recovery is in the range 70-110%. If your results have been adjusted for recovery, then please report the Recovery Factor that you used.. Reference: METHOD VALIDATION AND QUALITY CONTROL PROCEDURES FOR PESTICIDE RESIDUES ANALYSIS IN FOOD AND FEED Document No. SANCO/2007/3131
Recovery	%
Spiked Level	(mg/Kg) The spiking level that you used to determine your Recovery.
Batch of Analysis	YES or NO Was your recovery determined in the same analytical batch of as the test material?
Recovery	1, 2 or 3 Select "1" if the recovery values you reported originated from the same analytical batch as the test material. Select "2" if the recovery values originated from validation data, and select "3" if the recovery values were taken from your routine QC data.

APPENDIX 8. Methods used by participants for determining pesticides.

Table F1.- Reference Methods

Number	Reference
1	§ 64 LFGB Nr. L 00.00-34 (DFG-Method) S 19, former § 35 LMBG Nr. L 00.00-34
2	Analytical Methods for Pesticide Residues in Foodstuffs. Ministry of Welfare, health and cultural affairs, Netherlands, Multiresidue Method 1, 3.1.2, 6th Ed, 1996
3	Fillion et al. Journal of AOAC International 78-5-1995
4	Specht W, Pelz S, Gilsbach W. Fresenius J Anal Chem. (1995) 353: 183 - 190
5	Gilvydis Dm Walters SM (1990) JAOA Chem. 73
6	Janson et al. Journal of Chromatography A 1023 (2004,9, 93-104
7	Klein, J., Alder, L. JAOAC 86, 1015 (2003); prEN 15637, ChemElut-method
8	Leothay, S. Et al. JAOAC 88 (2005)
9	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): J. Assoc. Off. Anal. Chem. 64(5): 1187-1195
10	M. Anastassiades et al JAOAC 86 (2003) original QuEChERS-method
11	prEN 15662, citrate-buffered QuEChERS-method
12	Official Method of Analysis (1990) 15th Ed., 985.22 AOAC Arlington VA
13	Internal Method (specify the reference) OBLIGATORY

Table F2.- Extraction Solvents

Number	Denoted as
1	ethyl acetate
2	acetone followed by cyclohexane and ethyl acetate
3	acetone followed by dichloromethane
4	acetone followed by dichloromethane and petroleum ether
5	acetonitrile
6	methanol
7	dichloromethane
8	other (specify which)

Table F3.- Clean Up Steps

Clean Up Steps	
GPC	Gel permeation chromatography
SPE	Solid phase extraction
DSPE	Dispersive Solid Phase Extraction
LL	Liquid-liquid partition
NO	No clean-up
O	Other

APPENDIX 8. Methods used by participants for determining pesticides.

ACETAMIPRID														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001		10	8 + Methanol-ammonia acetate/acetic acid (95%:5%)	NO	M	YES	10		LC-MS/MS	MS/MS	0.01	126	0.04	YES	1
002	11	10	5	NO	M	NO	4		LC-MS/MS	LC-MS/MS	0.01	95.0	0.1	YES	1
003	10	10	5	DSPE	M	YES	10		LC-MS/MS	LC-MS/MS	0.01				
004	4	10	5	LL	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	83	0.05	YES	1
005	NA														
006	NA														
007	7	10			M		5		LC-MS/MS	LC-MS/MS	0.01	97	0.4	YES	1
008	Swedish method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	265	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-MS	HPLC-DAD	0.01	80.0	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-ECD-NPD	GC-MS	0.01	102	0.2	YES	2
011	11	10	5	DSPE	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	100	0.1	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-ECD	GC-MS	0.05	78	0.5	YES	1
013	11	5	5	NO	M	NO	10		LC-MS/MS	LC-MS/MS	0.01			YES	1
014	NA														
015	NA														
016	NA														
017	13	20	6 and 7	LL	S	NO	20	ON-COLUMN	HPLC-DAD		0.01	94	0.1	YES	1
018											0.01				
019	7	10	6	LL	M	YES	20		LC-MS/MS	GC-MS	0.01	102	0.1	YES	1
020	2	20	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	82.4	0.25	YES	1
021	13	10,0	7	DSPE	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
022	8	10	5	DSPE	S	YES	5		LC/MS/MS	LC/MS/MS	0.01	103	0.1	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	90	0.02	YES	1
024	6	20	1	NO	S	NO	10		LC-MSMS	LC-MSMS	0.01				
025	2	15	4	NO	S	NO	10	ON-COLUMN	LC/MS/MS		0.01	78	0.1	NO	2
026	13	10	7		S		20		HPLC-DAD		0.1	80	0.5	NO	3
027	10	10	5	DSPE	S	NO	20		HPLC-DAD	HPLC-DAD	0.01	92	0.2	YES	1
028	7	10	6	NO	M	YES	20	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.010	76	0.050	YES	1
029	NA														
030	10	15	5	DSPE	M	YES	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	89.9	0.067	YES	1
031	NA														
032	NA														
033	NFA Rapport 17/98	15	1	NO	M	YES	10	PTV	LC MS/MS		0.01				
034*											0.05				
035	10	15	5	DSPE	M	NO			LC-MS/MS	LC-MS/MS	0.01	70	0.01	YES	1
036	7	10	6	LL	M		10		LC-MS/MS		0.01	101		YES	1
037	NA														
038	9	10	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	104	0.08	YES	1
039	Istisan Report 97/23	15			S	NO	5		LC-MS	LCMS	0.01	71	0.2	YES	1
040	10	10	5	DSPE	M	YES	20		LC-MSMS	LC-MSMS	0.01				
041	NA														
042	13	50	2	NO	M	NO	5		LC-MS/MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.002	97	0.100	YES	1
044	NA														
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	105	0.400	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-ECD	0.01	71-109	0.01-1.0	NO	2
047	7	10	6	LL	M	NO	20		LC-MS/MS		0.01	98	0.1	YES	1
048	7	10	6	SPE	M	NO	35		LC-MS/MS		0.01	91	0.1	YES	1
049	NO RESULTS REPORTED														

APPENDIX 8. Methods used by participants for determining pesticides.

ACETAMIPRID														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	NA														
052	11	10	5	SPE	M	NO	20		LC-MS/MS	LC-MS/MS	0.01	85	0.4	YES	1
053	NA														
054	PRES/069	10	5	DSPE	S	NO	20		LC-MS/MS		0.01	89	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		20		LC-MS/MS	GC-NPD	0.01	97.2	0.058	YES	1
057	NA														
058*											0.05				
059	10	10	5	DSPE	M	NO	10	ON-COLUMN	LC-MS/MS		0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS		0.01				
061	NA														
062	11	10	5	DSPE	S	NO	50		HPLC-DAD	LC-MS/MS	0.01	100.6	0.5	YES	1
063	7	25	6	SPE					LC-MS/MS	LC-MS/MS	0.005	101.8	0.549	YES	1
064	11	10	5	DSPE	S	NO	5		LC-MSMS		0.01	97		YES	1
065	10	10	5	O	M	NO	50		LC/MS/MS	LC/MS/MS	0.010				
066	NA														
067	10								LC-MS/MS	MS/MS	0.01	87			
068	8038	10	1	SPE	M	YES	20		LC-MS/MS	LC-MS/MS	0.01	86	0.1	YES	1
069	10	10	5	DSPE	M	NO	20		LC-MSMS		0.01	102	0.4	YES	1
070		7.5	4	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	73	0.01	YES	1
071	7	1.0	8	LL	M	NO	8		LC-MS/MS	LC-MS/MS	0.01	101	0.01	YES	1
072	6		1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	101	0.04	YES	
073	10	10	5	DSPE	M	YES	20		LC-MS/MS	LC-MS/MS	0.01				
074	2	50	1		M	NO	5		LC-MS/MS	UPLC-MS/MS	0.01	97	0.2	YES	1
075	NO RESULTS REPORTED														
076	7	10	6		S	YES	25		LC-MS/MS		0.01				
077	2	10	4	NO	M		20		LC-MS-MS		0.010	80	0.010	YES	1
078	11	10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
079	2	15	1	NO	M	YES	10		LC-QQQ-MS/MS	LC-QQQ-MS/MS				YES	3
080	11		5						LC-MSMS	LC-MSMS	0.01				
081	NA														
082	NF EN 12393	25	1	NO	S	NO	5	ON-COLUMN	LC MS MS	LC MS MS	0.01	75	0.1	NO	1
083	NA														
084	7	10	6	LL	S	YES	25		LC-MS/MS		0.01	102	0.500	YES	1
085*	ISTISAN 97/23	25	3	DSPE					LC-MS/MS		0.01				
086*	11	10	5	DSPE	S	NO	1	PTV	GC-ECD	GC-MS	0.01	90	0.5	NO	2
087	NA														
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	81	0.2	YES	1
089	13	10	6	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	90.7	.1	YES	1
090	11	10	5	DSPE	M	YES	5	ON-COLUMN	LC-QQQ-MS/MS		0.01	86.8	0.25	YES	1
091	DAR-3-06	12.5	1		M		3	SPLITLESS	GC-NPD	GC-NPD	0.1	74.8	0.3	NO	1
092	NA														
093	NA														
094	NA														
095*	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				
096	NA														
097	11	10	5	NO	M	NO	5		LC-MS/MS	LC/MS/MS	0.005	82	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	97	0.66	YES	3
099	2	15	4	NO	M	NO	5		LC-MS-MS	GC-NPD	0.01	120	0.33	YES	1
100	6	20	1	NO	M	NO	20		LC-MS/MS	LC-MS/MS	0.01	60	0.01	YES	1

APPENDIX 8. Methods used by participants for determining pesticides.

ACETAMIPRID														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
101	NA														
102	EN-12393 P	50	1	GPC	S	NO	100		HPLC-DAD	GC-ECD	0.04	102	0.3	YES	1
103	FP086	10	6	O	M	YES	10		LCMSMS		0.05	122	0.1	YES	1
104	11	10	5	DSPE	S	NO	5		LC-MS/MS		0.01				
105	10	10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES	20		LC/MS/MS		0.01	79	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	20		HPLC-UV	GC-ITD-MS/MS	0.01	89.4	0.5	YES	1
111	ISS,Quad.97/23	10	1	GPC	S	NO	15		LC-MS/MS	LC-MS/MS	0.01				
112	NA														
113	NA														
114	NA														
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116	10	10	5	DSPE	M	YES	8	PTV-LVI	GC-Q-MS		0.01			NO	2
117	NA														
118	2	30	1	NO	S	NO	20		LC-MS		0.01	89	0.1	YES	1
119	NA														
120	NA														
121	11	10	5	DSPE	S	YES	3		LC-MS/MS			97		YES	
122	NA														
123	NA														
124	NA														
125		25	1	GPC	M	NO	10	ON-COLUMN	LC-MS/MS	MS/MS	0.01	106	0.01	YES	2
126	NA														
127	PUBLICATION	20	7	GPC	S	YES	20		LC-MS/MS	LC-MS/MS	0.05	80	0.05-0.25	NO	2
128	NA														
129	NA														
130	PNT-ANA-04	15	5	DSPE	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	100.73	0.01	YES	1
131	NA														
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	92.4	0.1	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

BOSCALID															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001		10	8 + Methanol-ammonia acetate/acetic acid (95%:5%)		M	YES	10		LC-MS/MS	MS/MS	0.02	103	0.04	YES	2
002	EN12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01	106	0.02	YES	1
003	10	10	5	DSPE	M	YES	10		LC-MS/MS	LC-MS/MS	0.01				
004	NA														
005	NA														
006	Kadenczki Et.al. JAOAC 75(1992)	5	3	SPE	S	NO	1	SPLITLESS	GC-ECD		0.005	89	0.200	NO	2
007	7	10			M		5		LC-MS/MS	LC-MS/MS	0.01	84	0.2	YES	1
008	Swedish Method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	137	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-MS	GC-ECD	0.01	96.6	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-ECD-NPD	GC/MS	0.01	89.8	0.02	YES	2
011	11	10	5	DSPE	M	YES	5	PTV-LVI	GC-ITD-MSMS	GC-ITD-MSMS	0.02	98	0.3	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-ECD	GC-MS	0.05	82	0.4	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	94	0.20	YES	1
014	NA														
015	NA														
016	NA														
017	11	10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.02	83	0.1	YES	1
018	NA														
019	7	10	6	LL	M	YES	2	PTV	GC-MS	LC-MS/MS	0.01	103	0.1	YES	1
020	11	10	5	DSPE	S	YES	20	PTV	GC-Q-MS	GC-Q-MS	0.01	106.0	0.25	YES	1
021	13	10	7	DSPE	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.005	95	0.5	YES	1
023	CHEM-014	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	86	0.02	YES	1
024	6	20	1	NO	S	NO	10	ON-COLUMN	LC-MSMS	LC-MSMS	0.01				
025	NF EN 12393	50	1	NO	S	NO	1	SPLITLESS	GC/MS	ECD	0.01	86.8	0.1	NO	3
026	istisan 97/23	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.02	108	0.085	NO	3
027	2	15	1		S	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.01	98	0.2	YES	1
028	7	10	6	NO	M	YES	20	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.010	94	0.050	YES	1
029	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, . & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	89.8	0.2	YES	1
030	10	15	5	DSPE	M	YES	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01		0.067	YES	1
031	NA														
032	NA														
033	NA														
034	NA														
035	10	15	5	DSPE	M	NO			LC-MS/MS	LC-MS/MS	0.01	70	0.01	YES	1
036	10	10	5	DSPE	M	YES	5	PTV	GC/MSMS		0.01	84		YES	1
037	NA														
038	9	10	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.02	101	0.08	YES	1
039	Istisan Report 97/23						5		LCMS	LCMS	0.01	85	0.2	YES	1
040	10	10	5	DSPE	M	YES	20		LC-MSMS	LC-MSMS	0.01				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.215	106	0.5	YES	1
042		50	2	NO	M	NO	5		LC-MS/MS		0.01				
043	NA														
044	NA														
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	105	0.300	YES	1

APPENDIX 8. Methods used by participants for determining pesticides.

BOSCALID														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-ECD	0.01	59-106	0.02-0.80	NO	3
047	1	75	2	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-MS	0.01	97	0.05	YES	1
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	83	0.1		
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	NA														
052	NA														
053	NA														
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	118	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		1	SPLIT	GC-ECD	GC-MSD	0.005	105.6	0.018	YES	1
057	10		5	DSPE	S	YES	3	PTV	GC-Q-MS	GC-Q-MS	0.01	90	0.1	YES	1
058	NA														
059	1	50	8	GPC	M	YES	1	SPLITLESS	GC-ECD	GC-NPD	0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS	GC-MS	0.01				
061	NF EN 12393	25	2	NO	S	YES	1	ON-COLUMN	GC-MS	MS	0.02	89	0.05	NO	3
062	11	10	5	DSPE	S	NO	10		LC-MS/MS	GC-ECD	0.01	92.7	0.1	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-ECD, NPD	GC-TOF-MS	0.01	102.7	1.328	YES	1
064	11	10	5	DSPE	S	NO	5		LC-MSMS		0.01	95		YES	1
065	10	10	5	O	M	NO	50		LC/MS/MS	GC/ECD	0.010				
066	NA														
067	10								LC-MS/MS	MS/MS	0.01	90			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	99	0.1	YES	1
069	10	10	5	DSPE	M	NO	1	SPLITLESS	GC-ECD	LC-MSMS	0.01	87	0.4	YES	1
070		7.5	4	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	98	0.01	YES	1
071	7	1.0	8	LL	M	NO	8		LC-MS/MS	LC-MS/MS	0.01	97	0.01	YES	1
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	89	0.04	YES	1
073	10	10	5	DSPE	M	NO	1,5	SPLIT	GC-MS	GC-MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS		0.01	87	0.2	YES	1
075	NO RESULTS REPORTED														
076	7	10	6		S		25		LC-MS/MS		0.01				
077	NA														
078	11	10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
079	NA														
080	11								LC-MSMS	LC-MSMS	0.01				
081	NA														
082	NF EN 12393	25	1	NO	S	YES	2	PTV	GC MS	GC MS	0.01	76	0.05	YES	1
083	NA														
084	7	10	6	LL	M	YES	25		LC-MS/MS		0.01	108	0.500	YES	1
085	NA														
086	NA														
087	NA														
088	NA														
089	13	10	6	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	94.4	0.1	YES	1
090	11	10	5	DSPE	M	YES	1	ON-COLUMN	GC-ECD	GC-QQQ-MS/MS	0.01	89.3	0.25	YES	1
091	NA														
092	NA														
093	NA														
094	NA														
095	NA														
096	NA														

APPENDIX 8. Methods used by participants for determining pesticides.

BOSCALID														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
097	11	10	5	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	99	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	93	0.33	YES	3
099	2	15	4	NO	M	NO	5		LC-MS-MS	LC-MS-MS	0.01	122	0.26	YES	1
100	NA														
101	NA														
102	NA														
103	NA														
104	NA														
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.01				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES	1	SPLITLESS	GC ECD	GC MS	0.01	89	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.01	84.0	0.25	NO	3
111	NA														
112	NA														
113	NA														
114	NA														
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116	NA														
117	NA														
118	2	30	1	NO	S	NO	20		LC-MS		0.01				
119	NA														
120	NA														
121	11	10	5	DSPE	S	YES	3		LC-MS/MS			95			
122	NA														
123	Rapporti ISTISAN 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-NPD	GC-Q-MS	0.02	85	0.1	NO	2
124	NA														
125	NA														
126	NA														
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05	80	0.05-0.25	NO	2
128	NA														
129	NA														
130	NA														
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	87	0.10	YES	1
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	L-MS/MS	0.01	101.5	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

CHLORPYRIFOS-METHYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001		25	2	GPC	M	NO	2	PTV	GC/MS/MS	MS/MS	0.01	96	0.104	YES	1
002	EN12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01	105	0.02	YES	1
003	10	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-TOF/MS	0.01	79	0.03	YES	1
005	2	25	1	NO	M	NO	2	SPLITLESS	GC-NPD	GC-NPD	0.02	96.4	0.1	YES	1
006	Kadenczki Et.al. JAOAC 75(1992)	5	3	SPE	S	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.010	103	0.050	NO	2
007	9	15			M		1	SPLITLESS	GC-MS	GC-MS	0.01	80	0.07	YES	1
008	Swedish method	25	1	DSPE	M	YES	5	PTV	GC-MS/MS	GC-MS/MS	0.01	124	0.05	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-TSD	GC-MS	0.01	102.7	0.100	YES	1
010	EN 12393		1	SPE	M	NO	2	PTV	GC-ECD-NPD	GC/MS	0.01	91	0.02	YES	2
011	EN 12393	37.5	1	GPC	M	NO	1	ON-COLUMN	GC-NPD	GC-ITD-MSMS	0.02	98	0.07	YES	1
012	istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-NPD	GC-MS	0.02	75	0.1	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	87	0.20	YES	1
014	1	50	3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.01	80	0.01	NO	2
015	1	25	1	GPC	M	NO	1	SPLITLESS	GC-MS	GC-MS	0.05	79	0.05	NO	3
016	9	100	4	NO	M	YES	1	SPLITLESS	GC-Q-MS		0.010				
017		10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.02	77	0.1	YES	1
018											0.01				
019	7	10	6	LL	M	YES	2	PTV	GC-MS	GC-MS	0.01	110	0.1	YES	1
020	11	10	5	DSPE	S	YES	20	PTV	GC-Q-MS	GC-Q-MS	0.01	98.8	0.1	YES	1
021	13	10	7	DSPE	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.01				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.01	100	0.5	YES	1
023	CHEM-014	10	1	GPC	M	YES	1.5	ON-COLUMN	GC-MS/MS	GC-MS/MS	0.005	90	0.02	YES	1
024		20	5	LL	M	NO	0.2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.01				
025	NF EN 12393	50	1	NO	S	NO	1	ON-COLUMN	PFPD	GC/MS	0.01	85	0.1	NO	3
026	Istisan97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-TSD	GC-MS	0.02	75	0.015	NO	2
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-NPD	GC-ECD	0.01	100	0.2	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	88	0.050	YES	1
029	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, . & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	94.2	0.2	YES	1
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	85.9	0.10	YES	1
031	10	15	5	DSPE	M	NO	10	SPLIT	GC-MS/MS	GC-MS/MS	0.010	99.9	0.050	YES	1
032	NA														
033	NFA Rapport 17/98	15		NO	M	YES	10	PTV	GC ITD MS/MS		0.05				
034	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.01	79	0.2	YES	1
035	RE-MA-01	15	4	LL	M	NO			GC-MS/MS	GC-MS/MS	0.01	87	0.01	YES	1
036	1	100	2	GPC	S	YES	1	SPLITLESS	GC-ECD	LC-MS/MS	0.01	90		YES	1
037	PN-EN12393-1,2,3	100	2	GPC	M		1	SPLITLESS	ECD	GC/MS	0.002	64			1
038	9	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	90	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GC-FPD	GCMS	0.01	79	0.15	NO	2
040	10	10	5	DSPE	M	YES	1	PTV	GC-Q-MS	GC-Q-MS	0.005				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.079	98	0.5	YES	1
042	1	50	2	GPC	M	NO	5	PTV	GC-Q-MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.002	96	0.1	YES	1
044	Rapporto Istisan 97/23	9.98	1	GPC	S	YES	1	SPLIT	GC-MS	GC-MS	0.01	110	0.2	NO	2
045	SLV M200	75	1	NO	M	NO	3	SPLITLESS	GC-MS/MS	GC-MS/MS	0.010	99	0.090	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-NPD	0.01	72-133	0.01-0.25	NO	2
047	1	75	2	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-MS	0.01	100	0.1	YES	1

APPENDIX 8. Methods used by participants for determining pesticides.

CHLORPYRIFOS-METHYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	80	0.05		
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2	PTV	GC-MS		0.01				
051	Internal Method reference Istituto Superiore di Sanit`	10	1	GPC	S	YES	3	SPLITLESS	GC-NPD-Q-MSD	GC-Q-MSD	0.01	90	0.01	NO	3
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	61	0.01	YES	1
053	9	100	3	O	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.010	90	0.118	YES	1
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	84	0.1	YES	1
055	8	15	5	DSPE	M	YES	1	PTV	GC-FPD	GC-MS(SIM)	0.1	120	0.1	YES	1
056	1	50	4	GPC	M		1	SPLIT	GC-NPD	GC-MSD	0.005	86.2	0.018	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-NPD	GC-Q-MS	0.01	88	0.1	YES	1
058	9	20	3	O	S		2	SPLITLESS	GC ECD GC NPD		0.08	75	0.1	YES	1
059	1	50	8	GPC	M	YES	2	SPLITLESS	GC-NPD	GC-ECD	0.01				
060	11	10	5	DSPE	M	NO	2	SPLIT	GC-MS	LC-MS/MS	0.01				
061	NF EN 12393	25	2	NO	S	YES	1	ON-COLUMN	GC-MS	MS	0.02	93	0.05	NO	3
062	11	10	5	DSPE	S	NO	1	ON-COLUMN	GC-ECD	GC-MS	0.01	100.4	0.1	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-ECD, NPD	GC-MSD	0.01	95.9	0.432	YES	1
064	11	10	5	DSPE	M	YES	2	PTV	GCMS		0.01	108		YES	1
065	10	10	5	O	M		1	SPLITLESS	GC/MSD	GC/ECD	0.010				
066	PN-EN 12393	50	3	GPC	S	NO	4	PTV	GC-NPD	GC-MS/MS	0.05	132	0.01	NO	2
067	Ethyl Acetate			HPGPC					GC-MS	MS	0.01	98			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	79	0.1	YES	1
069	10	10	5	DSPE	M	NO	20	PTV-LVI	GC-PND	LC-MSMS	0.005	95	0.100	YES	1
070		15	4	NO	M	NO	5	PTV-LVI	GC-ITD	GC-ITD	0.01	87	0.05	YES	1
071	7	5.0	8	LL	M	NO	8		LC-MS/MS	LC-MS/MS		82	0.01	YES	1
072	6	75	1	NO	M	NO	2	SPLITLESS	GC-QQQ-MS/MS	GC-QQQ-MS/MS	0.01	92	0.1	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS	GC-MS/ITD	0.01	102	0.2	YES	1
075	NO RESULTS REPORTED														
076	1	100	2	GPC			5	PTV	GC-MS		0.01				
077	2		4	O	S		2	SPLITLESS	GC-FPD	GC-NPD	0.020	80	0.05	YES	1
078	11	10	5	DSPE	M	YES	2	PTV	GC-FPD	GC-MS/MS	0.005				
079	2		1	NO	M	YES	5	SPLITLESS	GC-QQQ-MS/MS	GC-QQQ-MS/MS				YES	3
080	11								LC-MSMS	LC-MSMS	0.01				
081	MSPDE	5	8	O	S	NO	1	SPLITLESS	GC-NPD	GC-ECD, GC-NPD	0.01	86.4	0.02	NO	2
082	NF EN 12393	25	1	NO	S	NO	2	ON-COLUMN	FC FPD	GC MS	0.01	76	0.05	YES	1
083	2 (5th Edition)	25	8	LL	M	NO	5	SPLITLESS	GC-TSD	GC-TSD	0.02	112	0.1	YES	1
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.01	102	0.100	YES	1
085	ISTISAN97/23	25	3	DSPE	M	NO	1	SPLITLESS	GC-FPD		0.01	88	0.1	NO	2
086	11	10	5	DSPE	S	NO	2	PTV	GC-MS	GC-MS	0.01	113	0.5	NO	2
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	81	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC-ECD, NPD	GC-MS/MS	0.02	105	0.05	YES	1
090	11	10	5	DSPE	M	YES	1	ON-COLUMN	GC-ECD	GC-QQQ-MS/MS	0.01	115.8	0.05	YES	1
091	SAR-1-04	12.5	4	NO	M	NO	3	SPLITLESS	GC-NPD	GC-NPD	0.05	86.2	0.08	NO	1
092	9	10	4		M		2	SPLITLESS	GC-FPD	GC-MS	0.03	90	0.10	YES	1
093	NA														

APPENDIX 8. Methods used by participants for determining pesticides.

CHLORPYRIFOS-METHYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
094	9	15	4	NO	M	NO	10	SPLITLESS	CG-ECD	CG-MS	0.05				
095	10	15			M	YES	10		GC-MS	GC-MS	0.01				
096	PN-EN 12393-1,2,3:2000	25		GPC	M		1	SPLITLESS			0.01	63.4			
097	11	10	5	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	96		YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	88	0.1	YES	3
099	2	15	4	NO	M	NO	1	SPLITLESS	GC-NPD	GC-ECD	0.01	100	0.078	YES	1
100	6	20	1	NO	M	NO	2	SPLITLESS	GC-Q-MS	GC-Q-MS	0.01	102	0.01	YES	1
101	2	75	1	GPC	S	NO	20	PTV	GC-ECD	GC-NPD	0.001	81		NO	2
102	EN 12393 P	50	1	GPC	M	YES	1	SPLITLESS	GC-NPD	GC-FPD	0.02	126	0.05	YES	1
103	FP017	25	2	GPC	M	NO	2	PTV	GCQ		0.007	67	0.1	YES	1
104	11	10	5	DSPE	S	YES	5	PTV-LVI	GC-ITD		0.01				
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.01				
106	NO RESULTS REPORTED														
107	ISTISAN 97/23	15	7	NO	M	YES	1	SPLITLESS	GC NPD	GC-MS	0.01	88	0.20	YES	1
108	2		1	NO	M	NO	1	SPLITLESS	GCNPD VARIAN VA 17	GC NPD HP 5	0.04	89.67	0.04		
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-NPD	GC-IT-MS/MS	0.01	99.5	0.05	NO	3
111	SS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.01				
112	1	7.5	3		M	NO	1	SPLITLESS	GC-NPD	GC-MS	0.01	70-110	0.025	YES	1
113	PN-EN 12393:2000	50	3	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.007	84.05	0.05	NO	2
114	9	10	1	NO	M	YES	10	SPLIT	GC-ITD-MS/MS	GC-ITD-MS/MS			0.02	YES	1
115	11	10	5	DSPE	M	YES	5	PTV-LVI	GC/MS		0.01				
116	10										0.01	98			
117	PN-EN 12393-1,2,3:2000	100	3	O	S	NO	10	PTV-LVI	GC-ECD	GC-ECD	0.05				
118	2	30	1	GPC	S	NO	1	SPLITLESS	GC-NPD			80	0.1	YES	1
119	9	15	4	NO	M	NO	10	PTV-LVI	GC-MS	GC-MS/MS	0.01				
120		30	1	NO	M	NO	10	PTV	GC-MSMS	GC-MSMS	0.01	86	0.014	YES	1
121	11	10	5	DSPE	M	YES	3	PTV	GC-MS/MS			100			
122	2	15	4	NO	S	NO	1	SPLITLESS	GC-NPD	GC-ECD	0.01	115%	0.1	YES	1
123	Rapporti ISTISAN 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-ECD	GC-Q-MS	0.02	75	0.05	NO	2
124	PN-EN 12393:2000	100	8	GPC	S	NO	2	PTV	GC-NPD	GC-MS	0.050	81	0.050	YES	1
125		25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.01	95	0.01	YES	2
126	Internal Method	50	3	LL	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05	85	0.05-0.25	NO	2
128	3	50	1	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.02				
129	ISS 3/97	50	8	SPE	S	YES	2	SPLITLESS	GC-ECD/ECD; GC-MS	GC-MS	0.010	90%	0.100	NO	2
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	102	0.01	YES	1
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	86	0.10	YES	1
132	SOP	50	2	GPC	M	YES	1	SPLIT	GC-ECD	GC-MS	0.01	123	0.050	NO	3

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

DIAZINON															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001		25	2	GPC											
002	EN12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01	115	0.02	YES	1
003	10	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-TOF/MS	0.01	90	0.03	NO	2
005	2	25	1	NO	M	NO	2	SPLITLESS	GC-NPD	GC-NPD	0.02	94.9	0.52	YES	1
006	Kadenczki Et.al. JAOAC 75(1992)	5	3	SPE	S	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.010	75	0.500	NO	2
007	9	15			M		1	SPLITLESS	GC-MS	GC-MS	0.01	93	0.6	YES	1
008	Swedish method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	74	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-TSD	GC-MS	0.01	96.9	0.500	YES	1
010	EN 12393		1	SPE	M	NO	2	PTV	GC-ECD-NPD	GC/MS	0.01	83.8	0.02	YES	2
011	11	10	5	DSPE	M	NO	1	ON-COLUMN	GC-NPD	GC-ITD-MSMS	0.01	106	0.5	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-NPD	GC-MS	0.05	87	0.5	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	98	0.20	YES	1
014	1	50	3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.02	80	0.02	NO	2
015	1	25	1	GPC	M	NO	1	SPLITLESS	GC-MS	GC-MS	0.02	93	0.02	NO	2
016	9	100	4	NO	M	YES	1	SPLITLESS	GC-Q-MS		0.010				
017		10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.02	96	0.1	YES	1
018											0.01				
019	7	10	6	LL	M	YES	20		LC-MS/MS	GC-MS	0.01	107	0.1	YES	1
020	11	10	5	DSPE	S	YES	20	PTV	GC-Q-MS	GC-Q-MS	0.01	87.5	1	YES	1
021	13	10	7	DSPE	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
022	8	10	5	DSPE	M	NO	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.01	97	0.5	YES	1
023	CHEM-014	10	1	GPC	M	YES	1.5	ON-COLUMN	GC-MS/MS	GC-MS/MS	0.005	82	0.02	YES	1
024		20	5	LL	M	NO	0.2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.01				
025	NF EN 12393	50	1	NO	S	NO	1	ON-COLUMN	PFPD	GC/MS	0.01	90.5	0.1	NO	3
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-TSD	GC-MS	0.02	85	1.5	NO	2
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-NPD	GC-NPD	0.01	100	0.5	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	86	0.050	YES	1
029	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, . & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	95.3	0.2	YES	1
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	89.3	0.10	YES	1
031	10	15	5	DSPE	M	NO	10	SPLIT	GC-MS/MS	GC-MS/MS	0.010	83.7	0.050	YES	1
032	NA														
033	NFA Rapport 17/98	15	1		M	YES	10	PTV	GC ITD MS/MS		0.02				
034	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.01	81	0.5	YES	1
035	RE-MA-01	15	4	LL	M	NO			GC-MS/MS	GC-MS/MS	0.01	83	0.01	YES	1
036	1	100	2	GPC	S	YES	1	SPLITLESS	GC-ECD	LC-MSMS	0.01	99		YES	1
037	EN12393-1,2,3	100	2	GPC	M		1	SPLITLESS	ECD	GC/MS	0.002	75.5			1
038	9	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	89	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GC-FPD	GCMS	0.01	90	0.4	YES	1
040	10	10	5	DSPE	M	YES	1	PTV	GC-Q-MS	GC-Q-MS	0.01				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.520	94	0.5	YES	1
042	1	50	2	GPC	M	NO	5	PTV	GC-Q-MS		0.01				
043	Hajslova et al. Journal of Chromatography A, 800 (1998), 283-295	25	1	GPC	M	NO	1	SPLITLESS	GC-Q-MS		0.01	92	0.150	YES	1
044	Istisan 97/23	9.98	1	GPC	S	YES	1	SPLIT	GC-MS	GC_MS	0.01	88	0.3	YES	2
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	105	0.400	YES	1

APPENDIX 8. Methods used by participants for determining pesticides.

DIAZINON															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-NPD	0.01				
047	1	75	2	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-MS	0.01	94	0.1	YES	1
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.01	84	0.5		
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	Internal Method reference Istituto Superiore di Sanit`		1	GPC	S	YES	3	SPLITLESS	GC-NPD-QMSD	GC-Q-MSD	0.01	95	0.01	NO	3
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	66	0.3	YES	1
053	9	100	3	O	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.010	99	0.110	YES	1
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	104	0.1	YES	1
055	8	15		DSPE	M	YES	1	PTV	GC-FPD	GC-MS(SIM)	0.61	107	0.1	YES	1
056	1	50	4	GPC	M		1	SPLIT	GC.NPD	GC-MSD	0.005	81.1	0.041	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-NPD	GC-MS	0.01	92	0.1	YES	1
058	9	20	3	O	S		2	SPLITLESS	GC ECD GC NPD		0.69	82	0.1	YES	1
059	1	50	8	GPC	M	YES	2	SPLITLESS	GC-NPD	GC-ECD	0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS	GC-MS	0.01				
061	NF EN 12393	25	2	NO	S	YES	1	ON-COLUMN	GC-MS	MS	0.02	93	0.05	NO	3
062	11	10	5	DSPE	M	YES	1	ON-COLUMN	GC-NPD	GC-ECD	0.01	105.1	0.5	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-ECD, NPD	GC-TOF, GC-MSD	0.01	98.4	0.753	YES	1
064	11	10	5	DSPE	M	YES	2	PTV	GCMS		0.01	100		YES	1
065	10	10	5	O	M		1	SPLITLESS	GC/MSD	GC/ECD	0.010				
066	PN-EN 12393	50	3	GPC	S	NO	4	PTV	GC-ECD	GC-MS/MS	0.05	96.2	0.04		
067	Ethyl Acetate			HPGPC					GC-MS	MS	0.01	97			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	84	0.1	YES	1
069	10	10	5	DSPE	M	NO	1	SPLITLESS	GC-ECD	LC-MSMS	0.01	94	0.500	YES	1
070		7.5	4	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	90	0.01	YES	1
071	7	2.5	8	LL	M	NO	8		LC-MS/MS	LC-MS/MS		107	0.01	YES	1
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	106	0.04	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS	GC-MS/ITD	0.01	120	0.2	YES	1
075	NO RESULTS REPORTED														
076	1	100	2	GPC	M	YES	5	PTV	GC-MS		0.01				
077	2		4	O			2	SPLITLESS	GC-FPD	GC-NPD	0.020	80	0.05	YES	1
078	11	10	5	DSPE	M	YES	2	PTV	GC-MS/MS	GC-MS	0.005				
079									GC-QQQ-MS/MS	GC-QQQ-MS/MS					
080	11								LC-MSMS	LC-MSMS	0.01				
081	MSPDE	5	8	O	S	NO	1	SPLITLESS	GC-NPD	GC-ECD, GC-NPD	0.01	88.2	0.01	NO	2
082	NF EN 12393	25	1	NO	S	NO	2	ON-COLUMN	GC FPD	GC MS	0.01	82	O.O5	YES	1
083	2 (5th Edition)	25	8	LL	M	NO	5	SPLITLESS	GC-TSD	GC-TSD	0.02	104	0.6	YES	1
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.01	97	0.500	YES	1
085	ISTISAN 97/23	25	3	DSPE	M	NO	1	SPLITLESS	GC-FPD		0.01	90	0.1	NO	2
086	11	10	5	DSPE	S	NO	1	PTV	GC-ECD	GC-MS	0.01	110	0.5	NO	2
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01	92	0.10	NO	2
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	84	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC-ECD/NPD	GC-MS/MS	0.02	104	0.05	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	GC-PFPD	0.01	96.8	0.25	YES	1
091	SAR-1-04	12.5	4	NO	M	NO	3	SPLITLESS	GC-NPD	GC-MS	0.05	85.5	0.5	NO	1
092	9	10	4		M		2	SPLITLESS	GC-FPD	GC-MS	0.01	80	0.40	YES	1
093	ISTISAN modified	10.02	7	GPC	S	NO	1	SPLITLESS	GC-NPD	GC-Q-NPD	0.1	80	0.1	NO	3

APPENDIX 8. Methods used by participants for determining pesticides.

DIAZINON															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
094	9	15	4	NO	M	NO	10	SPLITLESS	CG-TSD	CG-MS	0.01				
095	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				
096	PN-EN 12393-1,2,3:2000	25		GPC	M		2	SPLITLESS			0.01	65.3			
097	11	10	5	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.005	91	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	78	0.66	YES	3
099	2	15	4	NO	M	NO	1	SPLITLESS	GC-NPD	GC-ECD	0.01	101	0.60	YES	1
100	6	20	1	NO	M	NO	2	SPLITLESS	GC-Q-MS	GC-Q-MS	0.01	111	0.01	YES	1
101	2	75	1	GPC	S	NO	20	PTV	GC-ECD	GC-NPD	0.01	67		NO	2
102	EN 12393 P	50	1	GPC	M	YES	1	SPLITLESS	GC-FPD	GC-TOF-MS	0.02	131	0.05	YES	1
103*															
104	11	10	5	DSPE	S	YES	5	PTV-LVI	GC-ITD		0.01				
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.01				
106	NO RESULTS REPORTED														
107	Istian 97/83	15			M	YES	1	SPLITLESS	GC-NPD	GC MS	0.01	90	0.20	YES	
108	2		1	NO	M	NO	1	SPLITLESS	GC-NPD VARIAN VA	GC NPD HP 5	0.04	91.05	0.40		
109	2	7.5	4	NO	M	NO	1	ON-COLUMN	GC-NPD	GC-ECD, GC/MS	0.02	100	0.02	YES	1
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-NPD	GC-ITD-MS/MS	0.01	98.5	0.5	NO	3
111	ISS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.01				
112	1	7.5	3		M	NO	1	SPLITLESS	GC-NPD	GC-MS	0.01	70-110	0.025	YES	1
113	NA														
114	9	10	1	NO	M	YES	10	SPLIT	GC-ITD-MS/MS	GC-ITD-MS/MS			0.02	YES	1
115	11	10	5	DSPE	M	YES	5	PTV-LVI	GC/MS		0.01				
116											0.01	100			
117	PN-EN 12393-1,2,3:2000	100	3	O	S	NO	10	PTV-LVI	GC-ECD	GC-ECD	0.05				
118	2	30	1	GPC	S	NO	1	SPLITLESS	GC-NPD	LC-MS	0.01	75	0.1	YES	1
119	9	15	4	NO	M	NO	10	PTV-LVI	GC-MS	GC-MS/MS	0.01				
120		30	1	NO	M	NO	10	PTV	GC-MSMS	GC-MSMS	0.01	96	0.013	YES	1
121	11	10	5	DSPE	S	YES	3		LC-MS/MS	GC-MS/MS		93			
122	2	15	4	NO	S	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.01	98.5%	0.5	YES	1
123	Rapporti ISTISAN 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-NPD	GC-Q-MS	0.01	75	0.1	NO	2
124	PN-EN 12393:2000	100	8	GPC	S	NO	2	PTV	GC-NPD	GC-MS	0.010	119	0.010	YES	1
125		25	1	GPC	M	YES	2	SPLITLESS	MS	MS	O.O1	100	0.01	YES	2
126	Internal Method	50	3	LL	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05	89	0.05-0.25	NO	2
128	3	50	1	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.035				
129	ISS 3/97	50	8	SPE	S	YES	2	SPLITLESS	GC-ECD/ECD; GC-MS	GC-MS	0.050	80	0.100	NO	2
130	NA														
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	91	0.10	YES	1
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	102.4	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001	NA														
002	EN12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD,GC-NPD	GC-MS	0.01	100	0.02	YES	1
003	10	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-ECD	GC-TOF/MS	0.005	80	0.03	NO	2
005	2 (5th Ed.)	25	8	O	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.02	91.5	0.09	YES	1
006	Kadenczki Et.al. JAOAC 75(1992)	5	3	SPE	S	NO	1	SPLITLESS	GC-ECD		0.010	79	0.050	NO	2
007	10	10			M		5	PTV	GC-MS	GC-MS	0.01	110	0.1	YES	1
008	Swedish method	25	1	DSPE	M	YES	5	PTV	GC-MS/MS	GC-MS/MS	0.01	101	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-ECD	GC-MS	0.01	88.4	0.100	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.01	87.2	0.2	YES	2
011		10	5	DSPE	M	YES	5	PTV-LVI	GC-ITD-MSMS	GC-ITD-MSMS	0.02	81	0.08	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-ECD	GC-MS	0.05	80	0.1	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	88	0.20	YES	1
014	1	50	3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.05	70	0.05	NO	2
015	1	25	1	GPC	M	NO	1	SPLITLESS	GC-MS	GC-MS	0.05	118	0.05	NO	3
016	9	100	4	NO	M	YES	1	SPLITLESS	GC-Q-MS		0.010				
017		10	5	DSPE	M	YES	2	Splitless	GC-Q-MS	GC-ITD-MS/MS	0.02	71	0.1	YES	1
018															
019	7	10	6	LL	M	YES	2	PTV	GC-MS	GC-MS	0.01	104	0.1	YES	1
020	11	10	5	DSPE	S	YES	15	PTV	GC-Q-MS	GC-Q-MS	0.01	74.8	0.25	YES	1
021	13	10	7	DSPE	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.02				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.01	99	0.5	YES	1
023	CHEM-014	10	1	GPC	M	YES	1.5	ON-COLUMN	GC-MS	GC-MS/MS	0.005	87	0.02	YES	1
024	NA														
025	NF EN 12393	50	1	SPE	S	NO	1	SPLITLESS	ECD	GC/MS	0.01	62	0.1	NO	3
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.02	105	0.013	NO	2
027	2	15	1	NO	S	NO	1		GC-ECD	GC-ECD	0.01	115	0.1	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	79	0.050	YES	1
029	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, . & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	91.9	0.2	YES	1
030	NA														
031	NA														
032	NA														
033	NFA Rapport 17/98	15	1	NO	M	YES	10	PTV	GC ITD MS/MS		0.04				
034	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.02	97	0.02	YES	1
035	RE-MA-01	15	4	LL	M	NO			GC-MS/MS	GC-MS/MS	0.01	76	0.01	YES	1
036	1	100	2	GPC	S	YES	1	SPLITLESS	GC-ECD		0.005	100		YES	1
037	EN12393-1,2,3	100	2	GPC	M		1	SPLITLESS	GC/ECD	GC/MS	0.008	71.3			
038	9	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	94	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GC-ECD	GCMS	0.01	86	0.15	NO	2
040	10	10	5	DSPE	M	YES	1	PTV	GC-Q-MS	GC-Q-MS	0.004				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.121	99	0.5	YES	1
042	1	50	2	GPC	M	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.005				
043	Hajslova et al., Journal of Chromatography A, 800 (1998), 283-295	25	1	GPC	M	NO	1	SPLITLESS	GC-Q-MS		0.008	93	0.150	YES	1
044	10	10.04	5	DSPE	S	YES	1	SPLIT	GC-MS	GC-MS	0.01				
045	SLV M200	75	1	NO	M	NO	3	SPLITLESS	GC-MS/MS	GC-MS/MS	0.010	91	0.070	YES	1
046	1	50	2	GPC	S	NO	1	SPLITLESS	GC-ECD	LC-MS/MS	0.01	72-105	0.01-1	NO	2

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
047	1	75	2	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-MS	0.01	77	0.05	YES	1
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	90	0.1		
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2	PTV	GC-MS		0.01				
051	Internal Method reference Istituto Superiore di Sanit`	10	1	GPC	S	YES	3	SPLITLESS	MSD	GC-Q-MSD		80	0.01	NO	3
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	77	0.01	YES	1
053	9	100	3	O	M	NO	1	SPLITLESS	GC-ECD		0.010	95	0.100	YES	1
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	140	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		1	SPLIT	GC-ECD	GC-MSD	0.005	85.1	0.012	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-Q-MS	GC-Q-MS	0.01	92	0.1	YES	1
058	9	20	3	O	S	NO	2	SPLITLESS	GC ECD		0.152	80	0.05	YES	1
059	1	50	8	GPC	M	YES	1	SPLITLESS	GC-ECD		0.01				
060	11		5	DSPE	M	NO	2	SPLIT	GC-MS		0.01				
061	NF EN 12393	25	2	NO	S	YES	1	ON-COLUMN	GC-MS	MS	0.02	95	0.05	NO	3
062	11	10	5	DSPE	S	NO	1	ON-COLUMN	GC-ECD	GC-MS	0.01	86.9	0.1	YES	1
063	1	50	2	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-MSD	0.001	92.4	0.392	YES	1
064	11	10	5	DSPE	M	YES	1	SPLITLESS	GC-ECD		0.01	102		YES	1
065	10	10	5	O	M	NO	1	SPLITLESS	GC/MSD	GC/ECD	0.010				
066	PN-EN 12393	50	3	GPC	S	NO	4	PTV	GC-ECD	GC-MS/MS			0.01	NO	2
067	Ethyl Acetate			HPGPC					GC-MS	MS	0.01	96			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	100	0.1	YES	1
069	10	10	5	DSPE	M	NO	1	SPLITLESS	GC-ECD	LC-MSMS	0.005	97	0.200	YES	1
070		15	4	NO	M	NO	5	PTV-LVI	GC-ITD	GC-ITD	0.01	91	0.05	YES	1
071	NA														
072	6	75	1	NO	M	NO	2	SPLITLESS	GC-QQQ-MS/MS	GC-QQQ-MS/MS	0.01	83	0.1	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	0.01				
074	2	50	1	GPC	M	NO	1	SPLITLESS	GC-MS/MS		0.01	90	0.2	NO	2
075	NO RESULTS REPORTED														
076*											0.01				
077	NA														
078	11	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.005				
079									GC-QQQ-MS/MS	GC-QQQ-MS/MS					
080	11								GC-ECD	GC-ECD	0.01				
081	MSPDE	5	8	O	S	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.003	109.9	0.003	NO	2
082*	NF EN 12393	25	1	NO	S	NO	2	PTV	GCMS	GCM	0.01	89	0.05	NO	1
083	NA														
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.01	102	0.100	YES	1
085	ISTISAN 97/23	25	1	NO	S	NO	1	SPLITLESS	GC-MS		0.01	77	0.1	YES	1
086	11	10	5	DSPE	S	NO	1	PTV	GC-ECD	GC-MS	0.01	127	0.05	NO	2
087*	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	76	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC-ECD/NPD	GC-MS/MS	0.02	93	0.05	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	GC-ECD	0.01	87.0	0.05	YES	1
091*															
092	9	10	4		M		2	SPLITLESS	GC-ECD	GC-MS	0.03	92	0.06	YES	1
093	NA														
094	9	15	4	NO	M	NO	10	SPLITLESS	CG-ECD	CG-MS	0.05				

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
095	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				
096	PN-EN 12393-1,2,3:2000	25		GPC	M		2	SPLITLESS			0.01	74.1			
097	11	10	5	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.005	99	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	87	0.1	YES	3
099	2		4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-MS	0.01	110	0.12	YES	1
100*	6		1	NO	M	NO	2	SPLITLESS	GC-Q-MS	GC-Q-MS	0.01				
101	2	75	1	GPC	S	NO	20	PTV	GC-ECD	GC-ECD	0.002	76		NO	2
102	EN 12393 P	50	1	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-TOF-MS	0.02	105	0.1	YES	1
103	FP017	25	2	GPC	M	NO	2	SPLITLESS	GCECD		0.011	75	0.1	YES	1
104	11	10	5	DSPE	S	YES	5	PTV-LVI	GC-ITD		0.02				
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.01				
106	NO RESULTS REPORTED														
107	ISTISAN 97/23	15	7		M	YES	1	SPLITLESS	GC ECD	GC MS	0.01	79	0.20	YES	1
108	NA														
109	2	7.5	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD, GC/MS	0.01	97	0.1	YES	1
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ITD-MS/MS	0.01	89.5	0.1	NO	3
111	ISS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.01				
112	1	7.5	3		M	YES	1	SPLIT	GC-ECD		0.005	70-110	0.025	YES	1
113	PN-EN 12393:2000	50	3	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.006	77.04	0.04	NO	2
114	9	10	1	NO	M	YES	10	SPLIT	GC-ITD-MS/MS	GC-ITD-MS/MS					
115	11	10	5	DSPE	M	YES	5	PTV-LVI	GC/MS		0.01				
116											0.01	100			
117	PN-EN 12393-1,2,3:2000	100	3	O	S	NO	10	PTV-LVI	GC-ECD	GC-ECD	0.05				
118	2	30	1	O	S	NO	1	SPLITLESS	GC-ECD		0.01	73	0.1	YES	1
119*	9														
120		30	1	NO	M	NO	10	PTV	GC-MSMS	GC-MSMS	0.01	120	0.013	YES	1
121	11	10	5	DSPE	M	YES	3	PTV	GC-MS/MS			95			
122	NA														
123	Rapporti ISTISAN 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-ECD	GC-Q-MS	0.01	75	0.02	NO	2
124	PN-EN 12393:2000	100	8	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-MS	0.017	120	0.050	YES	1
125	GC	25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.01	106	0.01	YES	2
126	PN-EN 12393	50	3	GPC	S	NO	1	SPLITLESS	GC-ECD		0.002				
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05	74	0.05-0.25	NO	2
128	NA														
129	ISS 3/97	50	8	SPE	S	YES	2	SPLITLESS	GC-ECD/ECD GC-MS	GC-MS	0.20	90	0.10	NO	2
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	99	0.01	YES	1
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-ECD	GC-MS	0.01	86	0.10	YES	1
132	SOP	50	2	GPC	M	YES	1	SPLIT	GC-ECD	GC-MS	0.04	113	0.05	NO	3

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

HEXYTHIAZOX															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001					M	YES	10		LC-MS/MS	MS/MS	0.11	93	0.2	YES	1
002	11	10	5	NO	M	NO	4		LC-MS/MS	LC-MS/MS	0.01	95	0.1	YES	1
003	10	10	5	DSPE	M	YES	10		LC-MS/MS	LC-MS/MS	0.01				
004	4	10	5	LL	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	80	0.05	YES	1
005	NA														
006	NA														
007	10	10			M		5		LC-MS/MS	LC-MS/MS	0.01	105	0.4	YES	1
008	Swedish method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	36	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-MS	HPLC-DAD	0.01	89.4	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.1	62.0	0.2	YES	2
011	11	10	4	DSPE	S	NO	10		LCMSMS	LCMSMS	0.01	98	0.1	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-MS		0.05	75	0.5	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.02	91	0.20	YES	1
014	1	50	3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.05	70	0.05	NO	3
015	NA														
016	9	100	4	NO	M	YES	1	SPLITLESS	GC-Q-MS		0.020				
017		10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.05	70	0.1	YES	1
018	NA														
019	7	10	6	LL	M	YES	20		LC-MS/MS	GC-MS	0.01	105	0.1	YES	1
020	2	20	4	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	99.5	0.25	YES	1
021	NA														
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.05	88	0.01	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	72	0.02	YES	1
024	6	20	1	NO	S	NO	10		LC-MSMS	LC-MSMS	0.01				
025	2	15	4	NO	S	NO	10	ON-COLUMN	LC/MS/MS	GC/MS	0.01	78	0.1	NO	2
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.02	88	0.92	NO	3
027	10	10	5	DSPE	S	NO	20		HPLC-DAD	HPLC-DAD	0.01	95	0.6	YES	1
028	7	10	6	NO	M	YES	20	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.010	56	0.050	YES	1
029	NA														
030	10	15	5	DSPE	M	YES	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	89.6	0.067	YES	1
031	10	15	5	DSPE	M	NO	50		LC-MS	LC-MS	0.010	94.7	0.050	YES	1
032	NA														
033	NA														
034	NA														
035	10	15	5	DSPE	M	NO			LC-MS/MS	LC-MS/MS	0.01	70	0.1	YES	1
036	7	10	6	LL	M		10		LCMSMS		0.01	64		YES	1
037	NA														
038	9	10	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	92	0.08	YES	1
039	NA														
040	10	10	5	DSPE	M	YES	20		LC-MSMS	LC-MSMS	0.01				
041	NA														
042			2	NO	M	NO	5		LC-MS/MS		0.02				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.002	96	0.1	YES	1
044	Istisan 97/23	9.98	1	GPC	S	NO	10		HPLC-DAD	HPLC-DAD					
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	108	0.400	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-NDD	0.01	98-104	4.0-10.0	NO	3
047	7	10	6	LL	M	NO	20		LC-MS/MS		0.01	86	0.1	YES	1
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	80	0.5		
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				

APPENDIX 8. Methods used by participants for determining pesticides.

HEXYTHIAZOX															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
051	NA														
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	130	0.47	YES	1
053	NA														
054	PRES/069	10	5	DSPE	S	NO	20		LC-MS/MS		0.01	98	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		20		LC-MS/MS	GC-NPD	0.01	91.0	0.058	YES	1
057	NA														
058	NA														
059	1	50	8	GPC	M	YES	1	SPLITLESS	GC-ECD		0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS	GC-MS	0.01				
061	NA														
062	11	10	5	DSPE	S	NO	50		HPLC-DAD	LC-MS/MS	0.01	96.6	0.5	YES	1
063	7		6	SPE	M	NO	10		LC-MS/MS	GC-MSD	0.005	76.7	0.574	YES	1
064	11	10	5	DSPE	M	NO	5		LC-MSMS		0.01	101		YES	1
065	10	10	5	O		NO	10		LC/MS/MS	LC/MS/MS	0.010				
066	NA														
067	10								LC-MS/MS	MS/MS	0.01	96			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	LC-MS/MS	0.01	85	0.1	YES	1
069	10	10	5	DSPE	M	NO	1	SPLITLESS	GC-ECD	LC-MSMS	0.01	100	1.0	YES	1
070		7.5	4	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	86	0.01	YES	1
071	7	1.0	8	LL	M	NO	8		LC-MS/MS	LC-MS/MS		101	0.01	YES	1
072	6		1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	92	0.4	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	0.05				
074	2	50	1	NO	M	NO	5		LC-MS/MS	UPLC-MS/MS	0.01	90	0.5	NO	2
075	NO RESULTS REPORTED														
076	7	10			S	YES	25		LC-MSMS		0.01				
077	2		4	O	M				LC-MS-MS		0.010	70	0.010	YES	1
078	11	10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
079	NA														
080	11								LC-MSMS	LC-MSMS	0.01				
081	NA														
082	NF EN 12393	25	1	NO	S	NO	5	ON-COLUMN	LC MS MS	LC MS MS	O.O1	82	0.1	NO	1
083	NA														
084	7	10	6	LL	S	YES	25		LC-MS/MS		0.01	80	0.500	YES	1
085	NA														
086	NA														
087	NA														
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	77	0.2	YES	1
089	13	10	6	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	93.5	0.1	YES	1
090	11	10	5	DSPE	M	YES	5	ON-COLUMN	LC-QQQ-MS/MS	GC-ECD	0.01	96.7	0.25	YES	1
091	NA														
092	9	10	4		M		2	SPLITLESS	GC-ECD	GC-MS	0.05	85	0.40	YES	1
093	NA														
094	NA														
095*	10	15			M	YES	10		LC-MS	LC-MS	0.01				
096	NA														
097	11	10	5	O	M		1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.01	89	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	85	0.66	YES	3
099	2	15	4	NO	M	NO	5		LC-MS-MS	LC-MS-MS	0.01	150	0.60	YES	1
100	NA														
101	NA														

APPENDIX 8. Methods used by participants for determining pesticides.

HEXYTHIAZOX															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
102	EN 12393 P	50	1	GPC	M	YES	1	SPLITLESS	GC-NPD	GC-ECD	0.05	132	0.5	YES	1
103	fp086	10	6	O	M	YES	10		LCMSMS		0.05	103	0.1	YES	2
104	11	10	5	DSPE	S	NO	5	PTV-LVI	LC-MS/MS		0.1				
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02				
106	NO RESULTS REPORTED														
107	Istian 97/23	15	7		M	YES	20		LC/MS/MS		0.01	88	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-NPD	GC-ITD-MS/MS	0.01	80.0	0.5	NO	3
111	SS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.02				
112	NA														
113	NA														
114	NA														
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116	NA														
117	NA														
118	2	30	1	NO	S	NO	20		LC-MS		0.01				
119	NA														
120	NA														
121	11	10	5	DSPE	S	YES	3		LC-MS/MS			97			
122	NA														
123	NA														
124	NA														
125	GC	25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.01	104	0.01	YES	2
126	NA														
127	NA														
128	NA														
129	NA														
130	PNT-ANA-04	15	5	DSPE	M	NO	10		LC-MS/MS	LC-MS/MS	0.05	101.76	0.05	YES	1
131	NA														
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	91	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

ISOFENPHOS-METHYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001	NA														
002	NA														
003	10	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-TOF/MS	GC-TOF/MS	0.01	82	0.03	NO	2
005	NA														
006	NA														
007	9	15			M		1	SPLITLESS	GC-MS	GC-MS	0.01	93	0.5	YES	1
008	Swedish method	25	1	DSPE	M	YES	5	PTV	GC-MS/MS	GC-MS/MS	0.01	91	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-TSD	GC-MS	0.01	91.9	0.500	YES	1
010	NA														
011	11	10	5	DSPE	M	YES	5	PTV-LVI	GC-ITD-MSMS	GC-ITD-MSMS	0.02	82	0.4	YES	1
012	NA														
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	87	0.20	YES	1
014	1	50	3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.05	80	0.05	NO	3
015	NA														
016	NA														
017		10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.02	80	0.1	YES	1
018	NA														
019	7	10	5	LL	M	YES	2	SPLITLESS	GC-MS	LC-MS/MS	0.01	92	0.1	YES	1
020	11	10	5	DSPE	S	YES	20	PTV	GC-Q-MS	GC-Q-MS	0.01	78.1	0.5	YES	1
021	13	10	7	DSPE	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.01				
022	NA														
023	CHEM-014	10	1	GPC	M	YES	1.5	ON-COLUMN	GC-MS/MS	GC-MS/MS	0.005	88	0.02	YES	1
024		20	5	LL	M	NO	0.2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.01				
025	NF EN 12393	50	1	NO	S	NO	1	ON-COLUMN	PFPD	GC/MS	0.01	92	0.1	NO	3
026	NA														
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-NPD	GC-NPD	0.01	98	0.3	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	88	0.050	YES	1
029	NA														
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	89.3	0.10	YES	1
031	10	15	5	DSPE	M	NO	10	SPLIT	GC-MS/MS	GC-MS/MS	0.010	86.52	0.050	YES	1
032	NA														
033	NFA Rapport 17/98	15	1	NO	M	YES	10	PTV	GC ITD MS/MS		0.01				
034	NA														
035	RE-MA-01	15	4	LL	M	NO			GC-MS/MS	GC-MS/MS	0.01	97	0.01	YES	1
036	7	10	6	LL	M		10		LCMSMS		0.01	83		YES	1
037	NA														
038	9	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	84	0.08	YES	1
039	NA														
040	10	10	5	DSPE	M	YES	1	PTV	GC-Q-MS	GC-Q-MS	0.01				
041	NA														
042		50	2	NO	M	NO	5		LC-MS/MS		0.01				
043	NA														
044	NA														
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	102	0.300	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS		0.01				
047	1	75	2	GPC	M	NO	1	PTV	GC-NPD	GC-MS	0.01	84	0.1	YES	1
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	85	0.5		
049	NO RESULTS REPORTED														

APPENDIX 8. Methods used by participants for determining pesticides.

ISOFENPHOS-METHYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
050	7	20	6	LL	M	NO	2	PTV	GC-MS		0.01				
051	NA														
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	50	0.01	YES	1
053	NA														
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	99	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		1	SPLIT	GC-NPD	GC-MSD	0.005	90.8	0.029	YES	1
057	NA														
058	NA														
059	1	50	8	GPC	M	YES	2	SPLITLESS	GC-NPD	GC-ECD	0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS	GC-MS	0.01				
061	NF EN 12393	25	2	NO	S	YES	1	ON-COLUMN	GC-MS	MS	0.02	89	0.05	NO	3
062	11	10	5	DSPE	M	YES	1	ON-COLUMN	GC-NPD	GC-MS	0.01	105.7	0.5	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-TOF	0.01	102	1.361	YES	1
064	11	10	5	DSPE	M	YES	2	PTV	GCMS		0.01	96		YES	1
065	10	10	5	O	M	NO	1	SPLITLESS	GC/MSD	GC/MSD	0.010				
066	NA														
067	Ethyl Acetate			HPGPC					GC-MS	MS	0.01	92			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	83	0.1	YES	1
069	10	10	5	DSPE	M	NO	1	SPLITLESS	GC-ECD	LC-MSMS	0.005	97	0.500	YES	1
070		15	4	NO	M	NO	5	PTV-LVI	GC-ITD	GC-ITD	0.01	93	0.05	YES	1
071	NA														
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	112	0.4	YES	1
073	10	10	5	DSPE	M	NO	1,5	SPLIT	GC-MS	GC-MS	0.01				
074	2	50	1	GPC	M	NO	1	SPLITLESS	GC-MS/ITD		0.01	78	0.2	NO	2
075	NO RESULTS REPORTED														
076	7	10	6		S	YES	25		LC-MSMS		0.01				
077	NA														
078	11	10	5	DSPE	M	YES	10		LC-MS/MS	GC-MS	0.005				
079	2		1	NO		YES			GC-QQQ-MS/MS	GC-QQQ-MS/MS					
080	NA														
081	NA														
082	NF EN 12393	25	1	NO	S	YES	2	PTV	GC MS	GC MS	0.01	110	0.05	YES	1
083	NA														
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.01	99	0.500	YES	1
085	NA														
086	NA														
087	NA														
088*	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01				
089	13	10	6	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	91.2	0.01	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	GC-ECD	0.01	95.4	0.25	YES	1
091	NA														
092	9	10	4		M		2	SPLITLESS	GC-FPD	GC-MS	0.01	80	0.60	YES	1
093	NA														
094	NA														
095	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				
096	NA														
097	11	10	5	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	92	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	80	0.66	YES	3
099	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.01	112	0.50	YES	1
100	NA														

APPENDIX 8. Methods used by participants for determining pesticides.

ISOFENPHOS-METHYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
101	NA														
102	EN 12393 P	50	1	GPC	M	NO	1	SPLITLESS	GC-ITD-MS	GC-NPD	0.05	114	0.1	YES	1
103	FP017	25	2	GPC	M	NO	2	PTV	GCQ		0.006	130	0.1	YES	1
104	NA														
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02				
106	NO RESULTS REPORTED														
107	NA														
108	NA														
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-NPD	GC-ITD-MS/MS	0.01	98.7	0.5	NO	3
111	NA														
112	NA														
113	NA														
114	NA														
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116*															
117	NA														
118	2	30	1	GPC	S	NO	1	SPLITLESS	GC-NPD	LC-MS	0.01	122	0.1	YES	1
119*	9														
120		30	1	NO	M	NO	10	PTV	GC-MSMS	GC-MSMS	0.01	70	0.013	YES	1
121	11	10	5	DSPE	M	YES		PTV	GC-MS/MS			94			
122	NA														
123	NA														
124	NA														
125	NA														
126	NA														
127	NA														
128	NA														
129	NA														
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	98	0.01	YES	1
131	NA														
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	100	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

KRESOXIM-METHYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001		25	2	GPC	M	YES	2	PTV	GC/ITD	MS/MS	0.01	78	0.104	YES	1
002	EN12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD,GC-NPD	GC-MS	0.01	100	0.02	YES	1
003	10	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
004	4	10	5	LL	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	88	0.05	YES	1
005	2 (5th Ed.)	25	8	O	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.02	106	0.044	YES	1
006	Kadenczki Et.al. JAOAC 75(1992)	5	3	SPE	S	NO	1	SPLITLESS	GC-ECD		0.010	89	0.050	NO	2
007	9	15			M		1	SPLITLESS	GC-MS	GC-MS	0.01	88	0.05	YES	1
008	Swedish method	25	1	DSPE	M	YES	5	PTV	GC-MS/MS	GC-MS/MS	0.01	110	0.05	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-MS	GC-TSD	0.01	94.5	0.100	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.01	90.0	0.2	YES	2
011	EN 12393	37.5	1	GPC	M	NO	1	SPLITLESS	GC-ECD	GC-ITD-MSMS	0.02	75	0.07	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-ECD	GC-MS	0.02	84	0.1	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	89	0.20	YES	1
014	1	50	1	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.02	80	0.02	NO	2
015	1	25	1	GPC	M	NO	1	SPLITLESS	GC-MS	GC-MS	0.05	96	0.05	NO	3
016	NA														
017		10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-ITD-MS/MS	0.02	77	0.1	YES	1
018											0.01				
019	7	10	6	LL	M	YES	2	PTV	GC-MS	LC-MS/MS	0.01	105	0.1	YES	1
020	11	10	5	DSPE	S	YES	20	PTV	GC-Q-MS	GC-Q-MS	0.01	97.3	0.1	YES	1
021	13	10	7	DSPE	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.02				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.005	102	0.01	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	88	0.02	YES	1
024	GC-ITD-MS	20	5	LL	M	NO	0.2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.01				
025	NF EN 12393	50	1	NO	S	NO	1	SPLITLESS	GC/MS	ECD	0.01	89.2	0.1	NO	3
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-ECD	GC-MS	0.02	97	0.4	NO	3
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.01				
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	94	0.050	YES	1
029	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, , & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	94.9	0.2	YES	1
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	89.9	0.10	YES	1
031	10	15	5	DSPE	M	NO	10	SPLIT	GC-MS/MS	GC-MS/MS	0.010	85.0	0.050	YES	1
032	NA														
033	NFA Rapport 17/98	15	1	NO	M	YES	10	PTV	GC ITD MS/MS		0.05				
034	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.02	94	0.02	YES	1
035	10	15	5	DSPE	M	NO			LC-MS/MS	LC-MS/MS	0.01	70	0.01	YES	1
036	7	10	6	LL	M		10		LCMSMS		0.01	91		YES	1
037	EN12393-1,2,3	100	2	GPC	M		1	SPLITLESS	GC/ECD	GC/MS	0.008	68.5			1
038	9	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	94	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GC-ECD	GCMS	0.01	96	0.03	NO	2
040	10	10	5	DSPE	M	YES	1	PTV	GC-Q-MS	GC-Q-MS	0.01				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.050	98	0.5	YES	1
042	1	50	2	GPC	M	NO	5	PTV	GC-Q-MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.002	98	0.1	YES	1
044	10	10.04	5	DSPE	S	YES	1	SPLIT	GC-NPD	GC_MS	0.01				
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	106	0.060	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-Q-MS	0.01	71-115	0.01-0.25	NO	2
047	1	75	2	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-MS	0.01	93	0.05	YES	1

APPENDIX 8. Methods used by participants for determining pesticides.

KRESOXIM-METHYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	83	0.05		
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	NA														
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	84	0.06	YES	1
053	9	100	3	O	S	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.020	99	0.107	YES	1
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	119	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		1	SPLIT	GC-ECD	GC-MSD	0.005	111.0	0.018	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-Q-MS	GC-Q-MS	0.01	84	0.1	YES	1
058	9	20	3	O	S		2	SPLITLESS	GC RCD GC NPD		0.05	78	0.05	YES	1
059	1	50	8	GPC	M	YES	1	SPLITLESS	GC-ECD	GC-NPD	0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS	GC-MS	0.01				
061	NF EN 12393	25	2	NO	S	YES	1	ON-COLUMN	GC-MS	MS	0.02	96	0.05	NO	3
062	11	10	5	DSPE	S	NO	10		LC-MS/MS	GC-MS	0.01	90.0	0.1	NO	3
063	7		6	SPE	M	NO	10		LC-MS/MS	GC-TOF, GC-MSD	0.01	70	0.052	YES	1
064	11	10	5	DSPE	M	YES	2	PTV	GCMS		0.01	100		YES	1
065	10	10	5	O	M	NO	1	SPLITLESS	GC/MSD	GC/ECD	0.010				
066	PN-EN 12393	50	3	GPC	S	NO	4	PTV	GC-NPD	GC-MS/MS	0.05	104.5	0.05	NO	2
067	10								LC-MS/MS	MS/MS	0.01	94			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	92	0.1	YES	1
069	10	10	5	DSPE	M	NO	1	SPLITLESS	GC-ECD	LC-MSMS	0.01	87	0.05	YES	1
070		7.5	4	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	102	0.01	YES	1
071	NA														
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	68	0.08	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS		0.01	100	0.2	YES	1
075	NO RESULTS REPORTED														
076											0.01				
077	2		4	NO	M				LC-MS-MS		0.010	70	0.050	YES	1
078	11	10	5	DSPE	M	YES	10		LC-MS/MS	GC-MS	0.005				
079	2		1						GC-QQQ-MS/MS	GC-QQQ-MS/MS					
080	11								LC-MSMS	LC-MSMS	0.01				
081	MSPDE	5	8	O	S	NO	1	SPLITLESS	GC-NPD	GC-ECD, GC-NPD	0.05	85.1	0.05	NO	2
082	NF EN 12393	25	1	NO	S	YES	2	PTV	GC MS	GC MS	O.01	90	O.05	YES	1
083	2 (5th Edition)	25	8	LL	M	NO	5	SPLITLESS	GC-TSD	GC-TSD	0.02	111	0.05	YES	1
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.01	101	0.100	YES	1
085	ISTISAN 97/23	25	1	NO	S	NO	1	SPLITLESS	GC-MS		0.01	104	0.1	YES	1
086	11	10	5	DSPE	S	NO	1	PTV	GC-ECD	GC-MS	0.01	115	0.5	NO	2
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	77	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC_ECD/NPD	GC-MS/MS	0.025	85	0.05	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	GC-ECD	0.01	99.0	0.05	YES	1
091	SAR-2-04	6	4	NO	M	NO	3	SPLITLESS	GC-ECD	GC-MS	0.01	99.0	0.08	NO	1
092	9	10	4		M		2	SPLITLESS	GC-NPD	GC-MS	0.05	85	0.05	YES	1
093	NA														
094	NA														
095	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				

APPENDIX 8. Methods used by participants for determining pesticides.

KRESOXIM-METHYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
096	PN-EN 12393-1,2,3:2000	25		GPC	M		2	SPLITLESS			0.01	67.2			
097	11	10	5	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	99	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	81	0.1	YES	3
099	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.01	108	0.06	YES	1
100	6	20	1	NO	M	NO	2	SPLITLESS	GC-Q-MS	GC-Q-MS	0.01	101	0.01	YES	1
101	2	75	1	GPC	S	NO	20	PTV	GC-ECD	GC-NPD	0.01				
102	EN 12393 P	50	1	GPC	M	YES	1	SPLITLESS	GC-NPD	GC-TOF-MS	0.05	121	0.26	YES	1
103	fp017	25	2	GPC	M	NO	2	SPLITLESS	GCQ		0.007	135	0.1	YES	1
104	11	10	5	DSPE	S	YES	5	PTV-LVI	GC-ITD		0.01				
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.01				
106	NO RESULTS REPORTED														
107	Istian 97/23		7	NO	M	YES	1	SPLITLESS	GC ECD	GC MS	0.01	89	0.2	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ITD-MS/MS	0.01	92.7	0.05	NO	3
111	SS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.01				
112	1	7.5	3		M	NO	1	SPLITLESS	GC-MS	GC-MS/MS	0.01	70-110	0.025	YES	1
113	PN-EN 12393:2000	50	3	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.002	82.60	0.05	NO	2
114	NA														
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116											0.01	100			
117	NA														
118	2	30	1	NO	M	NO	20		LC-MS		0.01	107	0.1	YES	1
119	NA														
120		30	1	NO	M	NO	10	SPLITLESS	GC-MSMS	GC-MSMS	0.01	120	0.013	YES	1
121	11	10	5	DSPE	S	YES	3		LC-MS/MS	GC-MS/MS		99			
122	NA														
123	Rapporti ISTISAN 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-NPD	GC-Q-MS	0.01	75	0.05	NO	2
124	NA														
125	GC	25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.01	83	0.01	YES	2
126	Internal Method	50	3	LL	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05	85	0.05-0.25	NO	2
128	NA														
129	NA														
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	99	0.01	YES	1
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.10	91	0.10	YES	1
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	90.5	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

MALATHION SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001		25	2	GPC	M	NO	2	PTV	GC/MS/MS	MS/MS	0.01	98	0.104	YES	1
002	EN12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01	105	0.02	YES	1
003	10	10	5	DSPE	M	YES	10		LC-MS/MS	LC-MS/MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-TOF/MS	0.01	101	0.03	NO	2
005	2	25	1	NO	M	NO	2	SPLITLESS	GC-NPD	GC-NPD	0.02	104	0.6	YES	1
006	Kadenczki Et.al. JAOAC 75(1992)	5	3	SPE	S	YES	1	SPLITLESS	GC-NPD		0.010	71	0.200	NO	2
007	10	10			M		5	PTV	GC-MS	GC-MS	0.01	104	0.7	YES	1
008	Swedish method	25	1	DSPE	M	YES	5	PTV	GC-MS/MS	GC-MS/MS	0.01	93	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-TSD	GC-MS	0.01	97.6	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.01	92.0	0.2	YES	2
011		10	5	DSPE	S	NO	1	ON-COLUMN	GC-NPD	GC-ITD-MSMS	0.02	108	0.9	YES	1
012					S	YES	1	SPLITLESS	GC-NPD	GC-MS	0.02	90	0.5	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	88	0.20	YES	1
014	1	50	3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.02	80	0.02	NO	2
015	1	25	1	GPC	M	NO	1	SPLITLESS	GC-MS	GC-MS	0.05	56	0.05	NO	3
016	9	100	4	NO	M	YES	1	SPLITLESS	GC-Q-MS		0.010				
017		10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.02	84	0.1	YES	1
018											0.01				
019	7	10	6	LL	M	YES	20		LC-MS/MS	GC-MS	0.01	104	0.1	YES	1
020	11	10	5	DSPE	S	YES	15	PTV	GC-Q-MS	GC-Q-MS	0.01	106.9	0.5	YES	1
021	13	10,0	7	DSPE	S	YES	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.005	89	0.5	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	81	0.02	YES	1
024		20	5	LL	M	NO	0.2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.01				
025	NF EN 12393	50	1	NO	S	NO	1	ON-COLUMN	PFPD	GC/MS	0.01	84.9	0.1	NO	3
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-TSD	GC-MS	0.02				
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-NPD	GC-NPD	0.01	100	1	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	89	0.050	YES	1
029	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, . & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	95.9	0.2	YES	1
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	102.6	0.10	YES	1
031	10	15	5	DSPE	M	NO	50		LC-MS	LC-MS	0.010	98.41	0.050	YES	1
032	NA														
033	NFA Rapport 17/98	15	1	NO	M	YES	10	PTV	GC ITD MS/MS		0.10				
034	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.02	82	0.2	YES	1
035	RE-MA-01	15	4	LL	M	NO			GC-MS/MS	GC-MS/MS	0.01	110	0.01	YES	1
036	1	100	2	GPC	S	YES	1	SPLITLESS	GC-ECD	LCMSMS	0.01	109		YES	1
037	EN12393-1,2,3	100	2	GPC	M		1	SPLITLESS	GC/ECD	GC/MS	0.002	68.0			1
038	9	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	90	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GC-FPD	GCMS	0.01	75	0.5	YES	1
040	10	10	5	DSPE	M	YES	20		LC-MSMS	LC-MSMS	0.005				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.851	102	0.5	YES	1
042	1	50	2	GPC	M	NO	5	PTV	GC-Q-MS		0.01				
043	Hajslova et al., Journal of Chromatography A, 800 (1998), 283-295	25	1	GPC	M	NO	1	SPLITLESS	GC-Q-MS		0.006	93	0.160	YES	1
044	10	10.04	5	DSPE	S	YES	1	SPLIT	GC-MS	GC_MS	0.01				
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	108	0.500	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-Q-MS	0.01	63-99	0.01-0.25	NO	2

APPENDIX 8. Methods used by participants for determining pesticides.

MALATHION SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
047	1	75	2	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-MS	0.01	85	0.1	YES	1
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	84	0.1		
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	Internal Method reference Istituto Superiore di Sanit`	10	1	GPC	S	YES	3	SPLITLESS	GC-NPD-Q-MSD	GC-Q-NPD	0.01	95	0.01	YES	3
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	66	0.01	YES	1
053	9	100	3	O	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.020	106	0.092	YES	1
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	103	0.1	YES	1
055	7	15	5	DSPE	M	YES	1	PTV	GC-FPD	GC-MS(SIM)	0.54	96	0.1	YES	1
056	1	50	4	GPC	M		1	SPLIT	GC-NPD	GC-MSD	0.005	84.3	0.041	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-NPD	GC-Q-MS	0.01	91	0.1	YES	1
058	9	20	3	NO	S	YES	2	SPLITLESS			0.99	82	0.1	YES	1
059	1	50	8	GPC	M	YES	2	SPLITLESS	GC-NPD	GC-ECD	0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS	GC-MS	0.01				
061	NF EN 12393	25	2	NO	S	YES	1	ON-COLUMN	GC-MS	MS	0.02	89	0.05	NO	3
062	11	10	5	DSPE	S	YES	1	ON-COLUMN	GC-NPD	GC-MS	0.01	108.8	1.0	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-TOF	0.01	103	0.642	YES	1
064	11	10	5	DSPE	S	NO	5		LC-MSMS		0.01	108		YES	1
065	10	10	5	O	M	NO	1	SPLITLESS	GC/MSD	GC/ECD	0.010				
066	PN-EN 12393	50	3	GPC	S	NO	4	PTV	GC-ECD	GC-MS/MS	0.05	121.5	0.2	NO	2
067	10								LC-MS/MS	MS/MS	0.01	91			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	85	0.1	YES	1
069	10	10	5	DSPE	S	NO	20	PTV-LVI	GC-PND	LC-MSMS	0.01	95	1.0	YES	1
070		7.5	4	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	93	0.01	YES	1
071	7	1.0	8	LL	M	NO	8		LC-MS/MS	LC-MS/MS		107	0.01	YES	1
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	104	0.4	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS	GC-MS/ITD	0.01	98	0.2	YES	1
075	NO RESULTS REPORTED														
076	1	100	2	GPC	M	YES	5	PTV	GC-MS		0.01				
077	2		4	NO	S		2	SPLITLESS	GC-FPD	GC-NPD	0.020	70	0.050	YES	1
078	11	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.005				
079									GC-QQQ-MS/MS	GC-QQQ-MS/MS					
080	11								LC-MSMS	LC-MSMS	0.01				
081	MSPDE	5	8	O	S	NO	1	SPLITLESS	GC-NPD	GC-ECD, GC-NPD	0.01	96.3	0.01	NO	2
082	NF EN 12393	25	1	NO	S	NO	2	ON-COLUMN	GC FPD	GC MS	0.01	105	0.05	YES	1
083	2 (5th Edition)	25	8	LL	M	NO	5	SPLITLESS	GC-TSD	GC-TSD	0.02	109	0.6	YES	1
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.01	104	0.500	YES	1
085	ISTISAN 97/23	25	3	DSPE	M	NO	1	SPLITLESS	GC-FPD		0.01	85	0.1	NO	2
086	11	10	5	DSPE	S	NO	1	PTV	GC-ECD	GC-MS	0.01	131	0.5	NO	2
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	77	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC-ECD/NPD	GC-MS/MS	0.05	93	0.05	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	GC-PFPD	0.01	101.0	0.25	YES	1
091	SAR-1-04	12.5	4	NO	M	NO	3	SPLITLESS	GC-NPD	GC-MS	0.02	76.4	0.8	NO	1
092	NA														
093	ISTISAN modified	10.02	7	GPC	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.1	78	0.1	NO	3
094	9	15	4	NO	M	NO	10	SPLITLESS	CG-TSD	CG-MS	0.05				

APPENDIX 8. Methods used by participants for determining pesticides.

MALATHION SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
095	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				
096	PN-EN 12393-1,2,3:2000	25		GPC	M		2	SPLITLESS			0.01	62.4			
097	11	10	5	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	102	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	CG-MS		0.01	97	0.66	YES	3
099	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.01	100	0.58	YES	1
100	6	20	1	NO	M	NO	2	SPLITLESS	GC-Q-MS	GC-Q-MS	0.01	64	0.01	YES	1
101	2	75	1	GPC	S	NO	20	PTV	GC-ECD	GC-NPD	0.005	70		NO	2
102	EN 12393 P	50	1	GPC	M	YES	1	SPLITLESS	GC-FPD	GC-NPD	0.05	127	0.1	YES	1
103	fp017	25	2	GPC	M	NO	2	SPLITLESS	GCNPD		0.008	80	0.1	YES	1
104	11	10	5	DSPE	S	YES	5	PTV-LVI	GC-ITD		0.02				
105	10	10	4	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02				
106	NO RESULTS REPORTED														
107	Istian 97/23	15	7	NO	M	YES	1	SPLITLESS	GC NPD	GC MS	0.01	81	0.20	YES	1
108	2		1	NO	M	NO	1	SPLITLESS	GCNPD VARIAN VA	GC NPD HP 5	0.06	92.34	0.40		
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-NPD	GC-ITD-MS/MS	0.01	95.2	0.75	NO	3
111	ISS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-NPD	GC-ITD-MS	0.01				
112*	1	7.5	3		M	NO	1	SPLITLESS	GC-NPD	GC-MS	0.01	70-110	0.025	YES	1
113	PN-EN 12393:2000	50	3	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.007	73.52	0.5	NO	2
114	9	10	1	NO	M	YES	10	SPLIT	GC-ITD-MS/MS	GC-ITD-MS/MS					
115	11	10	5	DSPE	M	YES	5	PTV-LVI	GC/MS		0.01				
116											0.01	95			
117	PN-EN 12393-1,2,3:2000	100	3	O	S	NO	10	PTV-LVI	GC-ECD	GC-ECD	0.05				
118	2	30	1	GPC	S	NO	1	SPLITLESS	GC-NPD	LC-MS	0.01	81	0.1	YES	1
119*	9														
120		30	1	NO	M	NO	10	PTV	GC-MSMS	GC-MSMS	0.01	120	0.014	YES	1
121	11	10	5	DSPE	S	YES	3		LC-MS/MS	GC-MS/MS		96			
122	NA														
123	Rapporti ISTISAN 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-NPD	GC-Q-MS	0.01	80	0.02	NO	2
124	PN-EN 12393:2000	100	8	GPC	S	NO	2	PTV	GC-NPD	GC-MS	0.050	108	0.509	YES	1
125		25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.01	100	0.01	YES	2
126	Internal Method	50	3	LL	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05	100	0.05-0.25	NO	2
128	3	50	1	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.035				
129	ISS 3/97	50	8	SPE	S	YES	2	SPLITLESS	GC-ECD/ECD; GC-MS	GC_MS	0.02	90	0.1	NO	2
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	91	0.01	YES	1
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	93	0.10	YES	1
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	98.1	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

METHAMIDOPHOS

Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001					M	YES	10		LC-MS/MS	MS/MS	0.01	91	0.04	YES	1
002	11	10	5	NO	M	NO	4		LC-MS/MS	LC-MS/MS	0.01	78.0	0.1	YES	1
003	10	10	5	DSPE	M	YES	10		LC-MS/MS	LC-MS/MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-TOF/MS	0.01	75	0.03	YES	1
005	2	25	1	NO	M	NO	2	SPLITLESS	GC-NPD	GC-NPD	0.08	101	0.4	YES	1
006*															
007	7	10			M		5		LC-MS/MS	LC-MS/MS	0.01	101	0.4	YES	1
008	Swedish method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	282	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-TSD	GC-MS	0.01	88.8	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.05	73.2	0.2	YES	2
011	11	10	5	DSPE	M	NO	10		LCMSMS	LCMSMS	0.01	70	0.1	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-NPD	GC-MS	0.05	75	0.4	YES	1
013	11	5	5	NO	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	73	0.10	YES	1
014	1	50	3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.05	50-60	0.05	NO	3
015	13	25	1	GPC	M	NO	1	SPLITLESS	GC-MS	GC-MS				NO	3
016	NA														
017		10	5	DSPE	M	YES	2	Splitless	GC-Q-MS		0.04	70	0.1	YES	1
018											0.01				
019	7	10	5	LL	M	YES	20		LC-MS/MS	GC-MS	0.01	91	0.1	YES	1
020	2	10	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	81.3	0.25	YES	1
021	13	10	7	DSPE	S	YES	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.005	74	0.5	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	83	0.02	YES	1
024	6	20	1	NO	S	NO	10		LC-MSMS	LC-MSMS	0.01				
025	NF EN 12393	50	1	NO	S	NO	1	ON-COLUMN	PFPD	GC/MS	0.01	76.4	0.1	NO	3
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.05				
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-NPD	GC-NPD	0.01	47	0.2	YES	1
028	7	10	6	NO	M	YES	20	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.010	36	0.050	YES	1
029*	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, . & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	91.2	0.2	YES	1
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.05	77.3	0.20	YES	1
031	10	15	5	DSPE	M	NO	50		LC-MS	LC-MS	0.010	60.92	0.050	YES	1
032	NA														
033	NFA Rapport 17/98	15	1	NO	M	YES	10	PTV	GC ITD MS/MS		0.01				
034	NA														
035	10	15	5	DSPE	M	NO			LC-MS/MS	LC-MS/MS	0.01	70	0.01	YES	1
036	7	10	6	LL	M		10		LCMSMS		0.01	92		YES	1
037*															
038	9	10	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	56	0.08	YES	1
039	Istisan Report 97/23						5		LCMS	LCMS	0.01	72	0.2	YES	1
040	10	10	5	DSPE	M	YES	20		LC-MSMS	LC-MSMS	0.01				
041*															
042	LC-MS/MS	50	2	NO	M	NO	5		LC-MS/MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.01	80	0.1	YES	1
044*															
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	94	0.450	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS		0.01				
047	7	10	6	LL	M	NO	20		LC-MS/MS		0.01	76	0.1	YES	1
048	7	10	6	SPE	M	NO	35		LC-MS/MS		0.01	89	0.2	YES	1

APPENDIX 8. Methods used by participants for determining pesticides.

METHAMIDOPHOS															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	NA														
052	11	10	5	SPE	M	NO	20		LC-MS/MS	LC-MS/MS	0.01	82	0.3	YES	1
053	NA														
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	118	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		1	SPLIT	GC-FPD	GC-MSD	0.01	67.6	0.12	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-NPD	GC-Q-MS	0.02	81	0.1	YES	1
058	NA														
059	10	10	5	DSPE	M	NO	10	ON-COLUMN	LC-MS/MS	GC-NPD	0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS		0.01				
061*															
062	11	10	5	DSPE	S	YES	1	ON-COLUMN	GC-NPD	GC-MS	0.01	78.2	0.25	YES	1
063	7	25	2	SPE	M	NO	10		LC-MS/MS	LC-TOF	0.005	83.3	0.543	YES	1
064	11	10	5	DSPE	S	NO	5		LC-MSMS		0.01	82		YES	1
065	10	10	5		M	NO	10		LC/MS/MS	LC/MS/MS	0.01				
066	NA														
067	Ethyl Acetate								FPD	LC-MS/MS	0.02	79			
068	8038	10	1	SPE	M	YES	20		LC-MS/MS	GC-FPD	0.01	77	0.1	YES	1
069	10	10	5	DSPE	M	NO	20	PTV-LVI	GC-PND	LC-MSMS	0.02	93	0.5	YES	1
070		7.5	4	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	43	0.01	YES	1
071	NA														
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	77	0.01	YES	1
073	10	10	5	DSPE	M	YES	20		LC-MS/MS	LC-MS/MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS		0.01	88	0.2	YES	1
075	NO RESULTS REPORTED														
076	7		6		S	YES	25		LC-MSMS		0.01				
077	2		4	NO	M				LC-MS-MS		0.010	70	0.050	YES	1
078	11	10	5	DSPE	M	YES	10		LC-MS/MS	GC-MS	0.005				
079	2		1						GC-QQQ-MS/MS	GC-QQQ-MS/MS					
080	11								LC-MSMS	LC-MSMS	0.01				
081	NA														
082	NF EN 12393	25	1	NO	S	NO	2	ON-COLUMN	GC FPD	GC MS	0.01	70	0.05	YES	1
083	2 (5th Edition)	25	8	LL	M	NO	5	SPLITLESS	GC-TSD	GC-TSD	0.02	87	0.5	YES	1
084	7	10	6	LL	S	YES	25		LC-MS/MS		0.01	84	0.500	YES	1
085	Istisan 97/23	25	3	DSPE	M	NO	1	SPLITLESS	GC-FPD		0.01	89	0.1	NO	2
086	NA														
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.05	89	0.2	YES	1
089	13	10	6	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	108.8	0.1	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	GC-PFPD	0.01	74.6	0.25	YES	1
091	DAR-1-06	12	1	NO	M	NO	3	SPLITLESS	GC-NPD	GC-MS	0.01	60.5	0.5	NO	1
092	9	10	4		M		2	SPLITLESS	GC-FPD	GC-MS	0.01	50	0.20	YES	1
093	Istisan modified	10.02	7	GPC	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.10	92	0.1	NO	3
094	9	15	4	NO	M	NO	10	SPLITLESS	CG-TSD	CG-MS	0.05				
095	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				
096	NA														

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METHAMIDOPHOS															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
097	11	10	5	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.005	72	0.5	YES	1
098	9		4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	75	0.33	YES	3
099	2		4	NO	M	NO	5		LC-MS-MS	GC-NPD	0.01	40	0.24	YES	1
100	6	20	1	NO	M	NO	20		LC-MS/MS	LC-MS/MS	0.01	80	0.01	YES	1
101*	2	75	1	GPC	S	NO	20	PTV	GC-NPD	GC-ECD	0.01	72		NO	2
102	EN 12393 P	50	1	GPC	M	YES	1	SPLITLESS	GC-FPD	GC-NPD	0.01	94	0.05	YES	1
103	fp086	10	6	O	M	YES	10		LCMSMS		0.011	99	0.1	YES	1
104	11	10	5	DSPE	S	NO	5		LC-MS/MS		0.05				
105	10	10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES			LC MS MS		0.01	83	0.20	YES	1
108	2		1	NO	M	NO	1	SPLITLESS	GCNPD VARIAN VA	GC NPD HP 5	0.04	74.44	0.40		
109	2	7.5	4	NO	M	NO	1	ON-COLUMN	GC-NPD	GC-NPD, GC/MS	0.03	80	0.1	YES	1
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-NPD	GC-ITD-MS/MS	0.01	100.5	0.3	NO	3
111	SS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-NPD	GC-ITD-MS	0.01				
112	NA														
113	PN-EN 12393:2000	50	3	GPC	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.011	76.63	0.5	NO	2
114	9	10	1	NO	M	YES	10	SPLIT	GC-ITD-MS/MS	GC-ITD-MS/MS					
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116	NA														
117	NA														
118	2	30	1	NO	S	NO	20		LC-MS		0.01				
119	9	15	4	NO	M	NO	10	PTV-LVI	GC-MS	GC-MS/MS	0.01				
120		30	1	NO	M	NO	10	PTV	GC-MSMS	GC-MSMS	0.01	70	0.016	YES	1
121		10	5	DSPE	S	YES	3		LC-MS/MS			75			
122	NA														
123	Rapporti Istisan 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-NPD	GC-NPD	0.02	70	0.02	NO	2
124	NA														
125	GC	25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.03	76	0.01	YES	2
126	NA														
127	PUBLICATION	20	7	GPC	S	YES	2	ON-COLUMN	GC-Q-MS	GC-Q-MS	0.05	75	0.05-0.25	NO	2
128	3	50	1	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.035				
129*															
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	46	0.01	YES	1
131	Istisan 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	80	0.10	YES	1
132	SOP	10	6	LL	M	YES	10	SPLITLESS	GC-MS	LC-MS/MS	0.01	102.4	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

METHIOCARB SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001			8		M	YES	10		LC-MS/MS	MS/MS	0.01	72	0.04	YES	1
002	11	10	5	NO	M	NO	4		LC-MS/MS	LC-MS/MS	0.01	108	0.1	YES	1
003	10	10	5	DSPE	M	YES	10		LC-MS/MS	LC-MS/MS	0.01				
004	4	10	5	LL	M	NO	10		LC_MS/MS	LC-MS/MS	0.01	89	0.05	YES	1
005	NA														
006	NA														
007	7	10			M	0	5		LC-MS/MS	LC-MS/MS	0.01	109	0.05	YES	1
008	Swedish method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	117	0.08	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-MS		0.01	79.8	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.05		0.2	YES	2
011									LCMSMS	LCMSMS	0.01				
012	NA														
013	11	5	5	NO	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	79	0.10	YES	1
014	1	50	1	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.03	60	0.03	NO	3
015	NA														
016	9	100	4	NO	M	YES	1	SPLITLESS	GC-Q-MS		0.010				
017	Herrera,Anal.Chem.Acta 463(2)189-197,2003	25	3	LL	S	NO	10	ON-COLUMN	HPLC-FL		0.01	92	0.1	YES	1
018											0.01				
019	7	10	5	LL	M	YES	20		LC-MS/MS	LC-MS/MS	0.01	104	0.1		1
020	2	20	4	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	97.6	0.025	YES	1
021	NA														
022	8	10	5	DSPE	S	YES	5		LC/MS/MS	LC/MS/MS	0.01	100	0.1	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	84	0.02	YES	1
024	6	20	1	NO	S	NO	10		LC-MSMS	LC-MSMS	0.01				
025	2	15	4	NO	S	NO	10	ON-COLUMN	LC/MS/MS	GC/MS	0.01	82	0.1	NO	2
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.05				
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-NPD	GC-NPD	0.01				
028	7	10	6	NO	M	YES	20	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.010	80	0.050	YES	1
029	NA														
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	92.8	0.10	YES	1
031	10	15	5	DSPE	M	NO	50		LC-MS	LC-MS	0.010	117.64	0.050	YES	1
032	531.1, REV. 3.1.1995 National exposure research laboratory, US EPA, CINCINNATI, OHIO 45268	50	7	SPE	S	NO	10		HPLC-FL	HPLC-FL	0.01	96	1	YES	1
033	NFA Rapport 17/98	15	1	NO	M	YES	10	PTV	LC MS/MS		0.05				
034	NA														
035	10	15	5	DSPE	M	NO			LC-MS/MS	LC-MS/MS	0.01	77	0.1	YES	1
036	7	10	6	LL	M	0	10		LCMSMS		0.01	98		YES	1
037*															
038	9	10	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	102	0.08	YES	1
039	Istisan Report 97/23						5		LCMS	LCMS	0.01	87	0.05	YES	1
040	10	10	5	DSPE	M	YES	20		LC-MSMS	LC-MSMS	0.005				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.131	120	0.5	YES	1
042		50	2	NO	M	NO	5		LC-MS/MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.002	94	0.1	YES	1
044	Istisan 97/23	10	1	GPC	S	YES	10		HPLC-FL	GC-MS	0.05				
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	94	0.050	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-Q-MS	0.01				
047	7	10	6	LL	M	NO	20		LC-MS/MS		0.01	95	0.1	YES	1
048	7	10	6	SPE	M	NO	35		LC-MS/MS		0.01	93	0.02	YES	1

APPENDIX 8. Methods used by participants for determining pesticides.

METHIOCARB SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	Internal Method reference Istituto Superiore di Sanit`	10	1	GPC	S	YES		SPLITLESS	GC-NPD-Q-MSD	GC-Q-MSD	0.01	110	0.01	NO	3
052	11	10	5	SPE	M	NO	20		LC-MS/MS	LC-MS/MS	0.01	99	0.05	YES	1
053	NA														
054	PRES/069	10	5	DSPE	S	NO	20		LC-MS/MS		0.01	104	0.1	YES	1
055	NA														
056	1	50	4	GPC	M	0	20		LC-MS/MS	HPLC-FL	0.01	65.3	0.029	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-Q-MS	GC-Q-MS	0.01	87	0.1	YES	1
058	NA														
059	10	10	5	DSPE	M	NO	10	ON-COLUMN	LC-MS/MS		0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS		0.01				
061	NA														
062	11	10	5	DSPE	S	NO	10		LC-MS/MS		0.01	116.0	0.05	YES	1
063	7	25	6	SPE	M	NO	10		LC-MS/MSD	GC-TOF, MSD	0.005	97.2	0.053	YES	1
064	11	10	5	DSPE	S	NO	5		LC-MSMS		0.01	100		YES	1
065	10	10	5	O	M	NO	10		LC/MS/MS	GC/MSD	0.010				
066	NA														
067	10								LC-MS/MS	MS/MS	0.01	85			
068	8038	10	1	SPE	M	YES	20		LC-MS/MS	LC-MS/MS	0.01	84	0.1	YES	1
069	10	10	5	DSPE	M	NO	20		LC-MSMS		0.01	90	0.020	YES	1
070		7.5	4	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	102	0.01	YES	1
071	7	10	8	LL	M	NO	8		LC-MS/MS	LC-MS/MS		110	0.01	YES	1
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	61	0.08	YES	1
073	10	10	5	DSPE	M	YES	20		LC-MS/MS	LC_MS/MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS	UPLC-MS/MS	0.01	92	0.2	YES	1
075	NO RESULTS REPORTED														
076	1	100	2	GPC	M	YES	5	PTV	GC-MS		0.01				
077			4	NO	M				LC-MS-MS		0.010	70	0.010	YES	1
078	11	10	5	DSPE	M	YES	10		LC-MS/MS	GC-MS	0.005				
079*															
080	11								LC-MSMS	LC-MSMS	0.01				
081	NA														
082	NF EN 12393	25	1	NO	S	NO	5	ON-COLUMN	LC MS MS	LC MS MS	0.01	70	0.1	NO	1
083	NA														
084	7	10	6	LL	M	YES	25		LC-MS/MS		0.01	93	0.1	YES	1
085	ISTISAN 97/23	25	3	DSPE	S	NO	20 (LOOP)		HPLC-PICKERING		0.01	90	0.1	YES	1
086*															
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B, 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.02				
088	NA														
089	13	10	6	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	90	0.1	YES	1
090	11	10	5	DSPE	M	YES	5	ON-COLUMN	LC-QQQ-MS/MS	GC-QQQ-MS/MS	0.01	82.4	0.05	YES	1
091	SAR-1-00	0.75	4	NO	M	NO	100		HPLC-FLD	HPLC-FLD	0.01	125.0	0.06	NO	1
092	NA														
093	NA														
094	NA														
095*	10				M	YES	10		LC-MS	LC-MS	0.01				
096	NA														
097	11	10	5	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.005	80	0.5		2

APPENDIX 8. Methods used by participants for determining pesticides.

METHIOCARB SUM														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
098	2	25		SPE	S	NO	50	ON-COLUMN	HPLC-F		0.01	50	0.1	YES	3
099	2														
100	NA														
101	EN-14185-2	50	7	SPE	S	NO	10	ON-COLUMN	HPLC-FL		0.001	50	0.020	YES	1
102	9	25	4		S	NO	200		HPLC-FD	GC-TOF-MS	0.01	130	0.03	YES	1
103															
104	11	10	5	DSPE	S	NO	5		LC-MS/MS		0.01				
105	9	10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES	20		LC MS MS		0.01	78	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-NPD	GC-ITD-MS/MS	0.01	91.5	0.05	NO	3
111	ISS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.01				
112	NA														
113	NA														
114	NA														
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116	NA														
117	NA														
118	2	30	1	NO	M	NO	20		LC-MS		0.01	70	0.1	YES	1
119	NA														
120*															
121	11	10	5	DSPE	S	YES	3		LC-MS/MS			101			
122	NA														
123	NA														
124	NA														
125		25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.02	84	0.01	YES	2
126	PN-EN 14185	15	4	SPE	S	YES	100	ON-COLUMN	HPLC -FL		0.006				
127	PUBLICATION	20	7	GPC	S	NO	20		HPLC-FL		0.04	90	0.03-0.30	NO	2
128	NA														
129	ISS 3/97	50	8	SPE	S	NO	2	SPLITLESS	GC-MS	GC-MS	0.02	85	0.1	NO	2
130	NA														
131	Istisan 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	97	0.10	YES	1
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	96.1	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

METHOMYL SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001			8		M	YES	10		LC-MS/MS	MS/MS	0.01	101	0.04	YES	1
002	11	10	5	NO	M	NO	4		LC-MS/MS	LC-MS/MS	0.01	81.0	0.1	YES	1
003	10	10	5	DSPE	M	YES	10		LC-MS/MS	LC-MS/MS	0.01				
004	5	10	5	LL	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	85	0.05	YES	1
005	NA														
006	NA														
007	7	10			M		5		LC-MS/MS	LC-MS/MS	0.01	86	0.7	YES	1
008	Swedish method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	197	0.2	YES	1
009	10	15	5	DSPE	M	YES	10		HPLC-DAD		0.01	78.8	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.05	73.0	0.2	YES	2
011									LCMSMS	LCMSMS	0.01				
012	NA														
013	11	5	5	NO	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	88	0.10	YES	1
014	NA														
015	NA														
016	NA														
017	Herrera,Anal.Chem.Acta463(2)189-197,2003	25	3	LL	S	NO	10	ON-COLUMN	HPLC-FL		0.02	93	0.3	YES	1
018											0.01				
019	7	10	6	LL	M	YES	20		LC-MS/MS	GC-MS	0.01	98	0.1	YES	1
020	2	20	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	93.1	0.25	YES	1
021	NA														
022	8	10	5	DSPE	S	YES	5		LC/MS/MS	LC/MS/MS	0.02	83	0.1	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	98	0.02	YES	1
024	6	20	1	NO	S	NO	10		LC-MSMS	LC-MSMS	0.01				
025	2	15	4	NO	S	NO	10	ON-COLUMN	LC/MS/MS		0.01	76	0.1	NO	2
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.05				
027	10	10	5	DSPE	S	NO	20		HPLC-DAD	HPLC-DAD	0.01	97	0.6	YES	1
028	7	10	6	NO	M	YES	20	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.010	62	0.050	YES	1
029	NA														
030	10	15	5	DSPE	M	YES	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	88.0	0.067	YES	1
031	NA														
032	531.1, REV. 3.1.1995 National exposure research laboratory, US EPA, CINCINNATI, OHIO 45268	50	7	SPE	S	NO	10		HPLC-FL	HPLC-FL	0.01	78	1	YES	1
033	NFA Rapport 17/98	15	1	NO	M	YES	10	PTV	LC MS/MS		0.05				
034	NA														
035	10	15	5	DSPE	M	NO			LC-MS/MS	LC-MS/MS	0.01	70	0.01	YES	1
036	7	10	6	LL	M		10		LCMSMS		0.01	94		YES	1
037*															
038*											0.01				
039	Istisan Report 97/23						5		LCMS	LCMS	0.01	87	0.5	YES	1
040	10	10	5	DSPE	M	YES	20		LC-MSMS	LC-MSMS	0.005				
041	NA														
042	13	50	2	NO	M	NO	5		LC-MS/MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.01	94	0.1	YES	1
044	Istisan 97/23	10	1	GPC	S	YES	10		HPLC-FL	HPLC-DAD	0.05				
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	104	0.600	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS		0.01	72-74	0.01-0.25	NO	2
047	7	10	6	LL	M	NO	20		LC-MS/MS		0.0	106	0.1	YES	1
048	7	10	6	SPE	M	NO	35		LC-MS/MS		0.01	106	0.2	YES	1
049	NO RESULTS REPORTED														

APPENDIX 8. Methods used by participants for determining pesticides.

METHOMYL SUM														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	NA														
052	11	10	5	SPE	M	NO	20		LC-MS/MS	LC-MS/MS	0.01	84	0.6	YES	1
053	NA														
054	PRES/069	10	5	DSPE	S	NO	20		LC-MS/MS		0.01	66	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		20		LC-MS/MS	HPLC-FL	0.01	77.3	0.058	YES	1
057	NA														
058	NA														
059	10	10	5	DSPE	M	NO	10	ON-COLUMN	LC-MS/MS		0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS		0.01				
061	NA														
062	11	10	5	DSPE	S	NO	50		HPLC-DAD	LC-MS/MS	0.01	94.2	0.5	YES	1
063	7	25	6	SPE	M	NO	10		LC-MS/MS	LC-MS/MS	0.005	98.9	0.498	YES	1
064	11	10	5	DSPE	S	NO			LC-MSMS		0.01	96			1
065	10	10	5	O	M	NO	10		LC/MS/MS	LC/MS/MS	0.010				
066	NA														
067	10			no clean-up					LC-MS/MS	MS/MS	0.01	77			
068	8038	10	1	SPE	M	YES	20		LC-MS/MS	LC-MS/MS	0.01	77	0.1	YES	1
069	10	10	5	DSPE	M	NO	20		LC-MSMS		0.05	120	0.50	YES	1
070		7.5	4	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	49	0.01	YES	1
071	7	1.0	8	LL	M	NO	8		LC-MS/MS	LC-MS/MS		112	0.01	YES	1
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	103	0.4	YES	1
073	10	10	5	DSPE	M	YES	20		LC-MS/MS	LC-MS/MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS	UPLC-MS/MS	0.01	90	0.2	YES	1
075	NO RESULTS REPORTED														
076	7		6		S	YES	25		LC-MSMS		0.01				
077															
078	11	10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
079	2		1		M	YES			LC-QQQ-MS/MS	LC-QQQ-MS/MS					
080	11								LC-MSMS	LC-MSMS	0.01				
081	NA														
082	NF EN 12393	25	1	NO	S	NO	5	ON-COLUMN	LC MS MS	LC MS MS	0.01	70	0.1	NO	1
083	NA														
084	7	10	6	LL	S	YES	25		LC-MS/MS		0.01	95	1.0	YES	1
085	Istisan 97/23	25	3	DSPE	S	NO	20 (LOOP)		HPLC-PICKERING		0.01	95	0.1	YES	1
086	PN-EN 14185-1	15	4	SPE	S	YES	100		GPLC-FLD						
087	NA														
088	NA														
089	13	10	6	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	83.4	0.1	YES	1
090	11	10	5	DSPE	M	YES	5	ON-COLUMN	LC-QQQ-MS/MS		0.01	90.5	0.25	YES	1
091	SAR-1-00	0.75	4	NO	M	NO	100		HPLC-FLD	HPLC-FLD	0.01	109.0	0.7	NO	1
092			1		M		25		LC-MS	LC-MS/MS	0.05	105	0.05	YES	1
093	NA														
094	NA														
095	10	15			M	YES	10		LC-MS	LC-MS	0.01				
096	NA														
097	11	10	5	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.005	82	0.5	YES	1
098	2	25		SPE	S	NO	50	ON-COLUMN	HPLC-F		0.01	80	0.66	YES	3
099		15	4	NO	M	NO	5		LC-MS-MS	LC-MS-MS	0.01	103	0.75	YES	1
100	6	20	1	NO	M	NO	20		LC-MS/MS	LC-MS/MS	0.01	110	0.01	YES	1

APPENDIX 8. Methods used by participants for determining pesticides.

METHOMYL SUM														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
101	14185-2	50	7	SPE	S	NO	10	ON-COLUMN	HPLC-FL		0.001	50	0.020	YES	1
102	EN 12393 P	50	1	GPC	S	NO	200		HPLC-FD		0.01	107	0.03	YES	1
103	fp086	10	6	O	M	YES	10		LCMSMS		0.01	93	0.1	YES	1
104	11	10	5	DSPE	S	NO	5		LC-MS/MS		0.2				
105		10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES	20		LC MS MS		0.01	83	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	20		HPLC-UV	HPLC-UV	0.01	93.2	0.5	YES	1
111	ISS,Quad.97/23	10	1	GPC	S	NO	15		LC-MS/MS	LC-MS/MS	0.01				
112	NA														
113	NA														
114	NA														
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116											0.01	85			
117	NA														
118	2	30	1	NO	M	NO	20		LC-MS		0.01	147	0.1	YES	1
119	NA														
120	NA														
121	11	10	5	DSPE	S	YES	3		LC-MS/MS			95			
122	NA														
123	NA														
124	NA														
125*															
126	PN-EN 14185	15	4	SPE	S	YES	100	ON-COLUMN	HPLC-FL		0.006				
127	PUBLICATION	20	7	GPC	S	NO	20		HPLC-FL		0.04	90	0.04-0.40	NO	2
128	NA														
129	ISS 3/97	50	3	SPE	S	NO	2	SPLITLESS	GC-MS	GC-MS	0.05	85	0.1	NO	2
130	PNT-ANA-04	15	5	DSPE	M	NO	10		LC-MS/MS	LC-MS/MS	0.05	101.84	0.05	YES	1
131	NA														
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	101.2	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

OXAMYL															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001					M	YES	10		LC-MS/MS	MS/MS	0.01	116	0.04	YES	1
002	11		5	NO	M	NO	4		LC-MS/MS	LC-MS/MS	0.01	96.0	0.1	YES	1
003	10	10	5	DSPE	M	YES	10		LC-MS/MS	LC-MS/MS	0.01				
004	4	10	5	LL	M	NO	10		LC-MS/MS	LC-MS/MS					
005	NA														
006	NA														
007	7	10			M		5		LC-MS/MS	LC-MS/MS	0.01	102	0.3	YES	1
008	Swedish method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	126	0.2	YES	1
009	10	15	5	DSPE	M	YES	10		HPLC-DAD		0.01	80.5	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.05	79.0	0.2	YES	2
011	11	10	5	DSPE	M	NO	10		LCMSMS	LCMSMS	0.01	100	0.1	YES	1
012	NA														
013	11	5	5	NO	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	88	0.10	YES	1
014	NA														
015	NA														
016	NA														
017	Herrera,Anal.Chem.Acta463(2) 189-197,2003	25	3	LL	S	NO	10	ON-COLUMN	HPLC-FL		0.01	88	0.3	YES	1
018											0.01				
019	7	10	6	LL	M	YES	20		LC-MS/MS	LC-MS/MS	0.01	90	0.1	YES	1
020	2	10	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	71.1	0.25	YES	1
021	NA														
022	8	10	5	DSPE	S	YES	5		LC/MS/MS	LC/MS/MS	0.01	101	0.1	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	92	0.02	YES	1
024	6	20	6	NO	S	NO	10		LC-MSMS	LC-MSMS	0.01				
025	2	15	4	NO	S	NO	10	ON-COLUMN	LC/MS/MS		0.02	71	0.1	NO	2
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.05				
027	10	10	5	DSPE	S	NO	20		HPLC-DAD	HPLC-DAD	0.01	99	0.2	YES	1
028	7	10	6	NO	M	YES	20	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.010	70	0.050	YES	1
029	NA														
030	10	15	5	DSPE	M	YES	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	81.1	0.067	YES	1
031	10	15	5	DSPE	M	NO	50		LC-MS	LC-MS	0.020	85.79	0.050	YES	1
032	531.1, REV. 3.1.1995 National exposure research laboratory, US EPA, CINCINNATI, OHIO 45268	50	7	SPE	S	NO	10		HPLC-FL	HPLC-FL	0.01	100	1	YES	1
033	NFA Rapport 17/98	15	1	NO	M	YES	10	PTV	LC MS/MS		0.05				
034	NA														
035	10	15	5	DSPE	M	NO			LC-MS/MS	LC-MS/MS	0.01	70	0.01	YES	1
036	7	10	6	GPC	M		10		LCMSMS		0.01	102		YES	1
037	NA														
038	9	10	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	87	0.08	YES	1
039	NA														
040	10	10	5	DSPE	M	YES	20		LC-MSMS	LC-MSMS	0.01				
041	NA														
042	LC-MS/MS	50	2	NO	M	NO	5		LC-MS/MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.005	96	0.1	YES	1
044	Istisan 97/23	10	1	GPC	S	YES	10		HPLC-FL		0.05				
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	106	0.400	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS		0.02				
047	7	10	6	LL	M	NO	20		LC-MS/MS		0.01	116	0.1	YES	1
048	7	10	6	SPE	M	NO	35		LC-MS/MS		0.01	106	0.2	YES	1
049	NO RESULTS REPORTED														

APPENDIX 8. Methods used by participants for determining pesticides.

OXAMYL														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	NA														
052	11	10	5	SPE	M	NO	20		LC-MS/MS	LC-MS/MS	0.01	97	0.35	YES	1
053	NA														
054	PRES/069	10	5	DSPE	S	NO	20		LC-MS/MS		0.01	91	0.01	YES	1
055	NA														
056	1	50	4	GPC	M		20		LC-MS/MS	HPLC-FL	0.01	81.4	0.088	YES	1
057	NA														
058	NA														
059	10	10	5	DSPE	M	NO	10	ON-COLUMN	LC-MS/MS		0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS		0.01				
061	NA														
062	11	10	5	DSPE	S	NO	10		LC-MS/MS		0.01	89.6	0.5	YES	1
063	7	25	6	SPE	M	NO	10		LC-MS/MS	LC-MS/MS	0.005	89.7	0.544	YES	1
064	11	10	5	DSPE	S	NO	5		LC-MSMS		0.01	96		YES	1
065*											0.010				
066	NA														
067	10								LC-MS/MS	MS/MS	0.01	79			
068	8038	10	1	SPE	M	YES	20		LC-MS/MS	LC-MS/MS	0.01	95	0.1	YES	1
069	10	10	5	DSPE	M	NO	20		LC-MSMS		0.02	88	0.300	YES	1
070		7.5	4	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	71	0.01	YES	1
071	7	10,0	8	LL	M	NO	8		LC-MS/MS	LC-MS/MS		96	0.01	YES	1
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	99	0.4	YES	1
073	10	10	5	DSPE	M	YES	20		LC-MS/MS	LC-MS/MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS	UPLC-MS/MS	0.01	94	0.2	YES	1
075	NO RESULTS REPORTED														
076	7	10	6		S	YES	25		LC-MSMS		0.01				
077	2		4	NO	M				LC-MS-MS		0.050	70	0.050	YES	1
078	11	10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
079	2		1		M	YES			LC-QQQ-MS/MS	LC-QQQ-MS/MS					
080	11								LC-MSMS	LC-MSMS	0.01				
081	NA														
082	13	25	1	NO	S	NO	5	ON-COLUMN	LC MS MS	LC MS MS	0.01	80	0.1	NO	1
083	NA														
084	7	10	6	LL	S	YES	25		LC-MS/MS		0.01	100	0.5	YES	1
085	Istisan 97/23	25	3	DSPE	S	NO	20 (LOOP)		HPLC-PICKERING		0.01	84	0.1	YES	1
086	PN-EN 14185-1	15	4	SPE	S	YES	100	0	HPLC-FLD		0.05	85		NO	2
087	NA														
088	NA														
089	13	10	6	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	85.7	0.1	YES	1
090	11	10	5	DSPE	M	YES	5	ON-COLUMN	LC-QQQ-MS/MS		0.01	91.2	0.25	YES	1
091	SAR-1-00	0.75	4	NO	M	NO	100		HPLC-FLD	HPLC-FLD	0.01	112.0	0.3	NO	1
092	13	10	1		M		25		LC-MS	LC-MS-MS	0.05	79	0.		
093	NA														
094	NA														
095	10	15			M	YES	10		LC-MS	LC-MS	0.01				
096	NA														
097	11	10	5	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.005	83	0.5	YES	1
098	2	25		SPE	S	NO	50	ON-COLUMN	HPLC-F		0.01	75	0.33	YES	3
099	2	15	4	NO	M	NO	5		LC-MS-MS	LC-MS-MS	0.01	100	0.32	YES	1
100	NA														

APPENDIX 8. Methods used by participants for determining pesticides.

OXAMYL														
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
101	EN-14185-2	50	7	SPE	S	NO	10	ON-COLUMN	HPLC-FL		0.001	50	0.020	YES	1
102	EN 12393 P	50	1	GPC	S	NO	200		HPLC-FD		0.01	130	0.03	YES	1
103	fp086	10	6	O	M	YES	10		LCMSMS		0.011	90	0.1	YES	1
104	11	10	5	DSPE	S	NO	5		LC-MS/MS		0.01				
105	10	10	5	DSPE	M	YES	10		LC-MS/MS		0.005				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES	20		LC MS MS		0.01	77	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	20		HPLC-UV	HPLC-UV	0.01	86.7	0.25	YES	1
111	NA														
112	NA														
113	NA														
114	NA														
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116	NA														
117	NA														
118	2	30	1	NO	M	NO	20		LC-MS		0.01	160	0.1	YES	1
119	NA														
120	NA														
121	11	10	5	DSPE	S		3		LC-MS/MS			96			
122	NA														
123	NA														
124	NA														
125	LC	25	1	GPC	M	NO	10	ON-COLUMN	MS/MS	MS/MS	0.02	92	0.01	YES	2
126	NA														
127	PUBLICATION	20	7	GPC	S	YES	20		HPLC-FL		0.04	107	0.05-0.22	NO	2
128	NA														
129	NA														
130	PNT-ANA-04	15	8	DSPE	M		10		LC-MS/MS	LC-MS/MS	0.05	93.88	0.05	YES	1
131	NA														
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	85.7	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

PENDIMETHALIN															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001			8		M	YES	10		LC-MS/MS	MS/MS	0.02	112	0.04	YES	1
002	En12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD,GC-NPD	GC-MS	0.01	102	0.02	YES	1
003	10	10	5	DSPE	M	YES	2		GC-MS	GC-MS	0.01				
004	4	10	5	LL	M	NO	10		LC-MS/MS	LC-MS/MS	0.01	62	0.05	YES	1
005	NA														
006	Kadenczki Et.al. JAOAC 75(1992)	5	3	SPE	S	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.010	85	0.100	NO	2
007	9	15			M		1	SPLITLESS	GC-MS	GC-MS	0.01	90	0.1	YES	1
008	Swedish method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	40	0.08	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-TSD	GC-MS	0.01	82.6	0.100	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.02	75.0	0.2	YES	2
011	11	10	5	DSPE	M	YES	5	PTV-LVI	GC-ITD-MSMS	GC-ITD-MSMS	0.01	99	0.08	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-ECD	GC-MS	0.02	81	0.1	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	86	0.20	YES	1
014*	1	50	3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.05	70	0.05	NO	3
015	NA														
016	NA														
017			5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.01	81	0.1	YES	1
018											0.01				
019	7	10	6	LL	M	YES	2	PTV	GC-MS	LC-MS/MS	0.01	106	0.1	YES	1
020	11	10	5	DSPE	S	YES	20	PTV	GC-Q-MS	GC-Q-MS	0.01	90.7	0.1	YES	1
021	NA														
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.005	100	0.5	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	96	0.02	YES	1
024	6	20	1	NO	S	NO	10		LC-MSMS	LC-MSMS	0.01				
025*	13	50	1	NO	S	NO	1	SPLITLESS	GC/MS		0.01	71	0.1	NO	2
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.02				
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.01	97	0.1	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	78	0.050	YES	1
029	NA														
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	86.4	0.10	YES	1
031	10	15	5	DSPE	M	NO	10	SPLIT	GC-MS/MS	GC-MS/MS	0.010	84.95	0.050	YES	1
032	NA														
033	NA														
034	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.02	103	0.02	YES	1
035	RE-MA-01	15	4	LL	M	NO			GC-MS/MS	GC-MS/MS	0.01	87	0.01	YES	1
036	1	100	2	GPC	S	YES	1	SPLITLESS	GC-ECD		0.01	97		YES	1
037	NA														
038	9	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	98	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GC-ECD	GCMS	0.01	91	0.05	YES	1
040	10	10	5	DSPE	M	YES	20		LC-MSMS	LC-MSMS	0.01				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.087	98	0.5	YES	1
042	1	50	2	GPC	M	NO	5	PTV	GC-Q-MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.005	92	0.1	YES	1
044	10	10.04	5	DSPE	S	YES	1	SPLIT	GC-MS	GC-MS	0.01				
045	SLV M200	75	1	NO	M	NO	3	SPLITLESS	GC-MS/MS	GC-MS/MS	0.010	105	0.140	YES	1
046	1	50	2	GPC	S	NO	1	SPLITLESS	GC-ECD	LC-MS/MS	0.01	72-116	0.02-0.2	NO	2
047	1	75	2	GPC	M	NO	1	SPLITLESS	GC-QQQ-MS/MS		0.01	108	0.05	YES	1
048	1	10	8		M	YES	1	SPLITLESS	GC-Q-MS		0.02	70	0.1		
049	NO RESULTS REPORTED														

APPENDIX 8. Methods used by participants for determining pesticides.

PENDIMETHALIN															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
050	7	20	6	LL	M	NO	2	PTV	GC-MS		0.01				
051	NA														
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	73	0.06	YES	1
053	9	100	3	O	M	NO	1	SPLITLESS	GC-NPD		0.020	98	0.212	YES	1
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	90	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		1	SPLIT	GC-NPD	GC-MSD	0.01	85.0	0.029	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-Q-MS	GC-Q-MS	0.01	95	0.1	YES	1
058	9	20	3	O	S		2	SPLIT	GC ECD		0.11	91	0.1	YES	1
059	1	50	8	GPC	M	YES	1	SPLITLESS	GC-ECD		0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS	GC-MS	0.01				
061*															
062	11	10	5	DSPE	S	NO	1	ON-COLUMN	GC-ECD	GC-NPD	0.01	98.0	0.1	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-ECD,NPD	LC-MS/MS	0.005	99.9	0.736	YES	1
064	11	10	5	DSPE	M	YES	2	PTV	GCMS		0.01	104		YES	
065	10	10	5	O	M	NO	10		LC/MS/MS	GC/MSD GC/ECD	0.010				
066	NA														
067	Ethyl Acetate			HPGPC					GC-MS	MS	0.01	98			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	90	0.1	YES	1
069	10	10	5	DSPE	M	NO	1	SPLITLESS	GC-ECD	LC-MSMS	0.02	96	0.100	YES	1
070		15	4	NO	M	YES	5	PTV-LVI	GC-ITD	GC-ITD	0.01	93	0.05	YES	1
071	NA														
072	6	75	1	NO	M	NO	2	SPLITLESS	GC-QQQ-MS/MS	GC-QQQ-MS/MS	0.01	85	0.1	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	^0.01				
074	2	50	1	GPC	M	NO	1	SPLITLESS	GC-MS/ITD	GC-MS/ITD	0.01	111	0.2	YES	1
075	NO RESULTS REPORTED														
076	1	100	2	GPC	M	YES	5	PTV	GC-MS		0.01				
077	2		4	NO	M				LC-MS-MS		0.010				
078	11	10	5	DSPE	M	YES	2	PTV	GC-MS/MS	GC-MS	0.005				
079	2		1		M	YES			GC-QQQ-MS/MS	GC-QQQ-MS/MS					
080	11								LC-MSMS	LC-MSMS	0.01				
081	MSPDE	5	8	O	S	NO	1	SPLITLESS	GC-NPD	GC-ECD, GC-NPD	0.05	83.2	0.05	NO	2
082	NA														
083	2 (5th Edition)	25	8	LL	M	NO	5	SPLITLESS	GC-TSD	GC-TSD	0.05	118	0.1	YES	1
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.02	97	0.1	YES	1
085	Istisan 97/23	25	1	NO	S	NO	1	SPLITLESS	GC-MS		0.01	103	0.1	YES	1
086	11	10	5	DSPE	S	NO	1	PTV	GC-ECD	GC-MS	0.01	108	0.5	YES	2
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	72	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC_ECD/NPD	GC-MS/MS	0.01	99	0.05	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	GC-ECD	0.01	98.8	0.05	YES	1
091	SAR-2-04	6	4	NO	M	NO	3	SPLITLESS	GC-ECD	GC-MS	0.01	104.0	0.1	NO	1
092	9	10	4		M		2	SPLITLESS	GC-NPD	GC-MS	0.05	80	0.30	YES	1
093	NA														
094	NA														
095	10	15			M	YES	10		LC-MS	LC-MS	0.01				
096	NA														
097	11	10	5	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	96	0.5	YES	1

APPENDIX 8. Methods used by participants for determining pesticides.

PENDIMETHALIN															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	82	0.1	YES	3
099	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.01	96	0.075	YES	1
100	NA														
101	NA														
102	NA														
103	fp017	25	2	GPC	M	NO	2	SPLITLESS	GCNPD		0.005	70	0.1	YES	1
104	NA														
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES	1	SPLITLESS	GC ECD	GC MS	0.01	90	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ITD-MS/MS	0.01	92.0	0.05	NO	3
111	ISS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.01				
112	1	7.5	3		M	NO	1	SPLITLESS	GC-MS	GC-MS/MS	0.01	70-110	0.025	YES	1
113	NA														
114	9	10	1	NO	M	YES	10	SPLIT	GC-ITD-MS/MS	GC-ITD-MS/MS					
115	11	10	5	DSPE	M	YES	5	PTV-LVI	GC/MS		0.01				
116											0.01	98			
117	NA														
118	2	30	1	O	S	NO	1	SPLITLESS	GC-ECD		0.01				
119	NA														
120	NA														
121	11	10	5	DSPE	M	YES	3	PTV	GC-MS/MS			101			
122	NA														
123	Rapporti Istisan 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-NPD	GC-NPD	0.05	75	0.05	NO	2
124	NA														
125	GC	25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.01	109	0.01	YES	2
126	NA														
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05		0.05-0.25	NO	2
128	NA														
129	Iss 3/97	50	8	SPE	S	YES	2	SPLITLESS	GC-ECD/ECD; GC-MS	GC-MS	0.030	85	0.1	NO	2
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	111	0.01	YES	1
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	86	0.10	YES	1
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	70.7	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

PHOSMET															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001		25	2	GPC	M	NO	2	PTV	GC/ITD	MS	0.04	86	0.104	YES	1
002	EN12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD,GC-NPD	GC-MS	0.01	100	0.02	YES	1
003	10	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-TOF/MS0	0.01	100	0.03	YES	1
005	2	25	1	NO	M	NO	2	SPLITLESS	GC-NPD	GC-NPD	0.04	88.7	0.2	YES	1
006	NA														
007	9	15			M		1	SPLITLESS	GC-MS	GC-MS	0.01	83	0.2	YES	1
008	Swedish method	25	1	DSPE	M	YES	5	PTV	GC-MS/MS	GC-MS/MS	0.01	70	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-TSD	GC-MS	0.01	101.2	0.500	YES	1
010	NA														
011	11	10	5	DSPE	M	YES	5	PTV-LVI	GC-ITD-MSMS	GC-ITD-MSMS	0.01	93	0.3	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-NPD	GC-MS	0.05	79	0.4	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GS-MS	GC-MS	0.01	97	0.20	YES	1
014	1	50	3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.5	70	0.5	NO	2
015	NA														
016	9	100	4	NO	M	YES	1	SPLITLESS	GC-Q-MS		0.010				
017		10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.02	78	0.1	YES	1
018	NA														
019	7	10	6	LL	M	YES	2	PTV	GC-MS	LC-MS/MS	0.01	105	0.1	YES	1
020	11	10	5	DSPE	S	YES	15	PTV	GC-Q-MS	GC-Q-MS	0.01	63.2	0.25	YES	1
021	13	10,0	7	DSPE	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.005	77	0.5	YES	1
023	CHEM-014	10	1	GPC	M	YES	1.5	ON-COLUMN	GC-MS/MS	GC-MS/MS	0.005	86	0.02	YES	1
024		20	5	LL	S	NO	0.2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.01				
025	NF EN 12393	50	1	NO	S	NO	1	ON-COLUMN	PFPD	GC/MS	0.01	85.1	0.1	NO	3
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-TSD	GC-ECD	0.02				
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-NPD	GC-NPD	0.01	103	0.3	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	63	0.050	YES	1
029	NA														
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	98.3	0.10	YES	1
031	10	15	5	DSPE	M	NO	50		LC-MS	LC-MS	0.010	116.39	0.050	YES	1
032	NA														
033	NA														
034	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.02	101	0.2	YES	1
035	10	115	5	DSPE	M	NO			LC-MS/MS	LC-MS/MS	0.01	70	0.01	YES	1
036	1	100	2	GPC	S	YES	1	SPLITLESS	GC-ECD	GC-MSMS	0.01	108		YES	1
037	NA														
038	9	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	110	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GC-FPD	GCMS	0.01	89	0.2	YES	1
040	10	10	5	DSPE	M	YES	1	PTV	GC-Q-MS	GC-Q-MS	0.01				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.204	120	0.5	YES	1
042	1	50	2	GPC	M	NO	5	PTV	GC-Q-MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.002	93	0.1	YES	1
044	10	10	5	DSPE	S	YES	1	SPLIT	GC_MS	GC_MS	0.01				
045	SLV M200	75	1	NO	M	NO	3	SPLITLESS	GC-MS/MS	GC-MS/MS	0.010	106	0.230	YES	1
046*	1	50	2	GPC	S		20		LC-MS/MS		0.01				
047	1	75	2	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-MS	0.01	75	0.1	YES	3
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	90	0.1		
049	NO RESULTS REPORTED														

APPENDIX 8. Methods used by participants for determining pesticides.

PHOSMET															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	Internal Method reference Istituto Superiore di Sanit`	10	1	GPC		YES	3	SPLITLESS	GC-NPD-Q-MSD	GC-Q-MSD	0.01	90	0.01	NO	3
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	87	0.16	YES	1
053	9	100	3	O	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.020	82	0.211	YES	1
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	100	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		1	SPLIT	GC-NPD	GC-MSD	0.01	93.4	0.088	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-NPD	GC-Q-MS	0.01	83	0.1	YES	1
058	9	20	3	NO	S		2	SPLITLESS	GC ECD GC NPD		0.3	79	0.15	NO	1
059	1	50	8	GPC	M	YES	2	PTV	GC-Q-MS	GC-ECD	0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS		0.01				
061*															
062	11	10	5	DSPE	S	YES	1	ON-COLUMN	GC-NPD	GC-ECD	0.01	107.7	0.5	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-NPD,ECD	GC-MSD	0.01	101.3	0.446	YES	1
064	11	10	5	DSPE	M	NO	1	SPLITLESS	GC-NPD	GCMS	0.01	121		YES	1
065	10	10	5	O	M	NO	10		LC/MS/MS	GC/MSD	0.010				
066	NA														
067	Ethyl Acetate			HPGPC					GC-MS	MS	0.01	96			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	96	0.1	YES	1
069	10	10	5	DSPE	M	NO	20	PTV-LVI	GC-PND	LC-MSMS	0.02	92	0.500	YES	1
070		7.5	4	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	81	0.01	YES	1
071	NA														
072	6	75	1	NO	M	NO	2	SPLITLESS	GC-QQQ-MS/MS	GC-QQQ-MS/MS	0.01	80	0.1	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	0.01				
074	2	50	1	GPC	M	NO	1	SPLITLESS	GC-MS/ITD	GC-MS/ITD	0.01	74	0.2	NO	2
075	NO RESULTS REPORTED														
076	1	100	2	GPC	M	YES	5	PTV	GC-MS		0.01				
077	NA														
078	11	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
079	2		1		M	YES			GC-QQQ-MS/MS	GC-QQQ-MS/MS					
080	11								LC-MSMS	LC-MSMS	0.01				
081	MSPDE	5	8	O	S	NO	1	SPLITLESS	GC-NPD	GC-ECD, GC-NPD	0.01	95.7	0.01	NO	2
082*	NF EN 12393	25	1	NO	S	NO	2	PTV	GCMS	GCMS	0.01	88	0.05	NO	1
083	2 (5th Edition)	25	8	LL	M	NO	5	SPLITLESS	GC-TSD	GC-TSD	0.02	97	0.1	YES	1
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.01	104	0.500	YES	1
085	Istisan 97/23	25	3	DSPE	M	NO	1	SPLITLESS	GC-FPD		0.01	89	0.1	NO	2
086	NA														
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	80	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC-ECD/NPD	GC-MS/MS	0.02	94	0.05	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	GC-PFPD	0.01	89.4	0.25	YES	1
091	SAR-1-04	12.5	4	NO	M	NO	3	SPLITLESS	GC-NPD	GC-MS	0.05	97.2	0.25	NO	1
092	9	10	4		M		2	SPLITLESS	GC-FPD	GC-MS	0.04	90	0.15	YES	1
093	NA														
094	9	15	4	NO	M	NO	10	SPLITLESS	CG-TSD	CG-MS	0.05				
095	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				

APPENDIX 8. Methods used by participants for determining pesticides.

PHOSMET															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
096	NA														
097	11	10	5	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	101	0.5	NO	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	90	0.33	YES	3
099	2	15	4	NO	M	NO	1	SPLITLESS	GC-NPD	GC-ECD	0.01	110	0.24	YES	1
100	6	20	1	NO	M	NO	2	SPLITLESS	GC-Q-MS	GC-Q-MS	0.01	84	0.01	YES	1
101	NA														
102	EN 12393 P	50	1	GPC	M	YES	1	SPLITLESS	GC-NPD	GC-TOF-MS	0.05	116	0.1		1
103	fp017	25	2	GPC	M		2	SPLITLESS	GCQ		0.012	70	0.1	YES	1
104	11	10	5	DSPE	S	YES	5	PTV-LVI	GC-ITD		0.01				
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.01				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES	1	SPLITLESS	GC NPD	GC MS	0.01	81	0.20	YES	1
108	NA														
109	2	7.5	4	NO	M	NO	1	ON-COLUMN	GC-NPD	GC-ECD, GC/MS	0.01	96	0.1	YES	1
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-NPD	GC-ITD-MS/MS	0.01	98.2	0.25	NO	3
111	ISS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.01				
112	NA														
113	NA														
114	NA														
115	11	10	5	DSPE	M	YES	5	PTV-LVI	GC/MS		0.025				
116	NA														
117	NA														
118	2	30	1	GPC	S	NO	1	SPLITLESS	GC-NPD		0.01				
119	9	15	4	NO	M	NO	10	PTV-LVI	GC-MS	GC-MS/MS	0.01				
120	NA														
121	11	10	5	DSPE	S	YES	3		LC-MS/MS			96			
122	NA														
123	NA														
124	NA														
125	GC	25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.01	98	0.01	YES	2
126	NA														
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05	106	0.05-0.25	NO	2
128	NA														
129	NA														
130	NA														
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	88	0.10	YES	1
132*															

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

QUINOXYFEN															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001	NA														
002	EN12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD,GC-NPD	GC-MS	0.01	95.0	0.02	YES	1
003	10	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-TOF/MS	GC-TOF/MS	0.01	85	0.03	YES	1
005	NA														
006	NA														
007	10	10			M		5		LC-MS/MS	GC-MS	0.01	102	0.2	YES	1
008	Swedish method	25	1	DSPE	M	YES	5	PTV	GC-MS/MS	GC-MS/MS	0.01	100	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-MS	HPLC-DAD	0.01	103	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.05	86.0	0.2	YES	2
011	11	10	5	DSPE	M	YES	5	PTV-LVI	GC-ITD-MSMS	GC-ITD-MSMS	0.01	96	0.2	YES	1
012	13	10	7	DSPE	S	YES	1	SPLITLESS	GC-MS		0.05	83	0.4	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	96	0.20	YES	1
014	1		3	NO	S	YES	1	SPLITLESS	GC/MS	GC/MS	0.01	70	0.01	NO	3
015	1	25	1	GPC	M	NO	1	SPLITLESS	GC-MS	GC-MS	0.05	71	0.05	NO	2
016	NA														
017		10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.01	70	0.1	YES	1
018											0.01				
019	7	10	6	LL	M	YES	2	PTV	GC-MS	LC-MS/MS	0.01	103	0.1	YES	1
020	11	10	5	DSPE	S	YES	15	PTV	GC-Q-MS	GC-Q-MS	0.01	86.9	0.5	YES	1
021	13	10	7	DSPE	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.02				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.005	100	0.5	YES	1
023	CHEM-054	10	1	O	M	YES	3		LC-MS/MS	LC-MS/MS	0.005	75	0.02	YES	1
024	GC-ITD-MS	20	5	LL	S	NO	0.2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.01				
025	NF EN 12393	50	1	NO	S	NO	1	SPLITLESS	GC/MS	NPD	0.01	78.8	0.1	NO	3
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.02	83	0.82	NO	2
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-ECD	HPLC-DAD	0.01	100	0.4	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	86	0.050	YES	1
029	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, . & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	91.8	0.2	YES	1
030	10	15	5	DSPE	M	YES	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	96.5	0.067	YES	1
031	10	15	5	DSPE	M	NO	10	SPLIT	GC-MS/MS	GC-MS/MS	0.010	89.8	0.050	YES	1
032	NA														
033	NA														
034	NA														
035	RE-MA-01	15	4	LL	M	NO			GC-MS/MS	GC-MS/MS	0.01	109	0.01		1
036	7	10	2	LL	M		10		LCMSMS		0.01	60		NO	1
037	NA														
038	9	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	106	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GC-ECD	GCMS	0.01	84	0.2	YES	1
040	10	10	5	DSPE	M	YES	1	PTV	GC-Q-MS	GC-Q-MS	0.01				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.284	96	0.5	YES	1
042	1	50	2	GPC	M	NO	5	PTV	GC-Q-MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.002	87	0.1	YES	1
044	10	10.04	5	DSPE	S	YES	1	SPLIT	GC-MS	GC-MS	0.01				
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/SM	0.010	107	0.300	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-Q-MS	0.01	68	2.0	NO	3
047	1	75	2	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-MS	0.01	110	0.1	YES	1
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	75	0.1		

APPENDIX 8. Methods used by participants for determining pesticides.

QUINOXYFEN															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	NA														
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	90	0.35	YES	1
053	NA														
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	101	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		1	SPLIT	GC-ECD	GC-MSD	0.005	83.8	0.058	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-Q-MS	GC-Q-MS	0.01	86	0.1	YES	1
058	NA														
059	1	50	8	GPC	M	YES	1	SPLITLESS	GC-ECD		0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS	GC-MS	0.01				
061	NF EN 12393	25	2	NO	S	YES	1	ON-COLUMN	GC-MS	MS	0.02	92	0.05	NO	3
062	11	10	5	DSPE	S	NO	10		LC-MS/MS	GC-ECD	0.01	87.3	0.5	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-NPD, ECD	GC-MSD, TOF	0.01	101.3	1.05	YES	1
064	11	10	5	DSPE	M	NO	5		LC-MSMS		0.01	94		YES	1
065	10	10	5	O	M	NO	10		LC/MS/MS	GC/MSD	0.010				
066	NA														
067	10								LC-MS/MS	MS/MS	0.01	86			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	88	0.1	YES	1
069	10	10	5	DSPE	M	NO	20	PTV-LVI	GC-PND	LC-MSMS	0.02	87	0.400	YES	1
070		15	4	NO	M	YES	5	PTV-LVI	GC-ITD	GC-ITD	0.01	88	0.05	YES	1
071	NA														
072	6	75	1	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	94	0.4	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	0.01				
074	2	50	1	NO	M	NO	5		LC-MS/MS	UPLC-MS/MS	0.01	118	0.2	YES	1
075	NO RESULTS REPORTED														
076	1	100	2	GPC	M	YES	5	PTV			0.01				
077	2		4	NO	M				LC-MS-MS		0.010	70	0.050	YES	1
078	11	10	5	DSPE	M	YES	10		LC-MS/MS	GC-MS	0.005				
079	NA														
080	11								LC-MSMS	LC-MSMS	0.01				
081	NA														
082	NF EN 12393	25	1	NO	S	NO	2	ON-COLUMN	GC ECD	GC MS	O.01	90	O.05	YES	1
083	2 (5th Edition)	25	8	LL	M	NO	5	SPLITLESS	GC-TSD	GC-TSD	0.05	104	0.3	YES	1
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.01	98	0.500	YES	1
085	Istisan 97/23	25	1	NO	S	NO	1	SPLITLESS	GC-MS		0.01	97	0.1	YES	1
086	NA														
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	76	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC-ECD/NPD	GC-MS/MS	0.1	90	0.05	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	LC-QQQ-MS/MS	0.01	89.4	0.25	YES	1
091	NA														
092	9	10	4		M		2	SPLITLESS	GC-ECD	GC-MS	0.02	85	0.15	YES	1
093	NA														
094	NA														
095	10	15			M	YES	10		LC-MS	LC-MS	0.01				
096	PN-EN 12393-1,2,3:2000	25		GPC	M		1	SPLITLESS			0.01	75.2			

APPENDIX 8. Methods used by participants for determining pesticides.

QUINOXYFEN															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
097	11	10	5	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	102	0.5	YES	2
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	96	0.33	YES	3
099	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	LC-MS-MS	0.01	101	0.32	YES	1
100	NA														
101	NA														
102	EN 12393 P	50	1	GPC	M	YES	1	SPLITLESS	GC-ITD-MS	GC-NPD	0.025	99	0.25	YES	1
103	NA														
104	11	10	5	DSPE	S	YES	5	PTV-LVI	GC-ITD		0.01				
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.01				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES	20		LC MS MS		0.01	93	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.01	95.2	0.25		
111	SS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.01				
112	NA														
113	NA														
114	NA														
115	11	10	5	DSPE	M	YES	5	PTV-LVI	GC/MS		0.01				
116											0.01	97			
117	NA														
118	2	30	1	NO	S	NO	20		LC-MS		0.01	80	0.1	YES	1
119	NA														
120		30	1	NO	M	NO	10	PTV	GC-MSMS	GC-MSMS	0.01	120	0.013	YES	1
121	11	10	5	DSPE	M	YES	3	PTV	GC-MSMS			90			
122	NA														
123	Rapporti Istisan 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-NPD	GC-Q-MS	0.05	75	0.1	NO	2
124	NA														
125		25	1	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	96	0.01	YES	2
126	PN-EN 12393	50	3	GPC	S	NO	1	SPLITLESS	GC-ECD		0.01				
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05	80	0.05-0.25	NO	2
128	NA														
129	NA														
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	104	0.01	YES	1
131	Istisan 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	90	0.10	YES	1
132	SOP	10	6	LL	M	YES	10	SPLITLESS	LC-MS/MS	LC-MS/MS	0.01	104.8	0.100	YES	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

TRIADIMENOL SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001		25	2	GPC	M	NO	2	PTV	GC/MS/MS	MS/MS	0.01	111	0.104	YES	1
002	EN12393-1,2,3:1998	20	3	NO	M	NO	2	SPLITLESS	GC-ECD,GC-NPD	GC-MS	0.01	108	0.02	YES	1
003	10	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-TOF/MS	0.01	86	0.03	NO	2
005	NA														
006	NA														
007	7	10			M		5		LC-MS/MS	GC-MS	0.01	85	0.3	YES	1
008	Swedish method	25	1	NO	M	NO	10	ON-COLUMN	LC-MS/MS	LC-MS/MS	0.01	98	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-TSD	GC-MS	0.01	79.6	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.05	85.0	0.2	YES	2
011	11	10	5	DSPE	M	YES	5	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.02	120	0.08	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-NPD	GC-MS	0.05	85	0.5	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	80	0.20	YES	1
014	1	50	3	NO	S	NO	1	SPLITLESS	GC/MS	GC/MS	0.1	70	0.1	NO	2
015	1	25	1	GPC	M	NO	1	SPLITLESS	GC-MS	GC-MS	0.02	120	0.02	NO	2
016	NA														
017		10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.02	74	0.1	YES	1
018											0.01				
019	7	10	6	LL	M	YES	2	PTV	GC-MS	GC-MS	0.01	106	0.1	YES	1
020	2	20	4	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	125.2	0.25	YES	1
021	13	10	6	DSPE	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.02				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GC/MS/MS	GC/MS/MS	0.005	89	0.5	YES	1
023	CHEM-014	10	1		M	YES	1.5	ON-COLUMN	GC-MS/MS	GC-MS/MS	0.005	79	0.02	YES	1
024*	6										0.01				
025	NF EN 12393	50	1	NO	S	YES	1	SPLITLESS	GC/MS	NPD	0.01	98	0.1	NO	3
026	Istian 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.05				
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-NPD	GC-NPD	0.01	87	0.5	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	104	0.050	YES	1
029	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, . & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	94.2	0.2	YES	1
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	95.6	0.10	YES	1
031	10	15	5	DSPE	M	NO	10	SPLIT	GC-MS/MS	GC-MS/MS	0.010	70.65	0.050	YES	1
032	NA														
033	NA														
034	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.05	95	0.5	YES	1
035	10														
036	10	10	5	DSPE	M	YES	5	PTV	GC-MSMS		0.01	100		YES	1
037	NA														
038	9	10	4	NO	S	NO	5		LC-MS/MS	LC-MS/MS	0.01	85	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GCMS	GCMS	0.01	84	0.2	YES	1
040	10	10	5	DSPE	M	YES	1	PTV	GC-Q-MS	GC-Q-MS	0.005				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.120	120	0.5	YES	1
042	1	50	2	GPC	M	NO	5	PTV	GC-Q-MS		0.01				
043	10	10	5	NO	M	YES	5		LC-MS/MS		0.005	77	0.1	YES	1
044	10	10	5	DSPE	S	YES	1	SPLIT	GC-MS	GC-MS	0.01				
045	SLV M200	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.010	99	0.500	YES	1
046	1	50	2	GPC	M	NO	20		LC-MS/MS	GC-Q-MS	0.01	85-107	0.01-0.25	NO	2
047	1	75	2	GPC	M	NO	1	SPLITLESS	GC-QQQ-MS/MS		0.01	98	0.1	YES	1
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	85	0.1		

APPENDIX 8. Methods used by participants for determining pesticides.

TRIADIMENOL SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2		LC-MS-MS		0.01				
051	Internal Method reference Istituto Superiore di Sanit`	10	1	GPC	S	YES	3	SPLITLESS	GC-NPD-Q-MS	GC-Q-MS	0.01	82	0.01	NO	3
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	65	0.01	YES	1
053	9	100	3	O	M	NO	1	SPLITLESS	GC-NPD	GC-NPD	0.020	101	0.200	YES	1
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	118	0.1	YES	1
055	NA														
056	1	50	4	GPC	M		1	SPLIT	GC-NPD	GC-MSD	0.05	77.5	0.234	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-Q-MS	GC-Q-MS	0.02	83	0.1	YES	1
058	NA														
059	1	50	8	GPC	M	YES	2	SPLITLESS	GC-NPD		0.01				
060	11	10	5	DSPE	M	NO	5		LC-MS/MS	GC-MS	0.01				
061	NF EN 12393	25	2	NO	S	YES	1	ON-COLUMN	GC-MS	MS	0.02	93	0.05	NO	3
062	11	10	5	DSPE	S	YES	1	ON-COLUMN	GC-NPD	GC-MS	0.01	109.2	0.5	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-NPD	GC-MSD	0.01	95.3	1.009	YES	1
064	11	10	5	DSPE	S	NO	5		LC-MSMS		0.01	96		YES	1
065	10	10	5	O	M	NO	10		LC/MS/MS	GC/MSD	0.010				
066	PN-EN 12393	50	3	GPC	S	NO	4	PTV	GC-NPD	GC-MS/MS		109.2	0.05	NO	2
067	10								LC-MS/MS	MS/MS	0.01	94			
068	8038	10	1	SPE	M	YES	20		LC-MS/MS	GC-TOF/MS	0.01	91	0.1	YES	1
069	10	10	5	DSPE	M	NO	20		LC-MSMS		0.05	90		NO	3
070		7.5	4	NO	M	YES	5		LC-MS/MS	LC-MS/MS	0.01	87	0.01	YES	1
071	NA														
072	6	75	1	NO	M	NO	5		LC-MS/MS	LC-MS/MS	0.01	88	0.4	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC-MS	0.05				
074	2	50	1	NO	M	NO	5		LC-MS/MS		0.01	86	0.2	YES	1
075	NO RESULTS REPORTED														
076	1	100	2	GPC	M	NO	5	PTV			0.01				
077															
078	11	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.005				
079	2		1		M	YES			GC-QQQ-MS/MS	GC-QQQ-MS/MS					
080	11								LC-MSMS	LC-MSMS	0.01				
081	NA														
082	NF EN 12393	25	1	NO	S	YES	2	PTV	GC MS	GC MS	0.01	105	O.05	NO	1
083	NA														
084	7	10	6	LL	S	YES	25		LC-MS/MS		0.01	102	0.5	YES	1
085	Istisan 97/23	25	1	NO	S	NO	1	SPLITLESS	GC-MS		0.01	94	0.1	YES	1
086*															
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	89	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC-ECD/NPD	GC-MS/MS	0.2	101	0.05	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS		0.01	91.4	0.25	YES	1
091	SAR-2-04	6	4	NO	M	NO	3	SPLITLESS	GC-ECD	GC-MS	0.01	74.0	2.5	NO	1
092	9	10	4		M		2	SPLITLESS	GC-NPD	GC-MS	0.05	95	0.30	YES	1
093	NA														
094	9	15	4	NO							0.05				

APPENDIX 8. Methods used by participants for determining pesticides.

TRIADIMENOL SUM															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
095	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				
096	PN-EN 12393-1,2,3:2000	25		GPC	M		1	SPLITLESS			0.01	109.8			
097	11	10	5	O	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	91	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	98	0.33	YES	3
099	2														
100	NA														
101	NA														
102												110	0.25	YES	1
103	NA														
104	11	10	5	DSPE	S	NO	5		LC-MS/MS		0.02				
105											0.02				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES			LC MS MS		0.01	95	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ITD-MS/MS	0.01	89.2	0.3	NO	3
111	ISS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.02				
112	NA														
113	PN-EN 12393:2000	50	3	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.005	81.91	0.12	NO	2
114	9	10	1	NO	M	YES	10	SPLIT	GC-ITD-MS/MS	GC-ITD-MS/MS					
115	11	10	5	DSPE	M	YES	1		LC MS/MS		0.01				
116											0.01	98			
117	NA														
118	2	30	1	GPC	S	NO	1	SPLITLESS	GC-NPD		0.01				
119	9	15	4	NO	M	NO	10	PTV-LVI	GC-MS	GC-MS/MS	0.01				
120	NA														
121	11	10	5	DSPE	S	YES	3		LC-MS/MS			98			
122	NA														
123	NA														
124	NA														
125		25	1	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	84	0.01	YES	2
126	Internal Method	50	3	LL	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05	89	0.05-0.25	NO	2
128	NA														
129	ISS 3/97	50	8	SPE	S	YES	2	SPLITLESS	GC-ECD/ECD GC-MS	GC-MS	0.050	80	0.10	NO	2
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	77	0.01	YES	1
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-NPD	GC-MS	0.01	88	0.10	YES	1
132	SOP	50	2	GPC	M	YES	1	SPLITLESS	GC-MS	GC-MS	0.05	100	0.05	NO	3

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

VINCLOZOLIN															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
001		25	2	GPC	M	NO	2	PTV	GC/MS/S	MS	0.04	82	0.104	YES	1
002	EN12393-1,2,3	20	3	NO	M	NO	2	SPLITLESS	GC-ECD,GC-NPD	GC-MS	0.01	97.5	0.02	YES	1
003	10	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.01				
004	2	25	1	GPC	M	NO	1	SPLITLESS	GC-ECD	GC-TOF/MS	0.01	86	0.03	NO	2
005	2 (5th Ed)	25	8	O	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.02	87.6	1.1	YES	1
006	Kadenczki Et.al. JAOAC 75(1992)	5	3	SPE	S	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.005	82	0.500	NO	2
007	9	15			M		1	SPLITLESS	GC-MS	GC-MS	0.01	88	1	YES	1
008	Swedish method	25	1	DSPE	M	YES	5	PTV	GC-MS/MS	GC-MS/MS	0.01	78	0.2	YES	1
009	10	15	5	DSPE	M	YES	1	PTV	GC-TSD	GC-MS	0.01	97.1	0.500	YES	1
010	EN 12393	25	1	SPE	M	NO	2	PTV	GC-NPD-ECD		0.01	78.0	0.2	YES	2
011	11	10	5	DSPE	M	YES	5	PTV-LVI	GC-ITD-MSMS	GC-ITD-MSMS	0.02	108	0.8	YES	1
012	Istisan 97/23	10	7	DSPE	S	YES	1	SPLITLESS	GC-ECD	GC-MS	0.05	90	0.5	YES	1
013	JCA 1190(08)316	10	5	SPE	M	YES	10	PTV-LVI	GC-MS	GC-MS	0.01	88	0.20	YES	1
014	1	50	3	NO	S	NO	1	SPLITLESS	GC/MS	GC/MS	0.05	70-80	0.05	NO	2
015	1	25	1	GPC	M	NO	1	SPLITLESS	GC-MS	GC-MS	0.05	102	0.05	YES	1
016	9	100	4	NO	M	YES	1	SPLITLESS	GC-Q-MS		0.010				
017		10	5	DSPE	M	YES	2	SPLITLESS	GC-Q-MS		0.01				
018											0.01				
019	7	10	5	LL	M	YES	2	PTV	GC-MS	GC-MS	0.01	105	0.1	YES	1
020	11	10	5	DSPE	S	YES	20	PTV	GC-Q-MS	GC-Q-MS	0.01	94.6	1	YES	1
021	13	10	7	DSPE	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.01				
022	8	10	5	DSPE	M	YES	5	SPLITLESS	GCMS/MS	GC/MS/MS	0.005	99	0.5	YES	1
023	CHEM-014	10	1	GPC	M	YES	1.5	ON-COLUMN	GC-MS/MS	GC-MS/MS	0.005	95	0.02	YES	1
024	GC-ITD-MS	20	5	LL	S	NO	0.2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.01				
025	NF EN 12393	50	1	SPE	S	NO	1	SPLITLESS	ECD	GC/MS	0.01	66.8	0.1	NO	3
026	Istisan 97/13	15	7	GPC	S	YES	1	SPLITLESS	GC-MS		0.02				
027	2	15	1	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.01	98	0.5	YES	1
028	7	10	6	NO	M	YES	5	SPLITLESS	GC-MS/TOF	GC-MS/TOF	0.010	87	0.050	YES	1
029	BA A ČESNIK, H., GREGORČIČ, A., VELIKONJA BOLTA, . & KMECL, V. (2006): Food Addit. Contam., 23, 164-173.	20	4	GPC	M	NO	1	SPLITLESS	GC-MS		0.01	94.4	0.2	YES	1
030	2	15	4	GPC	M	YES	2	SPLITLESS	GC-MS	GC-MS	0.02	94.4	0.10	YES	1
031	10	15	5	DSPE	M	NO	10	SPLIT	GC-MS/MS	GC-MS/MS	0.010	86.9	0.050	YES	1
032	NA														
033	nfa rapport 17/98	15	1	NO	M	YES	10	PTV	GC ITD MS/MS		0.05				
034	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-ECD	0.02	95	0.5	YES	1
035	RE-MA-01	15	4	LL	M	NO			GC-MS/MS	GC-MS/MS	0.01	74	0.01	YES	1
036	1	100	2	GPC	S	YES	1	SPLITLESS	GC-ECD		0.005	105		YES	1
037	EN12393-1,2,3	100	2	GPC	M		1	SPLITLESS	GC/ECD	GC/MS	0.002	63.1			1
038	8	5	8	NO	M	YES	1	SPLITLESS	GC-MS/MS	GC-MS/MS	0.01	83	0.08	YES	1
039	Istisan Report 97/23						1	SPLITLESS	GC-ECD	GCMS	0.01	90	0.5	YES	1
040	10	10	5	DSPE	M	YES	1	PTV	GC-Q-MS	GC-Q-MS	0.01				
041	10	10	5	DSPE	S	YES	2	SPLITLESS	GC-Q-MS		0.826	103	0.5	YES	1
042	1	50	2	GPC	M	NO	5	PTV	GC-MS/MS		0.01				
043	Hajslova et al., Journal of Chromatography A, 800 (1998), 283-295	25	1	GPC	M	NO	1	SPLITLESS	GC-Q-MS		0.009	99	0.190	YES	1
044	Rapporto Istisan 97/23	9.98	1	GPC	S	YES	1	SPLIT	GC-MS	GC-MS	0.01				
045	SLV M200	75	1	NO	M	NO	3	SPLITLESS	GC-MS/MS	GC-MS/MS	0.010	90	1.100	YES	1
046	1	50	2	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.01	90-100	0.01-0.25	NO	2

APPENDIX 8. Methods used by participants for determining pesticides.

VINCLOZOLIN															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
047	1	75	2	GPC	M	NO	1	PTV	GC-NPD	GC-MS	0.01	90	0.05	YES	1
048	1	10	8	SPE	M	YES	1	SPLITLESS	GC-Q-MS		0.02	83	0.5		
049	NO RESULTS REPORTED														
050	7	20	6	LL	M	NO	2	PTV	GC-MS		0.01				
051	Internal Method reference Istituto Superiore di Sanit`	10	1	GPC	S	YES	3	SPLITLESS	GC-ECDGC-Q-MS	GC-Q-MS	0.01	80	0.01	NO	3
052	11	10	5	SPE	M	YES	2	SPLITLESS	GC-Q-MS	GC-MS/MS	0.01	79	0.6	YES	1
053	9	100	3	NO	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.020	96	0.206	YES	1
054	PRES/069	10	5	DSPE	M	NO	2	SPLITLESS	GC-MS		0.01	100	0.1	YES	1
055	8	15	5	DSPE	M	YES	1	PTV	GC-ECD	GC-MS(SIM)	0.63	96	0.2	YES	1
056	1	50	4	GPC	M		1	SPLIT	GC-ECD	GC-MSD	0.005	77.9	0.058	YES	1
057	10	10	5	DSPE	S	YES	3	PTV	GC-ECD	GC-ITD-MS-MS	0.01	96	0.1	YES	1
058	9	20	3	O	S		2	SPLITLESS	GC ECD		1.37	81	0.1	YES	1
059	1	50	8	GPC	M	YES	1	SPLITLESS	GC-ECD	GC-Q-MS	0.01				
060	11	10	5	DSPE	M	NO	2	SPLIT	GC-MS		0.01				
061															
062	11	10	5	DSPE	S	NO	1	ON-COLUMN	GC-ECD	GC-NPD	0.01	117.8	1.0	YES	1
063	1	50	2	GPC	M	NO	1	SPLITLESS	GC-NPD. ECD	GC-MSD, TOF	0.01	100.8	1.259	YES	1
064	11	10	5	DSPE	M	YES	2	PTV	GCMS		0.01	95		YES	1
065	10	10	5	O	M	NO	1	SPLITLESS	GC/MSD	GC/ECD	0.010				
066	PN-EN 12393	50	3	GPC	S	NO	4	PTV	GC-NPD	GC-MS/MS	0.05	85.1	0.01	NO	2
067	Ethyl Acetate			HPGPC					GC-MS	MS	0.01	97			
068	8038	10	1	SPE	M	YES	2	SPLIT	GC-TOF/MS	GC-TOF/MS	0.01	80	0.1	YES	1
069	10	10	5	DSPE	M	NO	1	SPLITLESS	GC-ECD	GC-PND	0.01	96	1.5	YES	1
070		15	4	NO	M	YES	5	PTV-LVI	GC-ITD	GC-ITD	0.01	92	0.05	YES	1
071	NA														
072	6	75	1	NO	M	NO	2	SPLITLESS	GC-QQQ-MS/MS	GC-QQQ-MS/MS	0.01	74	0.1	YES	1
073	10	10	5	DSPE	M	NO	1.5	SPLIT	GC-MS	GC_MS	0.01				
074	2	50	1	GPC	M	NO	1	SPLITLESS	GC-MS/ITD		0.01	90	0.2	YES	1
075	NO RESULTS REPORTED														
076	1	100	2	GPC	M	YES	5	PTV	GC-MS		0.01				
077	2		4	NO	S		2	SPLITLESS	GC-MS-MS		0.050	70	0.050	YES	1
078	11	10	5	DSPE	M	YES	2	PTV	GC-MS	GC-MS	0.005				
079	2		1		M	YES		SPLITLESS	GC-QQQ-MS/MS	GC-QQQ-MS/MS				YES	3
080	11								GC-ECD	GC-ECD	0.01				
081	MSPDE	5	8	O	S	NO	1	SPLITLESS	GC-NPD	GC-ECD, GC-NPD	0.1	92.4	0.1	NO	2
082	NF EN 12393	25	1	NO	S	NO	2	ON-COLUMN	GC ECD	GC MS	0.01	86	0.05	YES	1
083	2 (5th Edition)	25	8	LL	M	NO	5	SPLITLESS	GC-TSD	GC-TSD	0.02	96	1.2	YES	1
084	2	20	4	NO	M	YES	2	SPLITLESS	GC-MS		0.01	103	0.500	YES	1
085	Istisan 97/23	25	1	NO	S	NO	1	SPLITLESS	GC-MS		0.01	97	0.1	YES	1
086	11	10	5	DSPE	S	NO	2	PTV	GC-MS	GC-MS	0.01	107	0.5	NO	2
087	Aysal, Ambrus et al. J. of Enviromental Science and Health B. 42(2007), 481-490	10	1	DSPE	S	YES	1.0	SPLITLESS	GC-ECD, GC-NPD	GC-MS	0.01				
088	13	5	7	NO	M	YES	0.5	SPLITLESS	GC-MS	GC-MS	0.01	83	0.2	YES	1
089	13	50	8	LL	M	NO	2	SPLITLESS	GC-ECD/NPD	GC-MS/MS	0.01	103	0.05	YES	1
090	11	10	5	DSPE	M	YES	3	PTV-LVI	GC-QQQ-MS/MS	GC-ECD	0.01	94.4	0.25	YES	1
091	SAR-2-04		4	NO	M	NO	3	SPLITLESS	GC-ECD	GC-MS	0.01	103.0	1.5	NO	1
092	9	10	4		M	NO	2	SPLITLESS	GC-ECD	GC/MS	0.04	82	1	YES	1
093	Istisan modified	10.02	7	GPC	S	NO	1	SPLITLESS	GC-NPD	GC-Q-MS	0.1	88	0.1	NO	3
094	9	15	4	NO	M	NO	10	SPLITLESS	CG-ECD	CG-MS	0.05				

APPENDIX 8. Methods used by participants for determining pesticides.

VINCLOZOLIN															
Lab Code	Reference Method	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Quantification Using Standards in Solvent or in Matrix	Internal Standard	Injection Volume (µl)	Injection Type	Determination	Confirmation Method	RL(mg/kg)	Recovery Factor (%)	Spiked Level	Batch of Analysis	Recovery (1), (2) or (3)
095	10	15			M	YES	10	PTV	GC-MS	GC-MS	0.01				
096	PN-EN 12393-1,2,3:2000	25		GPC	M		1	SPLITLESS			0.01	117.3			
097	11	10	5	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.005	98	0.5	YES	1
098	9	15	4	GPC	M	NO	2	SPLITLESS	GC-MS		0.01	85	0.66	YES	3
099	2	15	4	NO	M	NO	1	SPLITLESS	GC-ECD	GC-NPD	0.01	98	1.00	YES	1
100	6	20	1	NO	S	NO	2	SPLITLESS	GC-Q-MS	GC-Q-MS	0.01	113	0.01	YES	1
101	2	75	1	GPC	S	NO	20	PTV	GC-ECD	GC-NPD	0.002	83		NO	2
102	EN 12393 P	50	1	GPC	M	NO	1		GC-ECD	GC-TOF-MS	0.05	118	0.25	YES	1
103	fp017	25	2	GPC	M	NO	2	PTV	GCQ		0.01	85	0.1	YES	1
104	11	10	5	DSPE	S	YES	5	PTV-LVI	GC-ITD		0.01				
105	10	10	5	DSPE	M	YES	1	SPLITLESS	GC-Q-MS		0.01				
106	NO RESULTS REPORTED														
107	Istisan 97/23	15	7	NO	M	YES	1	SPLITLESS	GC ECD	GC MS	0.01	97	0.20	YES	1
108	NA														
109	NA														
110	11	10	5	NO	S	NO	1	SPLITLESS	GC-ECD	GC-ITD-MS/MS	0.01	90.1	1.0	NO	3
111	ISS,Quad.97/23	10	1	GPC	S	YES	1	PTV	GC-ITD-MS	GC-ITD-MS	0.01				
112	1	7.5	3		M	NO	1	SPLIT	GC-ECD	GC-MS	0.01	70-110	0.025	YES	1
113	PN-EN 12393:2000	50	3	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.03	105.88	5	NO	2
114	9	10	1	NO	M	YES	10	SPLIT	GC-ITD-MS/MS	GC-ITD-MS/MS					
115	11	10	5	DSPE	M	YES	5	PTV-LVI	GC/MS		0.01				
116											0.01	96			
117	PN-EN 12393-1,2,3:2000	100	3	O	S	NO	10	PTV-LVI	GC-ECD	GC-ECD	0.05				
118	2	30	1	O	S	NO	1	SPLITLESS	GC-ECD		0.01	79	0.5	YES	1
119	9	15	4	NO	M	NO	10	PTV-LVI	GC-MS	GC-MS/MS	0.01				
120		30	1	NO	M	NO	10	PTV	GC-MSMS	GC-MSMS	0.01	82	0.014	YES	1
121	11	10	5	DSPE	M	YES	3	PTV	GC-MS/MS			90			
122	NA														
123	Rapporti Istisan 97/23	15	7	GPC	S	NO	2	SPLITLESS	GC-ECD	GC-Q-MS	0.01	85	0.02	NO	2
124	PN-EN 12393:2000	100	8	GPC	S	NO	1	SPLITLESS	GC-ECD	GC-MS	0.050	123	0.502	YES	1
125	GC	25	1	GPC	M	YES	2	SPLITLESS	MS	MS	0.01	88	0.01	YES	2
126	Internal Method	10	3	LL	S	NO	1	SPLITLESS	GC-ECD	GC-Q-MS	0.01				
127	PUBLICATION	50	8	SPE	S	YES	2	SPLITLESS	GC-ITD-MS	GC-ITD-MS	0.05-0.25	71	0.05-0.25	NO	2
128	3	50	1	NO	M	NO	1	SPLITLESS	GC-Q-MS	GC-Q-MS	0.035				
129	ISS 3/97	50	8	SPE	S	YES	2	SPLITLESS	GC-ECD/ECD GC-MS	GC-MS	0.01	95	0.1	NO	2
130	PNT-ANA-02	15	1	NO	M	NO	10	PTV-LVI	GC-ITD-MS/MS	GC-ITD-MS/MS	0.01	102	0.01	YES	1
131	ISTISAN 97/23	10	7	GPC	M	YES	1	SPLIT	GC-ECD	GC-MS	0.01	90	0.10	YES	1
132	SOP	50	2	GPC	M	YES	1	SPLIT	GC-ECD	GC-MS	0.02	100	0.05	NO	3

* NOT DETECTED

Protocol

Main Characteristics

The aim of this proficiency test is to obtain information about the quality, accuracy and comparability of the pesticide residue data on fruit and vegetables sent to the European Commission within the framework of the EU and national pesticide monitoring programmes. Participating laboratories will be provided with an assessment of both their own analytical performance and the reliability of their data - compared to other laboratories.

Furthermore, DG SANCO, the Quality Control Group and the Organiser consider it important that all the participating laboratories are able to determine and quantify pesticide residues at low levels. This decision is supported by Regulation 396/2005/EC (which sets the LOD MRLs at 0.01 mg/Kg for all non-approved pesticides) and additionally, by the fact that baby food and organic production is increasing in importance each year.

In order to check variability between laboratories with regards to analytical standard solutions, and to establish their contribution to overall variability, a standard solution (containing the same pesticides as are present in the test material) will be sent on request to laboratories after the deadline to submit results for this proficiency test (Form 2) has passed.

The **Quality Control Group** for this proficiency test plays a vital role in the organisation of the test and the evaluation of its results. It is an independent group, approved by the Organiser and DG SANCO. Each member has proven experience over many years working in quality control for their own national accreditation bodies. The Quality Control Group's role is to help the Organiser make decisions concerning test quality, pesticide selection, residue levels,MRRLs and statistical treatments of the results.

The Organiser would like to point out that the results may be presented 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 laboratories could be made, especially for those Member States where only one lab participates. The performance data of the individual labs may also be forwarded to institutions within DG-SANCO upon request.

The official language used in this Proficiency Test is English.

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

Steps to Follow

This Proficiency Test is made up of the following 7 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 **Possible Pesticide List** from this web site. Laboratories should carefully read the Pesticide List, where important information about the reporting of the results, as well as the MRRLs, is listed. Labs should take note that the pesticide residue definitions within this exercise do not always follow Regulation 396/2005.
2. Laboratories will then receive an e-mail confirming their participation in this exercise and assigning them a **Laboratory Code**. Laboratories will be able to access the restricted area containing the **Protocol** and Forms (shown in the following steps) using their login information - consisting of their e-mail address and their password, as chosen on the application form.
3. The payment procedure must have started before the 31st March. An e-mail showing the bank transfer confirmation, or similar, has to be sent beforehand. Please note that this year the bank account has changed. **Payments without a laboratory code to identify them will not be considered paid**.
4. When the participant laboratories receive the test material (and not before), they must enter the restricted area and submit Form 1 on-line to inform the Organiser that they have accepted the test material. They will then receive a confirmation message. This Form has a deadline that must be met. If no test material has been received by the 17th April, please contact the Organiser by e-mail (pmedina@ual.es)
5. The participant laboratories must respect the deadline for submitting the results - using Form 2 on-line.
6. After the deadline for results' submission has passed, those laboratories that requested the standard solution will be sent an aliquot. Results for the standard solution ring test must also be submitted on-line, using Form 3. Participation in the analysis of the standard solution **is optional**.

7. The Organiser will evaluate the results at the end of the proficiency test, once the deadline for receipt of the results has passed. The Organiser will send a hard copy of the Final Report to each participant laboratory. 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 conclusions. Any other relevant information considered of value will also be included.

Calendar

The following table shows the programme for this EUPT-FV-10

Activity	Date
- Publish the Pesticide List and Calendar on the web page.	January 2008
- Receipt of Application Forms from invited laboratories.	14th March 2008
- Test material distribution.	14th - 17th April 2008
- Deadline for receipt of test material acceptance: Form 1	18th April 2008
- Deadline for receipt of results: Forms 2	12th May 2008
OPTIONAL PARTICIPATION - Standard solution distribution.	19th May 2008
- Deadline for receipt of standard solution results: Form 3	9th June 2008
- Preliminary Report: **results only, no statistical treatment.**	July 2008
- Final Report distributed to the Laboratories.	November 2008

Pesticide List

The **Pesticide List** can be accessed at the CRL-FV website from January 2008. This list includes all the possible pesticides that might be present in the test material. The distribution of this list (well before the receipt of the test materials) gives the labs enough time to purchase any standards that they may require and to validate their methods.

Laboratories should carefully read the Pesticide List, where important information about the reporting of the results, as well as the MRRLs is given. Labs should note that the pesticide residue definitions within this exercise do not always follow Regulation 396/2005. Where the residue definition includes more than one component, both the summed results, as well as the results of the individual components, are to be reported.

Each pesticide, and the relevant compounds included in the residue definitions, has been given an **MRRL** value (Minimum Required Reporting Level). These values are the levels that laboratories are expected to attain. They were established by the Quality Control Group and the Organiser, at 0.01 mg/kg (which corresponds to the lowest MRLs), with the aim to encourage laboratories to improve their performance and to lower their Reporting Levels. The MRRLs will be used for the calculation of false negative z-scores.

Some pesticides are marked with an asterisk. This means that to be in Category A (see "Performance-based laboratory classification"): the laboratory must not report any false positives, must analyse at least 90% of the pesticides present in the test material and report a result that is above the MRRL for 100% of the pesticides marked with an asterisk on the Pesticide List that are present in the test material.

Participant Laboratories

It is up to the administrative bodies responsible for the official monitoring of pesticide residues in each country to select the laboratories that should participate. Laboratories involved in providing residue data on fruit and

vegetables for their national monitoring programmes, and/or the EU Harmonised Monitoring Programme must participate in this CRL - European Proficiency Test in Fruit and Vegetables (FV) – 10. This is fully in line with provisions in Regulation 882/2004 (article 32 and 33), Regulation 645/2000 (article 2) and Regulation 396/2005 (coming into force on 1st September 2008, when the participation of official laboratories becomes compulsory).

It is up to the participants to complete the Application Form on-line so that the Organiser has all their details before the deadline. The Organiser will not be responsible if a laboratory does not receive notice of the web page address necessary to take part in the test.

If any official laboratory does not wish to participate, a letter should be sent explaining the reasons: both to the Organiser and to the laboratory's own NRL. These reasons will be communicated to the European Commission at a later date.

Application Form

On the CRL-FV web site: http://www.crl-pesticides.eu the participating laboratories must complete the Application Form on-line.

It is important that laboratories' details are updated and that laboratories make sure their e-mail system is working throughout the duration of the test.

On the Application Form, there is also information that must be provided, in order for an official invoice to be issued. The Application Form must be submitted on-line by 14th March 2008 at the latest.

Laboratories must be aware that some fields in this form are OBLIGATORY and are marked with red asterisks. If they are not filled in, they will not be able to continue.

On the Application Form, laboratories should declare if they want to take part in the standard solution ring test. If so, they will receive the solution after the deadline to submit Form 2 has passed.

Methodology

This proficiency test is based on the pesticide residues analysis of carrot. The carrots were grown in Almeria, Spain.

The pesticide treatments will be carried out post-harvest using either commercial formulations 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). 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.

After the results have been received from the laboratories, the Organiser will send a vial with the **standard solution** containing the pesticides that were used to treat the test material to those labs that opted to participate in the ring test.

Amount of Sample

Approximately 300g of carrot test material will be shipped, together with 300g of 'blank' carrot, surrounded with dry ice and packed in boxes. The courier costs will be charged to, and must be paid by, the participants before shipment of the test materials. There will only be a limited amount of test material and laboratories should not ask for more than they require in order to perform the analysis.

Shipping of Samples

The shipment of the test materials will be carried out over a one-week period. The Organiser will try to ensure that all the shipments arrive at once. A warning message will be sent out a week before the shipment.

Laboratories must make their own arrangements for the reception of the test materials. They must inform the Organiser of any public holidays in their country/city during the delivery period given in the calendar, as well as make the necessary arrangements to receive the shipment even if the laboratory is closed.

Advice on Sample Handling

Once received, the test material must be stored frozen until it is to be analysed.

The contents of the bottle should be mixed thoroughly - to ensure homogeneity of the test material - before taking the analytical portion(s).

Form 1

Once the laboratory has received the test materials, they must complete Form 1 on-line: filling in the date of receipt, the condition of the test material, and acknowledging its acceptance. Form 1 has a deadline, so if no form is received from the laboratories by 18th April 2008, the laboratories will no longer be able to submit the form.

Please note that on every form there are OBLIGATORY fields that must be filled in otherwise the form cannot be submitted. Form 1 will be available in the restricted area from the time the shipment process starts.

If any laboratory has not received the test material by 17th April, it must inform the Organiser immediately by e-mail (pmedina@ual.es).

Results and Analytical Methods: Form 2

Once the laboratory has analysed the test material and is ready to submit their data, they must enter the restricted zone and complete Form 2 on–line. Most of the fields are OBLIGATORY and have to be filled in otherwise it will not be possible to submit results.

Test Material Analysed

The test material contains a certain number of pesticides from the Possible Pesticide List. Laboratories must be aware that Form 2 will have different entries for individual contributions where parent compounds and transformation product(s) need to be listed, as well as the sum of components as specified in the residue definition. The residue definitions valid for this exercise are presented in the Possible Pesticide List.

Each laboratory must report the result for each of the pesticide residues present in the test material - reporting only one analytical procedure for each residue.

The results, expressed as residue levels in mg/kg, must also be reported, together with the laboratories' reporting level (RL) for each pesticide. This level will be used for information purposes only.

Concentration Significant Figures

The results must be expressed in mg/kg in the following way:

- Residue levels < 0.100 mg/kg, to be expressed to two significant figures (three decimals places: i.e. 0.058 mg/kg).
- Residue levels ≥ 0.100 mg/kg, to be expressed to three significant figures: i.e. 0.156, 1.64, 10.3 mg/kg.

In cases where a pesticide was not detected, it should be recorded as 'ND' and the reporting level should be written in the appropriate column. If it was not sought, it should be recorded as 'NA'.

The results/residue levels must be reported as numbers.

Correction of Results

According to Method Validation and Quality Control Procedures for Pesticide Residues Analysis in Food and Feed, Document No. SANCO/2007/3131: residue data do not have to be adjusted for recovery, when the mean recovery is in the range of 70-120%. If residues data are adjusted for recovery, then this must be stated - laboratories will be required to report whether their results were corrected for recovery, the recovery factor, the spiking level of the recovery and if it was determined in the same analytical batch as the test material.

Method information

The laboratories will also be asked to give a reference and provide details of the analytical procedure used. A drop-down box option containing the most common analytical methods will be available. If none of these methods are applicable, laboratories should choose the option 'OTHER' - typing the reference in the corresponding field (e.g. publication in a scientific journal) for the particular analytical method.

Form 2 must be sent to the Organiser by 12th May 2008 at the latest. No results will be accepted after this date. The laboratories will be responsible for reporting their results to the Organiser. The Organiser will acknowledge receipt of the results by sending back a confirmation message.

Standard Solution (Form 3)

After the results from the test material analyses have been received from the laboratories, the Organiser will send a vial with the **standard solution mixture** (containing the pesticides used to treat the test material) to those laboratories that opted to participate in the standard solution ring test on the Application Form.

The relevant details of this standard solution are:

(i) An aliquot of the standard solution (5mL), will be transferred into screw vials and stored at -20°C until shipment. Only two days will elapse between preparation and analysis of the solution and the shipment.

(ii) The solvent used to prepare the solution will be acetonitrile.

(iii) The concentration range of each compound present will be in the range 20-90 mg/L.

Individual stock solutions in acetonitrile will be prepared by weighing out suitable amounts of each of the reference standards that were freshly procured for this test. Aliquots of these stock solutions of the individual compounds will then be taken and combined to make up a mixed standard stock solution within the range 20-90 mg/L.

Evaluation of the Results

The statistics used for the treatment and assessment of the data will be described in detail in the Final Report. A short summary of how the results will be assessed and treated is given below.

The results will be grouped into:

- ***False Positives***

These are the results that show the presence of pesticides which are listed in the pesticide list but which were (i) not used in the treatment of the test material and (ii) not detected by the Organiser, even following a repeat analysis. However, if a number of laboratories detect the same additional pesticide, or if the concentration is close to 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 0.01mg/Kg will be ignored by the Organiser and will not therefore be considered as false positives.

- ***False Negatives***

These are results for pesticides that were not reported by the laboratories 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.

- ***Establishing the true concentration (μ)***

The true concentration (residue level) in all cases will be determined as the median of all the results. Therefore a **median value** for every pesticide present will be calculated.

- ***Establishing the assigned value for the standard deviation***

The assigned value for the standard deviation (δ) will be fixed by the Organiser.

Where $\delta = b_i * \mu_i$ b_i being **= %FFP/100%**

An assigned value will be established based on the Fit-For-Purpose (FFP) Standard Deviation model. An average fixed value of 25% has already been chosen. However, the Organiser may increase this value for certain difficult pesticide/concentrations combinations, after consultation with the committee of experts, and based on 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 laboratories, μ_i the assigned value and δ_i the standard deviation at that level for each pesticide ($_i$).

Any z-score values of /z/ > 5 will be reported as '+5', or '-5'.

z-Score values will be interpreted in the following way:

/z/ ≤ 2 Acceptable

2 < /z/ ≤ 3 Questionable

/z/ > 3 Unacceptable

For the values considered to be false negative results, z-scores will be calculated using the MRRL values as the value for x_i.

However, a z-score will not be assigned to any false positive results.

The Organiser will consider whether, or not, these values should appear in the histograms.

- ***Combined z-Score values***

Although classical combined z-scores formulae are generally less used in other PT schemes, both will be calculated: the re-scaled sum of z-scores (RSZ), and the sum of squared z-scores (SSZ).

The equations are:

$$RSZ = \Sigma z/(n)^{1/2}$$

$$SSZ = \Sigma z^2$$

n = number of reported results

These formulae will only have an informative purpose and will not be used for laboratory evaluations.

In order to evaluate each laboratory's performance, only those laboratories that have been classified in category A (see below) will be ranked according to the Weighted Sum of z-Scores.

The Weighted Sum of z-Scores formula uses the z-score values with a fixed maximum value of 5 as a default z-score, using the following formula:

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

n = number of reported results

So for each lab:

- The first factor is the sum of all their /z-scores/ between zero to two, multiplied by one.
- The second factor is the sum of all their /z-scores/ greater than two but less than or equal to, three, multiplied by three.
- The third factor is the sum of all their z-scores greater than three, multiplied by five.

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

/z/ ≤ 2 Good
2 < /z/ ≤ 3 Satisfactory
/z/ < 3 Unsatisfactory

- ***Performance-based laboratory classification***

For a laboratory to be in **Category A** it must: report 90% of the pesticides present in the test material, not report any false positive results, and/or report a result that is above the MRRL for 100% of the pesticides marked with an asterisk on the Pesticide List, and present in the test material.
These weighted summed z-score results are considered to be less important than the individual z-scores. Therefore, the Organiser retains the right not to use them if it is felt that they are unhelpful.

- ***Standard Solution Statistics***

The results from the standard solution analyses will be statistically assessed by the scientific committee. The Qn RSD and FFP RSD will be used. The results will be presented in the Final Report.

Organisation Address

The official postal address, phone number, fax number and e-mail address of the Organiser are as follows:

Universidad de Almería

Edificio Químicas CITE I

Ctra. Sacramento s/n

04120 Almería - Spain

Fax No.: +34 950015483

E-mail and Phone No.:

amadeo@ual.es +34 950015034

pmedina@ual.es +34 950015645

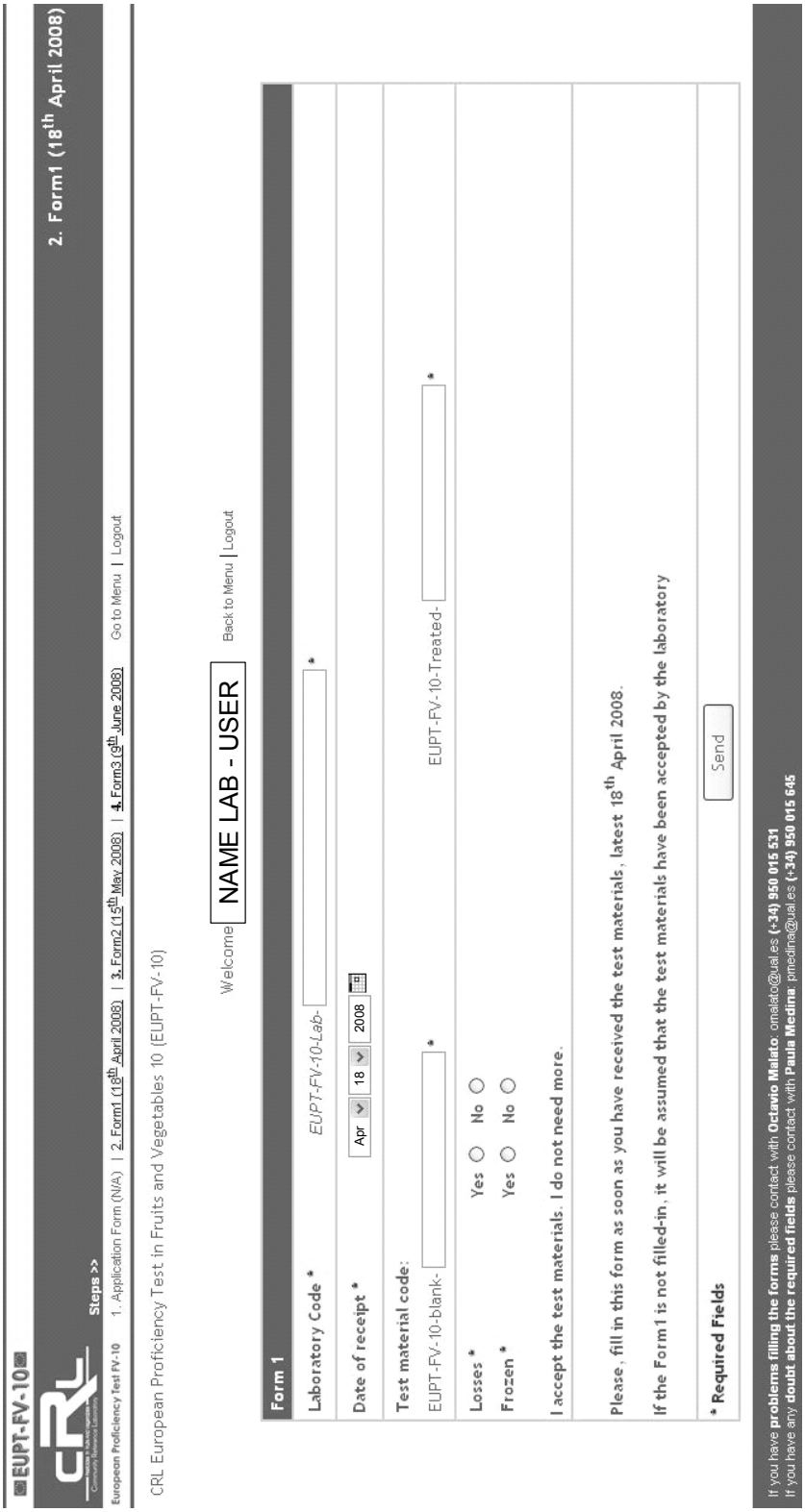
omalato@ual.es +34 950015531

On-Line News

The latest information currently updated can be found under CRL-FV at the web address:

http://www.crl-pesticides.eu

FORM 1


EUPT-FV-10
2. Form1 (18th April 2008)
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European Proficiency Test FV-10
1. Application Form (N/A) | 2. Form1 (18th April 2008) | 3. Form2 (15th May 2008) | 4. Form3 (9th June 2008)
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CRL European Proficiency Test in Fruits and Vegetables 10 (EUPT-FV-10)
Welcome NAME LAB - USER
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Form 1
Laboratory Code *
EUPT-FV-10-Lab-
Date of receipt *
Apr 18 2008
Test material code:
EUPT-FV-10-blank-
EUPT-FV-10-Treated-
Losses * Yes No
Frozen * Yes No
I accept the test materials. I do not need more.
Please, fill in this form as soon as you have received the test materials, latest 18th April 2008.
If the Form1 is not filled-in, it will be assumed that the test materials have been accepted by the laboratory
* Required Fields
Send
If you have problems filling the forms please contact with Octavio Maiato: omaiato@ualg.es (+34) 950 015 531
If you have any doubt about the required fields please contact with Paula Medina: pmedina@ualg.es (+34) 950 015 645

FORM 2

Please enter the number of Analytical Procedures you used to analyse each one of the pesticides/degradation products/isomers below:

Pesticide Name	Analytical procedure (Number of them)
* Acephate	
Acetamiprid	
Acrinathrin	
* Aldicarb - sum of aldicarb + aldicarb sulfoxide + aldicarb sulfone expressed as aldicarb	
Aldicarb	
Aldicarb Sulfoxide	
Aldicarb Sulfone	
Azinphos-methyl	
* Azoxystrobin	
* Bifenthrin	
Bromopropylate	
Boscalid	
Bupirimate	
Buprofezin	
* Captan	
* Carbaryl	
Carbendazim	
Carbofuran -sum of carbofuran and 3-hydroxy-carbofuran expressed as carbofuran	
Carbofuran	
3-hydroxy-carbofuran	
Clofentezine	
Chlorfenvinphos	
* Chlorothalonil	
Chlorpropham -only parent compound	
* Chlorpyrifos	
* Chlorpyrifos-methyl	
* Cypermethrin	
Cyprodinil	
* Deltamethrin	
* Diazinon	
Dichlofluanid	
* Dichlorvos	
* Dicofol	
* Dimethoate -sum of dimethoate and omethoate expressed as dimethoate	
Dimethoate	
Omethoate	
Dimethomorph	
Diphenylamine	
* Endosulfan -sum of alpha- and beta-isomers and endosulfan sulphate expressed as endosulfan	
Endosulfan alpha	
Endosulfan beta	
Endosulfan Sulphate	
Fenarimol	
Fenhexamid	
* Fenitrothion	
Fludioxonil	
Flusilazole	
Folpet	
Hexaconazole	
Hexythiazox	
* Imazalil	
* Imidacloprid	
Indoxacarb	
* Iprodione	
Iprovalicarb	
Isofenphos-methyl	
Kresoxim-methyl	
* Lambda-Cyhalothrin	
Linuron	
* Malathion -sum of malathion and malaoxon expressed as malathion	
Malathion	
Malaoxon	
Mepanipyrim -only parent compound	
Metalaxyl and metalaxyl-M	
* Methamidophos	

Methidathion	
* Methiocarb -sum of methiocarb + methiocarb sulfone + methiocarb sulfoxide expressed as methiocarb	
Methiocarb	
Methiocarb sulfone	
Methiocarb sulfoxide	
Methomyl and Thiodicarb -sum of methomyl and thiodicarb expressed as methomyl	
Methomyl	
Thiodicarb	
* Monocrotophos	
Myclobutanil	
* Oxamyl	
* Oxydemeton-methyl -sum of oxydemeton-methyl and demeton-S-methylsulfone expressed as oxydemeton-methyl	
Oxydemeton-methyl	
Demeton-S-methylsulfone	
Parathion	
* Parathion-methyl -sum of parathion-methyl and paraoxon-methyl expressed as parathion-methyl	
Parathion-methyl	
Paraoxon-methyl	
Penconazole	
Pendimethalin	
Phosalone	
Phosmet	
* Pirimicarb -only parent compound	
* Pirimiphos-methyl	
* Prochloraz -only parent compound	
* Procymidone	
Profenofos	
Propargite	
* Propiconazole	
* Pyrimethanil	
Pyriproxyfen	
Quinoxifen	
Spinosad	
Spiroxamine	
* Tebuconazole	
Tebufenozide	
Tetraconazole	
* Thiabendazole	
* Thiophanate-methyl	
Tolclofos-methyl	
* Tolylfluanid -only parent compound	
* Triadimefon and Triadimenol -sum of triadimefon and triadimenol	
Triadimefon	
Triadimenol	
Triazophos	
Trifloxystrobin	
Trifluralin	
* Vinclozolin -only parent compound	

Go to Enter Results

If you have **problems filling the forms** please contact with **Octavio Malato**: omalato@ual.es **(+34) 950 015 531**
If you have any **doubt about the required fields** please contact with **Paula Medina**: pmedina@ual.es **(+34) 950 015 645**

EUPT-FV-10

3. Form2(15th May 2008)

Steps >>

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CRL European Proficiency Test in Fruits and Vegetables 10 (EUPT-FV-10)

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Form 2 - Results

Laboratory Code * EUPT-FV-10-Lab- *

Pesticide	Scope of your Method	Residue Level (mg/kg)	Reference Number	Analytical Procedure Used	Sample Weight (g)	Extraction Solvent/s	Clean-up step	Quantification Using Standards	Internal Standard	Injection Volume (µl)	Injection Type	Determination Technique	Confirmation Method	RL (mg/kg)	Was your result adjusted for recovery?	Recovery %	Spiked Level (mg/kg)	Batch of Analysis	Recovery (1, 2 or 3)
* Acephate	NA		1	-- If (13) specify Internal Method:		-- If other (8) specify which:	-- If other (O) specify which:	--	--		--				--			--	--
Acetamiprid	NA		1	-- If (13) specify Internal Method:		-- If other (8) specify which:	-- If other (O) specify which:	--	--		--				--			--	--

PARAMETER	EXPLANATION
Pesticide	Pesticide Name
Scope of your Method	NA, ND, D
Residue Level	(mg/kg)
Reference Number	Number assigned by the laboratory
Analytical Procedure Used	Table F1
Sample Weight	(g)
Extraction Solvent/s	Table F2
Clean-up step	Table F3
Quantification Using Standards	S or M S: Standard/calibration in pure solvent M: Standard/calibration in matrix extract
Internal Standard	YES or NO
Injection Volume	(µL)
Injection Type	Split, Splitless, PTV, PTV-LVI or On-Column
Determination Technique	GC-ECD,GC-NPD, GC-FPD,GC-Q-MS, GC-QQQ-MS/MS,GC-ITD-MS/MS,GC-TOF/MS, HPLC-FL,HPLC-UV,HPLC-DAD,LC-MS,LC-MS/MS, LC-TOF/MS, …
Confirmation Method	Give the confirmation technique used if any. e.g. GC-ECD,GC-NPD, GC-FPD,GC-Q-MS, GC-QQQ-MS/MS,GC-ITD-MS/MS,GC-TOF/MS, HPLC-FL,HPLC-UV,HPLC-DAD,LC-MS,LC-MS/MS, LC-TOF/MS
RL	(mg/Kg) RL: Reporting Level must be given for all pesticides. For pesticides with metabolites/degradation products, give it for the full residue definition of the pesticide as well as for individual compounds when required.
Was your result adjusted for recovery?	YES or NO In general, results are not adjusted for recovery, when the mean recovery is in the range 70-110%. If your results have been adjusted for recovery, then please report the Recovery Factor that you used.. Reference: METHOD VALIDATION AND QUALITY CONTROL PROCEDURES FOR PESTICIDE RESIDUES ANALYSIS IN FOOD AND FEED Document No. SANCO/2007/3131
Recovery	%
Spiked Level	(mg/Kg) The spiking level that you used to determine your Recovery.
Batch of Analysis	YES or NO Was your recovery determined in the same analytical batch of as the test material?
Recovery	1, 2 or 3 Select "1" if the recovery values you reported originated from the same analytical batch as the test material. Select "2" if the recovery values originated from validation data, and select "3" if the recovery values were taken from your routine QC data.

Table F1.- Analytical Procedures

Number	Reference
1	§ 64 LFGB Nr. L 00.00-34 (DFG-Method) S 19, former § 35 LMBG Nr. L 00.00-34
2	Analytical Methods for Pesticide Residues in Foodstuffs. Ministry of Welfare, health and cultural affairs, Netherlands, Multiresidue Method 1, 3.1.2, 6th Ed, 1996
3	Fillion et al. Journal of AOAC International 78-5-1995
4	Specht W, Pelz S, Gilsbach W. Fresenius J Anal Chem. (1995) 353: 183 - 190
5	Gilvydis Dm Walters SM (1990) JAOA Chem. 73
6	Janson et al. Journal of Chromatography A 1023 (2004,9, 93-104
7	Klein, J., Alder, L. JAOAC 86, 1015 (2003); prEN 15637, ChemElut-method
8	Leothay, S. Et al. JAOAC 88 (2005)
9	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): J. Assoc. Off. Anal. Chem. 64(5): 1187-1195
10	M. Anastassiades et al JAOAC 86 (2003) original QuEChERS-method
11	prEN 15662, citrate-buffered QuEChERS-method
12	Official Method of Analysis (1990) 15th Ed., 985.22 AOAC Arlington VA
13	Internal Method (specify the reference) OBLIGATORY

Table F2.- Extraction Solvents

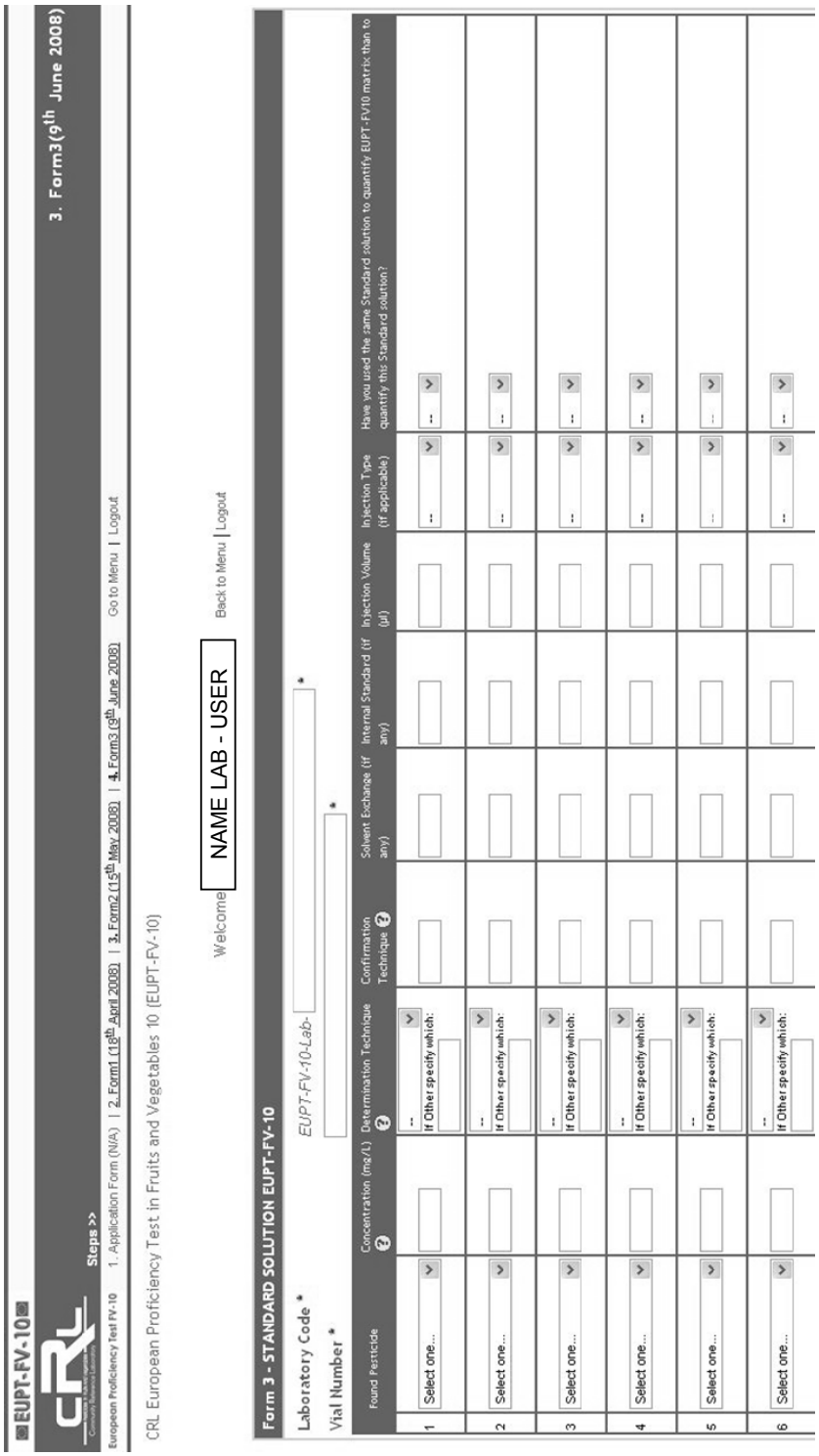
Number	Denoted as
1	ethyl acetate
2	acetone followed by cyclohexane and ethyl acetate
3	acetone followed by dichloromethane
4	acetone followed by dichloromethane and petroleum ether
5	acetonitrile
6	methanol
7	dichloromethane
8	other (specify which)

Table F3.- Clean Up Steps

Clean Up Steps	
GPC	Gel permeation chromatography
SPE	Solid phase extraction
DSPE	Dispersive Solid Phase Extraction
LL	Liquid-liquid partition
NO	No clean-up
O	Other

FORM 3

STANDARD SOLUTION EUPT-FV-10



PARAMETER	EXPLANATION
Found Pesticide	Pesticide Name
Concentration	(mg/L) Only concentration reported for detected and quantify pesticides
Determination Technique	GC-ECD,GC-NPD, GC-FPD,GC-Q-MS, GC-QQQ-MS/MS,GC-ITD-MS/MS,GC-TOF/MS,HPLC-FL,HPLC-UV,HPLC-DAD,LC-MS,LC-MS/MS, LC-TOF/MS, …
Confirmation Technique	Give the confirmation technique used if any. e.g. GC-ECD,GC-NPD, GC-FPD,GC-Q-MS, GC-QQQ-MS/MS,GC-ITD-MS/MS,GC-TOF/MS, HPLC-FL,HPLC-UV,HPLC-DAD,LC-MS,LC-MS/MS, LC-TOF/MS
Solvent Exchange	(if any)
Internal Standard	(if any)
Injection Volume	(µL)
Injection Type (if applicable)	Split, Splitless, PTV, PTV-LVI or On-Column
Have you used the same Standard solution to quantify EUPT-FV10 matrix than to quantify this Standard solution?	YES or NO

PESTICIDE LIST FOR THE CRL-EUPT-FV 10

The meaning of the asterisk is that to be in Category A, the laboratory must not report a false positive and analyse 90% of the pesticides present in the sample, but also have to analyse 100% of the marked pesticides

Pesticide	MRRL (mg/Kg)
* Acephate	0.01
Acetamiprid	0.01
Acrinathrin	0.01
* Aldicarb (sum of aldicarb + aldicarb sulfoxide + aldicarb sulfone expressed as aldicarb)	
Aldicarb	0.01
Aldicarb Sulfoxide	0.01
Aldicarb Sulfone	0.01
Azinphos-methyl	0.01
* Azoxystrobin	0.01
* Bifenthrin	0.01
Bromopropylate	0.01
Boscalid	0.01
Bupirimate	0.01
Buprofezin	0.01
* 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)	
Carbofuran	0.01
3-hydroxy-carbofuran	0.01
Clofentezine	0.01
Chlorfenvinphos	0.01
* Chlorothalonil	0.01
Chlorpropham (only parent compound)	0.01
* Chlorpyrifos	0.01
* Chlorpyrifos-methyl	0.01
* Cypermethrin	0.01
Cyprodinil	0.01
* Deltamethrin	0.01
* Diazinon	0.01
Dichlofluanid	0.01
* Dichlorvos	0.01
* Dicofol	0.01
* Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	
Dimethoate	0.01
Omethoate	0.01
Dimethomorph	0.01
Diphenylamine	0.01
* Endosulfan (sum of alpha- and beta-isomers and endosulfan sulphate expressed as endosulfan)	
Endosulfan alpha	0.01
Endosulfan beta	0.01
Endosulfan Sulphate	0.01
Fenarimol	0.01
Fenhexamid	0.01
* Fenitrothion	0.01
Fludioxonil	0.01
Flusilazole	0.01
Folpet	0.01
Hexaconazole	0.01
Hexythiazox	0.01
* Imazalil	0.01
* Imidacloprid	0.01
Indoxacarb	0.01
* Iprodione	0.01
Iprovalicarb	0.01
Isofenphos-methyl	0.01
Kresoxim-methyl	0.01
* Lambda-Cyhalothrin	0.01
Linuron	0.01
* Malathion (sum of malathion and malaoxon expressed as malathion)	
Malathion	0.01
Malaoxon	0.01
Mepanipyrim (only parent compound)	0.01
Metalaxyl and metalaxyl-M	0.01
* Methamidophos	0.01
Methidathion	0.01

Pesticide	MRRL (mg/Kg)
* Methiocarb (sum of methiocarb + methiocarb sulfone + methiocarb sulfoxide expressed as methiocarb)	
Methiocarb	0.01
Methiocarb sulfone	0.01
Methiocarb sulfoxide	0.01
Methomyl and Thiodicarb (sum of methomyl and thiodicarb expressed as methomyl)	
Methomyl	0.01
Thiodicarb	0.01
* Monocrotophos	0.01
Myclobutanil	0.01
* Oxamyl	0.01
* Oxydemeton-methyl (sum of oxydemeton-methyl + demeton-S-methylsulfone expressed as oxydemeton-methyl)	
Oxydemeton-methyl	0.01
Demeton-S-methylsulfone	0.01
Parathion	0.01
* Parathion-methyl (sum of parathion-methyl and paraoxon-methyl expressed as parathion-methyl)	
Parathion-methyl	0.01
Paraoxon-methyl	0.01
Penconazole	0.01
Pendimethalin	0.01
Phosalone	0.01
Phosmet	0.01
* Pirimicarb (only parent compound)	0.01
* Pirimiphos-methyl	0.01
* Prochloraz (only parent compound)	0.01
* Procymidone	0.01
Profenofos	0.01
Propargite	0.01
* Propiconazole	0.01
* Pyrimethanil	0.01
Pyriproxyfen	0.01
Quinoxifen	0.01
Spinosad	0.01
Spiroxamine	0.01
* Tebuconazole	0.01
Tebufenozide	0.01
Tetraconazole	0.01
* Thiabendazole	0.01
* Thiophanate-methyl	0.01
Tolclofos-methyl	0.01
* Tolylfluanid (only parent compound)	0.01
* Triadimefon and Triadimenol (sum of triadimefon and triadimenol)	
Triadimefon	0.01
Triadimenol	0.01
Triazophos	0.01
Trifloxystrobin	0.01
Trifluralin	0.01
* Vinclozolin (only parent compound)	0.01

ANNEX 2. List of laboratories that agreed to participate in PT10.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
AUSTRIA	Austrian Agency for Food and Health Safety (AGES) Analytical Competence for Plant Protection Products	Innsbruck	YES
AUSTRIA	Austrian Agency for Food and Health Safety, Competence Centre Residue Analysis, Vienna	Wien	YES
BELGIUM	FYTOLAB	Gent - Zwijnaarde	YES
BELGIUM	Scientific Institute of Public Health (IPH)	Bruxelles	YES
BULGARY	Central Laboratory for Chemical Testing and Control	Sofia	YES
CYPRUS	Pesticide Residues Laboratory of State General Laboratory	Nicosia	YES
CZECH REPUBLIC	Czech Agriculture and Food Inspection Authority	Praha 6	YES
CZECH REPUBLIC	Institute of Chemical Technology Department of Food Chemistry and Analysis	Prague	YES
DENMARK	The National Food Institute, Danish Technical University	Soeborg	YES
DENMARK	Danish Veterinary and Food Administration, Region East	Ringsted	YES
EGYPT	Central Laboratory of Residue Pesticide Analysis. Ministry of Agriculture	Giza	YES
ESTONIA	Agricultural Research Centre, Lab for Residues and Contaminants	Saku	YES
ESTONIA	Health Protection Inspectorate Tartu Laboratory	Tartu	YES
FINLAND	Environment Centre of the City of Helsinki MetropoliLab	Helsinki	YES
FINLAND	Finnish Customs Laboratory	Espoo	YES
FRANCE	SCL Sevice Commun des Laboratoires ILLKIRCH	Illkirch	YES
FRANCE	Laboratoire du SCL de Montpellier	Montpellier	YES
FRANCE	SCL Laboratoire d'Ile de France Massy	Massy Cedex	YES
FRANCE	SCL Laboratoire Pessac	Pessac	YES
FRANCE	Laboratoire SCL-Finance Ministry, Rennes	Rennes	YES
GERMANY	Chemisches und Lebensmitteluntersuchungsamt der Stadt Dortmund	Dortmund	YES
GERMANY	Landesamt für Landwirtschaft, Lebensmittel sicherheit und Fischerei Mecklenburg-Vorpommern	Rostock	YES
GERMANY	Landeslabor Brandenburg, Dienstsitz und Laborbereich Frankfurt (Oder)	Frankfurt (Oder)	YES
GERMANY	Institut für Hygiene und Umwelt	Hamburg	YES
GERMANY	Niedersdchsisches Landesamt f|r Verbraucherschutz und Lebensmittelsicherheit, Lebensmittelinstitut Oldenburg	Oldenburg	YES
GERMANY	Chemisches Landes- und Staatliches Veterindruntersuchungsamt	M|Nster	YES
GERMANY	Bioanalytik Weihenstephan	Freising	YES
GERMANY	Landesamt f. Lebensmittelsicherh. u. Verbrauchersch.	Bad Langensalza	YES
GERMANY	Landeslabor Schleswig-Holstein	Neum|Nster	YES
GERMANY	Landesamt fur Verbraucherschutz Sachsen-Anhalt	Halle/Saale	YES

ANNEX 2. List of laboratories that agreed to participate in PT10.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
GERMANY	Landesuntersuchungsamt, Institut fur Lebensmittelchemie	Speyer	YES
GERMANY	Gemeinsames Chemisches und Lebensmitteluntersuchungsamt für den Kreis Recklinghausen und die Stadt Gelsenkirchen (CEL)	Recklinghausen	YES
GERMANY	BBGes-ILAT, FB 26	Berlin	YES
GERMANY	Landesuntersuchungsamt für Chemie, Hygiene und Veterinärmedizin	Bremen	YES
GERMANY	Amt für Umwelt, Verbraucherschutz und Lokale Agenda	Bonn	YES
GERMANY	Federal Office of Consumer Protection and Food Safety (BVL)	Berlin	YES
GERMANY	Amt für Verbraucherschutz D | sseldorf - 39/2 Chemische und Lebensmitteluntersuchung	D | Sseldorf	YES
GERMANY	LSGV (Landesamt für Soziales, Gesundheit und Verbraucherschutz)	Saarbr | Cken	YES
GERMANY	Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit	Erlangen	YES
GERMANY	Chemisches und Veterinäruntersuchungsamt-Ostwestfalen-Lippe (CVUA-OWL)	Bielefeld	YES
GERMANY	CVUA-RRW, Standort Essen	Essen	YES
GERMANY	Landesbetrieb Hessisches Landeslabor	Kassel	YES
GERMANY	Chemisches und Veterinäruntersuchungsamt (CVUA) Stuttgart	Fellbach	YES
GREECE	Pesticide Residue Laboratory of Regional Centre of Plant Protection & Quality Control of Piraeus	Athens	YES
GREECE	Ministry of Rural Development and Food, Regional Centre of Plant Protection and Quality Control	Ioannina	YES
GREECE	Ministry of Rural Development and Food-Peripheral Centre of Kavala	Kavala	YES
GREECE	General Chemical State Laboratory. Division Pesticide Residue Laboratory	Athens	YES
GREECE	Regional Centre of Plant Protection and Quality Control of Thessaloniki. Pesticide Residue Laboratory	Thessaloniki	YES
GREECE	Pesticide Residues Laboratory, Benaki Phytopathological Institute	Kiphissia-Athens	YES
GREECE	Regional Centre of Plant Protection and Quality Control of Iraklion	Iraklion Crete	YES
GREECE	Regional Centre of Plant Protection and Quality Control of Magnesia, Laboratory of Residue Analysis	Volos	YES
GREECE	Laboratory of Pesticide Residues of Nafplio	Nafplio	YES
HUNGARY	Plant Protection and Soil Conservation Directorate. Agricultural Office of Somogy County	Kaposvar	YES
HUNGARY	Agricultural Office of County Csongrad, Directorate of Plant Protection and Soil Conservation, Pesticide Residue Analytical Laboratory	Hodmezovasarhely	YES
HUNGARY	Agricultural Office of County Féjer, Plant Protection and Soil Conservation Directirate, Pesticide Residue Analytical Laboratory	Velence	YES
HUNGARY	Agricultural Office of BAZ County Plant Protection and Soil Conservation Directorate, Pesticide Residue Laboratory	Miskolc	YES
HUNGARY	Plant Protection and Soil Conservation Directorate of Jasz-Nagykun-Szolnok County	Szolnok	YES

ANNEX 2. List of laboratories that agreed to participate in PT10.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
HUNGARY	Agricultural Special Management Office Plant-and Soil Protection Management Residue Analytical Laboratory	Tanakajd	YES
ICELAND	Matis ohf.	Akureyri	YES
IRELAND	Pesticide Control Laboratory. Department of Agriculture and Food	Celbridge, Co. Kildare	YES
ITALY	APPA Trento Settore Laboratorio e Controlli	Trento	YES
ITALY	Agenzia Ambiente Bolzano - Laboratorio Analisi Aria e Rumore	Bolzano	YES
ITALY	ARPA VALLE D'AOSTA	Saint Christophe	YES
ITALY	Arpa Ferrara Eccellenza Fitofarmaci	Chiesuol Del Fosso (Ferrara)	YES
ITALY	ARPA_FVG Dipartimento di Pordenone	Pordenone	YES
ITALY	ARPAT	Florence	YES
ITALY	Laboratorio Di Sanita Pubblica. ASL Provincia di Bergamo	Bergamo	YES
ITALY	ARPA Puglia - Dipartimento di Bari	Bari	YES
ITALY	Istituto Superiore di Sanit` - Dip. AMPP Ambiente e Connessa Prevenzione Primaria - Rep. Antiparassitari	Roma	YES
ITALY	ARPAT. Dipartimento di Arezzo	Arezzo	YES
ITALY	ARPA Sardegna Dipartimento Provinciale di Cagliari	Cagliari	YES
ITALY	A.S.L. della Provincia di Varese - Dipartimento di Prevenzione Medico – Unitá Oètativa. Laboratorio Chimico	Varese	YES
ITALY	AUSL N.7 RAGUSA ARPA SICILIA DAP RAGUSA	Ragusa	YES
ITALY	ARPAT, Dip. Prov. le di Livorno	Livorno	YES
ITALY	ARPA-VENETO - DIP.REG.LAB. - S.L. VERONA	Verona	YES
ITALY	A.R.P.A Piemonte - Polo Regionale Alimenti	La Loggia (To)	YES
ITALY	ARPA CAMPANIA - Dipartimento Provinciale di Napoli-L.S. Fitofarmaci	Naples	YES
ITALY	ARPA MARCHE-DIPARTIMENTO DI MACERATA	Macerata	YES
LATVIA	National Diagnostic Centre	Riga	YES
LITHUANIA	National Veterinary Laboratory	Vilnius	YES
LUXEMBOURG	Laboratoire National de Santi Côntrole des Denrées Alimentaries, LNS	Luxembourg	YES
NORWAY	Bioforsk, Plant Health and Plant Protection, Pesticide Chemistry Norwegian Institute for Agricultural and Environmental Research, Bioforsk Laboratory	Aas	YES
POLAND	Plant Protection Institute Branch Sosnicowice	Sosnicowice	YES
POLAND	Laboratory of Warsaw Sanitary-Epidemiological Station	Warszawa	YES
POLAND	Department of Pesticide Residue Research, Institute of Plant Protection	Poznan	YES
POLAND	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA	Poznan	YES
POLAND	Wojewodzka Stacja Sanitarno-Epidemiologiczna w Olsztynie	Olsztynie	NO
POLAND	Institute of Plant Protection. Experimental Station	Rzeszsw	YES
POLAND	Instytut Ochrony Roślin	Trzebnica	YES

ANNEX 2. List of laboratories that agreed to participate in PT10.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
POLAND	Laboratory of Gorzow Voivodeship Sanitary-Epidemiological Station	Gorzsw Wielkopolski	YES
POLAND	State Plant Health and Seed Inspection Service, Central Laboratory	Torun	YES
POLAND	National Institute of Hygiene, Laboratory of Department of Environmental Toxicology	Warsaw	YES
POLAND	Wojewsdzka Stacja Sanitarno-Epidemiologiczna w Opole	Opole	YES
POLAND	Wojewodzka Stacja Sanitarno-Epidemiologiczna w Krakowie	Krakow	YES
POLAND	Wojewodzka Stacja Sanitarno-Epidemiologiczna w Kielcach	Kielce	YES
POLAND	Food Safety Laboratory	Skierniewice	YES
POLAND	Wojewsdzka Stacja Sanitarno-Epidemiologicza w Łodzi	Łodzi	YES
POLAND	Wojewodzka Stacja Sanitarno-Epidemiologiczna we Wroclawiu, Dzial Laboratoryjny	Wroclaw	YES
POLAND	Wojewsdzka Stacja Sanitarno-Epidemiologiczna w Rzeszsw	Rzeszsw	YES
PORTUGAL	Pesticide Residue Laboratory. Direcção-Geral de Protecção das Culturas.	Oeiras	YES
PORTUGAL (MADEIRA ISLAND)	Laboratorio de Qualidade Agrícola	Camacha	YES
ROMANIA	LCCRPPPV-CENTRAL LABORATORY FOR PESTICIDE RESIDUE CONTROL IN PLANTS AND VEGETABLES	Bucharest	NO
ROMANIA	LABORATORUL SANITAR VETERINAR DE STAT BUCURESTI	Bucharest	YES
SLOVAKIA	State Veterinary and Food Institute	Bratislava	YES
SLOVENIA	Public Health Institute	Maribor	YES
SLOVENIA	Agricultural Institute of Slovenia, Central Laboratories	Ljubljana	YES
SLOVENIA	Institute of Public Health of the Republic of Slovenia	Ljubljana	YES
SPAIN	Laboratorio Regional de la Comunidad Autónoma de La Rioja	Logroqo	YES
SPAIN	Laboratorio de Producción y Sanidad Vegetal de Almería	Almería	YES
SPAIN	Laboratorio Agroalimentario de la Generalitat Valenciana	Burjassot	YES
SPAIN	Laboratorio Agroalimentario y de Sanidad Animal	El Palmar-Murcia	YES
SPAIN	Laboratorio Agroambiental Diputación Foral de Guipúzcoa	Zizurkil	NO
SPAIN	Laboratorio Producción y Sanidad Vegetal de Huelva	Cartaya (Huelva)	YES
SPAIN	Centro Nacional de Alimentación	Majadahonda-Madrid	YES
SPAIN	Laboratorio Agrario Regional - Junta de Castilla y León	Burgos	YES
SPAIN	Laboratorio Producción y Sanidad Vegetal	Jaén	YES
SPAIN	Laboratorio Arbitral Agroalimentario del M.A.P.A.	Madrid	YES
SPAIN	Laboratori Agroalimentari - DAR	Cabrils	YES
SPAIN	NASERSA	Villava	YES

ANNEX 2. List of laboratories that agreed to participate in PT10.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
SPAIN	Laboratorio Agrario y Fitopatológico de Galicia	San Tirso De Mabegondo	YES
SPAIN	Laboratorio Salud Publica - Almería	Almería	YES
SPAIN	Instituto Tecnológico de Canarias	Santa Lucia, Las Palmas	YES
SWEDEN	Lantmännen Analycen AB	Lidköping	YES
SWEDEN	National Food Administration, Chemistry Division 1	Uppsala	YES
SWITZERLAND	Official Food Control Authority of the Canton of Zurich	Zurich	YES
SWITZERLAND	Service de la Consommation et des Affaires Vitirinaires (SCAV)	Geneve 4 Plainpalais	YES
THE NETHERLANDS	VWA - Food and Consumer Product Safety Authority	Amsterdam	YES
UNITED KINGDOM	Scottish Agricultural Science Agency.	Edinburgh	YES
UNITED KINGDOM	Eurofins Laboratories Ltd	Wolverhampton	YES
UNITED KINGDOM	Central Science Laboratory	York	YES
UNITED KINGDOM	Laboratory of the Government Chemist	Teddington	YES
URUGUAY	Universidad de La República. Dpto. Farmacognosia y Productos Naturales	Montevideo	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Introduction

Proficiency Tests can play a very important role in detecting both performance problems and errors in routine analytical procedures. Therefore, their role in analytical quality control is of paramount importance. A comprehensive evaluation of an unsatisfactory result obtained in a Proficiency Test can lead to the detection of an inappropriate analytical standard solution, problems in the extraction procedure, etc. However, the reasons for inaccurate results cannot always be easily identified due to the many possible sources of error and their relative contributions. For this reason, the committee decided to once more organise a separate Ring Test using standard solutions. The objective of this Ring Test was to find out the between laboratory variability associated with their analytical standard solutions and to establish the contribution to the overall variability in EUPT-FV-10.

An additional benefit is to help laboratories to detect any possible inaccuracies with their standards and/or related working solutions.

A vial containing a solution of the pesticides present in the previously dispatched treated carrot test material was sent to the laboratories that participated in EUPT-FV-10, and had also agreed to voluntarily take part in this Ring Test. The intention being that laboratories should determine the concentrations of the compounds in the standard solution using their own standard solutions as were used by them in EUPT-FV-10.

Laboratories that agreed to participate in this Ring Test received the standard solutions soon after the deadline for submission of results for EUPT-FV-10 had passed.

The relevant details that were provided to the participants were:

(i) the volume of standard solution supplied (5mL)
(ii) the solvent used to prepare the solution (acetonitrile)
(iii) the concentration range of each compound present (30-60 mg/L).

Laboratories were asked to use the same determination techniques as they used in EUPT-FV-10

The timetable for the Ring Test was as follows:

- Deadline for submission of the application form accepting their participation — 14th March 2008
- Distribution of standard solutions by courier — 19th May 2008
- Deadline for submission of results on-line (Form 3) — 9th June 2008

It was decided by the scientific committee that this year a complete statistical treatment on the results should be performed.

Standard Solution Preparation

Individual stock solutions in acetonitrile were prepared by weighing out suitable amounts of each of the reference standards. Aliquots of these stock solutions of the individual compounds were then taken to make up a mixed standard stock solution. This procedure was performed by three analysts, independently. From each mixed solution dilutions were prepared at concentrations within the working range of the appropriate detection system in order to measure the relative responses. The RSD of the average response from the three independent solutions had to be <10% for the standard solutions to be approved. All three mixed stock standard solutions were then mixed.

5 mL aliquots of the mixed standard solution (30-60 mg/L) were transferred into screw cap vials and stored at -20°C until shipment. Only two days had elapsed between the preparation and analysis of the solutions, and their shipment.

Results and Discussion

The main reason for sending the standard solutions to the EUPT FV-10 participants was to compare the results from the standard solutions with the results from the carrot matrix.

Table 1 shows the medians, the results given by the laboratories and the z-scores achieved by the laboratories for each compound.

The median values for all compounds were the same (<5% difference) as the theoretical concentration, except for isofenphos-methyl and methamidophos which were slightly lower.
For most compounds, the same percentage of laboratories reported results for the standard solutions as were reported for the carrot test material. The exceptions were for acetamiprid, boscalid, hexythiazox, methomyl and oxamyl, where a higher percentage of laboratories reported these pesticides in the standard solution than in the carrot test material.
One laboratory reported a false positive result, i.e. a pesticide that was not present in the standard solution:

Lab 032 3-hydroxy-carbofuran (0.2 mg/L)

For methiocarb, endosulfan sulfate and malathion only parent compounds were used for z-score caculations.

The determination techniques used are presented in Table 2 and the participants list in Table 3. The same laboratory codes as for the carrot test material have also been used for this standard solution ring test.

Conclusions

Following on from last year's experience, a ring test for standard solutions was once again organised following the FV-10 Proficiency Test.

One hundred and three laboratories volunteered to participate. Out of these, twenty laboratories were not able to report results before the deadline set by the Organiser, which was just about two weeks after the shipment of the solutions.

The aim was to establish those errors actually associated with the analytical standard solutions used, and to estimate the contribution that these errors made to the overall results of the laboratories participating in EUPT FV-10.

No clear correlation was observed between the errors occurring in the standard solution ring test, and the errors in the actual carrot test material.

The Scientific Committee, considers that this ring test is useful for the laboratories quality control assurance, and it will therefore be performed again next year, even though few conclusions could be drawn from a comparison of the results.

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Table 1: Median, individual results (mg/L) and z-scores.

Lab Code	Acetamiprid	z-Score (FFP RSD 25%)	Boscalid	z-Score (FFP RSD 25%)	Chlorpyrifos-methyl	z-Score (FFP RSD 25%)	Diazinon	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	20.5		56.7		62.1		20.6	
Lab-001	20.9	0.1	69.8	0.9	55.4	-0.4	19.0	-0.3
Lab-002	20.5	0.0	55.0	-0.1	52.0	-0.7	19.0	-0.3
Lab-003	No results reported							
Lab-004	No results reported							
Lab-005	No participation							
Lab-006			66.0	0.7	69.0	0.4	19.5	-0.2
Lab-007	20.1	-0.1	56.8	0.0	61.8	0.0	21.7	0.2
Lab-008	21.1	0.1	59.5	0.2	69.0	0.4	23.4	0.6
Lab-009	20.5	0.0	60.2	0.2	50.7	-0.7	20.0	-0.1
Lab-010	40.0	3.8	60.0	0.2	60.0	-0.1	20.0	-0.1
Lab-011	23.2	0.5	65.6	0.6	55.2	-0.4	22.3	0.3
Lab-012	No results reported							
Lab-013	23.7	0.6	57.7	0.1	60.4	-0.1	20.7	0.0
Lab-014					40.9	-1.4	15.3	-1.0
Lab-015	No participation							
Lab-016	No results reported							
Lab-017			51.5	-0.4	62.3	0.0	16.3	-0.8
Lab-018					36.0	-1.7	24.0	0.7
Lab-019	18.6	-0.4	53.0	-0.3	60.4	-0.1	18.7	-0.4
Lab-020	23.2	0.5	31.7	-1.8	19.0	-2.8	28.2	1.5
Lab-021	22.0	0.3	64.1	0.5	58.8	-0.2	18.5	-0.4
Lab-022	18.4	-0.4	55.6	-0.1	58.0	-0.3	20.6	0.0
Lab-023	No results reported							
Lab-024	21.1	0.1	52.4	-0.3	70.0	0.5	21.8	0.2
Lab-025	No results reported							
Lab-026	21.2	0.1	59.1	0.2	56.9	-0.3	19.9	-0.1
Lab-027	No participation							
Lab-028	No results reported							
Lab-029			59.6	0.2	62.9	0.0	16.5	-0.8
Lab-030	22.4	0.4	55.3	-0.1	66.6	0.3	22.5	0.4
Lab-031					69.2	0.5	43.0	4.4
Lab-032								
Lab-033	No results reported							
Lab-034	No participation							
Lab-035	27.3	1.3	59.0	0.2	44.2	-1.2	17.0	-0.7
Lab-036	18.4	-0.4	51.8	-0.3	50.8	-0.7	24.1	0.7
Lab-037					69.8	0.5	69.6	5.0
Lab-038	20.1	-0.1	56.7	0.0	52.6	-0.6	16.6	-0.8
Lab-039	No participation							
Lab-040	17.3	-0.6	56.7	0.0	71.9	0.6	16.9	-0.7
Lab-041	No participation							
Lab-042	21.0	0.1	56.4	0.0	98.6	2.3	21.7	0.2
Lab-043	20.3	0.0			67.3	0.3	21.2	0.1
Lab-044					52.6	-0.6	20.0	-0.1
Lab-045	20.4	0.0	59.6	0.2	62.6	0.0	21.4	0.2
Lab-046	24.1	0.7	60.3	0.3	69.4	0.5	27.7	1.4

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Acetamiprid	z-Score (FFP RSD 25%)	Boscalid	z-Score (FFP RSD 25%)	Chlorpyrifos-methyl	z-Score (FFP RSD 25%)	Diazinon	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	20.5		56.7		62.1		20.6	
Lab-047	21.5	0.2	62.4	0.4	78.1	1.0	18.5	-0.4
Lab-048	21.0	0.1	43.6	-0.9	38.1	-1.5	14.1	-1.3
Lab-049	No participation							
Lab-050	No participation							
Lab-051					72.6	0.7	22.7	0.4
Lab-052	No results reported							
Lab-053					69.5	0.5	18.9	-0.3
Lab-054	No results reported							
Lab-055					31.0	-2.0	14.0	-1.3
Lab-056	No participation							
Lab-057			58.0	0.1	89.0	1.7	24.0	0.7
Lab-058	No participation							
Lab-059	17.9	-0.5	70.2	0.9	68.7	0.4	20.6	0.0
Lab-060	17.8	-0.5	48.0	-0.6	64.2	0.1	22.5	0.4
Lab-061			44.5	-0.9	62.4	0.0	16.5	-0.8
Lab-062	20.0	-0.1	51.7	-0.4	58.9	-0.2	21.9	0.3
Lab-063	No participation							
Lab-064	19.6	-0.2	61.9	0.4	76.3	0.9	22.3	0.3
Lab-065	No participation							
Lab-066					63.3	0.1	20.5	0.0
Lab-067	21.6	0.2	76.8	1.4	71.1	0.6	22.0	0.3
Lab-068	43.3	4.4	51.1	-0.4	59.1	-0.2	18.1	-0.5
Lab-069	23.7	0.6	64.2	0.5	58.0	-0.3	20.6	0.0
Lab-070	19.0	-0.3	54.3	-0.2	52.3	-0.6	20.3	0.0
Lab-071	18.4	-0.4	54.0	-0.2	62.0	0.0	18.5	-0.4
Lab-072	21.2	0.1	60.6	0.3	64.9	0.2	23.1	0.5
Lab-073	35.0	2.8	61.5	0.3	67.9	0.4	21.3	0.1
Lab-074	No participation							
Lab-075	No participation							
Lab-076	18.6	-0.4	52.4	-0.3	55.3	-0.4	22.1	0.3
Lab-077	17.5	-0.6			63.8	0.1	21.9	0.3
Lab-078	18.2	-0.4	52.9	-0.3	69.0	0.4	19.5	-0.2
Lab-079	No results reported							
Lab-080	17.6	-0.6	54.5	-0.2	56.5	-0.4	39.0	3.6
Lab-081	No results reported							
Lab-082	35.0	2.8	52.0	-0.3	60.0	-0.1	25.0	0.9
Lab-083	No participation							
Lab-084	20.3	0.0	78.3	1.5				
Lab-085	21.2	0.1			66.4	0.3	19.3	-0.2
Lab-086					70.4	0.5	21.8	0.2
Lab-087					48.0	-0.9	14.0	-1.3
Lab-088	17.6	-0.6			62.5	0.0	20.5	0.0
Lab-089	16.0	-0.9	49.4	-0.5	64.9	0.2	22.4	0.4
Lab-090	23.3	0.5	58.4	0.1	57.5	-0.3	21.1	0.1
Lab-091	150.8	5.0			62.3	0.0	19.2	-0.3
Lab-092	No participation							
Lab-093	No results reported							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Acetamiprid	z-Score (FFP RSD 25%)	Boscalid	z-Score (FFP RSD 25%)	Chlorpyrifos-methyl	z-Score (FFP RSD 25%)	Diazinon	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	20.5		56.7		62.1		20.6	
Lab-094	No participation							
Lab-095	23.3	0.5			84.4	1.4	32.8	2.4
Lab-096					68.0	0.4	22.4	0.4
Lab-097	No participation							
Lab-098	No participation							
Lab-099	No participation							
Lab-100	9.3	-2.2			53.7	-0.5	21.3	0.1
Lab-101					71.3	0.6	23.3	0.5
Lab-102	20.5	0.0			66.5	0.3	18.8	-0.3
Lab-103	19.2	-0.3			66.1	0.3	20.3	0.0
Lab-104	21.4	0.2			63.0	0.1	21.0	0.1
Lab-105	No results reported							
Lab-106	No participation							
Lab-107	20.9	0.1	47.4	-0.7	62.0	0.0	19.5	-0.2
Lab-108					0.6	-4.0	0.2	-4.0
Lab-109							19.1	-0.3
Lab-110	20.1	-0.1	52.5	-0.3	56.8	-0.3	20.2	-0.1
Lab-111	No results reported							
Lab-112	No results reported							
Lab-113	No participation							
Lab-114	No participation							
Lab-115	No results reported							
Lab-116	20.0	-0.1			50.2	-0.8	11.9	-1.7
Lab-117	No results reported							
Lab-118	25.2	0.9	61.8	0.4	52.8	-0.6	20.5	0.0
Lab-119	No participation							
Lab-120	No results reported							
Lab-121	20.3	0.0	58.7	0.1	87.0	1.6	21.3	0.1
Lab-122	No participation							
Lab-123	No participation							
Lab-124					65.6	0.2	19.0	-0.3
Lab-125	No results reported							
Lab-126	No participation							
Lab-127	No participation							
Lab-128					43.2	-1.2	13.5	-1.4
Lab-129					54.3	-0.5	23.8	0.6
Lab-130					55.0	-0.5		
Lab-131	No participation							
Lab-132	20.4	0.0	18.2	-2.7	72.4	0.7	16.7	-0.7

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Endosulfan Sulfate Only	z-Score (FFP RSD 25%)	Hexythiazox	z-Score (FFP RSD 25%)	Isofenphos-methyl	z-Score (FFP RSD 25%)	Kresoxym-methyl	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	39.7		41.1		54.0		59.2	
Lab-001	39.8	0.0	52.2	1.1			42.9	-1.1
Lab-002	19.0	-2.1	36.2	-0.5			55.5	-0.3
Lab-003	No results reported							
Lab-004	No results reported							
Lab-005	No participation							
Lab-006	39.8	0.0					52.8	-0.4
Lab-007	36.1	-0.4	39.9	-0.1	51.2	-0.2	61.0	0.1
Lab-008	42.7	0.3	44.1	0.3	53.7	0.0	61.4	0.1
Lab-009	43.2	0.4	41.5	0.0	50.5	-0.3	53.3	-0.4
Lab-010	40.0	0.0	60.0	1.8			60.0	0.1
Lab-011	32.0	-0.8	32.0	-0.9	54.4	0.0	61.9	0.2
Lab-012	No results reported							
Lab-013	37.8	-0.2	44.2	0.3	55.0	0.1	57.1	-0.1
Lab-014	75.4	3.6	24.1	-1.7	31.6	-1.7	62.1	0.2
Lab-015	No participation							
Lab-016	No results reported							
Lab-017	40.8	0.1	33.8	-0.7	46.2	-0.6	61.2	0.1
Lab-018	43.0	0.3	53.0	1.2			62.0	0.2
Lab-019	37.4	-0.2	26.9	-1.4	49.5	-0.3	53.7	-0.4
Lab-020	18.3	-2.2	32.1	-0.9	55.6	0.1	72.3	0.9
Lab-021	25.5	-1.4			55.6	0.1	77.0	1.2
Lab-022	37.9	-0.2	41.6	0.1			60.1	0.1
Lab-023	No results reported							
Lab-024			34.0	-0.7	50.7	-0.2	62.8	0.2
Lab-025	No results reported							
Lab-026	58.5	1.9	34.0	-0.7			78.9	1.3
Lab-027	No participation							
Lab-028	No results reported							
Lab-029	41.4	0.2					59.2	0.0
Lab-030			31.7	-0.9	55.2	0.1	64.2	0.3
Lab-031			47.4	0.6	55.0	0.1	62.6	0.2
Lab-032								
Lab-033	No results reported							
Lab-034	No participation							
Lab-035	23.7	-1.6	89.0	4.7	47.0	-0.5	58.2	-0.1
Lab-036	33.4	-0.6	39.4	-0.2	43.9	-0.7	47.3	-0.8
Lab-037	69.6	3.0					88.9	2.0
Lab-038	37.3	-0.2	36.3	-0.5	45.8	-0.6	48.6	-0.7
Lab-039	No participation							
Lab-040	38.1	-0.2	38.4	-0.3	51.4	-0.2	51.6	-0.5
Lab-041	No participation							
Lab-042	43.2	0.3	41.2	0.0	59.7	0.4	62.7	0.2
Lab-043	43.2	0.4	44.0	0.3			59.8	0.0
Lab-044	59.7	2.0	49.3	0.8			81.8	1.5
Lab-045	36.5	-0.3	43.2	0.2	49.6	-0.3	64.3	0.3
Lab-046	44.0	0.4	41.8	0.1	64.7	0.8	64.7	0.4

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Endosulfan Sulfate Only	z-Score (FFP RSD 25%)	Hexythiazox	z-Score (FFP RSD 25%)	Isofenphos-methyl	z-Score (FFP RSD 25%)	Kresoxym-methyl	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	39.7		41.1		54.0		59.2	
Lab-047	38.0	-0.2	42.4	0.1	29.3	-1.8	45.7	-0.9
Lab-048	19.8	-2.0	20.1	-2.0	45.7	-0.6	49.1	-0.7
Lab-049	No participation							
Lab-050	No participation							
Lab-051	39.0	-0.1						
Lab-052	No results reported							
Lab-053	46.8	0.7					58.5	0.0
Lab-054	No results reported							
Lab-055								
Lab-056	No participation							
Lab-057	40.0	0.0					68.0	0.6
Lab-058	No participation							
Lab-059	55.0	1.5	42.4	0.1	55.2	0.1	58.1	-0.1
Lab-060	32.4	-0.7	31.4	-0.9	51.9	-0.2	54.5	-0.3
Lab-061	44.3	0.5			52.6	-0.1	39.2	-1.4
Lab-062	39.6	0.0	43.7	0.3	54.2	0.0	51.4	-0.5
Lab-063	No participation							
Lab-064	38.7	-0.1	41.9	0.1	67.5	1.0	65.9	0.5
Lab-065	No participation							
Lab-066	38.8	-0.1					57.2	-0.1
Lab-067	40.5	0.1	54.6	1.3	67.8	1.0	75.1	1.1
Lab-068	42.2	0.2	57.7	1.6	51.8	-0.2	70.5	0.8
Lab-069	40.5	0.1	22.5	-1.8	57.0	0.2	55.7	-0.2
Lab-070	40.0	0.0	44.2	0.3	48.7	-0.4	65.5	0.4
Lab-071			37.5	-0.3				
Lab-072	34.9	-0.5	44.0	0.3	62.2	0.6	61.9	0.2
Lab-073	41.3	0.2	41.0	0.0	55.8	0.1	57.5	-0.1
Lab-074	No participation							
Lab-075	No participation							
Lab-076	39.5	0.0	38.4	-0.3	90.9	2.7	50.6	-0.6
Lab-077			39.2	-0.2			62.7	0.2
Lab-078	39.7	0.0	34.4	-0.6	53.1	-0.1	53.9	-0.4
Lab-079	No results reported							
Lab-080	34.2	-0.6	31.5	-0.9			59.5	0.0
Lab-081	No results reported							
Lab-082			32.0	-0.9	70.0	1.2	55.0	-0.3
Lab-083	No participation							
Lab-084			41.3	0.0				
Lab-085	45.5	0.6					60.0	0.1
Lab-086	38.7	-0.1					41.2	-1.2
Lab-087							54.2	-0.3
Lab-088	36.3	-0.3	41.1	0.0			48.6	-0.7
Lab-089	39.3	0.0	44.4	0.3	57.5	0.3	54.8	-0.3
Lab-090	44.1	0.4	46.8	0.6	60.3	0.5	68.0	0.6
Lab-091							56.6	-0.2
Lab-092	No participation							
Lab-093	No results reported							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Endosulfan Sulfate Only	z-Score (FFP RSD 25%)	Hexythiazox	z-Score (FFP RSD 25%)	Isofenphos-methyl	z-Score (FFP RSD 25%)	Kresoxym-methyl	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	39.7		41.1		54.0		59.2	
Lab-094	No participation							
Lab-095	46.4	0.7	36.4	-0.5	64.3	0.8	66.9	0.5
Lab-096	47.8	0.8					62.5	0.2
Lab-097	No participation							
Lab-098	No participation							
Lab-099	No participation							
Lab-100							42.9	-1.1
Lab-101	47.8	0.8					64.2	0.3
Lab-102	44.1	0.4	43.3	0.2	50.8	-0.2	57.9	-0.1
Lab-103	36.6	-0.3	37.5	-0.3	60.7	0.5	59.9	0.0
Lab-104	34.5	-0.5	39.3	-0.2			58.0	-0.1
Lab-105	No results reported							
Lab-106	No participation							
Lab-107	42.0	0.2	41.1	0.0			54.7	-0.3
Lab-108								
Lab-109	36.6	-0.3						
Lab-110	41.2	0.2	42.6	0.1	54.7	0.1	56.3	-0.2
Lab-111	No results reported							
Lab-112	No results reported							
Lab-113	No participation							
Lab-114	No participation							
Lab-115	No results reported							
Lab-116	48.7	0.9					62.7	0.2
Lab-117	No results reported							
Lab-118	23.2	-1.7	90.0	4.8	51.7	-0.2	46.3	-0.9
Lab-119	No participation							
Lab-120	No results reported							
Lab-121	45.0	0.5	40.0	-0.1	52.0	-0.1	57.3	-0.1
Lab-122	No participation							
Lab-123	No participation							
Lab-124	39.0	-0.1						
Lab-125	No results reported							
Lab-126	No participation							
Lab-127	No participation							
Lab-128								
Lab-129	28.4	-1.1						
Lab-130	36.0	-0.4			57.0	0.2	61.0	0.1
Lab-131	No participation							
Lab-132	31.6	-0.8	26.3	-1.4	51.5	-0.2	29.6	-2.0

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Malathion Only	z-Score (FFP RSD 25%)	Methamidophos	z-Score (FFP RSD 25%)	Methiocarb Only	z-Score (FFP RSD 25%)	Methomyl Only	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	61.9		16.4		40.5		41.1	
Lab-001	52.1	-1.0			37.4	-0.3	37.1	-0.4
Lab-002	58.0	-0.6	12.8	-0.9	40.1	0.0	40.6	0.0
Lab-003	No results reported							
Lab-004	No results reported							
Lab-005	No participation							
Lab-006	62.1	-0.4						
Lab-007	63.5	-0.3	17.3	0.2	44.8	0.4	40.9	0.0
Lab-008	70.0	0.0	17.1	0.2	40.2	0.0	49.7	0.8
Lab-009	64.0	-0.3	39.6	5.0	40.2	0.0	39.2	-0.2
Lab-010	60.0	-0.5	20.0	0.9	40.0	0.0	40.0	-0.1
Lab-011	69.2	0.0	20.8	1.1	41.0	0.1	42.8	0.2
Lab-012	No results reported							
Lab-013	60.2	-0.5	16.6	0.1	44.4	0.4	47.6	0.6
Lab-014	41.7	-1.6	87.4	5.0	13.9	-2.6		
Lab-015	No participation							
Lab-016	No results reported							
Lab-017	42.3	-1.6	9.4	-1.7	39.0	-0.1	42.9	0.2
Lab-018	50.0	-1.1	62.0	5.0	19.0	-2.1		
Lab-019	57.0	-0.7	14.0	-0.6			30.6	-1.0
Lab-020	50.6	-1.1	19.3	0.7	35.8	-0.5	46.6	0.5
Lab-021	56.3	-0.7	18.9	0.6				
Lab-022	56.8	-0.7	11.5	-1.2	35.9	-0.4	38.8	-0.2
Lab-023	No results reported							
Lab-024	67.6	-0.1	18.9	0.6	37.8	-0.3	45.1	0.4
Lab-025	No results reported							
Lab-026	73.9	0.3	25.0	2.1	43.5	0.3	49.0	0.8
Lab-027	No participation							
Lab-028	No results reported							
Lab-029	67.1	-0.1	13.0	-0.8				
Lab-030	69.5	0.0	14.6	-0.4	43.0	0.3	31.6	-0.9
Lab-031	59.1	-0.6	14.4	-0.5	32.8	-0.8		
Lab-032					47.4	0.7	40.1	-0.1
Lab-033	No results reported							
Lab-034	No participation							
Lab-035	39.5	-1.7	5.0	-2.8	57.0	1.6	64.5	2.3
Lab-036	51.4	-1.0	16.5	0.0	37.7	-0.3	41.7	0.1
Lab-037	100.2	1.8						
Lab-038	51.0	-1.1	13.1	-0.8	38.9	-0.2	41.8	0.1
Lab-039	No participation							
Lab-040	77.3	0.5	20.6	1.0	50.2	1.0	41.0	0.0
Lab-041	No participation							
Lab-042	67.8	-0.1	15.4	-0.2	40.7	0.0	40.3	-0.1
Lab-043	59.2	-0.6	17.1	0.2	39.7	-0.1	43.5	0.2
Lab-044	71.2	0.1			40.0	0.0	40.0	-0.1
Lab-045	63.8	-0.3	15.1	-0.3	52.2	1.2	40.6	0.0
Lab-046	72.7	0.2	18.3	0.5	43.4	0.3	37.8	-0.3

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Malathion Only	z-Score (FFP RSD 25%)	Methamidophos	z-Score (FFP RSD 25%)	Methiocarb Only	z-Score (FFP RSD 25%)	Methomyl Only	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	61.9		16.4		40.5		41.1	
Lab-047	73.8	0.3	20.1	0.9	41.9	0.1	41.8	0.1
Lab-048	35.8	-1.9	17.1	0.2	45.4	0.5	41.2	0.0
Lab-049	No participation							
Lab-050	No participation							
Lab-051	45.7	-1.4			36.1	-0.4		
Lab-052	No results reported							
Lab-053	53.5	-0.9						
Lab-054	No results reported							
Lab-055	72.0	0.2						
Lab-056	No participation							
Lab-057	78.0	0.5	41.0	5.0	44.0	0.4		
Lab-058	No participation							
Lab-059	67.5	-0.1	16.3	0.0	38.1	-0.2	40.1	-0.1
Lab-060	62.3	-0.4	20.2	0.9	47.9	0.7	38.0	-0.3
Lab-061	46.5	-1.3						
Lab-062	64.0	-0.3	22.2	1.4	41.3	0.1	39.5	-0.2
Lab-063	No participation							
Lab-064	65.2	-0.2	14.2	-0.5	45.6	0.5	39.7	-0.1
Lab-065	No participation							
Lab-066	72.1	0.2						
Lab-067	80.4	0.6	47.3	5.0	60.7	2.0	24.9	-1.6
Lab-068	63.2	-0.3	22.9	1.6	39.3	-0.1	45.9	0.5
Lab-069	75.2	0.3	24.3	1.9	47.0	0.6	45.8	0.5
Lab-070	66.9	-0.1	15.4	-0.2	46.8	0.6	38.7	-0.2
Lab-071	67.5	-0.1			40.2	0.0	41.2	0.0
Lab-072	67.8	-0.1	15.4	-0.2	50.8	1.0	44.8	0.4
Lab-073	90.4	1.2	25.5	2.2			62.1	2.0
Lab-074	No participation							
Lab-075	No participation							
Lab-076	56.3	-0.7	18.4	0.5	60.9	2.0	48.0	0.7
Lab-077	61.9	-0.4	14.7	-0.4	55.8	1.5	37.5	-0.4
Lab-078	60.2	-0.5	13.4	-0.7	39.7	-0.1	34.4	-0.7
Lab-079	No results reported							
Lab-080	67.5	-0.1	12.8	-0.9	40.7	0.0	33.9	-0.7
Lab-081	No results reported							
Lab-082	45.0	-1.4	13.0	-0.8			57.0	1.6
Lab-083	No participation							
Lab-084			19.6	0.8	75.0	3.4	43.7	0.3
Lab-085	62.7	-0.4	16.0	-0.1	38.9	-0.2	42.0	0.1
Lab-086	56.3	-0.7			36.8	-0.4	28.5	-1.2
Lab-087	55.0	-0.8	11.3	-1.2	39.8	-0.1		
Lab-088	121.1	3.0	15.4	-0.2				
Lab-089	61.8	-0.4	12.8	-0.9	34.2	-0.6	34.0	-0.7
Lab-090	61.4	-0.5	20.7	1.1	44.6	0.4	49.9	0.9
Lab-091	60.7	-0.5	23.0	1.6	20.1	-2.0	17.1	-2.3
Lab-092	No participation							
Lab-093	No results reported							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Malathion Only	z-Score (FFP RSD 25%)	Methamidophos	z-Score (FFP RSD 25%)	Methiocarb Only	z-Score (FFP RSD 25%)	Methomyl Only	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	61.9		16.4		40.5		41.1	
Lab-094	No participation							
Lab-095	81.1	0.7	37.9	5.0	16.9	-2.3	40.3	-0.1
Lab-096	62.8	-0.4						
Lab-097	No participation							
Lab-098	No participation							
Lab-099	No participation							
Lab-100	46.1	-1.3	15.1	-0.3			39.6	-0.1
Lab-101	68.1	-0.1			41.2	0.1	40.5	-0.1
Lab-102	59.1	-0.6	15.8	-0.1	47.8	0.7	45.4	0.4
Lab-103	64.3	-0.3	14.2	-0.5	38.0	-0.2	41.7	0.1
Lab-104	58.0	-0.6	13.8	-0.6	45.8	0.5	43.8	0.3
Lab-105	No results reported							
Lab-106	No participation							
Lab-107	53.8	-0.9	11.7	-1.1	32.6	-0.8	46.6	0.5
Lab-108	0.6	-4.0	0.2	-4.0				
Lab-109			12.4	-1.0				
Lab-110	62.1	-0.4	20.0	0.9	82.0	4.1	42.3	0.1
Lab-111	No results reported							
Lab-112	No results reported							
Lab-113	No participation							
Lab-114	No participation							
Lab-115	No results reported							
Lab-116	46.4	-1.3					32.2	-0.9
Lab-117	No results reported							
Lab-118	59.4	-0.6	26.3	2.4	66.0	2.5	53.5	1.2
Lab-119	No participation							
Lab-120	No results reported							
Lab-121	66.5	-0.2	16.4	0.0	37.5	-0.3	42.9	0.2
Lab-122	No participation							
Lab-123	No participation							
Lab-124	64.8	-0.3						
Lab-125	No results reported							
Lab-126	No participation							
Lab-127	No participation							
Lab-128	53.7	-0.9	12.6	-0.9				
Lab-129	69.2	0.0			40.1	0.0	54.9	1.3
Lab-130	61.0	-0.5	15.0	-0.3	74.0	3.3		
Lab-131	No participation							
Lab-132	51.5	-1.0	14.6	-0.4	1.5	-3.8	37.3	-0.4

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Oxamyl	z-Score (FFP RSD 25%)	Pendimethalin	z-Score (FFP RSD 25%)	Phosmet	z-Score (FFP RSD 25%)	Quinoxyfen	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	20.2		58.3		20.4		41.7	
Lab-001	16.4	-0.7	78.6	1.4	11.2	-1.8		
Lab-002	23.6	0.7	55.5	-0.2	21.0	0.1	41.5	0.0
Lab-003	No results reported							
Lab-004	No results reported							
Lab-005	No participation							
Lab-006			64.3	0.4				
Lab-007	29.2	1.8	58.8	0.0	20.5	0.0	41.7	0.0
Lab-008	21.3	0.2	63.4	0.4	21.3	0.2	44.0	0.2
Lab-009	23.8	0.7	53.9	-0.3	20.4	0.0	41.0	-0.1
Lab-010	30.0	1.9	60.0	0.1			40.0	-0.2
Lab-011	27.0	1.3	61.2	0.2	28.1	1.5	45.2	0.3
Lab-012	No results reported							
Lab-013	19.2	-0.2	58.3	0.0	15.6	-0.9	45.7	0.4
Lab-014					8.80	-2.3	32.1	-0.9
Lab-015	No participation							
Lab-016	No results reported							
Lab-017	16.4	-0.8	53.9	-0.3	20.6	0.0	43.6	0.2
Lab-018	16.0	-0.8	40.0	-1.3			18.0	-2.3
Lab-019			55.0	-0.2	21.6	0.2	38.1	-0.3
Lab-020	21.6	0.3	88.9	2.1			24.8	-1.6
Lab-021					23.0	0.5	38.9	-0.3
Lab-022	18.7	-0.3	57.5	-0.1	13.1	-1.4	42.2	0.0
Lab-023	No results reported							
Lab-024	21.6	0.3	74.3	1.1	21.2	0.2	50.1	0.8
Lab-025	No results reported							
Lab-026	18.9	-0.3	48.3	-0.7	15.0	-1.1	41.9	0.0
Lab-027	No participation							
Lab-028	No results reported							
Lab-029							39.8	-0.2
Lab-030	20.2	0.0	58.3	0.0	20.2	0.0	29.4	-1.2
Lab-031	20.3	0.0	58.8	0.0	18.9	-0.3	43.1	0.1
Lab-032	15.5	-0.9						
Lab-033	No results reported							
Lab-034	No participation							
Lab-035	31.2	2.2	55.1	-0.2	20.4	0.0	37.3	-0.4
Lab-036	20.4	0.0	38.5	-1.4	19.8	-0.1	37.7	-0.4
Lab-037								
Lab-038	22.6	0.5	48.5	-0.7	16.8	-0.7	35.7	-0.6
Lab-039	No participation							
Lab-040	27.2	1.4	61.2	0.2	30.3	2.0	53.3	1.1
Lab-041	No participation							
Lab-042	18.8	-0.3	62.1	0.3	19.2	-0.2	41.8	0.0
Lab-043	19.5	-0.1	61.1	0.2	20.6	0.0	39.8	-0.2
Lab-044	20.0	0.0	43.9	-1.0	29.6	1.8	55.6	1.3
Lab-045	20.4	0.0	54.6	-0.3	20.5	0.0	49.0	0.7
Lab-046	16.7	-0.7	95.4	2.5			54.4	1.2

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Oxamyl	z-Score (FFP RSD 25%)	Pendimethalin	z-Score (FFP RSD 25%)	Phosmet	z-Score (FFP RSD 25%)	Quinoxyfen	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	20.2		58.3		20.4		41.7	
Lab-047	20.0	0.0	50.3	-0.5	29.6	1.8	39.3	-0.2
Lab-048	19.3	-0.2	37.8	-1.4	3.8	-3.3	33.9	-0.7
Lab-049	No participation							
Lab-050	No participation							
Lab-051					11.3	-1.8		
Lab-052	No results reported							
Lab-053			53.0	-0.4	26.2	1.1		
Lab-054	No results reported							
Lab-055								
Lab-056	No participation							
Lab-057			82.0	1.6	18.0	-0.5	29.0	-1.2
Lab-058	No participation							
Lab-059	19.5	-0.1	63.1	0.3	25.9	1.1	44.3	0.2
Lab-060	18.2	-0.4	57.6	0.0	18.0	-0.5	36.3	-0.5
Lab-061			51.8	-0.4	14.5	-1.2	27.6	-1.4
Lab-062	21.6	0.3	48.6	-0.7	23.1	0.5	41.5	0.0
Lab-063	No participation							
Lab-064	20.5	0.1	62.8	0.3	20.6	0.0	41.9	0.0
Lab-065	No participation							
Lab-066								
Lab-067	24.1	0.8	67.7	0.6	21.1	0.1	51.6	0.9
Lab-068	29.7	1.9	68.8	0.7	20.6	0.1	42.6	0.1
Lab-069	21.3	0.2	54.1	-0.3	22.1	0.3	46.1	0.4
Lab-070	19.6	-0.1	52.1	-0.4	19.8	-0.1	41.2	0.0
Lab-071	20.8	0.1						
Lab-072	19.9	-0.1	59.7	0.1	23.4	0.6	43.2	0.1
Lab-073	35.0	2.9	63.4	0.4	21.7	0.3	45.5	0.4
Lab-074	No participation							
Lab-075	No participation							
Lab-076	17.8	-0.5	55.5	-0.2	15.9	-0.9	37.1	-0.4
Lab-077	15.1	-1.0	157.8	5.0			41.9	0.0
Lab-078	16.6	-0.7	78.8	1.4	14.5	-1.2	36.8	-0.5
Lab-079	No results reported							
Lab-080	13.2	-1.4	58.0	0.0	25.3	1.0	36.4	-0.5
Lab-081	No results reported							
Lab-082					12.0	-1.6	65.0	2.2
Lab-083	No participation							
Lab-084	20.4	0.0						
Lab-085	21.0	0.2	61.0	0.2	17.5	-0.6	44.7	0.3
Lab-086	21.0	0.2	56.5	-0.1				
Lab-087			62.0	0.3	17.4	-0.6	41.9	0.0
Lab-088			55.0	-0.2	20.8	0.1	41.5	0.0
Lab-089	16.6	-0.7	61.1	0.2	23.5	0.6	43.8	0.2
Lab-090	22.4	0.4	66.0	0.5	21.2	0.2	46.7	0.5
Lab-091	10.7	-1.9	56.1	-0.1	17.2	-0.6		
Lab-092	No participation							
Lab-093	No results reported							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Oxamyl	z-Score (FFP RSD 25%)	Pendimethalin	z-Score (FFP RSD 25%)	Phosmet	z-Score (FFP RSD 25%)	Quinoxyfen	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01	
Median (mg/L)	20.2		58.3		20.4		41.7	
Lab-094	No participation							
Lab-095	15.9	-0.9	63.0	0.3	28.7	1.6	50.9	0.9
Lab-096							42.9	0.1
Lab-097	No participation							
Lab-098	No participation							
Lab-099	No participation							
Lab-100					18.5	-0.4		
Lab-101	20.3	0.0						
Lab-102	19.9	-0.1			19.6	-0.1	39.7	-0.2
Lab-103	19.6	-0.1	58.9	0.0	18.7	-0.3		
Lab-104	18.7	-0.3			11.0	-1.8	43.8	0.2
Lab-105	No results reported							
Lab-106	No participation							
Lab-107	22.5	0.4	52.5	-0.4	20.3	0.0	31.5	-1.0
Lab-108								
Lab-109					17.6	-0.5		
Lab-110	19.9	-0.1	56.5	-0.1	21.6	0.2	40.6	-0.1
Lab-111	No results reported							
Lab-112	No results reported							
Lab-113	No participation							
Lab-114	No participation							
Lab-115	No results reported							
Lab-116			52.7	-0.4			36.8	-0.5
Lab-117	No results reported							
Lab-118	28.6	1.7	46.5	-0.8	20.0	-0.1	49.5	0.7
Lab-119	No participation							
Lab-120	No results reported							
Lab-121	20.5	0.1	50.0	-0.6	20.1	-0.1	41.0	-0.1
Lab-122	No participation							
Lab-123	No participation							
Lab-124								
Lab-125	No results reported							
Lab-126	No participation							
Lab-127	No participation							
Lab-128								
Lab-129			58.3	0.0				
Lab-130			60.0	0.1			42.0	0.0
Lab-131	No participation							
Lab-132	16.8	-0.7	29.7	-2.0			31.2	-1.0

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

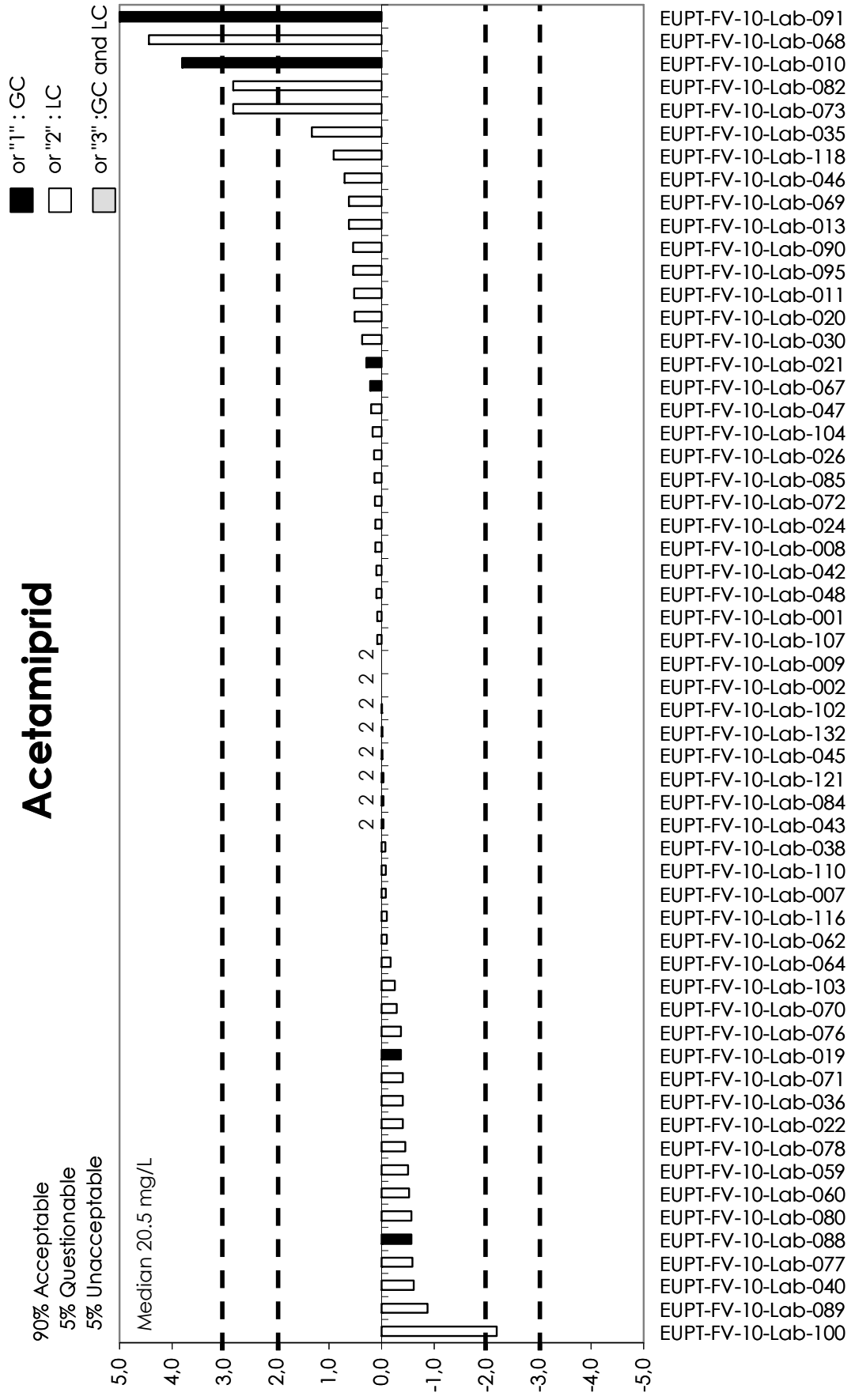
Lab Code	Triadimenol Only	z-Score (FFP RSD 25%)	Vinclozolin	z-Score (FFP RSD 25%)
MRRL	0.01		0.01	
Median (mg/L)	37.4		40.2	
Lab-001	34.0	-0.4	36.5	-0.4
Lab-002	40.5	0.3	40.1	0.0
Lab-003	No results reported			
Lab-004	No results reported			
Lab-005	No participation			
Lab-006			41.0	0.1
Lab-007	41.6	0.4	35.9	-0.4
Lab-008	16.9	-2.2	41.7	0.1
Lab-009	39.7	0.2	45.2	0.5
Lab-010	20.0	-1.9	40.0	0.0
Lab-011	20.2	-1.8	92.4	5.0
Lab-012	No results reported			
Lab-013	37.4	0.0	38.6	-0.2
Lab-014	43.6	0.7	34.2	-0.6
Lab-015	No participation			
Lab-016	No results reported			
Lab-017	20.6	-1.8	40.3	0.0
Lab-018	23.0	-1.5		
Lab-019	34.2	-0.3	38.4	-0.2
Lab-020	42.3	0.5	92.7	5.0
Lab-021	34.5	-0.3	34.1	-0.6
Lab-022	41.4	0.4	36.5	-0.4
Lab-023	No results reported			
Lab-024	39.9	0.3	44.5	0.4
Lab-025	No results reported			
Lab-026	358.0	5.0	67.3	2.7
Lab-027	No participation			
Lab-028	No results reported			
Lab-029	33.7	-0.4	39.8	0.0
Lab-030	22.0	-1.6	42.2	0.2
Lab-031	42.0	0.5	45.1	0.5
Lab-032				
Lab-033	No results reported			
Lab-034	No participation			
Lab-035	4.0	-3.6	31.1	-0.9
Lab-036	20.2	-1.8	33.6	-0.7
Lab-037			54.7	1.4
Lab-038	31.9	-0.6	34.4	-0.6
Lab-039	No participation			
Lab-040	49.6	1.3	38.7	-0.2
Lab-041	No participation			
Lab-042	19.9	-1.9	45.6	0.5
Lab-043	47.6	1.1	37.0	-0.3
Lab-044	44.2	0.7	37.1	-0.3
Lab-045	38.8	0.1	41.0	0.1
Lab-046	41.1	0.4	38.6	-0.2

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Triadimenol Only	z-Score (FFP RSD 25%)	Vinclozolin	z-Score (FFP RSD 25%)
MRRL	0.01		0.01	
Median (mg/L)	37.4		40.2	
Lab-047	39.1	0.2	28.5	-1.2
Lab-048	27.2	-1.1	28.1	-1.2
Lab-049	No participation			
Lab-050	No participation			
Lab-051	25.4	-1.3	41.2	0.1
Lab-052	No results reported			
Lab-053	32.5	-0.5	41.2	0.1
Lab-054	No results reported			
Lab-055			11.0	-2.9
Lab-056	No participation			
Lab-057	29.0	-0.9	46.0	0.6
Lab-058	No participation			
Lab-059	44.9	0.8	92.9	5.0
Lab-060	39.9	0.3	44.7	0.4
Lab-061	36.2	-0.1	34.8	-0.5
Lab-062	40.1	0.3	49.1	0.9
Lab-063	No participation			
Lab-064	43.5	0.7	44.4	0.4
Lab-065	No participation			
Lab-066	21.1	-1.7	38.6	-0.2
Lab-067	50.3	1.4	44.1	0.4
Lab-068	78.0	4.3	55.3	1.5
Lab-069	23.3	-1.5	40.9	0.1
Lab-070	45.0	0.8	38.4	-0.2
Lab-071				
Lab-072	40.9	0.4	40.2	0.0
Lab-073	38.6	0.1	50.5	1.0
Lab-074	No participation			
Lab-075	No participation			
Lab-076	24.9	-1.3	28.7	-1.1
Lab-077	24.8	-1.4	39.8	0.0
Lab-078	32.7	-0.5	31.2	-0.9
Lab-079	No results reported			
Lab-080	33.0	-0.5	38.1	-0.2
Lab-081	No results reported			
Lab-082	65.0	3.0	50.0	1.0
Lab-083	No participation			
Lab-084	44.8	0.8		
Lab-085	37.1	0.0	41.1	0.1
Lab-086			48.1	0.8
Lab-087	23.4	-1.5	32.7	-0.7
Lab-088	65.2	3.0	37.5	-0.3
Lab-089	24.6	-1.4	41.5	0.1
Lab-090	31.9	-0.6	47.6	0.7
Lab-091	240.1	5.0	44.7	0.4
Lab-092	No participation			
Lab-093	No results reported			

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Lab Code	Triadimenol Only	z-Score (FFP RSD 25%)	Vinclozolin	z-Score (FFP RSD 25%)
MRRL	0.01		0.01	
Median (mg/L)	37.4		40.2	
Lab-094	No participation			
Lab-095	49.0	1.2	40.3	0.0
Lab-096	16.1	-2.3	37.6	-0.3
Lab-097	No participation			
Lab-098	No participation			
Lab-099	No participation			
Lab-100			40.3	0.0
Lab-101			47.0	0.7
Lab-102	39.9	0.3	41.3	0.1
Lab-103	ND	-4.0	45.1	0.5
Lab-104	42.3	0.5	36.8	-0.3
Lab-105	No results reported			
Lab-106	No participation			
Lab-107	39.3	0.2	40.6	0.0
Lab-108				
Lab-109				
Lab-110	40.8	0.4	43.6	0.3
Lab-111	No results reported			
Lab-112	No results reported			
Lab-113	No participation			
Lab-114	No participation			
Lab-115	No results reported			
Lab-116	14.0	-2.5	29.6	-1.1
Lab-117	No results reported			
Lab-118	27.0	-1.1	37.6	-0.3
Lab-119	No participation			
Lab-120	No results reported			
Lab-121	41.9	0.5	39.0	-0.1
Lab-122	No participation			
Lab-123	No participation			
Lab-124			37.8	-0.2
Lab-125	No results reported			
Lab-126	No participation			
Lab-127	No participation			
Lab-128			32.7	-0.7
Lab-129	24.7	-1.4	39.3	-0.1
Lab-130	38.0	0.1	43.0	0.3
Lab-131				
Lab-132	63.9	2.8	35.4	-0.5


Acetamiprid
or "1" : GC
or "2" : LC
or "3" :GC and LC
90% Acceptable
5% Questionable
5% Unacceptable
Median 20.5 mg/L
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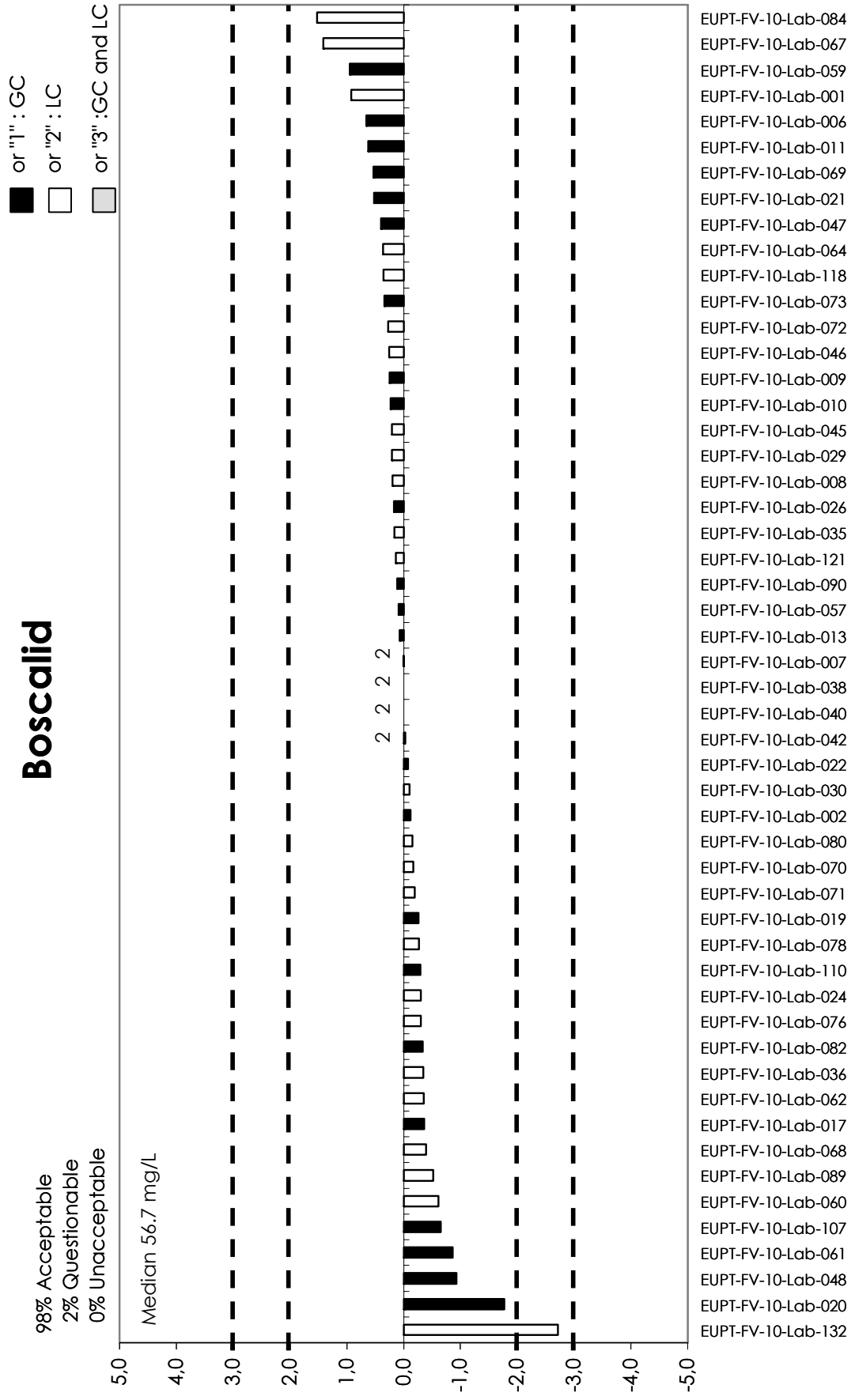
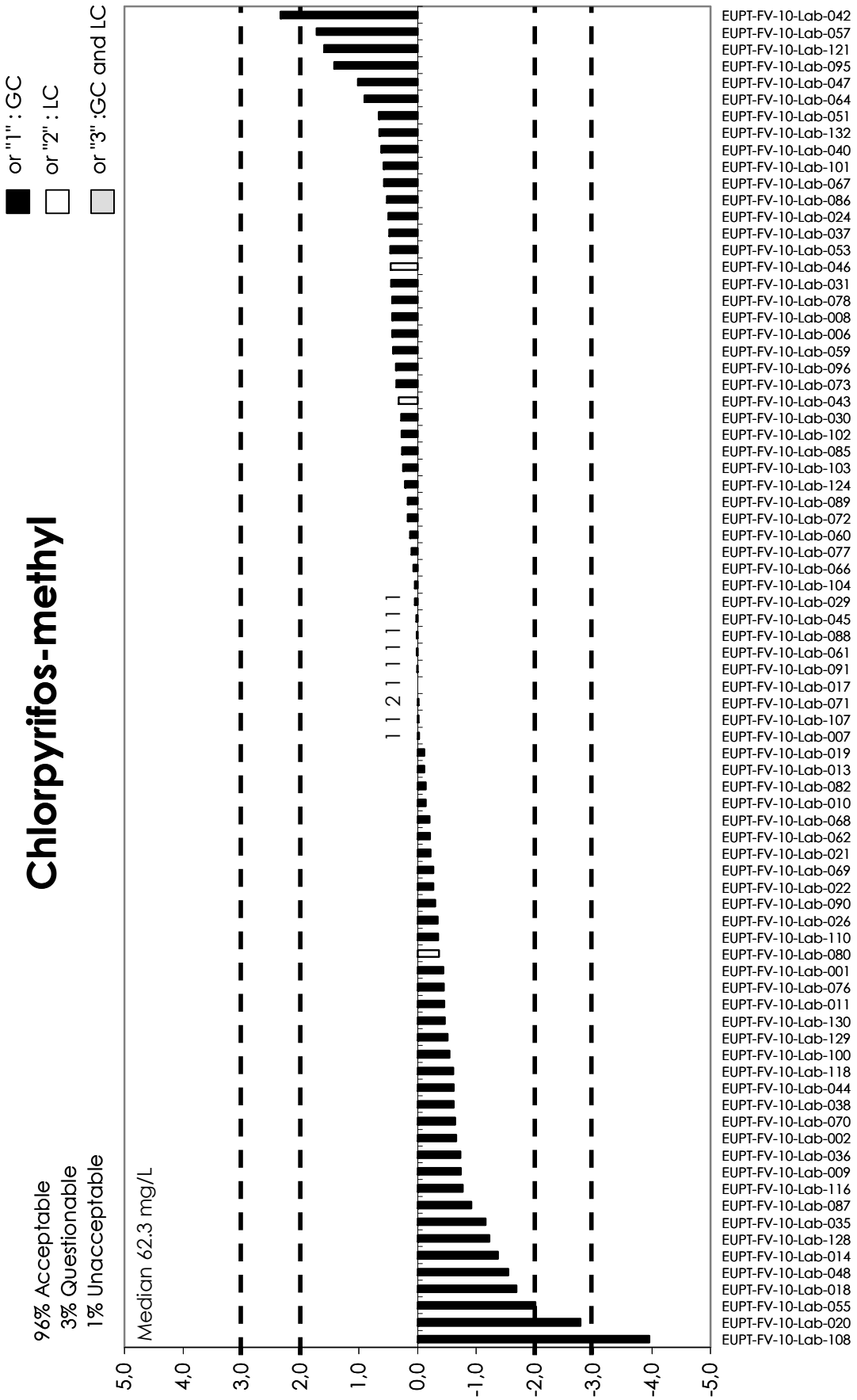
ANNEX 3. Ringtest of Standards Solution. Results and Participants.




Chlorpyrifos-methyl
or "1" : GC
or "2" : LC
or "3" :GC and LC
96% Acceptable
3% Questionable
1% Unacceptable
Median 62.3 mg/L
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EUPT-FV-10-Lab-103
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EUPT-FV-10-Lab-089
EUPT-FV-10-Lab-072
EUPT-FV-10-Lab-060
EUPT-FV-10-Lab-077
EUPT-FV-10-Lab-066
EUPT-FV-10-Lab-104
EUPT-FV-10-Lab-029
EUPT-FV-10-Lab-045
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EUPT-FV-10-Lab-017
EUPT-FV-10-Lab-071
EUPT-FV-10-Lab-107
EUPT-FV-10-Lab-007
EUPT-FV-10-Lab-019
EUPT-FV-10-Lab-013
EUPT-FV-10-Lab-082
EUPT-FV-10-Lab-010
EUPT-FV-10-Lab-068
EUPT-FV-10-Lab-062
EUPT-FV-10-Lab-021
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EUPT-FV-10-Lab-038
EUPT-FV-10-Lab-070
EUPT-FV-10-Lab-002
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EUPT-FV-10-Lab-087
EUPT-FV-10-Lab-035
EUPT-FV-10-Lab-128
EUPT-FV-10-Lab-014
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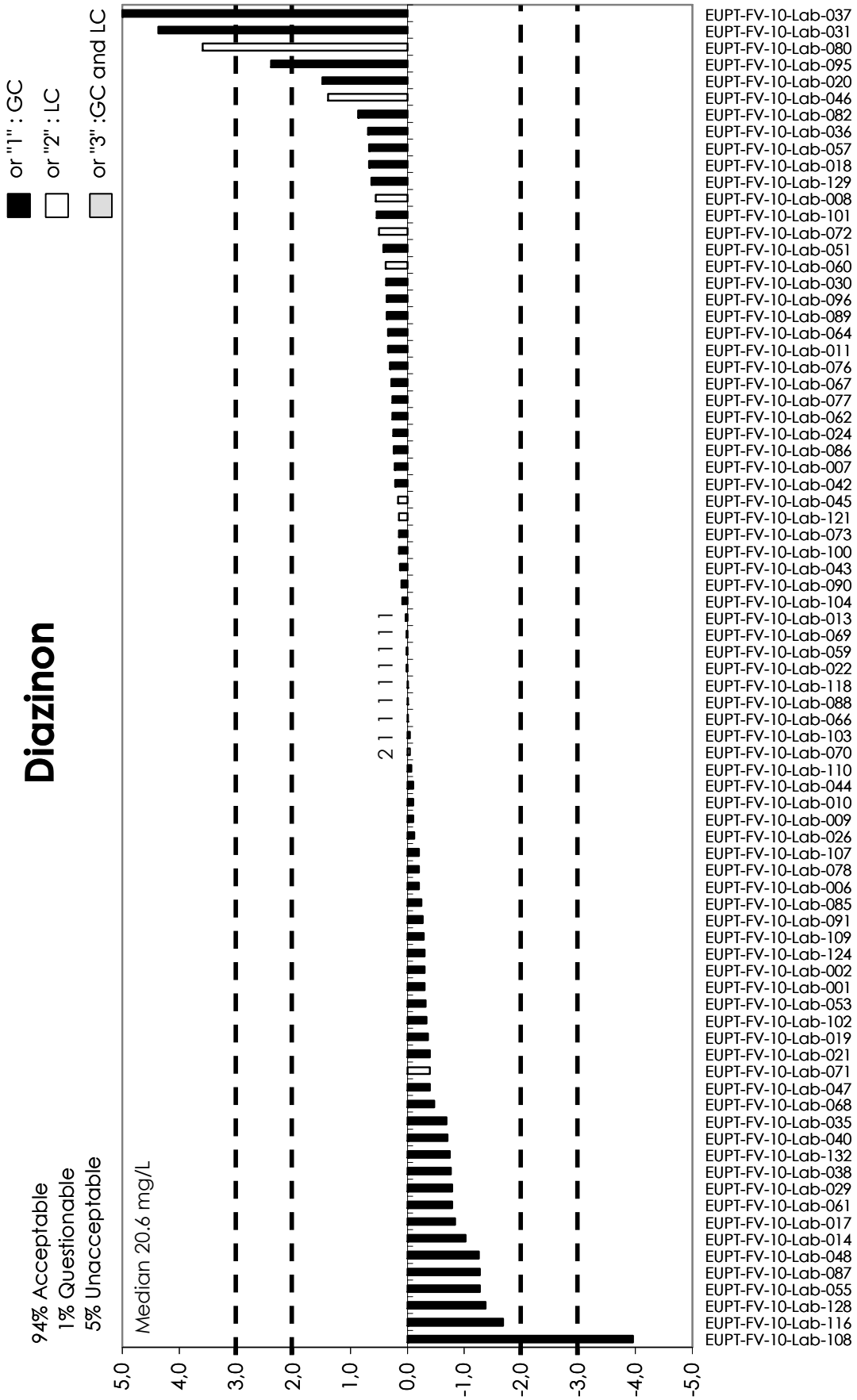
Diazinon
or "1" : GC
or "2" : LC
or "3" :GC and LC
94% Acceptable
1% Questionable
5% Unacceptable
Median 20.6 mg/L
2 1 1 1 1 1 1 1
5,0
4,0
3,0
2,0
1,0
0,0
-1,0
-2,0
-3,0
-4,0
-5,0
EUPT-FV-10-Lab-037
EUPT-FV-10-Lab-031
EUPT-FV-10-Lab-080
EUPT-FV-10-Lab-095
EUPT-FV-10-Lab-020
EUPT-FV-10-Lab-046
EUPT-FV-10-Lab-082
EUPT-FV-10-Lab-036
EUPT-FV-10-Lab-057
EUPT-FV-10-Lab-018
EUPT-FV-10-Lab-129
EUPT-FV-10-Lab-008
EUPT-FV-10-Lab-101
EUPT-FV-10-Lab-072
EUPT-FV-10-Lab-051
EUPT-FV-10-Lab-060
EUPT-FV-10-Lab-030
EUPT-FV-10-Lab-096
EUPT-FV-10-Lab-089
EUPT-FV-10-Lab-064
EUPT-FV-10-Lab-011
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EUPT-FV-10-Lab-086
EUPT-FV-10-Lab-007
EUPT-FV-10-Lab-042
EUPT-FV-10-Lab-045
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EUPT-FV-10-Lab-073
EUPT-FV-10-Lab-100
EUPT-FV-10-Lab-043
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EUPT-FV-10-Lab-013
EUPT-FV-10-Lab-069
EUPT-FV-10-Lab-059
EUPT-FV-10-Lab-022
EUPT-FV-10-Lab-118
EUPT-FV-10-Lab-088
EUPT-FV-10-Lab-066
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EUPT-FV-10-Lab-010
EUPT-FV-10-Lab-009
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EUPT-FV-10-Lab-001
EUPT-FV-10-Lab-053
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EUPT-FV-10-Lab-019
EUPT-FV-10-Lab-021
EUPT-FV-10-Lab-071
EUPT-FV-10-Lab-047
EUPT-FV-10-Lab-068
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EUPT-FV-10-Lab-132
EUPT-FV-10-Lab-038
EUPT-FV-10-Lab-029
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EUPT-FV-10-Lab-017
EUPT-FV-10-Lab-014
EUPT-FV-10-Lab-048
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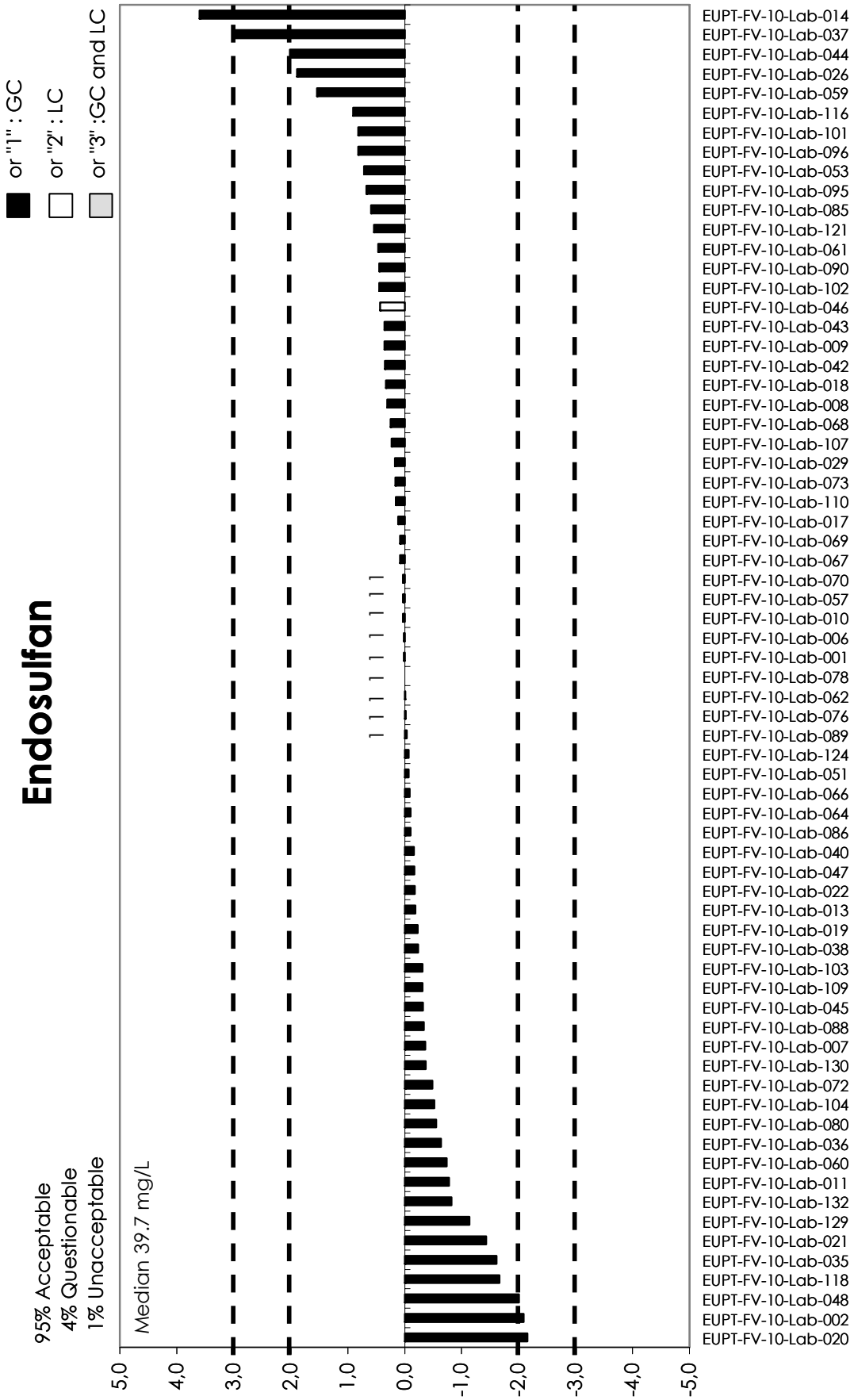
Endosulfan
or "1" : GC
or "2" : LC
or "3" :GC and LC
95% Acceptable
4% Questionable
1% Unacceptable
Median 39.7 mg/L
5,0
4,0
3,0
2,0
1,0
0,0
-1,0
-2,0
-3,0
-4,0
-5,0
EUPT-FV-10-Lab-014
EUPT-FV-10-Lab-037
EUPT-FV-10-Lab-044
EUPT-FV-10-Lab-026
EUPT-FV-10-Lab-059
EUPT-FV-10-Lab-116
EUPT-FV-10-Lab-101
EUPT-FV-10-Lab-096
EUPT-FV-10-Lab-053
EUPT-FV-10-Lab-095
EUPT-FV-10-Lab-085
EUPT-FV-10-Lab-121
EUPT-FV-10-Lab-061
EUPT-FV-10-Lab-090
EUPT-FV-10-Lab-102
EUPT-FV-10-Lab-046
EUPT-FV-10-Lab-043
EUPT-FV-10-Lab-009
EUPT-FV-10-Lab-042
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EUPT-FV-10-Lab-008
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EUPT-FV-10-Lab-029
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EUPT-FV-10-Lab-078
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EUPT-FV-10-Lab-080
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EUPT-FV-10-Lab-021
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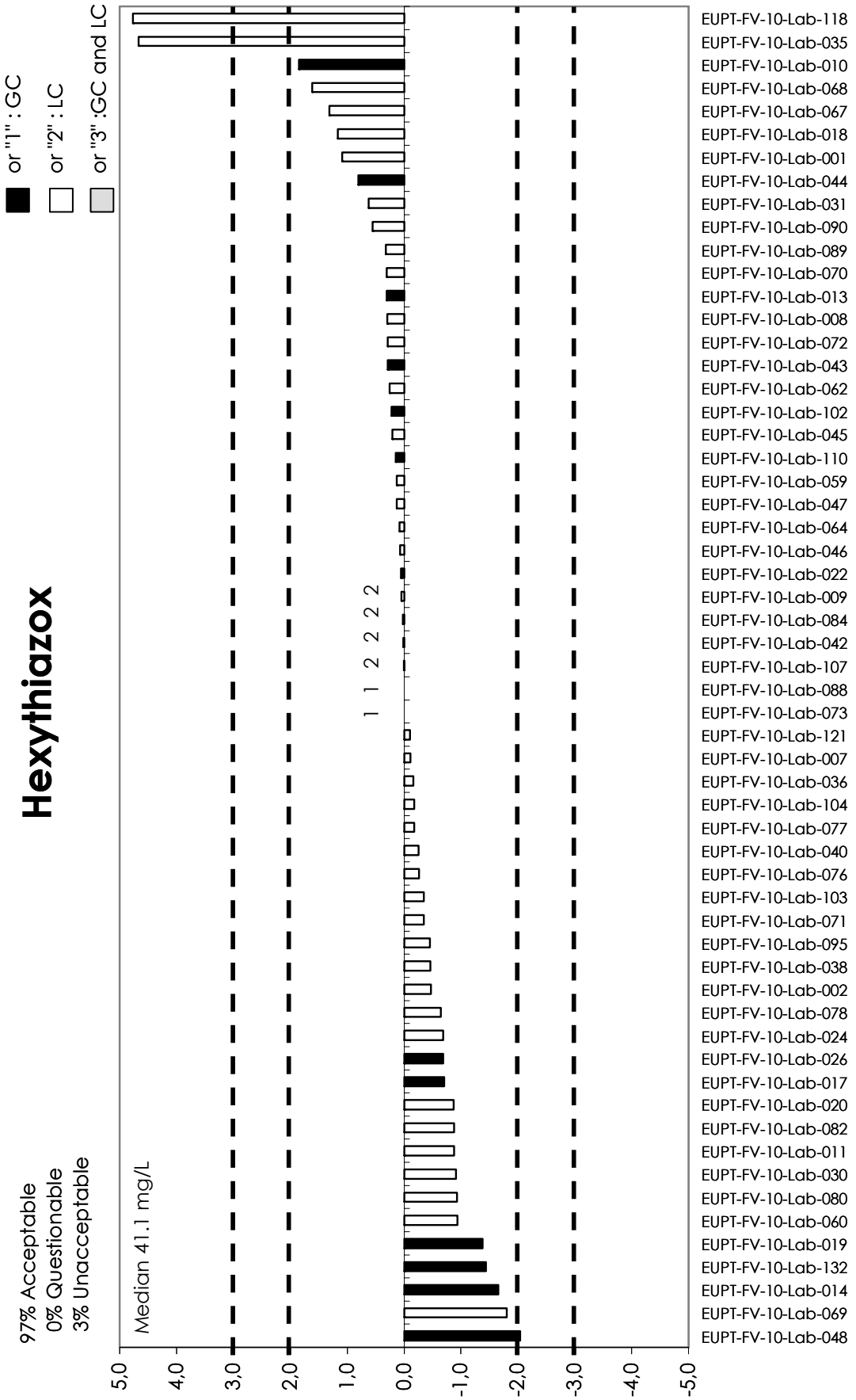
Hexythiazox
or "1" : GC
or "2" : LC
or "3" :GC and LC
97% Acceptable
0% Questionable
3% Unacceptable
Median 41.1 mg/L
1 1 2 2 2 2 2
5,0
4,0
3,0
2,0
1,0
0,0
-1,0
-2,0
-3,0
-4,0
-5,0
EUPT-FV-10-Lab-118
EUPT-FV-10-Lab-035
EUPT-FV-10-Lab-010
EUPT-FV-10-Lab-068
EUPT-FV-10-Lab-067
EUPT-FV-10-Lab-018
EUPT-FV-10-Lab-001
EUPT-FV-10-Lab-044
EUPT-FV-10-Lab-031
EUPT-FV-10-Lab-090
EUPT-FV-10-Lab-089
EUPT-FV-10-Lab-070
EUPT-FV-10-Lab-013
EUPT-FV-10-Lab-008
EUPT-FV-10-Lab-072
EUPT-FV-10-Lab-043
EUPT-FV-10-Lab-062
EUPT-FV-10-Lab-102
EUPT-FV-10-Lab-045
EUPT-FV-10-Lab-110
EUPT-FV-10-Lab-059
EUPT-FV-10-Lab-047
EUPT-FV-10-Lab-064
EUPT-FV-10-Lab-046
EUPT-FV-10-Lab-022
EUPT-FV-10-Lab-009
EUPT-FV-10-Lab-084
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EUPT-FV-10-Lab-107
EUPT-FV-10-Lab-088
EUPT-FV-10-Lab-073
EUPT-FV-10-Lab-121
EUPT-FV-10-Lab-007
EUPT-FV-10-Lab-036
EUPT-FV-10-Lab-104
EUPT-FV-10-Lab-077
EUPT-FV-10-Lab-040
EUPT-FV-10-Lab-076
EUPT-FV-10-Lab-103
EUPT-FV-10-Lab-071
EUPT-FV-10-Lab-095
EUPT-FV-10-Lab-038
EUPT-FV-10-Lab-002
EUPT-FV-10-Lab-078
EUPT-FV-10-Lab-024
EUPT-FV-10-Lab-026
EUPT-FV-10-Lab-017
EUPT-FV-10-Lab-020
EUPT-FV-10-Lab-082
EUPT-FV-10-Lab-011
EUPT-FV-10-Lab-030
EUPT-FV-10-Lab-080
EUPT-FV-10-Lab-060
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EUPT-FV-10-Lab-132
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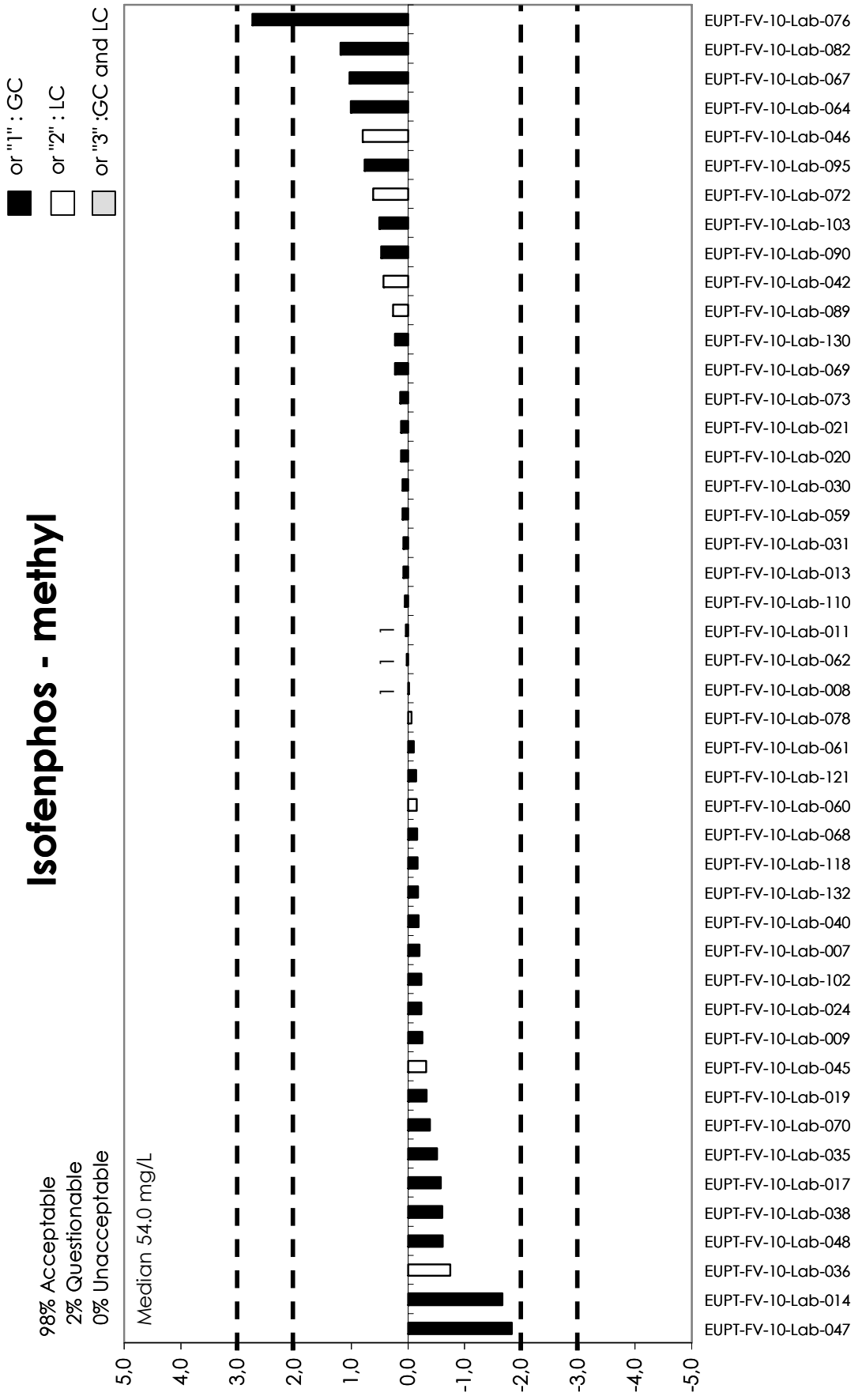
EUPT-FV-10-Lab-048


Isofenphos - methyl
or "1" : GC
or "2" : LC
or "3" :GC and LC
98% Acceptable
2% Questionable
0% Unacceptable
Median 54.0 mg/L
5,0
4,0
3,0
2,0
1,0
0,0
-1,0
-2,0
-3,0
-4,0
-5,0
EUPT-FV-10-Lab-076
EUPT-FV-10-Lab-082
EUPT-FV-10-Lab-067
EUPT-FV-10-Lab-064
EUPT-FV-10-Lab-046
EUPT-FV-10-Lab-095
EUPT-FV-10-Lab-072
EUPT-FV-10-Lab-103
EUPT-FV-10-Lab-090
EUPT-FV-10-Lab-042
EUPT-FV-10-Lab-089
EUPT-FV-10-Lab-130
EUPT-FV-10-Lab-069
EUPT-FV-10-Lab-073
EUPT-FV-10-Lab-021
EUPT-FV-10-Lab-020
EUPT-FV-10-Lab-030
EUPT-FV-10-Lab-059
EUPT-FV-10-Lab-031
EUPT-FV-10-Lab-013
EUPT-FV-10-Lab-110
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EUPT-FV-10-Lab-008
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EUPT-FV-10-Lab-060
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EUPT-FV-10-Lab-102
EUPT-FV-10-Lab-024
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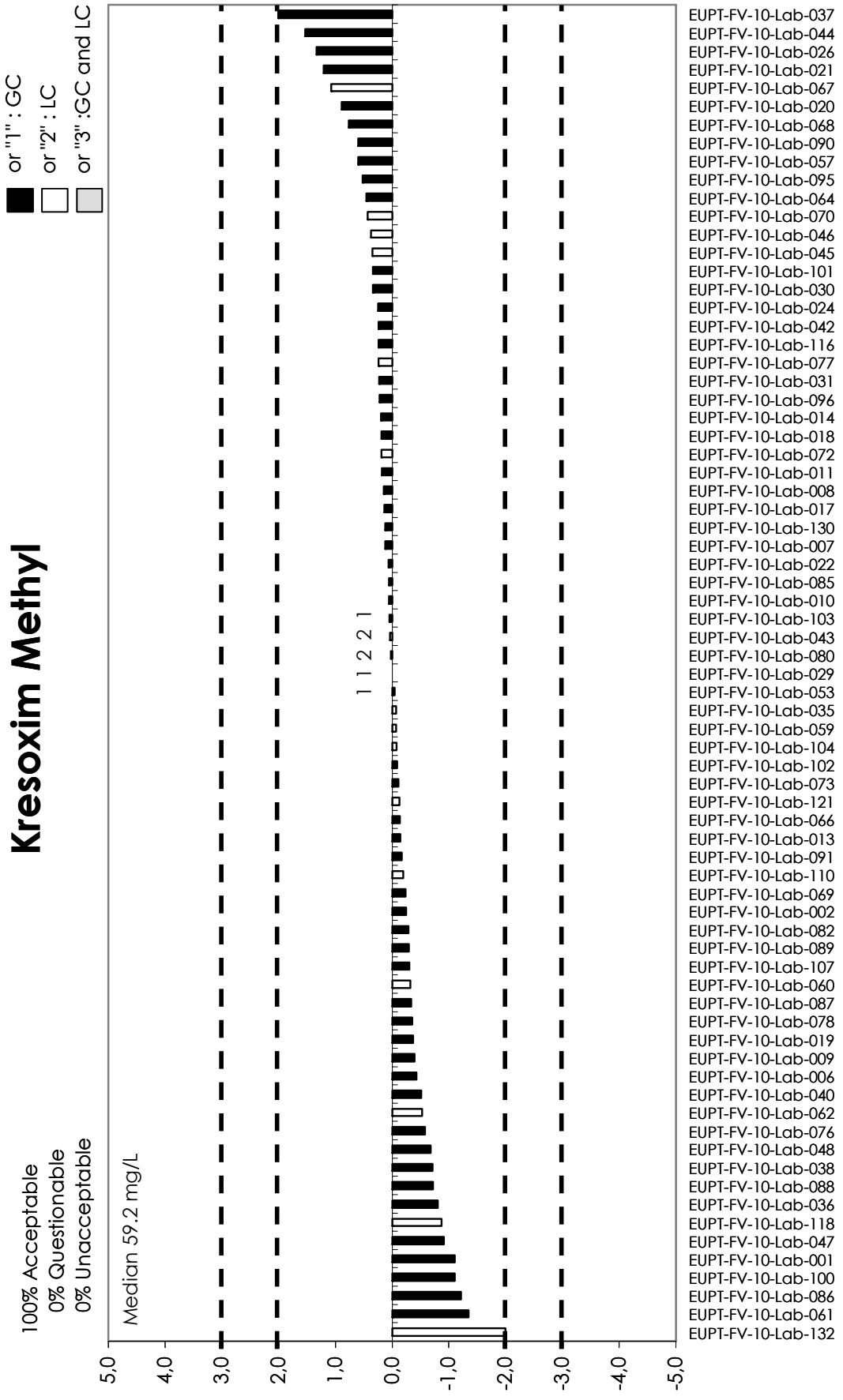
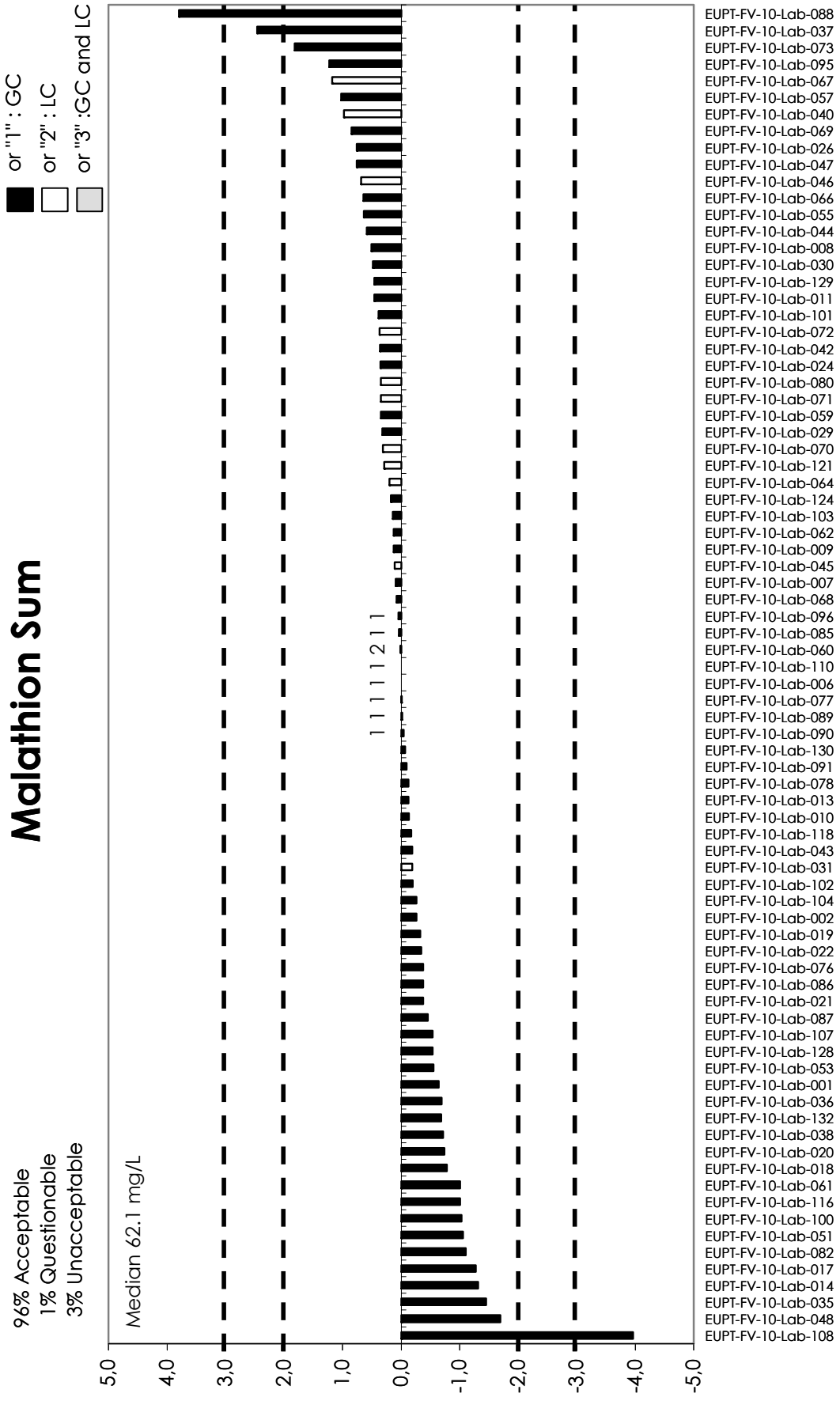
EUPT-FV-10-Lab-045
EUPT-FV-10-Lab-019
EUPT-FV-10-Lab-070
EUPT-FV-10-Lab-035
EUPT-FV-10-Lab-017
EUPT-FV-10-Lab-038
EUPT-FV-10-Lab-048
EUPT-FV-10-Lab-036
EUPT-FV-10-Lab-014
EUPT-FV-10-Lab-047

ANNEX 3. Ringtest of Standards Solution. Results and Participants.




Malathion Sum
or "1" : GC
or "2" : LC
or "3" :GC and LC
96% Acceptable
1% Questionable
3% Unacceptable
Median 62.1 mg/L
1 1 1 1 1 2 1 1
5,0
4,0
3,0
2,0
1,0
0,0
-1,0
-2,0
-3,0
-4,0
-5,0
EUPT-FV-10-Lab-088
EUPT-FV-10-Lab-037
EUPT-FV-10-Lab-073
EUPT-FV-10-Lab-095
EUPT-FV-10-Lab-067
EUPT-FV-10-Lab-057
EUPT-FV-10-Lab-040
EUPT-FV-10-Lab-069
EUPT-FV-10-Lab-026
EUPT-FV-10-Lab-047
EUPT-FV-10-Lab-046
EUPT-FV-10-Lab-066
EUPT-FV-10-Lab-055
EUPT-FV-10-Lab-044
EUPT-FV-10-Lab-008
EUPT-FV-10-Lab-030
EUPT-FV-10-Lab-129
EUPT-FV-10-Lab-011
EUPT-FV-10-Lab-101
EUPT-FV-10-Lab-072
EUPT-FV-10-Lab-042
EUPT-FV-10-Lab-024
EUPT-FV-10-Lab-080
EUPT-FV-10-Lab-071
EUPT-FV-10-Lab-059
EUPT-FV-10-Lab-029
EUPT-FV-10-Lab-070
EUPT-FV-10-Lab-121
EUPT-FV-10-Lab-064
EUPT-FV-10-Lab-124
EUPT-FV-10-Lab-103
EUPT-FV-10-Lab-062
EUPT-FV-10-Lab-009
EUPT-FV-10-Lab-045
EUPT-FV-10-Lab-007
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EUPT-FV-10-Lab-090
EUPT-FV-10-Lab-130
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EUPT-FV-10-Lab-021
EUPT-FV-10-Lab-087
EUPT-FV-10-Lab-107
EUPT-FV-10-Lab-128
EUPT-FV-10-Lab-053
EUPT-FV-10-Lab-001
EUPT-FV-10-Lab-036
EUPT-FV-10-Lab-132
EUPT-FV-10-Lab-038
EUPT-FV-10-Lab-020
EUPT-FV-10-Lab-018
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EUPT-FV-10-Lab-082
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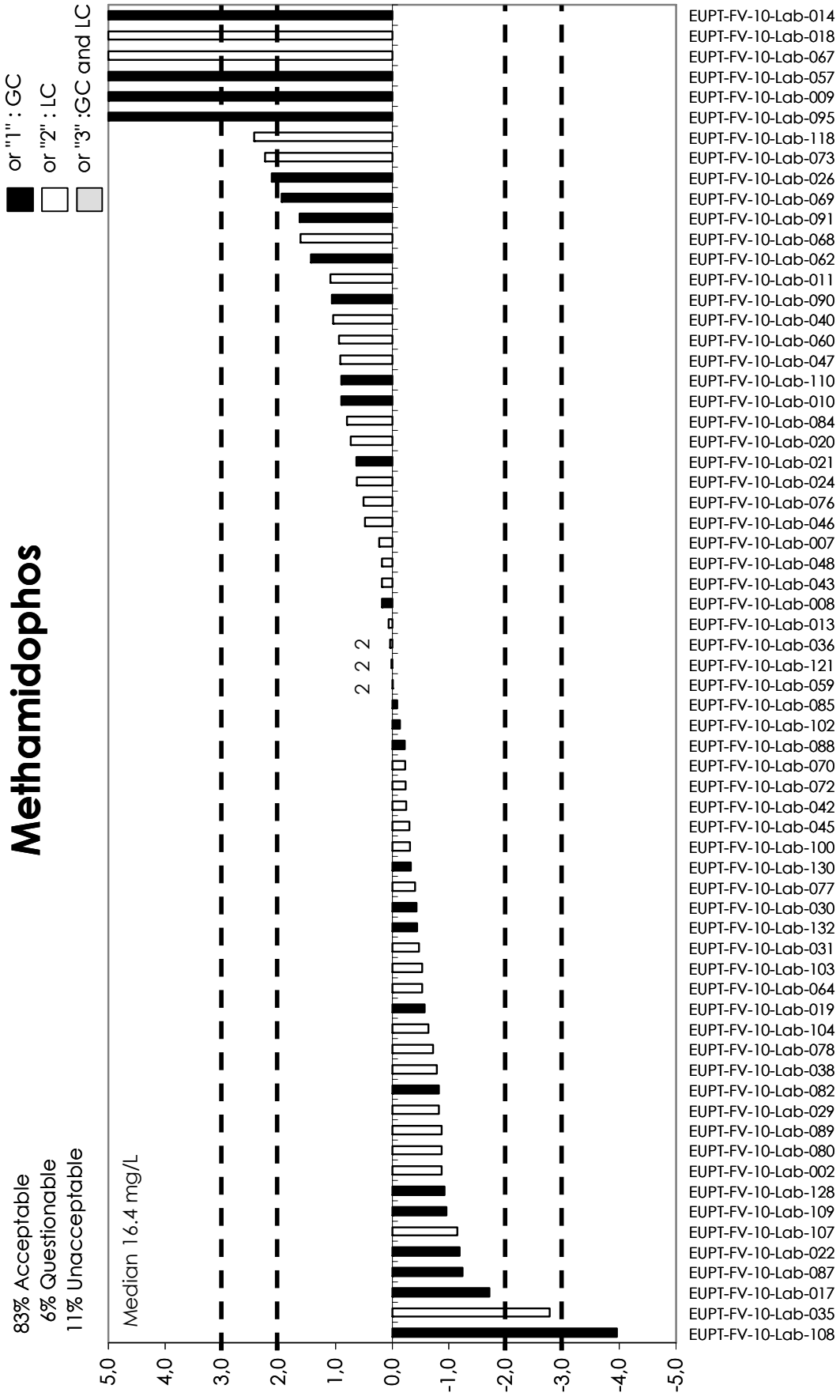
EUPT-FV-10-Lab-108


Methamidophos
or "1" : GC
or "2" : LC
or "3" :GC and LC
83% Acceptable
6% Questionable
11% Unacceptable
Median 16.4 mg/L
2 2 2
5,0
4,0
3,0
2,0
1,0
0,0
-1,0
-2,0
-3,0
-4,0
-5,0
EUPT-FV-10-Lab-014
EUPT-FV-10-Lab-018
EUPT-FV-10-Lab-067
EUPT-FV-10-Lab-057
EUPT-FV-10-Lab-009
EUPT-FV-10-Lab-095
EUPT-FV-10-Lab-118
EUPT-FV-10-Lab-073
EUPT-FV-10-Lab-026
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EUPT-FV-10-Lab-040
EUPT-FV-10-Lab-060
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EUPT-FV-10-Lab-107
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EUPT-FV-10-Lab-035
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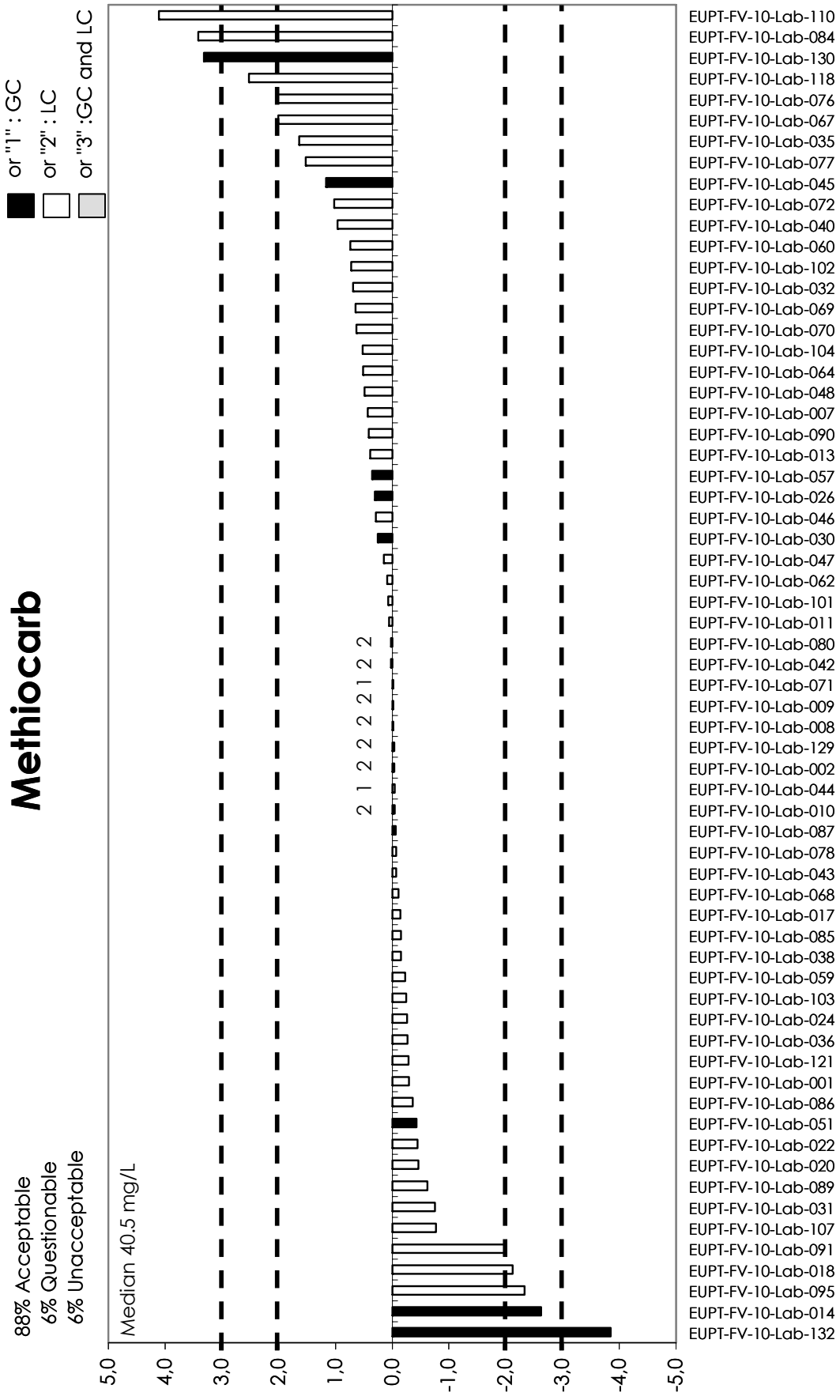
Methiocarb
or "1" : GC
or "2" : LC
or "3" :GC and LC
88% Acceptable
6% Questionable
6% Unacceptable
Median 40.5 mg/L
2 1 2 2 2 2 1 2 2
5,0
4,0
3,0
2,0
1,0
0,0
-1,0
-2,0
-3,0
-4,0
-5,0
EUPT-FV-10-Lab-110
EUPT-FV-10-Lab-084
EUPT-FV-10-Lab-130
EUPT-FV-10-Lab-118
EUPT-FV-10-Lab-076
EUPT-FV-10-Lab-067
EUPT-FV-10-Lab-035
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EUPT-FV-10-Lab-072
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EUPT-FV-10-Lab-032
EUPT-FV-10-Lab-069
EUPT-FV-10-Lab-070
EUPT-FV-10-Lab-104
EUPT-FV-10-Lab-064
EUPT-FV-10-Lab-048
EUPT-FV-10-Lab-007
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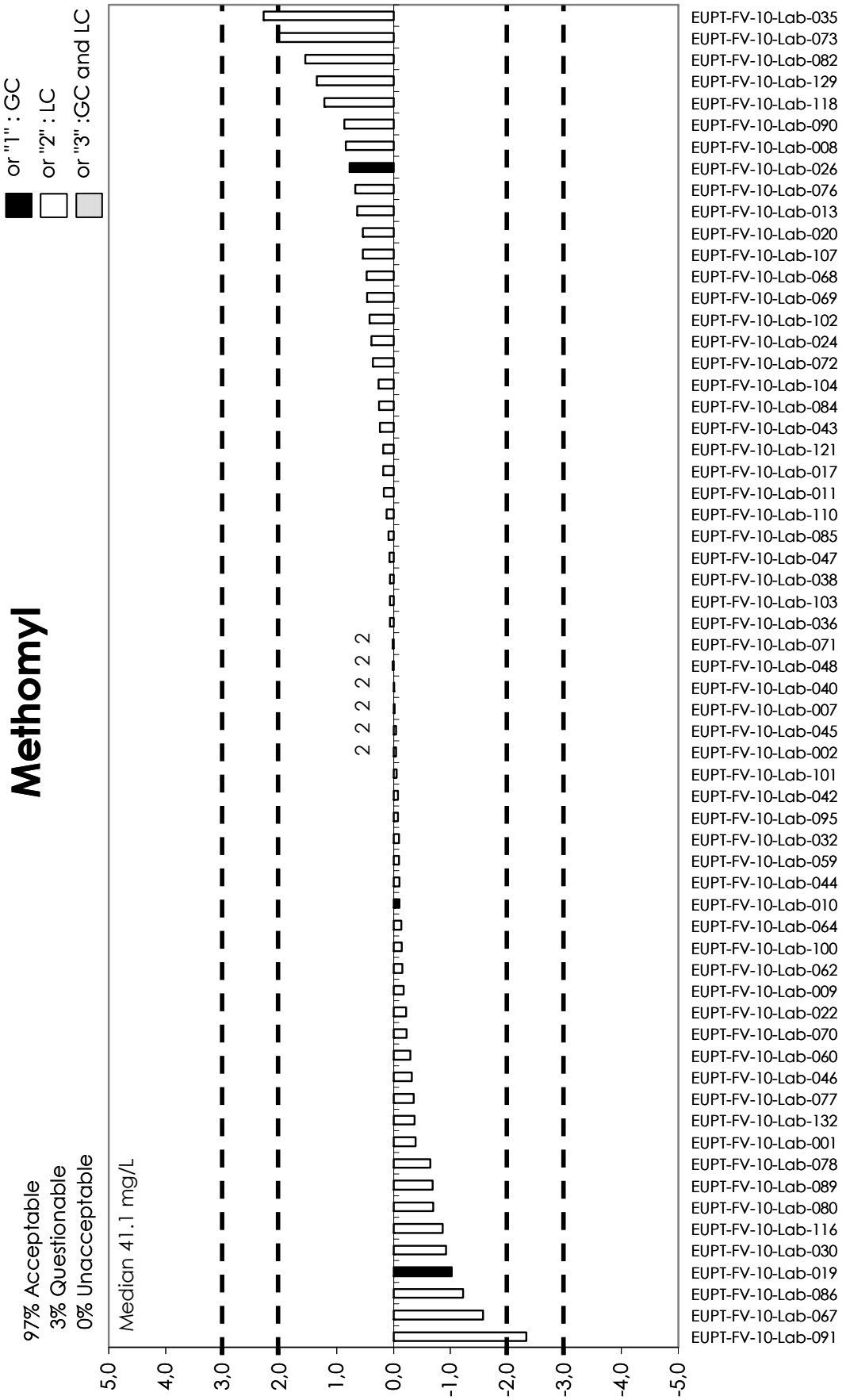
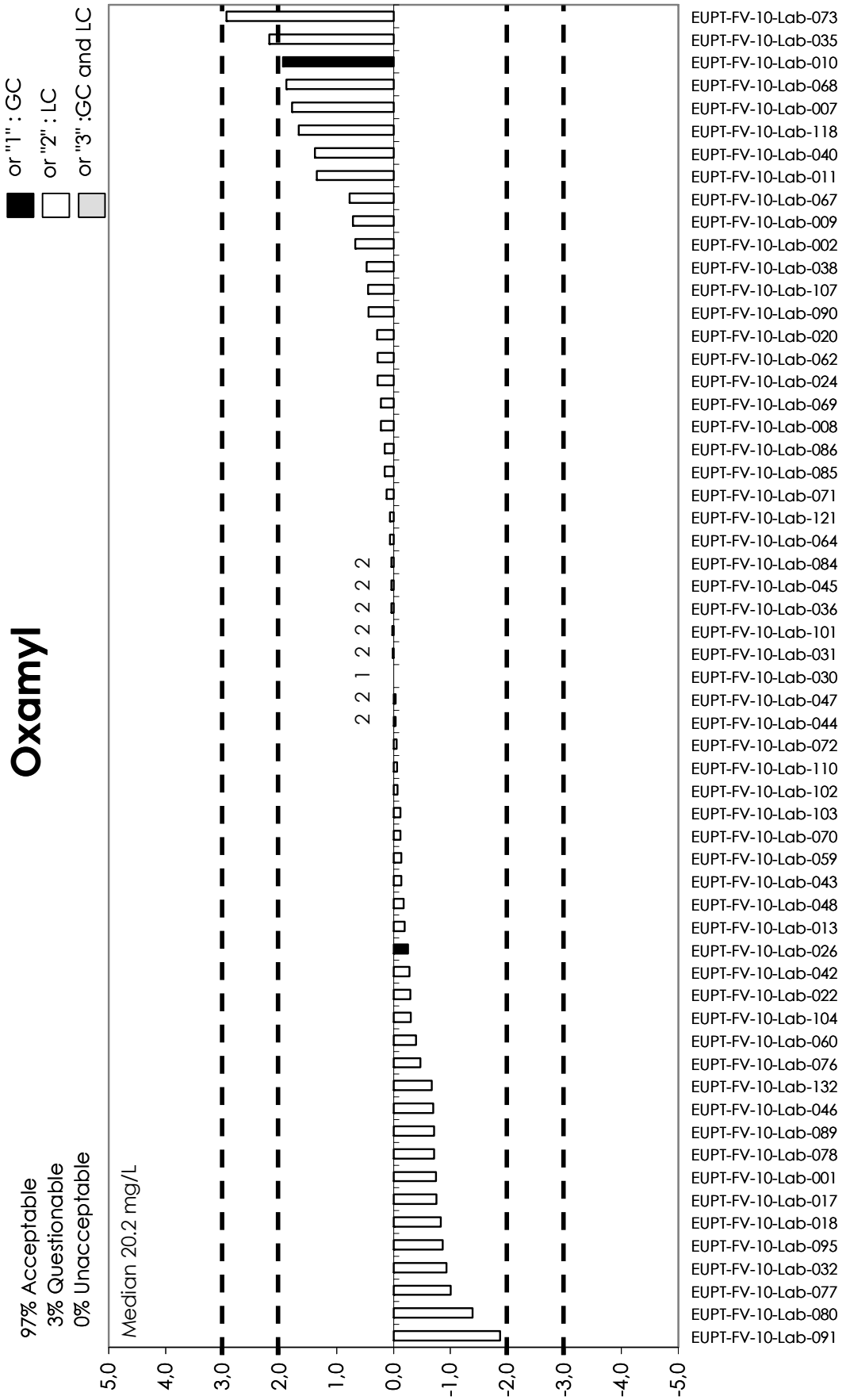
EUPT-FV-10-Lab-107
EUPT-FV-10-Lab-091
EUPT-FV-10-Lab-018
EUPT-FV-10-Lab-095
EUPT-FV-10-Lab-014
EUPT-FV-10-Lab-132

ANNEX 3. Ringtest of Standards Solution. Results and Participants.




Oxamyl
or "1" : GC
or "2" : LC
or "3" :GC and LC
97% Acceptable
3% Questionable
0% Unacceptable
Median 20.2 mg/L
2 2 1 2 2 2 2 2 2
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EUPT-FV-10-Lab-010
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EUPT-FV-10-Lab-121
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EUPT-FV-10-Lab-017
EUPT-FV-10-Lab-018
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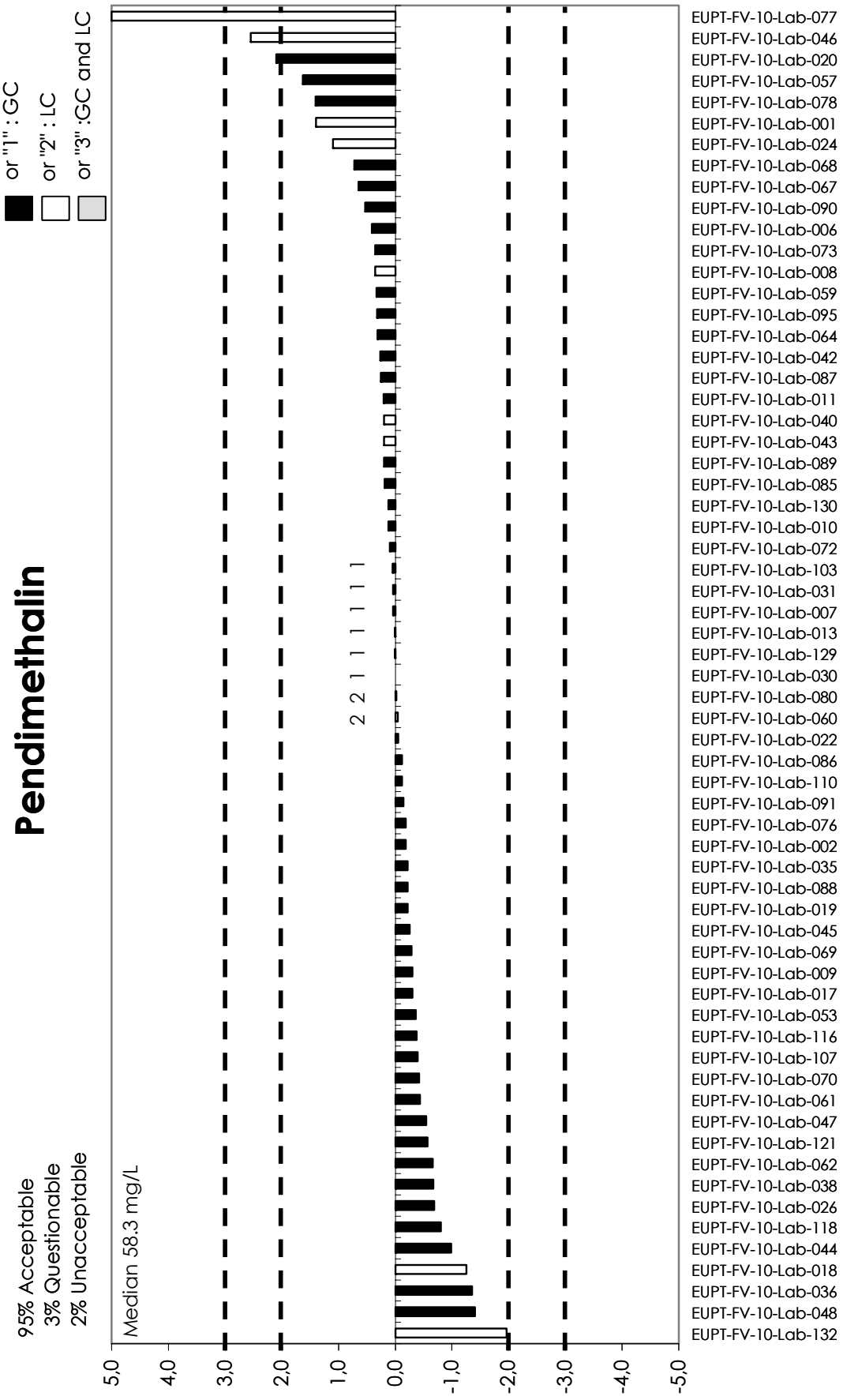
EUPT-FV-10-Lab-080
EUPT-FV-10-Lab-091


Pendimethalin
or "1" : GC
or "2" : LC
or "3" :GC and LC
95% Acceptable
3% Questionable
2% Unacceptable
Median 58.3 mg/L
2 2 1 1 1 1 1 1
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EUPT-FV-10-Lab-057
EUPT-FV-10-Lab-078
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EUPT-FV-10-Lab-085
EUPT-FV-10-Lab-130
EUPT-FV-10-Lab-010
EUPT-FV-10-Lab-072
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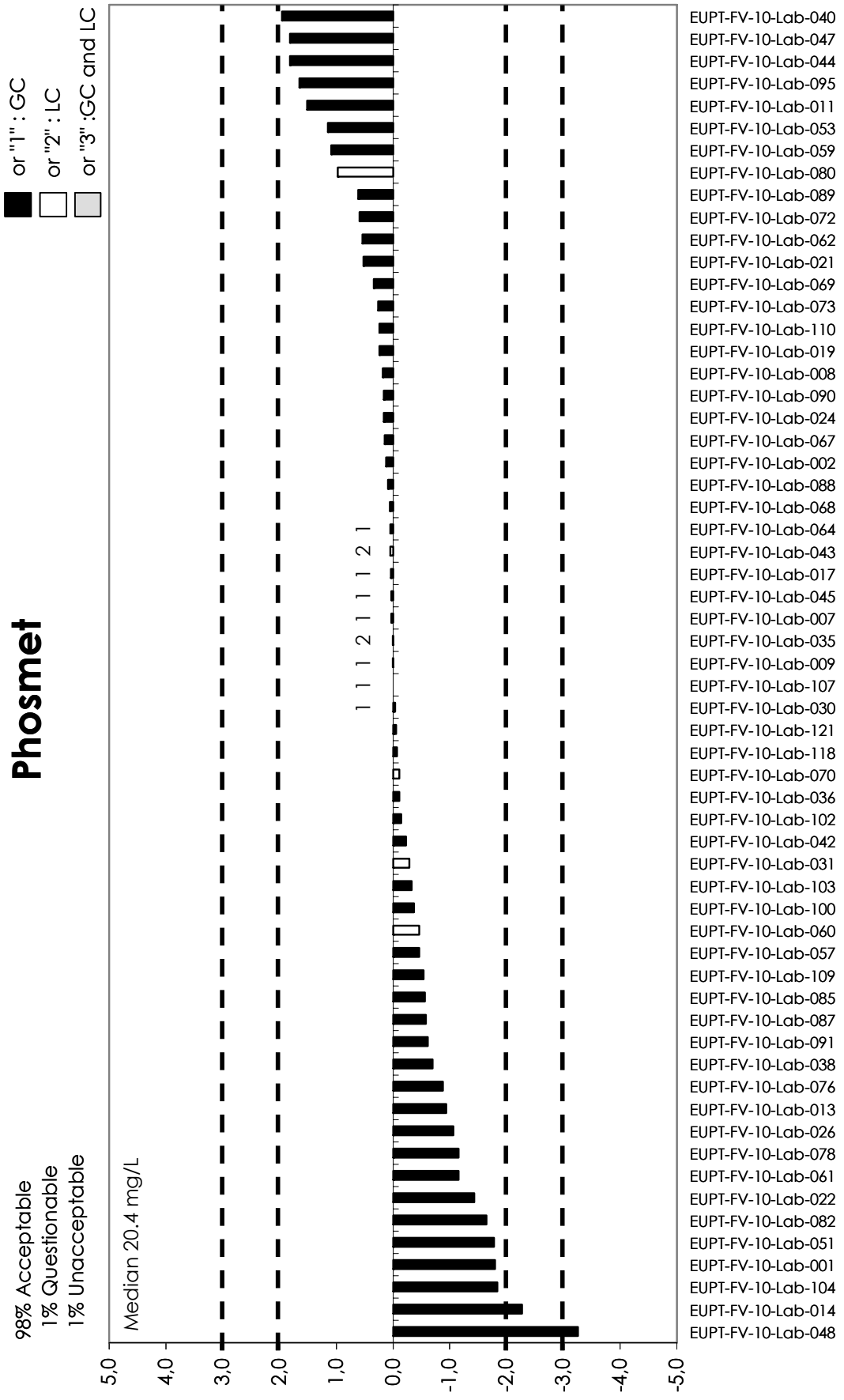
EUPT-FV-10-Lab-132


Phosmet
or "1" : GC
or "2" : LC
or "3" :GC and LC
98% Acceptable
1% Questionable
1% Unacceptable
Median 20.4 mg/L
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EUPT-FV-10-Lab-040
EUPT-FV-10-Lab-047
EUPT-FV-10-Lab-044
EUPT-FV-10-Lab-095
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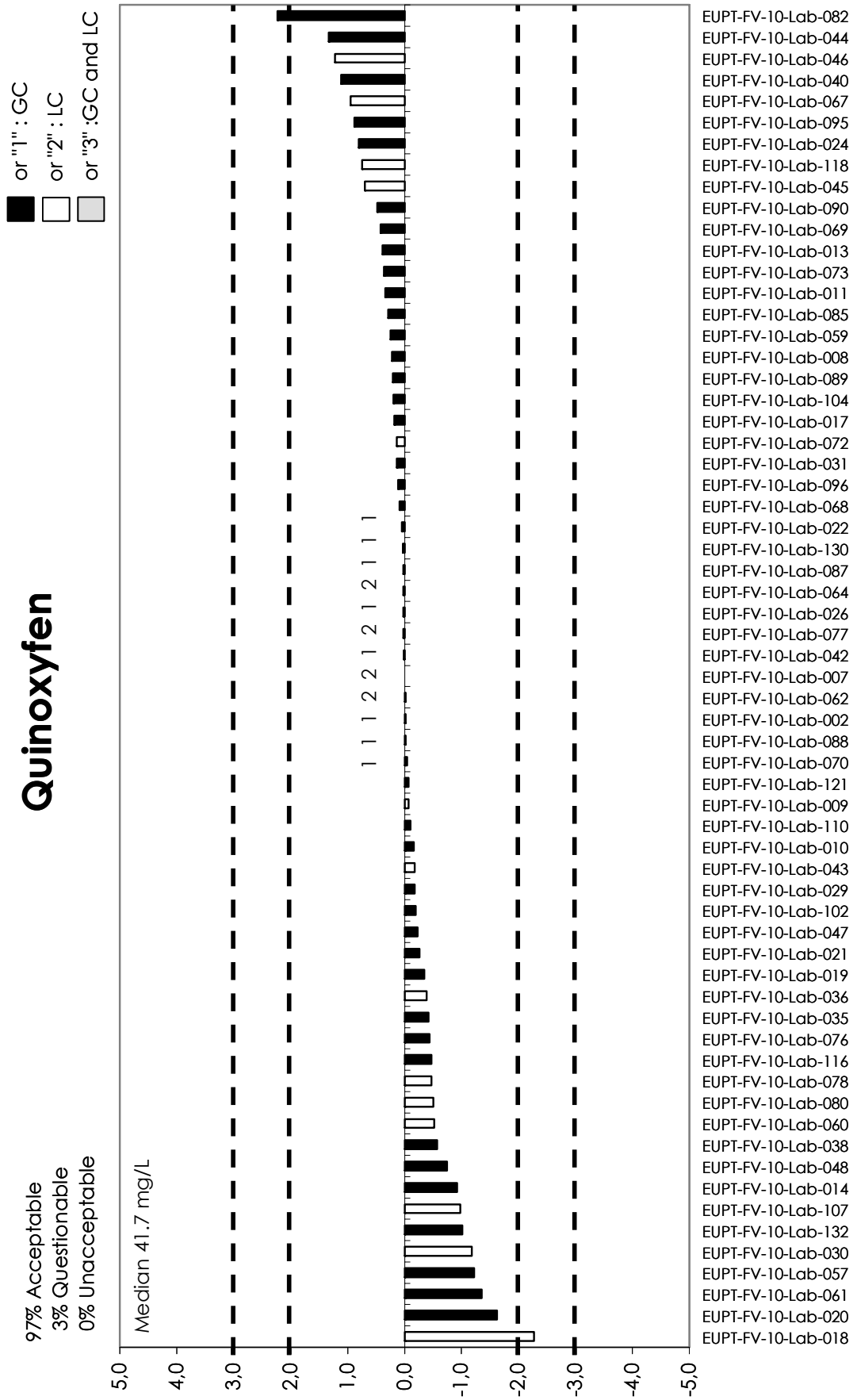
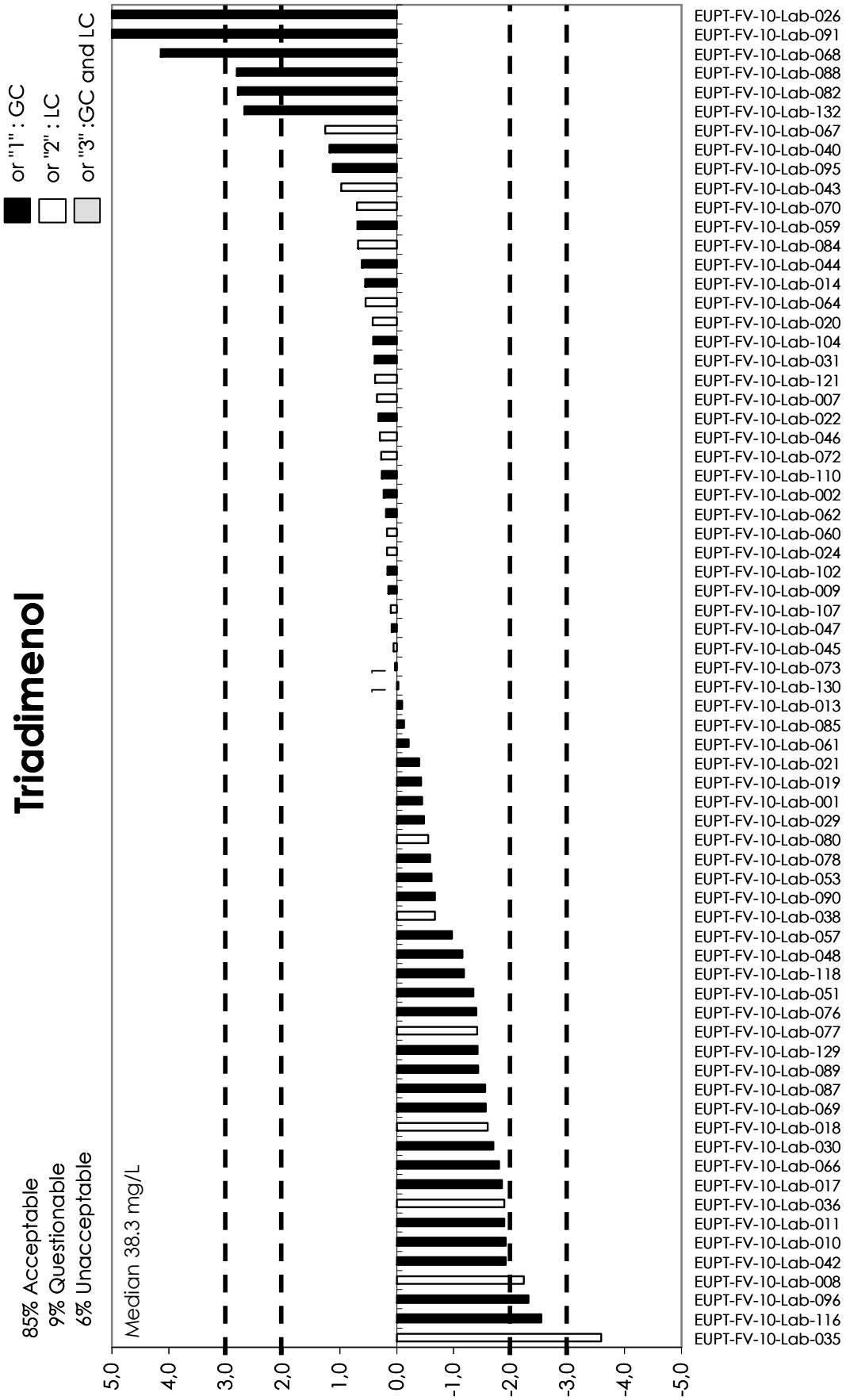
ANNEX 3. Ringtest of Standards Solution. Results and Participants.




Triadimenol
or "1" : GC
or "2" : LC
or "3" :GC and LC
85% Acceptable
9% Questionable
6% Unacceptable
Median 38.3 mg/L
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EUPT-FV-10-Lab-091
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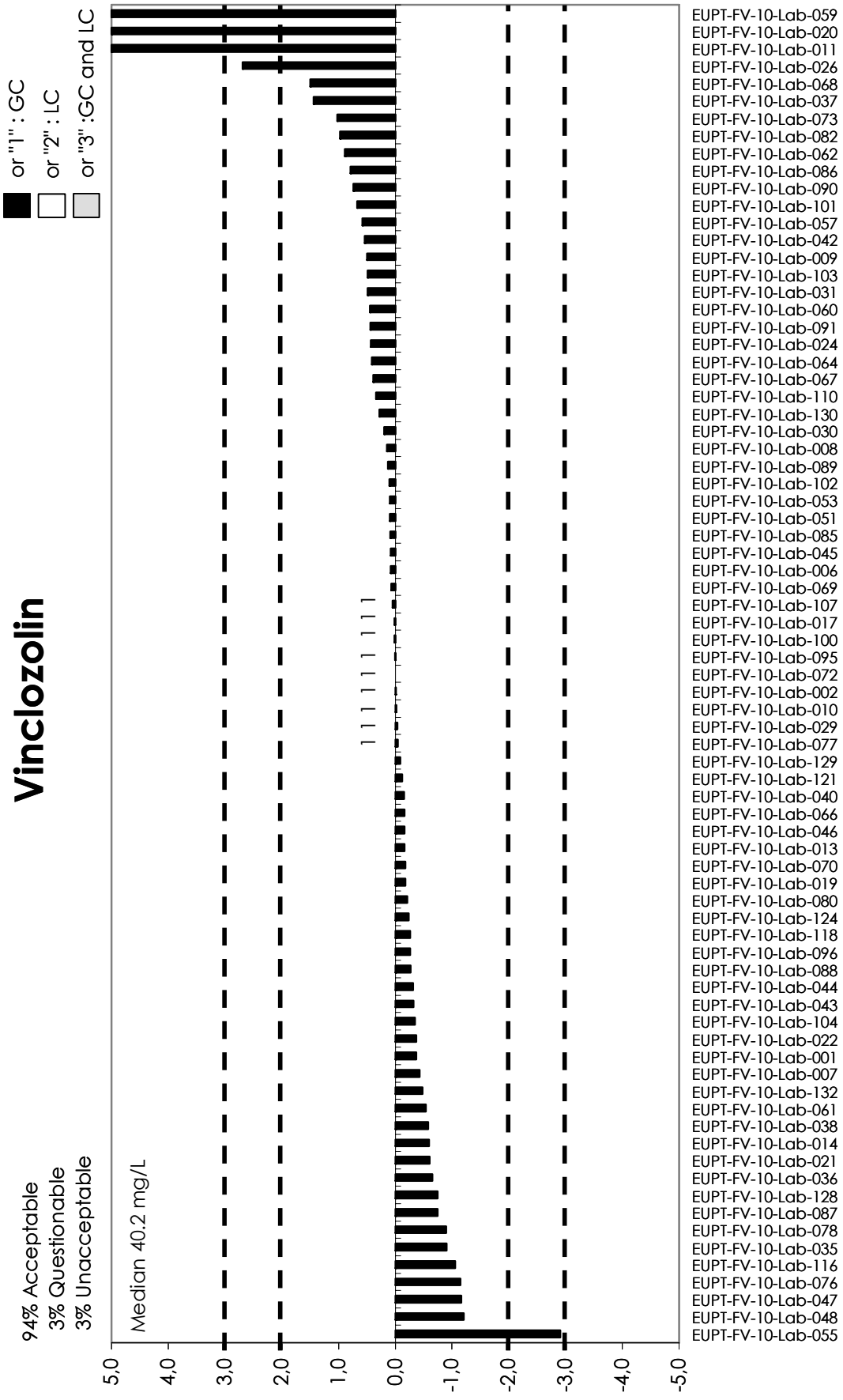
ANNEX 3. Ringtest of Standards Solution. Results and Participants.



ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Table 2. The techniques used by participating laboratories.

ACETAMIPRID							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	LC/MS/MS				10		YES
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006							
007	LC-MS/MS				5		YES
008	LC-MS/MS	LC-MS/MS			10		NO
009	HPLC-DAD	GC-MS			10		YES
010	GC-ECD		Toluene		2	PTV	YES
011	LC-MS/MS						YES
012	No results reported						
013	LC-MS/MS				10		NO
014							
015	No participation						
016	No results reported						
017							
018							
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	LC-MS/MS	LC-MS/MS	Dilution		5		YES
021	GC-NP D				1	Splitless	YES
022	LC-MS/MS	LC-MS/MS	MeOH+water with 1% formic Acid (30+70)		5		YES
023	No results reported						
024	LC-MS/MS	LC-MSMS			10		YES
025	No results reported						
026	HPLC-DAD		CH_3CN		20		YES
027	No participation						
028	No results reported						
029							
030	LC-MS/MS	LC/MS/MS		Ethoprophos	10		YES
031							
032							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ACETAMIPRID							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
033	No results reported						
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	LC-MS/MS				10		YES
037							
038	LC-MS/MS				5		YES
039	No participation						
040	LC-MS/MS						YES
041	No participation						
042	LC-MS/MS				5		YES
043	LC-MS/MS				5		YES
044							
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	LC-MS/MS	LC-MS/MS			20		YES
048	LC-MS/MS				35		YES
049	No participation						
050	No participation						
051							
052	No results reported						
053							
054	No results reported						
055							
056	No participation						
057							
058	No participation						
059	LC-MS/MS				10		YES
060	LC-MS/MS				5		NO
061							
062	HPLC-DAD				50		YES
063	No participation						
064	LC-MS/MS				5		YES
065	No participation						
066							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ACETAMIPRID							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
067	GC-Q-MS				2		NO
068							YES
069	LC-MS/MS		$MeOH/H_2O$		20		YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% Acetic Acid	Quinalfos	5		YES
071	LC-MS/MS	LC-MS/MS					YES
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	LC-MS/MS				20		No
074	No participation						
075	No participation						
076	LC-MS/MS				25		YES
077	LC-MS/MS						YES
078	LC-MS/MS			Linuron-D6	10		NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	LC-MS	Yes			5		YES
083	No participation						
084	LC-MS/MS				25		YES
085	LC-MS/MS				5		
086							
087							
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	LC-MS				5		YES
090	LC-MS/MS			Yes	5	On-Column	YES
091	GC-NPD	GC-NPD	Yes		3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	LC-MS/MS						NO
096							
097	No participation						
098	No participation						
099	No participation						
100	LC-MS/MS						YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ACETAMIPRID							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
101							
102	HPLC-DAD	GC-ECD	Methanol		100		YES
103	LC-MS/MS			13C 6 -carbaryl	10		YES
104	LC-MS/MS				5		YES
105	No results reported						
106	No participation						
107	LC-MS/MS						
108							
109							
110	HPLC-UV	HPLC-UV			20		YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	HPLC-DAD				50	On-Column	YES
117	No results reported						
118	LC-MS		ACN/Water		20		YES
119	No participation						
120	No results reported						
121	LC-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129							
130							
131	No participation						
132	LC-MS/MS		$MeOH/H_2O$		10		YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

BOSCALID							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	LC/MS/MS				10		YES
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006	GC-ECD				1	Splitless	YES
007	LC-MS/MS				5		YES
008	LC-MS/MS	LC-MS/MS			10		NO
009	GC-ITD-MS/MS				2	PTV	YES
010	GC-NPD		Toluene		2	PTV	YES
011	GC-ECD	GC-ITD-MS/MS	Isoctane		1	Splitless	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014							
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018							
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS	Dilution	TPP	20	PTV	YES
021	GC-NPD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	LC-MS/MS	LC-MSMS			10		YES
025	No results reported						
026	GC-Q-MS		Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl acetate /cyclohexane		1	Splitless	YES
030	LC-MS/MS	LC-MS/MS		Ethoprophos	10		YES
031							
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

BOSCALID							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	LC-MS/MS				10		YES
037							
038	LC-MS/MS				5		YES
039	No participation						
040	LC-MS/MS						YES
041	No participation						
042	LC-MS/MS				5		YES
043							
044							
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	GC-NPD	GC-MS			1	Splitless	YES
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051							
052	No results reported						
053							
054	No results reported						
055							
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	GC-NPD	GC-ECD	Isoctane	TPP/Mirex	2	Splitless	YES
060	LC-MS/MS	GC-Q-MS			5		NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	LC-MS/MS	GC-ECD			10		YES
063	No participation						
064	LC-MS/MS				5		YES
065	No participation						
066							
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

BOSCALID							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-ECD	LC-MSMS	Aceton		1	Splitless	YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid	Quinalfos	5		YES
071	LC-MS/MS	LC-MS/MS					YES
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	GC-Q-MS	GC-MS	Cyclohexan		1,5	Split	YES
074	No participation						
075	No participation						
076	LC-MS/MS				25		YES
077							
078	LC-MS/MS			Linuron-D6	10		NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	yes	2	PTV	YES
083	No participation						
084	LC-MS/MS				25		NO
085							
086							
087							
088							
089	LC-MS				5		YES
090	GC-QQQ-MS/MS			yes	3	PTV-LVI	YES
091							
092	No participation						
093	No results reported						
094	No participation						
095							
096							
097	No participation						
098	No participation						
099	No participation						
100							
101							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

BOSCALID							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102							
103							
104							
105	No results reported						
106	No participation						
107	GC-ECD						
108							
109							
110	GC-Q-MS	GC-MS	n-hexan		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116							
117	No results reported						
118	LC-MS		ACN/WATER		20		YES
119	No participation						
120	No results reported						
121	LC-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129							
130							
131	No participation						
132	LC-MS/MS		MeOH/H2O		10		YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

CHLORPYRIFOS-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	GC/MS/MS				2	LVI	yes
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006	GC-ECD	GC-NPD			1	Splitless	YES
007	GC-Q-MS				1	Splitless	YES
008	GC-QQQ-MS/MS	GC-MS/MS		Yes	5	PTV	NO
009	GC-NPD	GC-MS			2	PTV	YES
010	GC-ECD		Toluene		2	PTV	YES
011	GC-NPD	GC-ITD-MS/MS	Toluen		1	On-Column	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN		Yes	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018	GC-Q-MS	GC-MS			1	Splitless	YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS	Dilution	TPP	20	PTV	YES
021	GC-NPD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluen	TPP	5	Splitless	YES
023	No results reported						
024	GC-ITD-MS	GC-ITD-MS			1	Split	YES
025	No results reported						
026	GC-NPD	MS	acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl acetate/cyclohexane		1	Splitless	YES
030	GC-Q-MS	GC-MSD	None	Triphenyl Phosphate	2	Splitless	YES
031	GC-QQQ-MS/MS				10	Split	NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

CHLORPYRIFOS-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	GC-Q-MS	GC-ITD-MS/MS	Cyclohexane				
036	GC-ECD	LCMSMS			1	Splitless	YES
037	GC-ECD	GC-MS			1	Splitless	NO
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless	YES
039	No participation						
040	GC-Q-MS					PTV	YES
041	No participation						
042	GC-Q-MS				10	PTV	NO
043	LC-MS/MS				5		YES
044	GC-Q-MS	GC-MS	Ciclohexane	Azzobenzene	1	Split	YES
045	GC-ITD-MS/MS	GC-MS/MS	Ethyl acetat + Cyclohexane (1:1)		2	Splitless	YES
046	LC-MS/MS		Methanol/water		20		YES
047	GC-NPD	GC-MS			1	Splitless	YES
048	GC-Q-MS		Acetone	Atraz ine D5	1	Splitless	YES
049	No participation						
050	No participation						
051	GC-Q-MS		Metanolo	Trifenilfosfato	1 ul	Splitless	YES
052	No results reported						
053	GC-ECD	GC-NPD	Petroleum ether		1	Splitless	YES
054	No results reported						
055	GC-FPD						
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isottano	Ethion	3	PTV	YES
058	No participation						
059	GC-NPD	LC-MS/MS	Isooktan	TPP	2	Splitless	YES
060	GC-Q-MS	LC-MS/MS			5	PTV-LVI	NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	GC-ECD	GC-NPD	Isooctane	Yes	1	On-Column	YES
063	No participation						
064	GC-Q-MS			TPP	2	PTV	NO
065	No participation						
066	GC-ECD	GC-ITD-MS/MS	Yes		4	PTV	YES
067	GC-Q-MS				2	Splitless	NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

CHLORPYRIFOS-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-FPD		Aceton		1	Splitless	YES
070	GC-ITD	LC-MS/MS	Iso-octane/toluol 9:1	Ethoprofos	5	PTV-LVI	YES
071	LC-MS/MS	LC-MS/MS					YES
072	GC-QQQ-MS/MS	GC-QQQ-MS/MS	EtOAc/Ch		2	Splitless	YES
073	GC-Q-MS	GC-MS	Cylcohexan		1,5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077	GC-FPD					Splitless	YES
078	GC-QQQ-MS/MS	GC-Q-MS		Triphenylmethane	2	PTV	NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084							
085	GC-FPD	GC-MS	Toluene		1	Splitless	YES
086	GC-Q-MS		Ethyl acetate		1	PTV	YES
087	GC-NPD	GC-ECD, GC-MS	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-FPD	GC-QQQ-MS/MS		Yes	3	PTV-LVI	YES
091	GC-NPD	GC-NPD	Yes		3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096	GC-NPD				1	Splitless	
097	No participation						
098	No participation						
099	No participation						
100	GC-Q-MS						YES
101	GC-ECD	GC-NPD	Ethyl Acetate			PTV	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

CHLORPYRIFOS-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-NPD	GC-FPD	Ethyl Acetate	TPP	1	Splitless	YES
103	GC-ITD-MS				1	Splitless	YES
104	GC-ITD (EI)			Trichloronate	5	PTV-LVI	YES
105	No results reported						
106	No participation						
107	GC-ECD						
108	GC-NPD	GC-NPD (other columna)			1	Splitless	NO
109							
110	GC-NPD	GC-MS	n-Hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	GC-Q-MS			Yes	9	PTV-LVI	YES
117	No results reported						
118	GC-NPD		i-Octane		1	Splitless	YES
119	No participation						
120	No results reported						
121	GC-QQQ-MS/MS			TPP			YES
122	No participation						
123	No participation						
124	GC-NPD	GC-MS	Ethyl Acetate		2	PTV	YES
125	No results reported						
126	No participation						
127	No participation						
128	GC-Q-MS				1	Splitless	YES
129	GC-ECD	GC-MS		M-Series	2	Splitless	YES
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131	No participation						
132	GC-Q-MS		Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

DIAZINON							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	GC/MS/MS				2	LVI	yes
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006	GC-NPD	GC-ECD			1	Splitless	YES
007	GC-Q-MS				1	Splitless	YES
008	LC-MS/MS	LC-MS/MS			10		NO
009	GC-NPD	GC-MS			2	PTV	YES
010	GC-NPD		Toluene		2	PTV	YES
011	GC-FPD	GC-ITD-MS/MS	Toluene		1	On-Column	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN		YES	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018	GC-Q-MS	LC-MS/MS			1	Splitless	YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS	Dilution	TPP	20	PTV	YES
021	GC-NPD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluen	TPP	5	Splitless	YES
023	No results reported						
024	GC-ITD-MS	GC-ITD-MS			1	Splitless	YES
025	No results reported						
026	GC-NPD	ms	Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl Acetate/ Cyclohexane		1	Splitless	YES
030	GC-Q-MS	GC-MSD		Triphenyl Phosphate	2	Splitless	YES
031	GC-QQQ-MS/MS				10	Split	NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

DIAZINON							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	GC-Q-MS	GC-ITD-MS/MS	Cyclohexane				
036	GC-ECD	LCMSMS			1	Splitless	YES
037	GC-ECD	GC-MS			1	Splitless	NO
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless	YES
039	No participation						
040	GC-Q-MS					PTV	YES
041	No participation						
042	GC-Q-MS				10	PTV	NO
043	GC-Q-MS		Toluene		1	Splitless	YES
044	GC-Q-MS	GC_MS	Ciclohexane	Azzobenzene	1	Split	YES
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	GC-NPD	GC-MS			1	Splitless	YES
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051	GC-Q-MS		Methanol	Trifenilfosfate	1 ul	Splitless	YES
052	No results reported						
053	GC-ECD	GC-NPD	Petroleum Ether		1	Splitless	YES
054	No results reported						
055	GC-FPD						
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isottano	Ethion	3	PTV	YES
058	No participation						
059	GC-NPD	LC-MS/MS	Isoctane	TPP	2	Splitless	YES
060	LC-MS/MS	GC-Q- MS			5		NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	GC-NPD	GC-ECD	Isooctan	Yes	1	On-Column	YES
063	No participation						
064	GC-Q-MS			TPP	2	PTV	NO
065	No participation						
066	GC-NPD	GC-ITD-MS/MS	Yes		4	PTV	YES
067	GC-Q-MS				2	Splitless	NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

DIAZINON							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-FPD		Acetone		1	Splitless	YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid	Quinalfos	5		YES
071	LC-MS/MS	LC-MS/MS					YES
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	GC-Q-MS	GC-MS	Cyclohexane		1,5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077	GC-FPD					Splitless	YES
078	GC-QQQ-MS/MS	GC-FPD		Triphenylmethane	2	PTV	NO
079	No results reported						
080	LC-MS/MS				5	--	YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084							
085	GC-FPD	GC-MS	Toluene		1	Splitless	YES
086	GC-ECD	GC-MS	Ethyl Acetate		1	PTV	YES
087	GC-NPD	GC-ECD	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-FPD,	GC-QQQ-MS/MS		Yes	3	PTV-LVI	YES
091	GC-NPD	GC-NPD	Yes		3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096	GC-ECD				2	Splitless	
097	No participation						
098	No participation						
099	No participation						
100	GC-Q-MS						YES
101	GC-ECD	GC-NPD	Ethyl Acetate			PTV	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

DIAZINON							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-FPD	GC-TOF/MS	Ethyl Acetate	TPP	1	Splitless	YES
103	GC-ITD-MS				1	Splitless	YES
104	GC-ITD (EI)			Trichloronat	5	PTV-LVI	YES
105	No results reported						
106	No participation						
107	GC-NPD						
108	GC-NPD	GCNPD OTHER COLUMN			1	Splitless	NO
109	GC-NPD	GC-ECD	Isooctane/Toluene 90/10		2	On-Column	YES
110	GC-NPD	GC-MS	n-Hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	GC-Q-MS			Yes	9	PTV-LVI	YES
117	No results reported						
118	GC-NPD		i-OCTANE		1	Splitless	YES
119	No participation						
120	No results reported						
121	LC-MS/MS	GC-MS/MS		TPP			YES
122	No participation						
123	No participation						
124	GC-NPD	GC-MS	Ethyl Acetate		2	PTV	YES
125	No results reported						
126	No participation						
127	No participation						
128	GC-Q-MS				1	Splitless	YES
129	GC-ECD	GC-MS		M-Series	2	Splitless	YES
130							
131	No participation						
132	GC-Q-MS	LC-MS/MS	Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ENDOSULFAN SULFATE (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	GC/MS/MS				2	LVI	yes
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006	GC-ECD				1	Splitless	YES
007	GC-Q-MS				1	Splitless	YES
008	GC-QQQ-MS/MS	GC-MS/MS		Yes	5	PTV	NO
009	GC-ECD	GC-MS			2	YES	
010	GC-ECD		Toluene		2	PTV	YES
011	GC-ECD	GC-ITD-MS/MS	Isoctane		1	Splitless	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN		Yes	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018	GC-ECD	GC-MS			1	Splitless	YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS	Dilution		15	PTV	YES
021	GC-ECD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024							
025	No results reported						
026	GC-Q-MS		Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl Acetate/ Cyclohexane		1	Splitless	YES
030							
031							
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ENDOSULFAN SULFATE (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	GC-Q-MS	GC-ITD-MS/MS	Cyclohexane				
036	GC-ECD				10	Splitless	YES
037	GC-ECD	GC-MS			1	Splitless	NO
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless	YES
039	No participation						
040	GC-Q-MS					PTV	YES
041	No participation						
042	GC-Q-MS				10	PTV	NO
043	GC-Q-MS		Toluene		1	Splitless	YES
044	GC-Q-MS	GC_MS	Ciclohexane	Azobenzene	1	Split	YES
045	GC-ITD-MS/MS	GC-MS/MS	Ethyl acetat + Cyclohexane (1:1)		2	Splitless	YES
046	LC-MS/MS	GC-Q-MS	Methanol/water		20		YES
047	GC-ECD	GC-MS			1	Splitless	YES
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051	GC-Q-MS		Methanol	Trifenilfosfato	1ul	Splitless	YES
052	No results reported						
053	GC-ECD		Petroleum Ether		1	Splitless	YES
054	No results reported						
055							
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	GC-ECD		Isoctane	Mirex	1	Splitless	YES
060	GC-Q-MS				5	PTV-LVI	NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	GC-ECD	GC-MS	Isoctane	Yes	1	On-Column	YES
063	No participation						
064	GC-Q-MS			TPP	2	PTV	NO
065	No participation						
066	GC-ECD	GC-ITD-MS/MS	Yes		4	PTV	YES
067	GC-Q-MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ENDOSULFAN SULFATE (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-ECD		Isoctane		1	S plitless	YES
070	GC-ECD	GC-TQ	Iso-octane/toluene 9:1	Bromofos-Methyl	2	Splitless	YES
071							
072	GC-QQQ-MS/MS	GC-QQQ-MS/MS	EtOAc/Ch		2	Splitless	YES
073	GC-Q-MS	GC-MS	Cyclohexane		1,5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077							
078	GC-Q-MS	GC-Q-MS		Tris-(1,3-dichlorisopropyl)-phosphate	2	PTV	NO
079	No results reported						
080	GC-ECD			Aldrin	1		YES
081	No results reported						
082							
083	No participation						
084							
085	GC-Q-MS		Toluene		1	Splitless	YES
086	GC-ECD	GC-MS	Ethyl Acetate		1	PTV	YES
087							
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-QQQ-MS/MS			Yes	3	PTV-LVI	YES
091							
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096	GC-ECD				2	Splitless	
097	No participation						
098	No participation						
099	No participation						
100							
101	GC-ECD	GC-ECD	Ethyl Acetate			PTV	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ENDOSULFAN SULFATE (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-ECD	GC-TOF/MS	Ethyl Acetate		1	Splitless	YES
103	GC-ECD				2	Splitless	YES
104	GC-ITD (EI)			Trichloronat	5	PTV-LVI	YES
105	No results reported						
106	No participation						
107	GC-ECD						
108							
109	GC-ECD	GC-ECD	Isooctane/Toluene 90/10		1	Splitless	YES
110	GC-ECD	GC-MS	n-Hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	GC-Q-MS			Yes	9	PTV-LVI	YES
117	No results reported						
118	GC-ECD		i-Octane		1	Splitless	YES
119	No participation						
120	No results reported						
121	GC-QQQ-MS/MS			TPP			YES
122	No participation						
123	No participation						
124	GC-ECD	GC-MS	Ethyl Acetate		1	Splitless	YES
125	No results reported						
126	No participation						
127	No participation						
128							
129	GC-ECD	GC-MS		M-Series		Splitless	YES
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131	No participation						
132	GC-Q-MS		Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

HEXYTHIAZOX							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	LC/MS/MS				10		YES
002	LC-MS/MS	LC-MS/MS	Methanol		4		YES
003	No results reported						
004	No results reported						
005	No participation						
006							
007	LC-MS/MS				5		YES
008	LC-MS/MS	LC-MS/MS			10		NO
009	HPLC-DAD	GC-MS			10		YES
010	GC-ECD		Toluene		2	PTV	YES
011	LC-QQQ-MS						
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS		Yes	1	Split less	YES	
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018	LC-MS/MS				50		YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	LC-MS/MS	LC-MS/MS	Dilution		5		YES
021							
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	LC-MS/MS	LC-MS/MS			10		YES
025	No results reported						
026	GC-NPD	MS	Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029							
030	LC-MS/MS	LC-MS/MS		Ethoprophos	10		YES
031	LC-MS/MS				50		NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

HEXYTHIAZOX							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	LC-MS/MS				10		YES
037							
038	LC-MS/MS				5		YES
039	No participation						
040	LC-MS/MS						YES
041	No participation						
042	LC-MS/MS				5		YES
043	GC-Q-MS		Toluene		1	Splitless	YES
044	GC-Q-MS		Ciclohexane	Azobenzene	1	Split	NO
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/ MS	GC-NPD	Methanol/water		20		YES
047	LC-MS/MS	LC-MS/MS			20		YES
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051							
052	No results reported						
053							
054	No results reported						
055							
056	No participation						
057							
058	No participation						
059	LC-MS/MS	GC-ECD			10		YES
060	LC-MS/MS				5		NO
061							
062	LC-MS/MS				10		YES
063	No participation						
064	LC-MS/MS				5		YE S
065	No participation						
066							
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

HEXYTHIAZOX							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	LC-MS/MS		$MeOH/H_2O$		20		YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% Acetic Acid	Quinalfos	5		YES
071	LC-MS/MS	LC-MS/MS					YES
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	GC-Q-MS	GC-MS	Cyclohexane		1,5	Split	YES
074	No participation						
075	No participation						
076	LC-MS/MS				25		YES
077	LC-MS/MS						YES
078	LC-MS/MS			Linuron-D6	10		NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	LC-MS	Yes			5		YES
083	No participation						
084	LC-MS/MS				25		YES
085							
086							
087							
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	LC-MS				5		YES
090	LC-MS/MS			Yes	5	On-Column	YES
091							
092	No participation						
093	No results reported						
094	No participation						
095	LC-MS/MS						NO
096							
097	No participation						
098	No participation						
099	No participation						
100							
101							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

HEXYTHIAZOX							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-NPD	GC-ECD	EA	TPP	1	Spl itless	YES
103	LC-MS/MS			13C 6-carbaryl	10		YES
104	LC-MS/MS				5		YES
105	No results reported						
106	No participation						
107	LC-MS/MS						
108							
109							
110	GC-ECD	HPLC-UV	n-Hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116							
117	No results reported						
118	LC-MS		ACN/Water		20		YES
119	No participation						
120	No results reported						
121	LC-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129							
130							
131	No participation						
132	GC-Q-MS	LC-MS/MS	Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ISOFENPHOS-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (If any)	Internal Standard (If any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001							
002							
003	No results reported						
004	No results reported						
005	No participation						
006							
007	GC-Q-MS				1	Splitless	YES
008	GC-QQQ-MS/MS	GC-MS/MS		Yes	5	PTV	NO
009	GC-NPD	GC-MS			2	PTV	YES
010							
011	GC-FPD	GC-ITD-MS/MS	Toluene		1	On-Column	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN		Yes	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	NO
018							
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS	Dilution	TPP	20	PTV	YES
021	GC-NPD				1	Splitless	YES
022							
023	No results reported						
024	GC-ITD-MS	GC-ITD-MS			1	Splitless	YES
025	No results reported						
026							
027	No participation						
028	No results reported						
029							
030	GC-Q-MS	GC-MSD		Triphenyl Phosphate	2	Splitless	YES
031	GC-QQQ-MS/MS				10	Split	NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ISOFENPHOS-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	GC-Q-MS	GC-ITD-MS/MS	Cyclohexane				
036	LC-MS/MS				10		YES
037							
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless	YES
039	No participation						
040	GC-Q-MS					PTV	YES
041	No participation						
042	LC-MS/MS				5		YES
043							
044							
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	GC-NPD	GC-MS			1	Splitless	YES
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051							
052	No results reported						
053							
054	No results reported						
055							
056	No participation						
057							
058	No participation						
059	GC-NPD	LC-MS/MS	Isoctane	TPP	2	Splitless	YES
060	LC-MS/MS	GC-Q-MS			5		NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	GC-NPD	GC-ECD	Isoctane	Yes	1	On-Column	YES
063	No participation						
064	GC-Q-MS			TPP	2	PTV	NO
065	No participation						
066							
067	GC-Q-MS				2	Splitless	NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ISOFENPHOS-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-FPD		Acetone		1	Splitless	YES
070	GC-ITD	GC-ITD	Iso-octane/toluene 9:1	Ethoprofos	5	PTV-LVI	YES
071							
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	GC-Q-MS	GC-MS	Cyclohexane		1,5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077							
078	LC-MS/MS	GC-Q-MS		Linuron-D6	10		NO
079	No results reported						
080							
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084							
085							
086							
087							
088							
089	LC-MS				5		YES
090	GC-FPD	GC-QQQ-MS/MS		Yes	3	PTV-LVI	YES
091							
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096							
097	No participation						
098	No participation						
099	No participation						
100							
101							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

ISOFENPHOS-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-ITD/MS	GC-NPD	EA		1	Splitless	YES
103	GC-ITD-MS				1	Splitless	YES
104							
105	No results reported						
106	No participation						
107							
108							
109							
110	GC-NPD	GC-MS	n-hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116							
117	No results reported						
118	GC-NPD		i-Octane		1	Splitless	YES
119	No participation						
120	No results reported						
121	GC-QQQ-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129							
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131	No participation						
132	GC-Q-MS	LC-MS/MS	Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

KRESOXIM-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	GC-ITD/MS				2	LVI	yes
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006	GC-ECD				1	Splitless	YES
007	GC-Q-MS	LC-MS/MS			1	Splitless	YES
008	GC-QQQ-MS/MS	GC-MS/MS		Yes	5	PTV	NO
009	GC-NPD	GC-MS			2	PTV	YES
010	GC-ECD		Toluene		2	PTV	YES
011	GC-ECD	GC-ITD-MS/MS	Isoctane		1	Splitless	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN		Yes	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018	GC-Q-MS	LC-MS/MS			1	Splitless	YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS	Dilution	TPP	20	PTV	YES
021	GC-ECD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	GC-ITD-MS	GC-ITD-MS			1	Splitless	YES
025	No results reported						
026	GC-ECD	MS	Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl Acetate/ Cyclohexane		1	Splitless	YES
030	GC-Q-MS	GC-MSD		Triphenyl Phosphate	2	Splitless	YES
031	GC-QQQ-MS/MS				10	Split	NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

KRESOXIM-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	GC-ECD	LCMSMS			1	Splitless	YES
037	GC-ECD	GC-MS			1	Splitless	NO
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless< /td>	YES
039	No participation						
040	GC-Q-MS					PTV	YES
041	No participation						
042	GC-Q-MS				10	PTV	NO
043	LC-MS/MS				5		YES
044	GC-Q-MS	GC-MS	Ciclohexane	Azobenzene	1	Split	YES
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	GC-NPD	GC-MS			1	Splitless	YES
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051							
052	No results reported						
053	GC-ECD	GC-NPD	Petroleum Ether		1	Splitless	YES
054	No results reported						
055							
056	No results reported						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	LC-MS/MS	GC-ECD			10		YES
060	LC-MS/MS	GC-Q-MS			5		NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	LC-MS/MS				10		YES
063	No participation						
064	GC-Q-MS			TPP	2	PTV	NO
065	No participation						
066	GC-NPD	GC-ITD-MS/MS	Yes		4	PTV	YES
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

KRESOXIM-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (If any)	Internal Standard (If any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-ECD		Isoctane		1	Splitless	YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid	Quinalfos	5		YES
071							
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	GC-Q-MS	GC-MS	Cyclohexane		1,5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077	LC-MS/MS						YES
078	GC-QQQ-MS/MS	LC-MS/MS		Triphenylmethane	2	PTV	NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084							
085	GC-Q-MS		Toluene		1	Splitless	YES
086	GC-ECD	GC-MS	Ethyl acetate		1	PTV	YES
087	GC-ECD	GC-NPD	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-QQQ-MS/MS			Yes	3	PTV-LVI	YES
091	GC-ECD	GC-ECD	Yes		3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096	GC-ECD				2	Splitless	
097	No participation						
098	No participation						
099	No participation						
100	GC-Q-MS						YES
101	GC-ECD	GC-NPD	Ethyl Acetate			PTV	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

KRESOXIM-METHYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-NPD	GC-ITD/MS	Ethyl Acetate	TPP	1	Splitless	YES
103	GC-ITD-MS				1	Splitless	YES
104	LC-MS/MS				5		YES
105	No results reported						
106	No participation						
107	GC-ECD						
108							
109							
110	HPLC-UV	HPLC-UV			20		YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	GC-Q-MS			Yes	9	PTV-LVI	YES
117	No results reported						
118	LC-MS		ACN/WATER		20		YES
119	No participation						
120	No results reported						
121	LC-MS/MS	GC-MS/MS		TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129							
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131	No participation						
132	LC-MS/MS		MeOH/H_2O		10		YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

MALATHION (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	GC/MS/MS				2	LVI	yes
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006	GC-NPD				1	Splitless	YES
007	GC-Q-MS	LC-MS/MS			1	Splitless	YES
008	GC-QQQ-MS/MS	GC-MS/MS		Yes	5	PTV	NO
009	GC-NPD	GC-MS			2	PTV	YES
010	GC-NPD		Toluene		2	PTV	YES
011	GC-FPD	GC-ITD-MS/MS	Toluene		1	On-Column	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN		Yes	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS		Splitless	YES
018	GC-Q-MS				1	Splitless	YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS		Dilution	15	PTV	YES
021	GC-NPD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	GC-ITD-MS	GC-ITD-MS			1	Splitless	YES
025	No results reported						
026	GC-ECD	MS	Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl Acetate/ Cyclohexane		1	Splitless	YES
030	GC-Q-MS	GC-MSD		Triphenyl Phosphate	2	Splitless	YES
031	LC-MS/MS				50		NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

MALATHION (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	GC-Q-MS	GC-ITD-MS/MS	Cyclohexane				
036	GC-ECD				10	Splitless	YES
037	GC-ECD	GC-MS			1	Splitless	NO
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless	YES
039	No participation						
040	LC-MS/MS						YES
041	No participation						
042	GC-Q-MS				10	P TV	NO
043	GC-Q-MS		Toluene		1	Splitless	YES
044	GC-Q-MS	GC-MS	Ciclohxane	Azobenzene	1	Split	YES
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	GC-NPD	GC-MS			1	Splitless	NO
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051	GC-Q-MS		Metanolo	Trifenilfosfato	1 ul	Splitless	YES
052	No Results Reported						
053	GC-ECD	GC-NPD	Petroleum Ether		1	Splitless	YES
054	No results reported						
055	GC-FPD						
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	GC-NPD	LC-MS/MS	Isoctane	TPP	2	Splitless	YES
060	LC-MS/MS	GC-Q-MS			5		NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	GC-NPD	GC-ECD	Isooctan	Yes	1	On-Column	YES
063	No participation						
064	LC-MS/MS				5		YES
065	No participation						
066	GC-ECD	GC-ITD-MS/MS	Yes		4	PTV	YES
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

MALATHION (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-FPD		Acetone		1	Splitless	YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid	Quinalfos	5		YES
071	LC-MS/MS	LC-MS/MS					YES
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	GC-Q-MS	GC-MS	Cylcohexane		1,5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077	GC-FPD					Splitless	YES
078	GC-Q-MS	GC-FPD		Triphenylmethane	2	PTV	NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084							
085	GC-FPD	GC-MS	Toluene		1	Splitless	YES
086	GC-ECD	GC-MS	Ethyl acetate		1	PTV	YES
087	GC- ECD	GC-NPD	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-FPD	GC-QQQ-MS/MS		Yes	3	PTV-LVI	YES
091	GC-NPD		Yes		3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096	GC-NPD				2	Splitless	
097	No participation						
098	No participation						
099	No participation						
100	GC-Q-MS						YES
101	GC-ECD	GC -NPD	Ethyl Acetate			PTV	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

MALATHION (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-FPD	GC-NPD	Ethyl Acetate	TPP	1	Splitless	YES
103	GC-NPD				2	Splitless	YES
104	GC-ITD (EI)			Trichlorona	5	PTV-LVI	YES
105	No results reported						
106	No participation						
107	GC-NPD						
108	GC-NPD	GC-NPD Other Column			1	Splitless	NO
109							
110	GC-NPD	GC-MS	n-hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	GC-Q-MS			Yes	9	PTV-LVI	YES
117	No results reported						
118	GC-NPD		i-Octane		1	Splitless	YES
119	No participation						
120	No results reported						
121	LC-MS/MS	GC-MS/MS		TPP			YES
122	No participation						
123	No participation						
124	GC-NPD	GC-MS	Ethyl acetate		2	PTV	YES
125	No results reported						
126	No participation						
127	No participation						
128	GC-Q-MS				1	Splitless	YES
129	GC-ECD	GC-MS		M-Series	2	Splitless	YES
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131	No participation						
132	GC-Q-MS	LC-MS/MS	Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHAMIDOPHOS							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001							
002	LC-MS/MS	LC-MS/MS	Methanol		4		YES
003	No results reported						
004	No results reported						
005	No participation						
006							
007	LC-MS/MS				5		YES
008	GC-QQQ-MS/MS	GC-MS/MS		Yes	5	PTV	NO
009	GC-NPD	GC-MS			2	PTV	YES
010	GC-NPD				2	PTV	YES
011	LC-QQQ-MS						
012	No results reported						
013	LC-MS/MS				10		NO
014	GC-Q-MS	GC/MS/SCAN		Yes	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018	LC-MS/MS				50		YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	LC-MS/MS	LC-MS/MS	Dilution		5		YES
021	GC-NPD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	LC-MS/MS	LC-MSMS			10		YES
025	No results reported						
026	GC-NPD	ms	Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl Acetate/Cyclohexane		1	Splitless	YES
030	GC-Q-MS	GC-MSD	None	Triphenyl Phosphate	2	Splitless	YES
031	LC-MS/MS				50		NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHAMIDOPHOS							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (If any)	Internal Standard (If any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	LC-MS/MS				10		YES
037							
038	LC-MS/MS				5		YES
039	No participation						
040	LC-MS/MS						YES
041	No participation						
042	LC-MS/MS				5		YES
043	LC-MS/MS				5		YES
044							
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	LC-MS/MS	LC-MS/MS			20		YES
048	LC-MS/MS				35		YES
049	No participation						
050	No participation						
051							
052	No results reported						
053							
054	No results reported						
055							
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	LC-MS/MS	GC-NPD			10		YES
060	LC-MS/MS	GC-Q-MS			5		NO
061							
062	GC-NPD		Isoctane	Yes	1	On-Column	YES
063	No participation						
064	LC-MS/MS				5		YES
065	No participation						
066							
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHAMIDOPHOS							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (If any)	Internal Standard (If any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-FPD		Aceton			Splitless	YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid	Quinalfos	5		YES
071							
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	LC-MS/MS				20		No
074	No participation						
075	No participation						
076	LC-MS/MS				25		YES
077	LC-MS/MS						YES
078	LC-MS/MS	GC-FPD		Linuron-D6	10		NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084	LC-MS/MS				25		YES
085	GC-FPD		Toluene		1	Splitless	YES
086							
087	GC-NPD	GC-ECD, GC-MS	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	LC-MS				5		YES
090	GC-QQQ-MS/MS	GC-FPD		Yes	3	PTV-LVI	YES
091	GC-NPD	GC-NPD	Yes		3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096							
097	No participation						
098	No participation						
099	No participation						
100	LC-MS/MS						YES
101							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHAMIDOPHOS							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-FPD	GC-NPD	EA	TPP	1	Splitless	YES
103	LC-MS/MS			13C6-carbaryl	10		YES
104	LC-MS/MS				5		YES
105	No results reported						
106	No participation						
107	LC-MS/MS						
108	GC-NPD	GC-NPD other column			1	Splitless	NO
109	GC-NPD	GC-NPD	Isooctane/Toluene 90/10		2	On-Column	YES
110	GC-NPD	GC-MS	n-hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116							
117	No results reported						
118	LC-MS		ACN/WATER		20		YES
119	No participation						
120	No results reported						
121	LC-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128	GC-Q-MS				1	Splitless	YES
129							
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131	No participation						
132	GC-Q-MS	LC-MS/MS	Acetone/cyclohexane	No	1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHIOCARB (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	LC/MS/MS				10		yes
002	LC-MS/MS	LC-MS/MS	Methanol		4		YES
003	No results reported						
004	No results reported						
005	No participation						
006							
007	LC-MS/MS				5		YES
008	LC-MS/MS	LC-MS/MS			10		NO
009	GC-ITD-MS/MS				2	PTV	YES
010	GC-NPD		Toluene		2	PTV	YES
011	LC-QQQ-MS						
012	No results reported						
013	LC-MS/MS				10		NO
014	GC-Q-MS	GC/MS/SCAN		YES	1	Splitless	YES
015	No participation						
016	No results reported						
017	HPLC-FL				10	On-Column	YES
018	LC-MS/MS				5		YES
019							
020	LC-MS/MS	LC-MS/MS	Dilution		5		YES
021							
022	LC-MS/MS	LC/MS/MS	MeOH+water with 1% formic Acid (30+70)		5		YES
023	No results reported						
024	LC-MS/MS	LC-MSMS			10		YES
025	No results reported						
026	GC-Q-MS		Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029							
030	GC-Q-MS	GC-MSD		Triphenyl Phosphate	2	Splitless	YES
031	LC-MS/MS				50		NO
032	HPLC-FL	HPLC-FL			10		YES
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHIOCARB (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	LC-MS/MS				10		YES
037							
038	LC-MS/MS				5		YES
039	No participation						
040	LC-MS/MS						YES
041	No participation						
042	LC-MS/MS				5		YES
043	LC-MS/MS				5		YES
044	HPLC-FL	GC-MS	Methanol	BDMC	10		YES
045	GC-ITD-MS/MS	GC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	LC-MS/MS	LC-MS/MS			20		YES
048	LC-MS/MS				35		YES
049	No participation						
050	No participation						
051	GC-Q-MS			Trifenilfosfato	1	Splitless	YES
052	No results reported						
053							
054	No results reported						
055							
056	No Participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	LC-MS/MS				10		YES
060	LC-MS/MS	GC-Q-MS			5		NO
061							
062	LC-MS/MS				10		YES
063	No participation						
064	LC-MS/MS				5		YES
065	No participation						
066							
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHIOCARB (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (If any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068	--						YES
069	LC-MS/MS		MeOH/H_2O		20		YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid	Quinalfos	5		YES
071	LC-MS/MS	LC-MS/MS					YES
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073							
074	No participation						
075	No participation						
076	LC-MS/MS						NO
077	LC-MS/MS						YES
078	LC-MS/MS			Linuron-D6	10		NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082							
083	No participation						
084	LC-MS/MS				25		NO
085	HPLC-PICKERING				20		NO
086	HPLC-FL			Trimethacarb	100		YES
087	GC-NPD	GC-MS	Acetone	Diclofenthion	1.0	Splitless	YES
088							
089	LC-MS				5		YES
090	LC-MS/MS			Yes	5	On-Column	YES
091	HPLC-FL	HPLC-FL			100		YES
092	No participation						
093	No results reported						
094	No participation						
095	LC-MS/MS						NO
096							
097	No participation						
098	No participation						
099	No participation						
100							
101	HPLC-FL				10	On-Column	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHIOCARB (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	HPLC-FL	-	Acidif. Water	Trim Etacarb	200		YES
103	LC-MS/MS			13c6-carbaryl	10		YES
104	LC-MS/MS				5		YES
105	No results reported						
106	No participation						
107	LC-MS/MS						
108							
109							
110	HPLC-UV	GC-MS			20		YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116							
117	No results reported						
118	LC-MS/MS				10		NO
119	No participation						
120	No results reported						
121	LC-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129					2	Splitless	YES
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131							
132	GC-Q-MS		Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHOMYL (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	LC/MS/MS				10		YES
002	LC-MS/MS	LC-MS/MS	Methanol		4		YES
003	No results reported						
004	No results reported						
005	No participation						
006							
007	LC-MS/MS				5		YES
008	LC-MS/MS	LC-MS/MS			10		NO
009	HPLC-DAD				10		YES
010	GC-NPD		Toluene		2	PTV	YES
011	LC-MS/MS						YES
012	No results reported						
013	LC-MS/MS				10		NO
014							
015	No participation						
016	No results reported						
017	HPLC-FL				10	On-Column	YES
018							
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	LC-MS/MS	LC-MS/MS	Dilution		5		YES
021							
022	LC-MS/MS	LC/MS/MS	MeOH+water with 1% formic Acid (30+70)		5		YES
023	No results reported						
024	LC-MS/MS	LC-MSMS			10		YES
025	No results reported						
026	GC-Q-MS		Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029							
030	LC-MS/MS	LC-MS/MS		Ethoprophos	10		YES
031							
032	HPLC-FL	HPLC-FL			10		YES
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHOMYL (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	LC-MS/MS				10		YES
037							
038	LC-MS/MS				5		YES
039	No participation						
040	LC-MS/MS						YES
041	No participation						
042	LC-MS/MS				5		YES
043	LC-MS/MS				5		YES
044	HPLC-FL	none	Methanol	BDMC	10		YES
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	LC-MS/MS	LC-MS/MS			20		YES
048	LC-MS/MS				35		YES
049	No participation						
050	No participation						
051							
052	No results reported						
053							
054	No results reported						
055							
056	No participation						
057							
058	No participation						
059	LC-MS/MS				10		YES
060	LC-MS/MS				5		NO
061							
062	HPLC-DAD				50		YES
063	No participation						
064	LC-MS/MS				5		YES
065	No participation						
066							
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHOMYL (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	LC-MS/MS		MeOH/H_2O		20		YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid		5		YES
071	LC-MS/MS	LC-MS/MS					YES
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	LC-MS/MS				20		No
074	No participation						
075	No participation						
076	LC-MS/MS				25		YES
077	LC-MS/MS						YES
078	LC-MS/MS			Linuron-D6	10		NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	LC-MS	Yes			5		YES
083	No participation						
084	LC-MS/MS				25		YES
085	HPLC-DD-FLD (Pickering)				20		NO
086	HPLC-FL			Trimethacarb	100		YES
087							
088							
089	LC-MS				5		YES
090	LC-MS/MS			Yes	5	On-Column	YES
091	HPLC-FL	HPLC-FL			100		YES
092	No participation						
093	No results reported						
094	No participation						
095	LC-MS/MS						NO
096							
097	No participation						
098	No participation						
099	No participation						
100	LC-MS/MS						YES
101	HPLC-FL				10	On-Column	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

METHOMYL (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (If any)	Internal Standard (If any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	HPLC-FL		Acidif. Water	trimetacarb	200		YES
103	LC-MS/MS			13c6-carbaryl	10		YES
104	LC-MS/MS				5		YES
105	No results reported						
106	No participation						
107	LC-MS/MS						
108							
109							
110	HPLC-UV	HPLC-UV			20		YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	LC-MS/MS				5	On-Column	NO
117	No results reported						
118	LC-MS		ACN/WATER		20		YES
119	No participation						
120	No results reported						
121	LC-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129	GC-MS				2	Splitless	YES
130							
131	No participation						
132	LC-MS/MS		MeOH/H_2O		10		YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

OXAMYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	LC/MS/MS				10		YES
002	LC-MS/MS	LC-MS/MS	Methanol		4		YES
003	No results reported						
004	No results reported						
005	No participation						
006							
007	LC-MS/MS				5		YES
008	LC-MS/MS	LC-MS/MS			10		NO
009	HPLC-DAD			-	10		YES
010	GC-NPD		Toluene		2	PTV	YES
011	LC-QQQ-MS						
012	No results reported						
013	LC-MS/MS				10		NO
014							
015	No participation						
016	No results reported						
017	HPLC-FL				10	On-Column	YES
018	LC-MS/MS				50		YES
019							
020	LC-MS/MS	LC-MS/MS	Dilution		5		YES
021							
022	LC-MS/MS	LC/MS/MS	MeOH + water with 1% Formic Acid (30+70)		5		YES
023	No results reported						
024	LC-MS/MS	LC-MSMS			10		YES
025	No results reported						
026	GC-Q-MS		Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029							
030	GC-Q-MS	LC-MS/MS		Ethoprophos	10		
031	LC-MS/MS				50		NO
032	HPLC-FL	HPLC-FL			10		YES
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

OXAMYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	LC-MS/MS				10		YES
037							
038	LC-MS/MS				5		YES
039	No participation						
040	LC-MS/MS						YES
041	No participation						
042	LC-MS/MS				5		YES
043	LC-MS/MS				5		YES
044	HPLC-FL	none	Methanol	BDMC	10		NO
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	LC-MS/MS	LC-MS/MS			20		YES
048	LC-MS/MS				35		YES
049	No participation						
050	No participation						
051							
052	No results reported						
053							
054	No results reported						
055							
056	No participation						
057							
058	No participation						
059	LC-MS/MS	GC-NPD			10		YES
060	LC-MS/MS				5		NO
061							
062	LC-MS/MS				10		YES
063	No participation						
064	LC-MS/MS				5		YES
065	No participation						
066							
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

OXAMYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068	--						YES
069	LC-MS/MS		MeOH/H_2O		20		YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid	Quinalfos	5		YES
071	LC-MS/MS	LC-MS/MS					YES
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	LC-MS/MS				20		No
074	No participation						
075	No participation						
076	LC-MS/MS				25		YES
077	LC-MS/MS						YES
078	LC-MS/MS			Linuron-D6	10		NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082							
083	No participation						
084	LC-MS/MS				25		YES
085	HPLC-PICKERING				20		NO
086	HPLC-FL			Trimethacarb	100		YES
087							
088							
089	LC-MS				5		YES
090	LC-MS/MS			Yes	5	On-Column	YES
091	HPLC-FL	HPLC-FL			100		YES
092	No participation						
093	No results reported						
094	No participation						
095	LC-MS/MS						NO
096							
097	No participation						
098	No participation						
099	No participation						
100							
101	HPLC-FL				10	On-Column	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

OXAMYL							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (If any)	Internal Standard (If any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	HPLC-FL		Acidif. Water	Trimetacarb	200		YES
103	LC-MS/MS			13C6-carbaryl	10		YES
104	LC-MS/MS				5		YES
105	No results reported						
106	No participation						
107	LC-MS/MS						
108							
109							
110	HPLC-UV	HPLC-UV			20		YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116							
117	No results reported						
118			ACN/WATER		20		YES
119	No participation						
120	No results reported						
121	LC-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129							
130							
131	No participation						
132	LC-MS/MS		MeOH/H_2O		10		YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

PENDIMETHALIN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	LC/MS/MS				10		YES
002	GC-ECD, GCNPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006	GC-ECD	GC-NPD			1	Splitless	YES
007	GC-Q-MS	LC-MS/MS			1	Splitless	YES
008	LC-MS/MS	LC-MS/MS			10		NO
009	GC-NPD	GC-MS			2	PTV	YES
010	GC-NPD		Toluene		2	PTV	YES
011	GC-ECD	GC-ITD-MS/MS	Isoctane		1	Splitless	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014							
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018	LC-MS/MS				50		YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS	Dilution	TPP	20	PTV	YES
021							
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	LC-MS/MS	LC-MSMS			10		YES
025	No results reported						
026	GC-ECD	MS	Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029							
030	GC-Q-MS	GC-MSD		Triphenyl Phosphate	2	Splitless	YES
031	GC-QQQ-MS/MS				10	Split	NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

PENDIMETHALIN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	GC-Q-MS	GC-ITD-MS/MS	Cyclohexane				
036	GC-ECD				10	Splitless	YES
037							
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless	YES
039	No participation						
040	LC-MS/MS						YES
041	No participation						
042	GC-Q-MS				10	PTV	NO
043	LC-MS/MS				5		YES
044	GC-Q-MS	GC-MS	Ciclohexane	Azzobenzene	1	Split	YES
045	GC-ITD-MS/MS	GC-MS/MS	Ethyl acetate + Cyclohexane		2	Splitless	YES
046	LC-MS/MS		Methanol/water		20		YES
047	GC-MS/MS	GC-MS/MS			1	Splitless	NO
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051							
052	No results reported						
053	GC-ECD	GC-NPD	Petroleum Ether		1	Splitless	YES
054	No results reported						
055							
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	GC-ECD	LC-MS/MS	Isoctane	Mirex	1	Splitless	YES
060	LC-MS/MS	GC-Q-MS			5		NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	GC-ECD	GC-ECD	Isoctane	Yes	1	On-Column	YES
063	No participation						
064	GC-Q-MS			TPP	2	PTV	NO
065	No participation						
066							
067	GC-Q-MS				2	Splitless	NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

PENDIMETHALIN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-ECD	LC-MSMS	Isoctane		1	Splitless	YES
070	GC-ITD	GC-ITD	Iso-octane/toluene 9:1	Ethoprofos	5	PTV-LVI	YES
071							
072	GC-QQQ-MS/MS	GC-QQQ-MS/MS	ETOAc/Ch		2	Splitless	YES
073	GC-Q-MS	GC-MS	Cyclohexane		1.5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077	LC-MS/MS						YES
078	GC-QQQ-MS/MS	GC-Q-MS		Triphenylmethane	2	PTV	NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082							
083	No participation						
084							
085	GC-Q-MS		Toluene		1	Splitless	YES
086	GC-ECD	GC-MS	Ethyl acetate		1	PTV	YES
087	GC-NPD	GC-ECD	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-QQQ-MS/MS			Yes	3	PTV-LVI	YES
091	GC-ECD	GC-ECD	Yes		3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096							
097	No participation						
098	No participation						
099	No participation						
100							
101							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

PENDIMETHALIN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102							
103	GC-ITD-MS				1	Splitless	YES
104							
105	No results reported						
106	No participation						
107	GC-ECD						
108							
109							
110	GC-ECD	GC-MS	n-hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	GC-Q-MS			Yes	9	PTV-LVI	YES
117	No results reported						
118	GC-ECD		i-Octane		1	Splitless	YES
119	No participation						
120	No results reported						
121	GC-QQQ-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129	GC-ECD	GC-MS		M-Series	2	Splitless	YES
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131	No participation						
132	LC-MS/MS		MeOH/H_2O		10		YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

PHOSMET							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	GC-ITD/MS				2	LVI	yes
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006							
007	GC-Q-MS	LC-MS/MS			1	Splitless	YES
008	GC-QQQ-MS/MS	GC-MS/MS		Yes	5	PTV	NO
009	GC-NPD	GC-MS			2	PTV	YES
010							
011	GC-FPD	GC-ITD-MS/MS	Toluene		1	On-Column	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN		Yes	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018							
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020							
021	GC-NPD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	GC-ITD-MS	GC-ITD-MS			1	Splitless	YES
025	No results reported						
026	GC-NPD	MS	Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029							
030	GC-Q-MS	GC-MSD		Triphenyl Phosphate	2	Splitless	YES
031	LC-MS/MS				50		NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

PHOSMET							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	GC-ECD				10	Splitless	YES
037							
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless	YES
039	No participation						
040	GC-Q-MS					PTV	YES
041	No participation						
042	GC-Q-MS				10	PTV	NO
043	LC-MS/MS				5		YES
044	GC-Q-MS	GC-MS	Ciclohexane	Azzobenzene	1	Split	YES
045	GC-ITD-MS/MS	GC-MS/MS	Ethyl acetate + Cyclohexane		2	Splitless	YES
046							
047	GC-NPD	GC-MS			1	Splitless	NO
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051	GC-Q-MS		Methanol	Trifenilfosfato	1 ul	Splitless	YES
052	No results reported						
053	GC-ECD	GC-NPD	Petroleum Ether		1	Splitless	YES
054	No results reported						
055							
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	GC-NPD		Isoctane	TPP	2	Splitless	YES
060	LC-MS/MS				5		NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	GC-ECD	GC-NPD	Isooctan	Yes	1	On-Column	YES
063	No participation						
064	GC-Q-MS			TPP	2	PTV	NO
065	No participation						
066							
067	GC-Q-MS				2	Splitless	NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

PHOSMET							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (If any)	Internal Standard (If any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-NPD		Acetone		8	PTV-LVI	YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid	Quinalfos	5		YES
071							
072	GC-Q-MS	GC-QQQ-MS/MS	ETOAc/Ch		2	Splitless	YES
073	GC-Q-MS	GC-MS	Cyclohexane		1.5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077							
078	GC-Q-MS	GC-FPD		Triphenylmethane	2	PTV	NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084							
085	GC-FPD	GC.MS	Toluene		1	Splitless	YES
086							
087	GC-NPD	GC-ECD	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Split	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-QQQ-MS/MS	GC-FPD		Yes	3	PTV-LVI	YES
091	GC-NPD	GC-NPD	Yes		3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096							
097	No participation						
098	No participation						
099	No participation						
100	GC-Q-MS						YES
101							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

PHOSMET							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-NPD	GC-TOF/MS	EA	TPP	1	Splitless	YES
103	GC-ITD-MS				1	Splitless	YES
104	GC-ITD (EI)			Trichlorona	5	PTV-LVI	YES
105	No results reported						
106	No participation						
107	GC-NPD						
108							
109	GC-NPD	GC-ECD	Isooctane/Toluene 90/10		2	On-Column	YES
110	GC-NPD	GC-MS	n-hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116							
117	No results reported						
118	GC-NPD		i-Octane		1	Splitless	YES
119	No participation						
120	No results reported						
121	GC-QQQ-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129							
130							
131	No participation						
132							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

QUINOXYFEN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001							
002	GC- ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006							
007	LC-MS/MS	GC-Q-MS			5		YES
008	GC-QQQ-MS/MS	GC-MS/MS		Yes	5	PTV	NO
009	HPLC-DAD	GC-MS			10		YES
010	GC-NPD		Toluene		2	PTV	YES
011	GC-ITD-MS/MS				5	PTV-LVI	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN		Yes	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018	LC-MS/MS				50		YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS	Dilution		15	PTV	YES
021	GC-NPD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	GC-ITD-MS	GC-ITD-MS			1	Splitless	YES
025	No results reported						
026	GC-NPD	MS	Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl Acetate/ Cyclohexane		1	Splitless	YES
030	LC-MS/MS	GC-MSD		Ethoprophos	10		YES
031	GC-QQQ-MS/MS				10	Split	NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

QUINOXYFEN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	GC-Q-MS	GC-ITD-MS/MS	Cyclohexane				
036	LC-MS/MS				10		YES
037							
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless	YES
039	No participation						
040	GC-Q-MS					PTV	YES
041	No participation						
042	GC-Q-MS				10	PTV	NO
043	LC-MS/MS				5		YES
044	GC-Q-MS	GC-MS	Ciclohexane	Azzobenzene	1	Split	YES
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	GC-ECD	GC-MS			1	Splitless	YES
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051							
052	No results reported						
053							
054	No results reported						
055							
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	GC-NPD	LC-MS/MS	Isoctane	TPP	2	Splitless	YES
060	LC-MS/MS	GC-Q-MS			5		NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	LC-MS/MS	GC-ECD			10		YES
063	No participation						
064	LC-MS/MS				5		YES
065	No participation						
066							
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

QUINOXYFEN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-ECD		Isoctane		1	Splitless	YES
070	GC-ITD	GC-ITD	Iso-octane/toluene 9:1	Ethoprofos	5	PTV-LVI	YES
071							
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	GC-Q-MS	GC-MS	Cyclohexane		1.5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077	LC-MS/MS						YES
078	LC-MS/MS	GC-QQQ-MS/MS		Linuron-D6	10		NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084							
085	GC-Q-MS		Toluene		1	Splitless	YES
086							
087	GC-NPD	GC-MS	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-QQQ-MS/MS			Yes	3	PTV-LVI	YES
091							
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096	GC-NPD				1	Splitless	
097	No participation						
098	No participation						
099	No participation						
100							
101							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

QUINOXYFEN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-ITD/MS	GC-NPD	EA	TPP	1	Splitless	YES
103							
104	GC-ITD (EI)			Trichlorona	5	PTV-LVI	YES
105	No results reported						
106	No participation						
107	LC-MS/MS						
108							
109							
110	GC-ECD	GC-MS	n-hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	GC-Q-MS			Yes	9	PTV-LVI	YES
117	No results reported						
118	LC-MS		ACN/WATER		20		YES
119	No participation						
120	No results reported						
121	GC-QQQ-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129							
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131	No participation						
132	GC-Q-MS	LC-MS/MS	Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

TRIADIMENOL (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	GC/MS/MS				2	LVI	YES
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006							
007	LC-MS/MS				5		YES
008	LC-MS/MS	LC-MS/MS			10		NO
009	GC-NPD	GC-MS			2	PTV	YES
010	GC-ECD		Toluene		2	PTV	YES
011	GC-ITD-MS/MS				5	PTV-LVI	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN			1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018	LC-MS/MS				50		YES
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	LC-MS/MS	LC-MS/MS	Dilution		5		YES
021	GC-NPD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	LC-MS/MS	LC-MSMS			10		YES
025	No results reported						
026	GC-Q-MS		Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl Acetate/ Cyclohexane		1	Splitless	YES
030	GC-Q-MS	GC-MSD		Triphenyl Phosphate	2	Splitless	YES
031	GC-QQQ-MS/MS				10	Split	NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

TRIADIMENOL (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	LC-MS/MS	LC-MS/MS					
036	LC-MS/MS				10		YES
037							
038	LC-MS/MS				5		YES
039	No participation						
040	GC-Q-MS					PTV	YES
041	No participation						
042	GC-Q-MS				10	PTV	NO
043	LC-MS/MS				5		YES
044	GC-Q-MS	GC-MS	Ciclohexane	Azobenzene	1	Split	YES
045	LC-MS/MS	LC-MS/MS	Methanol		5		YES
046	LC-MS/MS		Methanol/water		20		YES
047	GC-MS/MS	GC-MS/MS			1	Splitless	NO
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051	GC-Q-MS		Methanol	Trifenilfosfato	1 ul	Splitless	YES
052	No results reported						
053	GC-NPD	GC-NPD	Petroleum Ether		1	Splitless	YES
054	No results reported						
055							
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	GC-NPD	LC-MS/MS	Isoctane	TPP	2	Splitless	YES
060	LC-MS/MS	GC-Q-MS			5		NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	GC-NPD		Isoctane	Yes	1	On-Column	YES
063	No participation						
064	LC-MS/MS				5		YES
065	No participation						
066	GC-NPD	GC-ITD-MS/MS	Yes		4	PTV	YES
067	LC-MS/MS				2		NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

TRIADIMENOL (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-ECD		Isooctane		1	Splitless	YES
070	LC-MS/MS	LC-MS/MS	Methanol + 0.025% acetic acid	Quinalfos	5		YES
071							
072	LC-MS/MS	LC-MS/MS	MeOH		5		YES
073	GC-Q-MS	GC-MS	Clyclohexane		1,5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077	LC-MS/MS						YES
078	GC-Q-MS	GC-Q-MS		Triphenylmethane	2	PTV	NO
079	No results reported						
080	LC-MS/MS				5		YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084	LC-MS/MS				25		YES
085	GC-Q-MS		Toluene		1	Splitless	YES
086							
087	GC-NPD	GC-MS	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-QQQ-MS/MS			Yes	3	PTV-LVI	YES
091	GC-ECD	GC-ECD	Yes		3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096	GC-NPD				1	Splitless	
097	No participation						
098	No participation						
099	No participation						
100							
101							

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

TRIADIMENOL (ONLY)							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-NPD	GC-ITD/MS	EA	TPP	1	Splitless	YES
103	GC-NPD				2	Splitless	YES
104	GC-ITD (EI)			Trichlorona	5	PTV-LVI	YES
105	No results reported						
106	No participation						
107	LC-MS/MS						
108							
109							
110	GC-ECD	GC-MS	n-hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	GC-Q-MS			Yes	9	PTV-LVI	YES
117	No results reported						
118	GC-NPD		i-Octane		1	Splitless	YES
119	No participation						
120	No results reported						
121	LC-MS/MS			TPP			YES
122	No participation						
123	No participation						
124							
125	No results reported						
126	No participation						
127	No participation						
128							
129	GC-ECD	GC-MS		M-Series		Splitless	YES
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Cyclohexane		10	PTV-LVI	YES
131	No participation						
132	GC-Q-MS		Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

VINCLOZOLIN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
001	GC-ITD/MS				2	LVI	yes
002	GC-ECD, GC-NPD	GC-MS	Acetone		2	Splitless	YES
003	No results reported						
004	No results reported						
005	No participation						
006	GC-ECD				1	Split	YES
007	GC-Q-MS				1	Splitless	YES
008	GC-QQQ-MS/MS	GC-MS/MS		Yes	5	PTV	NO
009	GC-NPD	GC-MS			2	PTV	YES
010	GC-ECD		Toluene		2	PTV	YES
011	GC-ECD	GC-ITD-MS/MS	Isoctane		1	Splitless	YES
012	No results reported						
013	GC-Q-MS		Yes	Yes	10	PTV-LVI	YES
014	GC-Q-MS	GC/MS/SCAN		Yes	1	Splitless	YES
015	No participation						
016	No results reported						
017	GC-Q-MS			TRIS	2	Splitless	YES
018							
019	GC-Q-MS	GC-Q-MS			3	PTV	YES
020	GC-Q-MS	GC-Q-MS	Dilution	TPP	20	PTV	YES
021	GC-NPD				1	Splitless	YES
022	GC-QQQ-MS/MS	GC/MS/MS	Toluene	TPP	5	Splitless	YES
023	No results reported						
024	GC-ITD-MS	GC-ITD-MS			1	Splitless	YES
025	No results reported						
026	GC-Q-MS		Acetone	Etion	1	Splitless	YES
027	No participation						
028	No results reported						
029	GC-MS		Ethyl Acetate/ Cyclohexane		1	Splitless	YES
030	GC-Q-MS	GC-MSD	None	Triphenyl Phosphate	2	Splitless	YES
031	GC-QQQ-MS/MS				10	Split	NO
032							
033	No results reported						

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

VINCLOZOLIN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
034	No participation						
035	GC-Q-MS	GC-ITD-MS/MS	Cyclohexane				
036	GC-ECD				10	Splitless	YES
037	GC-ECD	GC-MS			1	Splitless	NO
038	GC-QQQ-MS/MS		Hexane	TPP	1	Splitless	YES
039	No participation						
040	GC-Q-MS					PTV	YES
041	No participation						
042	GC-Q-MS				10	PTV	NO
043	GC-Q-MS		Toluene		1	Splitless	YES
044	GC-Q-MS	GC-MS	Ciclohexane	Azobenzene	1	Split	YES
045	GC-ITD-MS/MS	GC-MS/MS	Ethyl acetate + Cyclohexane (1:1)		2	Splitless	YES
046	GC-Q-MS		Acetone/Isoctane		1		YES
047	GC-NPD	GC-MS			1	Splitless	YES
048	GC-Q-MS		Acetone	Atrazine D5	1	Splitless	YES
049	No participation						
050	No participation						
051	GC-Q-MS		Methanol	Trifenilfosfato	1 ul	Splitless	YES
052	No results reported						
053	GC-ECD	GC-NPD	Petroleum Ether		1	Splitless	YES
054	No results reported						
055	GC-ECD						
056	No participation						
057	GC-Q-MS	GC-Q-MS	Isoctane	Ethion	3	PTV	YES
058	No participation						
059	GC-ECD		Isoctane	Mirex	1	Splitless	NO
060	GC-Q-MS				5	PTV-LVI	NO
061	GC-Q-MS		Yes	Yes	1	On-Column	YES
062	GC-ECD	GC-NPD	Isoctane	Yes	1	On-Column	YES
063	No participation						
064	GC-Q-MS			TPP	2	PTV	NO
065	No participation						
066	GC-ECD	GC-ITD-MS/MS	Yes		4	PTV	YES
067	GC-Q-MS				2	Splitless	NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

VINCLOZOLIN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
068							YES
069	GC-ECD		Isoctane		1	Splitless	YES
070	GC-ITD	GC-ITD	Isoctane /toluenel 9:1	Ethoprofos	5	PTV-LVI	YES
071							
072	GC-QQQ-MS/MS	GC-QQQ-MS/MS	ETOAc/Ch		2	Splitless	YES
073	GC-Q-MS	GC-MS	Cyclohexane		1.5	Split	YES
074	No participation						
075	No participation						
076	GC-Q-MS				5	PTV	YES
077	GC-ITD-MS/MS						YES
078	GC-QQQ-MS/MS	GC-Q-MS		Triphenylmethane	2	PTV	NO
079	No results reported						
080	GC-ECD			Aldrin	1		YES
081	No results reported						
082	GC-Q-MS	Yes	Yes	Yes	2	PTV	YES
083	No participation						
084							
085	GC-Q-MS		Toluene		1	Splitless	YES
086	GC-Q-MS		Ethyl acetate		1	PTV	YES
087	GC-NPD	GC-ECD, GC-MS	Acetone	Diclofenthion	1.0	Splitless	YES
088	GC-Q-MS	GC-Q-MS	CH_3CN		0.5	Splitless	NO
089	GC-ECD	MS			1	Splitless	YES
090	GC-QQQ-MS/MS			Yes	3	PTV-LVI	YES
091	GC-ECD	GC-ECD			3	Splitless	YES
092	No participation						
093	No results reported						
094	No participation						
095	GC-ITD-MS/MS					PTV-LVI	NO
096	GC-NPD				1	Splitless	
097	No participation						
098	No participation						
099	No participation						
100	GC-Q-MS						YES
101	GC-ECD	GC-NPD	Ethyl Acetate			PTV	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

VINCLOZOLIN							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV10 standard solution used? (Yes/No)
102	GC-ECD	GC-TOF/MS	Ethyl Acetate		1	Splitless	YES
103	GC-ITD-MS				1	Splitless	YES
104	GC-ITD (EI)			Trichlorona	5	PTV-LVI	YES
105	No results reported						
106	No participation						
107	GC-ECD						
108							
109							
110	GC-ECD	GC-MS	n-hexane		1	Splitless	YES
111	No results reported						
112	No results reported						
113	No participation						
114	No participation						
115	No results reported						
116	GC-Q-MS			Yes	9	PTV-LVI	YES
117	No results reported						
118	GC-ECD		i-Octane		1	Splitless	YES
119	No participation						
120	No results reported						
121	GC-QQQ-MS/MS			TPP			YES
122	No participation						
123	No participation						
124	GC-ECD	GC-MS	Ethyl Acetate		1	Splitless	YES
125							
126	No participation						
127	No participation						
128	GC-Q-MS				1	Splitless	YES
129	GC-ECD	GC-MS		M-Series	2	Splitless	YES
130	GC-ITD-MS/MS	GC-ITD-MS/MS	Ciclohexane		10	PTV-LVI	YES
131	No participation						
132	GC-Q-MS		Acetone/cyclohexane		1	Splitless	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

Table 3. List of FV-10 participating laboratories in relation with the ring test of standard solution.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS	PARTICIPATION
AUSTRIA	Austrian Agency for Food and Health Safety (AGES) Analytical Competence for Plant Protection Products	Innsbruck	YES	YES
AUSTRIA	Austrian Agency for Food and Health Safety, Competence Centre Residue Analysis, Vienna	Vienna	YES	YES
BELGIUM	FYTOLAB	Gent - Zwijnaarde	YES	YES
BELGIUM	Sientific Institute of Public Health (IPH)	Bruxelles	YES	YES
BULGARY	Central Laboratory for Chemical Testing and Control	Sofia	YES	YES
CYPRUS	Pesticide Residues Laboratory of State General Laboratory	Nicosia	NO	NO
CZECH REPUBLIC	Czech Agriculture and Food Inspection Authority	Praha 6	NO	YES
CZECH REPUBLIC	Institute of Chemical Technology Department of Food Chemistry and Analysis	Prague	YES	YES
DENMARK	The National Food Institute, Danish Technical University	Soeborg	YES	YES
DENMARK	Danish Veterinary and Food Administration, Region East	Ringsted	YES	YES
EGYPT	Central Laboratory of Residue Pesticide Analysis. Ministry of Agriculture	Giza	YES	YES
ESTONIA	Agricultural Research Centre, Lab for Residues and Contaminants	Saku	YES	YES
ESTONIA	Health Protection Inspectorate Tartu Laboratory	Tartu	NO	YES
FINLAND	Environment Centre of the City of Helsinki MetropoliLab	Helsinki	NO	YES
FINLAND	Finnish Customs Laboratory	Espoo	YES	YES
FRANCE	SCL Sevice commun des laboratoires ILLKIRCH	Illkirch	YES	YES
FRANCE	Laboratoire du SCL de Montpellier	Montpellier	NO	YES
FRANCE	SCl Laboratoire d'Ile de France Massy	Massy Cedex	YES	YES
FRANCE	SCL Laboratoire Pessac	Pessac	YES	YES
FRANCE	Laboratoire SCL-Finance Ministry, Rennes	Rennes	YES	YES
GERMANY	Chemisches und Lebensmitteluntersuchungsamt der Stadt Dortmund	Dortmund	NO	YES
GERMANY	Landesamt für Landwirtschaft, Lebensmittel sicherheit und Fischerei Mecklenburg-Vorpommern	Rostock	YES	YES
GERMANY	Landeslabor Brandenburg, Dienstsitz und Laborbereich Frankfurt (Oder)	Frankfurt (Oder)	NO	YES
GERMANY	Institut für Hygiene und Umwelt	Hamburg	YES	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS	PARTICIPATION
GERMANY	Niedersdchsisches Landesamt f|r Verbraucherschutz und Lebensmittelsicherheit, Lebensmittelinstitut Oldenburg	Oldenburg	YES	YES
GERMANY	Chemisches Landes- und Staatliches Veterindruntersuchungsamt	Münster	YES	YES
GERMANY	Bioanalytik Weihenstephan	Freising	YES	YES
GERMANY	Landesamt f. Lebensmittelsicherh. u. Verbrauchersch.	Bad Langensalza	YES	YES
GERMANY	Landeslabor Schleswig-Holstein	Neumüenster	NO	NO
GERMANY	Landesamt fur Verbraucherschutz Sachsen-Anhalt	Halle/Saale	NO	NO
GERMANY	Landesuntersuchungsamt, Institut fur Lebensmittelchemie	Speyer	YES	YES
GERMANY	Gemeinsames Chemisches und Lebensmitteluntersuchungsamt für den Kreis Recklinghausen und die Stadt Gelsenkirchen (CEL)	Recklinghausen	YES	YES
GERMANY	BBGes-ILAT, FB 26	Berlin	NO	NO
GERMANY	Landesuntersuchungsamt für Chemie, Hygiene und Veterinärmedizin	Bremen	NO	NO
GERMANY	Amt für Umwelt, Verbraucherschutz und Lokale Agenda	Bonn	YES	YES
GERMANY	Federal Office of Consumer Protection and Food Safety (BVL)	Berlin	YES	YES
GERMANY	Amt für Verbraucherschutz D|sseldorf - 39/2 Chemische und Lebensmitteluntersuchung	Düsseldorf	YES	YES
GERMANY	LSGV (Landesamt für Soziales, Gesundheit und Verbraucherschutz)	Saarbrücken	YES	YES
GERMANY	Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit	Erlangen	YES	YES
GERMANY	Chemisches und Veterinäruntersuchungsamt-Ostwestfalen-Lippe (CVUA-OWL)	Bielefeld	NO	NO
GERMANY	CVUA-RRW, Standort Essen	Essen	NO	YES
GERMANY	Landesbetrieb Hessisches Landeslabor	Kassel	NO	YES
GERMANY	Chemisches und Veterinäruntersuchungsamt (CVUA) Stuttgart	Fellbach	YES	YES
GREECE	Pesticide Residue Laboratory of Regional Centre of Plant Protection & Quality Control of Piraeus	Athens	NO	NO
GREECE	Ministry of Rural Development and Food, Regional Centre of Plant Protection and Quality Control	Ioannina	YES	YES
GREECE	Ministry of Rural Development and Food-Peripheral Center of Kavala	Kavala	NO	NO
GREECE	General Chemical State Laboratory. Division Pesticide Residue Laboratory	Athens	YES	YES
GREECE	Regional Centre of Plant Protection and Quality Control of Thessaloniki. Pesticide Residue Laboratory	Thessaloniki	NO	NO
GREECE	Pesticide Residues Laboratory, Benaki Phytopathological Institute	Kiphissia-Athens	NO	NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS	PARTICIPATION
GREECE	Regional Centre of Plant Protection and Quality Control of Iraklion	Iraklion Crete	YES	YES
GREECE	Regional Centre of Plant Protection and Quality Control of Magnesia, Laboratory of Residue Analysis	Volos	YES	YES
GREECE	Laboratory of Pesticide Residues of Nafplio	Nafplio	NO	NO
HUNGARY	Plant Protection and Soil Conservation Directorate. Agricultural Office of Somogy County	Kaposvar	YES	YES
HUNGARY	Agricultural Office of County Csongrad, Directorate of Plant Protection and Soil Conservation, Pesticide Residue Analytical Laboratory	Hodmezovasarhely	NO	NO
HUNGARY	Agricultural Office of County Féjer, Plant Protection and Soil Conservation Directirate, Pesticide Residue Analytical Laboratory	Velence	YES	YES
HUNGARY	Agricultural Office of BAZ County Plant Protection and Soil Conservation Directorate, Pesticide Residue Laboratory	Miskolc	YES	YES
HUNGARY	Plant Protection and Soil Conservation Directorate of Jasz-Nagykun-Szolnok County	Szolnok	YES	YES
HUNGARY	Agricultural Special Management Office Plant-and Soil Protection Management Residue Analytical Laboratory	Tanakajd	YES	YES
ICELAND	Matis ohf.	Akureyri	YES	YES
IRELAND	Pesticide Control Laboratory. Department of Agriculture and Food	Celbridge, Co. Kildare	YES	YES
ITALY	APPA Trento Settore Laboratorio e Controlli	Trento	NO	YES
ITALY	Agenzia Ambiente Bolzano - Laboratorio Analisi Aria e Rumore	Bolzano	YES	YES
ITALY	ARPA VALLE D'AOSTA	Saint Christophe	YES	YES
ITALY	Arpa Ferrara Eccellenza Fitofarmaci	Chiesuol Del Fosso (Ferrara)	NO	NO
ITALY	ARPA_FVG Dipartimento di Pordenone	Pordenone	NO	NO
ITALY	ARPAT	Florence	YES	YES
ITALY	Laboratorio Di Sanita Pubblica. ASL Provincia di Bergamo	Bergamo	YES	YES
ITALY	ARPA Puglia - Dipartimento di Bari	Bari	YES	YES
ITALY	Istituto Superiore di Sanit` - Dip. AMPP Ambiente e Connessa Prevenzione Primaria - Rep. Antiparassitari	Roma	YES	YES
ITALY	ARPAT. Dipartimento di Arezzo	Arezzo	YES	YES
ITALY	ARPA Sardegna Dipartimento Provinciale di Cagliari	Cagliari	YES	YES
ITALY	A.S.L. della Provincia di Varese - Dipartimento di Prevenzione Medico – Unitá Oètativa. Laboratorio Chimico	Varese	NO	YES
ITALY	AUSL N.7 RAGUSA ARPA SICILIA DAP RAGUSA	Ragusa	YES	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS	PARTICIPATION
ITALY	ARPAT, Dip. Prov.le di Livorno	Livorno	NO	YES
ITALY	ARPA-VENETO - DIP.REG.LAB. - S.L. VERONA	Verona	NO	NO
ITALY	A.R.P.A Piemonte - Polo Regionale Alimenti	La Loggia (To)	NO	NO
ITALY	ARPA CAMPANIA-Dipartimento Provinciale di Napoli-L.S. Fitofarmaci	Naples	YES	YES
ITALY	ARPA MARCHE-DIPARTIMENTO DI MACERATA	Macerata	NO	NO
LATVIA	National Diagnostic Centre	Riga	YES	YES
LITHUANIA	National Veterinary Laboratory	Vilnius	YES	YES
LUXEMBOURG	Laboratoire National de Santi Côntrole des Denrées Alimentaries, LNS	Luxembourg	NO	NO
NORWAY	Bioforsk, Plant Health and Plant Protection, Pesticide Chemistry Norwegian Institute for Agricultural and Environmental Research, Bioforsk Laboratory	Aas	YES	YES
POLAND	Plant Protection Institute Branch Sosnicowice	Sosnicowice	YES	YES
POLAND	Laboratory of Warsaw Sanitary-Epidemiological Station	Warszawa	YES	YES
POLAND	Department of Pesticide Residue Research, Institute of Plant Protection	Poznan	YES	YES
POLAND	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA	Poznan	YES	YES
POLAND	Wojewodzka Stacja Sanitarno-Epidemiologiczna w Olsztynie	Olsztynie	NO	NO
POLAND	Institute of Plant Protection. Experimental Station	Rzeszow	YES	YES
POLAND	Instytut Ochrony Roślin	Trzebnica	NO	NO
POLAND	Laboratory of Gorzow Voivodeship Sanitary-Epidemiological Station	Gorzsw Wielkopolski	YES	YES
POLAND	State Plant Health and Seed Inspection Service, Central Laboratory	Torun	NO	YES
POLAND	National Institute of Hygiene, Laboratory of Department of Environmental Toxicology	Warsaw	YES	YES
POLAND	Wojewsdzka Stacja Sanitarno-Epidemiologiczna w Opolu	Opole	YES	YES
POLAND	Wojewodzka Stacja Sanitarno-Epidemiologiczna w Krakowie	Krakow	YES	YES
POLAND	Wojewodzka Stacja Sanitarno-Epidemiologiczna w Kielcach	Kielce	NO	NO
POLAND	Food Safety Laboratory	Skierniewice	YES	YES
POLAND	Wojewsdzka Stacja Sanitarno-Epidemiologicza w Łodzi	Lodz	NO	YES
POLAND	Wojewodzka Stacja Sanitarno-Epidemiologiczna we Wroclawiu, Dzial Laboratoryjny	Wroclaw	YES	YES

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS	PARTICIPATION
POLAND	Wojewsdzka Stacja Sanitarno-Epidemiologiczna w Rzeszsw	Rzeszsw	NO	NO
PORTUGAL	Pesticide Residue Laboratory. Direcção-Geral de Protecção das Culturas.	Oeiras	YES	YES
PORTUGAL (MADEIRA ISLAND)	Laboratorio de Qualidade Agrícola	Camacha	YES	YES
ROMANIA	LCCRPPPV-CENTRAL LABORATORY FOR PESTICIDE RESIDUE CONTROL IN PLANTS AND VEGETABLES	Bucharest	NO	NO
ROMANIA	LABORATORUL SANITAR VETERINAR DE STAT BUCURESTI	Bucharest	NO	YES
SLOVAKIA	State Veterinary and Food Institute	Bratislava	YES	YES
SLOVENIA	Public Health Institute	Maribor	YES	YES
SLOVENIA	Agricultural Institute of Slovenia, Central Laboratories	Ljubljana	YES	YES
SLOVENIA	Institute of Public Health of the Republic of Slovenia	Ljubljana	YES	YES
SPAIN	Laboratorio Regional de la Comunidad Autónoma de La Rioja	Logroño	YES	YES
SPAIN	Laboratorio de Producción y Sanidad Vegetal de Almería	Almería	NO	YES
SPAIN	Laboratorio Agroalimentario de la Generalitat Valenciana	Burjassot	YES	YES
SPAIN	Laboratorio Agroalimentario y de Sanidad Animal	El Palmar-Murcia	NO	YES
SPAIN	Laboratorio Agroambiental Diputación Foral de Guipúzcoa	Zizurkil	NO	NO
SPAIN	Laboratorio Producción y Sanidad Vegetal de Huelva	Cartaya (Huelva)	NO	YES
SPAIN	Centro Nacional de Alimentación	Majadahonda-Madrid	NO	NO
SPAIN	Laboratorio Agrario Regional Junta de Castilla y León	Burgos	NO	NO
SPAIN	Laboratorio Producción y Sanidad Vegetal	Jaén	YES	YES
SPAIN	Laboratorio Arbitral Agroalimentario del M.A.P.A.	Madrid	NO	NO
SPAIN	Laboratori Agroalimentari - DAR	Cabrils	YES	YES
SPAIN	NASERSA	Villava	NO	NO

ANNEX 3. Ringtest of Standards Solution. Results and Participants.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS	PARTICIPATION
SPAIN	Laboratorio Agrario y Fitopatológico de Galicia	San Tirso De Mabegondo	NO	NO
SPAIN	Laboratorio Salud Publica - Almería	Almería	NO	YES
SPAIN	Instituto Tecnológico de Canarias	Santa Lucia, Las Palmas	YES	YES
SWEDEN	Lantmännen Analycen AB	Lidköping	YES	YES
SWEDEN	National Food Administration, Chemistry Division 1	Uppsala	YES	YES
SWITZERLAND	Official Food Control Authority of the Canton of Zurich	Zurich	YES	YES
SWITZERLAND	Service de la Consommation et des Affaires Vitirinaires (SCAV)	Geneve 4 Plainpalais	YES	YES
THE NETHERLANDS	VWA - Food and Consumer Product Safety Authority	Amsterdam	YES	YES
UNITED KINGDOM	Scottish Agricultural Science Agency.	Edinburgh	NO	YES
UNITED KINGDOM	Eurofins Laboratories Ltd	Wolverhampton, West Midlands	NO	YES
UNITED KINGDOM	Central Science Laboratory	York	YES	YES
UNITED KINGDOM	Laboratory of the Government Chemist	Teddington	YES	YES
URUGUAY	Universidad de La República. Dpto. Farmacognosia y Productos Naturales	Montevideo	YES	YES