

CRL-PROFICIENCY TEST-FV-9, 2007

Pesticide Residues in Strawberry Homogenate

Final Report

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CRL-EUROPEAN COMMISSION PROFICIENCY TEST 9
ON PESTICIDE MULTIRESIDUE METHODS IN FRUIT AND VEGETABLES
2007

The Council Directives 86/362/EEC¹ and 90/642/EEC² makes provision for the organisation and financial support of regular proficiency testing (PT) of those laboratories that perform analyses for their official national monitoring programmes. These proficiency tests are carried out in order to ensure the quality, accuracy and comparability of the residue data sent by EU Member States to the European Commission as well as other Member States, on an annual basis.

Regulation (EC) No 882/2004³ lays down the general tasks, duties and requirements for Community Reference Laboratories (CRLs) for Food, Feed and Animal Health. Among these tasks is the organisation of independently organised comparative tests. The European Proficiency Test 9 has been organised by the CRL in Fruit and Vegetables at the University of Almería, Spain⁴. The Proficiency Test is an activity carried out annually on the basis of previous EUPTs. Participation in this 9th European Proficiency Test was open to all official national or regional analytical laboratories involved in the determination of pesticide residues in fruit and vegetables within Member States of the EU. Participation was mandatory for all National Reference Laboratories. Additionally, laboratories from Iceland, Norway and Egypt who had been invited to take part in a previous test, were again invited to participate. Laboratories from Argentina, Switzerland, Turkey and Uruguay participated for the first time.

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

¹ Council Directive 86/362/EEC of 24 July 1986 on the fixing of maximum levels for pesticide residues in and on cereals. Published at OJ of the EU 221, 7.8.1986, p. 37. Directive as last amended by Commission Directive 2006/62/EC (OJ L 206, 27.7.2006, p. 27).

² Council Directive 90/642/EEC of 27 November 1990 on the fixing of maximum levels for pesticide residues in and on certain products of plant origin, including fruit and vegetables. Published at OJ L 350, 14.12.1990, p. 71. Directive as last amended by Commission Directive 2006/62/EC.

³ Regulation (EC) N° 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

⁴ 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 seven laboratories agreed to participate in the 9th European Commission Proficiency Test.

This proficiency test was performed in 2007 using strawberry homogenate. The strawberries were grown in Huelva, in the south of Spain, and were treated post-harvest, using commercial formulations that were applied using a microspray technique. Eighteen pesticide formulation products were used for the treatments (nineteen pesticides in total, as Endosulfan α and Endosulfan β were assessed individually). Participating laboratories were also provided with a 'blank' strawberry homogenate as well as the treated test material.

The test materials, 300 g of strawberry homogenate containing residues of pesticides, together with 300 g of 'blank' strawberry homogenate, were shipped to participants on the 9th, 10th and 16th of April 2007. The deadline for submission of results to the Organiser was the 14th May 2007. The participants were provided with a list of eighty-two possible pesticides (Annex 1) that might be present in the test material and were asked to determine the residue levels of all the pesticides that they detected. This list of possible pesticides to be present in the sample also contained the Minimum Required Reporting Level (MRRL) for each pesticide. In order to avoid further confusion, the term Minimum Required Reporting Level (MRRL) will now be used consistently in this report to replace the terms Minimum Required Performance Level (MRPL), which was used in the text of previous reports, and Minimum Performance Reporting Level (MRPL), which was used in the possible pesticides list in the protocol.

Participants were also 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 nineteen 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 of the nineteen compounds present.

For the assessment of the overall laboratory performance the Weighted Sum of z-Scores (WSZ), as used in the last Proficiency Test, has been applied with some additional conditions. Only laboratories that fulfilled the criteria of detecting 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 classified as having 'sufficient scope' and have therefore been placed 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.

This year for the first time a ring test was organised in order to estimate the contribution of participants calibration solutions to overall accuracy of their reported test results.

After the deadline for submitting results had passed, laboratories had the possibility to request a vial containing a solution of the pesticides that were present in the treated strawberry test material. Eighty nine laboratories from the one hundred and thirty seven, agreed to participate in this additional ring test of standard solutions. Participants and their reported results are presented in Annex 3.

2. TEST MATERIALS

2.1 Analytical methods

The two analytical methods, described briefly below, as well as other procedures used by the Organisers for the homogeneity and stability tests performed by the University of Almeria, were:

- GC method [1]: ethyl acetate extraction in the presence of sodium sulfate, filtration, addition of more sodium sulfate, evaporation, re-dissolution in cyclohexane and determination by GC-MS/MS.
- LC method [2]: ethyl acetate extraction in the presence of sodium sulfate and addition of sodium hydroxide, filtration, addition of more sodium sulfate, evaporation, re-dissolution in methanol, and determination by LC-MS/MS.

Fenhexamid, Hexythiazox, Oxamyl, Penconazole, Tebuconazole and Triadimenol were determined using the LC-MS/MS method. All other pesticides (Bupirimate, Cyprodinil, Diazinon, Endosulfan α and β , Fenitrothion, Fludioxonil, Iprodione, Myclobutanil, Procymidone, Pyrimethanil, Quinoxifen, Tolyfluanid), were analysed using the GC method. For confirmation purposes, MS/MS spectra were used.

2.2 Preparation of treated test material

Before preparation of the test material, the pesticides were selected and applied at suitable residue levels for the study, following recommendations made by the Quality Control Group, which had been specifically appointed for Proficiency Test 9. One hundred and fifty kilograms of strawberries were picked, their stems removed and treated post-harvest with commercial pesticide formulations dissolved in water and applied to the strawberries using a microspray. Each formulation containing the individual pesticide was applied, allowing one hour to elapse between applications. A portion was taken and analysed to check the residue levels present in order to decide whether or not additional spraying was necessary. When the residue levels contained in the strawberries 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 chopped strawberries were mixed in a constantly spinning container until a homogeneous material was obtained. 300g portions of the well-mixed homogenate were weighed out into screw-capped polyethylene plastic bottles, sealed, and stored in a freezer at about - 20 °C prior to distribution to participants.

2.3 Preparation of 'blank' test material

The strawberries 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. No low levels of any of the pesticides present in the Pesticide List were found at or above the Minimum Required Reporting Level (MRRL).

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' strawberries 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 [3]. 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 $\sigma = \text{RSD (25\%)}$ multiplied by the analytical sampling mean for all pesticides.

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

	Bupirimate	Cyprodinil	Diazinon	Endosulfan α	Endosulfan β	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox
Mean Conc. (mg/Kg)	0.798	0.906	0.276	0.391	0.320	0.345	0.782	0.542	1.00
S_s/σ	0.239	0.080	0.178	0.148	0.148	0.264	0.144	0.210	0.213
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)

	Myclobutanil	Oxamyl	Penconazole	Procymidone	Pyrimethanil	Quinoxifen	Tebuconazole	Tolyfluanid	Triadimenol
Mean Conc. (mg/Kg)	0.725	0.741	0.485	0.663	0.881	1.00	0.795	1.67	1.33
S_s/σ	0.188	0.196	0.172	0.135	0.058	0.293	0.109	0.285	0.280
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 9th April 2007.
- Day 2: shortly after the deadline for reporting results, on 15th May 2007.

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 did not influence their results.

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

	Bupirimate (mg/Kg)	Cyprodinil (mg/Kg)	Diazinon (mg/Kg)	Endosulfan α (mg/Kg)	Endosulfan β (mg/Kg)	Fenhexamid (mg/Kg)	Fenitrothion (mg/Kg)	Fludioxonil (mg/Kg)	Hexythiazox (mg/Kg)
Day 1 (1 st sample)	0.800	0.899	0.253	0.395	0.323	0.342	0.784	0.540	1.07
Day 1 (2 nd sample)	0.814	0.904	0.270	0.388	0.318	0.346	0.780	0.548	1.09
Mean 1	0.807	0.902	0.262	0.392	0.320	0.344	0.782	0.544	1.08
Day 2 (1 st sample)	0.768	0.900	0.260	0.391	0.320	0.344	0.791	0.530	1.05
Day 2 (2 nd sample)	0.799	0.890	0.265	0.398	0.325	0.360	0.780	0.540	1.05
Mean 2	0.784	0.895	0.263	0.394	0.322	0.352	0.786	0.535	1.05
(M1-M2)/M1	0.029	0.007	-0.004	-0.003	-0.003	-0.023	-0.004	0.017	0.028
%	2.91	0.72	-0.38	-0.35	-0.28	-2.33	-0.45	1.65	2.78

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

	Myclobutanil (mg/Kg)	Oxamyl (mg/Kg)	Penconazole (mg/Kg)	Procymidone (mg/Kg)	Pyrimethanil (mg/Kg)	Quinoxifen (mg/Kg)	Tebuconazole (mg/Kg)	Tolyfluanid (mg/Kg)	Triadimenol (mg/Kg)
Day 1 (1 st sample)	0.720	0.742	0.490	0.660	0.880	1.00	0.800	1.67	1.29
Day 1 (2 nd sample)	0.750	0.720	0.487	0.590	0.857	1.00	0.880	1.70	1.30
Mean 1	0.735	0.731	0.489	0.625	0.869	1.00	0.840	1.69	1.30
Day 2 (1 st sample)	0.714	0.738	0.500	0.654	0.823	0.980	0.880	1.60	1.32
Day 2 (2 nd sample)	0.730	0.730	0.489	0.657	0.879	0.940	0.870	1.65	1.34
Mean 2	0.722	0.734	0.495	0.66	0.851	0.960	0.880	1.63	1.33
(M1-M2)/M1	0.018	-0.004	-0.012	-0.049	0.020	0.040	-0.042	0.036	-0.027
%	1.77	-0.41	-1.23	-4.88	2.01	4.00	-4.17	3.56	-2.70

2.6 Distribution of test material and protocol to participants

One bottle of treated test sample and one bottle of 'blank' material were shipped to each participant encased in boxes containing dry ice. The samples were sent on the 9th, 10th and 16th April, 2007.

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 EUPT 9 web page, constructed especially for this Proficiency Test. A password was required to enter a restricted zone where the Protocol and Forms 1, 2 and 3 could be found. This information was sent by e-mail to all participating laboratories, at the same time as they were informed that their Application Form for participation had been accepted. This ensured that confidentiality was maintained throughout the duration of Proficiency Test 9. The Pesticide List together with the Minimum Required Reporting Level (MRRL) established by the Organiser was uploaded on the open web site in time to allow laboratories to purchase standards and validate their methods. This information was uploaded together with the Application Form.

3. STATISTICAL METHODS

3.1 Background

3.1.1 Proficiency Tests 1-5

For the previous Proficiency Tests 1-5, different methods for the estimation of the assigned values and standard deviations (RSDs) of the analytical data were used. The arithmetic mean values, after elimination of outliers, were used for Proficiency Tests 1-2, while the RSDs were calculated using the Horwitz equation.

In Proficiency Test 3, the median of the results was chosen as the best estimate of the true concentration. Estimates of the standard deviations were compared using four methods. The traditional approach (ISO 5725-Part 2) with outlier elimination, robust statistics (using both the Qn and Swiss methods) and a fixed target value (fit-for-purpose) as recommended by the Advisory Group. The two robust statistical methods for the estimation of the RSD, gave only marginal differences, whilst the other two methods produced results that differed significantly. In Proficiency Test 4, the same two robust statistical methods were compared and again only marginal differences were found.

z-Scores were used as in all the previous proficiency tests for the assessment of the laboratory performances for individual pesticides.

In Proficiency Test 5 sums of scores, the RSZ (the re-scaled sum of z-scores), SSZ (the squared sum of z-scores) and RLP (relative laboratory performance) were introduced.

3.1.2 Proficiency Tests 6-8

In these proficiency tests, the median was 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 also used to calculate the z-scores.

For PT6, 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 z-Scores. This new approach was carried forward to PT 7 and PT8 and now PT9, and used as the basis for separating the labs into two categories A and B. To be classified in Category A, sufficient scope had to be demonstrated. Results had to be reported for at least 90% of the pesticides present in the sample, as well as no false positives.

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

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

3.1.3 Proficiency Test 9

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 WSZ for those laboratories classified in Category A. The Qn RSD has also been reported for comparison with the FFP RSD.

This year, to achieve a Category A classification, laboratories had to have sought all the pesticides marked with an asterisk in the target Pesticide List and that were subsequently present in the test material. If they did not, even though they fulfilled all the other requirements for Category A, they would be classified in Category B. The sub-division within Category A was maintained as 'good', 'satisfactory' or 'unsatisfactory'.

3.2 False positives and negatives

3.2.1 False positives

Results reported for the presence of 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 that 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 have 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 exceeding the MRRL and for false negatives.

3.3 Estimation of the assigned values

The assigned values were based on the median level of all the reported results, excluding the 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, which is derived from and linked to the EU-PTs. The same target RSD has been applied to all the pesticides, and is independent of the residue concentration. 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:

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

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
$3 < z $	Unacceptable

- Any z-score values of $|z| > 5$ have been reported as '+5', or '-5'.
- No calculation 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 are also included in the graphical representation.

3.6 Combined z-Scores

In order to evaluate each laboratory's overall performance, and to take into account all the results reported, the 'Weighted Sum of z-Scores', as introduced in EUPT 6, was used.

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

3.6.1 Weighted Sum of 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:

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

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

$$\text{'Weighted sum of z-scores' } |z| = \frac{\sum_{i=1}^n |z_i| \omega(z_i)}{n}$$

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) from each lab.

The 'Weighted sum of z-scores' has subsequently been used to produce an overall classification of laboratories with three sub-classifications used: 'good', 'satisfactory' and 'unsatisfactory'. According to this, the resultant classification will be:

$ WSZ \leq 2$	Good
$2 < WSZ \leq 3$	Satisfactory
$3 < WSZ $	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 WSZ-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:

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

where n is the number of z-scores.

4. RESULTS

4.1 Summary of reported results

One hundred and thirty-seven laboratories agreed to participate in this proficiency test. However, five 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. Results from laboratories in Argentina, Egypt, Turkey and Uruguay have not been used.

Nineteen pesticides were used to treat the sample.

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 Laboratories with Reported Results *
Bupirimate	110	20	2	83
Cyprodinil	115	15	2	87
Diazinon	130	2	0	98
Endosulfan α »	124	4	0	95
Endosulfan β »	124	4	0	95
Fenhexamid	96	29	7	73
Fenitrothion	123	7	2	93
Fludioxonil	103	28	1	78
Hexythiazox	71	60	1	54
Iprodione	117	8	7	89
Myclobutanil	118	13	1	89
Oxamyl	111	15	6	84
Penconazole	116	14	2	88
Procymidone	129	3	0	98
Pyrimethanil	116	15	1	88
Quinoxifen	90	41	1	68
Tebuconazole	107	22	3	81
Tolylfluanid	118	14	0	89
Triadimenol	100	27	5	76

* The % of Laboratories with Reported Results is calculated relative to the total number of laboratories submitting results (132).

» One hundred and twenty eight laboratories reported results for endosulfan. However, four had reported results as stated in the residue definition and were unable to report data for the individual Endosulfan α and β isomers.

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 recoveries and analytical methods used are given in Appendix 8. For an explanation of the symbols used in these tables, see Annex 1.

4.1.1 False positives

Six laboratories reported results for additional pesticides that had not been used to treat the test material. These pesticides and their residue levels reported are presented in Table 4.2.1 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 was considered to be a false positive.

Traces of Chlorpyrifos at 0.020 mg/Kg and of Carbaryl at 0.008 mg/Kg were detected by the Organiser in the treated test material, but not in the untreated strawberries. These low level residues were thought to have arisen from contamination of the commercial formulations used to treat the strawberries. Results for these pesticides were reported by many laboratories, but because the resulting median concentrations were below the MRRL stipulated in the Pesticide List, the EUPT-FV9 Committee decided not to include them in the assessment.

Any laboratory that reported even a single false positive result was not classified in Category A.

Table 4.2.1. Laboratories that reported false positive results in the treated test material

Pesticide	Laboratory Code	Concentration (mg/kg)	RL (mg/Kg)	MRRL (mg/Kg)
Acetamiprid	EUPT-FV9-071	0.375	0.01	0.01
Acetamiprid	EUPT-FV9-090	0.31	0.05	0.01
Captan	EUPT-FV9-090	1.90	0.02	0.02
Dichlorvos	EUPT-FV9-127	0.052	0.02	0.01
Dicofol	EUPT-FV9-052	0.124	0.01	0.02
Dicofol	EUPT-FV9-074	0.031	0.02	0.02
Dicofol	EUPT-FV9-127	0.02*	0.05	0.02
Lambda-Cyhalothrin	EUPT-FV9-127	0.02*	0.2	0.02
Metalaxyl	EUPT-FV9-052	3.66	0.05	0.05
Parathion-Methyl	EUPT-FV9-127	0.04*	0.05	0.02
Methidation	EUPT-FV9-113	0.1	0.02	0.02
Thiophanate-Methyl	EUPT-FV9-090	0.35	0.05	0.1

* Residue levels that have been erroneously reported below the RL of the laboratory

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. However, these laboratories should have taken more care in reporting their results as the concentrations

reported were not only lower than the MRRL but, in most cases, also lower than their own reporting limits. These can be seen in Table 4.2.2.

Table 4.2.2. Laboratories reporting residue concentration levels below the MRRL and (mostly) below their own Reporting Limit

Pesticide	Laboratory Code	Concentration (mg/kg)	RL (mg/Kg)	MRRL (mg/Kg)
Carbendazim	EUPT-FV9-052	0.003	0.001	0.1
Chlorpropham	EUPT-FV9-083	0.004*	0.05	0.05
Cypermethrin	EUPT-FV9-127	0.03*	0.05	0.05
Deltamethrin	EUPT-FV9-127	0.01*	0.2	0.05
Phosalone	EUPT-FV9-127	0.03*	0.05	0.05
Pirimiphos-Methyl	EUPT-FV9-127	0.03*	0.05	0.05
Prochloraz	EUPT-FV9-127	0.005*	0.05	0.05
Propiconazole	EUPT-FV9-127	0.04*	0.2	0.05

* Residue levels that have been erroneously reported below the RL of the laboratory

Endosulfan α and Endosulfan β have been assessed separately. As stated in the Protocol, laboratories had to report the residue levels of these pesticides not only as stated in the MRL definition (as sum of Endosulfan α , Endosulfan β and Endosulfan sulfate), but also as separate compounds. The sample contained both Endosulfan α and Endosulfan β , but not Endosulfan sulfate. Six laboratories reported false positive results for Endosulfan sulfate. Therefore, these laboratories have to be classified in Category B.

Table 4.2.3 Laboratories that reported false positive results for Endosulfan sulfate.

Lab Code	Endosulfan α (mg/Kg)	Endosulfan β (mg/Kg)	Endosulfan Sulfate (mg/Kg)	Endosulfan Sum (mg/Kg)
EUPT-FV9-004	0.630	1.00	0.120	1.75
EUPT-FV9-026	0.441	0.353	0.663	1.46
EUPT-FV9-035	0.400	1.30	0.100	1.80
EUPT-FV9-049	0.340	0.330	0.140	0.810
EUPT-FV9-073	0.653	0.441	0.289	1.37
EUPT-FV9-113	0.340	0.260	0.100	0.700

Triadimenol has also been considered separately. As stated in the Protocol, laboratories had to report the residue level as stated in the MRL definition as the Sum of Triadimenol and Triadimefon, but also for the individual compounds Triadimenol and Triadimefon, separately. Only Triadimenol was used to treat the sample. The laboratory that reported a false positive result for Triadimefon was classified into Category B.

4.2.4 Laboratory that reported false positive results for Triadimefon

Lab Code	Triadimenol (mg/Kg)	Triadimefon (mg/Kg)	Triadimefon Sum (mg/Kg)
EUPT-FV9-079	NA	1.67	NA

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 in the treated test material

Laboratory Code EUPT-FV9-	Bupirimate	Cyprodinil	Diazinon	Endosulfan α	Endosulfan β	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox	Iprodione	Myclobutanil	Oxamyl	Penconazole	Procymidone	Pyrimethanil	Quinoxifen	Tebuconazole	Tolyfluanid	Triadimenol	
005										ND										
015																				ND
025												ND								
026	ND																			ND
029													ND							ND
030										ND										
043						ND														
047																				ND
049		ND				ND											ND			
050										ND										
052													ND							
069								ND			ND									
071	ND	ND													ND					
081							ND													
083																				ND
085												ND								
088									ND											
097						ND														
105						ND						ND								
108										ND										

Laboratory Code EUPT-FV9-	Bupirimate	Cyprodinil	Diazinon	Endosulfan α	Endosulfan β	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox	Iprodione	Myclobutanil	Oxamyl	Penconazole	Procymidone	Pyrimethanil	Quinoxifen	Tebuconazole	Tolyfluanid	Triadimenol
111						ND						ND				ND			
113						ND				ND									
116																	ND		
122										ND									
128												ND					ND		
131												ND							
132						ND				ND									
134							ND												

4.1.3 Distribution of data

The distributions of the residue levels of the nineteen pesticides reported by the laboratories have been plotted as histograms. See Appendix 2.

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 value of the median did not change even if these outliers were included. 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 the %RSDs for all pesticides present in the test material

Pesticides	MRRL (mg/Kg)	Median (mg/Kg)	FFP RSD (%)	Qn RSD (%)
Bupirimate	0.05	0.790	25	25
Cyprodinil	0.05	0.954	25	21
*Diazinon	0.02	0.272	25	25
*Endosulfan α	0.05	0.411	25	27
*Endosulfan β	0.05	0.326	25	26
Fenhexamid	0.05	0.338	25	26
*Fenitrothion	0.01	0.791	25	21
Fludioxonil	0.05	0.516	25	25
Hexythiazox	0.02	1.05	25	32

*Iprodione	0.02	0.725	25	22
Myclobutanil	0.02	0.759	25	23
*Oxamyl	0.01	0.756	25	24
Penconazole	0.05	0.486	25	23
*Procymidone	0.02	0.606	25	21
*Pyrimethanil	0.05	0.880	25	20
Quinoxyfen	0.02	1.03	25	24
*Tebuconazole	0.02	0.800	25	23
*Tolylfluanid	0.05	1.60	25	31
*Triadimenol	0.1	1.32	25	27

* Pesticides marked with 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% given 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 (%)
Bupirimate	88	9	3
Cyprodinil	92	3	5
*Diazinon	90	7	3
*Endosulfan α	93	6	1
*Endosulfan β	90	7	3
*Endosulfan Sum	92	5	3
Fenhexamid	83	5	12
*Fenitrothion	96	2	2
Fludioxonil	94	5	1
Hexythiazox	87	7	6
*Iprodione	86	4	10
Myclobutanil	94	4	2
*Oxamyl	89	5	6
Penconazole	92	4	4
*Procymidone	97	2	1
*Pyrimethanil	94	2	4
Quinoxyfen	91	6	3
*Tebuconazole	89	6	5
*Tolylfluanid	86	5	9
*Triadimenol	86	5	9

* Pesticides marked with 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 positives. 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.

For Endosulfan α and β , the statistical evaluation has been performed separately. For each compound individual z-scores have been calculated. Both z-scores have been used in the calculation of the WSZ values.

However four laboratories were not able to report results for individual compounds of Endosulfan because they were using a mixed standard. In order to achieve a z-score value for Endosulfan the median based on the sum of Endosulfan α and Endosulfan β from all the laboratories was used to calculate the z-scores. These Endosulfan Sum z-scores can be seen in Table 4.6. Thus for these four laboratories these z-score values were used for calculating the WSZ values and to calculate the WSZ, the number of pesticides used was eighteen, instead of nineteen (depending on the laboratory performance).

Table 4.6. Laboratories that reported results for Endosulfan as stated in the MRL definition

Lab Code	Concentration for Endosulfan Sum (mg/Kg)	Endosulfan Sum Median (mg/Kg)	z-Scores
EUPT-FV9-072	0.749	0.750	0.0
EUPT-FV9-094	1.08		1.8
EUPT-FV9-120	0.680		-0.4
EUPT-FV9-136	1.03		1.5

Appendix 3 shows the results for Endosulfan α , Endosulfan β and Endosulfan Sum based on the MRL definition and the z-scores. Appendix 4 is a graphical representation of these results.

4.3.2 Combined z-Scores

Appendix 5 shows a table with the values of individual z-scores for each pesticide and the combined 'Weighted Sum of z-Scores' for those laboratories in Category A. In this category are the laboratories that reported 17 or more results, did not report any false positive results and have sought all the target pesticides that were marked with an asterisk. A graphical representation of the results for these laboratories can also be found in Appendix 6.

Of the one hundred and thirty-seven laboratories that indicated that they wished to participate in PT9, five did not submit any results.

Sixty eight of the one hundred and thirty-two laboratories that submitted results have been classified in Category A (52%). Seventy-one percent were sub-divided as 'good', nineteen percent as 'satisfactory' and ten percent as 'unsatisfactory'.

Of the sixty-four laboratories in Category B, nineteen could have been in Category A; thirteen of them did not analyse all the target pesticides marked with an asterisk although they reported at least 90% of the pesticides present in the sample; and the other six reported a false positive result.

Table 4.6.1 shows the laboratories in Category A, the number of pesticides reported, the WSZ value and the sub-division achieved. Laboratories that reported false negative results in Category A are marked with an asterisk and laboratories with WSZ values of 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 an '+'.

A WSZ graphical representation for laboratories classified in Category A can be seen in Appendix 6. This year the National Reference Laboratories for Fruit and Vegetables has 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 9, out of 132 laboratories, 68 are in Category A with the following sub-divisions: 7 'unsatisfactory', 13 'satisfactory' and 48 'good'.
- For EUPT 8, out of 128 laboratories, 90 were in Category A with the following sub-divisions: 11 'unsatisfactory', 7 'satisfactory' and 72 'good'.
- For EUPT 7, out of 128 laboratories, 63 were in Category A with the following sub-divisions: 13 'unsatisfactory', 6 'satisfactory' and 44 '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-division of laboratories in Category A

Lab Code	No. of Pesticides sought	WSZ	Classification
EUPT-FV9-068	19	0.2	Good
EUPT-FV9-093	19	0.3	Good
EUPT-FV9-099	19	0.3	Good
EUPT-FV9-082	19	0.3	Good
EUPT-FV9-019	19	0.3	Good
EUPT-FV9-066	19	0.4	Good
EUPT-FV9-028	19	0.4	Good
EUPT-FV9-039	19	0.4	Good
EUPT-FV9-114	19	0.4	Good
EUPT-FV9-129	19	0.4	Good
EUPT-FV9-042	19	0.4	Good
EUPT-FV9-065	19	0.4	Good
EUPT-FV9-058	19	0.4	Good
EUPT-FV9-009	19	0.5	Good
EUPT-FV9-110	19	0.5	Good
EUPT-FV9-002	19	0.5	Good
EUPT-FV9-096	19	0.5	Good
EUPT-FV9-024	19	0.5	Good
EUPT-FV9-017	19	0.6	Good
EUPT-FV9-041	19	0.6	Good
EUPT-FV9-011	19	0.6	Good
EUPT-FV9-012	19	0.7	Good
EUPT-FV9-040	19	0.7	Good
EUPT-FV9-051	19	0.7	Good
EUPT-FV9-010	19	0.7	Good
EUPT-FV9-018	19	0.7	Good
EUPT-FV9-103	19	0.7	Good
EUPT-FV9-016	19	0.7	Good
EUPT-FV9-095	19	0.7	Good
EUPT-FV9-048	19	0.8	Good
EUPT-FV9-057	19	0.8	Good
EUPT-FV9-086	19	0.9	Good
EUPT-FV9-101	19	0.9	Good
EUPT-FV9-109	19	1.0	Good
EUPT-FV9-045	19	1.0	Good

Lab Code	No. of Pesticides sought	WSZ	Classification
EUPT-FV9-061	19	1.2	Good
EUPT-FV9-013	19	1.3	Good
EUPT-FV9-117	19	1.3	Good
EUPT-FV9-025*	19	1.5	Good
EUPT-FV9-081*	19	1.5	Good
EUPT-FV9-022	19	1.7	Good
EUPT-FV9-023	19	2.1	Satisfactory
EUPT-FV9-005*	19	2.1	Satisfactory
EUPT-FV9-047*	19	2.1	Satisfactory
EUPT-FV9-087	19	2.4	Satisfactory
EUPT-FV9-062	19	2.5	Satisfactory
EUPT-FV9-031	19	2.6	Satisfactory
EUPT-FV9-014	19	2.6	Satisfactory
EUPT-FV9-030*	19	2.8	Satisfactory
EUPT-FV9-006	19	2.9	Satisfactory
EUPT-FV9-060↑	19	3.3	Unsatisfactory
EUPT-FV9-125↑	19	3.5	Unsatisfactory
EUPT-FV9-076↑	19	3.7	Unsatisfactory
EUPT-FV9-050*↑	19	4.3	Unsatisfactory
EUPT-FV9-104↑	19	8.8	Unsatisfactory
EUPT-FV9-106	18	0.5	Good
EUPT-FV9-119	18	0.6	Good
EUPT-FV9-070	18	0.8	Good
EUPT-FV9-020	18	0.9	Good
EUPT-FV9-121	18	1.3	Good
EUPT-FV9-015*	18	1.3	Good
EUPT-FV9-077	18	2.5	Satisfactory
EUPT-FV9-105*	18	2.5	Satisfactory
EUPT-FV9-021	18	2.8	Satisfactory
EUPT-FV9-131*	18	3.0	Satisfactory
EUPT-FV9-085*↑	18	3.1	Unsatisfactory
EUPT-FV9-043*↑	18	4.1	Unsatisfactory
EUPT-FV9-098	17	0.4	Good

* Laboratories reporting a false negative result.

↑ Laboratories with WSZ 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-FV9-074+	19	19
EUPT-FV9-026*+	19	17
EUPT-FV9-073+	19	17
EUPT-FV9-090+	19	17
EUPT-FV9-049*+	19	16
EUPT-FV9-091	18	18
EUPT-FV9-088*	18	17
EUPT-FV9-118	18	17
EUPT-FV9-083*	18	15
EUPT-FV9-001	17	17
EUPT-FV9-046	17	17
EUPT-FV9-054	17	17
EUPT-FV9-130	17	17
EUPT-FV9-008	17	16
EUPT-FV9-059	17	15
EUPT-FV9-116*	17	15
EUPT-FV9-004+	17	14
EUPT-FV9-097*	17	14
EUPT-FV9-111*	17	14
EUPT-FV9-063	16	16
EUPT-FV9-067	16	16
EUPT-FV9-071*+	16	13
EUPT-FV9-069*	16	11
EUPT-FV9-032	15	15
EUPT-FV9-107	15	14
EUPT-FV9-038	15	13
EUPT-FV9-128*	15	13
EUPT-FV9-134*	15	10
EUPT-FV9-113*+	15	7
EUPT-FV9-007	14	14
EUPT-FV9-112	14	14
EUPT-FV9-055	14	13
EUPT-FV9-115	14	13
EUPT-FV9-075	14	12
EUPT-FV9-120	15»	12
EUPT-FV9-102	14	7
EUPT-FV9-029*	13	9

Lab Code	No. of Pesticides sought	No. of acceptable z-scores
EUPT-FV9-126	13	13
EUPT-FV9-079+	13	12
EUPT-FV9-080	13	12
EUPT-FV9-027	12	12
EUPT-FV9-034	12	12
EUPT-FV9-092	12	11
EUPT-FV9-122*	12	11
EUPT-FV9-036	12	9
EUPT-FV9-035	12	8
EUPT-FV9-052*+	11	9
EUPT-FV9-033	10	10
EUPT-FV9-072	11»	8
EUPT-FV9-094	11»	8
EUPT-FV9-100	10	8
EUPT-FV9-084	10	7
EUPT-FV9-123	9	8
EUPT-FV9-037	9	7
EUPT-FV9-127+	9	3
EUPT-FV9-056	7	7
EUPT-FV9-124	7	6
EUPT-FV9-132*	7	4
EUPT-FV9-053	6	6
EUPT-FV9-089	6	6
EUPT-FV9-108*	6	5
EUPT-FV9-003	3	2
EUPT-FV9-136	3»	2
EUPT-FV9-133	1	0

* Laboratories reporting a false negative result.

+ Laboratories reporting a false positive result.

» Laboratories reporting Endosulfan as stated in the MRL definition and not as individual compounds.

5. CONCLUSIONS

137 laboratories agreed to participate in PT9 and 132 of them submitted results following the analysis of the treated strawberry homogenate test material.

There was no correlation between the order in which laboratories reported their results and the accuracy of their results. Therefore, no table based on the date of submission of results has been included in this report.

The pesticide residue levels in the treated strawberry test material was 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% were calculated. The different separation techniques used by the participant laboratories, either gas chromatography or liquid chromatography, are shown in the z-score graphs. Asterisks were used to mark each bar of the chart to represent a false negative result reported as 'not detected', 'not determined', or 'ND' by a laboratory. Sub-division of z-score values into 'acceptable', 'questionable' and 'unacceptable' has also been undertaken.

'The Weighted Sum of z-Scores', a criterion first introduced in the EUPT 6 Proficiency Test report, has continued to be used to demonstrate the overall performance of the laboratories. Those laboratories reporting seventeen or more results (at least 90%), no false positive results, and that sought all the target pesticides marked with an asterisk in the Pesticide List (classified as having sufficient scope), were placed in Category A. Those laboratories that reported less than seventeen results were considered to have insufficient scope and were automatically placed in Category B. Laboratories in Category A were also sub-divided into 'good', 'satisfactory' and 'unsatisfactory'. Laboratories in Category A that reported false negatives were marked with an asterisk and those obtaining a WSZ value greater than 3 were marked with an '↑'

For the remainder of the laboratories (those classified in Category B) no combined Weighted Sum of z-Scores were calculated. However, the number of satisfactory z-scores achieved is 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. This year extra information was required from the laboratories, because results not only had to be reported as defined by the residue definition, but also for the individual compounds that are included in the MRL definition.

For Endosulfan, the median for the separate isomers were used and two independent z-scores were obtained - one for Endosulfan α and the other for Endosulfan β . Results that were reported for Endosulfan sulfate were considered to be false positives. A possible reason may have been, that the chromatographic peak assigned erroneously by the laboratory to Endosulfan sulfate was originating from the co-eluting pesticide Quinoxifen.

In the case of Triadimenol, only the results for Triadimenol were used for statistical evaluation.

Low residue levels of Chlorpyrifos and Carbaryl (below the MRRL of 0.05 mg/Kg) was detected in the treated strawberry test material. These residues were thought to have arisen impurities (contaminants) in the commercial formulations used to treat the strawberries. Results were reported by many laboratories, but they were not statistically assessed and therefore no medians/assigned values have been calculated for these two pesticides.

The overall results with regard to the z-scores for each pesticide present in the sample were very good. In some cases, the number of false negative results reported was relatively high (e.g. Fenhexamid 7, Iprodione 7, Oxamyl 6).

Ever since the introduction of the MRRL in EUPT 6, laboratories' 'reporting levels' have been continuously decreasing and overall performances have improved. The increased use of mass spectrometry, particularly LC-MS/MS, is probably the main reason why the results from more participating laboratories have shown an overall improvement year on year. This year, the extension of the mandatory scope of analysis for the laboratories seems to have reduced the number of laboratories in Category A. However a closer look reveals that the percentage of 'good' laboratories in Category A has not changed greatly: from 72 laboratories in EUPT 8 to 68 laboratories in this PT. Also this year there was the extra demand on laboratories to analyse all the pesticides marked with an asterisk in the target list. Failure to comply with this instruction meant that 13 laboratories were relegated to Category B.

The marked pesticides in the target list were considered of the utmost importance with regard to 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.

Participation in this year's 9th European Proficiency Test involved laboratories from 26 of the 27 EU member states, and also Iceland and Norway, who regularly participate in the EU-monitoring programmes. For the first time, laboratories from Switzerland participated. Non-European laboratories in Egypt, Turkey, Uruguay and Argentina also participated. These Non-EU laboratories are official laboratories in their own countries. As 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 help them improve the quality of their analyses.

6. SUGGESTIONS FOR FUTURE WORK

The following was suggested by the Organiser and the Scientific Committee for EUPT-FV9.

After last year's comparison of results between PT 6-8 and the continuing trend of improvement in performance, it was felt that it was time to make the conditions to achieve Category A more strict. These stricter conditions 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 enforce EU legislation. Consequently, the numbers of pesticides that will be mandatory to analyse (marked with an asterisk in the target Pesticide List) may further increase. Obviously the Pesticide List will have to be published in plenty of time for laboratories to validate their methods. 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 MRRL will be harmonised for all pesticides. The Pesticide List will have contain individual compounds that have to be analysed and reported. No results based on summing individual compounds as stated in MRL definitions will be required. This will allow more correct statistical treatment of the data to be undertaken and any possible analytical errors by the laboratories should be more easily recognised.

For 2008 the criteria for classification in Category A will be even more strict.

In future protocols a change will be made in the way false positive results are defined. These will be based on MRRL values only and not on the RL of each laboratory. 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 most of the participants.

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

7. REFERENCES

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8. ACKNOWLEDGEMENTS

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

APPENDIX 1. Homogeneity Data

Bupirimate (mg/Kg)		Cyprodinil (mg/Kg)		Diazinon (mg/Kg)		Endosulfan α (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.750	0.790	0.815	0.970	0.272	0.270	0.415	0.400
0.719	0.710	0.937	0.879	0.249	0.275	0.415	0.290
0.919	0.900	0.964	0.897	0.270	0.240	0.369	0.374
0.899	0.859	1.02	0.954	0.289	0.279	0.442	0.380
0.750	0.700	0.800	0.950	0.262	0.287	0.359	0.402
0.700	0.790	0.920	0.980	0.252	0.283	0.426	0.424
0.832	0.780	0.802	0.870	0.304	0.272	0.393	0.395
0.851	0.825	0.933	0.959	0.326	0.301	0.414	0.408
0.768	0.778	0.814	0.900	0.286	0.280	0.399	0.424
0.941	0.700	0.857	0.892	0.274	0.250	0.344	0.343

Endosulfan β (mg/Kg)		Fenhexamid (mg/Kg)		Fenitrothion (mg/Kg)		Fludioxonil (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.339	0.327	0.383	0.297	0.784	0.793	0.515	0.510
0.339	0.237	0.306	0.300	0.760	0.704	0.597	0.403
0.302	0.306	0.317	0.338	0.796	0.723	0.550	0.474
0.362	0.311	0.381	0.380	0.753	0.801	0.613	0.533
0.293	0.329	0.386	0.358	0.713	0.785	0.558	0.612
0.349	0.347	0.355	0.380	0.867	0.852	0.658	0.600
0.322	0.323	0.352	0.380	0.788	0.742	0.540	0.489
0.338	0.333	0.287	0.313	0.777	0.790	0.487	0.500
0.327	0.347	0.350	0.348	0.822	0.800	0.517	0.500
0.281	0.281	0.338	0.345	0.800	0.790	0.577	0.610

Hexythiazox (mg/Kg)		Iprodione (mg/Kg)		Myclobutanil (mg/Kg)		Oxamyl (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
1.05	1.04	0.780	0.713	0.758	0.782	0.666	0.809
0.990	0.970	0.697	0.600	0.733	0.758	0.850	0.663
0.859	0.910	0.714	0.710	0.765	0.785	0.774	0.779
1.06	1.03	0.689	0.636	0.694	0.720	0.650	0.716
1.00	1.08	0.730	0.730	0.650	0.701	0.873	0.782
1.06	1.00	0.720	0.723	0.684	0.690	0.682	0.828
1.25	1.01	0.793	0.690	0.744	0.691	0.687	0.701
0.953	0.964	0.805	0.733	0.746	0.782	0.724	0.727
0.890	0.984	0.756	0.722	0.716	0.600	0.855	0.787
0.981	0.953	0.820	0.789	0.773	0.731	0.605	0.656

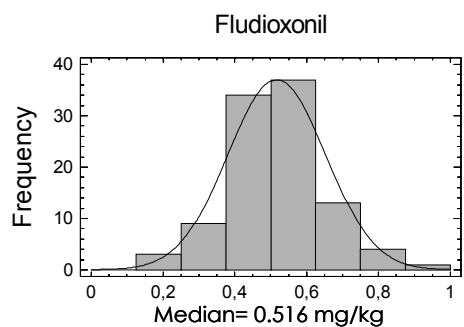
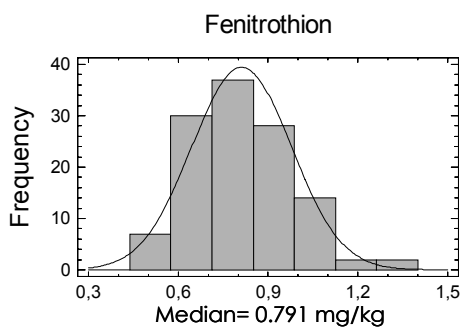
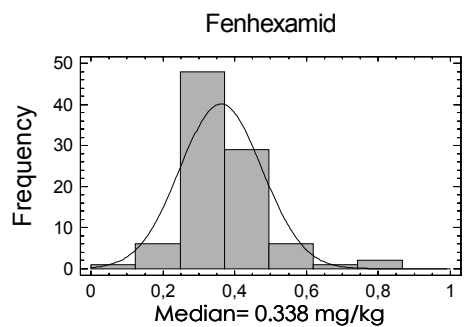
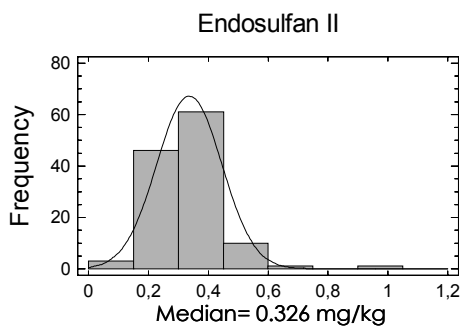
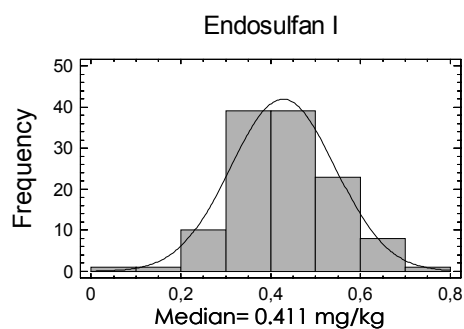
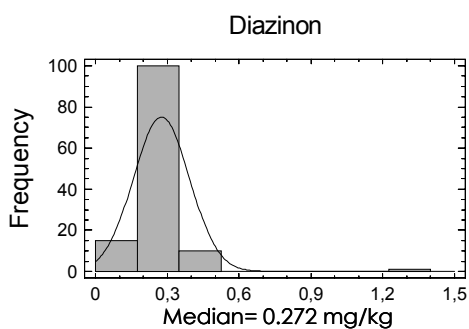
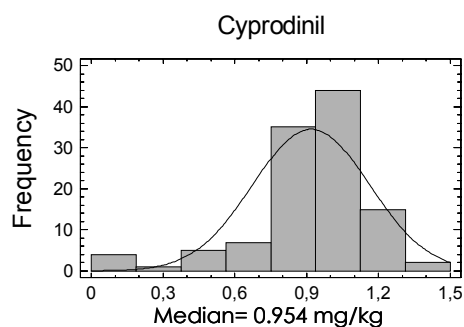
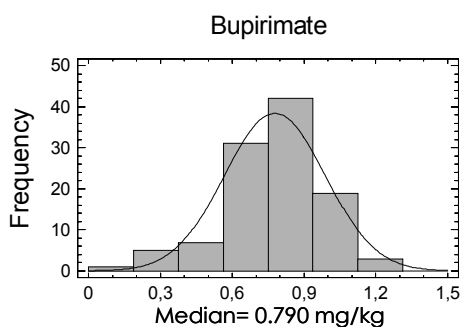
APPENDIX 1. Homogeneity Data

Penconazole (mg/Kg)		Procymidone (mg/Kg)		Pyrimethanil (mg/Kg)		Quinoxifen (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.544	0.415	0.751	0.602	0.805	0.880	1.05	1.00
0.420	0.469	0.750	0.641	0.947	0.842	0.960	0.978
0.533	0.333	0.621	0.601	0.890	0.880	0.895	0.841
0.557	0.463	0.792	0.656	0.844	0.854	0.910	0.983
0.519	0.708	0.661	0.665	0.900	0.905	0.932	0.947
0.252	0.487	0.665	0.779	0.845	0.845	1.40	1.05
0.581	0.518	0.624	0.612	0.930	0.880	0.945	0.973
0.423	0.507	0.580	0.584	0.875	0.856	0.958	1.020
0.438	0.458	0.674	0.645	0.879	0.938	1.01	1.09
0.568	0.501	0.658	0.700	0.920	0.897	0.998	0.982

Tebuconazole (mg/Kg)		Tolyfluanid (mg/Kg)		Triadimenol (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.780	0.672	1.77	1.76	1.30	1.49
0.871	0.863	1.64	1.60	1.33	1.35
0.661	0.725	1.72	1.77	1.31	1.48
0.799	0.865	1.45	1.40	1.49	1.74
0.833	0.833	1.52	1.26	1.30	0.99
0.627	0.887	1.31	1.89	1.36	1.31
0.799	0.786	1.95	1.90	1.30	1.45
0.830	0.762	1.78	1.78	1.25	1.51
0.825	0.840	1.88	1.57	1.08	1.31
0.870	0.780	1.68	1.70	1.29	1.00

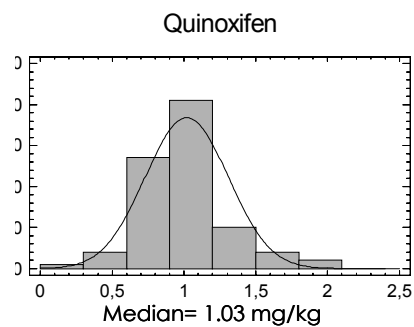
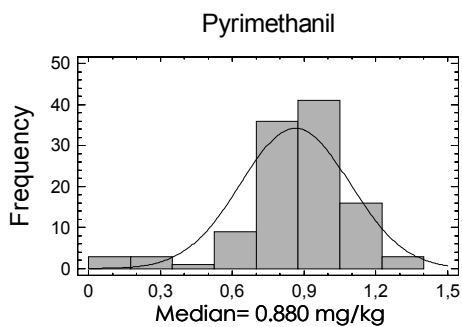
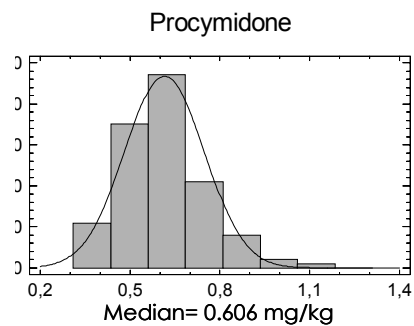
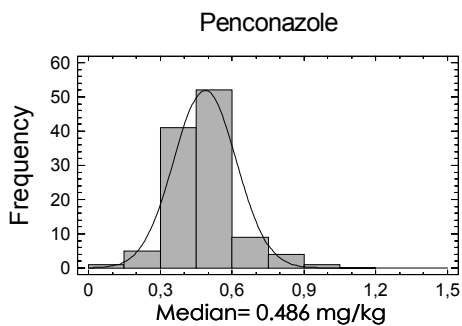
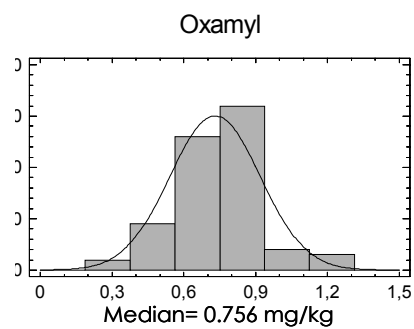
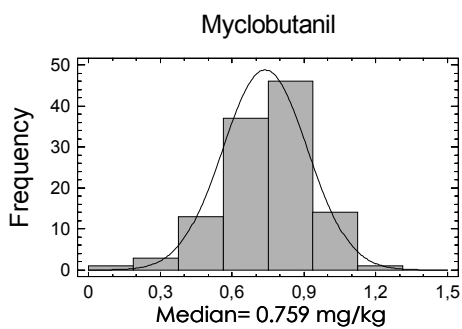
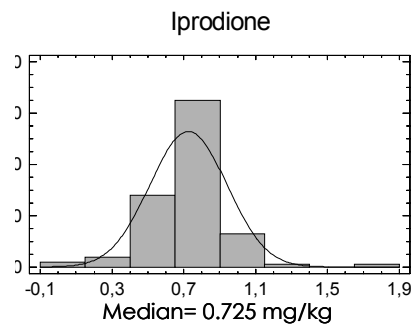
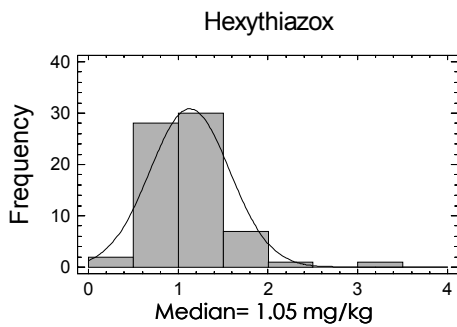
APPENDIX 2. Histograms of residue data for each pesticide from all the laboratories.

Results presented as histograms.



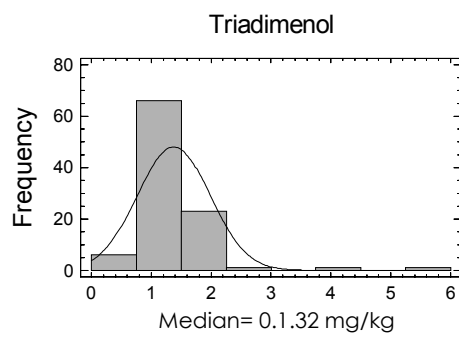
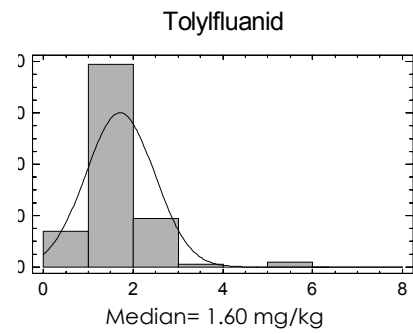
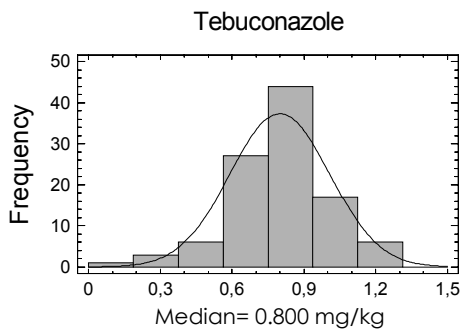
APPENDIX 2. Histograms of residue data for each pesticide from all the laboratories.

Results presented as histograms.



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

Results presented as histograms.



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

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

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

Lab Code	Bupirimate		Cyprodinil		Diazinon		Endosulfan a	
MRRL	0.05	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)
Median (mg/kg)	0.790		0.954		0.272		0.411	
1	0.821	0.2	0.763	-0.8	0.228	-0.6	0.313	-1.0
2	0.945	0.8	1.11	0.7	0.321	0.7	0.452	0.4
3	NA		NA		1.28	14.8	0.401	-0.1
4	1.30	2.6	1.30	1.5	0.330	0.9	0.630	2.1
5	0.547	-1.2	0.716	-1.0	0.158	-1.7	0.355	-0.5
6	0.960	0.9	1.26	1.3	0.336	0.9	0.654	2.4
7	0.670	-0.6	0.866	-0.4	0.289	0.2	0.417	0.1
8	0.584	-1.0	0.780	-0.7	0.350	1.1	0.410	0.0
9	0.888	0.5	0.978	0.1	0.237	-0.5	0.509	1.0
10	0.925	0.7	0.962	0.0	0.252	-0.3	0.447	0.4
11	0.825	0.2	1.04	0.4	0.285	0.2	0.587	1.7
12	0.882	0.5	1.06	0.4	0.326	0.8	0.479	0.7
13	0.960	0.9	1.19	1.0	0.347	1.1	0.584	1.7
14	0.846	0.3	1.42	2.0	0.288	0.2	0.575	1.6
15	0.597	-1.0	0.973	0.1	0.300	0.4	0.437	0.3
16	0.927	0.7	0.977	0.1	0.364	1.4	0.522	1.1
17	0.879	0.5	1.09	0.6	0.324	0.8	0.411	0.0
18	1.10	1.6	1.24	1.2	0.324	0.8	0.574	1.6
19	0.919	0.7	0.937	-0.1	0.283	0.2	0.451	0.4
20	0.780	-0.1	0.880	-0.3	0.240	-0.5	0.350	-0.6
21	0.756	-0.2	0.821	-0.6	0.041	-3.4	0.375	-0.4
22	0.902	0.6	1.06	0.4	0.335	0.9	0.617	2.0
23	0.861	0.4	1.01	0.2	0.263	-0.1	0.439	0.3
24	0.823	0.2	1.15	0.8	0.304	0.5	0.460	0.5
25	0.927	0.7	0.967	0.1	0.272	0.0	0.322	-0.9
26	<0.02	-3.7	0.801	-0.6	0.313	0.6	0.441	0.3
27	NA		1.31	1.5	0.382	1.6	0.570	1.5
28	0.919	0.7	0.964	0.0	0.215	-0.8	0.448	0.4
29	NA		NA		0.221	-0.8	0.561	1.5
30	0.880	0.5	1.15	0.8	0.304	0.5	0.481	0.7
31	0.739	-0.3	0.465	-2.1	0.155	-1.7	0.643	2.3
32	0.758	-0.2	1.09	0.6	0.308	0.5	0.436	0.2
33	0.520	-1.4	NA		0.280	0.1	0.510	1.0
34	1.01	1.1	NA		0.262	-0.1	0.339	-0.7
35	NA		NA		0.110	-2.4	0.400	-0.1
36	NA		0.586	-1.5	0.041	-3.4	0.222	-1.8
37	1.02	1.2	NA		0.246	-0.4	0.588	1.7
38	0.402	-2.0	0.729	-0.9	0.154	-1.7	0.206	-2.0
39	0.810	0.1	1.02	0.3	0.250	-0.3	0.403	-0.1
40	0.822	0.2	1.20	1.0	0.328	0.8	0.498	0.8
41	0.656	-0.7	0.732	-0.9	0.228	-0.6	0.410	0.0
42	0.723	-0.3	1.04	0.4	0.286	0.2	0.384	-0.3
43	0.285	-2.6	0.711	-1.0	0.220	-0.8	0.372	-0.4
44	No Results Given							
45	0.720	-0.4	0.910	-0.2	0.152	-1.8	0.321	-0.9
46	0.887	0.5	0.991	0.2	0.366	1.4	0.53	1.2
47	0.471	-1.6	1.03	0.3	0.349	1.1	0.628	2.1

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

Lab Code	Bupirimate	z-Score (FFP RSD 25%)	Cyprodinil	z-Score (FFP RSD 25%)	Diazinon	z-Score (FFP RSD 25%)	Endosulfan a	z-Score (FFP RSD 25%)
MRRL	0.05		0.05		0.02		0.05	
Median (mg/kg)	0.790		0.954		0.272		0.411	
48	0.884	0.5	1.07	0.5	0.308	0.5	0.554	1.4
49	0.870	0.4	<0.05	-3.8	0.260	-0.2	0.340	-0.7
50	0.663	-0.6	1.02	0.3	0.334	0.9	0.513	1.0
51	0.613	-0.9	1.04	0.4	0.299	0.4	0.439	0.3
52	NA		0.744	-0.9	0.184	-1.3	0.406	0.0
53	NA		NA		0.303	0.5	0.472	0.6
54	0.650	-0.7	0.800	-0.6	0.250	-0.3	0.540	1.3
55	0.750	-0.2	1.10	0.6	0.297	0.4	0.390	-0.2
56	NA		0.930	-0.1	0.230	-0.6	NA	
57	0.650	-0.7	0.867	-0.4	0.290	0.3	0.614	2.0
58	0.773	-0.1	0.951	0.0	0.275	0.0	0.343	-0.7
59	0.622	-0.9	1.09	0.6	0.046	-3.3	0.305	-1.0
60	0.711	-0.4	0.530	-1.8	0.328	0.8	0.763	3.4
61	0.764	-0.1	1.08	0.5	0.252	-0.3	0.363	-0.5
62	0.942	0.8	1.22	1.1	0.166	-1.6	0.584	1.7
63	NA		0.803	-0.6	0.227	-0.7	0.337	-0.7
64	No Results Given							
65	0.851	0.3	0.933	-0.1	0.249	-0.3	0.395	-0.2
66	0.714	-0.4	0.954	0.0	0.251	-0.3	0.393	-0.2
67	0.640	-0.8	0.930	-0.1	0.255	-0.3	0.310	-1.0
68	0.820	0.2	0.930	-0.1	0.240	-0.5	0.430	0.2
69	NA		0.390	-2.4	0.220	-0.8	0.330	-0.8
70	0.775	-0.1	0.969	0.1	0.163	-1.6	0.280	-1.3
71	<0.05	-3.7	<0.05	-3.8	0.304	0.5	NA	
72	NA		0.321	-2.7	0.299	0.4	#	
73	1.09	1.5	1.28	1.4	0.272	0.0	0.653	2.4
74	0.801	0.1	1.02	0.3	0.268	-0.1	0.405	-0.1
75	0.953	0.8	1.05		0.128	-2.1	0.410	0.0
76	0.556	-1.2	0.824	-0.5	0.100	-2.5	0.159	-2.5
77	0.666	-0.6	1.04	0.4	0.204	-1.0	0.555	1.4
78	No Results Given							
79	0.700	-0.5	0.870	-0.4	0.270	0.0	0.350	-0.6
80	0.330	-2.3	0.780	-0.7	0.270	0.0	0.330	-0.8
81	1.03	1.2	0.846	-0.5	0.272	0.0	0.456	0.4
82	0.790	0.0	0.950	0.0	0.270	0.0	0.410	0.0
83	0.669	-0.6	0.880	-0.3	0.279	0.1	0.323	-0.9
84	0.268	-2.6	NA		0.172	-1.5	0.265	-1.4
85	0.641	-0.8	0.982	0.1	0.242	-0.4	0.405	-0.1
86	0.830	0.2	0.950	0.0	0.370	1.4	0.520	1.1
87	1.12	1.7	1.07	0.5	0.423	2.2	0.660	2.4
88	0.690	-0.5	0.815	-0.6	0.268	-0.1	0.311	-1.0
89	NA		NA		0.290	0.3	0.300	-1.1
90	0.610	-0.9	0.510	-1.9	0.280	0.1	0.370	-0.4
91	0.820	0.2	1.07	0.5	0.223	-0.7	0.355	-0.5
92	0.435	-1.8	1.35	1.7	0.338	1.0	0.460	0.5
93	0.851	0.3	0.984	0.1	0.345	1.1	0.496	0.8
94	1.26	2.4	1.15	0.8	0.360	1.3	#	
95	0.687	-0.5	0.832	-0.5	0.164	-1.6	0.377	-0.3
96	0.680	-0.6	0.927	-0.1	0.264	-0.1	0.369	-0.4

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

Lab Code	Bupirimate		Cyprodinil		Diazinon		Endosulfan a	
MRRL	0.05	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)
Median (mg/kg)	0.790		0.954		0.272		0.411	
97	1.10	1.6	1.10	0.6	0.390	1.7	0.540	1.3
98	0.840	0.3	1.16	0.9	0.300	0.4	0.388	-0.2
99	0.873	0.4	1.04	0.4	0.301	0.4	0.420	0.1
100	NA		0.460	-2.1	0.237	-0.5	0.443	0.3
101	1.27	2.4	1.13	0.7	0.261	-0.2	0.442	0.3
102	NA		0.090	-3.6	0.180	-1.4	0.320	-0.9
103	0.796	0.0	1.19	1.0	0.305	0.5	0.566	1.5
104	1.23	2.2	1.41	1.9	0.428	2.3	0.334	-0.7
105	0.882	0.5	1.14	0.8	0.296	0.4	0.536	1.2
106	0.941	0.8	0.857	-0.4	0.315	0.6	0.416	0.0
107	0.789	0.0	1.04	0.4	0.331	0.9	0.401	-0.1
108	NA		0.800	-0.6	NA		NA	
109	1.11	1.6	0.693	-1.1	0.201	-1.0	0.280	-1.3
110	0.762	-0.1	0.975	0.1	0.264	-0.1	0.396	-0.1
111	0.886	0.5	1.11	0.6	0.291	0.3	0.453	0.4
112	0.739	-0.3	0.944	0.0	0.184	-1.3	0.367	-0.4
113	0.320	-2.4	0.140	-3.4	0.210	-0.9	0.340	-0.7
114	0.844	0.3	1.03	0.3	0.268	-0.1	0.349	-0.6
115	0.711	-0.4	0.865	-0.4	0.294	0.3	0.376	-0.3
116	1.39	3.0	0.871	-0.3	0.283	0.2	0.384	-0.3
117	0.490	-1.5	0.920	-0.1	0.200	-1.1	0.450	0.4
118	1.02	1.2	1.19	1.0	0.347	1.1	0.594	1.8
119	0.763	-0.1	0.814	-0.6	0.195	-1.1	0.340	-0.7
120	NA		0.920	-0.1	0.310	0.6	#	
121	0.705	-0.4	0.805	-0.6	0.475	3.0	0.292	-1.2
122	0.579	-1.1	NA		0.263	-0.1	0.281	-1.3
123	0.790	0.0	1.06	0.4	0.200	-1.1	0.400	-0.1
124	0.620	-0.9	NA		0.260	-0.2	0.570	1.5
125	0.368	-2.1	0.160	-3.3	0.156	-1.7	0.442	0.3
126	0.780	-0.1	0.800	-0.6	0.260	-0.2	0.440	0.3
127	NA		NA		0.460	2.8	0.061	-3.4
128	0.645	-0.7	0.802	-0.6	0.332	0.9	0.368	-0.4
129	0.959	0.9	0.928	-0.1	0.325	0.8	0.437	0.3
130	0.614	-0.9	0.880	-0.3	0.230	-0.6	0.202	-2.0
131	1.09	1.5	0.901	-0.2	0.250	-0.3	0.260	-1.5
132	NA		NA		0.118	-2.3	0.530	1.2
133	NA		NA		0.066	-3.0	NA	
134	0.090	-3.5	0.115	-3.5	NA		0.306	-1.0
135	No Results Given							
136	NA		NA		0.060	-3.1	#	
137	No Results Given							

Results given as Endosulfan Sum.

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 β		Endosulfan Sum		Fenhexamid		Fenitrothion	
MRRL	0.05	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)
Median (mg/kg)	0.326		0.750		0.338		0.791	
1	0.242	-1.0	0.555	-1.0	0.461	1.5	0.622	-0.9
2	0.381	0.7	0.833	0.4	0.296	-0.5	0.851	0.3
3	0.212	-1.4	0.613	-0.7	NA		NA	
4	1.00	8.3	1.75	5.3	0.290	-0.6	0.670	-0.6
5	0.270	-0.7	0.625	-0.7	0.279	-0.7	0.791	0.0
6	0.401	0.9	1.05	1.6	0.427	1.1	0.972	0.9
7	0.343	0.2	0.759	0.0	0.348	0.1	0.750	-0.2
8	0.310	-0.2	0.720	-0.2	0.360	0.3	0.882	0.5
9	0.277	-0.6	0.292	-2.4	0.294	-0.5	0.660	-0.7
10	0.325	0.0	0.772	0.1	0.315	-0.3	0.791	0.0
11	0.448	1.5	1.04	1.5	0.357	0.2	0.830	0.2
12	0.376	0.6	0.855	0.6	0.386	0.6	1.03	1.2
13	0.533	2.5	1.12	2.0	0.373	0.4	0.868	0.4
14	0.451	1.5	1.03	1.5	0.461	1.5	1.24	2.3
15	0.372	0.6	0.809	0.3	0.330	-0.1	0.864	0.4
16	0.366	0.5	0.888	0.7	0.329	-0.1	0.970	0.9
17	0.275	-0.6	0.686	-0.3	0.344	0.1	0.971	0.9
18	0.393	0.8	0.967	1.2	0.334	0.0	1.04	1.3
19	0.332	0.1	0.783	0.2	0.320	-0.2	0.831	0.2
20	0.380	0.7	0.730	-0.1	0.530	2.3	0.700	-0.5
21	0.300	-0.3	0.675	-0.4	0.287	-0.6	0.678	-0.6
22	0.518	2.4	1.14	2.1	0.326	-0.1	0.874	0.4
23	0.531	2.5	0.970	1.2	0.340	0.0	0.874	0.4
24	0.343	0.2	0.803	0.3	0.289	-0.6	1.03	1.2
25	0.253	-0.9	0.575	-0.9	0.402	0.8	0.735	-0.3
26	0.353	0.3	1.46	3.8	0.262	-0.9	0.844	0.3
27	0.409	1.0	0.979	1.2	NA		0.924	0.7
28	0.348	0.3	0.796	0.2	0.320	-0.2	0.859	0.3
29	0.475	1.8	1.04	1.5	NA		1.29	2.5
30	0.349	0.3	0.830	0.4	0.390	0.6	0.665	-0.6
31	0.459	1.6	1.10	1.9	0.272	-0.8	0.980	1.0
32	0.368	0.5	0.804	0.3	NA		0.603	-1.0
33	0.370	0.5	0.880	0.7	NA		0.720	-0.4
34	0.292	-0.4	0.631	-0.6	0.442	1.2	1.18	2.0
35	1.30	12.0	1.80	5.6	0.400	0.7	0.750	-0.2
36	0.148	-2.2	0.370	-2.0	0.168	-2.0	0.511	-1.4
37	0.535	2.6	1.12	2.0	NA		0.702	-0.5
38	0.100	-2.8	0.306	-2.4	NA		0.445	-1.7
39	0.335	0.1	0.738	-0.1	0.398	0.7	0.850	0.3
40	0.360	0.4	0.858	0.6	0.416	0.9	0.865	0.4
41	0.274	-0.6	0.684	-0.4	0.335	0.0	0.613	-0.9
42	0.294	-0.4	0.678	-0.4	0.282	-0.7	0.796	0.0
43	0.269	-0.7	0.641	-0.6	<0.05	-3.4	0.595	-1.0
44	No Results Given							
45	0.206	-1.5	0.527	-1.2	0.249	-1.1	0.738	-0.3
46	0.360	0.4	0.890	0.7	0.253	-1.0	0.981	1.0
47	0.454	1.6	1.08	1.8	0.321	-0.2	0.995	1.0
48	0.392	0.8	0.946	1.0	0.338	0.0	0.915	0.6

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

Lab Code	Endosulfan β	z-Score (FFP RSD 25%)	Endosulfan Sum	z-Score (FFP RSD 25%)	Fenhexamid	z-Score (FFP RSD 25%)	Fenitrothion	z-Score (FFP RSD 25%)
MRRL	0.05		0.05		0.05		0.01	
Median (mg/kg)	0.326		0.750		0.338		0.791	
49	0.330	0.0	0.810	0.3	<0.02	-3.4	0.750	-0.2
50	0.357	0.4	0.870	0.6	0.300	-0.4	0.933	0.7
51	0.325	0.0	0.764	0.1	0.357	0.2	0.834	0.2
52	0.348	0.3	0.754	0.0	NA		0.601	-1.0
53	0.335	0.1	0.807	0.3	NA		0.783	0.0
54	0.340	0.2	0.880	0.7	0.300	-0.4	0.840	0.2
55	0.300	-0.3	0.690	-0.3	0.820	5.7	0.740	-0.3
56	NA		NA		NA		0.680	-0.6
57	0.430	1.3	1.04	1.6	0.360	0.3	0.530	-1.3
58	0.275	-0.6	0.618	-0.7	0.417	0.9	0.723	-0.3
59	0.242	-1.0	0.547	-1.1	0.428	1.1	0.684	-0.5
60	0.477	1.9	1.24	2.6	0.287	-0.6	1.00	1.1
61	0.293	-0.4	0.656	-0.5	0.609	3.2	0.946	0.8
62	0.427	1.2	1.01	1.4	0.383	0.5	0.488	-1.5
63	0.266	-0.7	0.603	-0.8	0.394	0.7	0.720	-0.4
64	No Results Given							
65	0.302	-0.3	0.697	-0.3	0.378	0.5	0.858	0.3
66	0.311	-0.2	0.704	-0.2	0.299	-0.5	0.690	-0.5
67	0.416	1.1	0.726	-0.1	0.255	-1.0	0.578	-1.1
68	0.310	-0.2	0.740	-0.1	0.330	-0.1	0.810	0.1
69	0.270	-0.7	0.600	-0.8	0.230	-1.3	0.740	-0.3
70	0.290	-0.4	0.570	-1.0	0.388	0.6	0.787	0.0
71	NA		NA		0.237	-1.2	1.08	1.5
72	#		0.749	0.0	NA		0.680	-0.6
73	0.441	1.4	1.37	3.3	0.410	0.9	1.04	1.3
74	0.285	-0.5	0.690	-0.3	0.487	1.8	0.779	-0.1
75	0.325	0.0	0.735	-0.1	0.434	1.1	0.971	0.9
76	0.133	-2.4	0.292	-2.4	0.218	-1.4	0.527	-1.3
77	0.395	0.8	0.950	1.1	0.038	-3.6	0.611	-0.9
78	No Results Given							
79	0.420	1.2	0.770	0.1	NA		0.700	-0.5
80	0.270	-0.7	0.600	-0.8	NA		1.10	1.6
81	0.371	0.6	0.827	0.4	0.375	0.4	<0.01	-3.9
82	0.320	-0.1	0.730	-0.1	0.390	0.6	0.790	0.0
83	0.280	-0.6	0.603	-0.8	0.535	2.3	0.806	0.1
84	0.152	-2.1	0.417	-1.8	NA		0.538	-1.3
85	0.219	-1.3	0.624	-0.7	0.459	1.4	0.745	-0.2
86	0.350	0.3	0.870	0.6	0.330	-0.1	1.10	1.6
87	0.420	1.2	1.08	1.8	0.514	2.1	0.996	1.0
88	0.301	-0.3	0.612	-0.7	0.390	0.6	0.745	-0.2
89	0.250	-0.9	0.550	-1.1	NA		0.700	-0.5
90	0.350	0.3	0.720	-0.2	0.790	5.3	1.12	1.7
91	0.284	-0.5	0.639	-0.6	0.373	0.4	0.710	-0.4
92	0.381	0.7	0.841	0.5	NA		0.809	0.1
93	0.353	0.3	0.849	0.5	0.301	-0.4	0.828	0.2
94	#		1.08	1.8	NA		NA	
95	0.275	-0.6	0.652	-0.5	0.286	-0.6	0.738	-0.3
96	0.283	-0.5	0.652	-0.5	0.321	-0.2	0.745	-0.2
97	0.420	1.2	0.960	1.1	<0.02	-3.4	0.990	1.0

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

Lab Code	Endosulfan β	z-Score (FFP RSD 25%)	Endosulfan Sum	z-Score (FFP RSD 25%)	Fenhexamid	z-Score (FFP RSD 25%)	Fenitrothion	z-Score (FFP RSD 25%)
MRRL	0.05		0.05		0.05		0.01	
Median (mg/kg)	0.326		0.750		0.338		0.791	
98	0.308	-0.2	0.696	-0.3	0.310	-0.3	0.830	0.2
99	0.331	0.1	0.751	0.0	0.320	-0.2	0.692	-0.5
100	0.325	0.0	0.768	0.1	NA		0.696	-0.5
101	0.404	1.0	0.846	0.5	0.355	0.2	0.910	0.6
102	0.230	-1.2	0.550	-1.1	NA		0.620	-0.9
103	0.404	1.0	0.969	1.2	0.438	1.2	0.907	0.6
104	0.718	4.8	1.05	1.6	0.539	2.4	1.29	2.5
105	0.315	-0.1	0.851	0.5	<0.05	-3.4	0.903	0.6
106	0.345	0.2	0.761	0.1	0.309	-0.3	0.774	-0.1
107	0.326	0.0	0.727	-0.1	0.541	2.4	0.824	0.2
108	NA		NA		0.300	-0.4	NA	
109	0.224	-1.3	0.504	-1.3	0.201	-1.6	0.671	-0.6
110	0.274	-0.6	0.670	-0.4	0.239	-1.2	0.895	0.5
111	0.370	0.5	0.823	0.4	<0.05	-3.4	0.886	0.5
112	0.263	-0.8	0.630	-0.6	NA		0.630	-0.8
113	0.260	-0.8	0.700	-0.3	<0.05	-3.4	0.710	-0.4
114	0.253	-0.9	0.602	-0.8	0.281	-0.7	0.709	-0.4
115	0.290	-0.4	0.666	-0.4	0.661	3.8	0.767	-0.1
116	0.270	-0.7	0.654	-0.5	0.250	-1.0	1.11	1.6
117	0.300	-0.3	0.750	0.0	0.270	-0.8	0.550	-1.2
118	0.412	1.1	1.01	1.4	0.403	0.8	1.04	1.3
119	0.251	-0.9	0.590	-0.9	0.409	0.8	0.713	-0.4
120	#		0.680	-0.4	0.320	-0.2	0.880	0.5
121	0.295	-0.4	0.587	-0.9	0.445	1.3	0.902	0.6
122	0.227	-1.2	0.508	-1.3	NA		0.732	-0.3
123	0.350	0.3	0.750	0.0	NA		0.780	-0.1
124	0.510	2.3	1.08	1.8	NA		NA	
125	0.228	-1.2	0.671	-0.4	0.279	-0.7	0.691	-0.5
126	0.340	0.2	0.780	0.2	NA		0.800	0.0
127	0.256	-0.9	0.326	-2.3	NA		0.684	-0.5
128	0.260	-0.8	0.628	-0.7	NA		0.862	0.4
129	0.371	0.6	0.808	0.3	0.289	-0.6	0.699	-0.5
130	0.213	-1.4	0.415	-1.8	0.381	0.5	0.680	-0.6
131	0.275	-0.6	0.535	-1.1	0.330	-0.1	0.690	-0.5
132	0.224	-1.3	0.754	0.0	<0.05	-3.4	NA	
133	NA		NA		NA		NA	
134	0.203	-1.5	0.509	-1.3	NA		<0.05	-3.9
135	No Results Given							
136	#		1.03	1.5	NA		NA	
137	No Results Given							

Results given as Endosulfan Sum.

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

Lab Code	Fludioxonil		Hexythiazox		Iprodione		Myclobutanil	
MRRL	0.05	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)
Median (mg/kg)	0.516		1.05		0.725		0.759	
1	0.423	-0.7	NA		0.659	-0.4	0.901	0.7
2	0.583	0.5	1.18	0.5	0.855	0.7	0.824	0.3
3	NA		NA		NA		NA	
4	0.430	-0.7	NA		0.690	-0.2	0.670	-0.5
5	0.334	-1.4	0.517	-2.0	<0.02	-3.9	0.595	-0.9
6	0.724	1.6	1.30	1.0	0.856	0.7	0.934	0.9
7	0.457	-0.5	0.885	-0.6	0.820	0.5	NA	
8	0.608	0.7	NA		1.09	2.0	0.751	0.0
9	0.412	-0.8	0.867	-0.7	0.619	-0.6	0.812	0.3
10	0.778	2.0	1.26	0.8	0.722	0.0	0.727	-0.2
11	0.587	0.6	1.53	1.8	0.710	-0.1	0.484	-1.4
12	0.477	-0.3	1.01	-0.2	0.870	0.8	0.829	0.4
13	0.613	0.8	1.27	0.8	0.879	0.8	0.833	0.4
14	0.769	2.0	1.56	1.9	0.884	0.9	0.792	0.2
15	0.572	0.4	0.983	-0.3	0.744	0.1	0.749	-0.1
16	0.643	1.0	1.18	0.5	0.902	1.0	0.814	0.3
17	0.623	0.8	1.18	0.5	0.828	0.6	0.838	0.4
18	0.721	1.6	1.22	0.6	0.697	-0.2	0.870	0.6
19	0.465	-0.4	0.962	-0.3	0.784	0.3	0.822	0.3
20	0.350	-1.3	NA		0.660	-0.4	0.820	0.3
21	0.465	-0.4	0.998	-0.2	1.13	2.2	0.845	0.5
22	0.587	0.6	1.80	2.9	0.633	-0.5	0.516	-1.3
23	0.509	-0.1	0.819	-0.9	0.780	0.3	0.838	0.4
24	0.478	-0.3	0.990	-0.2	0.628	-0.5	0.546	-1.1
25	0.571	0.4	0.980	-0.3	0.659	-0.4	1.01	1.3
26	0.535	0.1	0.889	-0.6	0.666	-0.3	0.625	-0.7
27	NA		NA		0.726	0.0	0.624	-0.7
28	0.570	0.4	1.05	0.0	0.764	0.2	0.910	0.8
29	NA		NA		1.81	6.0	0.891	0.7
30	0.465	-0.4	1.77	2.7	<0.02	-3.9	1.04	1.5
31	0.458	-0.4	0.231	-3.1	0.991	1.5	0.490	-1.4
32	0.322	-1.5	NA		0.878	0.8	0.490	-1.4
33	NA		NA		0.560	-0.9	0.610	-0.8
34	NA		NA		0.533	-1.1	0.750	0.0
35	NA		NA		0.650	-0.4	0.900	0.7
36	0.287	-1.8	NA		0.286	-2.4	0.605	-0.8
37	NA		NA		0.658	-0.4	NA	
38	0.556	0.3	NA		0.529	-1.1	0.631	-0.7
39	0.600	0.7	1.47	1.6	0.793	0.4	0.802	0.2
40	0.544	0.2	1.21	0.6	0.738	0.1	0.857	0.5
41	0.432	-0.7	0.896	-0.6	0.566	-0.9	0.554	-1.1
42	0.430	-0.7	1.03	-0.1	0.644	-0.4	0.663	-0.5
43	0.453	-0.5	NA		0.506	-1.2	0.617	-0.7
44	No Results Given							
45	0.540	0.2	1.34	1.1	0.635	-0.5	0.700	-0.3
46	0.553	0.3	NA		0.730	0.0	0.720	-0.2
47	0.411	-0.8	1.57	2.0	0.647	-0.4	0.418	-1.8

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

Lab Code	Fludioxonil		Hexythiazox		Iprodione		Myclobutanil	
MRRL	0.05	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)
Median (mg/kg)	0.516		1.05		0.725		0.759	
48	0.524	0.1	1.05	0.0	1.03	1.7	1.07	1.6
49	0.530	0.1	1.10	0.2	0.650	-0.4	0.630	-0.7
50	0.523	0.1	2.35	5.0	<0.05	-3.9	0.859	0.5
51	0.542	0.2	1.14	0.3	0.769	0.2	0.796	0.2
52	NA		NA		0.820	0.5	0.733	-0.1
53	NA		NA		NA		0.776	0.1
54	0.580	0.5	NA		0.600	-0.7	0.650	-0.6
55	NA		NA		0.700	-0.1	0.780	0.1
56	NA		NA		0.660	-0.4	NA	
57	0.708	1.5	0.780	-1.0	0.805	0.4	0.824	0.3
58	0.503	-0.1	0.583	-1.8	0.788	0.3	0.804	0.2
59	0.558	0.3	NA		0.704	-0.1	0.795	0.2
60	0.690	1.3	1.22	0.7	0.893	0.9	0.769	0.1
61	0.585	0.5	1.05	0.0	0.770	0.2	0.751	0.0
62	0.678	1.3	1.11	0.2	0.906	1.0	1.01	1.3
63	0.501	-0.1	NA		0.667	-0.3	0.597	-0.9
64	No Results Given							
65	0.406	-0.9	0.712	-1.3	0.730	0.0	0.649	-0.6
66	0.507	-0.1	1.02	-0.1	0.643	-0.5	0.658	-0.5
67	0.418	-0.8	NA		0.502	-1.2	0.814	0.3
68	0.470	-0.4	0.840	-0.8	0.710	-0.1	0.760	0.0
69	<0.01	-3.6	0.740	-1.2	0.080	-3.6	<0.01	-3.9
70	0.439	-0.6	NA		0.774	0.3	0.681	-0.4
71	0.592	0.6	0.620	-1.6	0.899	1.0	0.777	0.1
72	NA		NA		0.599	-0.7	0.578	-1.0
73	0.698	1.4	1.38	1.3	1.01	1.6	1.06	1.6
74	0.425	-0.7	1.08	0.1	0.713	-0.1	0.897	0.7
75	NA		NA		0.773	0.3	0.595	-0.9
76	0.363	-1.2	0.415	-2.4	0.392	-1.8	0.562	-1.0
77	0.545	0.2	NA		0.578	-0.8	0.572	-1.0
78	No Results Given							
79	0.650	1.0	NA		0.860	0.7	0.940	1.0
80	0.440	-0.6	NA		0.730	0.0	NA	
81	0.452	-0.5	0.838	-0.8	0.893	0.9	0.983	1.2
82	0.550	0.3	1.06	0.0	0.680	-0.2	0.670	-0.5
83	0.688	1.3	1.81	2.9	0.780	0.3	0.765	0.0
84	NA		NA		0.446	-1.5	0.367	-2.1
85	0.394	-0.9	NA		0.438	-1.6	0.490	-1.4
86	0.370	-1.1	1.62	2.2	0.720	0.0	0.790	0.2
87	0.722	1.6	1.14	0.3	0.973	1.4	0.984	1.2
88	0.383	-1.0	<0.02	-3.9	0.744	0.1	0.742	-0.1
89	NA		NA		NA		NA	
90	0.650	1.0	3.40	9.0	0.930	1.1	0.81	0.3
91	0.629	0.9	0.806	-0.9	0.667	-0.3	0.759	0.0
92	NA		NA		0.714	-0.1	0.617	-0.7
93	0.537	0.2	1.02	-0.1	0.752	0.1	0.757	0.0
94	NA		NA		0.590	-0.7	0.960	1.1
95	0.545	0.2	0.886	-0.6	0.452	-1.5	0.503	-1.3

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

Lab Code	Fludioxonil		Hexythiazox		Iprodione		Myclobutanil	
MRRL	0.05	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)
Median (mg/kg)	0.516		1.05		0.725		0.759	
96	0.405	-0.9	0.871	-0.7	0.650	-0.4	0.790	0.2
97	0.840	2.5	NA		0.930	1.1	1.20	2.3
98	0.488	-0.2	NA		0.697	-0.2	0.785	0.1
99	0.554	0.3	0.886	-0.6	0.707	-0.1	0.792	0.2
100	NA		NA		0.546	-1.0	0.289	-2.5
101	0.341	-1.4	1.33	1.1	0.820	0.5	0.855	0.5
102	0.180	-2.6	NA		0.400	-1.8	0.140	-3.3
103	0.595	0.6	0.895	-0.6	0.877	0.8	0.930	0.9
104	0.893	2.9	1.41	1.4	1.43	3.9	1.20	2.3
105	0.434	-0.6	NA		0.767	0.2	0.818	0.3
106	0.543	0.2	1.22	0.6	0.690	-0.2	0.952	1.0
107	NA		NA		1.04	1.7	0.969	1.1
108	NA		NA		ND	-3.9	NA	
109	0.422	-0.7	0.895	-0.6	0.601	-0.7	0.465	-1.5
110	0.441	-0.6	1.11	0.2	0.682	-0.2	0.667	-0.5
111	0.472	-0.3	NA		0.958	1.3	0.903	0.8
112	0.456	-0.5	NA		0.700	-0.1	0.612	-0.8
113	0.140	-2.9	NA		<0.02	-3.9	0.630	-0.7
114	0.445	-0.6	1.05	0.0	0.670	-0.3	0.741	-0.1
115	NA		NA		NA		0.625	-0.7
116	0.445	-0.6	0.894	-0.6	NA		0.879	0.6
117	0.400	-0.9	0.870	-0.7	0.200	-2.9	0.550	-1.1
118	0.741	1.7	1.38	1.3	NA		1.02	1.4
119	0.470	-0.4	NA		0.623	-0.6	0.640	-0.6
120	0.620	0.8	NA		1.08	2.0	0.940	1.0
121	0.368	-1.1	NA		0.578	-0.8	0.627	-0.7
122	NA		NA		<0.05	-3.9	0.841	0.4
123	NA		NA		1.26	3.0	NA	
124	NA		NA		0.700	-0.1	NA	
125	0.132	-3.0	1.31	1.0	0.828	0.6	0.355	-2.1
126	0.440	-0.6	NA		0.820	0.5	0.670	-0.5
127	NA		NA		0.010	-3.9	NA	
128	0.754	1.8	NA		0.636	-0.5	0.568	-1.0
129	0.610	0.7	1.19	0.5	0.756	0.2	0.825	0.3
130	0.461	-0.4	NA		0.890	0.9	0.851	0.5
131	0.516	0.0	NA		0.607	-0.7	0.687	-0.4
132	NA		NA		<0.02	-3.9	NA	
133	NA		NA		NA		NA	
134	0.320	-1.5	0.786	-1.0	0.420	-1.7	0.495	-1.4
135	No Results Given							
136	NA		NA		NA		NA	
137	No Results Given							

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	Oxamyl		Penconazole		Procymidone		Pyrimethanil	
MRRL	0.01	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)
Median (mg/kg)	0.756		0.486		0.606		0.880	
1	NA		0.333	-1.3	0.501	-0.7	0.645	-1.1
2	0.427	-1.7	0.522	0.3	0.661	0.4	0.991	0.5
3	NA		NA		NA		NA	
4	0.680	-0.4	0.440	-0.4	0.610	0.0	0.860	-0.1
5	0.760	0.0	0.360	-1.0	0.617	0.1	0.845	-0.2
6	0.816	0.3	0.887	3.3	0.823	1.4	1.01	0.6
7	NA		0.502	0.1	0.793	1.2	0.773	-0.5
8	NA		0.449	-0.3	0.512	-0.6	0.895	0.1
9	0.680	-0.4	0.507	0.2	0.570	-0.2	0.946	0.3
10	0.666	-0.5	0.540	0.4	0.696	0.6	0.964	0.4
11	0.782	0.1	0.380	-0.9	0.751	1.0	0.884	0.0
12	0.574	-1.0	0.550	0.5	0.722	0.8	1.03	0.7
13	0.828	0.4	0.617	1.1	0.792	1.2	1.05	0.8
14	0.930	0.9	0.875	3.2	0.779	1.1	1.16	1.3
15	0.840	0.4	0.518	0.3	0.602	0.0	0.848	-0.1
16	0.961	1.1	0.547	0.5	0.706	0.7	1.10	1.0
17	0.798	0.2	0.426	-0.5	0.412	-1.3	0.968	0.4
18	0.809	0.3	0.560	0.6	0.633	0.2	1.04	0.7
19	0.915	0.8	0.433	-0.4	0.713	0.7	0.786	-0.4
20	0.940	1.0	0.460	-0.2	0.620	0.1	0.740	-0.6
21	0.431	-1.7	0.434	-0.4	0.465	-0.9	0.813	-0.3
22	0.460	-1.6	0.372	-0.9	0.665	0.4	0.947	0.3
23	0.942	1.0	0.501	0.1	0.656	0.3	0.985	0.5
24	0.923	0.9	0.486	0.0	0.645	0.3	0.945	0.3
25	<0.50	-3.9	0.490	0.0	0.647	0.3	0.937	0.3
26	0.852	0.5	0.395	-0.7	0.622	0.1	0.938	0.3
27	NA		0.706	1.8	0.584	-0.1	1.06	0.8
28	0.723	-0.2	0.549	0.5	0.652	0.3	0.878	0.0
29	0.516	-1.3	D	-3.6	0.856	1.7	1.27	1.8
30	0.850	0.5	0.620	1.1	0.685	0.5	1.07	0.9
31	0.656	-0.5	0.469	-0.1	0.711	0.7	0.673	-0.9
32	NA		0.382	-0.9	0.651	0.3	0.874	0.0
33	NA		NA		0.620	0.1	NA	
34	NA		0.428	-0.5	0.534	-0.5	NA	
35	NA		0.250	-1.9	0.420	-1.2	NA	
36	NA		0.306	-1.5	0.366	-1.6	1.03	0.7
37	NA		0.557	0.6	0.974	2.4	NA	
38	NA		0.323	-1.3	0.412	-1.3	0.644	-1.1
39	0.642	-0.6	0.544	0.5	0.597	-0.1	0.944	0.3
40	0.916	0.8	0.547	0.5	0.652	0.3	1.10	1.0
41	0.638	-0.6	0.406	-0.7	0.545	-0.4	0.761	-0.5
42	0.650	-0.6	0.438	-0.4	0.537	-0.5	0.856	-0.1
43	0.424	-1.8	0.220	-2.2	1.09	3.2	0.717	-0.7
44	No Results Given							
45	1.25	2.6	0.415	-0.6	0.490	-0.8	0.879	0.0
46	NA		0.522	0.3	0.604	0.0	0.864	-0.1
47	0.730	-0.1	0.392	-0.8	0.715	0.7	0.757	-0.6

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

Lab Code	Oxamyl		Penconazole		Procymidone		Pyrimethanil	
MRRL	0.01	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)
Median (mg/kg)	0.756		0.486		0.606		0.880	
48	0.895	0.7	0.708	1.8	0.814	1.4	0.961	0.4
49	0.690	-0.3	0.520	0.3	0.590	-0.1	0.870	0.0
50	0.873	0.6	0.970	4.0	0.690	0.6	1.12	1.1
51	1.15	2.1	0.465	-0.2	0.771	1.1	0.886	0.0
52	NA		<0.03	-3.6	0.525	-0.5	NA	
53	NA		0.519	0.3	NA		NA	
54	NA		0.430	-0.5	0.610	0.0	0.870	0.0
55	NA		NA		0.490	-0.8	1.16	1.3
56	NA		NA		0.620	0.1	0.930	0.2
57	0.622	-0.7	0.420	-0.5	0.850	1.6	0.848	-0.1
58	0.867	0.6	0.473	-0.1	0.582	-0.2	0.842	-0.2
59	NA		0.568	0.7	0.552	-0.4	1.21	1.5
60	0.809	0.3	0.581	0.8	0.881	1.8	0.860	-0.1
61	0.583	-0.9	0.495	0.1	0.568	-0.3	0.951	0.3
62	1.05	1.6	0.636	1.2	0.789	1.2	1.25	1.7
63	0.663	-0.5	0.423	-0.5	0.490	-0.8	0.775	-0.5
64	No Results Given							
65	0.540	-1.1	0.471	-0.1	0.678	0.5	0.853	-0.1
66	0.779	0.1	0.438	-0.4	0.549	-0.4	0.832	-0.2
67	NA		0.335	-1.2	0.508	-0.6	0.625	-1.2
68	0.760	0.0	0.530	0.4	0.570	-0.2	0.880	0.0
69	0.480	-1.5	0.290	-1.6	0.500	-0.7	0.180	-3.2
70	0.920	0.9	0.445	-0.3	0.540	-0.4	0.902	0.1
71	NA		0.468	-0.1	0.682	0.5	<0.05	-3.8
72	0.731	-0.1	NA		0.560	-0.3	0.254	-2.8
73	0.782	0.1	0.687	1.7	0.812	1.4	1.18	1.4
74	0.564	-1.0	0.520	0.3	0.597	-0.1	0.694	-0.8
75	NA		0.212	-2.3	0.424	-1.2	1.052	0.8
76	0.785	0.2	0.312	-1.4	0.458	-1.0	0.835	-0.2
77	0.787	0.2	0.415	-0.6	0.743	0.9	1.17	1.3
78	No Results Given							
79	NA		0.570	0.7	0.920	2.1	0.820	-0.3
80	NA		0.390	-0.8	0.490	-0.8	0.840	-0.2
81	0.890	0.7	0.490	0.0	0.621	0.1	0.901	0.1
82	0.440	-1.7	0.520	0.3	0.480	-0.8	0.880	0.0
83	NA		0.534	0.4	0.601	0.0	0.755	-0.6
84	NA		0.252	-1.9	0.354	-1.7	NA	
85	<0.01	-3.9	0.357	-1.1	0.484	-0.8	0.750	-0.6
86	0.840	0.4	0.580	0.8	0.700	0.6	0.930	0.2
87	0.693	-0.3	0.580	0.8	0.763	1.0	0.955	0.3
88	NA		0.430	-0.5	0.504	-0.7	0.790	-0.4
89	NA		NA		0.500	-0.7	NA	
90	0.240	-2.7	0.490	0.0	0.600	0.0	0.580	-1.4
91	NA		0.501	0.1	0.557	-0.3	1.06	0.8
92	NA		0.765	2.3	0.559	-0.3	NA	
93	0.751	0.0	0.507	0.2	0.641	0.2	0.935	0.3
94	NA		NA		0.720	0.8	0.920	0.2
95	0.403	-1.9	0.561	0.6	0.363	-1.6	0.854	-0.1

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

Lab Code	Oxamyl		Penconazole		Procymidone		Pyrimethanil	
MRRL	0.01	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)
Median (mg/kg)	0.756		0.486		0.606		0.880	
96	0.661	-0.5	0.404	-0.7	0.378	-1.5	0.735	-0.7
97	NA		0.580	0.8	0.690	0.6	1.10	1.0
98	0.77	0.1	0.487	0.0	0.430	-1.2	1.05	0.8
99	0.761	0.0	0.386	-0.8	0.597	-0.1	0.929	0.2
100	0.376	-2.0	NA		0.517	-0.6	NA	
101	0.589	-0.9	0.557	0.6	0.599	0.0	0.951	0.3
102	NA		0.130	-2.9	0.430	-1.2	0.070	-3.7
103	0.810	0.3	0.553	0.6	0.613	0.0	0.988	0.5
104	0.687	-0.4	0.763	2.3	0.966	2.4	1.12	1.1
105	<0.1	-3.9	0.523	0.3	0.771	1.1	0.962	0.4
106	1.13	2.0	0.652	1.4	0.617	0.1	0.744	-0.6
107	NA		0.481	0.0	0.582	-0.2	0.875	0.0
108	NA		0.400	-0.7	0.500	-0.7	1.00	0.5
109	0.605	-0.8	0.445	-0.3	0.511	-0.6	0.851	-0.1
110	0.688	-0.4	0.373	-0.9	0.622	0.1	0.943	0.3
111	<0.01	-3.9	0.458	-0.2	0.401	-1.4	1.01	0.6
112	NA		0.502	0.1	0.567	-0.3	0.788	-0.4
113	0.230	-2.8	0.390	-0.8	0.620	0.1	0.210	-3.0
114	0.821	0.3	0.463	-0.2	0.563	-0.3	0.972	0.4
115	NA		0.445	-0.3	0.532	-0.5	NA	
116	NA		0.599	0.9	0.554	-0.3	1.08	0.9
117	0.61	-0.8	0.550	0.5	0.380	-1.5	0.500	-1.7
118	0.855	0.5	0.658	1.4	0.814	1.4	1.03	0.7
119	0.584	-0.9	0.420	-0.5	0.529	-0.5	0.829	-0.2
120	NA		0.650	1.3	0.640	0.2	0.880	0.0
121	0.701	-0.3	0.360	-1.0	0.465	-0.9	0.690	-0.9
122	NA		0.444	-0.3	0.707	0.7	1.24	1.6
123	NA		NA		0.620	0.1	NA	
124	NA		NA		0.630	0.2	NA	
125	0.770	0.1	0.350	-1.1	0.618	0.1	0.584	-1.3
126	NA		0.540	0.4	0.750	1.0	0.780	-0.5
127	NA		NA		0.647	0.3	0.020	-3.9
128	<0.1	-3.9	0.493	0.1	0.542	-0.4	0.777	-0.5
129	0.690	-0.3	0.533	0.4	0.606	0.0	0.683	-0.9
130	NA		0.410	-0.6	0.541	-0.4	0.880	0.0
131	<0.10	-3.9	0.445	-0.3	0.550	-0.4	0.856	-0.1
132	NA		NA		0.509	-0.6	NA	
133	NA		NA		NA		NA	
134	0.682	-0.4	0.290	-1.6	0.455	-1.0	0.075	-3.7
135	No Results Given							
136	NA		NA		0.880	1.8	0.860	-0.1
137	No Results Given							

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	Quinoxifen		Tebuconazole		Tolyfluanid		Triadimenol	
MRRL	0.02	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.1	z-Score (FFP RSD 25%)
Median (mg/kg)	1.03		0.800		1.60		1.32	
1	0.872	-0.6	0.563	-1.2	1.12	-1.2	1.47	0.5
2	1.11	0.3	0.822	0.1	1.57	-0.1	1.37	0.2
3	NA		NA		NA		NA	
4	NA		0.850	0.3	2.05	1.1	1.51	0.6
5	0.545	-1.9	0.627	-0.9	0.960	-1.6	1.24	-0.2
6	1.34	1.2	1.03	1.2	2.58	2.5	2.24	2.8
7	NA		NA		1.60	0.0	NA	
8	0.722	-1.2	0.919	0.6	1.58	-0.1	1.19	-0.4
9	1.04	0.0	0.826	0.1	1.94	0.9	1.19	-0.4
10	0.647	-1.5	0.899	0.5	1.40	-0.5	1.25	-0.2
11	1.14	0.4	0.774	-0.1	1.54	-0.2	0.888	-1.3
12	1.10	0.3	0.930	0.7	2.40	2.0	1.37	0.2
13	1.28	1.0	1.01	1.1	2.34	1.9	1.59	0.8
14	1.40	1.4	1.28	2.4	2.40	2.0	0.93	-1.2
15	NA		0.887	0.4	1.88	0.7	<0.40	-3.7
16	1.30	1.0	0.961	0.8	2.05	1.1	1.24	-0.2
17	1.10	0.3	0.882	0.4	2.26	1.7	1.60	0.8
18	1.10	0.3	0.941	0.7	1.77	0.4	1.28	-0.1
19	0.970	-0.2	0.855	0.3	1.64	0.1	1.46	0.4
20	0.820	-0.8	0.920	0.6	1.30	-0.8	1.40	0.2
21	NA		0.855	0.3	0.045	-3.9	1.33	0.0
22	0.774	-1.0	0.780	-0.1	1.62	0.1	1.07	-0.8
23	1.10	0.3	0.840	0.2	5.86	10.7	1.69	1.1
24	1.25	0.9	0.614	-0.9	1.94	0.9	1.38	0.2
25	0.941	-0.3	0.809	0.0	1.80	0.5	1.50	0.5
26	0.938	-0.4	0.725	-0.4	1.98	1.0	<0.01	-3.7
27	NA		NA		1.91	0.8	1.04	-0.8
28	1.03	0.0	0.950	0.8	1.32	-0.7	1.51	0.6
29	NA		0.981	0.9	1.42	-0.5	D	-3.7
30	1.64	2.4	1.17	1.9	2.43	2.1	1.58	0.8
31	1.64	2.4	0.672	-0.6	1.45	-0.4	1.62	0.9
32	NA		0.739	-0.3	1.89	0.7	0.725	-1.8
33	NA		0.630	-0.9	1.31	-0.7	NA	
34	1.11	0.3	NA		1.91	0.8	NA	
35	NA		0.900	0.5	4.50	7.3	4.20	8.7
36	NA		NA		NA		NA	
37	NA		NA		NA		0.727	-1.8
38	NA		0.583	-1.1	0.289	-3.3	0.949	-1.1
39	0.938	-0.4	0.858	0.3	1.39	-0.5	1.40	0.2
40	1.13	0.4	0.950	0.8	2.18	1.5	1.74	1.3
41	0.808	-0.9	0.658	-0.7	1.94	0.9	1.14	-0.5
42	0.899	-0.5	0.716	-0.4	1.45	-0.4	0.911	-1.2
43	0.560	-1.8	0.300	-2.5	1.94	0.9	0.441	-2.7
44	No Results Given							

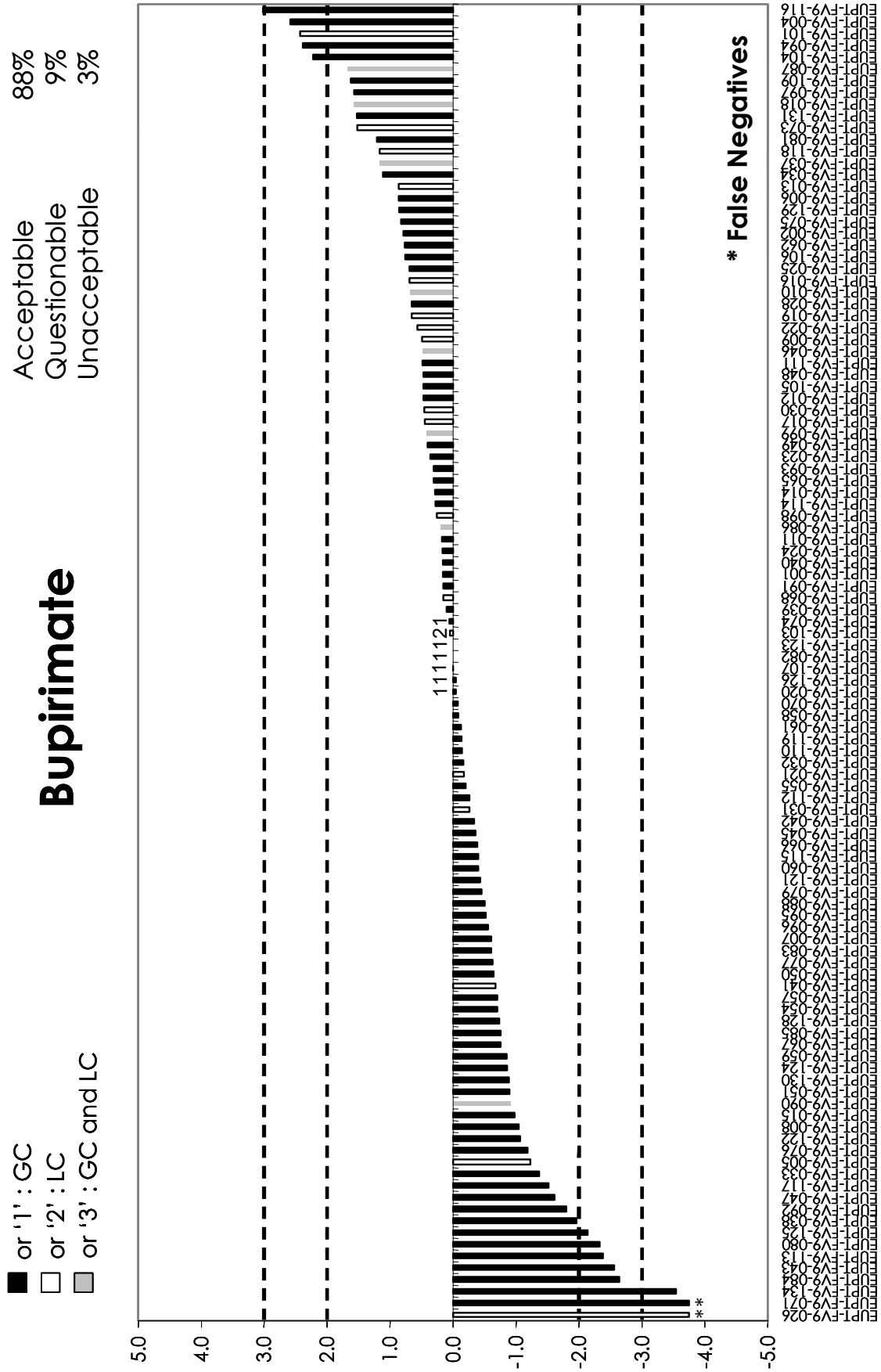
APPENDIX 3. Results (mg/Kg) and z-scores for FFP RSD (25%).

Lab Code	Quinoxifen		Tebuconazole		Tolyfluanid		Triadimenol	
MRRL	0.02	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.1	z-Score (FFP RSD 25%)
Median (mg/kg)	1.03		0.800		1.60		1.32	
45	1.37	1.3	0.880	0.4	1.26	-0.9	1.29	-0.1
46	1.08	0.2	0.956	0.8	1.60	0.0	0.978	-1.0
47	0.860	-0.7	0.521	-1.4	1.79	0.5	<0.05	-3.7
48	1.18	0.6	0.865	0.3	1.95	0.9	1.59	0.8
49	1.10	0.3	<0.01	-3.9	1.44	-0.4	1.11	-0.6
50	1.69	2.6	0.750	-0.3	2.37	1.9	1.44	0.4
51	1.09	0.2	0.868	0.3	1.84	0.6	1.49	0.5
52	NA		NA		5.50	9.8	0.79	-1.6
53	NA		NA		NA		NA	
54	0.840	-0.7	0.780	-0.1	1.50	-0.3	1.00	-1.0
55	NA		0.880	0.4	1.32	-0.7	0.95	-1.1
56	NA		NA		1.78	0.5	NA	
57	1.03	0.0	0.660	-0.7	1.80	0.5	0.98	-1.0
58	0.895	-0.5	0.871	0.4	1.27	-0.8	1.49	0.5
59	0.756	-1.1	0.956	0.8	0.331	-3.2	1.44	0.4
60	1.18	0.6	0.954	0.8	3.59	5.0	2.18	2.6
61	1.16	0.5	0.912	0.6	1.49	-0.3	1.52	0.6
62	1.35	1.2	1.01	1.1	2.16	1.4	5.41	12.4
63	NA		0.640	-0.8	1.75	0.4	1.32	0.0
64	No Results Given							
65	1.06	0.1	0.741	-0.3	2.04	1.1	1.40	0.2
66	0.928	-0.4	0.815	0.1	1.25	-0.9	1.65	1.0
67	0.591	-1.7	0.533	-1.3	1.89	0.7	NA	
68	0.970	-0.2	0.760	-0.2	1.56	-0.1	1.29	-0.1
69	NA		0.510	-1.5	NA		0.76	-1.7
70	0.951	-0.3	0.755	-0.2	0.739	-2.2	1.47	0.4
71	0.858	-0.7	0.799	0.0	1.78	0.5	1.09	-0.7
72	NA		0.586	-1.1	1.77	0.4	NA	
73	1.57	2.1	1.09	1.5	1.57	-0.1	2.01	2.1
74	0.945	-0.3	0.906	0.5	1.65	0.1	1.31	0.0
75	1.11	0.3	NA		NA		1.02	-0.9
76	0.514	-2.0	0.630	-0.9	0.370	-3.1	0.492	-2.5
77	0.837	-0.7	0.235	-2.8	1.72	0.3	0.509	-2.5
78	No Results Given							
79	NA		0.930	0.7	NA		NA	
80	NA		NA		1.86	0.7	1.10	-0.7
81	0.851	-0.7	0.865	0.3	1.69	0.2	0.991	-1.0
82	0.860	-0.7	0.780	-0.1	1.90	0.8	1.31	0.0
83	1.03	0.0	0.756	-0.2	1.66	0.2	<0.05	-3.7
84	NA		0.436	-1.8	NA		NA	
85	2.26	4.8	0.814	0.1	1.31	-0.7	1.40	0.2
86	1.07	0.2	0.790	-0.1	2.20	1.5	1.49	0.5
87	1.15	0.5	1.03	1.2	2.48	2.2	2.00	2.1
88	0.729	-1.2	0.690	-0.6	1.45	-0.4	1.32	0.0
89	NA		NA		1.10	-1.3	NA	
90	1.07	0.2	1.15	1.8	1.94	0.9	1.70	1.2
91	0.863	-0.6	0.866	0.3	1.13	-1.2	1.76	1.3

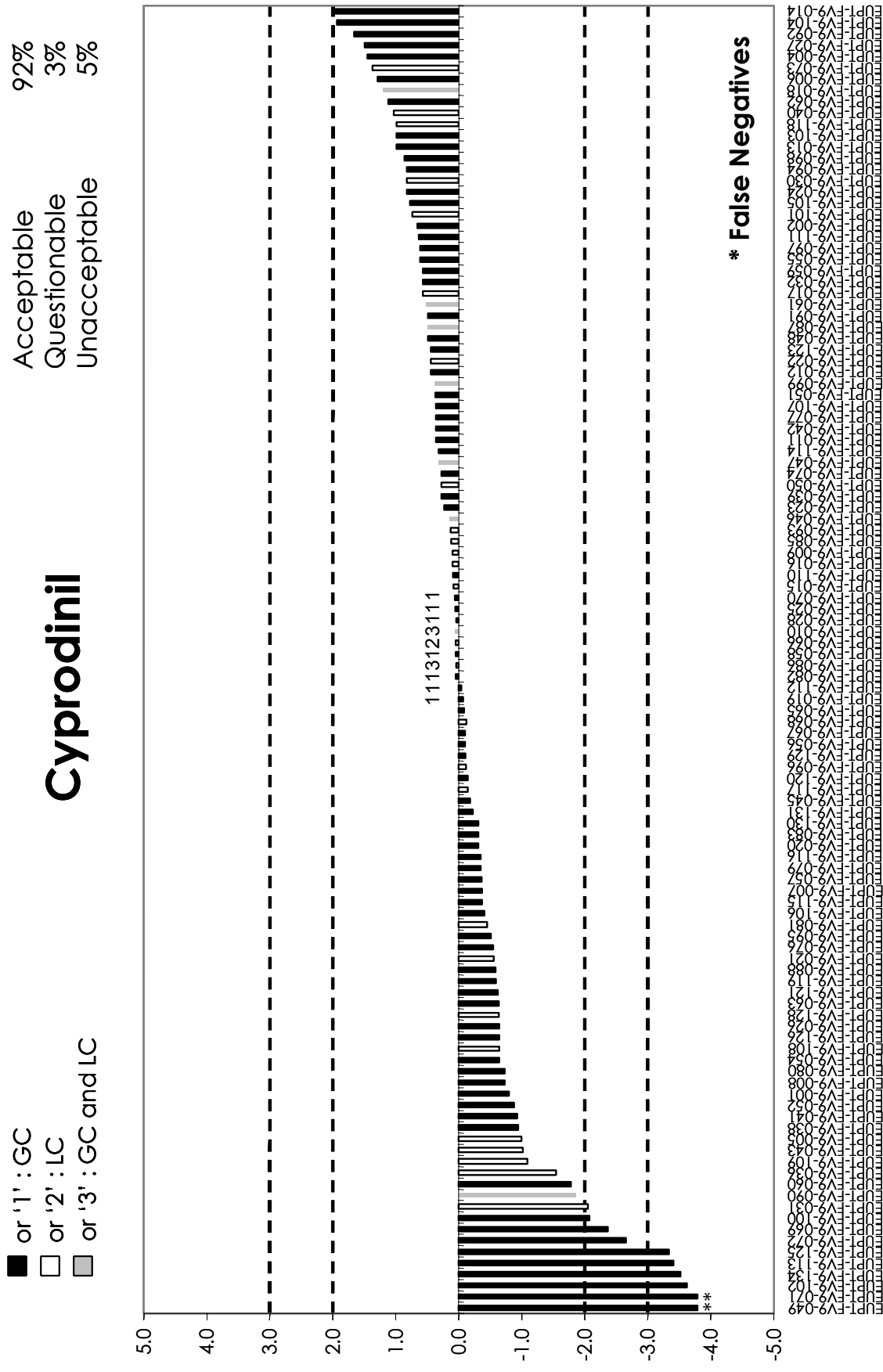
APPENDIX 3. Results (mg/kg) and z-scores for FFP RSD (25%).

Lab Code	Quinoxifen		Tebuconazole		Tolyfluanid		Triadimenol	
MRRL	0.02	z-Score (FFP RSD 25%)	0.02	z-Score (FFP RSD 25%)	0.05	z-Score (FFP RSD 25%)	0.1	z-Score (FFP RSD 25%)
Median (mg/kg)	1.03		0.800		1.60		1.32	
92	NA		NA		2.25	1.6	1.14	-0.5
93	1.09	0.2	0.786	-0.1	1.83	0.6	1.34	0.1
94	1.28	1.0	0.920	0.6	NA		2.55	3.7
95	0.832	-0.8	0.799	0.0	1.26	-0.9	1.36	0.1
96	0.934	-0.4	0.697	-0.5	1.52	-0.2	0.94	-1.2
97	1.10	0.3	1.10	1.5	1.90	0.8	1.40	0.2
98	NA		0.833	0.2	1.38	-0.6	1.66	1.0
99	1.04	0.0	0.808	0.0	1.58	-0.1	1.74	1.3
100	NA		NA		1.16	-1.1	NA	
101	1.10	0.3	0.901	0.5	1.85	0.6	1.09	-0.7
102	NA		0.090	-3.6	1.11	-1.2	0.27	-3.2
103	1.19	0.6	0.979	0.9	2.29	1.7	1.45	0.4
104	2.29	4.9	1.47	3.3	3.14	3.9	1.46	0.4
105	1.16	0.5	0.774	-0.1	2.09	1.2	1.28	-0.1
106	NA		0.778	-0.1	1.59	0.0	1.46	0.4
107	NA		0.704	-0.5	1.33	-0.7	1.15	-0.5
108	NA		NA		NA		NA	
109	0.833	-0.8	1.03	1.2	1.03	-1.4	0.987	-1.0
110	0.880	-0.6	0.746	-0.3	1.31	-0.7	0.925	-1.2
111	<0.02	-3.9	0.762	-0.2	1.16	-1.1	NA	
112	0.970	-0.2	0.649	-0.8	NA		NA	
113	NA		NA		0.68	-2.3	NA	
114	0.835	-0.8	0.725	-0.4	1.31	-0.7	1.46	0.4
115	0.835	-0.8	0.704	-0.5	1.59	0.0	1.04	-0.8
116	0.925	-0.4	<0.05	-3.9	0.859	-1.9	1.58	0.8
117	0.750	-1.1	0.800	0.0	1.00	-1.5	1.08	-0.7
118	1.43	1.6	1.27	2.4	2.01	1.0	1.75	1.3
119	0.812	-0.8	0.711	-0.4	1.40	-0.5	1.24	-0.2
120	1.07	0.2	1.23	2.2	1.09	-1.3	1.84	1.6
121	0.746	-1.1	1.00	1.0	1.26	-0.9	0.967	-1.1
122	NA		0.607	-1.0	1.36	-0.6	NA	
123	NA		NA		2.12	1.3	NA	
124	NA		NA		2.12	1.3	NA	
125	1.22	0.7	0.468	-1.7	2.99	3.5	1.51	0.6
126	NA		NA		1.30	-0.8	NA	
127	NA		0.286	-2.6	0.675	-2.3	NA	
128	NA		<0.05	-3.9	1.35	-0.6	NA	
129	1.09	0.2	0.798	0.0	1.73	0.3	1.18	-0.4
130	0.710	-1.2	0.661	-0.7	1.40	-0.5	1.30	-0.1
131	0.755	-1.1	0.730	-0.4	1.37	-0.6	3.81	7.5
132	NA		NA		1.20	-1.0	NA	
133	NA		NA		NA		NA	
134	0.265	-3.0	0.425	-1.9	NA		NA	
135	No Results Given							
136	NA		NA		NA		NA	
137	No Results Given							

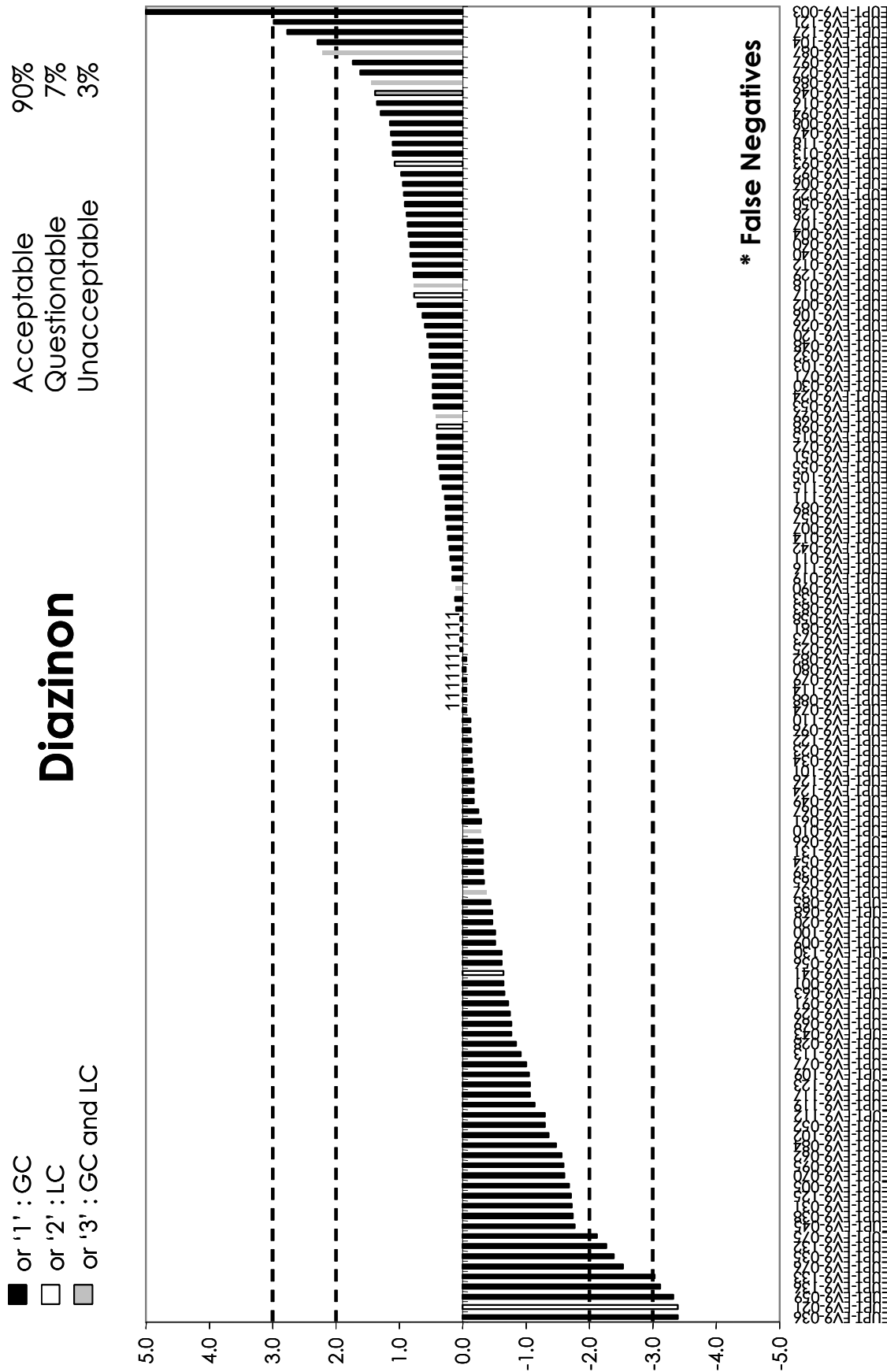
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



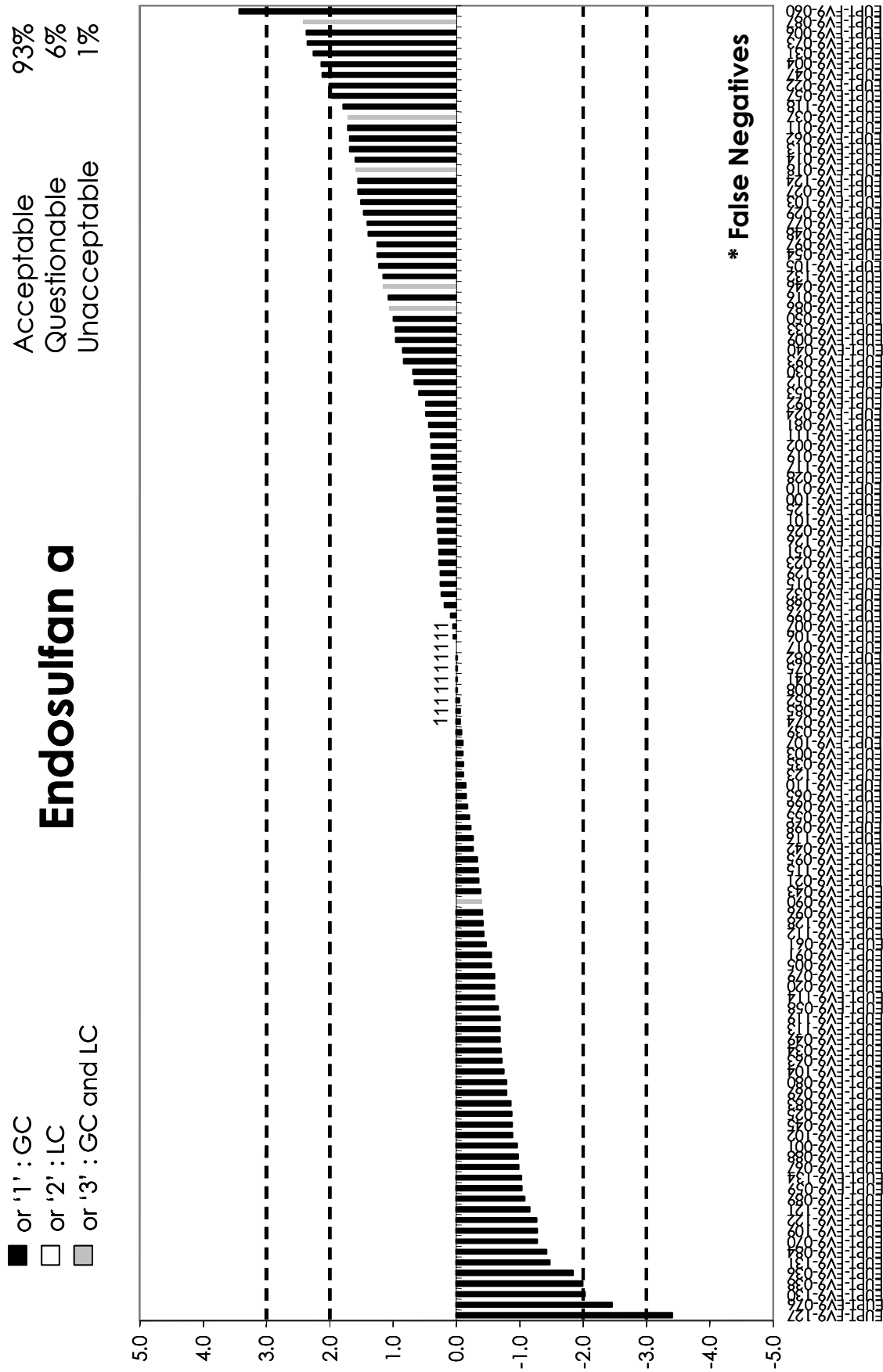
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



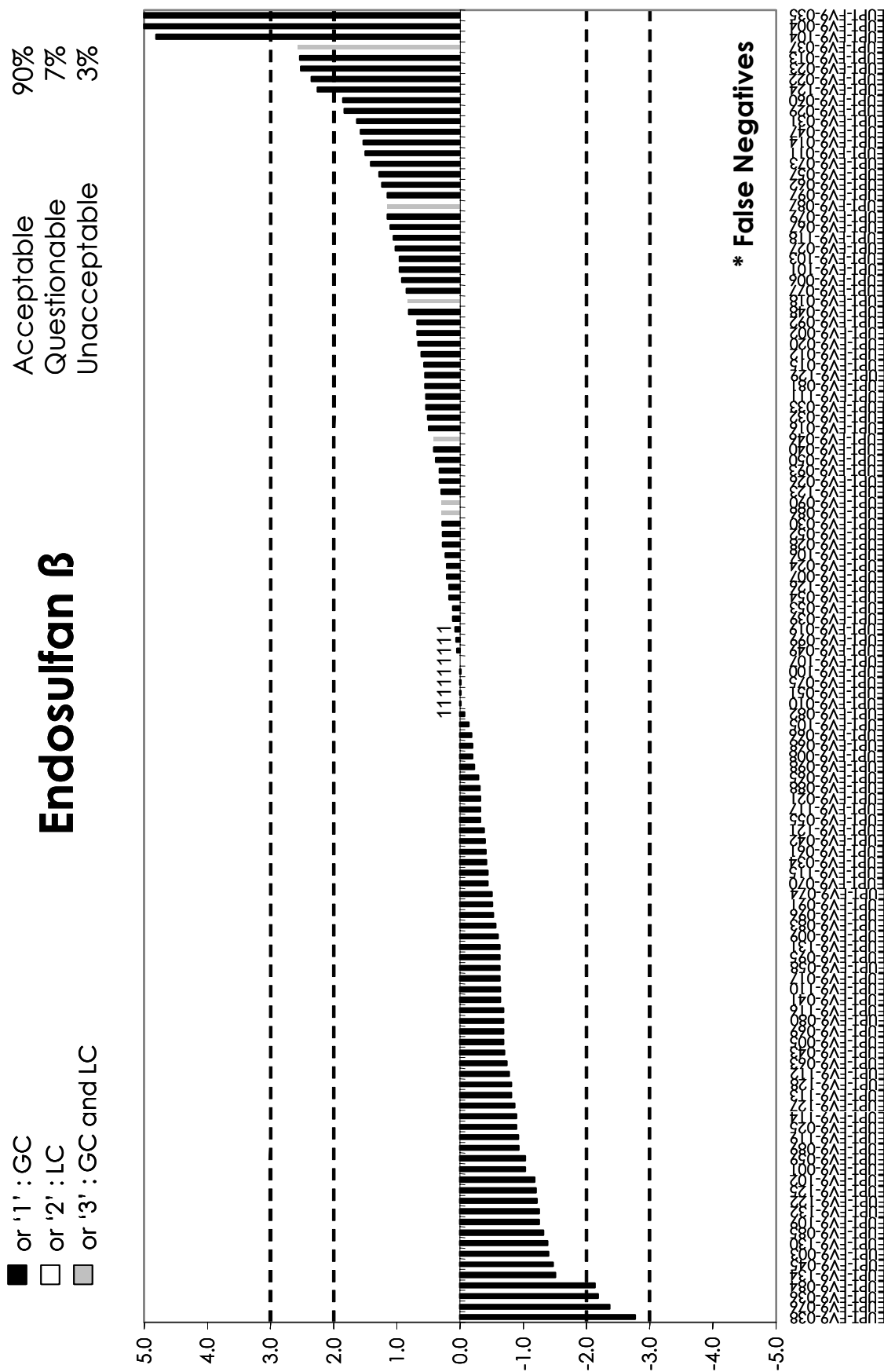
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



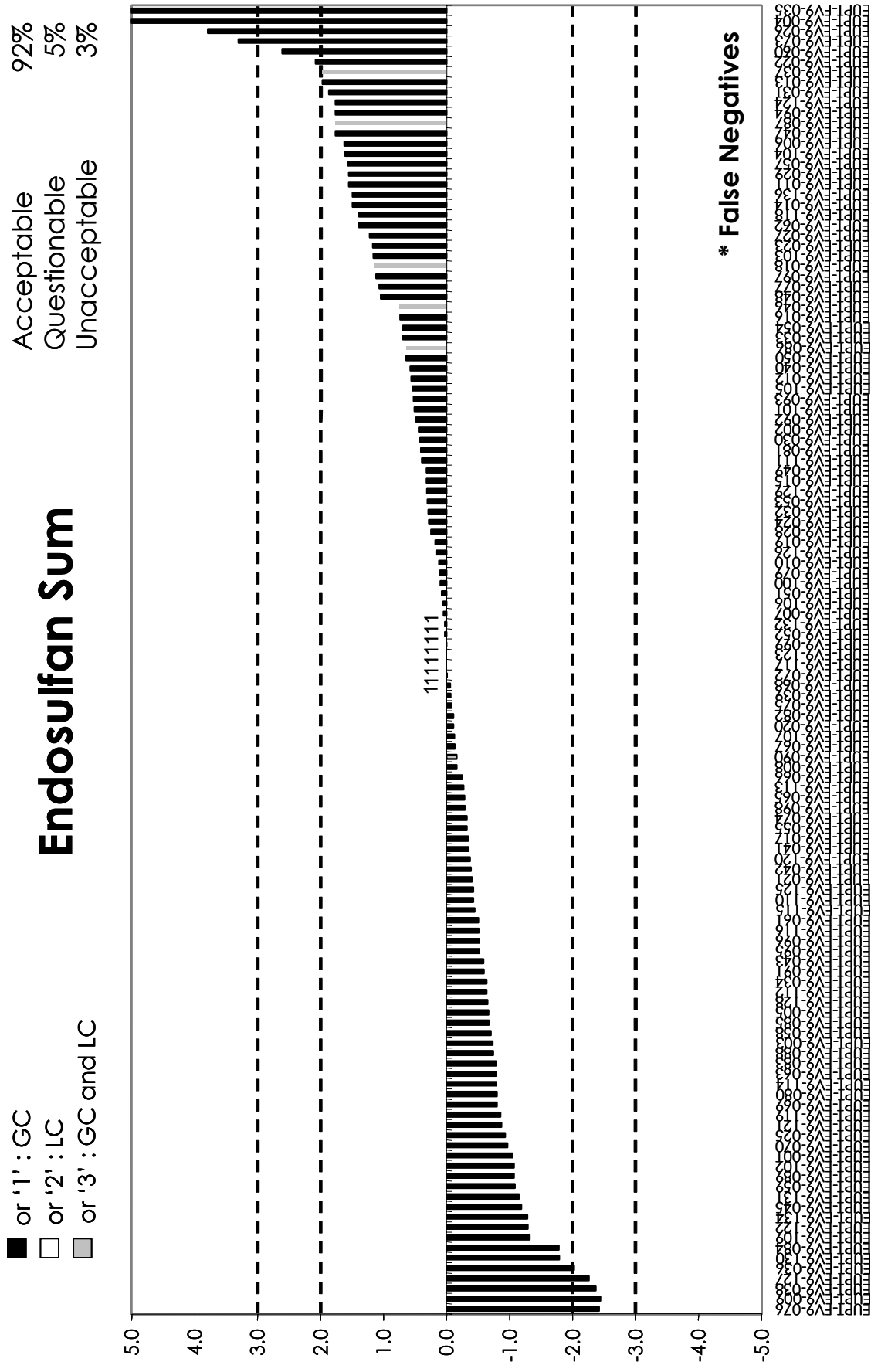
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



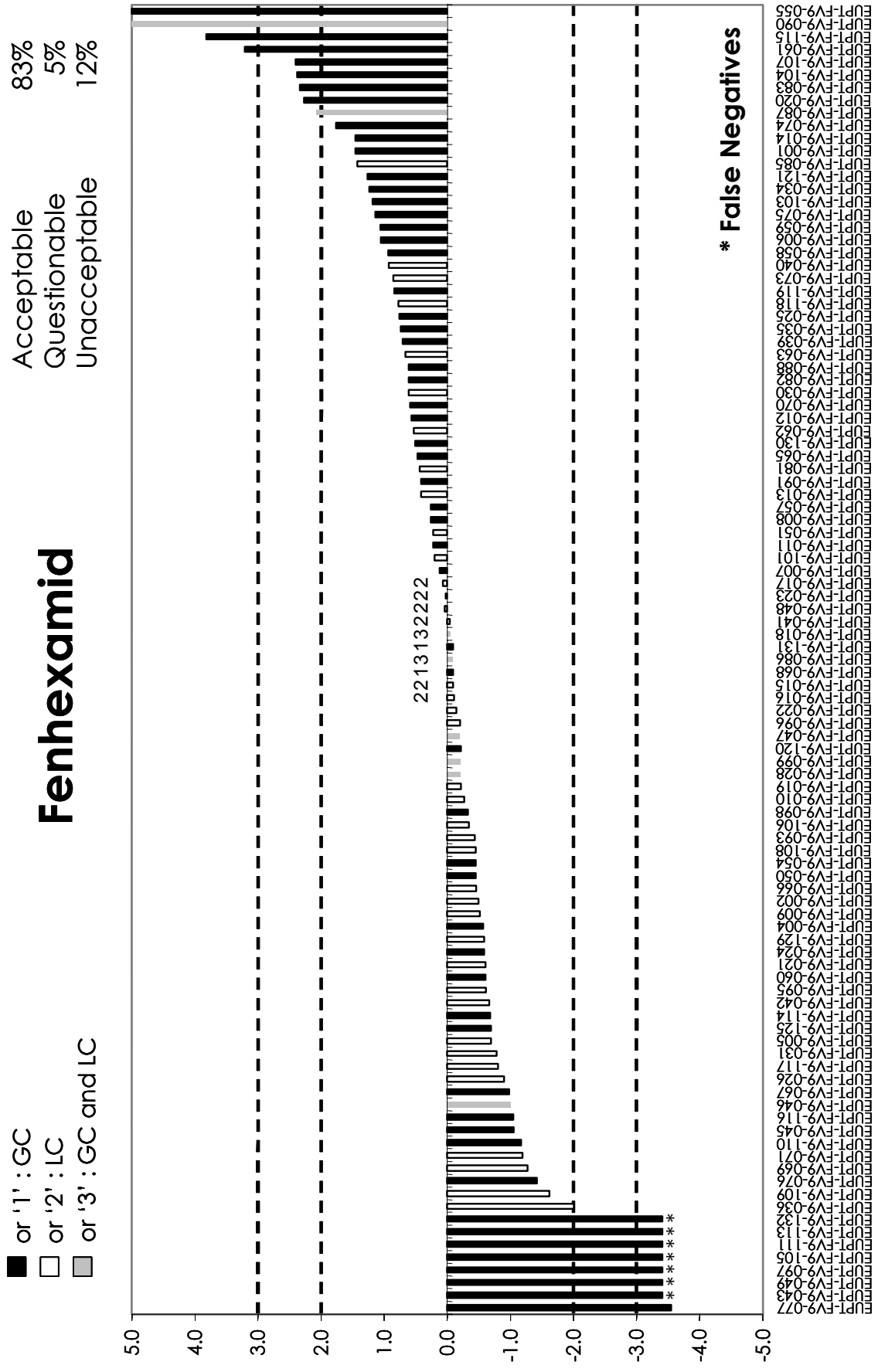
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).

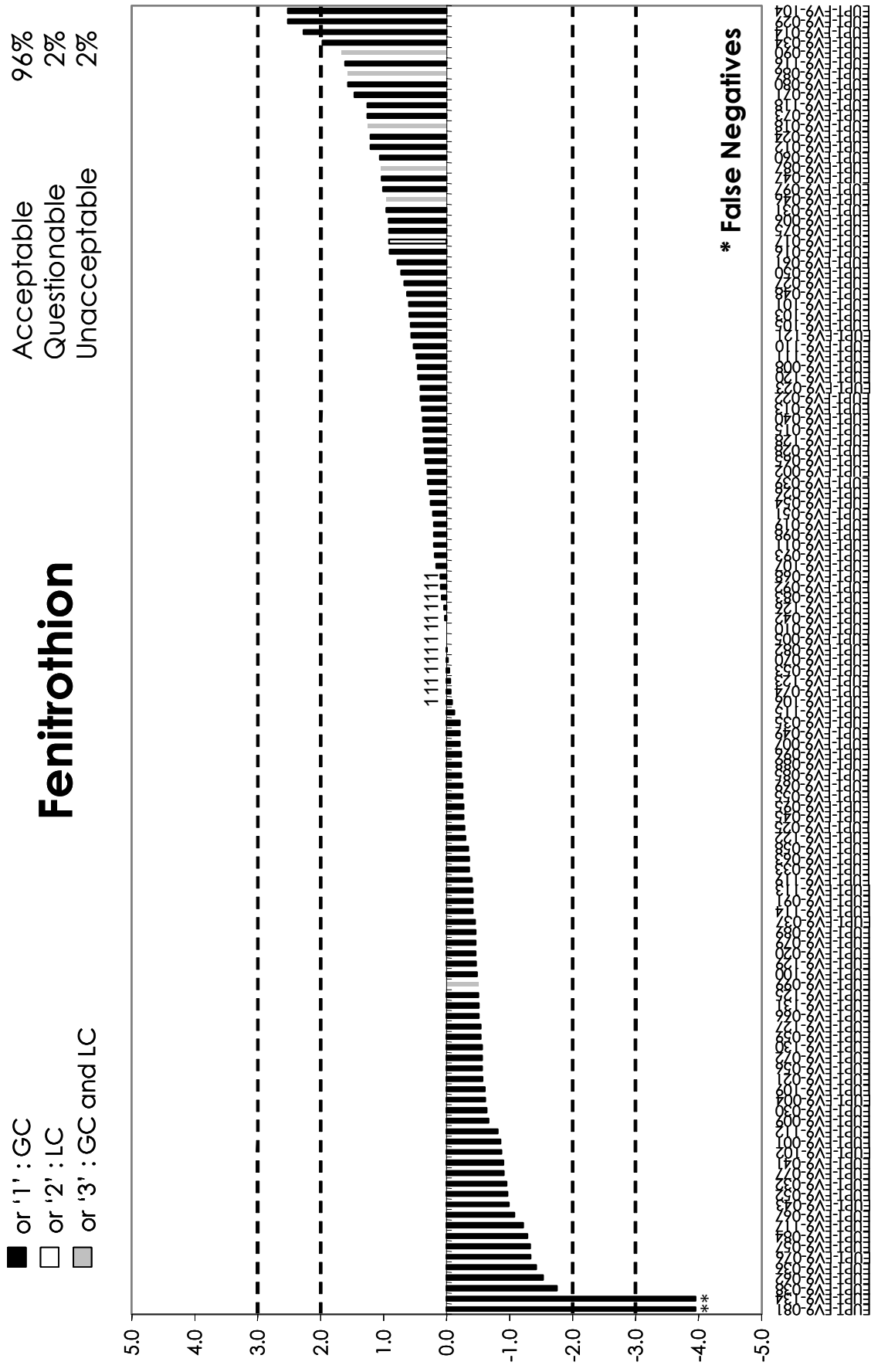


APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).

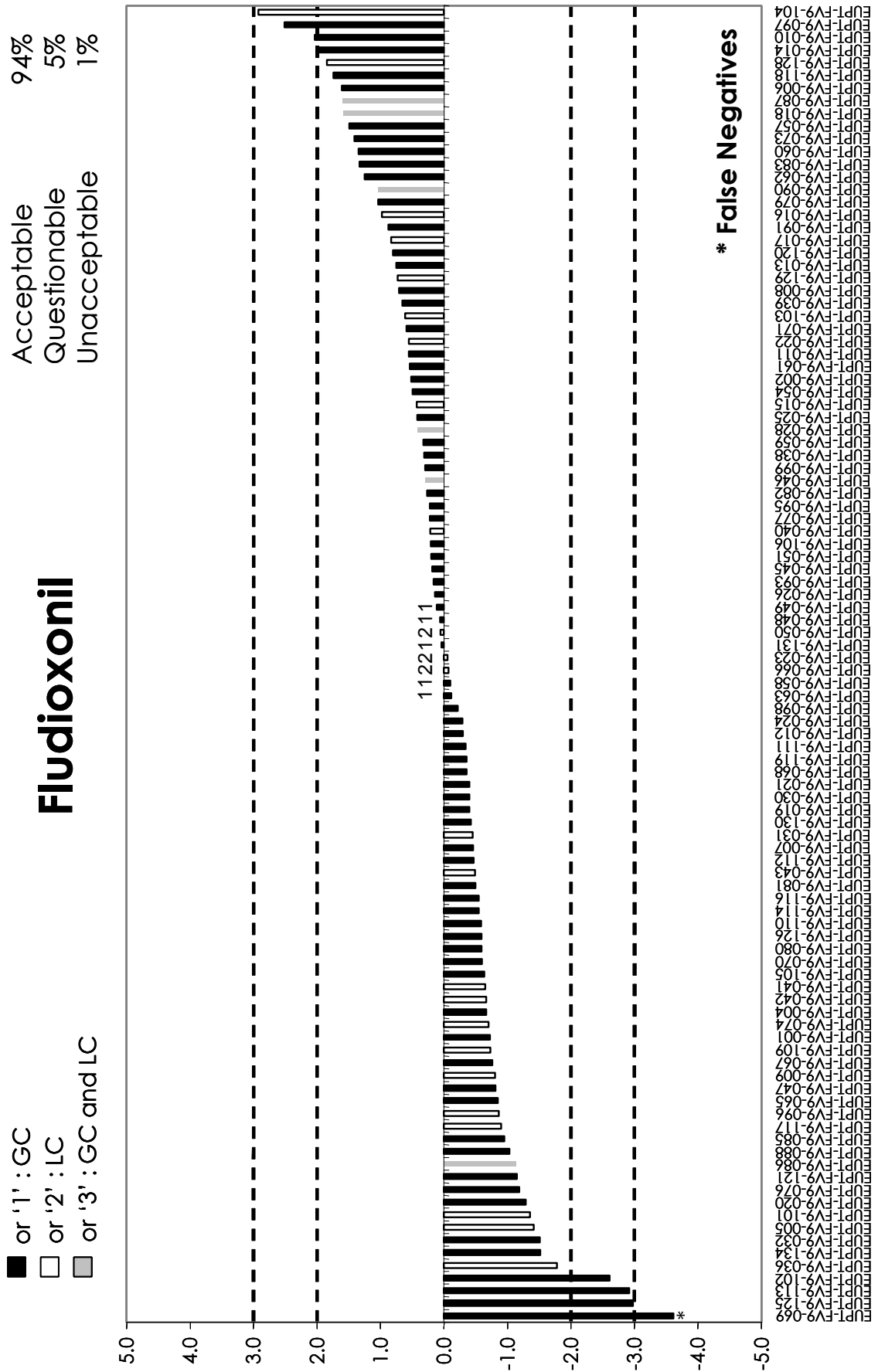


APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).

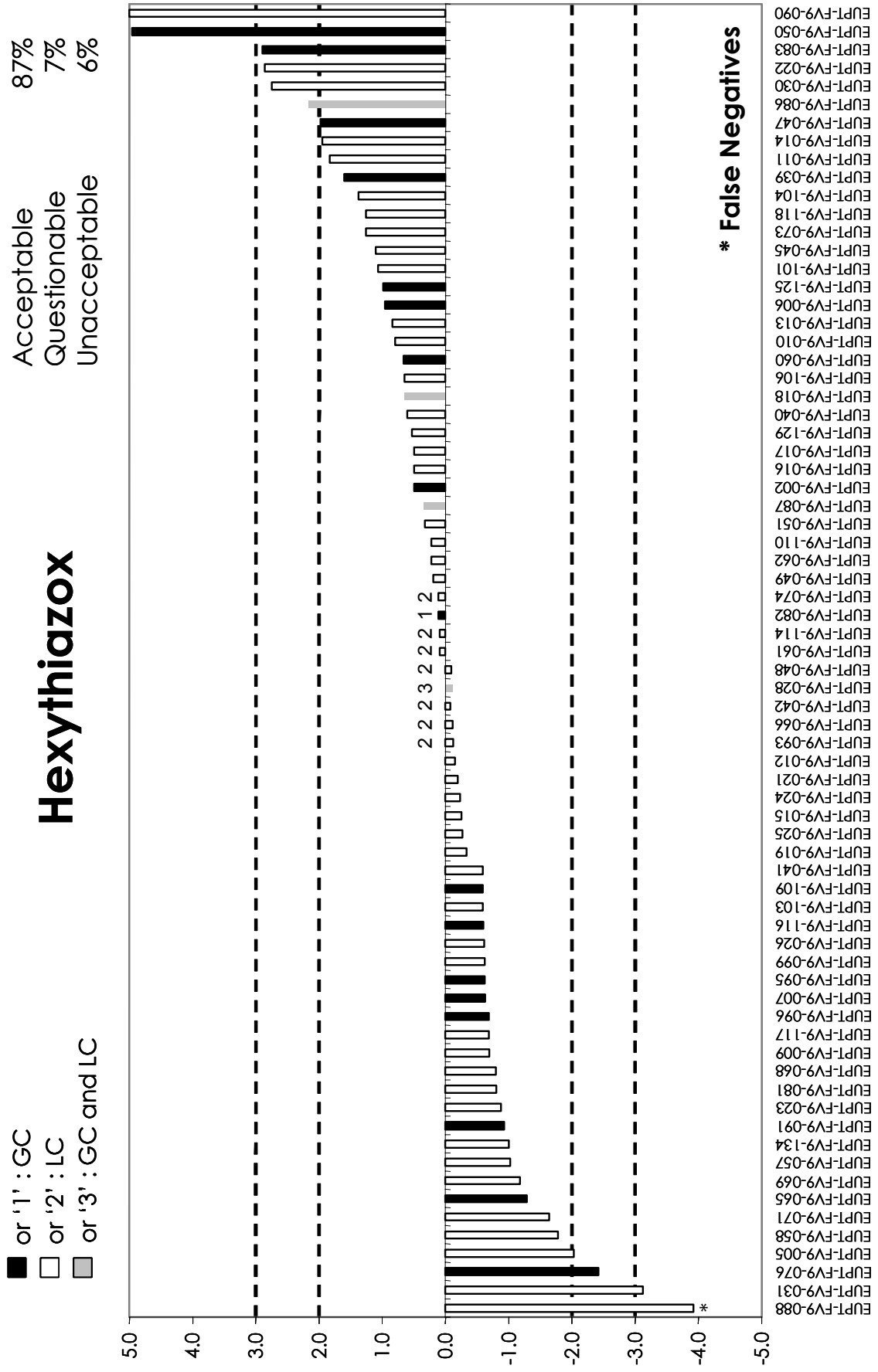




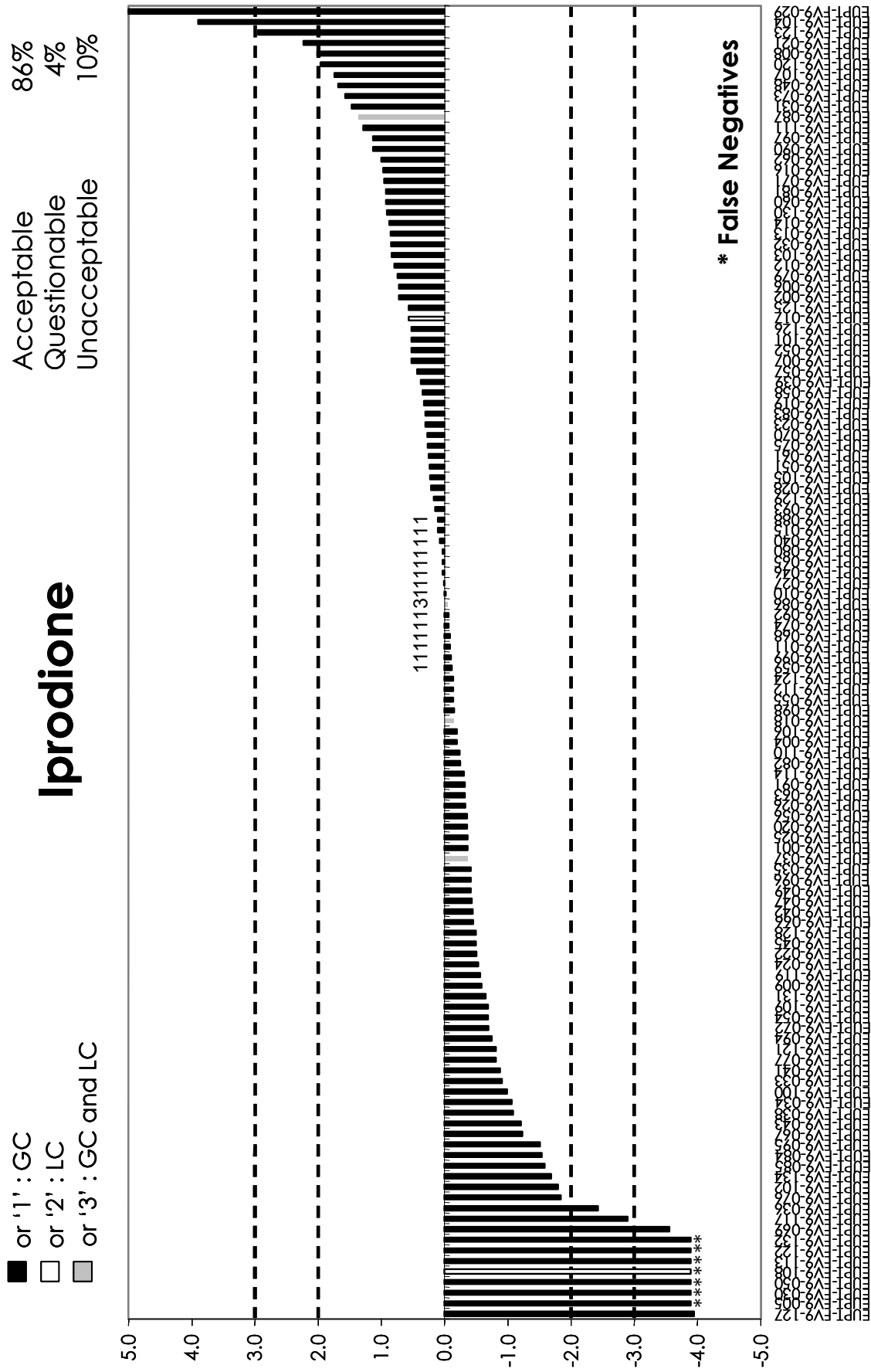
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



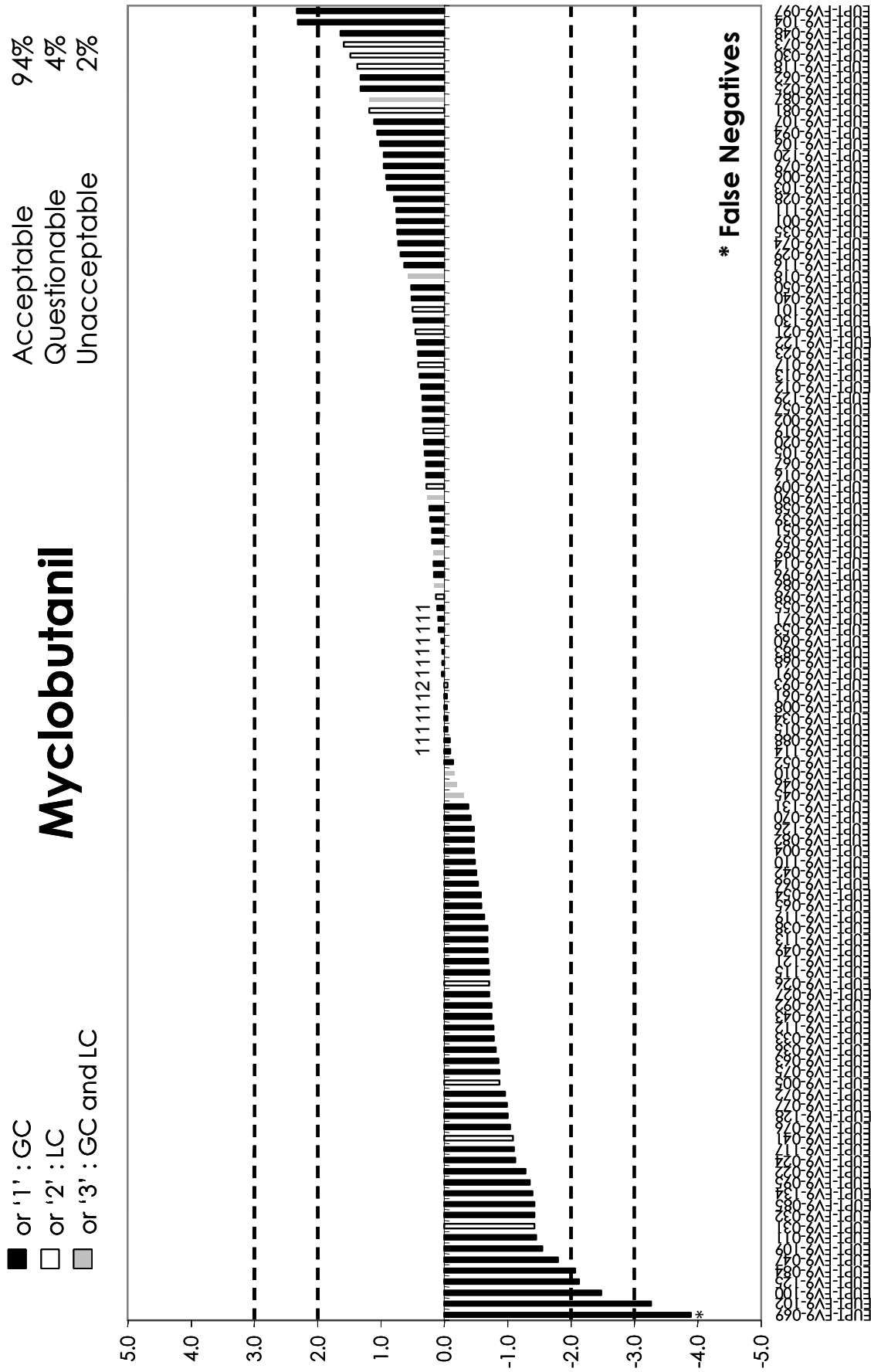
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



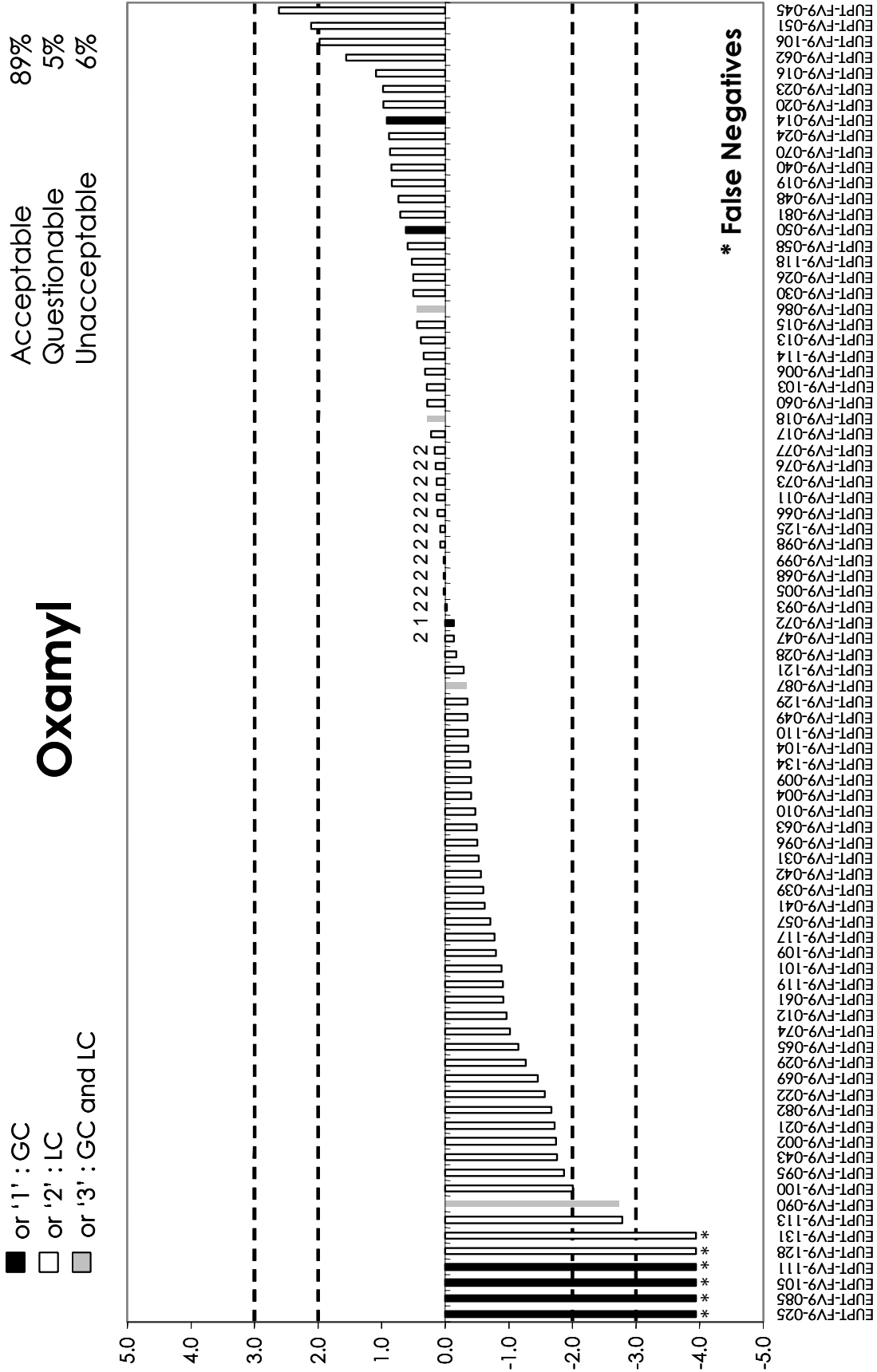
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



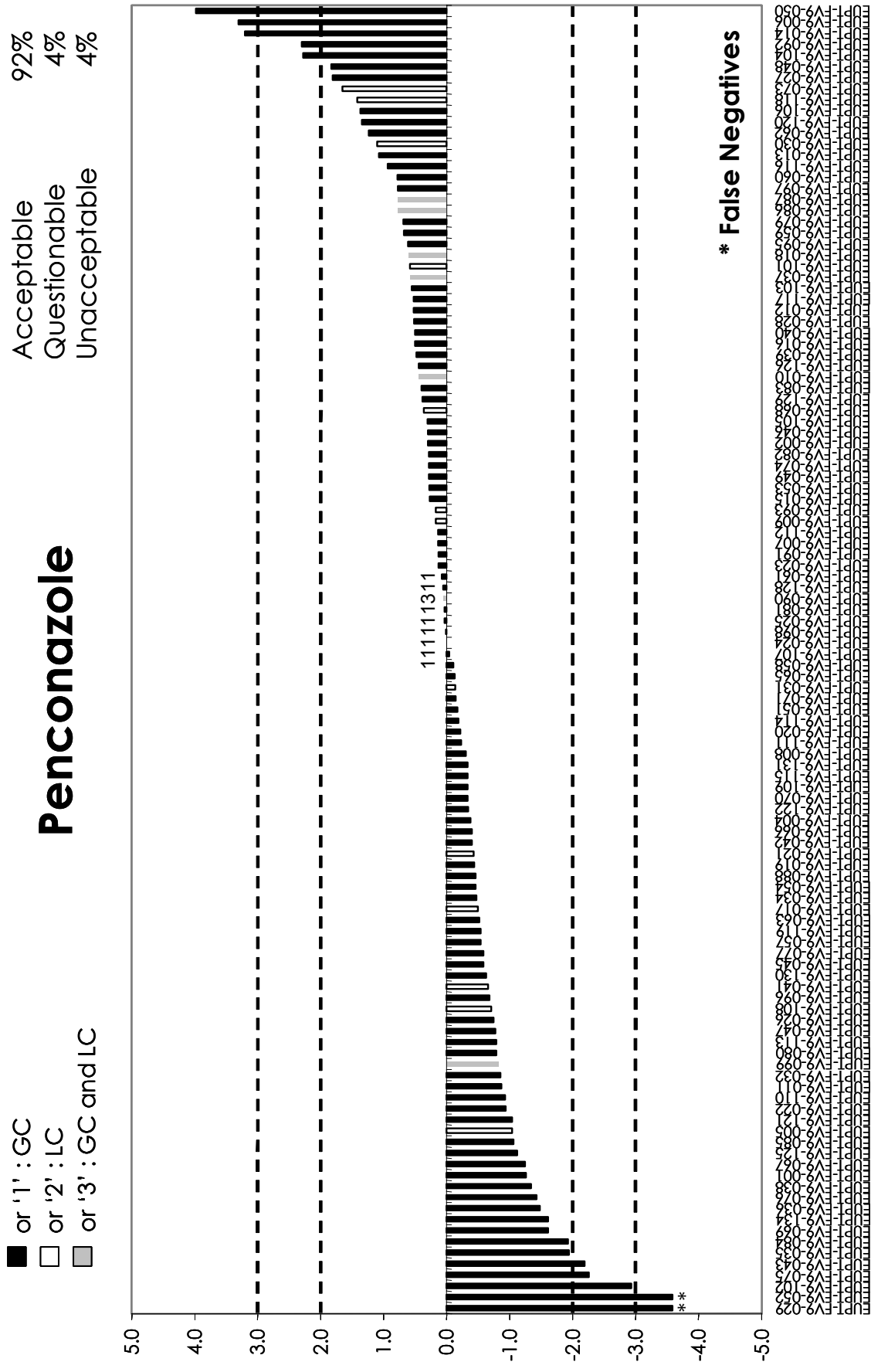
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).

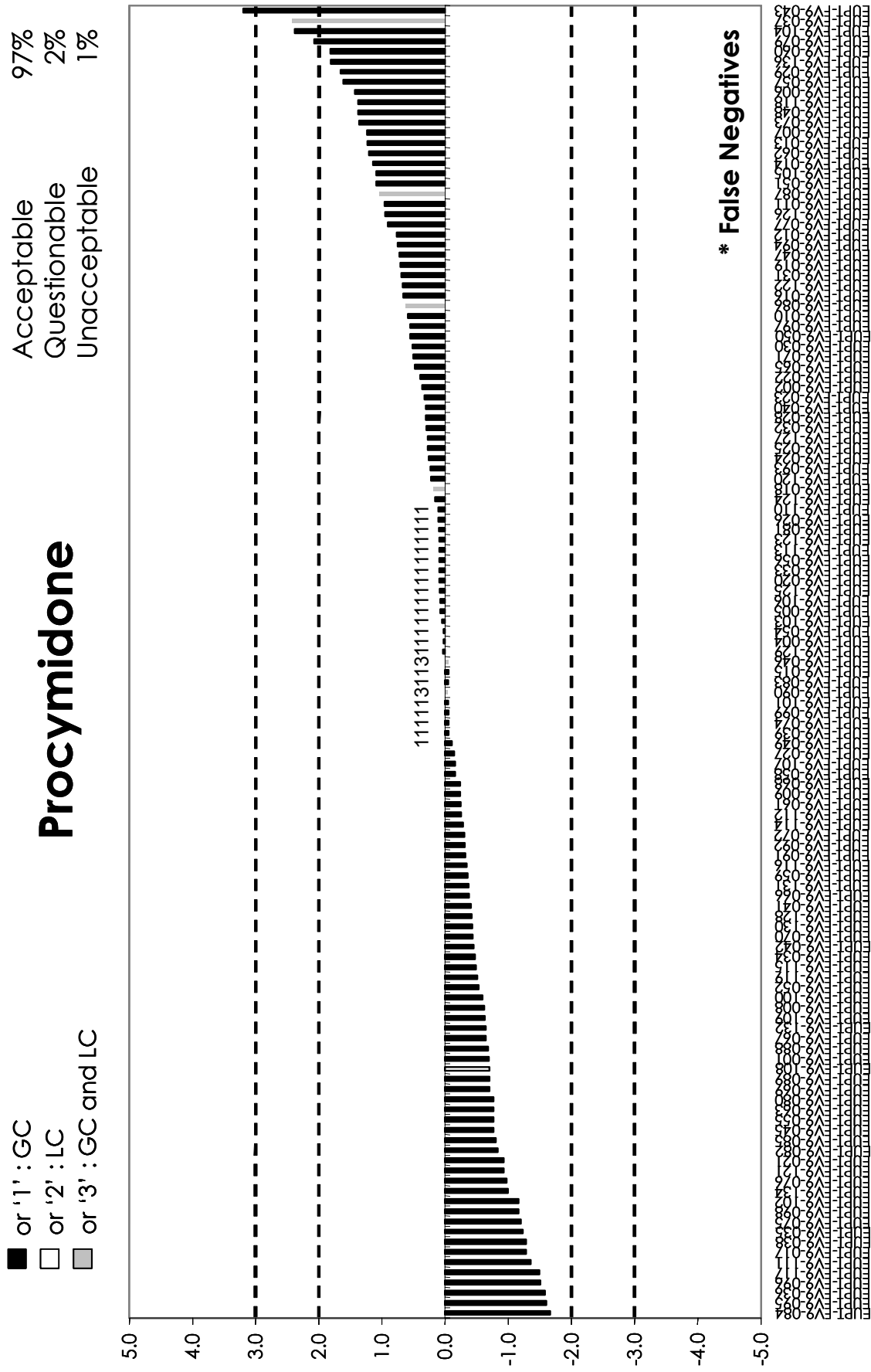


APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).

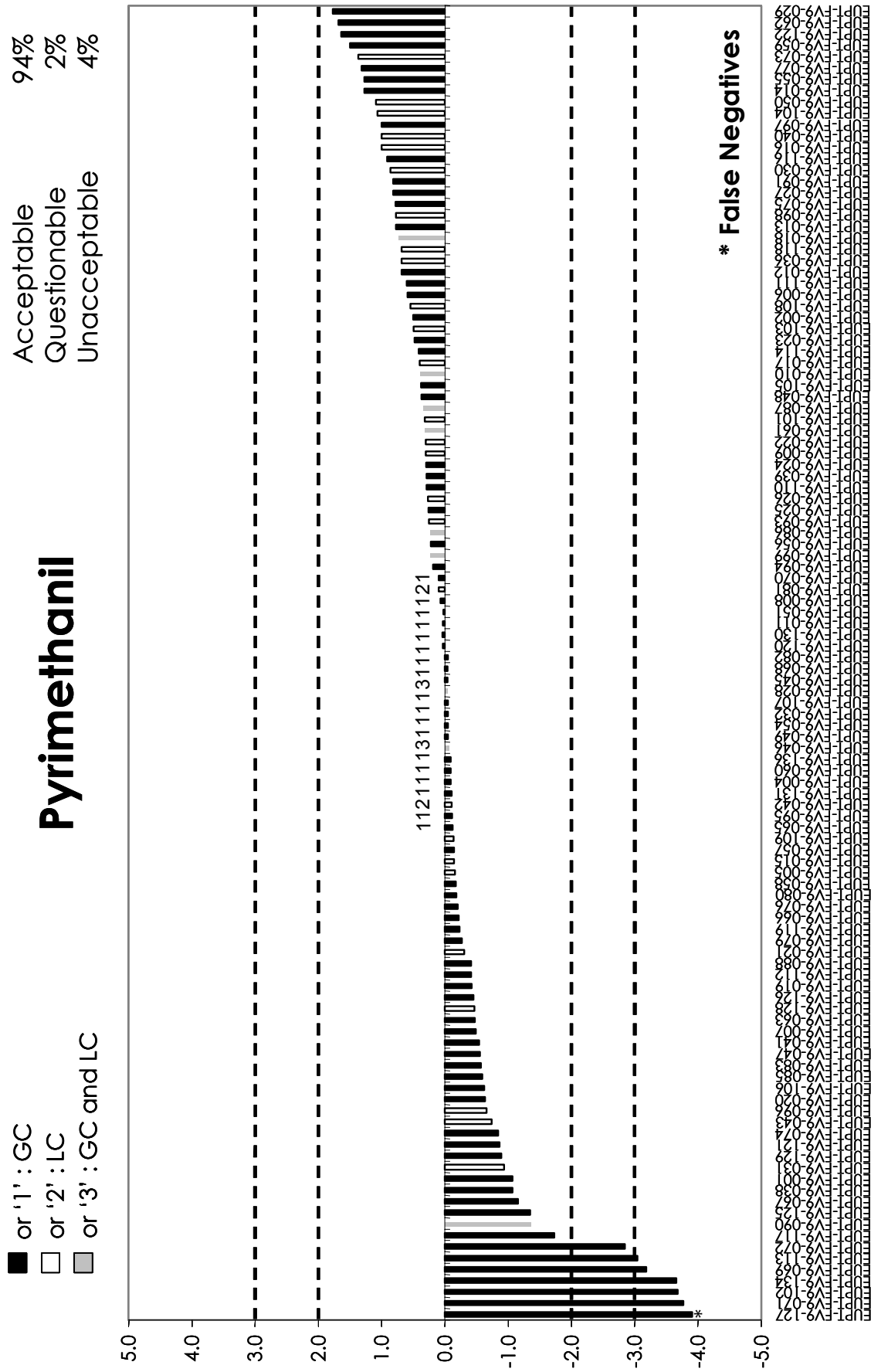


APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).

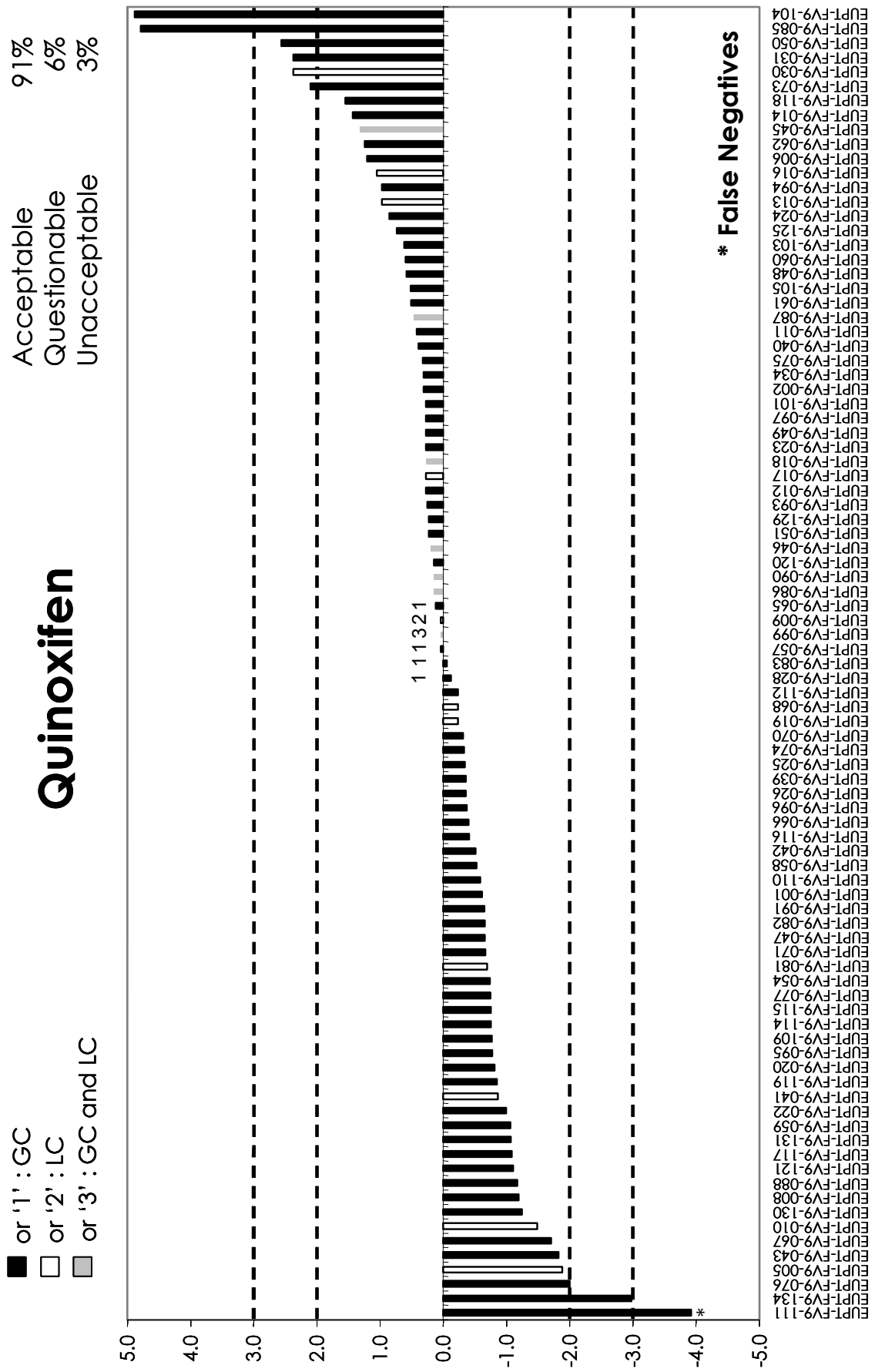


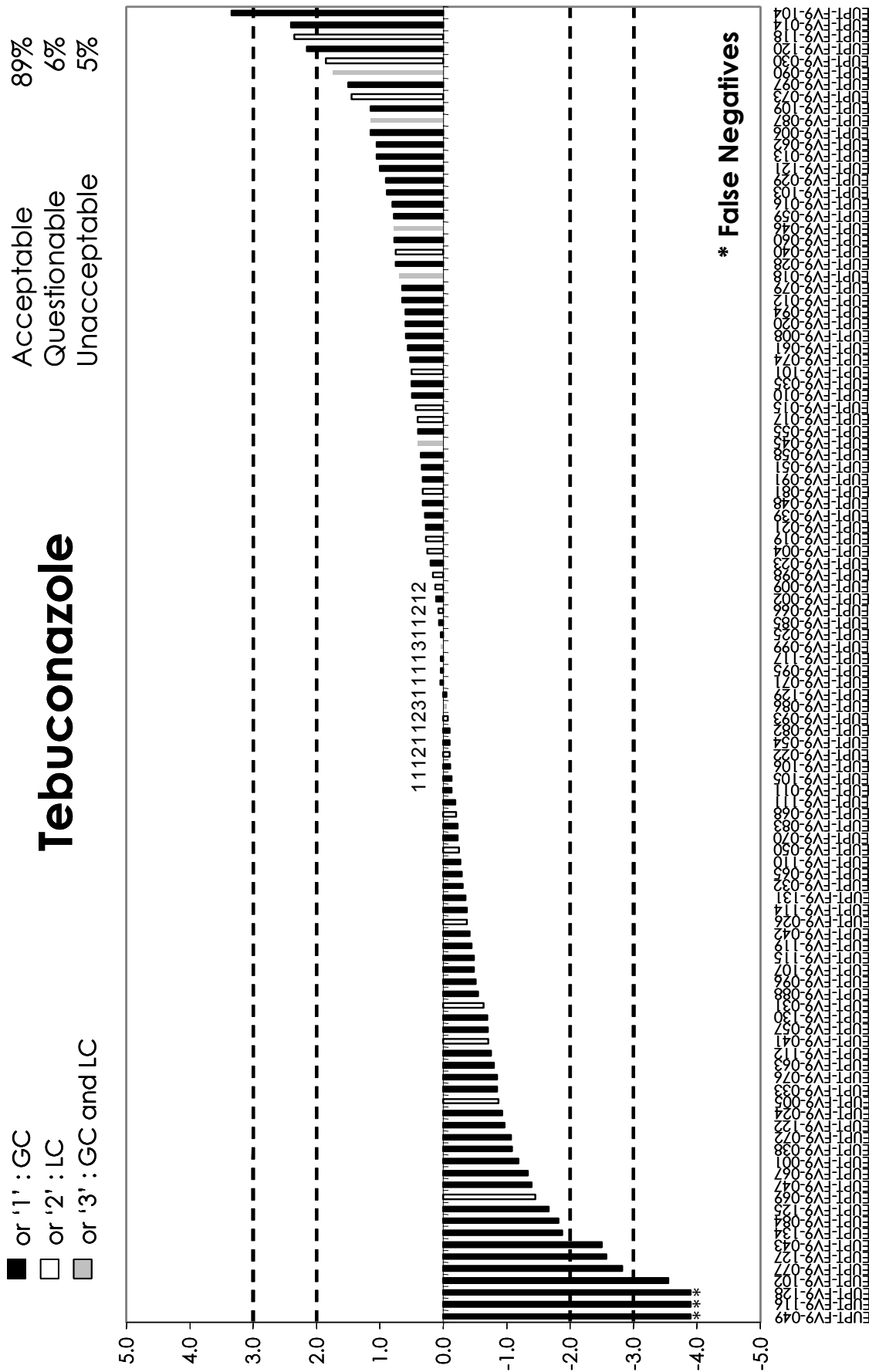


APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).

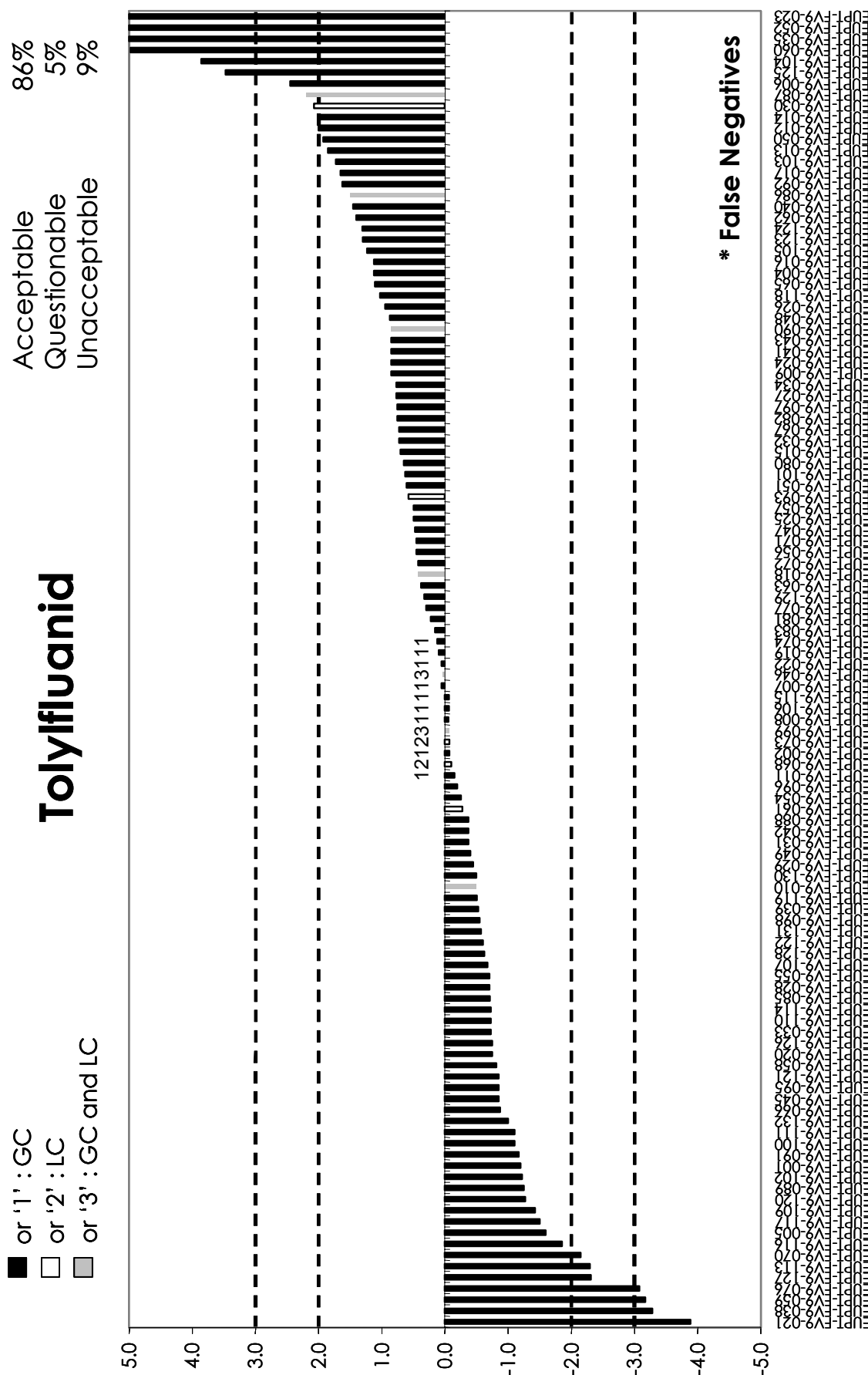


APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).

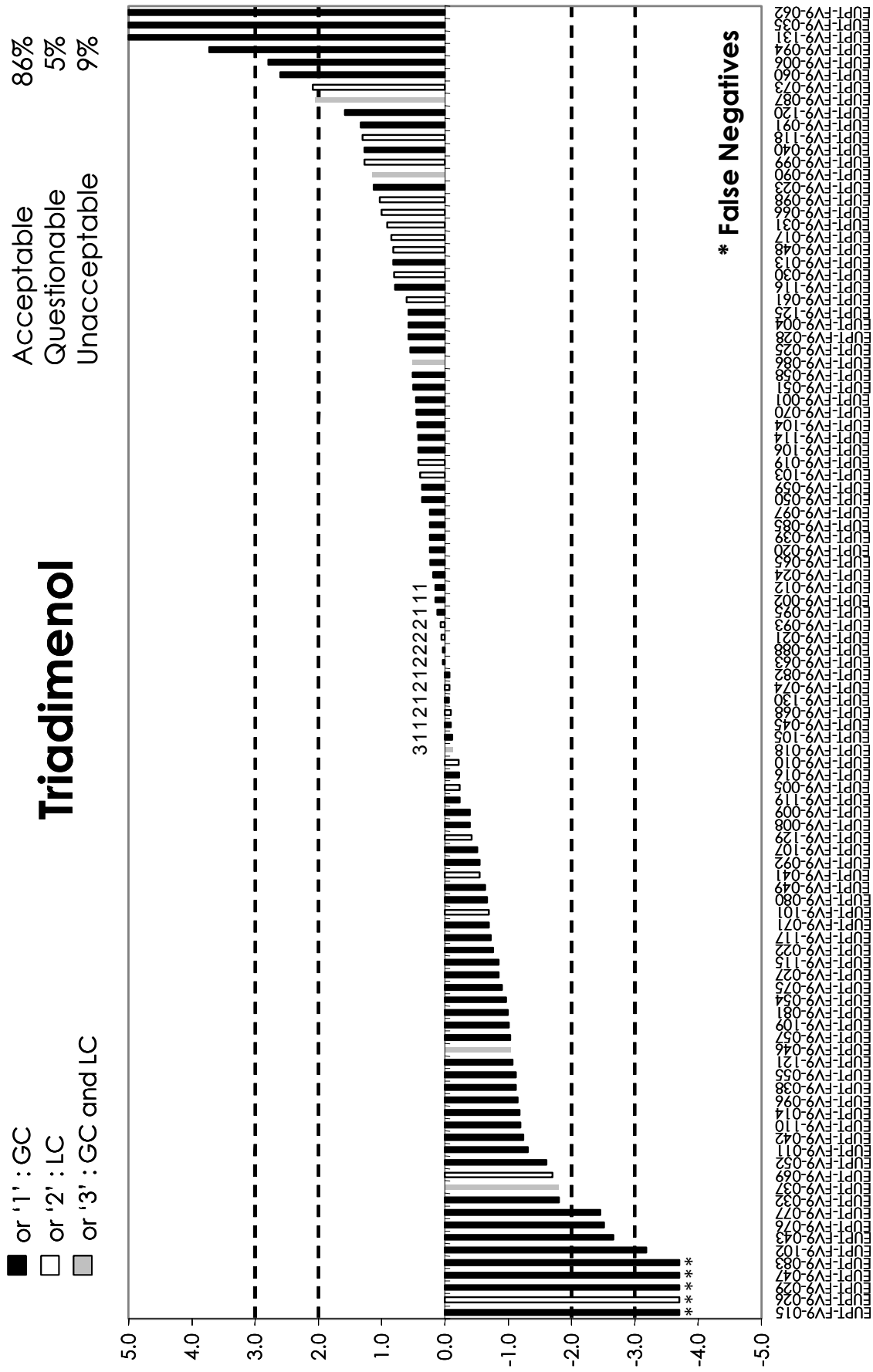




APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



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

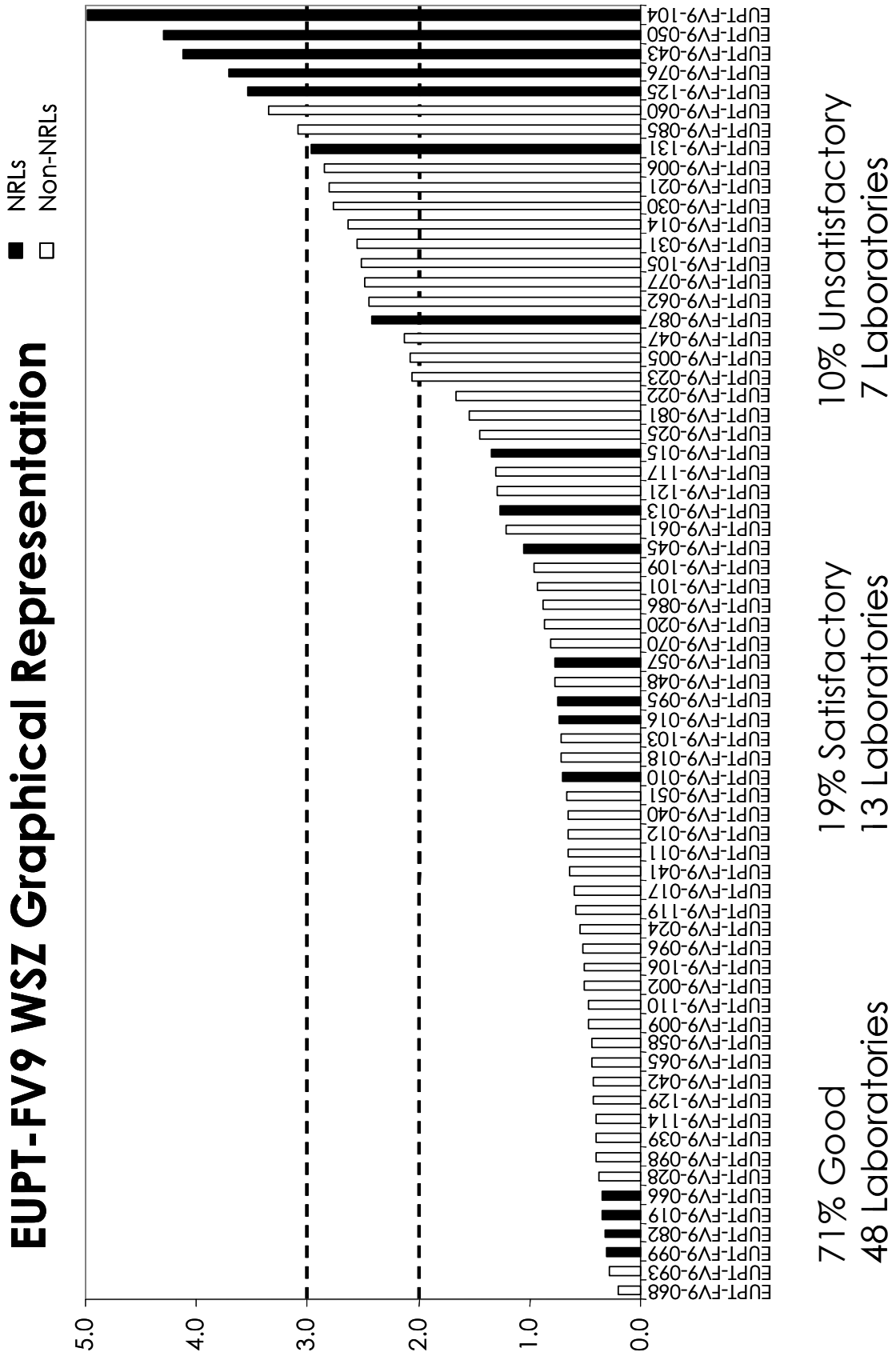


APPENDIX 5. 'Weighted Sum of z-Score' (WSZ) for laboratories in Category A.

Lab Code	z-Score Results																		N of Pesticides	WSZ	
	Bupirimate	Cyprodinil	Diazinon	Endosulfan α	Endosulfan β	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox	Iprodione	Myclobutanil	Oxamyl	Penconazole	Procymidone	Pyrimethanil	Quinoxifen	Tebuconazole	Tolyfluanid			Triadimenol
002	0.8	0.7	0.7	0.4	0.7	-0.5	0.3	0.5	0.5	0.7	0.3	-1.7	0.3	0.4	0.5	0.3	0.1	-0.1	0.2	19	0.5
005	-1.2	-1.0	-1.7	-0.5	-0.7	-0.7	0.0	-1.4	-2.0	-3.9	-0.9	0.0	-1.0	0.1	-0.2	-1.9	-0.9	-1.6	-0.2	19	2.1
006	0.9	1.3	0.9	2.4	0.9	1.1	0.9	1.6	1.0	0.7	0.9	0.3	3.3	1.4	0.6	1.2	1.2	2.5	2.8	19	2.9
009	0.5	0.1	-0.5	1.0	-0.6	-0.5	-0.7	-0.8	-0.7	-0.6	0.3	-0.4	0.2	-0.2	0.3	0.0	0.1	0.9	-0.4	19	0.5
010	0.7	0.0	-0.3	0.4	0.0	-0.3	0.0	2.0	0.8	0.0	-0.2	-0.5	0.4	0.6	0.4	-1.5	0.5	-0.5	-0.2	19	0.7
011	0.2	0.4	0.2	1.7	1.5	0.2	0.2	0.6	1.8	-0.1	-1.4	0.1	-0.9	1.0	0.0	0.4	-0.1	-0.2	-1.3	19	0.6
012	0.5	0.4	0.8	0.7	0.6	0.6	1.2	-0.3	-0.2	0.8	0.4	-1.0	0.5	0.8	0.7	0.3	0.7	2.0	0.2	19	0.7
013	0.9	1.0	1.1	1.7	2.5	0.4	0.4	0.8	0.8	0.8	0.4	0.4	1.1	1.2	0.8	1.0	1.1	1.9	0.8	19	1.3
014	0.3	2.0	0.2	1.6	1.5	1.5	2.3	2.0	1.9	0.9	0.2	0.9	3.2	1.1	1.3	1.4	2.4	2.0	-1.2	19	2.6
015	-1.0	0.1	0.4	0.3	0.6	-0.1	0.4	0.4	-0.3	0.1	-0.1	0.4	0.3	0.0	-0.1		0.4	0.7	-3.7	18	1.3
016	0.7	0.1	1.4	1.1	0.5	-0.1	0.9	1.0	0.5	1.0	0.3	1.1	0.5	0.7	1.0	1.0	0.8	1.1	-0.2	19	0.7
017	0.5	0.6	0.8	0.0	-0.6	0.1	0.9	0.8	0.5	0.6	0.4	0.2	-0.5	-1.3	0.4	0.3	0.4	1.7	0.8	19	0.6
018	1.6	1.2	0.8	1.6	0.8	0.0	1.3	1.6	0.6	-0.2	0.6	0.3	0.6	0.2	0.7	0.3	0.7	0.4	-0.1	19	0.7
019	0.7	-0.1	0.2	0.4	0.1	-0.2	0.2	-0.4	-0.3	0.3	0.3	0.8	-0.4	0.7	-0.4	-0.2	0.3	0.1	0.4	19	0.3
020	-0.1	-0.3	-0.5	-0.6	0.7	2.3	-0.5	-1.3		-0.4	0.3	1.0	-0.2	0.1	-0.6	-0.8	0.6	-0.8	0.2	18	0.9
021	-0.2	-0.6	-3.4	-0.4	-0.3	-0.6	-0.6	-0.4	-0.2	2.2	0.5	-1.7	-0.4	-0.9	-0.3		0.3	-3.9	0.0	18	2.8
022	0.6	0.4	0.9	2.0	2.4	-0.1	0.4	0.6	2.9	-0.5	-1.3	-1.6	-0.9	0.4	0.3	-1.0	-0.1	0.1	-0.8	19	1.7
023	0.4	0.2	-0.1	0.3	2.5	0.0	0.4	-0.1	-0.9	0.3	0.4	1.0	0.1	0.3	0.5	0.3	0.2	5.0	1.1	19	2.1
024	0.2	0.8	0.5	0.5	0.2	-0.6	1.2	-0.3	-0.2	-0.5	-1.1	0.9	0.0	0.3	0.3	0.9	-0.9	0.9	0.2	19	0.5
025	0.7	0.1	0.0	-0.9	-0.9	0.8	-0.3	0.4	-0.3	-0.4	1.3	-3.9	0.0	0.3	0.3	-0.3	0.0	0.5	0.5	19	1.5
028	0.7	0.0	-0.8	0.4	0.3	-0.2	0.3	0.4	0.0	0.2	0.8	-0.2	0.5	0.3	0.0	0.0	0.8	-0.7	0.6	19	0.4
030	0.5	0.8	0.5	0.7	0.3	0.6	-0.6	-0.4	2.7	-3.9	1.5	0.5	1.1	0.5	0.9	2.4	1.9	2.1	0.8	19	2.8
031	-0.3	-2.1	-1.7	2.3	1.6	-0.8	1.0	-0.4	-3.1	1.5	-1.4	-0.5	-0.1	0.7	-0.9	2.4	-0.6	-0.4	0.9	19	2.6
039	0.1	0.3	-0.3	-0.1	0.1	0.7	0.3	0.7	1.6	0.4	0.2	-0.6	0.5	-0.1	0.3	-0.4	0.3	-0.5	0.2	19	0.4
040	0.2	1.0	0.8	0.8	0.4	0.9	0.4	0.2	0.6	0.1	0.5	0.8	0.5	0.3	1.0	0.4	0.8	1.5	1.3	19	0.7
041	-0.7	-0.9	-0.6	0.0	-0.6	0.0	-0.9	-0.7	-0.6	-0.9	-1.1	-0.6	-0.7	-0.4	-0.5	-0.9	-0.7	0.9	-0.5	19	0.6
042	-0.3	0.4	0.2	-0.3	-0.4	-0.7	0.0	-0.7	-0.1	-0.4	-0.5	-0.6	-0.4	-0.5	-0.1	-0.5	-0.4	-0.4	-1.2	19	0.4
043	-2.6	-1.0	-0.8	-0.4	-0.7	-3.4	-1.0	-0.5		-1.2	-0.7	-1.8	-2.2	3.2	-0.7	-1.8	-2.5	0.9	-2.7	18	4.1
045	-0.4	-0.2	-1.8	-0.9	-1.5	-1.1	-0.3	0.2	1.1	-0.5	-0.3	2.6	-0.6	-0.8	0.0	1.3	0.4	-0.9	-0.1	19	1.0
047	-1.6	0.3	1.1	2.1	1.6	-0.2	1.0	-0.8	2.0	-0.4	-1.8	-0.1	-0.8	0.7	-0.6	-0.7	-1.4	0.5	-3.7	19	2.1
048	0.5	0.5	0.5	1.4	0.8	0.0	0.6	0.1	0.0	1.7	1.6	0.7	1.8	1.4	0.4	0.6	0.3	0.9	0.8	19	0.8
050	-0.6	0.3	0.9	1.0	0.4	-0.4	0.7	0.1	5.0	-3.9	0.5	0.6	4.0	0.6	1.1	2.6	-0.3	1.9	0.4	19	4.3
051	-0.9	0.4	0.4	0.3	0.0	0.2	0.2	0.2	0.3	0.2	0.2	2.1	-0.2	1.1	0.0	0.2	0.3	0.6	0.5	19	0.7
057	-0.7	-0.4	0.3	2.0	1.3	0.3	-1.3	1.5	-1.0	0.4	0.3	-0.7	-0.5	1.6	-0.1	0.0	-0.7	0.5	-1.0	19	0.8
058	-0.1	0.0	0.0	-0.7	-0.6	0.9	-0.3	-0.1	-1.8	0.3	0.2	0.6	-0.1	-0.2	-0.2	-0.5	0.4	-0.8	0.5	19	0.4
060	-0.4	-1.8	0.8	3.4	1.9	-0.6	1.1	1.3	0.7	0.9	0.1	0.3	0.8	1.8	-0.1	0.6	0.8	5.0	2.6	19	3.3
061	-0.1	0.5	-0.3	-0.5	-0.4	3.2	0.8	0.5	0.0	0.2	0.0	-0.9	0.1	-0.3	0.3	0.5	0.6	-0.3	0.6	19	1.2
062	0.8	1.1	-1.6	1.7	1.2	0.5	-1.5	1.3	0.2	1.0	1.3	1.6	1.2	1.2	1.7	1.2	1.1	1.4	5.0	19	2.5

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

Lab Code	z-Score Results																		N of Pesticides	WSZ	
	Bupirimate	Cyprodinil	Diazinon	Endosulfan a	Endosulfan β	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox	Iprodione	Myclobutanil	Oxamyl	Penconazole	Procymidone	Pyrimethanil	Quinoxifen	Tebuconazole	Tolyfluanid			Triadimenol
065	0.3	-0.1	-0.3	-0.2	-0.3	0.5	0.3	-0.9	-1.3	0.0	-0.6	-1.1	-0.1	0.5	-0.1	0.1	-0.3	1.1	0.2	19	0.4
066	-0.4	0.0	-0.3	-0.2	-0.2	-0.5	-0.5	-0.1	-0.1	-0.5	-0.5	0.1	-0.4	-0.4	-0.2	-0.4	0.1	-0.9	1.0	19	0.4
068	0.2	-0.1	-0.5	0.2	-0.2	-0.1	0.1	-0.4	-0.8	-0.1	0.0	0.0	0.4	-0.2	0.0	-0.2	-0.2	-0.1	-0.1	19	0.2
070	-0.1	0.1	-1.6	-1.3	-0.4	0.6	0.0	-0.6		0.3	-0.4	0.9	-0.3	-0.4	0.1	-0.3	-0.2	-2.2	0.4	18	0.8
076	-1.2	-0.5	-2.5	-2.5	-2.4	-1.4	-1.3	-1.2	-2.4	-1.8	-1.0	0.2	-1.4	-1.0	-0.2	-2.0	-0.9	-3.1	-2.5	19	3.7
077	-0.6	0.4	-1.0	1.4	0.8	-3.6	-0.9	0.2		-0.8	-1.0	0.2	-0.6	0.9	1.3	-0.7	-2.8	0.3	-2.5	18	2.5
081	1.2	-0.5	0.0	0.4	0.6	0.4	-3.9	-0.5	-0.8	0.9	1.2	0.7	0.0	0.1	0.1	-0.7	0.3	0.2	-1.0	19	1.5
082	0.0	0.0	0.0	0.0	-0.1	0.6	0.0	0.3	0.0	-0.2	-0.5	-1.7	0.3	-0.8	0.0	-0.7	-0.1	0.8	0.0	19	0.3
085	-0.8	0.1	-0.4	-0.1	-1.3	1.4	-0.2	-0.9		-1.6	-1.4	-3.9	-1.1	-0.8	-0.6	4.8	0.1	-0.7	0.2	18	3.1
086	0.2	0.0	1.4	1.1	0.3	-0.1	1.6	-1.1	2.2	0.0	0.2	0.4	0.8	0.6	0.2	0.2	-0.1	1.5	0.5	19	0.9
087	1.7	0.5	2.2	2.4	1.2	2.1	1.0	1.6	0.3	1.4	1.2	-0.3	0.8	1.0	0.3	0.5	1.2	2.2	2.1	19	2.4
093	0.3	0.1	1.1	0.8	0.3	-0.4	0.2	0.2	-0.1	0.1	0.0	0.0	0.2	0.2	0.3	0.2	-0.1	0.6	0.1	19	0.3
095	-0.5	-0.5	-1.6	-0.3	-0.6	-0.6	-0.3	0.2	-0.6	-1.5	-1.3	-1.9	0.6	-1.6	-0.1	-0.8	0.0	-0.9	0.1	19	0.7
096	-0.6	-0.1	-0.1	-0.4	-0.5	-0.2	-0.2	-0.9	-0.7	-0.4	0.2	-0.5	-0.7	-1.5	-0.7	-0.4	-0.5	-0.2	-1.2	19	0.5
098	0.3	0.9	0.4	-0.2	-0.2	-0.3	0.2	-0.2		-0.2	0.1	0.1	0.0	-1.2	0.8		0.2	-0.6	1.0	17	0.4
099	0.4	0.4	0.4	0.1	0.1	-0.2	-0.5	0.3	-0.6	-0.1	0.2	0.0	-0.8	-0.1	0.2	0.0	0.0	-0.1	1.3	19	0.3
101	2.4	0.7	-0.2	0.3	1.0	0.2	0.6	-1.4	1.1	0.5	0.5	-0.9	0.6	0.0	0.3	0.3	0.5	0.6	-0.7	19	0.9
103	0.0	1.0	0.5	1.5	1.0	1.2	0.6	0.6	-0.6	0.8	0.9	0.3	0.6	0.0	0.5	0.6	0.9	1.7	0.4	19	0.7
104	2.2	1.9	2.3	-0.7	4.8	2.4	2.5	2.9	1.4	3.9	2.3	-0.4	2.3	2.4	1.1	4.9	3.3	3.9	0.4	19	8.8
105	0.5	0.8	0.4	1.2	-0.1	-3.4	0.6	-0.6		0.2	0.3	-3.9	0.3	1.1	0.4	0.5	-0.1	1.2	-0.1	18	2.5
106	0.8	-0.4	0.6	0.0	0.2	-0.3	-0.1	0.2	0.6	-0.2	1.0	2.0	1.4	0.1	-0.6		-0.1	0.0	0.4	18	0.5
109	1.6	-1.1	-1.0	-1.3	-1.3	-1.6	-0.6	-0.7	-0.6	-0.7	-1.5	-0.8	-0.3	-0.6	-0.1	-0.8	1.2	-1.4	-1.0	19	1.0
110	-0.1	0.1	-0.1	-0.1	-0.6	-1.2	0.5	-0.6	0.2	-0.2	-0.5	-0.4	-0.9	0.1	0.3	-0.6	-0.3	-0.7	-1.2	19	0.5
114	0.3	0.3	-0.1	-0.6	-0.9	-0.7	-0.4	-0.6	0.0	-0.3	-0.1	0.3	-0.2	-0.3	0.4	-0.8	-0.4	-0.7	0.4	19	0.4
117	-1.5	-0.1	-1.1	0.4	-0.3	-0.8	-1.2	-0.9	-0.7	-2.9	-1.1	-0.8	0.5	-1.5	-1.7	-1.1	0.0	-1.5	-0.7	19	1.3
119	-0.1	-0.6	-1.1	-0.7	-0.9	0.8	-0.4	-0.4		-0.6	-0.6	-0.9	-0.5	-0.5	-0.2	-0.8	-0.4	-0.5	-0.2	18	0.6
121	-0.4	-0.6	3.0	-1.2	-0.4	1.3	0.6	-1.1		-0.8	-0.7	-0.3	-1.0	-0.9	-0.9	-1.1	1.0	-0.9	-1.1	18	1.3
125	-2.1	-3.3	-1.7	0.3	-1.2	-0.7	-0.5	-3.0	1.0	0.6	-2.1	0.1	-1.1	0.1	-1.3	0.7	-1.7	3.5	0.6	19	3.5
129	0.9	-0.1	0.8	0.3	0.6	-0.6	-0.5	0.7	0.5	0.2	0.3	-0.3	0.4	0.0	-0.9	0.2	0.0	0.3	-0.4	19	0.4
131	1.5	-0.2	-0.3	-1.5	-0.6	-0.1	-0.5	0.0		-0.7	-0.4	-3.9	-0.3	-0.4	-0.1	-1.1	-0.4	-0.6	5.0	18	3.0



APPENDIX 7. Combined z-scores RSZ and SSZ.

Lab Code	No. Of Pesticides Sought (n)	RSZ	SSZ
EUPT-FV9-001	17	3.45	13.75
EUPT-FV9-002	19	2.22	7.31
EUPT-FV9-003	3	3.75	26.97
EUPT-FV9-004	17	4.21	42.42
EUPT-FV9-005	19	4.56	36.58
EUPT-FV9-006	19	5.91	46.48
EUPT-FV9-007	14	1.41	3.33
EUPT-FV9-008	17	2.39	10.24
EUPT-FV9-009	19	2.01	5.29
EUPT-FV9-010	19	2.12	9.22
EUPT-FV9-011	19	2.82	14.85
EUPT-FV9-012	19	2.84	11.31
EUPT-FV9-013	19	4.35	24.24
EUPT-FV9-014	19	6.39	51.79
EUPT-FV9-015	18	2.19	16.56
EUPT-FV9-016	19	3.19	12.74
EUPT-FV9-017	19	2.59	9.55
EUPT-FV9-018	19	3.11	14.35
EUPT-FV9-019	19	1.51	3.09
EUPT-FV9-020	18	2.62	11.43
EUPT-FV9-021	18	3.97	37.48
EUPT-FV9-022	19	3.94	26.66
EUPT-FV9-023	19	3.24	35.51
EUPT-FV9-024	19	2.38	7.96
EUPT-FV9-025	19	2.72	21.22
EUPT-FV9-026	19	3.57	32.63
EUPT-FV9-027	12	3.31	14.52
EUPT-FV9-028	19	1.65	4.12
EUPT-FV9-029	13	7.37	83.77
EUPT-FV9-030	19	5.17	43.90
EUPT-FV9-031	19	5.21	39.27
EUPT-FV9-032	15	2.78	11.54
EUPT-FV9-033	10	2.12	5.93
EUPT-FV9-034	12	2.52	9.59
EUPT-FV9-035	12	6.71	87.52
EUPT-FV9-036	12	6.10	42.97
EUPT-FV9-037	9	3.82	20.86
EUPT-FV9-038	15	5.79	41.99
EUPT-FV9-039	19	1.74	5.21
EUPT-FV9-040	19	2.87	10.84
EUPT-FV9-041	19	2.81	9.21
EUPT-FV9-042	19	1.84	4.66
EUPT-FV9-043	18	6.60	59.68
EUPT-FV9-044			
EUPT-FV9-045	19	3.37	19.38
EUPT-FV9-046	17	2.06	7.56
EUPT-FV9-047	19	4.91	37.75
EUPT-FV9-048	19	3.35	17.03
EUPT-FV9-049	19	3.70	43.45
EUPT-FV9-050	19	5.77	71.32
EUPT-FV9-051	19	1.94	7.98
EUPT-FV9-052	11	4.48	44.48
EUPT-FV9-053	6	0.64	0.66

APPENDIX 7. Combined z-scores RSZ and SSZ.

Lab Code	No. Of Pesticides Sought (n)	RSZ	SSZ
EUPT-FV9-054	17	1.98	5.72
EUPT-FV9-055	14	3.07	29.91
EUPT-FV9-056	7	0.91	1.10
EUPT-FV9-057	19	3.37	16.85
EUPT-FV9-058	19	1.93	6.93
EUPT-FV9-059	17	4.11	30.57
EUPT-FV9-060	19	5.70	60.20
EUPT-FV9-061	19	2.33	14.04
EUPT-FV9-062	19	6.10	53.48
EUPT-FV9-063	16	2.12	5.42
EUPT-FV9-064			
EUPT-FV9-065	19	1.92	6.33
EUPT-FV9-066	19	1.53	3.58
EUPT-FV9-067	16	3.59	15.66
EUPT-FV9-068	19	0.87	1.42
EUPT-FV9-069	16	7.12	71.58
EUPT-FV9-070	18	2.41	11.39
EUPT-FV9-071	16	5.05	51.79
EUPT-FV9-072	11	3.03	18.44
EUPT-FV9-073	19	5.69	39.93
EUPT-FV9-074	19	1.74	6.73
EUPT-FV9-075	13	3.22	16.15
EUPT-FV9-076	19	6.77	58.79
EUPT-FV9-077	18	4.72	36.91
EUPT-FV9-078			
EUPT-FV9-079	13	2.63	10.04
EUPT-FV9-080	13	2.72	11.95
EUPT-FV9-081	19	3.13	23.28
EUPT-FV9-082	19	1.40	5.31
EUPT-FV9-083	18	3.42	31.47
EUPT-FV9-084	10	5.68	33.79
EUPT-FV9-085	18	4.83	51.19
EUPT-FV9-086	19	2.86	15.58
EUPT-FV9-087	19	5.49	39.05
EUPT-FV9-088	18	2.84	21.19
EUPT-FV9-089	6	1.91	4.37
EUPT-FV9-090	19	6.82	129.35
EUPT-FV9-091	18	2.38	7.86
EUPT-FV9-092	12	3.25	16.49
EUPT-FV9-093	19	1.24	2.91
EUPT-FV9-094	11	4.32	28.72
EUPT-FV9-095	19	3.24	16.32
EUPT-FV9-096	19	2.26	7.46
EUPT-FV9-097	17	5.29	39.23
EUPT-FV9-098	17	1.64	4.66
EUPT-FV9-099	19	1.33	3.67
EUPT-FV9-100	10	3.34	17.59
EUPT-FV9-101	19	2.93	13.83
EUPT-FV9-102	14	8.36	86.23
EUPT-FV9-103	19	3.14	13.34
EUPT-FV9-104	19	10.56	142.84
EUPT-FV9-105	18	3.73	33.76
EUPT-FV9-106	18	2.16	9.23

APPENDIX 7. Combined z-scores RSZ and SSZ.

Lab Code	No. Of Pesticides Sought (n)	RSZ	SSZ
EUPT-FV9-107	15	2.23	11.92
EUPT-FV9-108	6	2.83	17.04
EUPT-FV9-109	19	4.20	20.97
EUPT-FV9-110	19	2.02	6.26
EUPT-FV9-111	17	4.84	49.83
EUPT-FV9-112	14	1.81	4.91
EUPT-FV9-113	15	7.36	78.09
EUPT-FV9-114	19	1.77	4.21
EUPT-FV9-115	14	2.53	17.72
EUPT-FV9-116	17	4.38	35.78
EUPT-FV9-117	19	4.33	26.75
EUPT-FV9-118	18	5.36	31.84
EUPT-FV9-119	18	2.47	7.33
EUPT-FV9-120	15	3.15	16.76
EUPT-FV9-121	18	4.06	22.21
EUPT-FV9-122	12	3.61	24.17
EUPT-FV9-123	9	2.10	11.83
EUPT-FV9-124	7	2.44	10.02
EUPT-FV9-125	19	5.88	54.32
EUPT-FV9-126	13	1.54	3.27
EUPT-FV9-127	9	6.86	63.15
EUPT-FV9-128	15	4.29	38.92
EUPT-FV9-129	19	1.84	4.65
EUPT-FV9-130	17	2.83	12.01
EUPT-FV9-131	18	4.14	48.30
EUPT-FV9-132	7	5.15	36.19
EUPT-FV9-133	1	3.03	9.18
EUPT-FV9-134	15	7.91	81.42
EUPT-FV9-135			
EUPT-FV9-136	3	2.90	13.00
EUPT-FV9-137			

APPENDIX 8. Methods used by participants for determining pesticides.

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	SOP P/43
4	EN-14185
5	EN-12393
6	EN-14333 or EN-14185
7	Fillion et al. Journal of AOAC International 78-5-1995
8	FP017 or FP018 or FP086
9	SOP C0089/SOP C0139/SOP C0025
10	SOP MR407SOM1/SOP MR504SZO1
11	SOP MR405012M1/SOP MR405/1FEJ1
12	Internal Method SAR (based on No. 7)
13	ISTIAN 97/23
14	Janson et al. Journal of Chromatography A 1023 (2004,9, 93-104
15	JB Leary
16	Klein, J., Alder, L. JAOAC 86, 1015 (2003)
17	KM 21 or KM 22
18	Leothay, S. Et al. JAOAC 88 (2005)
19	Luke, M.A., Froberg, J.E., Doose, G.M., Masumoto, H.T. (1981): Improved multiresidue gas chromatographic determination of organophosphorus, organonitrogen, and organohalogen pesticides in produce, using flame photometric and electrolytic conductivity detectors, J. Assoc. Off. Anal. Chem. 64(5): 1187-1195
20	M. Anastassiades et al JAOAC 86 (2003)
21	Methodenvorschlag EG Proficiency Test 1996/97
22	Multi Residu Method draft BfR
23	Official Method of Analysis (1990) 15th Ed., 985.22 AOAC Arlington VA
24	Kandeczki et al. AOAC Vol. 75, No. 1,1992
25	K. Granby, J. H. Andersen, H. B. Christensen, Anal. Chem. Acta, 520 (2004) 165
26	G. Kearney, L. Alder, A. Mewton, J. Klein, A multi-residue LC-MS/MS method for the determination of 81 pesticides residues in fruit and vegetables, Waters Corporation
27	SLV M200
28	Mini-Luke AOAC 1998, Cap. 3, 259-261
29	ISS 97/31
30	SLV Extraction Methods
31	Internal Method (specify any reference)
32	DFG- Manual of Pesticide Residue Analysis Vol 1, 1987
33	AQC Document SANCO/10232/2006
34	EN-15637

Some of these methods may be the same but we use the same terminology that the laboratories have used.

APPENDIX 8. Methods used by participants for determining pesticides.

BUPIRIMATE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.05	85	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	96	1	10	5	SPE	YES	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.05			10	5	DSPE		1	SPLIT	GC-MS	23
005	M		0.05	74	1	10	1			20		LC-MS-MS	5
006	M	LC-MS/MS	0.01			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	GCMS	0.25	96	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.02	77	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	LCMSMS	0.02	96	1	10	1		Carbendazim D4, Methomyl D3	2,1		LC-MSMS	12
010	M		0.01	104	1	50	1	HP-GPC		5 1	SPLITLESS	LC-MS/MS GC-ITD	12
011	M	GC-MS	0.05	90	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-PPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	LC-MS/MS	0.01	70	1	10	6		Imazalil D5	5		LC-MS /MS	18
014	M		0.01	92	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	M	GC-MS	0.05	63	1	50	Acetone	LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.01	102	1	15	5	PSA	Ethoprophos	10	LOOP	LC-MS/MS	18
017	M	LC/MSMS	0.01			10	5	PSA	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	96	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 (GC) 5 (LC)	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-PPD	20
019	S	LC-MS/MS	0.01	93	1	10	5	DSPE		5	LOOP	LC-MS/MS	20
020	S	GC-MS	0.05	89	2	50	Acetone Metanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	LC-MS/MS	0.01	96	2	10	5	DSPE		5		LC-MS/MS	20
022	M	LC-MS/MS	0.02	98	1	10	5			20		LC-MS/MS	20
023	M	GC-MS	0.05	93	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.01			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.05	94	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026*	M		0.02			25	1			10	LOOP	LC-MS/MS	31
027	NA												
028	M	GC-MS	0.05	107	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

BUPIRIMATE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	NA												
030	M	LC-MS/MS	0.002			10	5		Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.05	80	2	20	1	LL		10		LC-MS/MS	14,16
032	M	GC-NPD	0.05	98	2	100	3	Florisil – Column Chromatography		0.1	SPLITLESS	GC-ECD	19
033	S	GC-MS	0.01	86	2	50	3	0		1	SPLIT/SPLITLESS	GC-NPD	5
034	S	Different Column	<0.05			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	NA												
036	NA												
037	M	GC-MS	0.05			15	4			1/10		GC-ECD; GC-TSD; GC-MS; HPLC-UV	22
038		GC-MS	0.05			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.02	96.6	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.01	82	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	LC-MS/MS	0.01	93	1	75	1			5		LC-MS/MS	27
042	S	GC-MS	0.05	100.8	1	30	1	GPC		0.1	TPOCI	GC-ECD	11
043	M	GC/ITD	0.02	60	1	50	1	GPC	FPD	1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	ECD	0.01	93	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.01	106	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.01			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	s	GC-MS/MS	0.05	88	1	20	Diisopropylether Hexane Iso-Octane		Dichlobenil	2	SPLIT-LESS	GC-NPD	31
049	M	GCMSMS	0.05	112	1	10	5	PSA	Triphenyl Phosphate	5	LARGE VOLUME	GC-MS/MS	20
050	M	GC/TOF	0.05	89	1	25	1	GPC		2		GC-NPD	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	NA												
053	NA												
054	M	GC/MS	0.01	69.8	1	25		GPC/SPE	No	5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-NPD	0.04	84		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	NA												
057	S	GC/MS	0.010	83	2	50		SPE (Only for ECD and ELCD Detections)		1-3	SPLITLESS-ON COLUMN-SPI	PPFD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.05	84	1	15	Dichloromethane			1	SPLITLESS	GC/ECD	13
059	S	GC/ECD	0.02	96	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

BUPIRIMATE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.004			12	5	DSPE	Mirex/TPP	2	SPLIT/SPLITLESS	GC-PND/ECD	20
061	M	GC/MS	0.05	91	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.05	87	1	15	4		PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1 (ECD) 2 (NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	NA												
064	No Results Given												
065	M	GC/MS/MS	0.01	79.6	1	20	3			4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	90	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		NPD80	0.04			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-MS	0.01	108	1	20	6	SPE	Triphenylphosphate	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069	NA												
070	M	GC-MS	0.02	105	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071*	M	GC-MS	0.05			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072													
073			0.01			7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	GC-MS	0.02	105	1	20	4			2	SPLITLESS	GC- NPD	2
075	M	GC-ECD	0.02	99	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	105	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS				10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.02		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS		0.02			10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-M (Single-quad)	31
081	S	LC/MS/MS	0.01	101	1	100	2	GPC; SPE	tr-HCEO	2	SPLITLESS/SPLIT	GC-ECD	1
082	M	LC-MS	0.02	75	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.05	>70	2	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.05			15	5	O	Yes	10	LVI	GC-ITD	20
085	M	GC-MS	0.05			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	GC-MS	0.01	89	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.010	97	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.05	92	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-PPD	31
089	NA												
090	S	GC-MS	0.05	93	2	25	1	SPE		2		GC-ECD, GC-NPD, GC-PPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

BUPIRIMATE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	92	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-NPD	0.04	112	1	25	1			2	SPLITLESS	GC-NPD	2
093	M	None	0.01	104	1	10	5	DSPE	PCB138, TPP	3	PTV	GC-MS (EI)	20 Modified
094	M	GC-MS	0.01	112	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.04	78	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC - ECD	0.05	99.5	1	30	1			1	SPLITLESS	GC-ECD	11
097	S	GC-MS	0.01	93	2	25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	M		0.05	120	1	25	5	SPE	Yes	2		LC-MS/MS	7
099	M	GC-ECD, GC-MS LC-MS-MS	<0.05	98	1	25 10	2 6	GPC SPE	MIREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECDI, GC-MS LC-MS/MS	5 34
100	NA												
101	M	LC-MS/MS	0.05			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	NA												
103	M	LC-MS/MS	0.05	94	1	10	1	SPE	Yes	10	LOOP	LC-MS/MS	31
104	M	GC-MS	<0.01	89.3	1	10	5	O (cleanup mixture: PSA + MgSO ₄)	TCDPP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-ECD, GC-MS	0.01			50	Methanol Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ECD	0.02	84	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.02	78	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	NA												
109	S	HPLC	0.1	81.6	1	30	1	GPC		1	SPLIT 1/10	GC-ECD	11
110	S	GC-MS	0.05	88.8	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111	M	GC-ECD	0.02	92.1	1	2	Hexane Ether Ethyl Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.02	106	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-ECD	0.05	60	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.005	91	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.05	80	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.007	104	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05	92.7	1	30	1	GPC		1	SPLITLESS	GC-NPD	11
118	M	LC-MS/MS	0.01	106	1	10	5	DSPE		10		LC-MS/MS	18
119	M		0.01	100	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	NA												
121	S	GC/MS	0.02	77	2	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29
122	S		0.05	0.8	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	M		0.025			50	1			1	AUTO INJ	GC-MS	30

APPENDIX 8. Methods used by participants for determining pesticides.

BUPIRIMATE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
124	S	GC-ECD	<0.056	75	2	100	3	GPC, SPE		10	SOLVENT VENT PTV	GC-ECD	5
125	M	GC/MS	0.02	74	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S	GC-NPD, GC-ECD	0.02	88.8	1	5	Dichloromethane Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	NA												
128	M	GC-MS	0.05	93.1	1	6.25	4			1	SPLITLESS	GC-ECD	31 (SAR-2-00 oc,p)
129	M	GC-MS/MS	0.05			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.05			10	Dichloromethane	GPC	Fenchlorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-ITD	0.05	81	2	15	4		Hexachlorbenzene	1	SPLITLESS	GC-TOF	2
132	NA												
133	NA												
134	M	GC-MS/MS	0.05	24	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

CYPRODINIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.05	83	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	95	1	10	5	SPE	YES	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	LC-MS/MS	0.05			10	5	DSPE		1	SPLIT	GC-MS	23
005	M		0.05	78	2	10	1			20		LC-MS-MS	5
006	M	LC-MS/MS	0.05			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	LCMS	0.05	85	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.01	94	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	LCMSMS	0.02	101	1	10	1		Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M		0.005	103	1	50	1	- HP-GPC		5 1	- SPLITLESS	LC-MS/MS GC-ITD	12
011	M	GC-MS	0.02	74	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	S	GC-MS	0.01	82	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.01	63	2	50	2	GPC		2	PTV	GC-MS (single quad)	1
015	M	MS/MS	0.01	114	1	10	CH ₃ OH/H ₂ O		Oxfendazole	5		LC-MS/MS	33
016	M		0.01	78	1	15	5	PSA	Ethoprophos	10	LOOP	LC-MS/MS	18
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	96	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 (GC) 5 (LC)	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	GC-MS	0.01	96	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05	98	2	50	Acetone Metanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	LC-MS/MS	0.02	98	2	10	5	DSPE		5		LC-MS/MS	20
022	M	LC-MS/MS	0.01	100	1	10	5			20		LC-MS/MS	20
023	M	GC-MS	0.05	81	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.01			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.05	90	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M	LC-MS/MS	0.01	105	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31

APPENDIX 8. Methods used by participants for determining pesticides.

CYPRODINIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
027	M	GC-TSD	0.05	97	1	25	1	O (Carbon + Celite)		2	SPLITLESS	GC-NPD	2
028	M	GC-MS LC-MS/MS	0.05	93	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1
029	NA												
030	M	LC-MS/MS	0.002			10	5		Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.01	85	1	20	1	LL		10		LC-MS/MS	14,16
032	M	GC-NPD	0.05	88	2	100	3	O (Florisil – Column Chromatography)		0.1	SPLITLESS	GC-NPD	19
033	NA												
034	NA												
035	NA												
036	M	LC-MS/MS	0.02			20	1			10		LC-MS/MS	19
037	NA												
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.02	103	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	LCMSMS	0.01	109	1	10	5	DSPE	Pirimicarb-D6	20		LCMSMS	20
041	M	GC-MS/MS	0.01	87	1	75	1		Ditalimfos	4	SPLITLESS	GC-MS/MS	27
042	S	HPLC-DAD	0.05	98.5	1	10	5	DSPE		1	TPOCI	GC-NPD	20
043	S	GC/TOF		75	1	50	1 (with NaOH)	GPC		10	REODYNE	HPLC-DAD	5
044	No Results Given												
045	M	MS	0.10	90	2	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.01	94	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	LC-MS/MS	0.005			10	5	DSPE	TPP	20 2	PTV	LC-MS/MS (Triple-Quad) GC-MS (Single-Quad)	20
048	S	GC-MS/MS	0.02	87	1	20	Diisopropylether Hexane Iso-Octane		Dichlobenil	2	SPLIT-LESS	GC-NPD	31
049*			0.05			37.5	1	GPC		1	SPLITLESS	GC-ECD,NPD,FPD	5
050	M	LC-MS/MS	0.005	99	1	10	5	LL		10	_	LC-MS/MS	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S	GC-MS/MS	0.02	74	1	20	3	LL,SPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	NA												
054	M	GC/MS	0.01	78.9	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-NPD	0.05	80		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	M	GC-NPD		90	2	10	Dichloromethane	GPC		1	SPLITLESS	GC-NPD, GC-MS (Single-Quad)	13
057	S	GC/MS	0.010	75	2	50		SPE (Only for ECD and ELCD Detections)		1	SPLITLESS-ON COLUMN-SPI	PPFD,NPD,ELCD,ECD and GC-ITD	5

APPENDIX 8. Methods used by participants for determining pesticides.

CYPRODINIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
058	M	GC-MS	0.05	98	1	15	Dichloromethane			1	SPLITLESS	GC/MS	13
059	S	GC/NPD	0.1	118	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
060			0.002			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061		LC/MS/MS	0.05	103	1	10	5	PSA O	TPP	1 2	PTV	GC/MS (single quad) LC-MS/MS	20
062	M	GC-MS	0.05	92	1	15	4		PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.005	98	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	93.5	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	LC-MS	0.01	111	1	10	5			3	PARTIAL LOOP	LC-MS/MS	20
067		NPD80	0.01			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-MS	0.01	94	1	20	6	SPE	Triphenylphosphate	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069	M	GC-MSMS	0.01			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.02	92		20	4			2	SPLITLESS	GC/ECD-NPD	5
071*	M	GC-MS	0.05			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	M	GCMSMS	0.05				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.01	105	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	GC-MS	0.01	103	1	20	4			2	SPLITLESS	GC- NPD	2
075	M	GC-NPD	0.05	103	1	15	4			3	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	97	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.02		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS		0.02			10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	M		0.01	78	1	10	6	LL	TBZ-d6	10		LC-MS/MS	16
082	M	GC-MS	0.02	96	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.05	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	NA												
085	M	HPLC-DAD	0.05			5	5	SPE Florisil	Quantification By STD Addition Method	20	AUTOMATIC	HPLC-DAD	31
086	M	GC-MS	0.01	95	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	GC-MS/MS	0.005	96	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27

APPENDIX 8. Methods used by participants for determining pesticides.

CYPRODINIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
088	S	GC-MS	0.05	79	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-FPD	31
089	NA												
090	S	GC-MS	0.05	79	2	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5
091	M	GC-MS	0.05	91	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-NPD	0.1	41	1	25	1			2	SPLITLESS	GC-NPD	2
093	M	GC-MS	0.005	102	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	M	GC-MS	0.01	104	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.02	91	1	10	ACETONE	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	HPLC	0.05	97.6	1	30	1	n-Al ₂ O ₃		20	DIRECT	HPLC-UV	10
097	S	GC-MS	0.02	76	2	25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	S	GCMS	0.05	89	2	25	5	SPE	YES	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD, GC-MS LC-MS-MS	<0.05	104	1	25 10	2 6	GPC SPE	MIREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECDI, GC-MS LC-MS/MS	5 34
100	S	GC-NPD	0.03	68.9	2	50	3	LL		10	PTV-SOLVENT VENT	GC-NPD	5
101	M	LC-MS/MS	0.05			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	M	GC-MS	<0.05	10	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.05	94	1	10	1	SPE	Yes	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	73.1	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	TCDDP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-MS	0.01			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ITD	0.01	87	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	S		0.02	92	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	M	LC-MS/MS	0.52	77	2	10	6	LL		8		LC-MS/MS	16
109	S	NP	0.05	89.8	1	30	1	GPC		20	LOOP	HPLC-UV	11
110	S	GC-MS	0.05	89.4	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/NPD	10
111	M	GC-NPD	0.02	92.7	1	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.02	104	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.05	73	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.02	109	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-NPD	0.05	87	2	5	3	GPC		1	PULSED SPLITLESS	GC-NPD	
116	M	GC-MS	0.004	99	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05			30	1	GPC		20	REODYNE	LC-MS	11
118	M	LC-MS/MS	0.01	96	1	10	5	DSPE		10		LC-MS/MS	18

APPENDIX 8. Methods used by participants for determining pesticides.

CYPRODINIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
119	M		0.01	100	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	120	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	91		10	1	GPC	YES	1	PTV/SSL	GC/NPD, GC/ECD, GC/MS	29
122	NA												
123	M					50	1			1	AUTO INJ	GC-MS	30
124	NA												
125	M	GC/MS	0.02	75	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS Single Quadrupole	1
126	S	GC-NPD	0.02	89.6	1	5	Dichloromethane Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	NA												
128	M	GC-NPD	0.1	88.5	1	25	1			100		HPLC-UV	31 (DAR-2-06)
129	M	GC-MS/MS	0.02			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.05			10	Dichloromethane	GPC	Fenchlorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	89	2	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	NA												
133	NA												
134	M	GC-MS/MS	0.02	34	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

DIAZINON													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.02	87	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	96	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	S	GC-MS	0.02	1.04	1	15	4			1.5	SPLITLESS	GC-ITD	2
004	M	GC-MS	0.02			10	5	DSPE	Isodrin	1	SPLIT	GC-ECD, GC-MS	23
005	S	GC/MS	0.02	80	1	10	1			2	SPLITLESS	GC-FPD	5
006	M	LC-MS/MS	0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	GCMS	0.02	101	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.01	104	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	GCMSMS	0.02	80	1	10	1	GPC	DDE-pp D8	1	ON-COLUMN	GC-MS and GC-MSMS	12
010	M		0.01	93	1	50	1	- HP-GPC HP-GPC		5 1 2	- SPLITLESS SPLITLESS	LC-MS/MS GC-ITD GC-FPD	12
011	M	GC-MS	0.02	95	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	78	1	15	4			1	SPLITLESS	GC-MS	35
014	M		0.01	67	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	M	GC-MS	0.02	89	1	50	8: Acetone	0: LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	109	1	15	4	GPC	No	2	SPLITLESS	GC MS	2
017	S	GC/MSD	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	GC-MS/MS	0.01	101	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 (GC) 5 (LC)	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	GC-MS	0.01	92	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05	89	2	50	7 Acetone/ Metanol	SPE	yes	1	ON COLUMN	GC-MS	33
021	S	LC-MS/MS	0.01	96	2	10	5	DSPE		5		LC-MS/MS	20
022	M	GC-MS	0.02	110	2	10	5	DSPE		2	PTV	GC-MS	20
023	M	GC-MS	0.02	90	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.01			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.02	86	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.02	106	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	M	GC-ECD	0.02	105	1	25	O (Toluene)	O (Carbon + Celite)		2	SPLITLESS	GC-ECD	2

APPENDIX 8. Methods used by participants for determining pesticides.

DIAZINON													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
028	M	GC-MS	0.02	97	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1
029	S	GC-MS	0.010	110		15	4			2	SPLITLESS	GC-µECD-NPD CG-MS	35
030	M	GC-MS	0.01			25	1	GPC		1	PULSED SPLITLESS	GC-MS	17
031	S	GC-ITD	0.01			50	8	LL		1	SPLITLESS	GC-ITD	31
032	M	GC-NPD	0.02	108	2	100	3	O (Florisil – Column Chromatography)		0.1	SPLITLESS	GC-ECD	19
033	S	GC-MS	0.01	90	2	50	3	O		1	SPLIT/SPLITLESS	GC-NPD	5
034	S	Different Column	<0.02			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.020	102	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	M	GC-MS	0.02			20	1			2	SPLITLESS	GC-MS	19
037	M	CG-MS	0.02			15	4			1/10		GC-ECD; GC-TSD; GC-MS; HPLC-UV	22
038	M	GC-MS	0.01			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.01	97.1	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.01	89	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	LC-MS/MS	0.01	90	1	75	1			5		LC-MS/MS	27
042	S	GC-MS	0.02	93.2	1	30	1	GPC		0.1	TPOCI	GC-ECD	11
043	M	GC/ITD	0.02	68	1	50	1	GPC	FPD	1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	ECD	0.02	88	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.02	93	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.01			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	S	GC-MS/MS	0.02	103	1	20	8 Diisopropylether Hexane Iso-Octane		Ethion/Coumafos	2	SPLIT-LESS	GC-PFPD	31
049	M	GCMSMS	0.01	103	1	37.5	1	GPC		1	SPLITLESS	GC-ECD,NPD,FPD	5
050	M	GC/TOF	0.02	98	1	25	1	GPC		2		GC-NPD	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S	GC-MS/MS	0.02	72	1	20	3	LL,SPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	M	B,C	0.010	97	1	15	4			1	ON COLUMN	GC-NPD-HP101 column	2
054	M	GC/MS	0.01	95.2	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-ECD	0.02	85		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	M	GC-NPD	0.02	85	2	10	Dichloromethane	GPC		1	SPLITLESS	GC-NPD, GC-MS (Single-Quad)	13
057	S	GC/MS	0.010	87	2	50		SPE (only for ECD and ELCD deflections)		1/10	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5

APPENDIX 8. Methods used by participants for determining pesticides.

DIAZINON													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
058	M	GC-MS	0.02	84	1	15	Dichloromethane			1	SPLITLESS	GC/NPD	13
059	S	GC/ECD	0.01	75	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
060			0.004			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061		GC/MS	0.02	98	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.01	97	1	25	4		Tributylphosphat	1	SPLIT/SPLITLESS	GC-FPD	2
063	M		0.01	68	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	81.9	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	96	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		NPD80	0.01			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-PND	0.01	82	2	20	6	SPE	p,p-DDE	1	SPLITLESS	GC-MS	16
069	M	GC-MSMS	0.02			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.02	99.5		20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.02			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	M	GCMSMS	0.02				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	LC-MS/MS	0.02	86	1	15	4		Yes	2	PTV	GC-ITD	
074	M	GC-MS	0.02	106	1	20	4			2	SPLITLESS	GC-ECD/NPD	2
075	M	GC-ECD	0.05	94	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	90	1	50	Acetone	SPE	atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenilphospate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.02		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS		0.02			10	1	GPC	Triphenilphospate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	S	LCMSMS	0.01	80	1	100	2	GPC; SPE	tr-HCEO	2	SPLITLESS/SPLIT	GC-ECD	1
082	M	GC-FPD	0.02	98	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.02	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.02			15	5	0	Yes	10	LVI	GC-ITD	20
085	M	GC-MS	0.01			5	5		Quantification By STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	GC-MS	0.01	95	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.005	101	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.02	97	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-FPD	31

APPENDIX 8. Methods used by participants for determining pesticides.

DIAZINON													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
089	S	GC-MS	0.02	96.2	2	50	3	GPC		1	PTV	GC-ECD	5
090	S	GC-MS	0.02	88	1	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5
091	M	GC-MS	0.05	90	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-NPD	0.02	84	1	25	1			2	SPLITLESS	GC-NPD	2
093	M	GC-MS	0.05	106	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	M	GC-MS	0.01	102	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.01		1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-NPD	0.02	95.5	1	30	1			1	SPLITLESS	GC-NPD	11
097	S	GC-MS	0.02	81	2	25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	M	GCMS	0.02	92	2	25	5	SPE	YES	2		LC-MS/MS	7
099	M	GC-ECD, GC-MS LC- MS-MS	<0.02	105	1	25 10	2 6	GPC SPE	MIREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECDI, GC-MS LC-MS/MS	5 34
100	S	GC-ECD	0.003	60.3	2	50	3	LL		10	PTV-SOLVENT VENT	GC-NPD	5
101	M	GC/MS	0.02			10	5	DSPE	Triphenylphosphate	5	KAS	GC-MS	20
102	M	GC-MS	<0.05	75	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.02	86	1	10	1	SPE	YES	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	103.6	1	10	5		O (cleanup mixture: PSA + MgSO ₄)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-MS	0.01			50	Methanol Followed By Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ITD	0.02	77	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107			0.02	87	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	NA												
109	S	GC-MS	0.02	100.2	1	30	1			1	DIRECT	GC-NPD	11
110	S	GC-MS	0.02	83.2	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/NPD	10
111	M	GC-ECD	0.01	101.8	1	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.02	89	1	15	5	DSPE	ETOPROFOS	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.02	81	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.002	107	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.02	101	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.01	100	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.02	112.7	1	30	1	GPC		1	SPLITLESS	GC-NPD	11
118	M	GC-MS/MS	0.01	87	1	10	5	DSPE		2	SPLITLESS	GC-MS/MS	18
119	M		0.01	92	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20

APPENDIX 8. Methods used by participants for determining pesticides.

DIAZINON													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
120	M		0.05	106	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	84	1	10	1	GPC	YES	1	PTV/SSL	GC/NPD, GC/ECD, GC/MS	29
122	S		0.05	0.8	2							GC-ECD/MS	
123	M		0.02			50	1			1	AUTO INJ	GC-MS	30
124	S	GC-ECD	<0.018	64	2	100	3	GPC, SPE		10	SOLVENT VENT PTV	GC-ECD	5
125	M	GC/MS	0.02	81	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S	GC-NPD, GC-ECD	0.01	86.9	1	5	Dichloromethane Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	S	GC NPD, ECD	0.05	81	1	40	3	LL	Aldrin	2	SPLIT/SPLITLESS	GC-NPD, GC-ECD	5
128	M	GC-MS	0.05	84.7	1	12.5	4			3	SPLITLESS	GC-NPD	31 (SAR-1-04)
129	M	GC-MS	0.02			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.01			10	Dichloromethane	GPC	Fenclorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.025	87	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	S	GC-MS	0.02	82	2	100	Acetone, Dichloromethane, NaCl, Ethyl Acetate	GPC, SPE		15	SOLVENT VENT	GC-NPD	
133			0.02	126.8	1	50	1			1	SPLITLESS	GC NPD	2
134	NA												
135	No Results Given												
136	M	GC-FPD	0.02			56	4	LL	Bromophos-Methyl	1	MANUAL	GC-ECD, GC-FPD, GC-MS	35
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN α													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.05	90	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	95	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	S	GC-MS	0.01	0.81	1	15	4			1.5	SPLITLESS	GC-ITD	2
004	M	GC-MS	0.02			10	5	DSPE	Isodrin	1	SPLIT	GC-ECD, GC-MS	23
005	M		0.01	72	1	10	4			2	SPLITLESS	GC-MS-MS (ION TRAP)	2
006	M		0.01			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	GCMS	0.01	110	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.01	103	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	GCMSMS	0.02	85	1	10	1	GPC	DDE-pp D8	1	ON-COLUMN	GC-MS and GC-MSMS	12
010	M		0.01	95	1	50	1	HP-GPC		1 2	SPLITLESS	GC-ITD GC-ECD	12
011	M	GC-MS	0.01	99	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	GC-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	81	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.005	110	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	M	GC-MS	0.02	92	1	50	Acetone	LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	101	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	S	GC/MSD	0.01			100	2	GPC, SPE		1	SPIIT	GC-MSD, GC-ECD	1
018	M	GC-MS	0.01	95	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphat (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 (GC) 5 (LC)	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	GC-MS	0.01	112	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05			50	Acetone Metanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	GC-MS	0.02	94	2	10	5	DSPE	TPP	2	PTV	GC-MS (single-quad)	20
022	M	GC-MS	0.01	110	2	10	5	DSPE		2	PTV	GC-MS	20
023	S	GC-MS	0.05	113	1	75	2	GPC		1		GC-ECD	1
024		GC-MS	0.01			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.05	105	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	109	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	M	GC-ECD	0.01	102	1	25	Toluene	Carbon + Celite		2	SPLITLESS	GC-ECD	2
028	M	GC-MS	0.01	95	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN α													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
029	S	GC-MS	0.02	104	1	15	4			2	SPLITLESS	GC- μ ECD-NPD CG-MS	35
030	M	GC-MS	0.01			25	1	GPC		1	PULSED SPLITLESS	GC-MS	17
031	S	GC-ITD	0.01	80	2	50	8	LL		1	SPLITLESS	GC-ITD	31
032	M		0.01	97	2	100	3	Florisil – Column Chromatography		0.1	SPLITLESS	GC-ECD	19
033	S	GC-MS	0.001	98	2	70	1,2,3	GPC		1	SPLITLESS	GC-ECD	5
034	S	Different Column	<0.01			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.020	93	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	M	GC-MS	0.02			20	1	NO		2	SPLITLESS	GC-MS	19
037	M	CG-MS	0.05			15	4	NO		1/10		GC-ECD; GC-ITD; GC-MS; HPLC-UV	22
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.01	88.3	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.004	97	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	GC-MS/MS	0.01	93	1	75	1	No	Ditalimfos	4	SPLITLESS	GC-MS/MS	27
042	S	GC-MS	0.02	111.5	1	30	1	GPC		0.1	TPOCI	GC-ECD	11
043	M	GC/TOF		68	1	50	1	GPC		1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	MS	0.005	92	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.01	102	1	10	5	DSPE (PSA)	Mirex	1.2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.02			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	M		0.01			5	Acetone Ethylacetate Hexane		TPP	1	SPLITLESS	GC-MS/MS	31
049		GC MS	0.02	87	1	37.5	1	GPC		1	SPLITLESS	GC-ECD,NPD,FPD	5
050	M	GC/TOF	0.005	98	1	25	1	GPC		2		GC-ECD	3
051	M		0.02			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S	GC-MS/MS	0.01	85	1	20	3	LL,SPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	M	D	0.020	102	1	15	4			1	SPLITLESS	GC-ECD-HP-5 column	2
054	M			89.9	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-ECD	0.04	85		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	NA												
057	S	GC/MS	0.010	75	2	50		SPE (Only for ECD and ELCD Detections)		1/3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.05	81	1	15	Dichloromethane			1	SPLITLESS	GC/ECD	13
059	S	GC/ECD	0.01	98	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN α													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
060			0.0096			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061		GC/MS	0.05	102	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.01	106	1	15	4	NO	PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD) 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.011	84	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	95.1	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	95	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		ECD	0.01			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M		0.01	81	2	20	6	SPE	p,p-DDE	1	SPLITLESS	GC-MS	16
069	M	GC-MSMS	0.02			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.01	75.8	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	NA												
072	M	GCMSMS	0.05				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.01		1	15	4	NO	Yes	1.5	SPLIT/SPLITLESS	GC-ECD	
074	M	GC-MS	0.02	94	1	20	4			2	SPLITLESS	GC- ECD	2
075	M	GC-ECD	0.02	84	1	15	4			3/1	PULSED SPLITLESS (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	80	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenilphospate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.05		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS		0.01			10	1	GPC	Triphenilfosfato and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	S			90	2	100	2	GPC; SPE	tr-HCEO	2	SPLITLESS/SPLIT	GC-ECD	1
082	M	GC-ECD	0.02	79	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.05	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.03			15	5	0	Yes	10	LVI	GC-ITD	20
085	M	GC-MS	0.05			5	5		Quantification By STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	GC-MS	0.01	84	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	GC-MS/MS	0.010	96	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.05	90	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-FPD	31
089	S	GC-MS			2	50	3	GPC		1	PTV	GC-ECD	5
090	S	GC-MS	0.05	82	2	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN α													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	88	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-ECD	0.01	89	1	25	Toluene,Propanol	O		2	SPLITLESS	GC-ECD	2
093	M	GC-MS CI	0.05	107	1	10	5	DSPE	PCB138, TPP	3	PTV	GC-MS (EI)	20 Modified
094	M	GC-MS	0.01		1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.02	92	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-ECD	0.02	94.5	1	30	1			1	SPLITLESS	GC-ECD	11
097	S	GC-MS	0.02	85	2	25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	S	GCMS	0.01	87	2	25	5	SPE	YES	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD, GC-MS	<0.02	94	1	25	2	GPC	MIREX, HCB	1	SPLIT/SPLITLESS	GC-ECDI GC-MS	5
100	S	GC-ECD	0.001	101	2	50	3	LL		10	PTV-SOLVENT VENT	GC-ECD	5
101	M	GC/MS	0.01			10	5	DSPE	Triphenylphosphate	5	KAS	GC-MS	20
102	M	GC-MS	<0.05	80	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.05	109	1	10	1	SPE	YES	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	102.6	1	10	5	(Cleanup Mixture: PSA + MgSO ₄)	TCDPP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-ECD, GC-MS	0.005			50	Methanol Followed By Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-MS/MS	0.01	78	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.02	79	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	NA												
109	S	GC-MS	0.02	101	1	30	1	GPC		1	SPLIT 1/10	GC-ECD	11
110	S	GC-MS	0.05	78.6	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111	M	GC-ECD	0.05	98.2	1	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.01	102	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.05	75	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.001	109	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.05	75	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.05	102	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05	88	2	30	1	GPC		1	SPI	GC-ECD	11
118	M	GC-MS/MS	0.02	98	1	10	5	DSPE		2	SPLITLESS	GC-MS/MS	18
119	M		0.01	94	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	97	2	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	76	1	10	1	GPC	YES	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN α													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
122	S		0.05	0.85	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	M		0.035			50	1			1	AUTO INJ	GC-MS	30
124	S	GC-ECD	<0.024	70	2	100	3	GPC, SPE		10	SOLVENT VENT PTV	GC-ECD	5
125	M	GC/MS	0.02	105	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S		0.003	87.9	2	5	Diethyl Ether N-Hexane	DSPE		1	SPLITLESS	GC-ECD	
127	S	GC-NPD, ECD		81	1	40	3	LL	Aldrin	2	SPLIT/SPLITLESS	GC-NPD, GC-ECD	5
128	M	GC-MS	0.05	89.7	1	6.25	4			1	SPLITLESS	GC-ECD	31 [SAR-2-00 oc,p]
129	M	GC-MS/MS	0.05			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.01			10	Dichloromethane	GPC	Fenclorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	78	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	S	GC-MS	0.05	81	2	100	Acetona Dichloromethane NaCl Ethyl Acetate	GPC, SPE		15	SOLVENT VENT	GC-ECD	
133	NA												
134	M	GC-MS/MS	0.02	83	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	M	GC-ECD GC-MS	0.01			56	4	LL	Bromophos-Methyl	1	MANUAL	GC-ECD, GC-FPD, GC-MS	35
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN β													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.05	82	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	96	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	S	GC-MS	0.01	0.89	1	15	4			1.5	SPLITLESS	GC-ITD	2
004	M	GC-MS	0.02			10	5	DSPE	Isodrin	1	SPLIT	GC-ECD, GC-MS	23
005	M		0.01	78	1	10	4			2	SPLITLESS	GC-MS-MS (ION TRAP)	2
006	M		0.01			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	GCMS	0.01	96	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.01	95	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	GCMSMS	0.02	93	1	10	1	GPC	DDE-pp D8	1	ON-COLUMN	GC-MS and GC-MSMS	12
010	M		0.01	96	1	50	1	HP-GPC		1 2	SPLITLESS	GC-ITD GC-ECD	12
011	M	GC-MS	0.01	95	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	GC-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	81	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.005	111	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	M	GC-MS	0.02	89	1	50	8: Acetone	LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	102	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	S	GC/MSD	0.01			100	2	GPC, SPE		1	SPITT	GC-MSD, GC-ECD	1
018	M	GC-MS	0.01	99	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	GC-MS	0.01	108	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05			50	7-Acetone Metanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	GC-MS	0.02	95	2	10	5	DSPE	TPP	2	PTV	GC-MS (single-quad)	20
022	M	GC-MS	0.01	98	2	10	5	DSPE		2	PTV	GC-MS	20
023	S	GC-MS	0.05	88	1	75	2	GPC		1		GC-ECD	1
024		GC-MS	0.01			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.05	105	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	111	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	M	GC-ECD	0.01	98	1	25	O (Toluene)	O (Carbon + Celite)		2	SPLITLESS	GC-ECD	2
028	M	GC-MS	0.01	97	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN β													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
029	S	GC-MS	0.02	108	1	15	4			2	SPLITLESS	GC- μ ECD-NPD CG-MS	35
030	M	GC-MS	0.015			25	1	GPC		1	PULSED SPLITLESS	GC-MS	17
031	S	GC-ITD	0.01	94	2	50	8	LL		1	SPLITLESS	GC-ITD	31
032	M		0.01	103	2	100	3	O (Florisil - Column Chromatography)		0.1	SPLITLESS	GC-ECD	19
033	S	GC-MS	0.001	102	2	70	1,2,3	GPC		1	SPLITLESS	GC-ECD	5
034	S	Different Column	<0.01			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.020	93	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	M	GC-MS	0.02			20	1			2	SPLITLESS	GC-MS	19
037	M	CG-MS	0.05			15	4			1		GC-ECD; GC-TSD; GC-MS; HPLC-UV	22
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.01	88	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.004	94	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	GC-MS/MS	0.01	87	1	75	1		Ditalimfos	4	SPLITLESS	GC-MS/MS	27
042	S	GC-MS	0.02	106.8	1	30	1	GPC		0.1	TPOCI	GC-ECD	11
043	M	GC/TOF		73	1	50	1	GPC		1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	MS	0.005	90	2	15	4	NO		1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.01	105	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.02			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	M	GC-MS (ITD)	0.01	115	1	5	8 Acetone Ethylacetate Hexane	No	TPP	1	SPLITLESS	GC-MS/MS	31
049		GC MS	0.02	87	1	37.5	1	GPC		1	SPLITLESS	GC-ECD,NPD,FPD	5
050	M	GC/TOF	0.005	98	1	25	1	GPC		2		GC-ECD	3
051	M		0.02			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S	GC-MS/MS	0.01	84	1	20	3	LL,SPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	M	D	0.020	97	1	15	4			1	SPLITLESS	GC-ECD-HP-5 column	2
054	M			94.1	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-ECD	0.04	78		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	NA												
057	S	GC/MS	0.010	70	2	50		SPE (Only for ECD and ELCD Detections)		1	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.05	81	1	15	Dichlorometane			1	SPLITLESS	GC/ECD	13
059	S	GC/ECD	0.01	97	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN β													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
060			0.033			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061		GC/MS	0.05	102	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.01	101	1	15	4	NO	PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1 (ECD) 2 (NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.008	85	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	99.5	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	97	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		ECD	0.01			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M		0.01	80	2	20	6	SPE	p,p-DDE	1	SPLITLESS	GC-MS	16
069	M	GC-MSMS	0.04			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.01	82.3	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	NA												
072	M	GCMSMS	0.05				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.01	94	1	15	4	NO	Yes	1.5	SPLIT/SPLITLESS	GC-ECD	
074	M	GC-MS	0.02	90	1	20	4			2	SPLITLESS	GC-ECD	2
075	M	GC-ECD	0.02	85	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	89	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.05		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS		0.01			10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	S			87	1	100	2	GPC; SPE	tr-HCEO	2	SPLITLESS/SPLIT	GC-ECD	1
082	M	GC-ECD	0.02	83	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.05	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.03			15	5	0	Y	10	LVI	GC-ITD	20
085	M	GC-MS	0.05			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	GC-MS	0.01	83	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	GC-MS/MS	0.010	97	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.05	104	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-PPD	31
089	S	GC-MS			2	50	3	GPC		1	PTV	GC-ECD	5
090	S	GC-MS	0.05	82	2	25	1	SPE		2		GC-ECD, GC-NPD, GC-PPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN β													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	88	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-ECD	0.01	96	1	25	Toluene.Propanol	O		2	SPLITLESS	GC-ECD	2
093	M	GC-MS CI	0.05	102	1	10	5	DSPE	PCB138, TPP	3	PTV	GC-MS (EI)	20 Modified
094	M	GC-MS	0.01		1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.02	89	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-ECD	0.02	92.2	1	30	1			1	SPLITLESS	GC-ECD	11
097	S	GC-MS	0.02	85	2	25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	S	GCMS	0.01	91	2	25	5	SPE	YES	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD GC-MS	<0.04	93	1	25	2	GPC	MIREX, HCB	1	SPLIT/SPLITLESS	GC-ECDI GC-MS	5
100	S	GC-ECD	0.001	98.2	2	50	3	LL		10	PTV-SOLVENT VENT	GC-ECD	5
101	M	GC/MS	0.01			10	5	DSPE	Triphenylphosphate	5	KAS	GC-MS	20
102	M	GC-MS	<0.05	82	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.05	95	1	10	1	SPE	YES	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	74.3	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	TCDPP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-ECD	0.005			50	Methanol Followed by Dichloromethane	GPC	ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-MS/MS	0.01	80	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.02	86	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	NA												
109	S	GC-MS	0.02	101	1	30	1	GPC		1	SPLIT 1/10	GC-ECD	11
110	S	GC-MS	0.01	98.7	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111	M	GC-ECD	0.05	96.8	1	2	Hexane Ether Ethyl Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.01	96	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.05	75	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.001	110	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.05	75	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.05	100	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05	88	2	30	1	GPC		1	SPI	GC-ECD	11
118	M	GC-MS/MS	0.05	86	1	10	5	DSPE		2	SPLITLESS	GC-MS/MS	18
119	M		0.01	88	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	106	2	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	76	1	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

ENDOSULFAN β													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (μ l)	Injection Type	Determination	Reference Method (see page 83)
122	S		0.05	85%	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	M		0.035			50	1			1	AUTO INJ	GC-MS	30
124	S	GC-ECD	<0.007	70	2	100	3	GPC, SPE		10	SOLVENT VENT PTV	GC-ECD	5
125	M	GC/MS	0.02	99	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S		0.003	88.9	2	5	Diethyl Ether n-Hexane	DSPE		1	SPLITLESS	GC-ECD	
127	S	GC-NPD, ECD		81	1	40	3	LL	Aldrin	2	SPLIT/SPLITLESS	GC-NPD, GC-ECD	5
128	M	GC-MS	0.05	88.9	1	6.25	4			1	SPLITLESS	GC-ECD	31 [SAR-2-00 oc,p]
129	M	GC-MS/MS	0.05			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.01			10	Dichloromethane	GPC	Fenclorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	78	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	S	GC-MS	0.05	82	2	100	Acetone, Dichloromethane NaCl Ethyl Acetate	GPC, SPE		15	SOLVENT VENT	GC-ECD	
133	NA												
134	M	GC-MS/MS	0.02	79	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	M	GC-ECD/ GC-MS	0.01			56	4	LL	Bromophos-Methyl	1	MANUAL	GC-ECD, GC-FPD, GC-MS	35
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

FENHEXAMID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001			0.05			10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	79	1	5	5			10		LC-MS/MS	20
003	NA												
004	M	LC-MS/MS	0.05			10	5	DSPE	Isodrin	1	SPLIT	GC-ECD, GC-MS	23
005	M		0.05	70	1	10	1			20		LC-MS-MS	5
006	M	LC-MS/MS	0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	GCMS	0.02	115	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.02	102	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	LCMSMS	0.02	92	1	10	1		Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M		0.005	101	1	50	1			5		LC-MS/MS	12
011	M	GC-MS	0.05	84	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.02			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	LC-MS/MS	0.01	74	1	10	6		Imazalil D5	5		LC-MS /MS	18
014	M		0.03	92	2	50	2	GPC		2	PTV	GC-MS (single quad)	1
015	M	MS/MS	0.01	104	1	10	8 (CH ₃ OH/H ₂ O)		Oxfendazole	5		LC-MS/MS	33
016	M		0.01	91	1	15	5	PSA	Ethoprophos	10	LOOP	LC-MS/MS	18
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	84	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	LC-MS/MS	0.01	88	1	10	5	DSPE		5	LOOP	LC-MS/MS	20
020	S	GC-MS	0.05	106	2	50	7 Acetone Metanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	LC-MS/MS	0.01	98	2	10	5	DSPE		5		LC-MS/MS	20
022	M	LC-MS/MS	0.01	97	1	10	5			20		LC-MS/MS	20
023	M	GC-MS	0.05	95	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.02			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	M	GC-MS	0.05	109	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	86	1	25	1			10	LOOP	LC-MS/MS	31
027	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

FENHEXAMID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
028	M	GC-MS LC-MS/MS	0.05	87	1	50	2 6	GPC SPE		1 10	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad) LC-MS/MS	1 16
029	NA												
030	M	LC-MS/MS	0.002			10	5		Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.01	93	2	20	1	LL		10		LC-MS/MS	14 + 16
032	NA												
033	NA												
034	S	Different column	<0.05			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.050	98	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	M	LC-MS/MS	0.02			20	1			10		LC-MS/MS	19
037	NA												
038	NA												
039	M	LC-MS/MS	0.02	116	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	LCMSMS	0.01	107	1	10	5	DSPE	Pirimicarb-D6	20		LCMSMS	20
041	M	LC-MS/MS	0.01	102	1	75	1			5		LC-MS/MS	27
042	S	GC-ECD	0.05	92.5	1	10	5	DSPE		25	AUTOSAMPLER	HPLC-DAD	20
043*			0.05			50	1	GPC		1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	MS	0.05	93	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.01	97	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.025			10	5	DSPE	TPP	20 2	PTV	LC-MS/MS (Triple-Quad) GC-MS (Single-Quad)	20
048	s		0.01	95	1	10	4			5	SYRINGE DRIVE WITH LOOP	LC-MS/MS	31
049*			0.02			37.5	1	GPC		1	SPLITLESS	GC-ECD,NPD,FPD	5
050	M	LC-MS/MS	0.01	89	1	10	5	LL		10		LC-MS/MS	3
051	S		0.01			10	6	Diatomaceous Earth		25		LC-MSMS	34
052	NA												
053	NA												
054	M		0.01	79.4	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-NPD	0.05	95		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	NA												
057	S	GC/MS	0.010	68	2	50		SPE (Only for ECD and ELCD Detections)		1-3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.05	98	1	15	Dichloromethane			1	SPLITLESS	GC/ECD	13

APPENDIX 8. Methods used by participants for determining pesticides.

FENHEXAMID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
059	S	GC/ECD	0.02	89	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
060			0.003			12	5	DSPE	Mirex/TPP	2	SPLIT/SPLITLESS	GC-PND/ECD	20
061		GC/MS	0.05	98	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M		0.01	92	1	10	6	LL on Chem Elut		25		LC-MS/MS	16
063	M		0.012	97	1	10	6		C13-carbaryl	10		LC-MS/MS	8
064	No Results Given												
065	M	GC/MS/MS	0.05	106.6	1	20	3			4	SPLITLESS	GC-ECD-NPD	5
066	M	LC-MS	0.01	96	1	10	5			3	PARTIAL LOOP	LC-MS/MS	20
067		NPD80	0.02			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-PND	0.01	110	1	20	6	SPE	p,p-DDE	1	SPLITLESS	GC-MS	16
069	M	LC-MSMS	0.01			15	1		TPP	10	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MSMS	31
070	M	GC-MS	0.02	105	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	LC/MS/MS	0.05			20	4	GPC		10	RHEODYNE	LC/MS/MS	31
072	NA												
073	M	GC-MS	0.01	109	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	GC-MS	0.02	91	1	20	4			2	SPLITLESS	GC- NPD	2
075	M	GC-ECD	0.05	103	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	91	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.02			10	1	GPC	Triphenilphospate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	NA												
080	NA												
081	M		0.01	93	1	10	6	LL	TBZ-d6	10		LC-MS/MS	16
082	M	GC-MS	0.02	97	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.05	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	NA												
085	M	HPLC-DAD	0.05			5	5	SPE Florisil	Quantification by STD Addition Method	20	AUTOMATIC	HPLC-DAD	31
086	M	LC-MS-MS	0.02	30	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.010	100	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.05	81	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-FPD	31

APPENDIX 8. Methods used by participants for determining pesticides.

FENHEXAMID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
089	NA												
090	S	GC-MS	0.05	70	1	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5
091	M	GC-MS	0.05	97	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	NA												
093	M	None	0.01	99	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	NA												
095	M	LC-MS	0.05	82	1	10	Ethyl Acetate			25		HPLC-MS	
096	S	HPLC	0.05	81.5	1	30	1	n-Al ₂ O ₃		20	DIRECT	HPLC-UV	10
097			0.02			25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	M	GCMS	0.05	100	2	25	5	SPE	YES	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD, GC-MS, LC-MS-MS	<0.05	96	1	25 10	2 6	GPC SPE	MIREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECD, GC-MS LC-MS/MS	5 34
100	NA												
101	M	LC-MS/MS	0.01			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	NA												
103	M	GC-MS	0.05	96	1	10	1	SPE	YES	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	83.2	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	TCDDP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105			0.05			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	LC-MS/MS	0.02	98	1	10	Methanol- Ammonia Acetate Acetic Acid (95%:5%)		¹³ C ₆ -Carbaryl	10		LC-MS/MS	8
107	s		0.02	81	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	M	LC-MS/MS	0.4	81		10	6	LL		8		LC-MS/MS	16
109	S	EC	0.05	82	1	30	1	GPC		20	LOOP	HPLC-UV	11
110	S	GC-MS	0.05	92.8	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111*			0.05	102	2	2	Hexane Ether Ethyl Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	NA												
113*	S		0.05			100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.005	106	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.05	103	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.02	96	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05			30	1	GPC		20	REODYNE	LC-MS	11
118	M	LC-MS/MS	0.01	109	1	10	5	DSPE		10		LC-MS/MS	18

APPENDIX 8. Methods used by participants for determining pesticides.

FENHEXAMID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
119	M		0.01	100	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	106	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	81	2	10	1	GPC	YES	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29
122	NA												
123	NA												
124	NA												
125	M	GC/MS	0.03	96	1	75	1	GPC	aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	NA												
127	NA												
128	NA												
129	M	LC-MS/MS	0.05			15	5	DSPE				LC-MS/MS	18
130	S	GC-MS	0.05			10	Dichloromethane	GPC	Fenchlorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	84	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132*	S		0.05	109	1	100	Acetone, Dichloromethane NaCl Ethyl Acetate	GPC, SPE		15	SOLVENT VENT	GC-ECD	
133	NA												
134	NA												
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

FENITROTHION													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.01	82	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	98	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.01			10	5	DSPE		1	SPLIT	GC-MS	23
005	S	GC/MS	0.02	80	1	10	1			2	SPLITLESS	GC-FPD	5
006	M		0.01			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	GCMS	0.02	90	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.01	96	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	GCMSMS	0.02	72	1	10	1	GPC	DDE-pp D8	1	ON-COLUMN	GC-MS and GC-MSMS	12
010	M		0.01	93	1	50	1	HP-GPC		2	SPLITLESS	GC-FPD	12
011	M	GC-MS	0.02	95	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	81	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.01	104	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	M	GC-MS	0.02	96	1	50	8: Acetone	LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	113	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	M	GC/MSD	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	105	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 (GC) 5 (LC)	PTV (GC)	GC-MS, GC-MS/MS LC-MS/MS, GC-FPD	20
019	S	GC-MS	0.01	88	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05	89	2	50	7 Acetone Methanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	GC-MS	0.01	96	2	10	5	DSPE	TPP	2	PTV	GC-MS (single-quad)	20
022	M	GC-MS	0.01	111	2	10	5	DSPE		2	PTV	GC-MS	20
023	M	GC-MS	0.01	89	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.01			10	5	O		1,5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.02	88	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	109	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	M	GC-NPD	0.02	82	1	25	O (Toluene)	O (Carbon + Celite)		2	SPLITLESS	GC-ECD	2
028	M	GC-MS	0.01	94	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

FENITROTHION													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	S	GC-MS	0.02	112	1	15	4			2	SPLITLESS	GC-µECD-NPD CG-MS	35
030	M	GC-MS	0.015			25	1	GPC		1	PULSED SPLITLESS	GC-MS	17
031	S	GC-ITD	0.01	95	2	50	8	LL		1	SPLITLESS	GC-ITD	31
032	M	GC-NPD	0.01	91	2	100	3	O (Florisil - Column Chromatography)		0.1	SPLITLESS	GC-ECD	19
033	S	GC-MS	0.01	88	2	50	3	0		1	SPLIT/SPLITLESS	GC-NPD	5
034	S	Different Column	<0.01			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.050	102	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	M	GC-MS	0.01			20	1			2	SPLITLESS	GC-MS	19
037	M	CG-MS	0.01			15	4			1/10		GC-ECD; GC-TSD; GC-MS; HPLC-UV	22
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.01	103	1	100	2	GPC		1	SPLIT	GC-NPD and/or GC-ECD	1
040	M	GCMS	0.01	81	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	GC-MS/MS	0.01	86	1	75	1		Ditalimfos	4	SPLITLESS	GC-MS/MS	27
042	S	GC-MS	0.01	104.3	1	30	1			1	TPOCI	GC-NPD	11
043	M	GC/ITD	0.02	96	1	50	1	GPC	FPD	1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	MS	0.01	96	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.01	98	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.01			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	S	GC-MS/MS	0.02	105	1	20	8: Diisopropylether Hexane Iso-Octane		Ethion/Coumafos	2	SPLIT-LESS	GC-PFPD	31
049	M	GCMSMS	0.02	103	1	10	5	PSA	Triphenyl Phosphate	5	LARGE VOLUME	GC-MS/MS	20
050	M	GC/TOF	0.05	102	1	25	1	GPC		2		GC-NPD	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S	GC-MS/MS	0.01	73	1	20	3	LL,SPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	M	B,C	0.030	101	1	15	4			1	ON COLUMN	GC-NPD-HP101 column	2
054	M		0.02	84.9	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-NPD	0.05	87		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	M	GC-NPD	0.01	80	2	10	Dichloromethane	GPC		1	SPLITLESS	GC-NPD, GC-MS (Single-Quad)	13
057	S	GC/MS	0.010	81	2	50		SPE (Only for ECD and ELCD Detections)		1/3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.01	97	1	15	Dichloromethane			1	SPLITLESS	GC/ECD	13
059	S	GC/ECD	0.01	103	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

FENITROTHION													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.007			12	5	DSPE	Mirex/TPP	2	SPLIT/SPLITLESS	GC-PND/ECD	20
061		GC/MS	0.01	92	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.01	94	1	25	4		Tributylphosphat	1	SPLIT/SPLITLESS	GC-FPD	2
063	M		0.008	67	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	89.1	1	20	3			4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	99	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		ECD	0.01			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-PND	0.01			20	6	SPE	p,p-DDE	1	SPLITLESS	GC-MS	16
069	M	GC-MSMS	0.01			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.02	95	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.01			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	M	GCMSMS	0.02				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.02	95	1	15	4		Yes	2	PTV	GC-ITD	
074	M	GC-MS	0.01	103	1	20	4			2	SPLITLESS	GC- NPD	2
075	M	GC-NPD	0.02	100	1	15	4			3/1	PULSED SPLITLESS (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.01	92	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenilphospate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.05		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS		0.02			10	1	GPC	Triphenilphospate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081*			0.01									GC-ECD	
082	M	GC-MS	0.02	85	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.01	>70	2	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.05			15	5	0	Yes	10	LVI	GC-ITD	20
085	M	GC-MS	0.05			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	GC-MS	0.01	92	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	GC-MS/MS	0.005	93	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.01	96	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-FPD	31
089	S	GC-MS	0.05	104	2	50	3	GPC		1	PTV	GC-ECD	5
090	S	GC-MS	0.01	85	1	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

FENITROTHION													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	85	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-NPD	0.02	101	1	25	1			2	SPLITLESS	GC-NPD	2
093	M	GC-MS CI	0.005	106	1	10	5	DSPE	PCB138, TPP	3	PTV	GC-MS (EI)	20 Modified
094	NA												
095	M	GC-MS	0.03	88	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-NPD	0.01	91.9	1	30	1			1	SPLITLESS	GC-NPD	11
097	S	GC-MS	0.02	98	2	25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	S	GCMS	0.01	93	2	25	5	SPE	Yes	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD, GC-MS, LC-MS-MS	<0.05	104	1	25 10	2 6	GPC SPE	MiREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECDI, GC-MS LC-MS/MS	2 34
100	S	GC-NPD	0.006	75.6	2	50	3	LL		10	PTV-SOLVENT VENT	GC-ECD	5
101	M	GC/MS	0.01			10	5	DSPE	Triphenylphosphate	5	KAS	GC-MS	20
102	M	GC-MS	<0.05	84	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.01	88	1	10	1	SPE	Yes	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	96.3	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	TCDDP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-ECD, GC-MS	0.01			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ITD	0.01	106	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.01	89	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	NA												
109	S	GC-MS	0.05	77.1	1	30	1			1	DIRECT	GC-NPD	11
110	S	GC-MS	0.01	93.8	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/NPD	10
111	M	GC-ECD	0.01	94.6	1	2	Hexane Ether Ethyl Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.01	120	1	15	5	DSPE	EtoproFOS	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.01	69	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.001	101	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.01	81	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.02	94	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.01	110.7	1	30	1	GPC		1	SPLITLESS	GC-NPD	11
118	M	GC-MS/MS	0.01	92	1	10	5	DSPE		2	SPLITLESS	GC-MS/MS	18
119	M		0.01	98	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	133	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	107	1	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

FENITROTHION													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
122	S		0.05	80%	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	M					50	1			1	AUTO INJ	GC-MS	30
124	NA												
125	M	GC/MS	0.02	101	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S	GC-NPD, GC-ECD	0.02	89.3	1	5	Dichloromethane Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	S	GC-NPD, ECD	0.02	81	1	40	3	LL	Aldrin	2	SPLIT/SPLITLESS	GC-NPD, GC-ECD	5
128		GC-MS	0.05	88.5	1	12.5	4			3	SPLITLESS	GC-NPD	31 (SAR-1-04)
129	M	GC-MS	0.05			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.01			10	Dichloromethane	GPC	Fenclorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	84	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	NA												
133	NA												
134*	M	GC-MS/MS	0.05	103	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

FLUDIOXONIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.05	99	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	97	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.05			10	5	DSPE		1	SPLIT	GC-MS	23
005	M		0.05	72	1	10	1			20		LC-MS-MS	5
006	M	LC-MS/MS	0.05			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	LCMS	0.02	100	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.02	105	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	LCMSMS	0.02	99	1	10	1	None	Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M		0.02	96	1	50	1	HP-GPC		1	SPLITLESS	GC-ITD	12
011	M	GC-MS	0.01	74	2	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	GC-MS	0.03			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	76	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.01	69	2	50	2	GPC		2	PTV	GC-MS (single quad)	1
015	M	MS/MS	0.01	96	1	10	8 (CH ₃ OH/H ₂ O)		Oxfendazole	5		LC-MS/MS	33
016	M		0.01	104	1	15	5	PSA	Ethoprophos	10	LOOP	LC-MS/MS	18
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	102	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 (GC) 5 (LC)	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	GC-MS	0.05	86	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05	85	2	50	Acetone Methanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	GC-MS	0.02	98	2	10	5	DSPE	TPP	2	PTV	GC-MS (single-quad)	20
022	M	LC-MS/MS	0.01	101	1	10	5			20		LC-MS/MS	20
023	M	LC-MS/MS	0.05	88	2	10	6			20		LC-MS/MS	22
024		GC-MS	0.01			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.05	104	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M	LC-MS/MS	0.01	89	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	NA												
028	M	GC-MS LC-MS/MS	0.05	104	1	50	2 6	GPC SPE		1 10	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad) LC-MS/MS	1 16

APPENDIX 8. Methods used by participants for determining pesticides.

FLUDIOXONIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	NA												
030	M	GC-MS	0.01			25	1	GPC	No	1	PULSED SPLITLESS	GC-MS	17
031	S	LC-MS/MS	0.01	88	1	20	1	LL	NO	10		LC-MS/MS	14 + 16
032	M	GC-NPD	0.05	86	2	100	3	O (Florisil – Column Chromatography)		0.1	SPLITLESS	GC-NPD	19
033	NA												
034	NA												
035	NA												
036	M	LC-MS/MS	0.02			20	1			10		LC-MS/MS	19
037	NA												
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.03	107	1	100	2	GPC		1	SPLIT	GC-NPD and/or GC-ECD	1
040	M	LCMSMS	0.01	98	1	10	5	DSPE	Nicarbazin	5		LCMSMS	20
041	M	LC-MS/MS	0.01	86	1	75	1	No		5		LC-MS/MS	27
042	S	GC-NPD	0.05	111.8	1	30	1	O (Al ₂ O ₃)		25	AUTOSAMPLER	HPLC-DAD	11
043	S	GC/TOF		70	1	50	1 (with NaOH)	GPC		10	REODYNE	HPLC-DAD	5
044	No Results Given												
045	M	MS	0.05	94	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.02	98	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.02			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	S	GC-MS/MS	0.01	100	1	20	Diisopropylether Hexane Iso-Octane		Dichlobenil	2	SPLIT-LESS	GC-NPD	31
049	M	GCMSMS	0.02	102	1	10	5	PSA	Triphenyl Phosphate	5	LARGE VOLUME	GC-MS/MS	20
050	M	LC-MS/MS	0.01	96	1	10	5	LL		10		LC-MS/MS	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	NA												
053	NA												
054	M		0.02	92.0	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	NA												
056	NA												
057	S	GC/MS	0.010	73	2	50		SPE (Only for ECD and ELCD Detections)		1/3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.05	105	1	15	Dichloromethane			1	SPLITLESS	GC/NPD	13
059	S	GC/MS	0.01	120	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

FLUDIOXONIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.012			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061		GC/MS	0.05	104	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.05	91	1	15	4	NO	PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.025	77	1	25	2	GPC			SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.05	77.3	1	20	3			4	SPLITLESS	GC-ECD-NPD	5
066	M	LC-MS	0.01	102	1	10	5			3	PARTIAL LOOP	LC-MS/MS	20
067		NPD80	0.02			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-PND	0.01	86	1	20	6	SPE	p,p-DDE	1	SPLITLESS	GC-MS	16
069*	M	GC-MSMS	0.01			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.02	95.9	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.05			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	NA												
073	M	GC-MS	0.02	85	1	15	4		Yes	2	PTV	GC-ITD	
074	M	LC-MS/MS	0.01	90	1	20	4			5	LOOP	LC-MS/MS	2
075	NA												
076	M		0.02	99	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.02			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.05		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS		0.02			10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	S	LCMSMS	0.01	85	1	100	2	GPC; SPE	TPP	2	SPLITLESS/SPLIT	GC-NPD	1
082	M	GC-MS	0.03	103	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.05	60	1	50	3			1	SPLITLESS	GC-MS	5
084	NA												
085	M	GC-MS	0.01			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	LC-MS-MS	0.01	98	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.005	86	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.05	75	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-PPD	31
089	NA												
090	S	GC-MS	0.05	99	2	25	1	SPE		2		GC-ECD, GC-NPD, GC-PPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

FLUDIOXONIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	103	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	NA												
093	M	None	0.003	103	1	10	5	DSPE	PCB138, TPP	3	PTV	GC-MS (EI)	20 Modified
094	NA												
095	M	GC-MS	0.02	109	1	10	Acetone	Dichloromethane Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	HPLC	0.05	100.8	1	30	1	n-Al ₂ O ₃		20	DIRECT	HPLC-UV	10
097	S	GC-MS	0.02	96	2	25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	S	GCMS	0.05	100	2	25	5	SPE	YES	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD, GC-MS	<0.02	107	1	25	2	GPC	MIREX, HCB	1	SPLIT/SPLITLESS	GC-ECDI GC-MS	2
100	NA												
101	M	LC-MS/MS	0.01			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	M	GC-MS	<0.05	57	1	15	1	GPC		1	SPLI/SPLITLESS	GC-MS	21
103	M	LC-MS/MS	0.05	97	1	10	1	SPE	YES	10	LOOP	LC-MS/MS	31
104	M	GC-MS	<0.05	97.8	1	10	5	(Cleanup Mixture: PSA + MgSO ₄)	Anthracene	20	SOLVENT INJECTION	HPLC-UV	18
105	M	GC-NPD, GC-MS	0.05			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ITD	0.04	107	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	NA												
108	NA												
109	S	NP	0.05	79	1	30	1	GPC		20	LOOP	HPLC-UV	11
110	S	GC-MS	0.05	95.2	1	15	5	DSPE/AI2O3		2	SPLIT/SPLITLESS	GC/ECD	10
111	M	GC-ECD	0.05	86.7	1	2	Hexane Ether Ethyl Acetone	Column Chromatography		2	SPLITT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.02	97	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.05	71	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.02	102	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	NA												
116	M	GC-MS	0.01	100	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05			30	1	GPC		20	REODYNE	LC-MS	11
118	M	GC-MS/MS	0.1	102	1	10	5	DSPE		2	SPLITLESS	GC-MS/MS	18
119	M		0.01	100	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	104	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	73	2	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

FLUDIOXONIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
122	NA												
123	NA												
124	NA												
125	M	GC/MS	0.03	78	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S	GC-NPD	0.05	81.1	1	5	Dichloromethane Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	NA												
128		GC-NPD	0.1	54.7	1	25	1			100		HPLC-UV	31 (DAR-2-06)
129	M	LC-MS/MS	0.05			10	5	LL				LC-MS/MS	20
130	S	GC-MS	0.05			10	Dichloromethane	GPC	Fenclorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	90	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	NA												
133	NA												
134	M	GC-MS/MS	0.05	76	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

HEXYTHIAZOX													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001									NA				
002	M		0.05	74	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003									NA				
004									NA				
005	M		0.02	60	1	10	4			20		LC-MS-MS	2
006	M		0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	LCMS	0.25	91	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19.22
008									NA				
009	M	LCMSMS	0.02	77	1	10	1	None	Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M		0.02	99	1	50	1			5		LC-MS/MS	12
011	M	LC-MS/MS	0.02	105	1	10	5	SPE	TPP	10	SPLITLESS	LC-MS/MS	20
012	M	LC-MS-MS	0.02			10	6	LL		20	SAMPLE LOOP	LC-MS-MS (triple-quad)	16
013	M	LC-MS/MS	0.01	73	1	10	6		Imazalil D5	5		LC-MS /MS	18
014	M		0.02	56	2	50	2	GPC		2	PTV	GC-MS (single quad)	1
015	M	MS/MS	0.01	95	1	10	8 (CH ₃ OH/H ₂ O)		Oxfendazole	5		LC-MS/MS	33
016	M		0.01	72	1	15	5	PSA	Ethoprophos	10	LOOP	LC-MS/MS	18
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	93	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 (GC) 5 (LC)	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	LC-MS/MS	0.01	92	1	10	5	DSPE		5	LOOP	LC-MS/MS	20
020									NA				
021	S	LC-MS/MS	0.02	98	2	10	5	DSPE		5		LC-MS/MS	20
022	M	LC-MS/MS	0.01	101	1	10	5			20		LC-MS/MS	20
023	M	LC-MS/MS	0.02	78	2	10	6			20		LC-MS/MS	22
024		LC-MS	0.01			10	5	O		20		LC-MS/MS	23
025	S	GC-MS	0.05	89	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	92	1	25	1			10	LOOP	LC-MS/MS	31
027									NA				
028	M	GC-MS LC-MS/MS	0.02	102	1	50	2 6	GPC SPE		1 10	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad) LC-MS/MS	1 16

APPENDIX 8. Methods used by participants for determining pesticides.

HEXYTHIAZOX													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	NA												
030	M	LC-MS/MS	0.002			10	5		Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.02	40	2	20	1	LL		10		LC-MS/MS	14+16
032	NA												
033	NA												
034	NA												
035	NA												
036	NA												
037	NA												
038	NA												
039	M	LC-MS/MS	0.02	99.3	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	LCMSMS	0.01	105	1	10	5	DSPE	Pirimicarb-D6	20		LCMSMS	20
041	M	LC-MS/MS	0.01	92	1	75	1	No		5		LC-MS/MS	27
042	S	LC-MS/MS	0.02	107.8	1	10	5	DSPE		25	AUTOSAMPLER	HPLC-DAD	20
043	NA												
044	No Results Given												
045	M	LC-MS-MS	0.02	65	1	15	1			5	FULL LOOP	LC-MS-MS	2
046	NA												
047	M	GC-MS	0.1									GC-MS	31
048	s		0.01	89	1	10	4			5	SYRINGE DRIVE WITH LOOP	LC-MS/MS	14
049	M	LCMSMS	0.02		1	5	5			5		LC-MS/MS	3
050	S	GC/TOF	0.05	110	2	25	1	GPC		1		GC-GC/TOF	34
051	S		0.01			10	6	Diatomaceous Earth		25		LC-MSMS	
052	NA												
053	NA												
054	NA												
055	NA												
056	NA												
057	S	LC/MS/MS	0.010	78	2	15	4			10		LC-MS/MS	2
058	M	LC/MS/MS	0.02	85	1	15	Dichloromethane			20		LC/MS/MS	13
059	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

HEXYTHIAZOX													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.011			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061		LC/MS/MS	0.02	86	1	10	5	O		2		LC-MS/MS	20
062	M		0.01	85	1	10	6	LL on Chem Elut		25		LC-MS/MS	16
063	NA												
064	No Results Given												
065	M	GC/MS/MS	0.02	116.5	1	10	5	DSPE	TPP	5	PTV SPLITLESS	GC-MS/MS (triple-quad)	18
066	M	LC-MS	0.01	101	1	10	5			3	PARTIAL LOOP	LC-MS/MS	20
067	NA												
068	M	GC-MS	0.01	112	1	20	6	SPE	Triphenylphosphate	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069	M	LC-MS/MS	0.01			15	1		TPP	10	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	31
070	NA												
071	M	LC/MS/MS	0.02			20	4	GPC		10	RHEODYNE	LC/MS/MS	31
072	NA												
073	M	GC-MS	0.01	127	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	LC-MS/MS	0.01	107	1	20	4			5	LOOP	LC-MS/MS	2
075	NA												
076	M		0.02	89	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	NA												
078	No Results Given												
079	NA												
080	NA												
081	M		0.01	114	1	10	6	LL	TBZ-d6	10		LC-MS/MS	16
082	M	GC-MS	0.02	105	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.02	>70	2	50	3			1	SPLITLESS	GC-MS	5
084	NA												
085	NA												
086	M	LC-MS-MS	0.01	74	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.010	99	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088*			0.02			15	Dichloromethane	GPC		20	RHEODYNE VALVE	HPLC-DAD	31
089	NA												
090	S	HPLC-MS	0.05	70	2	5	5			5		LC-MS	31 (IN09/ANA54)

APPENDIX 8. Methods used by participants for determining pesticides.

HEXYTHIAZOX													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	88	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	NA												
093	M	None	0.003	99	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	NA												
095	M	GC-MS	0.04	82	1	10	Acetone	Dichloromethane Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-NPD	0.02	79.0	1	30	1			1	SPITLESS	GC-NPD	11
097	NA												
098	NA												
099	M	LC-MS-MS	<0.01	99	1	10	6	SPE	Triphenylphosphate	10	SPLIT/SPLITLESS	LC-MS/MS	34
100	NA												
101	M	LC-MS/MS	0.02			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	NA												
103	M	LC-MS/MS	0.02	75	1	10	1	SPE	YES	10	LOOP	LC-MS/MS	31
104	M	HPLC-UV	<0.05	83.2	1	10	5	(Cleanup Mixture: PSA + MgSO ₄)	Antracene	20	SOLVENT INJECTION	HPLC-UV	18
105	NA												
106	M	LC-MS/MS	0.01	98	1	10	Methanol Ammonia Acetate/ Acetic Acid (95%:5%)		¹³ C ₆ -Carbaryl	10		LC-MS/MS	8
107	NA												
108	NA												
109	S	NP	0.02	103.2	1	30	1			1	DIRECT	GC-NPD	11
110	S	LC-DAD	0.02	65.5	1	15	5	DSPE/Al ₂ O ₃		20	AUTOSAMPLER	HPLC-UV-DAD	10
111	NA												
112	NA												
113	NA												
114	M	LC-MS/MS	0.01	98.8	1	10	5		Triphenylphosphate	2	AUTOSAMPLER	LC-MS/MS	9
115	NA												
116	M	GC-MS	0.02	91	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.02			30	1	GPC		20	REODYNE	LC-MS	11
118	M	LC-MS/MS	0.01	103	1	10	5	DSPE		10		LC-MS/MS	18
119	NA												
120	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

HEXYTHIAZOX													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
121	NA												
122	NA												
123	NA												
124	NA												
125	M	GC/MS	0.02	89	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	NA												
127	NA												
128	NA												
129	M	LC-MS/MS	0.02			15	5	DSPE				LC-MS/MS	18
130	NA												
131	NA												
132	NA												
133	NA												
134	M	LC-MS/MS	0.05	82	1	15	Acetonitrile: Acetic Acid (99:1, v/v)	DSPE	TPP	10	UL PICKUP	LC-MS/MS	20
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

IPRODIONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.05	84	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	99	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.02			10	5	DSPE		1	SPLIT	GC-MS	23
005*			0.02	69	2	10	1			2	SPLITLESS	GC-ECD	5
006	M		0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	GCMS	0.05	102	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.02	104	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	GCMSMS	0.02	109	1	10	1	GPC	DDE-pp D8	1	ON-COLUMN	GC-MS and GC-MSMS	12
010	M		0.01	99	1	50	1	HP-GPC		2	SPLITLESS	GC-ECD	12
011	M	GC-MS	0.02	92	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	GC-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	85	1	15	4	NO		1	SPLITLESS	GC-MS	19
014	M		0.01	71	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	M	GC-MS	0.01	94	1	50	8: Acetone	0: LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	105	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	GC-MS	0.01	101	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3- dichloroisopropyl)- phosphate (GC-MS)	2 (GC) 5 (LC)	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019		GC-MS	0.02	88	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05	89	2	50	7 Acetone Methanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	GC-MS	0.01	95	2	10	5	DSPE	TPP	2	PTV	GC-MS (single-quad)	20
022	M	GC-MS	0.02	133	2	10	5	DSPE		2	PTV	GC-MS	20
023	M	GC-MS	0.02	72	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.1			10	5	O		1,5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	M	GC-MS	0.02	90	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	102	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	M	GC-NPD	0.02	77	1	25	O (Toluene)	O (Carbon + Celite)		2	SPLITLESS	GC-ECD	2
028	M	GC-MS	0.02	103	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

IPRODIONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	S	GC-MS	0.02	120	1	15	4			2	SPLITLESS	GC-µECD-NPD CG-MS	35
030*	M	GC-MS	0.02			25	1	GPC		1	PULSED SPLITLESS	GC-MS	17
031	S	GC-ITD	0.01	91	2	50	8	LL		1	SPLITLESS	GC-ITD	31
032	M	GC-NPD	0.02	85	2	100	3	O (Florisil - Column Chromatography)		0.1	SPLITLESS	GC-ECD	19
033	S	GC-MS	0.01	85	1	50	3	O		1	SPLIT/SPLITLESS	GC-NPD	5
034	S	Different Column	<0.02			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.050	85	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	M	GC-MS	0.02			20	1			2	SPLITLESS	GC-MS	19
037	M	CG-MS	0.02			15	4			1/10		GC-ECD; GC-TSD; GC-MS; HPLC-UV	22
038	M	GC-MS	0.01			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.02	105	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.01	97	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	GC-MS/MS	0.01	86	1	75	1		Ditalimfos	4	SPLITLESS	GC-MS/MS	27
042	S	GC-MS	0.02	97.4	1	30	1	GPC		0.1	TPOCI	GC-ECD	11
043	M	GC/TOF		60	1	50	1	GPC		1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	ECD	0.02	93	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.01	105	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.01			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	M	GC-MS (ITD)	0.02	83	1	5	8 Acetone Ethylacetate Hexane		TPP	1	SPLITLESS	GC-MS/MS	31
049	M	GCMSMS	0.03	98	1	37.5	1	GPC		1	SPLITLESS	GC-ECD,NPD,FPD	5
050*			0.05									GC-NPD	
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S		0.02	110	1	20	3	LL,SPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	NA												
054	M		0.02	76.9	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-ECD	0.05	90		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	M	GC-NPD	0.1	100	2	10	Dichloromethane	GPC		1	SPLITLESS	GC-NPD, GC-MS (Single-Quad)	13
057	s	GC/MS	0.010	81	2	50		SPE (Only for ECD and ELCD Defections)		1-3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.02	87	1	15	Dichloromethane			1	SPLITLESS	GC/ECD	13
059	S		0.02	112	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

IPRODIONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.006			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061		GC/MS	0.02	103	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.02	101	1	15	4		PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.02	109	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.02	90.4		20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	95	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		NPD80	0.01			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-PND	0.01	75	2	20	6	SPE	p,p-DDE	1	SPLITLESS	GC-MS	16
069	M	GC-MSMS	0.02			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.02	95	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.02			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	M	GCMSMS	0.05				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.02	95	1	15	4		Yes	2	PTV	GC-ITD	
074	M	GC-MS	0.02	97	1	20	4			2	SPLITLESS	GC-ECD/NPD	2
075	M	GC-ECD	0.05	96	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	100	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.05		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS		0.01			10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	S	NPD	0.01	100	1	100	2	GPC; SPE	tr-HCEO	2	SPLITLESS/SPLIT	GC-ECD	1
082	M	GC-ECD	0.02	85	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.02	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.02			15	5	0	Yes	10	LVI	GC-ITD	20
085	M	GC-MS	0.03			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	GC-MS	0.01	79	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087		GC-MS/MS	0.005	92		75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.02	82	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-PPD	31
089	NA												
090	S	GC-MS	0.02	75	1	25	1	SPE		2		GC-ECD, GC-NPD, GC-PPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

IPRODIONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	103	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-NPD	0.04	82	1	25	Toluene,Propanol	O		2	SPLITLESS	GC-ECD	2
093	M	None	0.005	106	1	10	5	DSPE	PCB138, TPP	3	PTV	GC-MS (EI)	20 Modified
094	M	GC-MS	0.01	75	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.02	88	1	10	Acetone	Dichloromethane Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-ECD	0.02	101.2	1	30	1			1	SPLITLESS	GC-ECD	11
097	S	GC-MS	0.02	80	2	25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	S	GCMS	0.02	103	2	25	5	SPE	Yes	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD, GC-MS	<0.02	95	1	25	2	GPC	MIREX, HCB	1	SPLIT/SPLITLESS	GC-ECDI GC-MS	5
100	S	GC-NPD	0.049	65	2	50	3	LL		10	PTV-SOLVENT VENT	GC-ECD	5
101	M	GC/MS	0.05			10	5	DSPE	Triphenylphosphate	5	KAS	GC-MS	20
102	M	GC-MS	<0.05	68	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.02	92	1	10	1	SPE	Yes	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	96.9	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	TCDDP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-ECD, GC-MS	0.02			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ECD	0.01	89	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	S		0.02	82	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108*		LC-MS/MS				10	6	LL		8		LC-MS/MS	16
109	S	GC-MS	0.02	79.2	1	30	1			1	DIRECT	GC-NPD	11
110	S	GC-MS	0.02	93.6	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111	M	GC-NPD	0.02	89.7	1	2	Hexane Ether Ethyl Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.02	103	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113*	S		0.02			100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.02	112	1	10	1		PCB-28	1	ON-COLUMN	GC- ECD	9
115	NA												
116	NA												
117	S		0.05	73	2	30	1	GPC		1	SPI	GC-ECD	11
118	NA												
119	M		0.01	96	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	104	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	83	1	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

IPRODIONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
122*	S		0.05			50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	M		0.02			50	1			1	AUTO INJ	GC-MS	30
124	S	GC-ECD	<0.012	28	2	100	3	GPC, SPE		10	SOLVENT VENT PTV	GC-ECD	5
125	M	GC/MS	0.02	85	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S	GC-ECD	0.05	92.4	1	5	Dichloromethane Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	S	GC-NPD, ECD	0.05	81	1	40	3	LL	Aldrin	2	SPLIT/SPLITLESS	GC-NPD, GC-ECD	5
128	M	GC-MS	0.05	86.8	1	6.25	4			1	SPLITLESS	GC-ECD	31 [SAR-2-00 oc,p]
129	M	GC-MS/MS	0.04			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.01			10	Dichloromethane	GPC	Fenclorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	91	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132*	S		0.02	106	1	100	Acetone Dichloromethane NaCl Ethyl Acetate	GPC, SPE		15	SOLVENT VENT	GC-ECD	
133	NA												
134	M	GC-MS/MS	0.02	86	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

MYCLOBUTANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.02	89	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	93	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.02			10	5	DSPE	Isodrin	1	SPLIT	GC-ECD, GC-MS	23
005	M		0.02	70	1	10	1			20		LC-MS-MS	5
006	M	LC-MS/MS	0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	NA												
008	S	GC-MS	0.02	100	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	LCMSMS	0.02	91	1	10	1		Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M		0.01	96	1	50	1	HP-GPC		5 2	SPLITLESS	LC-MS/MS GC-ECD	12
011	M	GC-MS	0.02	105	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	83	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.01	103	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	M	GC-MS	0.05	90	1	50	Acetone	0: LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	99	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	95	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3- dichloroisopropyl)- phosphate (GC-MS)	2 (GC) 5 (LC)	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	LC-MS/MS	0.01	102	1	10	5	DSPE		5	LOOP	LC-MS/MS	20
020	S	GC-MS	0.05	79	2	50	7 Acetone Methanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	LC-MS/MS	0.02	92	2	10	5	DSPE		5		LC-MS/MS	20
022	M	GC-MS	0.02	75	2	10	5	DSPE		2	PTV	GC-MS	20
023	M	GC-MS	0.02	93	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.01			10	5	O		1,5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.05	95	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	101	1	25	1			10	LOOP	LC-MS/MS	31
027	M	GC-TSD	0.02	72	1	25	O (Toluene)	O (Carbon + Celite)		2	SPLITLESS	GC-ECD	2
028	M	GC-MS	0.02	99	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

MYCLOBUTANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	S	MS	0.01	107	1	15	4			2	SPLITLESS	GC-µECD-NPD CG-MS	35
030	M	LC-MS/MS	0.002			10	5		Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.01			20	1	LL		10		LC-MS/MS	14, 16
032	M	GC-NPD	0.02	85	2	100	3	O (Florisil - Column Chromatography)		0.1	SPLITLESS	GC-ECD	19
033	S	GC-MS	0.01	87	2	50	3	O		1	SPLIT/SPLITLESS	GC-NPD	5
034	S	Different Column	<0.02			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.050	98	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	M	GC-MS	0.02			20	1			2	SPLITLESS	GC-MS	19
037	NA												
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.01	101	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.01	102	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	LC-MS/MS	0.01	90	1	75	1			5		LC-MS/MS	27
042	S	GC-MS	0.02	89.6	1	30	1	GPC		0.1	TPOCI	GC-ECD	11
043	M	GC/ITD	0.02			50	1	GPC	FPD	1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	LC-MS-MS	0.02	100	1	15	4 1			1 5	SPLITLESS FULL LOOP	GC-NPD, GC-ECD, GC-ITD LC-MS-MS	2
046	M	GC-MS	0.02	103	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.01			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	M	GC-MS (ITD)	0.01	65	1	5	Acetone Ethylacetate Hexane		TPP	1	SPLITLESS	GC-MS/MS	31
049	M	GCNPD	0.02	85	1	37.5	1	GPC		1	SPLITLESS	GC-ECD,NPD,FPD	5
050	M	GC/TOF	0.05	89	1	25	1	GPC		2		GC-NPD	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S	GC-MS/MS	0.02	87	1	20	3	LL,SPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	M	A,D	0.100	107	1	15	4			1	SPLITLESS	GC-ECD-HP-5 column	2
054	M	GC/MS	0.02	75.9	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-NPD	0.05	88		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	NA												
057	S	GC/MS	0.010	76	2	50		SPE (Only for ECD and ELCD Detections)		1/3	SPLITLESS ON COLUMN SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.02	98	1	15	Dichloromethane			1	SPLITLESS	GC/ECD	13
059	S		0.1	104	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

MYCLOBUTANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.01			12	5	DSPE	Mirex/TPP	2	SPLIT/SPLITLESS	GC-PND/ECD	20
061	M	GC/MS	0.02	96	1	10	5	PSA	TPP	1	PTV	GC/MS(single quad)	20
062	M	GC-MS	0.02	100	1	15	4		PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.02	81	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.02	95.4	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	93	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		NPD80	0.01			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-MS	0.01	116	1	20	6	SPE	Triphenylphosphate	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069*	M	GC-MSMS	0.01			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.02	99.2	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.02			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	M	GCMSMS	0.05				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.01	99	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	GC-MS	0.01	109	1	20	4			2	SPLITLESS	GC- NPD	2
075	M	GC-NPD	0.05	99	1	15	4			03-ene	PULSED SPLITLESS (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	88	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.01		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	NA												
081	M		0.01	101	1	10	6	LL	TBZ-d6	10		LC-MS/MS	16
082	M	GC-MS	0.02	95	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.02	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.02			15	5	0	Yes	10	LVI	GC-ITD	20
085	M	GC-MS	0.02			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	LC-MS-MS	0.01	60	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.005	91	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.02	78	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-FPD	31
089	NA												
090	S	GC-MS	0.02	82	1	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

MYCLOBUTANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	93	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-ECD	0.1	83	1	25	Toluene Propanol	O		2	SPLITLESS	GC-ECD	2
093	M	GC-MS	0.01	101	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	M	GC-MS	0.01	87	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.02	86	1	10	Acetone	Dichloromethane Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-ECD	0.02	105.4	1	30	1			1	SPLITLESS	GC-ECD	11
097	s	GC-MS	0.02	88	2	25	Ethyl Acetate Cyclohexane			1	SPLITLESS		5
098	M	GCMS	0.02	93	2	25	5	SPE	Yes	2		LC-MS/MS	7
099	M	GC-ECD, GC-MS LC-MS-MS	<0.01	98	1	25 10	2 6	GPC SPE	MIREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECDI, GC-MS LC-MS/MS	2 34
100	S	GC-NPD	0.003	68.2	2	50	3	LL		10	PTV-SOLVENT VENT	GC-ECD	5
101	M	LC-MS/MS	0.02			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	M	GC-MS	<0.05	23	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.02	85	1	10	1	SPE	YES	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	81.2	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	TCDDP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-ECD, GC-MS	0.01			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ITD	0.01	115	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.02	89	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	NA												
109	S	NP	0.05	71.2	1	30	1			1	DIRECT	GC-NPD	11
110	S	GC-MS	0.02	87.2	1	15	5	DSPE/AI2O3		2	SPLIT/SPLITLESS	GC/ECD	10
111	M	GC-ECD	0.02	85.9	1	2	Hexane, Ether Ethyl Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.02	106	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.02	70	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.02	104	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.02	73	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.01	97	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.1	78	2	30	1	GPC		1	SPI	GC-ECD	11
118	M	LC-MS/MS	0.01	97	1	10	5	DSPE		10		LC-MS/MS	18
119	M		0.01	98	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	110	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	91	2	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

MYCLOBUTANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
122	S		0.05	80%	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	NA												
124	NA												
125	M	GC/MS	0.02	77	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S	GC-NPD	0.04	63.6	1	5	Dichloromethane Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	NA												
128	M	GC-MS	0.05	80.7	1	6.25	4			1	SPLITLESS	GC-ECD	31 [SAR-2-00 oc,p]
129	M	GC-MS/MS	0.02			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.02			10	Dichloromethane	GPC	Fenclorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.025	94	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	NA												
133	NA												
134	M	GC-MS/MS	0.02	74	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

OXAMYL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	NA												
002	M		0.01	91	1	5	5			10		LC-MS/MS	20
003	NA												
004	M	LC-MS/MS	0.01			10	5	DSPE	TPP	50		LC-MS/MS	23
005	M		0.02	65	1	10	1			20		LC-MS-MS	5
006	M		0.01			10	5	DSPE		10		LC-MS/MS	20
007	NA												
008	NA												
009	M	LCMSMS	0.02	90	1	10	1		Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M		0.005	98	1	50	1			5		LC-MS/MS	12
011	M	LC-MS/MS	0.02	104	1	10	5	SPE	TPP	10	SPLITLESS	LC-MS/MS	20
012	M	GC-MS	0.01			10	6	LL		20	SAMPLE LOOP	LC-MS-MS (triple-quad)	16
013	M	LC-MS/MS	0.01	83	1	10	6		Imazalil D5	5		LC-MS /MS	18
014	M		0.01	90	2	50	2	GPC		2	PTV	GC-MS (single quad)	1
015	M	MS/MS	0.01	83	1	10	8 (CH ₃ OH/H ₂ O)		Oxfendazole	5		LC-MS/MS	33
016	M		0.01	69	1	15	5	PSA	Ethoprophos	10	LOOP	LC-MS/MS	18
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	90	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	LC-MS/MS	0.01	96	1	10	5	DSPE		5	LOOP	LC-MS/MS	20
020	S		0.04	106	2	20	7-Dicloromethane	GPC		20		HPLC-FL	33
021	S	LC-MS/MS	0.01	96	2	10	5	DSPE		5		LC-MS/MS	20
022	M	LC-MS/MS	0.05	96	1	10	5			20		LC-MS/MS	20
023	M	LC-MS/MS	0.01	121	2	10	6			20		LC-MS/MS	22
024		LC-MS	0.01			10	5	O		20		LC-MS/MS	23
025*			0.5			15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.05	74	1	25	1			10	LOOP	LC-MS/MS	31
027	NA												
028	M + S	LC-MS/MS	0.01	94	1	50	6	SPE		10		LC-MS/MS	16

APPENDIX 8. Methods used by participants for determining pesticides.

OXAMYL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	S	LC-FL	0.036	81	1	20	4	GPC		50		HPLC-FL (DER:OPA+NaOH)	35
030	M	LC-MS/MS	0.002			10	5	No	Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.01			5	6	LL	No	10		LC-MS/MS	14, 16
032	NA												
033	NA												
034	NA												
035	NA												
036	NA												
037	NA												
038	NA												
039	M	LC-MS/MS	0.01	74.6	1	100	2	GPC		20		HPLC-UV with post column derivatization	1, 4
040	M	LCMSMS	0.01	94	1	10	5	DSPE	Pirimicarb-D6	20		LCMSMS	20
041	M	LC-MS/MS	0.01	90	1	75	1			5		LC-MS/MS	27
042	S	LC-MS/MS	0.01	96.2	1	30	1	O (Al ₂ O ₃)		25	AUTOSAMPLER	HPLC-DAD	11
043	S			60	1	50	1 (with NaOH)	GPC		10	REODYNE	HPLC-DAD	5
044	No Results Given												
045	M	LC-MS-MS	0.01	70	1	15	1	NO		5	FULL LOOP	LC-MS-MS	2
046	NA												
047	M	LC-MS/MS	0.005			10	5	DSPE	TPP	20		LC-MS/MS (Triple-Quad)	20
048	s	LC-MS/MS	0.05	101	1	50	4			50	FULL LOOP	HPLC-FL	31
049	M	LCMSMS	0.01	105	1	5	5			5		LC-MS/MS	14
050	M	GC/TOF	0.01	95	1	25	1	GPC		1		GC-GC/TOF	3
051	S		0.01			10	6	Diatomaceous Earth		25		LC-MSMS	34
052	NA												
053	NA												
054	NA												
055	NA												
056	NA												
057	S	LC/MS/MS	0.010	72	2	15	4			10		LC-MS/MS	2
058	M	LC-MS/MS	0.01	85	1	15	Dichlorometane			20		LC/MS/MS	13
059	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

OXAMYL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.0014			12	5	DSPE		20		LC-MS/MS	20
061	M	LC-MS/MS	0.01	88	1	10	5	PSA O	TPP	1 2	PTV	GC/MS (single quad) LC-MS/MS	20
062	M		0.01	104	1	10	6	LL on Chem Elut		25		LC-MS/MS	16
063	M		0.01	110	1	10	6		C13-carbaryl	10		LC-MS/MS	8
064	No Results Given												
065	S	LC/MS/MS	0.01	97.0	1	20	5	SPE		5		LC-MS/MS	16
066	M	LC-MS	0.01	102	1	10	5			3	PARTIAL LOOP	LC-MS/MS	20
067	NA												
068	M	GC-MS	0.01	98	1	20	6	SPE	Triphenylphosphat	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069	M	LC-MS/MS	0.05			15	1		TPP	10	AUTO-ADDITION	LC-MS/MS	31
070	S	LC-MS/MS	0.02	97.9	1	20	4			2		LC-MS/MS	5
071	NA												
072	M	LCMSMS	0.05				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	LC-MS/MS	0.01	102	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	LC-MS/MS	0.01	76	1	20	4			5	LOOP	LC-MS/MS	2
075	NA												
076	M		0.01	101	1	20	Methanol/Water	SPE		35		LC/MS/MS	34
077	M	Sampl Additions	0.05			10	1	GPC	BDMC (4-Bromo-3,5-dimethyl-N-Methylcarbamate)	10		HPLC FL WITH POST DERIVATIZATION COLUMN	13
078	No Results Given												
079	NA												
080	NA												
081	M		0.01	96	1	10	6	LL	TBZ-d6	10		LC-MS/MS	16
082	M	LC-MS	0.02	87	1	15	4	SPE		10		HPLC-FL	2
083	NA												
084	NA												
085*	M	GC-MS	0.01			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (Based on No. 7)
086	M	LC-MS-MS	0.01	94	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.005	59	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	NA												
089	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

OXAMYL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
090	S	HPLC-MS	0.05	70	2	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5
091	NA												
092	NA												
093	M	None	0.005	91	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	NA												
095	M	LC-MS	0.05	85	1	10	Ethyl Acetate			25		HPLC-MS	
096	S	HPLC	0.01	85.0	1	30	1	n-Al ₂ O ₃		20	DIRECT	HPLC-UV	10
097	NA												
098	M		0.01	88	1	25	5	SPE	Yes	2		LC-MS/MS	7
099	M	LC-MS-MS	<0.01	119	1	10	6	SPE	Triphenylphosphate	10	SPLIT/SPLITLESS	LC-MS/MS	34
100	S	HPLC-FLD	0.01	90	2	10	4	SPE		20	AUTO SAMPLER	HPLC-FL	6
101	M	LC-MS/MS	0.01			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	NA												
103	M	LC-MS/MS	0.01	90	1	10	1	SPE	Yes	10	LOOP	LC-MS/MS	31
104	M	HPLC-UV	<0.05	73.2	1	10	5	(Cleanup Mixture: PSA + MgSO ₄)	Anthracene	20	SOLVENT INJECTION	HPLC-UV	18
105*			0.1			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	LC-MS/MS	0.01	90	1	10	Methanol-Ammonia Acetate/ Acetic Acid (95%:5%)		¹³ C ₂ -Carbaryl	10		LC-MS/MS	8
107	NA												
108	NA												
109	S	HPLC	0.05	90.1	1	30	1	GPC		20	LOOP	HPLC-UV	11
110	S	LC-DAD	0.01	62.7	1	15	5	DSPE/Al ₂ O ₃		20	AUTOSAMPLER	HPLC-UV-DAD	10
111*			0.01	89.9	2	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	NA												
113	S	HPLC-FL	0.01	87	1	25	4	LL	3,4,5-trimethacarb	100	AUTOSAMPLER	HPLC-FL	6
114	M	LC-MS/MS	0.01	100	1	10	5		Triphenylphosphate	2	AUTOSAMPLER	LC-MS/MS	9
115	NA												
116	NA												
117	S		0.01			30	1	GPC		20	REODYNE	LC-MS	11
118	M	LC-MS/MS	0.02	90	1	10	5	DSPE		10		LC-MS/MS	18
119	M		0.01	85	1	10	5	DSPE	10		LC-MS/MS	20	

APPENDIX 8. Methods used by participants for determining pesticides.

OXAMYL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
120													
	NA												
121	S		0.01	72	2	10	1	GPC	Yes	20	PARTIAL LOOP	HPLC-DAD, LC-MS/MS	29
122													
	NA												
123													
	NA												
124													
	NA												
125	M	LC/MS/MS	0.01	88	1	75	1	GPC		10		LC/MS/MS triple quadrupole	34
126													
	NA												
127													
	NA												
128*			0.1			0.75	4			100		HPLC-FLD	31 (SAR-1-00)
129	M	LC-MS/MS	0.05			15	5	DSPE				LC-MS/MS	18
130													
	NA												
131*	M		0.1	62	2	15	4			20	PARTIAL LOOPFILL	LC-MS/MS	2
132													
	NA												
133													
	NA												
134	M	LC-MS/MS	0.05	74	1	15	Acetonitrile: Acetic Acid (99:1, v/v)	DSPE	TPP	10	µL PICKUP	LC-MS/MS	20
135													
	No Results Given												
136													
	NA												
137													
	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

PENCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.05	81	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	94	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.05			10	5	DSPE	Isodrin	1	SPLIT	GC-ECD, GC-MS	23
005	M		0.02	70	1	10	1			20		LC-MS-MS	5
006	M	LC-MS/MS	0.03			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	LCMS	0.02	106	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.02	98	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	LCMSMS	0.02	97	1	10	1	None	Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M		0.05	104	1	50	1	No HP-GPC		5 1	- SPLITLESS	LC-MS/MS GC-ITD	12
011	M	GC-MS	0.05	72	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	88	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.01	89	2	50	2	GPC		2	PTV	GC-MS (single quad)	1
015	M	GC-MS	0.02	94	1	50	8: Acetone	0: LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	111	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	98	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	GC/MS	0.03	84	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05	89	2	50	7-Acetone/ Methanol	SPE	yes	1	ON COLUMN	GC-MS	33
021	S	LC-MS/MS	0.01	102	2	10	5	DSPE		5		LC-MS/MS	20
022	M	GC-MS	0.02	97	2	10	5	DSPE		2	PTV	GC-ECD	20
023	M	GC-MS	0.05	78	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.02			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.05	94	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	102	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	M	GC-TSD	0.02	83	1	25	O (Toluene)	O (Carbon + Celite)		2	SPLITLESS	GC-ECD	2
028	M	GC-MS	0.05	101	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

PENCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029*						15	4			2	SPLITLESS	GC-µECD-NPD CG-MS	35
030	M	LC-MS/MS	0.002			10	5		Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.01	74	2	20	1	LL		10		LC-MS/MS	14, 16
032	M	GC-NPD	0.05	84	2	100	3	O (Florisil – Column Chromatography)		0.1	SPLITLESS	GC-ECD	19
033	NA												
034	S	Different Column	<0.05			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.050	98	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	M	GC-MS	0.02			20	1			2	SPLITLESS	GC-MS	19
037	M	CG-MS	0.05			15	4			1/10		GC-ECD; GC-TSD; GC-MS; HPLC-UV	22
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.02	99.6	1	100	2	GPC		1	SPLIT	GC-NPD and/or GC-ECD	1
040	M	GCMS	0.01	100	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	LC-MS/MS	0.01	90	1	75	1			5		LC-MS/MS	27
042	S	GC-MS	0.05	95.4	1	10	5	DSPE		1	TPOCI	GC-NPD	20
043	M	GC/ITD				50	1	GPC	FPD	1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	ECD	0.02	94	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.02	104	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.01			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	M	GC-MS (ITD)	0.01	78	1	5	8 Acetone/ Ethylacetate/ Hexane		TPP	1	SPLITLESS	GC-MS/MS	31
049	M	GCMSMS	0.01	96	1	10	5	PSA	Triphenyl Phosphate	5	LARGE VOLUME	GC-MS/MS	20
050	S	GC/TOF	0.05	108	2	25	1	GPC		1		GC-GC/TOF	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052*	S		0.03	80	1	20	3	LLSPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	M	B,C	0.050	98	1	15	4	No	No	1	ON COLUMN	GC-NPD-HP101 column	2
054	M	GC/MS	0.01	75.3	1	25		GPC/SPE	no	5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	NA												
056	NA												
057	S	GC/MS	0.010	78	2	50		SPE (Only for ECD and ELCD Detections)		1-3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.05	97	1	15	Dichloromethane			1	SPLITLESS	GC/MS	13
059	S		0.1	105	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

PENCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.002			12	5	DSPE	Mirex/TPP	2	SPLIT/SPLITLESS	GC-PND/ECD	20
061	M	GC/MS	0.05	96	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.01	112	1	15	4		PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.007	86	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	85.5	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	98	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		NPD80	0.01			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-MS	0.01	110	1	20	6	SPE	Triphenylphosphate	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069	M	GC-MSMS	0.02			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.02	105	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.05			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	NA												
073	M	GC-MS	0.01	111	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	GC-MS	0.01	78	1	20	4			4	SPLITLESS	GC-MS (SIM)	2
075	M	GC-NPD	0.05	103	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	93	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.02		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS	0.02				10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	M		0.01	101	1	10	6	LL	TBZ-d6	10		LC-MS/MS	16
082	M	GC-MS	0.02	82	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.05	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.05			15	5	0	Y	10	LVI	GC-ITD	20
085	M	GC-MS	0.05			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	LC-MS-MS	0.01	91	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087			0.010	100	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.05	94	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-PPD	31
089	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

PENCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
090	S	GC-MS	0.05	79	1	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5
091	M	GC-MS	0.05	91	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-NPD	0.15	82	1	25	1			2	SPLITLESS	GC-NPD	2
093	M	None	0.01	102	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	NA												
095	M	GC-MS	0.02	94	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-ECD	0.05	100.3	1	30	1			1	SPLITLESS	GC-ECD	11
097	S	GC-MS	0.02	80	2	25	Ethyl Acetate/Cyclohexane			1	SPLITLESS		5
098	S	GCMS	0.05	94	2	25	5	SPE	Yes	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD, GC-MS, LC-MS-MS	<0.04	94	1	25 10	2 6	GPC SPE	MIREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECD, GC-MS LC-MS/MS	5 34
100	NA												
101	M	LC-MS/MS	0.05			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	M	GC-MS	<0.05	31	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.05	98	1	10	1	SPE	Yes	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	111.8	1	10	5	(Cleanup Mixture: PSA + MgSO ₄)	TCDEP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-MS	0.02			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ITD	0.01	105	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	S		0.02	74	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	M	LC-MS/MS	0.2	70	2	10	6	LL		8		LC-MS/MS	16
109	S	EC	0.02	111	1	30	1	GPC		1	SPLIT 1/10	GC-ECD	11
110	S	GC-MS	0.05	97.4	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111	M	GC-NPD	0.05	90.3	1	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.02	99	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.05	64	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.002	103	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.05	74	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.007	99	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05	83	2	30	1	GPC		1	SPI	GC-ECD	11
118	M	LC-MS/MS	0.05	99	1	10	5	DSPE		10		LC-MS/MS	18
119	M		0.01	98	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	124	1	25	2	GPC		1	SPLITLESS	GC-MS	1

APPENDIX 8. Methods used by participants for determining pesticides.

PENCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
121	S	GC/MS	0.01	108	2	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD, GC/MS	29
122	S		0.05	80%	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	NA												
124	NA												
125	M	GC/MS	0.02	92	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS Single Quadrupole	1
126	S	GC-ECD	0.05	53.8	2	5	Dichloromethane: Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	NA												
128	M	GC-MS	0.05	83.2	1	6.25	4			1	SPLITLESS	GC-ECD	31 (SAR-2-00 oc.p)
129	M	GC-MS/MS	0.05			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.05			10	Dichloromethane	GPC	Fenchlorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-ITD	0.05	84	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-TOF	2
132	NA												
133	NA												
134	M	GC-MS/MS	0.05	80	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

PROCYMIDONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.02	89	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	96	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.02			10	5	DSPE	Isodrin	1	SPLIT	GC-ECD, GC-MS	23
005	M		0.02	78	1	10	4			2	SPLITLESS	GC-MS-MS (ION TRAP)	2
006	M		0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	GCMS	0.03	104	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.02	91	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	GCMSMS	0.02	91	1	10	1	GPC	DDE-pp D8	1	ON-COLUMN	GC-MS and GC-MSMS	12
010	M	B	0.05	98	1	50	1	HP-GPC		1	SPLITLESS	GC-ITD	12
011	M	GC-MS	0.01	92	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	GC-MS	0.005			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	S	GC-MS	0.01	84	1	15	4	NO		1	SPLITLESS	GC-MS	19
014	M		0.01	100	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	M	GC-MS	0.02	90	1	50	8: Acetone	0: LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	103	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	S	GC/MSD	0.01			100	2	GPC, SPE		1	SPITT	GC-MSD, GC-ECD	1
018	M	GC-MS/MS	0.01	99	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	GC/MS	0.01	114	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05	70	2	50	7-Acetone/ Metanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	GC-MS	0.02	104	2	10	5	DSPE	TPP	2	PTV	GC-MS (single-quad)	20
022	M	GC-MS	0.01	99	2	10	5	DSPE		2	PTV	GC-ECD	20
023	S	GC-MS	0.02	94	1	75	2	GPC		1		GC-ECD	1
024		GC-MS	0.01			10	5	O		1,5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.02	85	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	99	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	M	GC-ECD	0.02	73	1	25	1	O (Carbon + Celite)		2	SPLITLESS	GC-NPD	2
028	M	GC-MS	0.02	99	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

PROCYMIDONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	S	GC-MS	0.01	106	1	15	4	NO		2	SPLITLESS	GC-µECD-NPD CG-MS	35
030	M	GC-MS	0.01			25	1	GPC		1	PULSED SPLITLESS	GC-MS	17
031	S	GC-ITD	0.01	83	2	50	8	LL		1	SPLITLESS	GC-ITD	31
032	M	GC-NPD	0.02	96	2	100	3	O (Florisil – Column Chromatography)		0.1	SPLITLESS	GC-ECD	19
033	S	GC-MS	0.01	84	2	10	3	O		1	SPLIT/SPLITLESS	GC-ECD	5
034	S	Different Column	<0.02			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.020	96	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	M	GC-MS	0.02			20	1	NO		2	SPLITLESS	GC-MS	19
037	M	CG-MS	0.02			15	4	NO		1/10		GC-ECD; GC-TSD; GC-MS; HPLC-UV	22
038	M	GC-MS	0.01			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.02	99.8	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.01	101	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	GC-MS/MS	0.01	91	1	75	1	No	Ditalimfos	4	SPLITLESS	GC-MS/MS	27
042	S	GC-MS	0.02	97.8	1	30	1	GPC		0.1	TPOCI	GC-ECD	11
043	M	GC/TOF		75	1	50	1	GPC		1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	MS	0.02	104	2	15	4	NO		1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.01	107	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.02			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	M	GC-MS (ITD)	0.01	105	1	5	8 Acetone/ Ethylacetate/ Hexane	No	TPP	1	SPLITLESS	GC-MS/MS	31
049	M	GCMSMS	0.02	98	1	37.5	1	GPC		1	SPLITLESS	GC-ECD,NPD,FPD	5
050	M	GC/TOF	0.01	96	1	25	1	GPC		2		GC-ECD	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S	GC-MS/MS	0.02	70	1	20	3	LL,SPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	NA												
054	M	GC/MS	0.01	96.3	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-ECD	0.05	83		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	M	GC-NPD	0.05	90	2	10	Dichloromethane	GPC		1	SPLITLESS	GC-NPD, GC-MS (Single-Quad)	13
057	S	GC/MS	0.010	82	2	50		SPE (Only for ECD and ELCD Detections)		1-3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.02	83	1	15	Dichloromethane			1	SPLITLESS	GC/ECD	13
059	S		0.01	107	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

PROCYMIDONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.003			12	5	DSPE	Mirex/TPP	2	SPLIT/SPLITLESS	GC-PND/ECD	20
061	M	GC/MS	0.02	103	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.01	101	1	15	4	NO	PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.02	92	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	94.4	1	20	3			4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	98	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		ECD	0.01			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-PND	0.01	73	2	20	6	SPE	p,p-DDE	1	SPLITLESS	GC-MS	16
069	M	GC-MSMS	0.02			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.02	108	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.02			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	M	GCMSMS	0.02				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.02	88	1	15	4		Yes	2	PTV	GC-ITD	
074	M	GC-MS	0.02	101	1	20	4			2	SPLITLESS	GC- NPD	2
075	M	GC-NPD	0.05	101	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	99	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.02		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS	0.01				10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	S		0.01	97	1	100	2	GPC; SPE	tr-HCEO	2	SPLITLESS/SPLIT	GC-ECD	1
082	M	GC-ECD	0.02	86	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.02	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.02			15	5	0	Y	10	LVI	GC-ITD	20
085	M	GC-MS	0.03			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	GC-MS	0.01	92	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.005	94	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.02	88	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-PPD	31
089	S	GC-MS	0.05	73.1	2	50	3	GPC		1	PTV	GC-ECD	5
090	S	GC-MS	0.02	110	2	25	1	SPE		2		GC-ECD, GC-NPD, GC-PPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

PROCYMIDONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	91	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-NPD	0.04	110	1	25	1			2	SPLITLESS	GC-NPD	2
093	M	None	0.001	104	1	10	5	DSPE	PCB138, TPP	3	PTV	GC-MS (EI)	20 Modified
094	M	GC-MS	0.01	107	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.02	93	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-ECD	0.02	100.3	1	30	1			1	SPLITLESS	GC-ECD	11
097	s	GC-MS	0.02	83	2	25	Ethyl Acetate/ Cyclohexane			1	SPLITLESS		5
098	S	GCMS	0.02	87	2	25	5	SPE	Yes	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD, GC-MS	<0.02	106	1	25	2	GPC	MIREX, HCB	1	SPLIT/SPLITLESS	GC-ECD GC-MS	5
100	S	GC-NPD	0.003	87.2	2	50	3	LL		10	PTV-SOLVENT VENT	GC-ECD	5
101	M	GC/MS	0.02			10	5	DSPE	Triphenylphosphate	5	KAS	GC-MS	20
102	M	GC-MS	<0.05	92	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.02	100	1	10	1	SPE	Yes	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	88.5	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	TCDEP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-ECD, GC-MS	0.01			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ECD	0.01	86	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.01	90	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	M	LC-MS/MS	1.3			10	6	LL		8		LC-MS/MS	16
109	S	EC	0.02	77.5	1	30	1	GPC		1	SPLIT 1/10	GC-ECD	11
110	S	GC-MS	0.02	102.8	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111		GC-ECD	0.02	95.4	2	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.01	105	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.02	70	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.02	106	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.02	90	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.006	102	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05	79	2	30	1	GPC		1	SPI	GC-ECD	11
118	M	GC-MS/MS	0.01	95	1	10	5	DSPE		2	SPLITLESS	GC-MS/MS	18
119	M		0.01	104	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	102	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	103	1	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

PROCYMIDONE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
122	S		0.05	90%	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	M		0.02			50	1			1	AUTO INJ	GC-MS	30
124	S	GC-ECD	<0.012	85	2	100	3	GPC, SPE		10	SOLVENT VENT PTV	GC-ECD	5
125	M	GC/MS	0.02	88	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S	GC-ECD	0.05	91.7	1	5	Dichloromethane: Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	S	GC-NPD, ECD	0.05	81	1	40	3	LL	Aldrin	2	SPLIT/SPLITLESS	GC-NPD, GC-ECD	5
128	M	GC-MS	0.02	95.5	1	6.25	4			1	SPLITLESS	GC-ECD	31 [SAR-2-00 oc,p]
129	M	GC-MS/MS	0.02			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.01			10	Dichloromethane	GPC	Fenchlorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.025	82	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	S	GC-MS	0.02	91	1	100	Acetone, Dichloromethane, NaCl, Ethyl Acetate	GPC, SPE		15	SOLVENT VENT	GC-ECD	
133	NA												
134	M	GC-MS/MS	0.02	90	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	M	GC-MS	0.01			56	4	LL	Bromophos-Methyl	1	MANUAL	GC-ECD, GC-FPD, GC-MS	35
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

PYRIMETHANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.05	82	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	95	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.05			10	5	DSPE		1	SPLIT	GC-MS	23
005	M		0.05	70	1	10	1			20		LC-MS-MS	5
006	M	LC-MS/MS	0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	LCMS	0.05	100	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.02	103	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	LCMSMS	0.02	96	1	10	1		Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M		0.01	104	1	50	1	No HP-GPC		5 1	- SPLITLESS	LC-MS/MS GC-ITD	12
011	M	GC-MS	0.01	77	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	85	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.01	88	2	50	2	GPC		2	PTV	GC-MS (single quad)	1
015	M	MS/MS	0.01	114	1	10	8 (CH ₃ OH/H ₂ O)	No	Oxfendazole	5		LC-MS/MS	33
016	M		0.01	75	1	15	5	PSA	Ethoprophos	10	LOOP	LC-MS/MS	18
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	97	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3-dichloroisopropyl)-phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	GC/MS	0.01	86	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05	93	2	50	7-Acetone/ Metanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	LC-MS/MS	0.01	95	2	10	5	DSPE		5		LC-MS/MS	20
022	M	LC-MS/MS	0.01	106	1	10	5			20		LC-MS/MS	20
023	M	GC-MS	0.05	89	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.01			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.05	90	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M	LC-MS/MS	0.01	92	1	25	1			10	LOOP	LC-MS/MS	31
027	M	GC-TSD	0.02	91	1	25	1	O (Carbon + Celite)		2	SPLITLESS	GC-NPD	2
028	M	GC-MS LC-MS/MS	0.05	95	1	50	2 6	GPC SPE		1 10	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad) LC-MS/MS	1 16

APPENDIX 8. Methods used by participants for determining pesticides.

PYRIMETHANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	S	GC-MS	0.01	120	1	15	4			2	SPLITLESS	GC-µECD-NPD CG-MS	35
030	M	LC-MS/MS	0.002			10	5		Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.01	87	1	20	1	LL		10		LC-MS/MS	14,16
032	M	GC-NPD	0.05	82	2	100	3	O (Florisil – Column Chromatography)		0.1	SPLITLESS	GC-NPD	19
033	NA												
034	NA												
035	NA												
036	M	LC-MS/MS	0.02			20	1			10		LC-MS/MS	19
037	NA												
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.02	106	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	LCMSMS	0.01	106	1	10	5	DSPE	Pirimicarb-D6	20		LCMSMS	20
041	M	GC-MS/MS	0.01	93	1	75	1		Ditalimfos	4	SPLITLESS	GC-MS/MS	27
042	S	GC-MS	0.05	88.5	1	30	1	O (Al2O3)		25	AUTOSAMPLER	HPLC-DAD	11
043	S	GC/TOF		81	1	50	1 (with NaOH)	GPC		10	REODYNE	HPLC-DAD	5
044	No Results Given												
045	M	MS	0.05	96	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.02	90	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.01			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	S	GC-MS/MS	0.05	92	1	20	8: Diisopropylether/ Hexane/ Iso-Octane		Dichlobenil	2	SPLIT-LESS	GC-NPD	31
049	M	GCMSMS	0.02	106	1	10	5	PSA	Triphenyl Phosphate	5	LARGE VOLUME	GC-MS/MS	20
050	M	LC-MS/MS	0.005	95	1	10	5	LL		10		LC-MS/MS	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	NA												
053	NA												
054	M	GC/MS	0.02	82.6	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-NPD	0.05	100		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	M	GC-NPD	0.1	90	2	10	Dichloromethane	GPC		1	SPLITLESS	GC-NPD, GC-MS (Single-Quad)	13
057	S	GC/MS	0.010	76	2	50		SPE (Only for ECD and ELCD Detections)		1-3	SPLITLESS-ON COLUMN-SPI	PFPD, NPD, ELCD, ECD and GC-ITD	5
058	M	GC-MS	0.05	93	1	15	Dichloromethane			1	SPLITLESS	GC/MS	13
059	S		0.02	118	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

PYRIMETHANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.004			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061	M	LC/MS/MS	0.05	105	1	10	5	PSA O	TPP	1 2	PTV	GC/MS (single quad) LC-MS/MS	20
062	M	GC-MS	0.03	94	1	15	4	NO	PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M	LC-MS/MS	0.005	107	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	90.2	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	99	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		NPD80	0.02			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-PND	0.01	88	2	20	6	SPE	p,p-DDE	1	SPLITLESS	GC-MS	16
069	M	GC-MSMS	0.02			15	1		TPP	10	PTV	GC-MSMS	31
070	M	GC-MS	0.02	105	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071*	M	GC-MS	0.05			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	M	GCMSMS	0.05				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.01	102	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	GC-MS	0.01	104	1	20	4			2	SPLITLESS	GC- NPD	2
075	M	GC-NPD	0.05	82	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	90	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.02			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.02		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	GC/MS	0.02				10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	M		0.01	73	1	10	6	LL	TBZ-d6	10		LC-MS/MS	16
082	M	GC-MS	0.02	97	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.05	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	NA												
085	M	GC-MS	0.01			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	LC-MS-MS	0.01	96	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOEB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	GC-MS/MS	0.005	96	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.05	79	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-PPD	31
089	NA												
090	S	GC-MS	0.05	78	2	25	1	SPE		2		GC-ECD, GC-NPD, GC-PPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

PYRIMETHANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	95	1	5	Dichloromethane		TFF	0,5	SPLIT/SPLITLESS	GC-MS	31
092	NA												
093	M	GC-MS	0.005	102	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	M	GC-MS	0.01	108	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.02	100	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	HPLC	0.05	90.7	1	30	1	n-Al ₂ O ₃		20	DIRECT	HPLC-UV	10
097	s	GC-MS	0.02	87	2	25	Ethyl Acetate/ Cyclohexane			1	SPLITLESS		5
098	M	GCMS	0.05	87	2	25	5	SPE	Yes	2		LC-MS/MS	7
099	M	GC-ECD, GC-MS LC-MS-MS	<0.05	95	1	25 10	2 6	GPC SPE	MIREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECDI, GC-MS LC-MS/MS	2 34
100	NA												
101	M	LC-MS/MS	0.05			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	M	GC-MS	<0.05	8	1	15	1	GPC		1	SPLI/SPLITLESS	GC-MS	21
103	M	LC-MS/MS	0.05	98	1	10	1	SPE	YES	10	LOOP	LC-MS/MS	31
104	M	GC-MS	<0.05	82.3	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	Antracene	20	SOLVENT INJECTION	HPLC-UV	18
105	M	GC-NPD, GC-MS	0.02			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ITD	0.01	70	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.02	96	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	M	LC-MS/MS	0.46	81	2	10	6	LL		8		LC-MS/MS	16
109	S	NP	0.05	93.4	1	30	1	GPC		20	LOOP	HPLC-UV	11
110	S	GC-MS	0.05	94.9	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/NPD	10
111	M	GC-ND	0.02	99.1	1	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.02	93	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	S	GC-MS	0.05	82	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.005	100	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	NA												
116	M	GC-MS	0.005	96	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05	117.8	1	30	1	GPC		1	SPLITLESS	GC-NPD	11
118	M	LC-MS/MS	0.01	96	1	10	5	DSPE		10		LC-MS/MS	18
119	M		0.01	95	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	99	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	72	2	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

PYRIMETHANIL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
122	S		0.05	75%	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	NA												
124	NA												
125	M	GC/MS	0.03	90	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S	GC-NPD	0.02	95.8	1	5	Dichloromethane: Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	S	GC-NPD, ECD	0.10	81	1	40	3	LL	Aldrin	2	SPLIT/SPLITLESS	GC-NPD, GC-ECD	5
128	M	GC-NPD	0.1	109.8	1	25	1			100		HPLC-UV	31 (DAR-2-06)
129	M	GC-MS/MS	0.02			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.05			10	Dichloromethane	GPC	Fenchlorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	88	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	NA												
133	NA												
134	M	GC-MS/MS	0.02	26	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	M	GC-MS	0.01			56	4	LL	Bromophos-Methyl	1	MANUAL	GC-ECD, GC-FPD, GC-MS	35
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

QUINOXIFEN													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.02	88	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	98	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004													
005	M		0.02	72	1	10	4	NO		20		LC-MS-MS	2
006	M		0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007													
008	S	GC-MS	0.02	98	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	LCMSMS	0.02	74	1	10	1	None	Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M		0.01	99	1	50	1	NO		5		LC-MS/MS	12
011	M	GC-MS	0.02	101	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC- FPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	LC-MS/MS	0.01	70	1	10	6	NO	Imazalil D5	5		LC-MS /MS	18
014	M		0.01	108	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	NA												
016	M		0.01	83	1	15	5	PSA	Ethoprophos	10	LOOP	LC-MS/MS	18
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	100	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3- dichloroisopropyl)- phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-PPD	20
019	S	LC-MS/MS	0.01	83	1	10	5	DSPE		5	LOOP	LC-MS/MS	20
020	S	GC-MS	0.05	80	2	50	7-Acetone/ Methanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	NA												
022	M	GC-MS	0.05	90	2	10	5	DSPE		2	PTV	GC-ECD	20
023	S	GC-MS	0.02	88	1	75	2	GPC		1		GC-ECD	1
024		GC-MS	0.01			10	5	O		1,5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.02	83	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	90	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	NA												
028	M	GC-MS	0.02	103	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

QUINOXIFEN													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	NA												
030	M	LC-MS/MS	0.002			10	5	No	Yes	5		LC-MS/MS	20
031	S	GC-ITD	0.01			50	8	LL		1	SPLITLESS	GC-ITD	31
032	NA												
033	NA												
034	S	Different Column	<0.02			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	NA												
036	NA												
037	NA												
038	NA												
039	M	GC-MS	0.01	94.8	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.01	98	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	LC-MS/MS	0.01	95	1	75	1	No		5		LC-MS/MS	27
042	S	GC-MS	0.02	106.2	1	10	5	DSPE		0.1	TPOCI	GC-ECD	20
043	M			72	1	50	1	GPC	TPP	1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	LC-MS-MS	0.02	90	1	15	4 1	NO		1 5	SPLITLESS FULL LOOP	GC-NPD, GC-ECD, GC-ITD LC-MS-MS	2
046	M	GC-MS	0.02	106	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.01			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	S	GC-MS/MS	0.05	105	1	20	8: Diisopropylether/ Hexane/ Iso-Octane	NO	Nitrofen/Mirex	2	SPLIT-LESS	GC-ECD	31
049	M	GCMSMS	0.01	101	1	10	5	PSA	Triphenyl Phosphate	5	LARGE VOLUME	GC-MS/MS	20
050	S	GC/TOF	0.05	105	2	25	1	GPC		1		GC-GC/TOF	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	NA												
053	NA												
054	M	GC/MS	0.02	76.5	1	25		GPC/SPE	no	5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	NA												
056	NA												
057	S	GC/MS	0.010	71	2	50		SPE (Only for ECD and ELCD Detections)		1-3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M		0.02	102	1	15	Dichloromethane			1	SPLITLESS	GC/MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

QUINOXIFEN													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
059	S		0.1	100	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
060			0.015			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061	M	GC/MS	0.02	95	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.01	91	1	15	4	NO	PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	NA												
064	No Results Given												
065	M	GC/MS/MS	0.01	97.0	1	10	5	DSPE	TPP	5	PTV SPLITLESS	GC-MS/MS (triple-quad)	18
066	M	GC-MS	0.01	95	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		NPD80	0.04			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-MS	0.01	90	1	20	6	SPE	Triphenylphosphate	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069	NA												
070	M	GC-MS	0.02	105	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.02			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	NA												
073	M	GC-MS	0.02	98	1	15	4		Yes	2	PTV	GC-ITD	
074	M	GC-MS	0.02	72	1	20	4			4	SPLITLESS	GC-MS (SIM)	2
075	M	GC-ECD	0.05	92	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	89	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	NA												
080	NA												
081	M		0.01	85	1	10	6	LL	TBZ-d6	10		LC-MS/MS	16
082	M	GC-MS	0.02	85	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.02	>70	2	50	3			1	SPLITLESS	GC-MS	5
084	NA												
085	M	GC-MS	0.02			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion deflection	31 (based on No. 7)
086	M	GC-MS	0.01	87	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.010	104	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.02	80	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-FPD	31

APPENDIX 8. Methods used by participants for determining pesticides.

QUINOXIFEN													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
089	NA												
090	S	GC-MS	0.02	77	1	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5
091	M	GC-MS	0.05	87	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	NA												
093	M	None	0.005	104	1	10	5	DSPE	PCB138, TPP	3	PTV	GC-MS (EI)	20 Modified
094	M	GC-MS	0.01	119	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.01	73	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-ECD	0.02	95.3	1	30	1			1	SPLITLESS	GC-ECD	11
097	s	GC-MS	0.02	75	2	25	Ethyl Acetate/ Cyclohexane			1	SPLITLESS		5
098	NA												
099	M	GC-ECD, GC-MS LC-MS-MS	<0.05	96	1	25 10	2 6	GPC SPE	MiREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECDI, GC-MS LC-MS/MS	5 34
100	NA												
101	M	GC/MS	0.02			10	5	DSPE	Triphenylphosphate	5	KAS	GC-MS	20
102	NA												
103	M	GC-MS	0.02	88	1	10	1	SPE	YES	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	90.3	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	TCDDP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-MS				50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	NA												
107	NA												
108	NA												
109	S	HPLC	0.05	98.3	1	30	1	GPC		1	SPLIT 1/10	GC-ECD	11
110	S	GC-MS	0.02	95.1	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111*			0.02	85	2	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.01	84	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	NA												
114	M	GC-MS	0.01	104	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.02	67	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.01	101	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.02			30	1	GPC		1	SPLITLESS	GC-NPD	11
118	M	GC-MS/MS	0.01	97	1	10	5	DSPE		2	SPLITLESS	GC-MS/MS	18
119	M		0.01	101	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20

APPENDIX 8. Methods used by participants for determining pesticides.

QUINOXIFEN													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
120	M		0.05	102	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	84	2	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29
122	NA												
123	NA												
124	NA												
125	M	GC/MS	0.01	86	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	NA												
127	NA												
128	NA												
129	M	GC-MS/MS	0.01			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.02			10	Dichloromethane	GPC	Fenclorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.025	97	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	NA												
133	NA												
134	M	GC-MS/MS	0.01	49	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

TEBUCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.02	93	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	90	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	LC-MS/MS	0.02			10	5	DSPE	TPP	50		LC-MS/MS	23
005	M		0.02	72	1	10	1			20		LC-MS-MS	5
006	M	LC-MS/MS	0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	NA												
008	S	GC-MS	0.02	104	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	LCMSMS	0.02	85	1	10	1		Carbendazim D4, Methomyl D3	2.1		LC-MSMS	12
010	M	A	0.01	103	1	50	1	HP-GPC		1	SPLITLESS	GC-ITD	12
011	M	GC-MS	0.02	80	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	S	GC-MS	0.01	95	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.01	88	2	50	2	GPC		2	PTV	GC-MS (single quad)	1
015	M	MS/MS	0.01	116	1	10	8 (CH ₃ OH/H ₂ O)		Oxendazole	5		LC-MS/MS	33
016	M		0.02	118	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	LC-MS/MS	0.01	98	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3- dichloroisopropyl)- phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	LC-MS/MS	0.01	76	1	10	5	DSPE		5	LOOP	LC-MS/MS	20
020	S	GC-MS	0.05	89	2	50	7-Acetone/ Metanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	GC-MS	0.02	95	2	10	5	DSPE	TPP	2	PTV	GC-MS (single-quad)	20
022	M	LC-MS/MS	0.03	96	1	10	5			20		LC-MS/MS	20
023	M	GC-MS	0.02	84	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.01			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.02	97	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	113	1	25	1			10	LOOP	LC-MS/MS	31
027	NA												
028	M	GC-MS	0.02	104	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

TEBUCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	S	GC-MS	0.02	102	1	15	4			2	SPLITLESS	GC-µECD-NPD CG-MS	35
030	M	LC-MS/MS	0.002			10	5		Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.01	93	1	20	1	LL		10		LC-MS/MS	14, 16
032	M	GC-NPD	0.02	84	2	100	3	○ (Florisil - Column Chromatography)		0.1	SPLITLESS	GC-NPD	19
033	S	GC-MS	0.01	91	2	50	3	0		1	SPLIT/SPLITLESS	GC-NPD	5
034	NA												
035	S	GC-MS	0.020	95	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	NA												
037	NA												
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.02	104	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	LCMSMS	0.01	112	1	10	5	DSPE	Pirimicarb-D6	20		LCMSMS	20
041	M	LC-MS/MS	0.01	92	1	75	1			5		LC-MS/MS	27
042	S	GC-MS	0.02	83.8	1	10	5	DSPE		1	TPOCI	GC-NPD	20
043	M	GC/ITD				50	1	GPC	FPD	1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	LC-MS-MS	0.02	100	1	15	4 1			1 5	SPLITLESS FULL LOOP	GC-NPD, GC-ECD, GC-ITD LC-MS-MS	2
046	M	GC-MS	0.05	94	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.02			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	S	LC-MS/MS	0.05	104	1	20	8 Diisopropylether/ Hexane/ Iso-Octane	No	Dichlobenil	2	SPLIT-LESS	GC-NPD	31
049*			0.01			10	5	PSA	Triphenyl Phosphate	5	LARGE VOLUME	GC-MS/MS	20
050	M	LC-MS/MS	0.05	97	1	10	5	LL		10		LC-MS/MS	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	NA												
053	NA												
054	M	GC/MS	0.01	81.6	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-NPD	0.05	90		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	NA												
057	S	GC/MS	0.010	81	2	50		SPE (Only for ECD and ELCD Detections)		1-3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.02	98	1	15	Dichloromethane			1	SPLITLESS	GC/NPD	13
059	S		0.02	109	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

TEBUCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.045			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061	M	GC/MS	0.02	101	1	10	5	PSA	TPP	1	PTV	GC/MS (single quad)	20
062	M	GC-MS	0.1	94	1	15	4		PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.02	75	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	88.3	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	LC-MS	0.01	100	1	10	5			3	PARTIAL LOOP	LC-MS/MS	20
067		NPD80	0.03			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-MS	0.01	112	1	20	6	SPE	Triphenylphosphate	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069	M	LC-MSMS	0.01			15	1		TPP	10	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MSMS	31
070	M	GC-MS	0.02	93.5	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.02			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	M	GCMSMS	0.05				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.01	105	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	GC-MS	0.01	99	1	20	4			2	SPLITLESS	GC- NPD	2
075	NA												
076	M		0.02	98	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS				10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	M	GC-MS	0.02		1	10	Ethyl Acetate		TPP	10		GC-MSMS ION TRAP	
080	NA												
081	M		0.01	99	1	10	6	LL	TBZ-d6	10		LC-MS/MS	16
082	M	GC-MS	0.02	98	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.02	>70	1	50	3			1	SPLITLESS	GC-MS	5
084	M	GC-MS	0.05			15	5	0	Y	10	LVI	GC-ITD	20
085	M	GC-MS	0.02			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	LC-MS-MS	0.01	87	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.005	103	1	75	1			2 GC 5 LC	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.02	91	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-FPD	31
089	NA												
090	S	GC-MS	0.02	75	1	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

TEBUCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	92	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	NA												
093	M	None	0.01	100	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	M	GC-MS	0.01	108	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.05	93	1	10	Acetone	Dichloromethane Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-NPD	0.02	95.0	1	30	1			1	SPLITLESS	GC-NPD	11
097	s	GC-MS	0.02	75	2	25	Ethyl Acetate/ Cyclohexane			1	SPLITLESS		5
098	M	GCMS	0.02	100	2	25	5	SPE	YES	2		LC-MS/MS	7
099	M	GC-ECD, GC-MS LC-MS-MS	<0.05	95	1	25 10	2 6	GPC SPE	MIREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECDI, GC-MS LC-MS/MS	5 34
100	NA												
101	M	LC-MS/MS	0.02			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	M	GC-MS	<0.05	18	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.02	93	1	10	1	SPE	Yes	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	79.8	1	10	5	(Cleanup Mixture: PSA + MgSO ₄)	TCDDP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-MS	0.05			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ITD	0.01	84	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.02	81	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	NA												
109	S	NP	0.02	84.5	1	30	1			1	DIRECT	GC-NPD	11
110	S	GC-MS	0.02	95.2	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111	M	GC-NPD	0.02	88.6	1	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	M	GC-MS	0.02	109	1	15	5	DSPE	Etoprofos	2	SPLITLESS	GC-MS (single-quad)	18
113	NA												
114	M	GC-MS	0.001	99	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-NPD	0.02	80	1	5	3	GPC		1	PULSED SPLITLESS	GC-NPD	
116*	M	GC-MS	0.05	102	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.02			30	1	GPC		1	SPLITLESS	GC-NPD	11
118	M	LC-MS/MS	0.02	97	1	10	5	DSPE		10		LC-MS/MS	18
119	M		0.01	100	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	128	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	103	2	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

TEBUCONAZOLE													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
122	S		0.05	75%	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	NA												
124	NA												
125	M	GC/MS	0.01	92	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	NA												
127	S	GC-NPD, ECD	0.20	81	1	40	3	LL	Aldrin	2	SPLIT/SPLITLESS	GC-NPD, GC-ECD	5
128*			0.05			6.25	4			1	SPLITLESS	GC-ECD	31 (SAR-2-00 oc,p)
129	M	GC-MS	0.05			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.05			10	Dichloromethane	GPC	Fenchlorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	96	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	NA												
133	NA												
134	M	GC-MS/MS	0.05	65	1	15	1		TPP	10	SP/SPL-PTV (CARBOFRIT)	GC-ITD	19
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

TOLYFLUANID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.05	84	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	84	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.05			10	5	DSPE	Isodrin	1	SPLIT	GC-ECD, GC-MS	23
005	M		0.05	75	1	10	4			2	SPLITLESS	GC-MS-MS (ION TRAP)	2
006	M	LC-MS/MS	0.02			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	M	GCMS	0.02	83	1	100	3	LL	Aldrin and Ditalimfoss	1	SPLITLESS	GC-ECD, GC-NPD	19, 22
008	S	GC-MS	0.02	105	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	GCMSMS	0.02	89	1	10	1	GPC	DDE-pp D8	1	ON-COLUMN	GC-MS and GC-MSMS	12
010	M		0.005	91	1	50	1	No HP-GPC		5 1	- SPLITLESS	LC-MS/MS GC-ITD	12
011	M	GC-MS	0.02	95	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.005			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	86	1	15	4	No		1	SPLITLESS	GC-MS	19
014	M		0.01	93	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015	M	GC-MS	0.02	93	1	50	8: Acetone	0: LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	113	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	S	GC/ECD	0.05			100	2	GPC, SPE		1	SPIIT	GC-MSD, GC-ECD	1
018	M	LC-MS/MS	0.02	82	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3- dichloroisopropyl)- phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	GC/MS	0.02	94	1	10	5	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	20
020	S	GC-MS	0.05	100	2	50	7-Acetone/ Methanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	GC-MS	0.01	102	2	10	5	DSPE	TPP	2	PTV	GC-MS (single-quad)	20
022	M	GC-MS	0.02	71	2	10	5	DSPE		2	PTV	GC-NPD	20
023	M	GC-MS	0.05	47	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.01			10	5	O		1,5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.05	60	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026	M		0.01	91	1	25	1	dSPE with PSA	TPP	5	PTV	GC-MS/MS	31
027	M	GC-NPD	0.02	90	1	25	O (Toluene)	O (Carbon + Celite)		2	SPLITLESS	GC-ECD	2
028	M	GC-MS	0.05	90	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

TOLYFLUANID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029	S	GC-MS	0.02	94	1	15	4			2	SPLITLESS	GC-µECD-NPD CG-MS	35
030	M	LC-MS/MS	0.002			10	5		Yes	5		LC-MS/MS	20
031	S	GC-ITD	0.01			50	8	LL		1	SPLITLESS	GC-ITD	31
032	M	GC-NPD	0.05	94	2	100	3	O (Florisil - Column Chromatography)		0.1	SPLITLESS	GC-ECD	19
033	S	GC-MS	0.01	86	2	10	3	O		1	SPLIT/SPLITLESS	GC-ECD	5
034	S	Different Column	<0.05			10	1	GPC	Dichlofenthion	1	SPLITLESS	GC-ECD	15
035	S	GC-MS	0.100	85	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036	NA												
037	NA												
038	M	GC-MS	0.02			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.01	86	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.01	99	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	GC-MS/MS	0.01	75	1	75	1		Ditalimfos	4	SPLITLESS	GC-MS/MS	27
042	S	GC-MS	0.05	103.0	1	30	1			1	TPOCI	GC-NPD	11
043	M	GC/TOF		60	1	50	1	GPC		1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	No Results Given												
045	M	MS	0.05	90	1	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.01	95	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047	M	GC-MS	0.025			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	S	GC-MS/MS	0.05	80	1	20	8: Diisopropylether/ Hexane/ Iso-Octane		Nitrofen/Mirex	2	SPLIT-LESS	GC-ECD	31
049	M	GCMS	0.02	89	1	37.5	1	GPC		1	SPLITLESS	GC-ECD,NPD,FPD	5
050	M	GC/TOF	0.03	95	1	25	1	GPC		2		GC-ECD	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S	GC-MS/MS	0.03	78	1	20	3	LL,SPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	NA												
054	M	GC/MS	0.01	89.0	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-ECD	0.03	81		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	M	GC-NPD	0.02	80	2	10	Dichloromethane	GPC		1	SPLITLESS	GC-NPD, GC-MS (Single-Quad)	13
057	S	GC/MS	0.010	79	2	50		SPE (Only for ECD and ELCD Detections)		1-3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.05	81	1	15	Dichloromethane			1	SPLITLESS	GC/ECD	13
059	S		0.02	124	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

TOLYFLUANID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.004			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061		LC/MS/MS	0.05	91	1	10	5	O		2		LC-MS/MS	20
062	M	GC-MS	0.01	117	1	15	4		PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1(ECD), 2(NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.02	79	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	No Results Given												
065	M	GC/MS/MS	0.01	120.1	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	GC-MS	0.01	87	1	30	1	GPC	Tetraphenylethylene	2	SPLITLESS	GC-MS	31
067		ECD	0.02			10	Dichloromethane			4	SPLIT	GC-NPD80; GC-ECD	13
068	M	GC-MS	0.01	100	1	20	6	SPE	Triphenylphosphate	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069	NA												
070	M	GC-MS	0.02	72.5	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.05			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	M	GCMSMS	0.05				1		TPP	10		GCMSMS	31 (PNT-MA01)
073	M	GC-MS	0.01	106	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	GC-MS	0.01	79	1	20	4			4	SPLITLESS	GC-MS (SIM)	2
075	NA												
076	M		0.02	81	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS	0.01			10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	No Results Given												
079	NA												
080	GC/MS	0.02				10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	S	LCMSMS	0.01	85	1	100	2	GPC; SPE	tr-HCEO	2	SPLITLESS/SPLIT	GC-ECD	1
082	M	GC-ECD	0.02	90	1	15	4	GPC		1	PTV	CG-MS	2
083	S	GC-MS	0.05	60	2	50	3			1	SPLITLESS	GC-MS	5
084	NA												
085	M	GC-MS	0.05			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	GC-MS	0.01	33	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	GC-MS/MS	0.005	93	1	75	1			GC 2 LC 5	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.05	81	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-PPD	31
089	S	GC-MS	0.01	94.8	2	50	3	GPC		1	PTV	GC-ECD	5
090	S	GC-MS	0.05	87	2	25	1	SPE		2		GC-ECD, GC-NPD, GC-PPD, GC-MS, LC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

TOLYFLUANID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
091	M	GC-MS	0.05	81	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-NPD	0.02	95	1	25	Toluene,Propanol	O		2	SPLITLESS	GC-ECD	2
093	M	None	0.001	98	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	NA												
095	M	GC-MS	0.05	96	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-ECD	0.05	99.8	1	30	1			1	SPLITLESS	GC-ECD	11
097	s	GC-MS	0.02	86	2	25	Ethyl Acetate/ Cyclohexane			1	SPLITLESS		5
098	S	GCMS	0.05	74	2	25	5	SPE	YES	0.5	SPLITLESS	GC-ECD, GC-NPD	7
099	M	GC-ECD, GC-MS LC-MS-MS	<0.05	91	1	25 10	2 6	GPC SPE	MIREX, HCB Triphenylphosphate	1 10	SPLIT/SPLITLESS	GC-ECDI, GC-MS LC-MS/MS	5 34
100	S	GC-NPD	0.003	73	2	50	3	LL		10	PTV-SOLVENT VENT	GC-ECD	5
101	M	GC/MS	0.05			10	5	DSPE	Triphenylphosphate	5	KAS	GC-MS	20
102	M	GC-MS	<0.05	79	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	GC-MS	0.05	97	1	10	1	SPE	Yes	2	SPLIT/SPLITLESS	GC-MS	31
104	M	GC-MS	<0.01	56.7	1	10	5	O (Cleanup Mixture: PSA + MgSO ₄)	TCDDP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-ECD, GC-MS	0.01			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-ITD	0.02	79	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.02	94	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	NA												
109	S	GC-MS	0.05	75.4	1	30	1	GPC		1	SPLIT 1/10	GC-ECD	11
110	S	GC-MS	0.05	72.5	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111	M	GC-NPD	0.05	98.1	1	2	Hexane, Ether Ethyl, Acetone	Column Chromatography		2	SPLIT/SPLITLESS	GC-ECD, GC-NPD	19
112	NA												
113	S	GC-MS	0.05	66	1	100	3	GPC		1	SOLVENT VENT PTV	GC-ECD + GC-MS (ion trap)	5
114	M	GC-MS	0.001	101	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.05	75	2	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.005	98	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05	86	2	30	1	GPC		1	SPI	GC-ECD	11
118	M	GC-MS/MS	0.01	85	1	10	5	DSPE		2	SPLITLESS	GC-MS/MS	18
119	M		0.01	101	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	108	1	25	2	GPC		1	SPLITLESS	GC-MS	1
121	S	GC/MS	0.01	71	2	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29

APPENDIX 8. Methods used by participants for determining pesticides.

TOLYFLUANID													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
122	S		0.05	80%	2	50	Acetone	SPE C18	M Series	2	AUTOSAMPLER	GC-ECD; GC-MS	13
123	M					50	1			1	AUTO INJ	GC-MS	30
124	S	GC-ECD	<0.004	60	2	100	3	GPC, SPE		10	SOLVENT VENT PTV	GC-ECD	5
125	M	GC/MS	0.02	99	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	S	GC-NPD, GC-ECD	0.03	97.4	1	5	Dichloromethane: Acetone	DSPE		1	SPLITLESS	GC-NPD	
127	S	GC-NPD, ECD	0.05	81	1	40	3	LL	Aldrin	2	SPLIT/SPLITLESS	GC-NPD, GC-ECD	5
128	M	GC-NPD	0.05	67.0	1	6.25	4			1	SPLITLESS	GC-ECD	31 [SAR-2-00 oc,p]
129	M	GC-MS/MS	0.05			15	4	LL				GC-MS/MS	19
130	S	GC-MS	0.05			10	Dichloromethane	GPC	Fenclorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-TOF	0.05	90	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-ITD	2
132	S		0.05	79	1	100	Acetone Dichloromethane NaCl Ethyl Acetate	GPC, SPE		15	SOLVENT VENT	GC-ECD	
133	NA												
134	NA												
135	No Results Given												
136	NA												
137	No Results Given												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

TRIADIMENOL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
001	S	GC-MS	0.1	93	1	10	7	DSPE	Ethion	1	SPLITLESS	GC-NPD, GC-ECD, GC-MS	13
002	M		0.01	89	1	10	5	SPE	Yes	10	LVI-PTV	GC-MS (single quad)	31
003	NA												
004	M	GC-MS	0.05			10	5	DSPE		1	SPLIT	GC-MS	23
005	M		0.05	70	1	10	1			20		LC-MS-MS	5
006	M	LC-MS/MS	0.05			10	5	DSPE		2	SPLIT/SPLITLESS	GC/MS	20
007	NA												
008	S	GC-MS	0.05	98	1	10	1	GPC	Ethion	3	PTV	GC-ECD+NPD+FPD GC-MS	13, 15
009	M	GCMSMS	0.02	86	1	10	1	GPC	DDE-pp D8	1	ON-COLUMN	GC-MS and GC-MSMS	12
010	M			97	1	50	1			5		LC-MS/MS	12
011	M	GC-MS	0.05	110	1	10	5	SPE	TPP	2	SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS	20
012	M	LC-MS-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	16
013	M	GC-MS	0.01	88	1	15	4			1	SPLITLESS	GC-MS	19
014	M		0.01	92	2	50	2	GPC		5	PTV	GC-MS (SIM)	1
015*			0.4			50	8: Acetone	0: LL (Isopropyl Ether)		2	SPLITLESS	GC-ECD GC-NPD	19
016	M		0.02	112	1	15	4	GPC		2	SPLITLESS	GC MS	2
017	M	LC/MSMS	0.01			10	5	O (PSA)	TPP	20		LC/MSMS	20
018	M	GC-MS	0.01	103	2	10	5	DSPE	Triphenylmethane (GC-MS, GC-MS/MS) Triphenyl phosphate (LC-MS/MS) Tris-(1,3- dichloroisopropyl)- phosphate (GC-MS)	2 GC 5 LC	PTV (GC)	GC-MS, GC-MS/MS, LC-MS/MS, GC-FPD	20
019	S	LC-MS/MS	0.01	88	1	10	5	DSPE		5	LOOP	LC-MS/MS	20
020	S	GC-MS	0.05	89	2	50	7-Acetone/ Metanol	SPE	Yes	1	ON COLUMN	GC-MS	33
021	S	LC-MS/MS	0.02	97	2	10	5	DSPE		5		LC-MS/MS	20
022	M	GC-MS	0.05	97	2	10	5	DSPE		2	PTV	GC-NPD	20
023	M	GC-MS	0.1	102	1	75	2	GPC		1		GC-NPD	1
024		GC-MS	0.02			10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-MS	23
025	S	GC-MS	0.1	97	1	15	7	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	15
026*	M		0.01			25	1			10	LOOP	LC-MS/MS	31
027	M	GC-ECD	0.02	112	1	25	1	O (Carbon + Celite)		2	SPLITLESS	GC-NPD	2
028	M	GC-MS	0.05	92	1	50	2	GPC		1	OC, SPLITLESS	GC-ECD and/or GC-NPD or GC-MS (single-quad)	1

APPENDIX 8. Methods used by participants for determining pesticides.

TRIADIMENOL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
029*						15	4			2	SPLITLESS	GC-µECD-NPD CG-MS	35
030	M	LC-MS/MS	0.005			10	5		Yes	5		LC-MS/MS	20
031	S	LC-MS/MS	0.01			20	1	LL		10		LC-MS/MS	14, 16
032	M	GC-NPD	0.05	82	2	100	3	O (Florisil - Column Chromatography)		0.1	SPLITLESS	GC-NPD	19
033	NA												
034	NA												
035	S	GC-MS	0.100	85	1	15	5	O		1	SPLITLESS	GC-ECD, GC-FPD, GC-MS (single quad)	18
036												GC-MS	
037	M	CG-MS	0.1			15	4			1/10		GC-ECD; GC-TSD; GC-MS; HPLC-UV	22
038	M	GC-MS	0.01			15	4	LL		10	GVOL AUTOSAMPLER	GC-MS	22
039	M	GC-MS	0.04	102	1	100	2	GPC		1	SPLIT	GC-NPC and/or GC-ECD	1
040	M	GCMS	0.005	106	1	10	5	DSPE	PCB 138	1	PTV SOLVENT VENT	GCMS	20
041	M	LC-MS/MS	0.01	81	1	75	1			5		LC-MS/MS	27
042	S	GC-MS	0.1	84.4	1	30	1			1	TPOCI	GC-NPD	11
043	M	GC/ITD		75	1	50	1	GPC	FPD	1	SPLITLESS	NPD, FPD and GC-ITD/M	5
044	NA												
045	M		0.05	91	2	15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-ITD	2
046	M	GC-MS	0.05	91	1	10	5	DSPE (PSA)	Mirex	1, 2	SPLITLESS	GC-ECD/PND/FPD/MS, HPLC-DAD/FD	20
047*			0.05			10	5	DSPE	TPP	2	PTV	GC-MS (Single-Quad)	20
048	S		0.01	86	1	10	4			5	SYRINGE DRIVE WITH LOOP	LC-MS/MS	31
049	M	GC-MS/MS	0.05	96	1	10	5	PSA	Triphenyl Phosphate	5	LARGE VOLUME	GC-MS/MS	20
050	M	GC/TOF	0.05	96	1	25	1	GPC		2		GC-NPD	3
051	M		0.01			100	2	GPC	TPP	5	PTV	GC-MS	1
052	S	GC-MS/MS	0.1	73	1	20	3	LLSPE		2	AUTOSAMPLER	GC-ECD, GC-NPD	5
053	NA												
054	M		0.05	66.9	1	25		GPC/SPE		5	SOLVENT VENT PTV	GC/ECD/NPD, GC-ITD	5
055	S	GC-NPD	0.05	80		5	3			2	SPLITLESS	GC-ECD, GC-NPD	32
056	NA												
057	S	GC/MS	0.010	76	2	50		SPE (Only for ECD and ELCD Detections)		1-3	SPLITLESS-ON COLUMN-SPI	PFPD,NPD,ELCD,ECD and GC-ITD	5
058	M	GC-MS	0.1	95	1	15	Dichloromethane			1	SPLITLESS	GC/NPD	13
059	S		0.1	103	1	10.1	Dichloromethane	DSPE		1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	13

APPENDIX 8. Methods used by participants for determining pesticides.

TRIADIMENOL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
060			0.0029			12	5	DSPE	Mirex/TPP	1	SPLIT/SPLITLESS	GC-MS	20
061		LC/MS/MS	0.1	96	1	10	5	O		2		LC-MS/MS	20
062	M	GC-MS	0.5	118	1	15	4		PCB 97 (GC-ECD), Trifluralin (GC-NPD)	1 (ECD) 2 (NPD)	SPLIT/SPLITLESS	GC-ECD-NPD	2
063	M		0.084	80	1	25	2	GPC		2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD	8
064	NA												
065	M	GC/MS/MS	0.05	96.3	1	20	3	SPE		4	SPLITLESS	GC-ECD-NPD	5
066	M	LC-MS	0.01	101	1	10	5			3	PARTIAL LOOP	LC-MS/MS	20
067	NA												
068	M	GC-MS	0.01	92	1	20	6	SPE	Triphenylphosphate	2	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MS/MS	16
069	M	LC-MSMS	0.01			15	1		TPP	10	PARTIAL LOOP WITH NEEDLE OVERFILL	LC-MSMS	31
070	M	GC-MS	0.02	102	1	20	4			2	SPLITLESS	GC/ECD-NPD	5
071	M	GC-MS	0.05			20	4	GPC		1	PULSED SPLITLESS	GC-MS	31
072	NA												
073	M	GC-MS	0.01	106	1	7.5	4 + Na ₂ SO ₄			5	LOOP	LC-MS/MS	
074	M	LC-MS/MS	0.01	87	1	20	4			5	LOOP	LC-MS/MS	2
075	M	GC-NPD	0.05	101	1	15	4			3/1	PULSED SPLITLESS/ (TRACK OVEN) ON-COLUMN	GC-NPD/ GC-ECD	2
076	M		0.02	91	1	50	Acetone	SPE	Atrazine D5	1	PULSED SPLITLESS	GC/MS	32
077	M	GC-MS				10	1	GPC	Triphenylphosphate	2	SPLITLESS	GC-MS, GC-ECD, GC-NPD	13
078	NA												
079	NA												
080	GC/MS	0.02				10	1	GPC	Triphenylphosphate and Ethion	3	SPLITLESS	GC-ECD-NPD-MS (Single-quad)	31
081	S	LCMSMS		90	1	100	2	GPC; SPE	TPP	2	SPLITLESS/SPLIT	GC-NPD	1
082	M	GC-MS	0.02	95	1	15	4	GPC		1	PTV	CG-MS	2
083*	S	GC-MS	0.05	>70	2	50	3			1	SPLITLESS	GC-MS	5
084	NA												
085	M	GC-MS	0.02			5	5		Quantification by STD Addition Method	50	AUTOMATIC TDS SAMPLER	TDS-in line with GC-MS (single-quad) total ion detection	31 (based on No. 7)
086	M	LC-MS-MS	0.01	84	1	10	6	SPE	TPP	5 GC 20 LC	GC: SSL MIT DUCKSTOB	GC-MS-TOF; GC-MS-NCI; LC-MS-MS	16
087	M	LC-MS/MS	0.010	91	1	75	1			GC 2 LC 5	SPLIT/SPLITLESS	GC-MS/MS or LC-MS/MS	27
088	S	GC-MS	0.1	102	2	15	Dichloromethane	GPC		1	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-FPD	31
089	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

TRIADIMENOL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
090	S	GC-MS	0.1	80	1	25	1	SPE		2		GC-ECD, GC-NPD, GC-FPD, GC-MS, LC-MS	5
091	M	GC-MS	0.05	93	1	5	Dichloromethane		TFF	0.5	SPLIT/SPLITLESS	GC-MS	31
092	M	GC-NPD	0.02	105	1	25	1			2	SPLITLESS	GC-NPD	2
093	M	None	0.01	102	1	10	5		PCB138, TPP	3		LC-MS-MS (ESI)	20 Modified
094	M	GC-MS	0.01	106	1	15	5			10	LVI	GC-MS	18
095	M	GC-MS	0.05	90	1	10	Acetone	Dichloromethane-Ether Petroleum		2	SPLITLESS	GC-ECD/FPD/NPD/MS	19
096	S	GC-NPD	0.1	91.0	1	30	1			1	SPLITLESS	GC-NPD	11
097	s	GC-MS	0.02	75	2	25	Ethyl Acetate/Cyclohexane			1	SPLITLESS		5
098	M	GCMS	0.05	93	2	25	5	SPE	Yes	2		LC-MS/MS	7
099	M	LC-MS-MS	<0.01	90	1	10	6	SPE	Triphenylphosphate	10	SPLIT/SPLITLESS	LC-MS/MS	34
100	NA												
101	M	LC-MS/MS	0.01			10	5	DSPE	Triphenylphosphate	1		LC-MS/MS	20
102	M	GC-MS	<0.05	27	1	15	1	GPC		1	SPLIT/SPLITLESS	GC-MS	21
103	M	LC-MS/MS	0.05	101	1	10	1	SPE	Yes	10	LOOP	LC-MS/MS	31
104	M	GC-MS	<0.01	89.2	1	10	5	(Cleanup Mixture: PSA + MgSO ₄)	TCDEPP (PF 38)	1	SPLITLESS	GC-MS (ion trap)	18
105	M	GC-NPD, GC-ECD	0.05			50	Methanol Followed by Dichloromethane	GPC	Ethion	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	1
106	M	GC-MS-MS	0.01	90	1	25	2	GPC	Ditalimfos	2	SPLITLESS	GC-ECD, GC-NPD, GC-ITD, GC-MS-MS	
107	s		0.02	72	2	5	3			1	SPLITLESS	GC-ECD, GC-NPD	32
108	NA												
109	S	GC-MS	0.1	115.2	1	30	1			1	DIRECT	GC-NPD	11
110	S	GC-MS	0.05	89.6	1	15	5	DSPE/Al ₂ O ₃		2	SPLIT/SPLITLESS	GC/ECD	10
111	NA												
112	NA												
113	NA												
114	M	GC-MS	0.1	100	1	10	1		PCB-28	1	SSL	GC-MS/ECD	9
115	M	GC-ECD	0.1	73	1	5	3	GPC		2	PULSED SPLITLESS	GC-ECD	
116	M	GC-MS	0.01	98	2	10	5	DSPE(PSA)	TPP	2	SPLITLESS	GC-MS	20
117	S		0.05	87	2	30	1	GPC		1	SPI	GC-ECD	11
118	M	LC-MS/MS	0.02	90	1	10	5	DSPE		10		LC-MS/MS	18
119	M		0.01	96	1	10	5	DPSE		2	SPLITLESS	GC-MS (Single Quad)	20
120	M		0.05	120	1	25	2	GPC		1	SPLITLESS	GC-MS	1

APPENDIX 8. Methods used by participants for determining pesticides.

TRIADIMENOL													
Lab Code	Quantification Using Standards in Solvent or in Matrix	Confirmation Method	RL(mg/kg)	Recovery (%)	Recovery (1) or (2)	Sample Weight (g)	Extraction Solvent	Clean-Up Step	Internal standard	Injection Volume (µl)	Injection Type	Determination	Reference Method (see page 83)
121	S	GC/MS	0.01	81	1	10	1	GPC	Yes	1	PTV/SSL	GC/NPD, GC/ECD,GC/MS	29
122	NA												
123	NA												
124	NA												
125	M	GC/MS	0.02	98	1	75	1	GPC	Aldrin	2	PULSED SPLITLESS	GC/MS single quadrupole	1
126	NA												
127	NA												
128	NA												
129	M	LC-MS/MS	0.05			15	5	DSPE				LC-MS/MS	18
130	S	GC-MS	0.05			10	Dichloromethane	GPC	Fenchlorphos	1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	13
131	M	GC-ITD	0.1	75	1	15	4		Hexachlorbenzene	1	SPLITLESS	GC-TOF	2
132	NA												
133	NA												
134	NA												
135	NA												
136	NA												
137	NA												

* NOT DETECTED

Protocol

Instructions

Only laboratories that are involved in providing residue data on fruit and vegetables for their national monitoring programmes, and/or the EU co-ordinated monitoring programme are invited to participate in this CRL – European Proficiency Test in Fruit and Vegetables (FV) - 9.

To participate, each laboratory will have to complete and return by e-mail the **Application Form** to the Organiser. They will then receive acceptance confirmation by e-mail of their participation with a **Laboratory Code**; subsequently, this code must always be used in all communicating with the Organiser. Any e-mail without this code will not be answered. This code will only be known by the participant, the Organiser, and the Commission. This will ensure confidentiality during the test. In the Final Report there will not be any correlation between the code and the laboratory name. However, some results may need to be presented on a country basis to the Standing Committee on the Food Chain and Animal Health, and a link between codes and laboratories is possible, especially if there are only a few laboratories in any one country. A **web security code** will be given to enable laboratories to access the **Protocol** and the **Forms**.

This **Protocol**, together with three **Forms (1-3)** will be uploaded onto the web page and access will be by using the security code. Each form will have a deadline; please ensure you adhere strictly to these deadlines. The completed forms must be returned to the Organiser. On receipt of each form, the Organiser will respond with a receipt confirmation e-mail.

The **Pesticide List** will also be accessible at this website without using the security code. This list will include all the possible pesticides that could be present in the test material. This list will specify which compounds to look for. The list will be available from 10th January 2007, so that all participants know in good time, well before receipt of the test materials, which pesticides might be present. This early publication is to allow participants have time enough to purchase any standards required and to validate their methods. MPRL values (minimum performance reporting levels) for each pesticide will be given. These values are the levels that the laboratories are expected to attain.

The official language used in this Proficiency Test will be English.

Communication between participating laboratories during the test is not allowed.

Invoices to cover the cost of transporting the test materials will be available from the start of the test so that, once the shipping begins, laboratories will be able to receive the test materials. Only laboratories that have paid the transport costs will receive the test materials. If laboratories need more time to pay, they must send a payment record by **fax** or **e-mail** to verify that the payment procedure has started. **Payments without a laboratory code to identify them will not be considered as paid.**

General Characteristics

Objectives

The objective 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 in the framework of the EU and national pesticide monitoring programmes. Participating laboratories will be provided with an assessment of their own analytical performance and the reliability of their data compared to other laboratories.

Steps to Follow

The Proficiency Test is made up of the following 8 steps that are essential for the generation of satisfactory results:

1. Invitation to the participating laboratories. Also supplying details of the web site & web page, where they can download the Application Form and Possible Pesticide List.

2. Preparation of the test materials. Homogeneity and stability testing performed by the Organiser.
3. Receipt confirmation of the participant's Application Form and notification of the Laboratory Codes and Security Code to gain access to the Forms and to this Protocol.
4. Payment in advance for the shipment of the test materials indicating the Lab Code, and receipt of a fax demonstrating that the payment procedure has started.
5. Shipment of the test material, together with the blank.
6. The participant laboratories will be responsible for reporting their data to the Organiser using the Forms supplied, by the stipulated deadline.
7. The Organiser will evaluate the results at the end of the proficiency test, once the deadline for receipt of the results has passed.
8. 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 record of the shipped samples, 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.

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 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 and which were (i) not used in the sample treatment, (ii) and not detected by the Organiser even in a repeat analysis. However, if a number of laboratories detect the same additional pesticide, or if the concentration is close to the MPRL, 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.

Nevertheless, 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 MPRL.

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

The true concentration in all cases will be determined by 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.

$$\text{Where } \delta = b_i * \mu_i \quad \text{being } b_i = \%FFP/100\%$$

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-crop-concentration combinations, after consultation with the committee of experts, and based on experience gained from previous Proficiency Tests.

– **z-Scores**

This parameter is calculated using this 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:

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



$|z| \leq 2$ Acceptable

$2 < |z| \leq 3$ Questionable

$|z| > 3$ Unacceptable

For the values considered to be false negative results, z-scores will be calculated using the MPRL 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 reported at least 90% of the pesticides present, and have reported no false positive results, will be classified according by the Weighted Sum of z-Scores. Additionally this year, laboratories must also report a concentration value above the MPRL for all of the 43 pesticides marked with a red asterisk on the Pesticide List and found to be present in the sample. This is a further condition in order for a laboratory to be classified.

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:

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

n = number of reported results

So for each 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:

$|z| \leq 2$ Good

$2 < |z| \leq 3$ Satisfactory

For a laboratory to be in Category A it must achieve: report a 90% of the pesticides present in the sample, not report a false positive, achieve a WSZ less or equal to three and report a concentration value above the MPRL for all the pesticides marked with asterisk and present in the sample.

Laboratories reporting a WSZ above 3 will not be in Category A.

These weighted summed z-score results are considered to be less important than the individual z-scores. Therefore, the Organizer retains the right not to use them if feels they are unhelpful.

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

Phone Numbers: +34 950015034 or +34 950015645

Fax Number: +34 950015645

E-mail: pmedina@ual.es or amadeo@ual.es

On-Line News

The latest information currently updated can be found at the web address:

<http://www.ual.es/GruposInv/EUPT/>

Introduction

This proficiency test is based on pesticide residues analysis of strawberries. The strawberries were grown in Almería, Spain.

The pesticide treatments will be carried out as a post harvest treatment using a commercial formulation in micro spray 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 by an independent laboratory to check for homogeneity.

The test material will be stored frozen (-20°C) 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 results from the participants). These results will not be included in the statistical analysis of the proficiency test.

The aim is only to check the stability during the shipping process and the proficiency test.

Calendar

The following table shows the programme for this EUPT-FV-9

Activity	Date
- Selection of pesticides and design of the web page and protocol.	10 th January 2007
- Deadline for receiving the Application Form from invited laboratories.	23 rd February 2007
- Sample Treatment, Homogenisation, and Storage/Stability Test.	March 2007
- Sample distribution.	16 th -19 th April 2007
- Deadline for receiving Form 1.	20 th April 2007
- Deadline for receiving results: Forms 2 and 3.	14 th May 2007
- Preliminary Report: only results, no statistical treatment.	July 2007
- Final Report.	December 2007

Participant Laboratories

It is up to the contact points/authorities/organisations responsible for the official monitoring of pesticide residues in each country to select the laboratories that should participate, although it is a requirement that a laboratory must be active in contributing results to the national monitoring programme and/or the EU co-ordinated programme. It is up to the participants to complete and return the Application Form so 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.

Amount of Sample

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

Application Form

Using the web page site: <http://www.ual.es/GruposInv/EUPF/>, the participating laboratories must complete the Application Form and return it by e-mail to the Organiser.

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

In the Application Form there is also information that must be provided in order to make an official invoice. The Application Form must be sent to the Organiser by 23rd February 2007, at the latest.

Shipping of Samples

The shipment of the test materials will be carried out during a one-week period making a great effort to ensure that all the shipments arrive at once. A warning message will be sent out a week before shipment, and laboratories must make their own arrangements for the reception of the test materials. They must inform the Organiser of any possible public holidays in their country/city during the delivery time mentioned in the calendar and make every effort to receive the shipment even if the laboratory is closed.

Form 1

Once the laboratory has received the test materials they **must** complete Form 1, filling in the date of receipt, the condition of the test material, and its acceptance. Form 1 has a deadline, so if it is not returned by e-mail, by the latest 20th April 2007, the Organiser will assume the laboratory has received and accepted the test material.

Please note that you must include the laboratory code assigned to you on this form.

Analyses and Results Forms (Form 2)

Significant Figures

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

- Concentrations < 0.100 mg/kg, to be expressed to two significant figures (three decimal places, i.e. 0.058 mg/kg).
- Concentrations ≥ 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. If it was not sought, it should be recorded as NA.

The results/concentrations must be reported as numbers. Any other form of data will not be considered.

Correction of Results

The results must **not** be corrected using recovery factors. If the laboratory usually corrects the results using their recoveries, they should provide the correction factor used for each pesticide as informative data only. It must also be reported if recoveries originated from experiments performed in connection with the test or if they have originated from the validation data. This information must be sent together with the results in Form 2.

Samples Material for Analysis

The test material contains a certain number of pesticides from the Pesticide List. Laboratories must be aware that this year, Form 2 will have space to report separately the individual contributions for parent compounds and transformation product(s), as well as the sum specified in the residue definition. The residue definitions have been given in the Pesticide List.

It should **not** be assumed that only pesticides registered for use on strawberries will be present.

Each laboratory must report only **one** result for each of the pesticide residues present in the test material, using their normal routine analytical procedure(s). This does not mean that more than one method has to be used to cover all the compounds present.

The analytical nomenclature used must be reported using Form 2. The results, expressed as concentration levels in mg/kg, must also be reported, together with the laboratories reporting level (RL) for each pesticide. This level will only be used for information purposes.

The confirmation technique must be reported in this Form.

Form 2 must be sent to the Organiser by 14th May 2007, at the latest. Results received after this date will not be included in the statistical treatment, or in the Final Report. The laboratories are responsible for reporting their results to the Organiser. The Organiser will acknowledge receipt of the results by e-mail and the order of reception of this Form will be recorded. For this year, the time taken to submit Form 2 will not penalize the laboratory's classification.

Please note that you must include the laboratory code assigned to you on this Form.

Analytical Procedures Used (Form 3)

A brief summary of the analytical procedure(s) used is required from each laboratory on Form 3.

If more than one method has been used, please label them with different letters or codes in Form 2, and use as many copies of Form 3 as are needed (one for each method). Form 2 requires the confirmation method and Form 3 the determination method, please differentiate them.

The Organiser must receive Form 3 by mail by 14th May 2007, at the latest. For this year, the time taken to submit Form 2 will not penalize the laboratory's classification although the order of reception will be recorded.

Please note that you must include the laboratory code assigned to you on this Form.

Advice on Sample Handling

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

Be sure to mix the contents of the bottle thoroughly, to ensure homogeneity of the test material, before taking the analytical portion(s).

Form 1

Laboratory Code: *EUPF-FV-09-Lab-*

Date of receipt: / /2007

Test material code: *(Check both the blank bottle and the test material)*

EUPF-FV-09-blank-

EUPF-FV-09-sample-

Losses: YES NO

Frozen: YES NO

I accept the test material. I do not need more.

Please, fill in this form and send it back by e-mail (pmedina@ual.es) as soon as you have received the test material, latest 20th April 2007.

If no Form1 is received by the Organiser, it will be assumed that the test material has been accepted by the laboratory.

Name:

Laboratories should fill in this form and send it to the following e-mail address: pmedina@ual.es

Form 2 (Results)

Laboratory Code:

Date:

Test material and blank code:

Pesticide	Scope of your Method (1)	Analytical Procedure (2)	Conc. (mg/kg) (3)	Quantification Using Standards in Solvents or Matrix (4)	Confirmation Method (5)	RL (mg/kg) (6)	Recovery % (7)	Recovery (1 or 2) (8)
Acephate								
Acetamiprid								
Acrinathrin								
Aldicarb (sum)								
Aldicarb								
Aldicarb Sulfone								
Aldicarb Sulfoxide								
Azinphos-methyl								
Azoxystrobin								
Bifenthrin								
Bromopropylate								
Bupirimate								
Buprofezin								
Captan								
Carbaryl								
Carbendazim (sum)								
Benomyl								
Carbendazim								
Chlofentezin								
Chlorothalonil								
Chlorpropham								
Chlorpyrifos								
Chlorpyrifos-methyl								
Cypermethrin								
Cyprodinil								
Deltamethrin								
Diazinon								
Dichlofluanid								
Dichlorvos								
Dicofol								
Dimethoate (sum)								
Dimethoate								
Omethoate								
Dimethomorph								
Diphenylamine								
Endosulfan (sum)								
Alpha Endosulfan								
Beta Endosulfan								
Endosulfan Sulfate								
Fenarimol								

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



Pesticide	Scope of your Method (1)	Analytical Procedure (2)	Conc. (mg/kg) (3)	Quantification Using Standards in Solvents or Matrix (4)	Confirmation Method (5)	RL (mg/kg) (6)	Recovery % (7)	Recovery (1 or 2) (8)
Fenhexamid								
Fenitrothion								
Fludioxonil								
Flusilazole								
Folpet								
Hexaconazole								
Hexythiazox								
Imazalil								
Imidacloprid								
Indoxcarb								
Iprodione								
Iprovalicarb								
Kresoxim-methyl								
Lambda-cyhalothrin								
Malathion (sum)								
Malathion								
Malaoxon								
Mepanipyrim								
Metaxyl (sum)								
Metaxyl-M								
Isomers								
Methamidophos								
Methidathion								
Methiocarb (sum)								
Methiocarb								
Methiocarb sulfone								
Methiocarb sulfoxide								
Methomyl (sum)								
Methomyl								
Thiodicarb								
Monocrotophos								
Myclobutanil								
Oxamyl								
Oxydemeton-methyl (sum)								
Oxydemeton-methyl								
Demeton-S-Methylsulfon								
Parathion								
Parathion-methyl (sum)								
Parathion-methyl								
Paraoxon-methyl								
Penconazole								
Phosalone								
Pirimicarb								
Pirimiphos-methyl								
Prochloraz								
Procymidone								
Profenofos								
Propargite								

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



Pesticide	Scope of your Method (1)	Analytical Procedure (2)	Conc. (mg/kg) (3)	Quantification Using Standards in Solvents or Matrix (4)	Confirmation Method (5)	RL (mg/kg) (6)	Recovery % (7)	Recovery (1 or 2) (8)
Propiconazole								
Pyrimethanil								
Pyriproxyfen								
Quinoxifen								
Spiroxamine								
Tebuconazole								
Tebufozozide								
Tetraconazole								
Thiabendazole								
Thiophanate-methyl								
Tolclofos-methyl								
Tolyfluanid								
Triadimefon (sum)								
Triadimefon								
Triadimenol								
Triazophos								
Trifloxystrobin								
Vinclozolin								

- (1) If the pesticide is not included in your analysis, put **NA**. If the pesticide is included in your scope (analysed) put **D**.
- (2) Write codes (e.g. A, B, C...) for each analytical method used, the same as you will use in Form 3.
- (3) Concentration determined in the sample (report only one result). **Record the concentrations for all pesticides and give individual contributions for parent compounds and transformation products when required.**
- (4) Standards: **S** = standard/calibration in pure solvent, **M** = standard/calibration in matrix extract
- (5) **Give the confirmation technique used if any e.g. GC-FPD, HPLC-UV, GC-MS, LC-MS, LC-MS/MS**
- (6) **RL** Your Reporting Level must be given for all pesticides. For pesticides with metabolites/degradation products included in the MRL definition, give the "Reporting Level" for the global pesticide as well as for individual compounds when required.
- (7) The concentration/results reported in (3) must not be corrected using recovery factors even if the laboratory usually corrects them. Nevertheless, you may give the correction factor for each pesticide as informative data.
- (8) Write "1" if recoveries reported originated from experiments performed at the same time as the test and write "2" if recoveries reported have been originated from validation data.

I agree to be responsible for completing and returning this form to the Organizer latest 14th May 2007. In case of no e-mail confirmation of reception of this document (in 3 or 4 days), I will contact the Organiser as soon as possible.

Name:

Laboratories should fill in this form and send it to the following e-mail address: pmedina@ual.es

Form 3 (Analytical Procedures Used)

Laboratory Code: _____

Date: _____

Complete one of these forms for each different analytical procedure used

Analytical Procedure **(2)**: _____

Sample Weight (g): _____ Extraction solvent/s **(7)**: _____

Clean-up step **(8)**: _____ Internal standard (if any): _____

Injection Volume: _____ Injection Type: _____

Determination **(9)**: _____

Reference Method **(10) (Obligatory)**: _____

Signature: _____

I accept responsibility for delivering this form to the Organiser. In the case of no e-mail receipt confirmation for this form (within 3 or 4 days), I will contact the Organiser as soon as possible

Please return this form no later than 7th May, 2007.

(2) Write the same code as you use in Form 2 for the analytical method used, e.g. A, B, C...

(7) 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**).

(8) Clean-up: GPC = **gel permeation chromatography**, SPE = **solid phase extraction**, DSPE = **Dispersive Solid Phase Extraction**, LL = **liquid-liquid partition**, NO = **no clean-up**, O = **other** (**specify which**)

(9) Determination Technique: e.g. GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad), GC-ITD, HPLC-FL, HPLC-UV, HPLC-DAD, LC-MS, LC-MS/MS

(10) Reference Method: please see list below

Laboratories should fill in this form and send it to the following e-mail address:
pmedina@ual.es

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



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	Application note 2003/1 1-15 Sabdra, Tienpont, David Research Institute for Chromatography Belgium
4	Cano, De La Plaza, Muñoz. Pestic. Sci 1987
5	EN-12393
6	EN-14333 or EN-14185
7	Fillion et al. Journal of AOAC International 78-5-1995
8	FP017 or FP018 or FP086
9	Fresenius J Anal Chem. (1995) 353: 183 - 190
10	Gilvydis Dm Walters SM (1990) JAOA Chem. 73
11	Internal Method MI/C/10/100 Rev. 3 or Local SOP
12	Internal Method SAR (based on No. 7)
13	ISTIAN 97/23
14	Janson et al. Journal of Chromatography A 1023 (2004,9, 93-104
15	JB Leary
16	Klein, J., Alder, L. JAOAC 86, 1015 (2003)
17	KM 21 or KM 22
18	Leothay, S. Et al. JAOAC 88 (2005)
19	Luke
20	M. Anastasiades et al JAOAC 86 (2003)
21	Methodenvorschlag EG Proficiency Test 1996/97
22	Multi Residu Method draft BfR
23	Official Method of Analysis (1990) 15th Ed., 985.22 AOAC Arlington VA
24	Proc. Int. Citriculture (1997) Vol. 3
25	Rev 3, 1, 1995 Method 531,1. National Exposure Research Laboratory Office of Research and Development, US Environmental Protection Agency, Cincinnati Ohio 45268
26	SC/PB-07; 28.10.2004 wyd.1
27	SLV M200
28	Validated Internal Method JAOAC 79-2 (1996)
29	VVMDC-T-012-023
30	Wyd. Met. PZH 2002
31	Internal Method (specify any reference)

PESTICIDE LIST FOR THE CRL-EUPF-FV 9

Pesticide	MRRL (mg/Kg)	Pesticide	MRRL (mg/Kg)
* Acephate	0.02	Iprovalicarb	0.05
Acetamiprid	0.01	Kresoxim-methyl	0.05
Acrinathrin	0.05	* Lambda-cyhalothrin	0.02
* Aldicarb (Aldicarb + Aldicarb Sulfone + Aldicarb Sulfoxide expressed as Aldicarb)	0.02	* Malathion (Malathion + Malaaxon, expressed as Malathion)	0.05
Azinphos-methyl	0.05	Mepanipyrim	0.01
* Azoxystrobin	0.05	* Metalaxyl (including Metalaxyl-M, sum of isomers)	0.05
* Bifenthrin	0.05	* Methamidophos	0.01
Bromopropylate	0.05	Methidathion	0.02
Bupirimate	0.05	* Methiocarb (Methiocarb + Methiocarb sulfone + Methiocarb sulfoxide, expressed as Methiocarb)	0.05
Buprofezin	0.02	* Methomyl (Methomyl + Thiodicarb, expressed as Methomyl)	0.05
* Captan	0.02	* Monocrotophos	0.03
* Carbaryl	0.05	Myclobutanil	0.02
* Carbendazim (Benomyl + Carbendazim expressed as Carbendazim)	0.1	* Oxamyl (only parent compound)	0.01
Chlofentezin	0.05	* Oxydemeton-methyl (Oxydemeton-methyl + Demeton-S- Methylsulfon, expressed as Oxydemeton-methyl)	0.02
* Chlorothalonil	0.01	Parathion	0.05
Chlorpropham	0.05	* Parathion-methyl (Parathion-methyl + Paraoxon-methyl expressed as Parathion-methyl)	0.02
* Chlorpyrifos	0.05	Penconazole	0.05
* Chlorpyrifos-methyl	0.05	Phosalone	0.05
* Cypermethrin	0.05	* Pirimicarb	0.05
Cyprodinil	0.05	* Pirimiphos-methyl	0.05
* Deltamethrin	0.05	* Prochloraz	0.05
* Diazinon	0.02	* Procymidone	0.02
Dichlofluanid	0.05	Profenofos	0.05
* Dichlorvos	0.01	Propargite	0.05
* Dicofol	0.02	* Propiconazole	0.05

Pesticide	MRRL (mg/Kg)	Pesticide	MRRL (mg/Kg)
* Dimethoate (Dimethoate + Omethoate, expressed as Dimethoate)	0.02	* Pyrimethanil	0.05
Dimethomorph	0.05	Pyriproxyfen	0.02
Diphenylamine	0.05	Quinoxifen	0.02
* Endosulfan ($\alpha + \beta$ + Sulphate Endosulfan expressed as Endosulfan)	0.05	Spiroxamine	0.05
Fenarimol	0.05	* Tebuconazole	0.02
Fenhexamid	0.05	Tebufenozide	0.02
* Fenitrothion	0.01	Tetraconazole	0.05
Flusilazole	0.05	* Thiabendazole	0.05
Fludioxonil	0.05	* Thiophanate-methyl	0.1
Folpet	0.02	Tolclofos-methyl	0.05
* Imazalil	0.02	* Tolyfluanid	0.05
Hexaconazole	0.02	* Triadimefon (Triadimefon + Triadimenol expressed as Triadimefon)	0.1
Hexythiazox	0.02	Triazophos	0.01
* Imidacloprid (only parent compound)	0.05	Trifloxystrobin	0.02
Indoxacarb	0.05	* Vinclozolin (only parent compound)	0.05
* Iprodione	0.02		

Laboratories not analysing any of the pesticides marked with a red asterisk (*), or reporting any false negative for these pesticides, will not be included in Category A.

ANNEX 2. List of laboratories invited to participate in PT9.

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
ARGENTINA	LABORATORIO CENTRAL. UNIVERSIDAD NACIONAL DEL LITORAL	SANTA FE	NO
AUSTRIA	AUSTRIAN AGENCY FOR FOOD AND HEALTH SAFETY (AGES) ANALYTICAL COMPETENCE FOR PLANT PROTECTION PRODUCTS	INNSBRUCK	YES
AUSTRIA	AUSTRIAN AGENCY FOR HEALTH AND FOOD SAFETY, COMPETENCE CENTRE RESIDUE ANALYSIS, VIENNA	VIENNA	YES
BELGIUM	SCIENTIFIC INSTITUTE OF PUBLIC HEALTH (IPH)	BRUXELLES	YES
BELGIUM	FYTOLAB	ZWIJNAARDE	YES
BELGIUM	CENTRE D'ECONOMIE RURALE GROUPE - LABORATOIRE D'HORMONOLOGIE	MARLOIE	YES
BULGARY	CENTRAL LABORATORY FOR CHEMICAL TESTING AND CONTROL	SOFIA	YES
COUNTRY	LABORATORY NAME	CITY	YES
CYPRUS	STATE GENERAL LABORATORY	NICOSIA	YES
CZECH REPUBLIC	INSTITUTE OF CHEMICAL TECHNOLOGY DEPARTMENT OF FOOD CHEMISTRY AND ANALYSIS	PRAGUE 6	YES
CZECH REPUBLIC	CZECH AGRICULTURE AND FOOD INSPECTION AUTHORITY	PRAHA 5	YES
DENMARK	DANISH VETERINARY AND FOOD ADMINISTRATION, REGION EAST	RINGSTED	YES
DENMARK	THE NATIONAL FOOD INSTITUTE, DANISH TECHNICAL UNIVERSITY	SOEBORG	YES
EGYPT	CENTRAL LABORATORY OF RESIDUE PESTICIDE ANALYSIS, MINISTRY OF AGRICULTURE	GIZA	YES
ESTONIA	AGRICULTURAL RESEARCH CENTRE, LAB FOR RESIDUES AND CONTAMINANTS	SAKU (HARJUMAA)	YES
ESTONIA	HEALTH PROTECTION INSPECTORATE TARTU LABORATORY	TARTU	YES
FINLAND	ENVIROMENT CENTRE OF THE CITY OF HELSINKI	HELSINKI	YES
FINLAND	FINNISH CUSTOMS LABORATORY	ESPOO	YES
FRANCE	LABORATOIRE DU SCL DE MONTPELLIER	MONTPELLIER	YES
FRANCE	LABORATOIRE SCL-FINANCE MINISTRY, RENNES	RENNES	NO
FRANCE	SCL LABORATOIRE DE STRASBOURG	ILLKIRCH	YES
FRANCE	SCL LABORATOIRE DE PESSAC	PESSAC	YES
FRANCE	SCL LABORATOIRE D'ILE DE FRANCE - MASSY	MASSY CEDEX	YES
FRANCE	LABORATOIRE SCL DE LILLE	VILLENEUVE D'ASCQ	YES
FRANCE	SERVICE COMMUN DES LABORATOIRES	SAINT-DENIS DE LA REUNION CEDEX	NO
GERMANY	GEMEINSAMES CHEMISCHES UND LEBENSMITTELUNTERSUCHUNGSAMT FÜR DEN KREIS RECKLINGHAUSEN UND DIE STADT GELSENKIRCHEN (CEL)	RECKLINGHAUSEN	YES
GERMANY	CHEMISCHES UND LEBENSMITTELUNTERSUCHUNGSAMT DER STADT DORTMUND	DORTMUND	YES

ANNEX 2. List of laboratories invited to participate in PT9.

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
GERMANY	LANDESAMT FÜR LANDWIRTSCHAFT, LEBENSMITTEL SICHERHEIT UND FISCHEREI MECKLENBURG-VORPOMMERN	ROSTOCK	YES
GERMANY	CHEMISCHES LANDES- UND STAATLICHES VETERINÄRUNTERSUCHUNGSAMT	MÜNSTER	YES
GERMANY	LANDESUNTERSUCHUNGSAMT FÜR CHEMIE, HYGIENE UND VETERINÄRMEDIZIN	BREMEN	YES
GERMANY	BAYERISCHES LANDESAMT FÜR GESUNDHEIT UND LEBENSMITTELSICHERHEIT	ERLANGEN	YES
GERMANY	CHEMISCHES UNTERSUCHUNGSAMT DER STADT HAGEN	HAGEN	YES
GERMANY	THÜRINGER LANDESAMT FÜR LEBENSMITTELSICHERHEIT UND VERBRAUCHERSCHUTZ (TLLV)	ERFURT	YES
GERMANY	39/2 CHEMISCHEN UND LEBENSMITTELUNTERSUCHUNG	DÜSSELDORF	YES
GERMANY	BBGES-ILAT, FB 26	BERLIN	YES
GERMANY	LANDESAMT FÜR VERBRAUCHERSCHUTZ	HALLE / S.	YES
GERMANY	LAVES LEBENSMITTELINSTITUT OLDENBURG	OLDENBURG	YES
GERMANY	AMT FÜR UMWELT, VERBRAUCHERSCHUTZ UND LOKALE AGENDA	BONN	YES
GERMANY	CGI ESSEN/OBERHAUSEN	ESSEN	YES
GERMANY	LSGV (LANDESAMT FÜR SOZIALES, GESUNDHEIT UND VERBRAUCHERSCHUTZ)	SAARBRÜCKEN	YES
GERMANY	LANDESUNTERSUCHUNGSAMT-INSTITUT FÜR LEBENSMITTELCHEMIE TRIER	TRIER	YES
GERMANY	CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT-OSTWESTFALEN-LIPPE (CVUA-OWL)	BIELEFELD	YES
GERMANY	LANDESLABOR SCHLESWIG-HOLSTEIN	NEUMÜNSTER	YES
GERMANY	INSTITUT FÜR HYGIENE UND UMWELT	HAMBURG	YES
GERMANY	LANDESLABOR BRANDENBURG, DIENSTSITZ UND LABORBEREICH FRANKFURT (ODER)	FRANKFURT (ODER)	YES
GERMANY	CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT (CVUA) STUTTART	FELLBACH	YES
GERMANY	LANDESBETRIEB HESSISCHES LANDESLABOR	KASSEL	YES
GERMANY	LANDESUNTERSUCHUNGSAMT, INSTITUT FÜR LEBENSMITTELCHEMIE	SPEYER	YES
GERMANY	FEDERAL OFFICE OF CONSUMER PROTECTION AND FOOD SAFETY (BVL)	BERLIN	YES
GREECE	MINISTRY OF RURAL DEVELOPMENT AND FOOD, REGIONAL CENTRE OF PLANT PROTECTION AND QUALITY CONTROL	IOANNINA	YES
GREECE	GENERAL CHEMICAL STATE LABORATORY. DIVISION PESTICIDE RESIDUE LABORATORY	ATHENS	YES
GREECE	REGIONAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL	THESSALONIKI	YES
GREECE	PESTICIDE RESIDUES LABORATORY, BENAKI PHYTOPATHOLOGICAL INSTITUTE	KIPHISSIA, ATHENS	YES
GREECE	REGIONAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL OF MAGNESIA. PESTICIDE RESIDUE LABORATORY	VOLOS	YES
GREECE	MINISTRY OF RURAL DEVELOPMENT AND FOOD - PERIPHERAL CENTER OF KAVALA	KAVALA	YES

ANNEX 2. List of laboratories invited to participate in PT9.

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
GREECE	PESTICIDE RESIDUE LABORATORY OF REGIONAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL OF PIRAEUS	ATHENS	YES
GREECE	REGIONAL CENTRE OF PLANT PROTECTION AND QUALITY CONTROL OF IRAKLION	IRAKLION CRETE	YES
HUNGARY	AGRICULTURAL OFFICE OF COUNTY FÉJER, PLANT PROTECTION AND SOIL CONSERVATION DIRECTIRATE, PESTICIDE RESIDUE ANALYTICAL LABORATORY	VELENCE	YES
HUNGARY	PLANT PROTECTION AND SOIL CONSERVATION DIRECTORATE OF JÁSZ-NAGYKUN-SZOLNOK COUNTY	SZOLNOK	YES
HUNGARY	PESTICIDE RESIDUE ANALYTICAL LABORATORY	MISKOLC	YES
HUNGARY	PLANT PROTECTION AND SOIL CONSERVATION DIRECTORATE, AGRICULTURAL OFFICE OF CSONGRAD COUNTY	HÓDMEZOVÁSÁRHELY	YES
HUNGARY	PLANT PROTECTION AND SOIL CONSERVATION DIRECTORATE, AGRICULTURAL OFFICE OF SOMOGY COUNTY	KAPOSVÁR	YES
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, COUNTY KILDARE	YES
ITALY	A.P.P.A. TRENTO-SETTORE LABORATORIO E CONTROLLI	TRENTO	YES
ITALY	ARPA PUGLIA - DIPARTIMENTO DI BARI	BARI	YES
ITALY	A.R.P.A PIEMONTE - POLO REGIONALE ALIMENTI	LA LOGGIA (TORINO)	YES
ITALY	ARPA VALLE D'AOSTA	SAINT CHRISTOPHE (AOSTA)	YES
ITALY	ARPAT DIPARTIMENTO DI AREZZO	AREZZO	YES
ITALY	UNITÀ OPERATIVA LABORATORIO CHIMICO - ASL DELLA PROVINCIA DI VARESE	VARESE	YES
ITALY	AUSL N.7 RAGUSA ARPA SICILIA DAP RAGUSA. LABORATORIO CHIMICO	RAGUSA	YES
ITALY	AGENZIA AMBIENTE BOLZANO	BOLZANO	YES
ITALY	I.S.S. DIP. AMBIENTE E CONNESSA PREVENZIONE PRIMARIA	ROMA	NO
ITALY	APRAV-VERONA	VERONA	YES
ITALY	ARPAT DIPARTIMENTO DI FIRENZE	FIRENZE	YES
ITALY	LABORATORIO DI SANITA PUBBLICA. ASL PROVINCIA DI BERGAMO	BERGAMO	YES
ITALY	A.R.P.A.L. LABORATORIO "CENTRO REGIONALE PESTICIDI"	LA SPEZIA	YES
ITALY	ARPA FERRARA	CHIESUOL DEL FOSSO (FERRARA)	YES
ITALY	P.M.P. ASL 8 CAGLIARI	CAGLIARI	YES
ITALY	A.R.P.A.V. DIPARIMENTO DI VICENZA	VICENZA	YES
ITALY	ARPA - FVG DIPARTIMENTO DI PORDENONE	PORDENONE	YES
ITALY	ARPAT DIP. PROV. LE DI LIVORNO	LIVORNO	YES

ANNEX 2. List of laboratories invited to participate in PT9.

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
ITALY	ARPA CAMPANIA LABORATORIO SPECIALIZZATO FITOFARMACI	NAPLES	YES
ITALY	ARPA MARCHE - DIP. MACERATA	MACERATA	YES
LATVIA	NATIONAL DIAGNOSTIC CENTRE	RIGA	YES
LITHUANIA	NATIONAL VETERINARY LABORATORY	VILNIUS	YES
LUXEMBOURG	CONTROLE DES DENREES ALIMENTAIRES, LNS	LUXEMBOURG	YES
NORWAY	NORWEGIAN INSTITUTE FOR AGRICULTURAL AND ENVIRONMENTAL RESEARCH, BIOFORSK LABORATORY	AAS	YES
POLAND	INSTITUTE OF PLANT PROTECTION, EXPERIMENTAL STATION	RZESZOW	YES
POLAND	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W RZESZOWIE	RZESZOW	YES
POLAND	LABORATORY OF WARSAW VOIVODESHIP SANITARY-EPIDEMIOLOGICAL STATION	WARSZAWA	YES
POLAND	PLANT PROTECTION INSTITUTE	TRZEBNICA	YES
POLAND	PLANT PROTECTION INSTITUTE, DEPARTMENT OF PESTICIDE RESIDUE RESEARCH	POZNAN	YES
POLAND	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W GORZÓW	GORZÓW WIELKOPOLSKI	YES
POLAND	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W KRAKOWIE	KRAKOW	YES
POLAND	PLANT PROTECTION INSTITUTE	SOSNICOWICE	YES
POLAND	INSTYTUT OCHRONY ROSLIN LABORATORIUM BADAŃ POZOSTAŁOŚCI ŚRODKÓW ROSLIN	BIAŁYSTOK	YES
POLAND	NATIONAL INSTITUTE OF HYGIENE ENVIROMENTAL TOXICOLOGICAL LABORATORY	WARSAW	YES
POLAND	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA	OPOLE	YES
POLAND	FOOD SAFETY LABORATORY	SKIERNIEWICE	YES
POLAND	WOJEWÓDZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W LODZI	LODZ	YES
POLAND	STATE PLANT HEALTH AND SEED INSPECTION SERVICE, CENTRAL LABORATORY	TORUN	YES
POLAND	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W WROCLAW	WROCLAW	YES
PORTUGAL	PESTICIDE RESIDUE LABORATORY, DIRECÇÃO-GERAL DE PROTECÇÃO DAS CULTURAS.	OEIRAS	YES
PORTUGAL	LABORATORIO REGIONAL DA DIRECÇÃO REGIONAL DE AGRICULTURA DE ENTRE DOURO E MINHO	SENHORA DA HORA	NO
PORTUGAL	LABORATÓRIO DE QUALIDADE AGRÍCOLA	CAMACHA MADEIRA ISLAND	YES
ROMANIA	CENTRAL LABORATORY FOR PESTICIDE RESIDUES CONTROL	BUCURESTI, SECTOR 6	YES
SLOVAKIA	STATE VETERINARY AND FOOD INSTITUTE	BRATISLAVA	YES
SLOVENIA	PUBLIC HEALTH INSTITUTE	MARIBOR	YES
SLOVENIA	AGRICULTURAL INSTITUTE OF SLOVENIA, CENTRAL LABORATORIES	LJUBLJANA	YES

ANNEX 2. List of laboratories invited to participate in PT9.

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
SLOVENIA	INSTITUTE FOR PUBLIC HEALTH OF REPUBLIC OF SLOVENIA	LJUBLJANA	YES
SPAIN	LABORATORIO AGRARIO. DIPUTACIÓN FORAL DE GIPUZKOA	ZIZURKIL	YES
SPAIN	LABORATORI AGROALIMENTARI -DAR (GENERALITAT DE CATALUNYA)	CABRILS	YES
SPAIN	JUNTA DE CASTILLA Y LEÓN. LABORATORIO AGRARIO REGIONAL	BURGOS	YES
SPAIN	LABORATORIO AGRARIO Y FITOPATOLÓGICO DE GALICIA	A CORUÑA	YES
SPAIN	LABORATORIO DE PRODUCCIÓN Y SANIDAD VEGETAL DE ALMERÍA	LA MOJONERA, ALMERIA	YES
SPAIN	LABORATORIO DE PRODUCCIÓN Y SANIDAD VEGETAL DE HUELVA	HUELVA	YES
SPAIN	NASERSA	VILLAVA NAVARRA	YES
SPAIN	LABORATORIO ARBITRAL AGROALIMENTARIO	ARAVACA (MADRID)	YES
SPAIN	LABORATORIO DE PRODUCCIÓN Y SANIDAD VEGETAL	JAÉN	YES
SPAIN	LABORATORIO REGIONAL DE LA CCAA DE LA RIOJA	LOGROÑO	YES
SPAIN	CENTRO NACIONAL DE ALIMENTACION	MAJADAHONDA (MADRID)	YES
SPAIN	LABORATORIO AGROALIMENTARIO Y DE SANIDAD ANIMAL	EL PALMAR, MURCIA	YES
SPAIN	LABORATORIO AGROALIMENTARIO DE VALENCIA	BURJASSOT (VALENCIA)	YES
SPAIN	LABORATORIO DE RESIDUOS - INSTITUTO TECNOLÓGICO DE CANARIAS	SANTA LUCÍA DE TIRAJANA	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 PROTECTION DE LA CONSOMMATION (SPCO)	GENEVE 4 PLAINPALAIS	YES
SWITZERLAND	AMT FÜR VERBRAUCHERSCHUTZ AARGAU	AARAU	YES
THE NETHERLANDS	VWA-FOOD AND CONSUMER PRODUCT SAFETY AUTHORITY	AMSTERDAM	YES
TURKEY	MINISTRY OF AGRICULTURE AND RURAL AFFAIRS OF ANKARA. PROVINCIAL CONTROL LABORATORY	ANKARA	YES
UNITED KINGDOM	SCOTTISH AGRICULTURAL SCIENCE AGENCY.	EDINBURGH	YES
UNITED KINGDOM	CENTRAL SCIENCE LABORATORY	YORK	YES
UNITED KINGDOM	LABORATORY OF THE GOVERNMENT CHEMIST LIMITED	TEDDINGTON, MIDDLESEX	YES
UNITED KINGDOM	EUROFINS LABORATORIES LTD	WOLVERHAMPTON, WEST MIDLANDS	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 performance problems and errors in routine analytical procedures. Therefore, its role in analytical quality control is becoming 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 easily be identified due to the many possible sources of error and their relative contribution. For this reason, the committee has decided to organise a separate Ring test on standard solutions. The objective of this Ring test was to find out the between laboratory variability associated with the analytical standard solutions and to establish the contribution to the overall variability in EUPT-FV9.

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

A vial containing a solution of the pesticides present in the previously dispatched strawberry test material was sent to the laboratories that participated in EUPT-FV9 and had also agreed to take part voluntarily in this ring test. The intention was that laboratories should determine the concentrations of the compounds in the standard solution using their own standard solutions as they used in EUPT-FV9.

Laboratories that agreed to participate in this ring test received the standard solutions after the deadline for submission of results for EUPT-FV9 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-FV9

The timetable for the ring test was as follows;

- | | |
|--|--------------------------|
| • Deadline for laboratories to confirm their participation (by e-mail) | 23rd May 2007 |
| • Distribution of standard solutions by courier (no extra charge) | 29th May – 1st June 2007 |
| • Deadline for submission of results (Form 4) | 18th June 2007 |

It was decided by the organising committee that no complete statistical treatment would be performed on the results, but to consider this Ring test as a first pilot study providing information on how this type of activity would work out and to decide afterwards about how to organise a similar Ring test next year.

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

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

Results and Discussion:

One reason for sending the standard solutions to the EUPT FV-9 participants was to compare the results from the standard solutions with the results from the strawberry matrix. After receiving the results, it appeared that laboratories had quantified the compounds in the standard solution using either standard in pure solvent or standards in a blank matrix extract.

Table 1 shows the median, the theoretical concentration and all individual and total numbers of results reported for each compound.

The median values for all compounds were the same (<5% difference) as the theoretical concentration, except for Tolyfluanid and Tebuconazole. Tolyfluanid is known to be prone to degradation in solution if not acidified, which would explain the lower value for the median value. The observed difference for Tebuconazole can not be explained so easily and may have been caused by different factors.

For most compounds, the same percentage of laboratories reported results for the standard solutions as were reported for the strawberry matrix. Exceptions were observed for Oxamyl, 56% compared with 81%, and for Tolyfluanid, 78% compared with 86%, for the standard solutions and strawberry matrix, respectively. For Quinoxifen, these percentages were just the opposite, 73% compared with 66%.

Some laboratories reported false positive result, i.e. for pesticides that were not present in the standard solution:

Lab 025	Chlorpyrifos-methyl (0.24 mg/L)
Lab 048	Chlorpyrifos-methyl (0.23 mg/L)
Lab 097	Triadimefon (31.8 mg/L)
Lab 0133	Monocrotophos (65.7 mg/L)

As an alternative for z-scores the individual pesticide concentration were taken and recalculated as a percentage differences with the median. The results were then subdivided per pesticides into a range of percentages. The results can be seen in Table 2.

Table 2. Number of Laboratories in each percentage category per pesticide

Percentage Range	Bupirimate	Cyprodinil	Diazinon	Endosulfan I	Endosulfan II	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox	Iprodione	Myclobutanil	Oxamyl	Penconazole	Pyrimethanil	Procymidone	Quinoxifen	Tebuconazole	Tolyfluanid	Triadimenol
0-5%	17	22	30	30	30	14	22	15	18	21	22	19	20	23	29	22	24	14	14
6-10%	15	14	13	12	10	17	11	18	10	11	13	10	21	15	16	14	13	16	11
11-20%	15	15	21	12	12	6	17	13	6	18	17	8	15	15	15	14	14	19	17
>20%	18	14	8	12	14	19	19	15	5	14	15	7	11	13	12	7	7	12	15

The determination techniques used are presented in Table 3 and the participants list in Table 4. The same laboratory codes as for the strawberry test material have been used for this standard solution ring test.

Conclusions:

This year for the first time, a ring test for standard solutions was organised following the FV Proficiency Test.

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

Eighty-nine laboratories volunteered to participate. Out of these, eleven laboratories were not able to report results before the deadline set by the Organiser, which was set at just over two weeks after the shipment of the solutions.

The aim was to establish the errors associated with the analytical standard solutions used, and to estimate the contribution of these errors to the overall results of the laboratories participating in EUPT FV-9.

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

Table 1: Median, theoretical concentration and individual results (mg/L).

		Median (mg/L)	Theoretical Concentration (mg/L)	No. of results
	Bupirimate	44.4	45.1	65
	Cyprodinil	40.3	40.3	65
	Diazinon	49.8	52.1	72
	Endosulfan I	38.5	40.1	70
	Endosulfan II	39.4	40.3	67
	Fenhexamid	41.3	40.1	56
	Fenitrothion	50.0	51.4	69
	Fludioxonil	38.4	42.4	61
	Hexythiazox	41.7	42.8	39
	Iprodione	38.8	40.8	64
	Myclobutanil	40.1	41.9	67
	Oxamyl	41.0	39.7	44
	Penconazole	40.0	41.6	67
	Pyrimethanil	39.1	39.9	66
	Procymidone	39.3	39.8	57
	Quinoxifen	48.7	49.5	58
	Tebuconazole	42.4	50.5	61
	Tolyfluamid	45.4	50.0	56
	Triadimenol	39.3	39.8	57
Lab001		48.4		
Lab002		41.8		
Lab003				
Lab005		54.3		
Lab008		37.1		
Lab009		54.3		
Lab010				
Lab013		43.2		
Lab015		51.8		
Lab016		56.5		
Lab017		35.6		
Lab018		47.7		

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

	Bupirimate	Cyprodinil	Diazinon	Endosulfan I	Endosulfan II	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox	Iprodione	Myclobutanil	Oxamyl	Penconazole	Pyrimethanil	Procymidone	Quinoxifen	Tebuconazole	Tolyfluamid	Triadimenol
Lab019	44.4	42.7	50.0	34.4	37.9	39.7	50.8	43.6	44.0	42.9	44.2	42.0	41.5	40.8	46.4	39.3	49.4	44.9	47.5
Lab021	48.7	45.5	52.5	38.0	37.0	44.5	54.5	38.0	46.9	38.5	48.7	43.1	45.0	44.1	45.5		50.0		49.5
Lab024	43.1	39.0	49.2	38.3	38.3	38.1	53.6	39.6	40.5	38.8	39.3	46.7	39.8	38.1	49.5	39.9	46.8	41.9	45.7
Lab025	50.4	33.4	40.3	16.0	21.4	26.0	41.0	21.7	21.2	28.4	38.9		23.2	29.1	42.3	32.4	33.6	34.6	34.6
Lab026																			
Lab028																			
Lab029			47.4	38.9	43.5		55.0			35.8	43.0	40.2		59.0	52.9		54.1	41.5	
Lab030	41.6	40.0		32.7	35.0	49.7			45.1		41.5	34.5	43.6	35.9	42.9	42.6	48.9	43.2	41.3
Lab034	58.4		53.8	35.4	39.6	36.0	48.8			35.3	38.2		42.1		50.2	38.8		40.5	
Lab036		45.7	47.7	35.2	35.8	45.8	42.3	37.7		23.6	31.1		27.0	41.1	37.9				
Lab037	36.7		58.1	38.7	44.7		42.9			38.9			36.2		53.0				64.5
Lab040	40.5	40.0	40.1	35.1	38.0	41.9	42.9	40.3	40.7	35.0	39.4	38.8	37.1	39.1	44.4	36.8	46.1	38.2	47.3
Lab041	50.3	36.0	47.4	38.1	34.7	67.8	33.1	35.9	41.4	25.2	40.1	35.3	42.0	35.3	46.6	38.0	45.9	51.2	21.0
Lab042	41.7	40.9	46.6	36.6	41.4	41.8	54.5	40.9	40.4	41.8	40.4	42.1	36.0	44.0	51.5	41.2	46.2	43.8	39.3
Lab043	55.3	43.0	51.4	34.7	40.9		53.1	41.7		39.3	51.4	41.0	39.7	40.2	49.7	27.5	48.9	49.3	66.4
Lab044			50.0	64.0			41.0								52.0				
Lab045	63.6	52.3	70.5	64.3	53.5	54.7	71.5	37.5	45.8	55.4	57.0	41.3	62.2	50.7	68.8	54.2	58.0	65.8	
Lab046	47.0	37.7	43.4	40.4	39.4	25.6	52.7	33.6		37.3	36.3		40.0	34.9	44.8	37.8	52.6	35.6	38.9
Lab047		49.6				50.1						44.6		48.8					
Lab048	42.5	44.5	54.2	40.5	40.7	38.5	57.3	33.8	43.9	46.3	35.3	35.3	38.8	38.1	51.9	41.2	39.5	45.2	47.0

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

	Bupirimate	Cyprodinil	Diazinon	Endosulfan I	Endosulfan II	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox	Iprodione	Myclobutanil	Oxamyl	Penconazole	Pyrimethanil	Procymidone	Quinoxifen	Tebuconazole	Tolyfluamid	Triadimenol
Lab049	52.7		51.5	38.0	33.9	38.4	36.7	44.4		37.8	25.4		42.4	34.6	30.3	41.7		35.2	42.3
Lab052		37.7	65.5	39.0	43.5		53.7			37.3	65.0		35.4		66.0			42.4	63.9
Lab053			42.3	36.1	35.0		45.7				34.4		33.6						
Lab054	45.0	41.0	55.0	40.0	40.0	40.0	55.0	42.0		40.0	41.0	35.0	42.0	42.0	47.0	42.0	50.0	45.0	40.0
Lab056		39.6	49.7				52.6	38.8		49.2	38.7			40.2	61.8			45.1	
Lab057	39.6	30.6	40.7	49.7	39.9	44.5	33.0	32.1	40.1	36.2	39.2	42.2	41.5	32.2	51.6	40.0	49.8	30.4	55.6
Lab058	42.7	38.7	49.6	39.7	39.1	35.5	46.5	35.1	45.7	40.3	37.6	44.5	39.0	37.1	48.2	37.7	40.9	43.1	38.4
Lab061	32.5	36.5	43.4	33.2	35.8	36.9	57.3	42.4	35.2	42.4	36.1	31.2	36.5	38.4	60.4	33.9	50.0	48.9	44.7
Lab062	54.4	42.1	42.1	42.5	45.1	39.6	36.4	36.4	39.4	45.6	59.0	39.9	49.5	43.1	56.3	41.5	50.3	62.9	216
Lab064	46.4	43.1	52.7	38.3	40.6	44.1	52.2	40.6		43.5	35.6	39.5	41.8	37.4	50.9		52.8	24.8	40.1
Lab066	49.8	43.9	55.8	44.0	44.5	44.9	56.2	42.9	47.2	44.3	45.1	42.2	45.5	42.5	54.9	44.2	50.5	48.0	54.5
Lab067	29.9	31.4	45.0	38.8	38.5	44.0	61.8	30.1		38.3	30.2		34.2	42.0	53.8	30.7	42.3	33.8	
Lab070	44.5	40.4	40.0	33.0	38.5	40.8	49.0	40.0		40.6	39.0	43.8	38.0	39.6	48.0	40.0	49.5	40.2	48.0
Lab071	61.8	43.8	48.8			39.6	50.4	38.4	37.0	31.6	40.1		44.0	39.2	54.7	40.8	41.9	37.7	42.2
Lab073	47.1	42.1	53.1	41.6	40.8	42.4	48.3	41.9	46.2	41.6	45.2	43.1	43.5	42.3	52.7	39.3	51.4	45.7	53.8
Lab074	50.1	46.9	51.3	36.3	37.5	61.2	52.2	45.8	56.8	44.6	58.2	49.1	59.0	33.0	62.9	36.9	63.7	39.0	53.0
Lab075	34.1	36.0	15.2	61.3	54.3	24.7	44.5			18.6	11.1		12.9		21.7	38.4			24.7
Lab076	31.0	27.0	22.0	46.0		22.0	12.0	14.0	23.0	30.0	22.0	43.0	29.0	28.0	35.0	22.0	34.0	25.0	20.0
Lab077																			
Lab078																			

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

	Bupirimate	Cyprodinil	Diazinon	Endosulfan I	Endosulfan II	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox	Iprodione	Myclobutanil	Oxamyl	Penconazole	Pyrimethanil	Procymidone	Quinoxifen	Tebuconazole	Tolyfluamid	Triadimenol
Lab079	42.8	33.4	47.6	37.5	36.3		57.5	44.5		31.3	47.4		40.5	40.5	54.6		32.0		45.0
Lab080	26.7	33.6	57.2	39.7	39.8		46.2	36.1		44.7			48.5	41.1	52.7			46.5	47.4
Lab081	52.1	24.5	38.7	39.5	45.7	55.1	50.5	36.3	43.5	42.8	45.8	37.3	41.9	30.0	48.1	35.5	48.1	43.1	55.8
Lab087	47.2	31.2	49.5	36.0	32.1	41.6	36.0	41.8	41.7	19.8	40.1	38.1	36.2	30.0	39.6	44.1	44.2	35.1	45.7
Lab090	40.4	30.9	44.3	36.5	38.9	59.0	29.5	27.0		39.7	35.4		33.0	28.3	47.4	40.5	57.1	39.8	60.0
Lab091																			
Lab093	45.6	42.2	53.9	41.0	40.7	39.0	54.2	41.4	43.0	45.2	41.3	36.8	45.0	52.2	40.9	41.6	50.2	1.3	47.3
Lab094	41.9	38.2	44.0	44.3	33.3					24.7	35.5			37.8	46.6	32.5	41.5	36.2	43.0
Lab095	42.0	24.2	47.5	75.4		49.6	38.6	14.1	54.4	31.7	36.7	37.0	37.5	21.4	40.9	31.8	41.7	34.1	40.1
Lab096	40.6	55.0	48.0	31.6	31.9	34.8	57.1	50.8	41.4	40.9	49.7	45.3	39.8	42.9	36.3	39.8	48.9	45.4	39.8
Lab097	40.2	32.2	43.8	30.2	30.9		49.2	52.1		36.8	36.1		33.7	35.5	38.7	26.5	34.7	34.2	40.2
Lab098	39.3	47.0	56.0	29.2	29.3	41.0	50.0	38.0		38.4	40.5	33.3	42.8	40.5	50.1		49.3	45.0	39.7
Lab100		44.0	52.0	38.8	39.5		51.2			42.4	44.3				51.8	32.5		42.8	
Lab103	45.3	41.4	51.3	43.9	43.6	44.1	44.9	52.1	45.1	48.5	44.1	41.0	42.7	47.5	52.6	45.0	51.9	49.1	53.1
Lab104	43.5	36.1	50.1	38.5	40.1	16.1	41.5	31.6	32.8	26.7	34.8	32.1	34.4	34.1	52.6	38.5	48.6	30.2	36.6
Lab105	51.3							47.5		44.3	48.0		44.2	41.6	56.5	40.8	57.1	78.6	49.8
Lab106																			
Lab108		34.5				37.5							33.4	42.7	56.5				
Lab109	46.2	42.3	46.0	34.2	25.1	17.3	52.5	38.0	41.2	36.7	42.8	45.2	39.4	34.0	52.4	30.2	48.4	40.8	37.2
Lab110	33.1	41.0	44.6	37.0	40.8	42.6	48.1	36.8	44.2	40.9	42.1	42.4	37.8	34.1	52.9	39.2	48.7	31.9	36.0

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	Bupirimate	Cyprodinil	Diazinon	Endosulfan I	Endosulfan II	Fenhexamid	Fenitrothion	Fludioxonil	Hexythiazox	Iprodione	Myclobutanil	Oxamyl	Penconazole	Pyrimethanil	Procymidone	Quinoxifen	Tebuconazole	Tolyfluanid	Triadimenol
Lab111	58.3	55.7	62.6	48.5	68.1		68.1	55.8		58.9	54.1		54.2	44.8	60.0		65.4	55.9	
Lab112	42.2	38.7	51.5	39.7	39.6		35.4	36.0		30.6	36.7		46.5	36.2	52.2	39.6	42.4		
Lab114																			
Lab115	43.9	42.2	49.2	38.5	40.4	38.5	51.2				39.2		40.7		47.3	37.0	52.8	42.6	44.7
Lab116	55.1	41.7	40.3	44.2	40.5	26.5	25.7	41.7	45.9		33.0		35.8	31.8	46.4	39.6		36.5	42.0
Lab117	58.0		52.0	39.0	21.0	58.0	48.0	35.0		25.0	52.0		60.0	42.0	52.0	32.0	48.0	39.0	57.0
Lab118	42.5	39.0	54.6	40.6	39.8	41.5	50.3	40.8	39.7		40.8	41.0	38.7	37.4	50.7	42.6	45.1	34.4	46.1
Lab119	53.6	44.5	59.7	37.2	38.1	49.8	57.0	36.3		37.0	38.5	29.1	42.4	45.0	50.1	36.0	47.7	47.5	45.9
Lab125																			
Lab127	36.3		78.4	79.7	57.3		121.7	108.6		40.1			65.1	47.4	40.3	29.5	254.9	51.9	
Lab128	47.4	47.6	53.0	41.0	37.3		61.4	14.8		43.0	47.9		45.2	43.2	56.2			46.5	
Lab129	43.9	36.3	42.5	32.8	31.1	42.5	30.0	38.5	37.5	36.0	43.5	44.0	36.0	28.3	46.8	34.5	46.2	39.8	44.5
Lab130																			
Lab132			53.1	30.4	35.5										44.4			35.2	
Lab133			55.2																
Lab134	36.4	34.8		30.8	33.2		40.8	30.8	38.4	32.8	40.0	49.7	32.4	32.0	42.8	33.2	41.2		
Lab135		61.7	57.3				68.8	29.9						37.1					

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

Table 3. The techniques used by participating laboratories.

Bupirimate							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	ECD	GC-MS	Isoctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	LC-MS/MS		Water				Yes
008	GC-MS	GC-MS	Isoctane	Ethion	3	PTV	Yes
009	LC-MS/MS	LC-MS/MS	Diluted x50 into MeOH	Carbendazim-d4	3		Yes
010	No Results Given						
013	LC-MS/MS				5	AS	Yes
015	GC-NPD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	LC-MS/MS				10	LOOP	No
017	LC-MS/MS		ACN+Buffer		20		Yes
018	LC-MS/MS	GC-MS		Triphenyl-phosphate	5		No
019	LC-MS/MS				5	LOOP	Yes
021	LC-MS/MS	LC-MS/MS	MeOH-H ₂ O		25		Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-ECD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029							
030	LC-MS/MS	LC-MS/MS	No	Yes	5		Yes
034	GC-ECD	Different column	Acetone	Diclofention	1	SPLITLESS	Yes
036							
037	GC-MS	GC-MS			10		No
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	LC-MS/MS	LC-MS/MS	Methanol		5		Yes
042	GC-NPD	GC-ECD	Isocotane		1	TPOCI	Yes
043	GC-NPD	GC-TOF-MS	EA		1	SPLITLESS	Yes
044							
045	NPD	ECD			1		
046	GC-ECD/PND		Acetone/Isocotane		1	SPLITLESS	Yes
047							

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

Bupirimate							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
048	GC-NPD	GC-MSMS	Hexane/ Isotane/ Diisopropylether	Yes	2	SPLITLESS	Yes
049	GCMSMS			TPP	5	LV	Yes
052	No Results Given						
053	No Results Given						
054	GC/NPD	GC/ECD	Toluene		4	SOLVENT VENT PTV	Yes
056	No Results Given						
057	GC-NPD	GC-MS	Hexane		1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS	No		1		No
062	GC-NPD		Toluol/Isotane	Trifluralin	2	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate		1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-ethylene	2	SPLITLESS	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	GC-NPD	GC-MS			2	SPLITLESS	Yes
075	GC-ECD	GC-ECD			1	ON-COLUMN	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/NPD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-ECD	LC-MS/MS		tr-HCEO	2	SPLITLESS/SPLIT	Yes
087	LC-MS/MS	LC-MS/MS	MeOH	No	5		Yes
090	GC-ECD	GC-MS	Acetone and Hexane	No	2	DIRECT	Yes
091	No Results Given						
093	GC-MS			PCB138, TPP	3	PTV	Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-ECD		Acetone		2		
096	ECD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLES	Yes

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

Bupirimate							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
098	LC MS/MS			Yes	20		Yes
100							
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap) +HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-ECD GC-MS		Isooctane with 20% matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-ECD		Isotane		1	DIRECT	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SSL	Yes
111	GC-NPD	GC-ECD	Hexane		2	SPLITLESS	Yes
112	GC-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-ECD				2	PULSED SPLITLESS	No
116	GC-MS		AcN	TPP	2	SPLITLESS	No
117	GC-NPD				1	SPLITLESS	Yes
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	GC-MS	GC-MS	EtAc		2	SPLITLESS	Yes
125	No Results Given						
127	GC ECD	GC MS			1	SPLIT/SPLITLESS	
128	GC-ECD	GC/MS	Isooctane/Toluene (90:10)		1	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132							
133							
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135							

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

Cyprodinil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	NPD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	LC-MS-MS		Water				Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	LC-MSMS	LC-MSMS	Diluted x50 into MeOH	Carbendazim-d4	3		Yes
010	No Results Given						
013							
015	LC-MS/MS		Methanol		5		Yes
016	LC MS/MS				10	LOOP	No
017	LC/MSMS	No	ACN+buffer	No	20		Yes
018	LC-MS/MS	GC-MS		Triphenyl-phosphate	5		No
019	GC-NP		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021	LC/MSMS	LC/MSMS	MeOH-H ₂ O		25		Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-TSD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029							
030	LC-MS/MS	LC-MS/MS		Yes	5		Yes
034							
036	LC-MS/MS	LC-MS/MS	MeOH		10		Yes
037							
040	LC-MSMS		Acetonitrile	Pirimicarb-D6	20		No
041	GC-MS/MS	GC-MS/MS	Ethylacetate + Cyclohexan 1:1	No	4	SPLITLESS	Yes
042	HPLC-DAD	GC-NPD	Acetonitrile/Water 50/50 v/v		50	AUTOSAMPLER RHEODYNE 7010-120	Yes
043	HPLC-DAD		Me/Water		1	REODYNE	Yes
044							
045	NPD	GC-MS			1		
046	GC-PND	GC-MS	Acetone/Isooctane		1	SPLITLESS	Yes
047	LC-MS-MS			Dimethoate D6	20		No

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

Cyprodinil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
048	GC-NPD	GC-MSMS	Hexane/ Isoctane/ Disopropylether	Yes	2	SPLITLESS	Yes
049							
052	GC-MS/MS	GC-MS	Acetonitrile		4	ALS	No
053							
054	GC/NPD		Toluene		4	SOLVENT VENT PTV	Yes
056	GC-NPD	GC-MS (single-quad)	Isooctane		1	SPLITLESS	Yes
057	GC-NPD	GC-MS	Hexane		1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS			1		No
062	GC-NPD		Toluol/Isoctane	Trifluralin	2	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate		1	SPLIT LESS	Yes
066	LC-MS/MS	LC-MS/MS			3	PARTIAL	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	GC-NPD	GC-MS			2	SPLITLESS	Yes
075	GC-NPD	GC-NPD			3	SPLIT/SPLITLESS	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/NPD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	LC-MS/MS			Thiabendazol-d6	10		Yes
087	GC-MS/MS	GC-MS/MS	EtOAc/Cyclohexane	No	2	SPLIT/SPLITLESS	Yes
090	GC-MS		Acetone and Hexane	No	2	PTV	Yes
091	No Results Given						
093	LC-MS/MS	GC-MS		PCB138, TPP	3		Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-NPD		Acetone		2		
096	HPLC-UV				20	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLESS	Yes

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

Cyprodinil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
098	GC-NPD	LC-MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100	GC-NPD		Ethyl Acetate		10	PTV	Yes
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108	LC-MS/MS	LC-MS/MS			8		Yes
109	HPLC-UV	None	Acetonitrile/Water	None	20	LOOP	Yes
110	GC-NPD	GC-MS	Hexane/Acetone		2	S/SPL	Yes
111	GC-NPD	Two columns	Hexane		2	SPLITLESS	Yes
112	GG-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-NPD				1	PULSED SPLITLESS	No
116	GC-MS	none	AcN	TPP	2	SPLITLESS	No
117							
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	GC-MS	GC-MS	EtAc		2	SPLITLESS	Yes
125	No Results Given						
127							
128	GC-NPD	GC-MS	Isooctane/Toluene (90:10)		3	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132							
133							
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135	GC-MS		Ethyl Acetate		2	ON COLUMN	No

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Diazinon							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	NPD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003	GC ITD	GC-MS			1.5	SPLITLESS	Yes
005	GC-FPD	GC-MS	Ethyl Acetate		2	SPLITLESS	Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	GC-MSMS	GC-MSMS	Diluted x50 into EtOAc	Trifluralin-d14	1	ON COLUMN	Yes
010	No Results Given						
013							
015	GC-ECD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	GC-MSD				2	SPLITLESS	No
017	GC/MSD	No	No	No	1	SPLITT	Yes
018	GC-FPD	GC-MS/MS		Tris-(1,3-dichloro-isopropyl)-phosphat	2	PTV	No
019	GC-NP		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021	LC/MSMS	LC/MSMS	MeOH-H ₂ O		25		Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	Gc-tsd		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-µECD-NPD	GC-MS	Isooctane		2	SPLITLESS	Yes
030							
034	GC-ECD	Different Column	Acetone	Diclofention	1	SPLITLESS	Yes
036	GC-MS	GC-MS	AcOEt		2	SPLITLESS	Yes
037	GC-MS	GC-MS			10		No
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	LC-MS/MS	LC-MS/MS	Methanol	No	5		Yes
042	GC-ECD	GC-MS	Isooctane		1	SPLIT/ SPLITLESS	Yes
043	GC-NPD	GC-FPD	EA		1	SPLITLESS	Yes
044	GC-NPD		Ethyl Acetate		1	SPLIT	
045	NPD	ECD			1		
046	GC-ECD/PND	GC-MS	Aceton/Isooctane		1	SPLITLESS	Yes
047							
048	GC-FPD	GC-MSMS	Hexane/ Iso-Octane/ Diisopropylether	Yes	2	SPLITLESS	Yes

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Diazinon							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GC-NPD	GC-MSMS			1	ON COLUMN	Yes
052	GC-MS	GC-MS	Acetonitrile		2	MANUAL	No
053	GC-NPD	GC-ECD	TMP/TOL*(90/10)		1	ON COLUMN	Yes
054	GC/ NPD	GC/ECD	Toluene		4	SOLVENT VENT PTV	Yes
056	GC-NPD	GC-MS (single-quad)	Isooctane		1	SPLITLESS	Yes
057	GC-PFPD	GC-MS	Hexane		1	ON COLUMN	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS			1		No
062	GC-FPD		Toluol	Tributylphosphate	1	SPLIT/SPLITLESS	No
064	GC-FPD		Ethyl Acetate	N	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-ethylene	2	SPLITLESS	Yes
067	NPD-80	GC-MS	Acetone/ Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	GC-ITD	GC-ITD	Isooctane-Toluene 9:1		2	SPLITLESS	Yes
074	GC-NPD	GC-MS			2	SPLITLESS	Yes
075	GC-ECD	GC-ECD			1	ON-COLUMN	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/NPD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-ECD	LC-MS/MS		tr-HCEO	2	SPLITLESS/SPLIT	Yes
087	LC-MS/MS	LC-MS/MS	MeOH		5		Yes
090	GC-NPD GC-FPD	GC-MS	Acetone and Hexane		2	DIRECT	Yes
091	No Results Given						
093	LC-MS/MS	GC-MS		PCB138, TPP	3		Yes
094	GC/MSD	GC/MSD	Acetonitrile		10	LVI	Yes
095	GC-FPD		Acetone		2		
096	NPD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLESS	Yes
098	GC ECD NPD	LC MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100	GC-NPD	GC-ECD	Ethyl Acetate		10	PTV	Yes

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Diazinon							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-ECD GC-MS		Isooctane with 20% matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-NPD	none	Isooctane		1	DIRECT	Yes
110	GC-NPD	GC-MS	Hexane/Acetone		2	S/SLL	Yes
111	GC-NPD	GC-ECD	Hexane		2	SPLITLESS	Yes
112	GC-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-ECD	GC-NPD			2	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	NPD	No	No	No	1	SPLITLESS	Yes
118	GC-MS/MS	GC-MS/MS	Acetonitrile	Triphenyl Phosphate	2	SPLITLESS	Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC MS	GC MS			1	SPLIT/SPLITLESS	
128	GC-NPD	GC-MS	Isooctane/Toluene(90:10)	No	3	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132	GC/NPD	GC/MS	No		15	SOLVENT VENT	No
133	GC NPD	GC(2) NPD			1	SPLITLESS	Yes
135	GC MS		Ethyl Acetate		2	ON COLUMN	No

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

Endosulfan Alpha							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	ECD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003	GC ITD	GC-MS			1.5	SPLITLESS	Yes
005	GC-MS-MS		Ethyl Acetate		2	SPLITLESS	Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	GC-MSMS	GC-MSMS	Diluted x50 into EtOAc	DDE pp-d8	1	ON COLUMN	Yes
010	No Results Given						
013							
015	GC-ECD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	GC-MSD				2	SPLITLESS	No
017	GC/MSD	No	No	No	1	SPLITT	Yes
018	GC-MS	GC-MS		PCB 170	2	PTV	No
019	GC-EC		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021	GC/MSD	GC/MSD	CH ₃ CN	TPP	2	PTV	Yes
024	GC-MS		Cyclohexan		1.5	SPLIT/SPLITLESS	Yes
025	GC-ECD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-µECD	GC-MS	Isooctane		2	SPLITLESS	Yes
030	GC-MS	GC-MS	Yes	No	1	PULSED SPLITLESS	Yes
034	GC-ECD	Different Column	Acetone	Diclofention	1	SPLITLESS	Yes
036	GC-MS	GC-MS	AcOEt		2	SPLITLESS	Yes
037	GC-MS	GC-MS			10		No
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	GC-MS/MS	GC-MS/MS	Ethylacetat + Cyclohexane 1:1	No	4	SPLITLESS	Yes
042	GC-ECD	GC-MS	Isooctane		1	SPLIT/ SPLITLESS	Yes
043	GC-ECD	GC-TOF-MS	EA		1	SPLITLESS	Yes
044	GC-ECD		Ethyl Acetate		1	SPLITLESS	
045	ECD	GC-MS			1		
046	GC-ECD		Aceton/Isooctane		1	SPLITLESS	Yes
047							
048	GC-MSMS	GC-MSMS	n-Hexane	TPP	1	SPLITLESS	Yes

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

Endosulfan Alpha							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GCECD				1	SPLITLESS	Yes
052	GC-ECD	GC-MS	Hexane		2	ALS	Yes
053	GC-ECD	GC-ECD	TMP/TOL*(90/10)		1	SPLITLESS	Yes
054	GC/ECD		Toluene		1	SPLIT	Yes
056	No Results Given						
057	GC-ECD	GC-MS	Hexane	None	1	SPI	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	GC/MS	GC/MS	No	No	1	PTV	No
062	GC-ECD		Toluol/Isooctane	PCB 97	1	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-ethylene	2	SPLITLESS	Yes
067	ECD	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-ECD	GC-MS			2	SPLITLESS	Yes
071	No Results Given						
073	GC-ECD		Isooctane-Toluene 9:1		2	SPLITLESS	Yes
074	GC-ECD	GC-MS			2	SPLITLESS	Yes
075	GC-ECD	GC-ECD			1	ON-COLUMN	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/ECD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-ECD			tr-HCEO	2	SPLITLESS/SPLIT	Yes
087	GC-MS/MS	GC-MS/MS	EtoAc/Cyclohexane	No	2	SPLIT/SPLITLESS	Yes
090	GC-ECD	GC-MS	Acetone and Hexane	No	2	DIRECT	Yes
091	No Results Given						
093	GC-MS			PCB138, TPP	3	PTV	Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-ECD		Acetone		2		
096	ECD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLESS	Yes
098	GC ECD	GC MS	Toluene	Yes	2	SPLITLESS	Yes
100	GC-ECD		Ethyl Acetate		10	PTV	Yes

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

Endosulfan Alpha							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-ECD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-ECD	None	Isooctane	None	1	DIRECT	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SSL	Yes
111	GC-ECD	Two Columns	Hexane		2	SPLITLESS	Yes
112	GG-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-ECD				2	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	ECD	No	No	No	1	SPI	Yes
118	GC-MS/MS	GC-MS/MS	Acetonitrile	Triphenyl Phosphate	2	SPLITLESS	Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC MS	GC MS			1	SPLIT/SPLITLESS	
128	GC-ECD	GC/MS	Isooctane/Toluene (90:10)	No	1	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132	GC/ECD	GC/MS	No		15	SOLVENT VENT	No
133							
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135	GC MS		EtAc		2	ON COLUMN	No

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

Endosulfan Beta							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	ECD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003	GC ITD	GC-MS			1.5	SPLITLESS	Yes
005	GC-MS-MS		Ethyl Acetate		2	SPLITLESS	Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	GC-MSMS	GC-MSMS	Diluted x50 into EtOAc	DDE pp-d8	1	ON COLUMN	Yes
010	No Results Given						
013							
015	GC-ECD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	GC-MSD				2	SPLITLESS	No
017	GC/MSD	No	No	No	1	SPLIT	Yes
018	GC-MS	GC-MS		PCB 170	2	PTV	No
019	GC-EC		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021	GC/MSD	GC/MSD	CH ₃ CN	TPP	2	PTV	Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	Gc-eCd		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-µECD	GC-MS	Isocane		2	SPLITLESS	Yes
030	GC-MS	GC-MS	Yes	No	1	PULSED SPLITLESS	Yes
034	GC-ECD	Different Column	Acetone	Diclofention	1	SPLITLESS	Yes
036	GC-MS	GC-MS	AcOEt		2	SPLITLESS	Yes
037	GC-MS	GC-MS			10		No
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	GC-MS/MS	GC-MS/MS	Ethylacetate + Cyclohexane 1:1		4	SPLITLESS	Yes
042	GC-ECD	GC-MS	Isooctane		1	SPLIT/ SPLITLESS	Yes
043	GC-ECD	GC-TOF-MS	EA		1	SPLITLESS	Yes
044	GC-ECD		Ethyl Acetate		1	SPLITLESS	
045	ECD	GC-MS			1		
046	GC-ECD		Acetone/Isooctane		1	SPLITLESS	Yes
047							
048	GC-MSMS	GC-MSMS	n-Hexane	TPP	1	SPLITLESS	Yes

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

Endosulfan Beta							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GCECD				1	SPLITLESS	Yes
052	GC-ECD	GC-MS	Hexane		2	ALS	Yes
053	GC-ECD	GC-ECD	TMP/TOL*(90/10)		1	SPLITLESS	Yes
054	GC/ECD		Toluene		1	SPLIT	Yes
056	No Results Given						
057	GC-ECD	GC-MS	Hexane	None	1	SPI	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	GC/MS	GC/MS	No	No	1	PTV	No
062	GC-ECD		Toluol/Isooctane	PCB 97	1	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	No	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-Ethylene	2	SPLITLESS	Yes
067	ECD	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-ECD	GC-MS			2	SPLITLESS	Yes
071	No Results Given						
073	GC-ECD	GC-ITD	Isooctane-Toluene 9:1		2	SPLITLESS	Yes
074	GC-ECD	GC-MS			2	SPLITLESS	Yes
075	GC-ECD	GC-ECD			1	ON-COLUMN	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/ECD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-ECD			tr-HCEO	2	SPLITLESS/SPLIT	Yes
087	GC-MS/MS	GC-MS/MS	EtoAc/Cyclohexane	No	2	SPLIT/SPLITLESS	Yes
090	GC-ECD	GC-MS	Acetone and Hexane	No	2	DIRECT	Yes
091	No Results Given						
093	GC-MS			PCB138, TPP	3	PTV	Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-ECD		Acetone		2		
096	ECD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLESS	Yes
098	GC ECD	GC MS	Toluene	Yes	2	SPLITLESS	Yes
100	GC-ECD		Ethyl Acetate		10	PTV	Yes

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

Endosulfan Beta							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-ECD		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-ECD	None	Isooctane	None	1	DIRECT	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SSL	Yes
111	GC-ECD	Two columns	Hexane		2	SPLITLESS	Yes
112	GG-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-ECD				2	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	ECD	No	No	No	1	SPI	Yes
118	GC-MS/MS	GC-MS/MS	Acetonitrile	Triphenyl Phosphate	2	SPLITLESS	Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC MS	GC MS			1	SPLIT/SPLITLESS	
128	GC-ECD	GC/MS	Isooctane/Toluene (90:10)	No	1	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132	GC/ECD	GC/MS	No		15	SOLVENT VENT	No
133							
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135	GC MS		EtAc		2	ON COLUMN	No

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

Fenhexamid							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	ECD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	LC-MS/MS		MeOH/buffer		10		Yes
003							
005	LC-MS-MS		Water				Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	LC-MSMS	LC-MSMS	Diluted x50 into MeOH	Carbendazim-d4	3		Yes
010	No Results Given						
013	LC-MS/MS				5	AS	Yes
015	LC-MS/MS		Methanol		5		Yes
016	LC MS/MS				10	LOOP	No
017	LC/MSMS	No	ACN+buffer	No	20		Yes
018	LC-MS/MS			Triphenyl-phosphate	5		No
019	LC-MS/MS				5	LOOP	Yes
021	LC/MSMS	LC/MSMS	MeOH-H ₂ O		25		Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-ECD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029							
030	LC-MS/MS	LC-MS/MS	No	Yes	5		Yes
034	GC-ECD	Different column	Acetone	Diclofention	1	SPLITLESS	Yes
036	LC-MS/MS	LC-MS/MS	MeOH		10		Yes
037							
040	LC-MSMS		Acetonitrile	Pirimicarb-D6	20		No
041	LC-MS/MS	LC-MS/MS	Methanol	No	5		Yes
042	HPLC-DAD	GC-ECD	Acetonitrile/Water 50/50 v/v		50	AUTOSAMP. RHEODYNE 7010-120	Yes
043							
044							
045	ECD	GC-MS			1		
046	GC-ECD	GC-MS	Aceton/ Isooctane		1	SPLITLESS	Yes
047	LC-MS-MS			Dimethoat D6	20		No
048	LC-MSMS	LC-MSMS			5	FULL-LOOP	Yes

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

Fenhexamid							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GC ECD				1	SPLITLESS	No
052	No Results Given						
053	No Results Given						
054	GC/ECD		Toluene		1	SPLIT	Yes
056	No Results Given						
057	GC-ITD	GC-NPD	Hexane	No	1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS	No	No	1		No
062	LC-MS-MS		H ₂ O/MeOH		25		No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	LC-MS/MS	LC-MS/MS			3	PARTIAL	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	LC/MS/MS				10		No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	GC-NPD	GC-MS			2	SPLITLESS	Yes
075	GC-ECD	GC-ECD			1	ON-COLUMN	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	No Results Given						
080	No Results Given						
081	LC-MS/MS			Thiabendazole-d6	10		Yes
087	LC-MS/MS	LC-MS/MS	MeOH	No	5		Yes
090	GC-ECD	GC-MS	Acetone and Hexane	No	2	DIRECT	Yes
091	No Results Given						
093	LC-MS/MS			PCB138, TPP	3		Yes
094	No Results Given						
095	LC-MS/MS		Methanol/Water		25		
096	HPLC-UV				20	DIRECT	Yes
097	No Results Given						
098	GC ECD NPD	LC MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100	No Results Given						

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

Fenhexamid							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	No Results Given						
106	No Results Given						
108	LC-MS/MS	LC-MS/MS			8		Yes
109	HPLC-UV	None	Acetonitrile/Water	No	20	LOOP	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SSL	Yes
111	No Results Given						
112	No Results Given						
114	No Results Given						
115	GC-ECD				2	PULSED SPLITLESS	No
116	GC-MS	none	AcN	TPP	2	SPLITLESS	No
117	NPD	No	No	No	1	SPLITLESS	Yes
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	No Results Given						
128	No Results Given						
129	LC-MS/MS	LC-MS/MS			10		No
130	No Results Given						
132	No Results Given						
133	No Results Given						
134	No Results Given						
135	No Results Given						

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

Fenitrothion							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	NPD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003	No Results Given						
005	GC-FPD	GC-MS	Ethyl Acetate		2	SPLITLESS	Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	GC-MSMS	GC-MSMS	Diluted x50 into EtOAc	Trifluralin-d14	1	ON COLUMN	Yes
010	No Results Given						
013	No Results Given						
015	GC-ECD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	GC-MSD				2	SPLITLESS	No
017	GC/MSD	No	No	No	1	SPLIT	Yes
018	GC-FPD	LC-MS/MS		Tris-(1,3-dichloro-isopropyl)-phosphat	2	PTV	No
019	GC-NP		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021	GC/MSD	GC/MSD	CH ₃ CN	TPP	2	PTV	Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-TSD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-µECD-NPD	GC-MS	Isooctane		2	SPLITLESS	Yes
030	No Results Given						
034	GC-ECD	Different Column	Acetone	Diclofention	1	SPLITLESS	Yes
036	GC-MS	GC-MS	AcOEt		2	SPLITLESS	Yes
037	GC-MS	GC-MS			10		No
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	GC-MS/MS	GC-MS/MS	Ethylacetate + Cyclohexane 1:1	No	4	SPLITLESS	Yes
042	GC-NPD	GC-ECD	Isooctane		1	TPOCI	Yes
043	GC-NPD	GC-FPD	EA		1	SPLITLESS	Yes
044	GC-NPD		Ethyl Acetate		1	SPLIT	
045	NPD	ECD			1		
046	GC-ECD/PND	GC-MS	Aceton/ Isooctane		1	SPLITLESS	Yes
047	No Results Given						
048	GC-FPD	GC-MSMS	Hexane/ Isooctane/ Diisopropylether	Yes	2	SPLITLESS	Yes

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

Fenitrothion							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GC-NPD	GCMSMS			1	ON COLUMN	Yes
052	GC-MS/MS	GC-MS	Acetonitrile		4	ALS	No
053	GC-NPD	GC-ECD	TMP/TOL*(90/10)		1	ON COLUMN	Yes
054	GC/ECD	GC/NPD	Toluene		1	SPLIT	Yes
056	GC-NPD	GC-MS (single-quad)	Isooctane		1	SPLITLESS	Yes
057	GC-PFPD	GC-MS	Hexane	None	1	ON COLUMN	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	GC/MS	GC/MS	No	No	1	PTV	No
062	GC-FPD		Toluol	Tributylphosphat	1	SPLIT/SPLITLESS	No
064	GC-FPD		Ethyl Acetate	N	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-ethylene	2	SPLITLESS	Yes
067	ECD	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	GC-ITD	GC-ITD	Isooctane-Toluene 9:1		2	SPLITLESS	Yes
074	GC-NPD	GC-MS			2	SPLITLESS	Yes
075	GC-NPD	GC-NPD			3	SPLIT/SPLITLESS	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS				10		
080	GC/NPD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-ECD			tr-HCEO	2	SPLITLESS/SPLIT	Yes
087	GC-MS/MS	GC-MS/MS	EtoAc/Cyclohexane	No	2	SPLIT/SPLITLESS	Yes
090	GC-NPD GC-FPD	GC-MS	Acetone and Hexane	No	2	DIRECT	Yes
091	No Results Given						
093	GC-MS			PCB138, TPP	3l	PTV	Yes
094							
095	GC-FPD		Acetone		2		
096	NPD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLES	Yes
098	GC ECD NPD	GC MS	Toluene	Yes	2	SPLITLESS	Yes
100	GC-ECD	GC-NPD	Ethyl Acetate		10	PTV	Yes

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

Fenitrothion							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-ECD GC-MS		Isooktan with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-NPD	None	Isooctane	None	1	DIRECT	Yes
110	GC-NPD	GC-MS	Hexane/Acetone		2	S/SPL	Yes
111	GC-ECD	GC-NPD	Hexane		2	SPLITLESS	Yes
112	GC-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-ECD	GC-NPD			2	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	NPD	No	No	No	1	SPLITLESS	Yes
118	GC-MS/MS	GC-MS/MS	Acetonitrile	Triphenyl Phosphate	2	SPLITLESS	Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC MS	GC MS			1	SPLIT/SPLITLESS	
128	GC-NPD	GC-MS	Isooctane/Toluene (90:10)	No	3	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132							
133							
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135	GC-MS		EtAc		2	ON COLUMN	No

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

Fludioxonil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	NPD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	LC-MS-MS		Water				Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	LC-MSMS	LC-MSMS	Diluted x50 into MeOH	Carbendazim-d4	3		Yes
010	No Results Given						
013							
015	LC-MS/MS		Methanol		5		Yes
016	LC MS/MS				10	LOOP	No
017	LC/MSMS	No	ACN+Buffer	No	20		Yes
018	GC-MS	GC-MS		Triphenyl-methan	3	PTV	No
019	GC-NP		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021	GC/MSD	GC/MSD	CH ₃ CN	TPP	2	PTV	Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-TSD		Acetone	Ethion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029							
030							
034							
036	LC-MS/MS	LC-MS/MS	MeOH		10		Yes
037							
040	LC-MSMS		Acetonitrile	Nicarbazin	20		N
041	LC-MS/MS	LC-MS/MS	Methanol	No	5		Yes
042	HPLC-DAD	GC-NPD	Acetonitrile/Water 50/50 v/v		50	AUTOSAMP. RHEODYNE 7010-120	Yes
043	GC-NPD		Me/Water		1	REODYNE	Yes
044							
045	NPD	GC-MS			1		
046	GC-PND	GC-MS	Aceton/ Isooctane		1	SPLITLESS	Yes
047							

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

Fludioxonil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
048	GC-NPD	GC-MSMS	Hexane/ Isooctane/ Diisopropylether	Yes	2	SPLITLESS	Yes
049	GCMSMS			TPP	5	LV	Yes
052							
053							
054	GC/NPD		Toluene		4	SOLVENT VENT PTV	Yes
056	GC-NPD	GC-MS (single-quad)	Isooctane		1	SPLITLESS	Yes
057	GC-NPD	GC-MS	Hexane	None	1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	GC/MS	GC/MS	No	No	1	PTV	No
062	GC-NPD		Toluol/ Isooctane	Trifluralin	2	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	LC-MS/MS	LC-MS/MS			3	PARTIAL	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	GC-ITD	GC-ITD	Isooctane-Toluene 9:1		2	SPLITLESS	Yes
074	LC-MS/MS		Methanol		5	LOOP	Yes
075							
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/ECD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-NPD	LC-MS/MS		TPP	2	SPLITLESS/SPLIT	Yes
087	LC-MS/MS	LC-MS/MS	MeOH	No	5		Yes
090	GC-MS		Acetone and Hexane	No	2	PTV	Yes
091	No Results Given						
093	GC-MS			PCB138, TPP	3	PTV	Yes
094							
095	GC-NPD		Acetone		2		
096	HPLC-UV				20	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLES	Yes

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

Fludioxonil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
098	GC-NPD	LC-MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100	No Results Given						
103	LC-MS/MS	LC-MS/MS		TBP	20	LOOP	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108	No Results Given						
109	HPLC-UV	none	Acetonitrile/Water	None	1	DIRECT	Yes
110	GC-NPD	GC-MS	Hexane/Acetone		2	S/SLL	Yes
111	GC-NPD	GC-ECD	Hexane		2	SPLITLESS	Yes
112	GG-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprofos	2	SPLITLESS	Yes
114	No Results Given						
115	No Results Given						
116	GC-MS	none	AcN	TPP	2	SPLITLESS	No
117	NPD	No	No	No	1	SPLITLESS	Yes
118	GC-MS/MS	GC-MS/MS	Acetonitrile	Triphenyl Phosphate	2	SPLITLESS	Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC MS	GC MS			1	SPLIT/SPLITLESS	
128	GC-NPD	GC-MS	Isooctane/Toluene (90:10)	No	3	SPLITLESS	Yes
129	LC-MS/MS	LC-MS/MS			10		No
130	No Results Given						
132	No Results Given						
133	No Results Given						
134	GC-MS/MS	GC-MS/MS	Cyclohexane		10	SP/SPL PTV	Yes
135	GC MS		EtAc		2	ON COLUMN	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-FV9 standard solution used? (Yes/No)
001							
002	LC-MS/MS		MeOH/buffer		10		Yes
003							
005	LC-MS-MS		Water				Yes
008							
009	LC-MSMS	LC-MSMS	Diluted x 50 into MeOH	Pendimethalin-d5	3		Yes
010	No Results Given						
013	LC-MS/MS				5	AS	Yes
015							
016	LC MS/MS				10	LOOP	No
017	LC/MSMS	No	ACN+Buffer	No	20		Yes
018	LC-MS/MS			Triphenyl-phosphate	5		No
019	LC-MS/MS				5	LOOP	Yes
021	LC/MSMS	LC/MSMS	MeOH-H ₂ O		25		Yes
024	LC-MS		No		20		Yes
025	GC-TSD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029							
030	LC-MS/MS	LC-MS/MS	No	Yes	5		Yes
034							
036							
037							
040	LC-MSMS		Acetonitrile	Pirimicarb-D6	20		No
041	LC-MS/MS	LC-MS/MS	Methanol	No	5		Yes
042	HPLC-DAD		Acetonitrile/Water 50/50 v/v		50	AUTOSAMP. RHEODYNE 7010-120	Yes
043							
044							
045	LC-MS-MS	GC-MS			5		
046							
047							
048	LC-MSMS	LC-MSMS			5	FULL-LOOP	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-FV9 standard solution used? (Yes/No)
049							
052							
053							
054							
056							
057	LC/MS	MS/MS	Methanol	None	10		Yes
058	LC-MS-MS		Methanol		20		Yes
061	LC-MS/MS	LC-MS/MS	No	No	1		No
062	LC-MS-MS		H ₂ O/MeOH		25		No
064							
066	LC-MS/MS	LC-MS/MS			3	PARTIAL	Yes
067							
070							
071	LC/MS/MS				10		No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAc		5	LOOP	Yes
074	LC-MS/MS		Methanol		5	LOOP	Yes
075							
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079							
080							
081	LC-MS/MS			Thiabendazol-d6	10		Yes
087	LC-MS/MS	LC-MS/MS	MeOH	No	5		Yes
090							
091	No Results Given						
093	LC-MS/MS			PCB138, TPP	3		Yes
094							
095	GC-ECD		Acetone		2		
096	NPD		Hexane		1	DIRECT	Yes
097							
098							
100							

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-FV9 standard solution used? (Yes/No)
103	LC-MS/MS	LC-MS/MS		TBP	20	LOOP	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105							
106	No Results Given						
108							
109	GC-NPD	None	Isooctane	None	1	DIRECT	Yes
110	LC-DAD	GC-MS	Hexane/Acetone		2	S/SSL	Yes
111							
112							
114	No Results Given						
115							
116	GC-MS	none	AcN	TPP	2	SPLITLESS	No
117							
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	LC-MS/MS	LC-MS/MS			10		No
125	No Results Given						
127							
128							
129							
130	No Results Given						
132							
133							
134	LC-MS/MS	LC-MS/MS	ACN		10	MICROLITER PICK-UP	Yes
135							

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

Iprodione							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	ECD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005							
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	GC-MSMS	GC-MSMS	Diluted x50 into EtOAc	DDE pp-d8	1	ON COLUMN	Yes
010	No Results Given						
013							
015	GC-ECD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	GC-MSD				2	SPLITLESS	No
017	LC/MSMS	No	ACN+Buffer	No	20		Yes
018	GC-MS	GC-MS		PCB 170	2	PTV	No
019	GC-NP		Hexane-Acetone	yes	1	SPLITLESS	Yes
021	GC/MSD	GC/MSD	CH3CN	TPP	2	PTV	Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-ECD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-µECD-NPD	GC-MS	Isooctane		2	SPLITLESS	No
030							
034	GC-ECD	Different Column	Acetone	Diclofention	1	SPLITLESS	Yes
036	GC-MS	GC-MS	AcOEt		2	SPLITLESS	Yes
037	GC-MS	GC-MS			10		No
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	GC-MS/MS	GC-MS/MS	Ethylacetate + Cyclohexane 1:1	No	4	SPLITLESS	Yes
042	GC-ECD	GC-MS	Isooctane		1	SPLIT/ SPLITLESS	Yes
043	GC-ECD	GC-TOF-MS	EA		1	SPLITLESS	Yes
044							
045	NPD	ECD			1		
046	GC-ECD/PND		Acetone/Isooctane		1	SPLITLESS	Yes
047							
048	GC-MSMS	GC-MSMS	n-Hexane	TPP	1	SPLITLESS	Yes

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

Iprodione							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GCMSMS			TPP	5	LV	Yes
052	GC-ECD	GC-MS	Hexane		2	ALS	Yes
053	No Results Given						
054	GC/ECD	GC/NPD	Toluene		1	SPLIT	Yes
056	GC-NPD	GC-MS (single-quad)	Isooctane		1	SPLITLESS	Yes
057	GC-NPD	GC-MS	Hexane	None	1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS	No	No	1		No
062	GC-ECD/NPD		Toluol/Isooctane	PCB 97/Trifluralin	0.5	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-Ethylene	2	SPLITLESS	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	GC-ITD	GC-ITD	Isooctane-Toluene 9:1		2	SPLITLESS	Yes
074	GC-NPD/ECD	GC-MS			2	SPLITLESS	Yes
075	GC-ECD	GC-ECD			1	ON-COLUMN	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/ECD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-ECD			tr-HCEO	2	SPLITLESS/SPLIT	Yes
087	GC-MS/MS	GC-MS/MS	EtoAc/Cyclohexane	No	2	SPLIT/SPLITLESS	Yes
090	GC-ECD		Acetone and Hexane	No	2	DIRECT	Yes
091	No Results Given						
093	GC-MS			PCB138, TPP	3	PTV	Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-ECD		Acetone		2		
096	ECD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLESS	Yes
098	GC ECD NPD	GC MS	Toluene	Yes	2	SPLITLESS	Yes
100	GC-ECD	GC-NPD	Ethyl Acetate		10	PTV	Yes

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

Iprodione							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-ECD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108	NA						
109	GC-NPD	none	Isooctane	None	1	DIRECT	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SLL	Yes
111	GC-ECD	GC-NPD	Hexane		2	SPLITLESS	Yes
112	GC-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115							
116							
117	ECD	No	No	No	1	SPI	Yes
118							
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC ECD	GC MS			1	SPLIT/SPLITLESS	
128	GC-ECD	GC/MS	Isooctane/Toluene (90:10)	No	1	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132							
133							
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135	GC MS		EtAc		2	ON COLUMN	No

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

Myclobutanil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	ECD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003	NA						
005	LC-MS-MS		Water				Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	LC-MSMS	LC-MSMS	Diluted x50 into MeOH	Carbendazim-d4	3		Yes
010	No Results Given						
013							
015	GC-ECD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	GC-MSD				2	SPLITLESS	No
017	LC/MSMS	No	ACN+Buffer	No	20		Yes
018	LC-MS/MS	GC-MS		Triphenyl-phosphate	5		No
019	LC-MS/MS				5	LOOP	Yes
021	LC/MSMS	LC/MSMS	MeOH-H ₂ O		25		Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-ECD		Acetone	Ethion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-µECD-NPD	GC-MS	Isooctane		2	SPLITLESS	Yes
030	LC-MS/MS	LC-MS/MS	No	Yes	5		Yes
034	GC-ECD	Different Column	Acetone	Diclofention	1	SPLITLESS	Yes
036	GC-MS	GC-MS	AcOEt		2	SPLITLESS	Yes
037							
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	LC-MS/MS	LC-MS/MS	Methanol	No	5		Yes
042	GC-ECD	GC-NPD	Isooctane		1	SPLIT/ SPLITLESS	Yes
043	GC-NPD	GC-TOF-MS	EA		1	SPLITLESS	Yes
044							
045	NPD	LC-MS-MS			1		
046	GC-ECD/PND		Acetone/Isooctane		1	SPLITLESS	Yes
047							
048	GC-MSMS	GC-MSMS	n-Hexane	TPP	1	SPLITLESS	Yes

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

Myclobutanil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GC ECD				1	SPLITLESS	Yes
052	GC-ECD	GC-MS	Hexane		2	ALS	Yes
053	GC-NPD	GC-ECD	TMP/TOL*(90/10)		1	ON COLUMN	Yes
054	GC/NPD	GC/ECD	Toluene		4	SOLVENT VENT PTV	Yes
056	GC-NPD	GC-MS (single-quad)	Isooctane		1	SPLITLESS	Yes
057	GC-NPD	GC-MS	Hexane	None	1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS	No	No	1		No
062	GC-ECD/NPD		Toluol/Isooctane	PCB 97/Trifluralin	0.5	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-ethylene	2	SPLITLESS	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	GC-NPD	GC-MS			2	SPLITLESS	Yes
075	GC-NPD	GC-NPD			3	SPLIT/SPLITLESS	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080							
081	LC-MS/MS			Thiabendazol-d6	10		Yes
087	LC-MS/MS	LC-MS/MS	MeOH	No	5		Yes
090	GC-MS		Acetone and Hexane	No	2	PTV	Yes
091	No Results Given						
093	LC-MS/MS	GC-MS		PCB138, TPP	3		Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-ECD		Acetone		2		
096	ECD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLESS	Yes
098	GC ECD NPD	LC MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100	GC-ECD	GC-NPD	Ethyl Acetate		10	PTV	Yes

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

Myclobutanil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-ECD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-NPD	None	Isooctane	None	1	DIRECT	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SLL	Yes
111	GC-NPD	GC-ECD	Hexane		2	SPLITLESS	Yes
112	GC-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-ECD				2	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	ECD	No	No	No	1	SPI	Yes
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127							
128	GC-ECD	GC/MS	Isooctane/Toluene (90:10)	No	1	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132							
133							
134	GC-MS/MS	GC-MS/MS	Cyclohexane		10	SP/SPL PTV	Yes
135	GC MS		EtAc		2	ON COLUMN	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 (ul)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001							
002	LC-MS/MS		MeOH/Buffer		10		Yes
003							
005	LC-MS-MS		Water				Yes
008							
009	LC-MSMS	LC-MSMS	Diluted x50 into MeOH	Methomyl-d3	3		Yes
010	No Results Given						
013	LC-MS/MS				5	AS	Yes
015	LC-MS/MS		Methanol		5		Yes
016	LC MS/MS				10	LOOP	No
017	LC/MSMS	No	ACN+Buffer	No	20		Yes
018	LC-MS/MS			Triphenyl-phosphate	5		No
019	LC-MS/MS				5	LOOP	Yes
021	LC/MSMS	LC/MSMS	MeOH-H ₂ O		25		Yes
024	LC-MS		No		20		Yes
025							
026	No Results Given						
028	No Results Given						
029	HPLC-DERV-FLU		Methanol /Water		50		Yes
030	LC-MS/MS	LC-MS/MS	No	Yes	5		Yes
034							
036							
037							
040	LC-MSMS		Acetonitrile	Pirimicarb-D6	20		No
041	LC-MS/MS	LC-MS/MS	Methanol	No	5		Yes
042	HPLC-DAD		Acetonitrile/Water 50/50 v/v		50	AUTOSAMP, RHEODYNE 7010-120	Yes
043	HPLC-FLD		Acidified Water	Trimetacarb	1	REODYNE	Yes
044							
045	LC-MS-MS	GC-MS			5		
046							
047	LC-MS-MS			Dimethoate D6	20		No
048	LC-FL	LC-MSMS			50	FULL-LOOP	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-FV9 standard solution used? (Yes/No)
049							
052							
053							
054	GC/NPD		Toluene		4	SOLVENT VENT PTV	No
056							
057	LC/MS	MS/MS	Methanol	None	10		Yes
058	LC-MS-MS		Methanol		20		Yes
061	LC-MS/MS	LC-MS/MS	No	No	1		No
062	LC-MS-MS		H ₂ O/MeOH		25		No
064	HPLC-PICKERING		Water:Acetonitrile 1:1	N	20	SPLITLESS	Yes
066	LC-MS/MS	LC-MS/MS			3	PARTIAL	Yes
067							
070	LC-MS/MS				2		Yes
071							
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	LC-MS/MS		Methanol		5	LOOP	Yes
075							
076	LC/MS/MS	None	Methanol/Water	None	35		Yes
077	No Results Given						
078	No Results Given						
079							
080							
081	LC-MS/MS			Thiabendazole-d6	10		Yes
087	LC-MS/MS	LC-MS/MS	MeOH	No	5		Yes
090							
091	No Results Given						
093	LC-MS/MS			PCB138, TPP	3		Yes
094							
095	LC-MS/MS		Methanol /Water		25		
096	HPLC-UV				20	DIRECT	Yes
097							
098	LC MS/MS			Yes	20		Yes
100	HPLC-FL		Methanol	2,3,5-Tri methacarb	20	AUTO	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-FV9 standard solution used? (Yes/No)
103	LC-MS/MS	LC-MS/MS		TBP	20	LOOP	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-ECD		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	HPLC-UV	None	Acetonitrile/Water	None	20	LOOP	Yes
110	LC-DAD	GC-MS	Hexane/Acetone		2	S/SSL	Yes
111							
112							
114	No Results Given						
115							
116							
117							
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	LC-MS/MS	LC-MS/MS	ACN	None	10		Yes
125	No Results Given						
127							
128							
129	LC-MS/MS	LC-MS/MS			10		No
130	No Results Given						
132							
133							
134	LC-MS/MS	LC-MS/MS	ACN		10	MICROLITER PICK-UP	Yes
135							

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

Penconazole							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	NPD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	LC-MS-MS		Water				Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	LC-MSMS	LC-MSMS	Diluted x 50 into MeOH	Carbendazim-d4	3		Yes
010	No Results Given						
013							
015	GC-ECD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	GC-MSD				2	SPLITLESS	No
017	LC/MSMS	No	ACN+Buffer	No	20		Yes
018	LC-MS/MS	GC-MS		Triphenyl-phosphate	5		No
019	GC-NP		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021	LC/MSMS	LC/MSMS	MeOH-H ₂ O		25		Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-ECD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029							
030	LC-MS/MS	LC-MS/MS	No	Yes	5		Yes
034	GC-ECD	Different column	Acetone	Diclofention	1	SPLITLESS	Yes
036	GC-MS	GC-MS	AcOEt		2	SPLITLESS	Yes
037	GC-MS	GC-MS			10		No
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	LC-MS/MS	LC-MS/MS	Methanol	No	5		Yes
042	GC-ECD	GC-NPD	Isooctane		1	TPOCI	Yes
043	GC-NPD	GC-ITD-MS	EA		1	SPLITLESS	Yes
044							
045	NPD	ECD			1		
046	GC-ECD/PND		Acetone/Isooctane		1	SPLITLESS	Yes
047							
048	GC-MSMS	GC-MSMS	n-Hexane	TPP	1	SPLITLESS	Yes

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

Penconazole							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GC ECD	GCMSMS			1	SPLITLESS	Yes
052	GC-ECD	GC-MS	Hexane		2	ALS	Yes
053	GC-NPD	GC-ECD	TMP/TOL*(90/10)		1	ON COLUMN	Yes
054	GC/ECD	GC/NPD	Toluene		1	SPLIT	Yes
056	No Results Given						
057	GC-NPD	GC-MS	Hexane	None	1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS	No	No	1		No
062	GC-ECD		Toluol/Isooctane	PCB 97	1	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-Ethylene	2	SPLITLESS	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	GC-MS	GC-MS			2	SPLITLESS	Yes
075	GC-NPD	GC-NPD			3	SPLIT/SPLITLESS	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/NPD	GC/MSD	Acetone	YES	3	SPLITLESS	Yes
081	LC-MS/MS			Thiabendazole-d6	10		Yes
087	LC-MS/MS	LC-MS/MS	MeOH	No	5		Yes
090	GC-MS		Acetone and Hexane	No	2	PTV	Yes
091	No Results Given						
093	LC-MS/MS			PCB138, TPP	3		Yes
094	No Results Given						
095	GC-ECD		Acetone		2		
096	ECD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLESS	Yes
098	GC ECD NPD	LC MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100	No Results Given						

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

Penconazole							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-ECD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108	LC-MS/MS	LC-MS/MS			8		Yes
109	GC-ECD	None	Isooctane	None	1	DIRECT	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SLL	Yes
111	GC-ECD	GC-NPD	Hexane		2	SPLITLESS	Yes
112	GC-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-ECD	GC-NPD			2	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	ECD	No	No	No	1	SPI	Yes
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC MS	GC MS			1	SPLIT/SPLITLESS	
128	GC-ECD	GC/MS	Isooctane/Toluene (90:10)	No	1	SPLITLESS	Yes
129	LC-MS/MS	LC-MS/MS			10		No
130	No Results Given						
132							
133							
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135	GC MS		EtAc		2	ON COLUMN	No

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

Procymidone							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	ECD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	GC-MS-MS		Ethyl Acetate		2	SPLITLESS	Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	GC-MSMS	GC-MSMS	Diluted x 50 into EtOAc	DDE pp-d8	1	ON COLUMN	Yes
010	No Results Given						
013							
015	GC-ECD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	GC-MSD				2	SPLITLESS	No
017	GC/MSD	No	No	No	1	SPLIT	Yes
018	GC-MS/MS	GC-MS		Triphenyl-methan	3	PTV	No
019	GC-EC		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021	GC/MSD	GC/MSD	CH3CN	TPP	2	PTV	Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-ECD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-µECD-NPD	GC-MS	Isooctane		2	SPLITLESS	Yes
030	GC-MS	GC-MS	Yes	No	1	PULSED SPLITLESS	Yes
034	GC-ECD	Different Column	Acetone	Diclofention	1	SPLITLESS	Yes
036	GC-MS	GC-MS	AcOEt		2	SPLITLESS	Yes
037	GC-MS	GC-MS			10		No
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	N
041	GC-MS/MS	GC-MS/MS	Ethylacetate + Cyclohexane 1:1	No	4	SPLITLESS	Yes
042	GC-ECD	GC-NPD	Isooctane		1	SPLIT/ SPLITLESS	Yes
043	GC-ECD	GC-TOF-MS	EA		1	SPLITLESS	Yes
044	GC-ECD		Ethyl Acetate		1	SPLITLESS	
045	NPD	GC-MS			1		
046	GC-ECD/PND		Acetone/Isooctane		1	SPLITLESS	Yes
047							
048	GC-MSMS	GC-MSMS	n-Hexane	TPP	1	SPLITLESS	Yes

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

Procymidone							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GC ECD				1	SPLITLESS	Yes
052	GC-ECD	GC-MS	Hexane		2	ALS	Yes
053	No Results Given						
054	GC/ECD	GC/NPD	Toluene		1	SPLIT	Yes
056	GC-NPD	GC-MS (single-quad)	Isooctane		1	SPLITLESS	Yes
057	GC-ECD	GC-MS	Hexane	None	1	SPI	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	GC/MS	GC/MS	No	No	1	PTV	No
062	GC-ECD		Toluol/Isooctane	PCB 97	1	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-Ethylene	2	SPLITLESS	Yes
067	ECD	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	GC-ITD	GC-ITD	Isooctane-Toluene 9:1		2	SPLITLESS	Yes
074	GC-NPD	GC-MS			2	SPLITLESS	Yes
075	GC-NPD	GC-NPD			3	SPLIT/SPLITLESS	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/ECD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-ECD			tr-HCEO	2	SPLITLESS/SPLIT	Yes
087	GC-MS/MS	GC-MS/MS	EtoAc/Cyclohexane	No	2	SPLIT/SPLITLESS	Yes
090	GC-ECD	GC-MS	Acetone and Hexane	No	2	DIRECT	Yes
091	No Results Given						
093	GC-MS			PCB138, TPP	3	PTV	Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-ECD		Acetone		2		
096	ECD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLESS	Yes
098	GC ECD	GC MS	Toluene	Yes	2	SPLITLESS	Yes
100	GC-ECD	GC-NPD	Ethyl Acetate		10	PTV	Yes

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

Procymidone							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-ECD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108	LC-MS				8		Yes
109	GC-ECD	None	Isooctane	None	1	DIRECT	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SLL	Yes
111	GC-ECD	GC-NPD	Hexane		2	SPLITLESS	Yes
112	GG-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-ECD				2	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	ECD	No	No	No	1	SPI	Yes
118	GC-MS/MS	GC-MS/MS	Acetonitrile	Triphenyl Phosphate	2	SPLITLESS	Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC ECD	GC MS			1	SPLIT/SPLITLESS	
128	GC-ECD	GC/MS	Isooctane/Toluene (90:10)	No	1	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132	GC/ECD	GC/MS	No		15	SOLVENT VENT	No
133							
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135	GC MS		EtAc		2	ON COLUMN	No

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

Pyrimethanil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	NPD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	LC-MS-MS		Water				Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	LC-MSMS	LC-MSMS	Diluted x 50 into MeOH	Carbendazim-d4	3		Yes
010	No Results Given						
013							
015	LC-MS/MS		Methanol		5		Yes
016	LC MS/MS				10	LOOP	No
017	LC/MSMS	No	ACN+Buffer	No	20		Yes
018	LC-MS/MS	GC-MS		Triphenyl-Phosphate	5		No
019	GC-NP		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021	LC/MSMS	LC/MSMS	MeOH-H ₂ O		25		Yes
024	GC-MS		Cyclohexan		1.5	SPLIT/SPLITLESS	Yes
025	GC-TSD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-NPD	GC-MS	Isooctane		2	SPLITLESS	Yes
030	LC-MS/MS	LC-MS/MS	No	Yes	5		Yes
034	NA						
036	LC-MS/MS	LC-MS/MS	MeOH		10		Yes
037	NA						
040	LC-MSMS		Acetonitrile	Pirimicarb-D6	20		No
041	GC-MS/MS	GC-MS/MS	Ethylacetate + Cyclohexane 1:1	No	4	SPLITLESS	Yes
042	HPLC-DAD	GC-NPD	Acetonitrile/Water 50/50 v/v		50	AUTOSAMP. RHEODYNE 7010-120	Yes
043	GC-NPD		Me/Water		1	REODYNE	Yes
044							
045	NPD	GC-MS			1		
046	GC-PND	GC-MS	Acetone/Isooctane		1	SPLITLESS	Yes
047	LC-MS-MS			Dimethoat D6	20		No

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

Pyrimethanil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
048	GC-NPD	GC-MSMS	Hexane/ IsoOctane/ Diisopropylether	Yes	2	SPLITLESS	Yes
049	GC MSMS			TPP	5	LV	Yes
052							
053							
054	GC/NPD		Toluene		4	SOLVENT VENT PTV	Yes
056	GC-NPD	GC-MS (single-quad)	Isooctane		1	SPLITLESS	Yes
057	GC-NPD	GC-MS	Hexane	None	1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS	No	No	1		No
062	GC-NPD		Toluol/Isooctane	Trifluralin	2	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-ethylene	2	SPLITLESS	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	GC-NPD	GC-MS			2	SPLITLESS	Yes
075							
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/NPD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	LC-MS/MS			Thiabendazole-d6	10		Yes
087	GC-MS/MS	GC-MS/MS	EtOAc/Cyclohexane	No	2	SPLIT/SPLITLESS	Yes
090	GC-MS		Acetone and Hexane	No	2	PTV	Yes
091	No Results Given						
093	LC-MS/MS	GC-MS		PCB138, TPP	3		Yes
094	GC/MSD	GC/MSD	Acetonitrile	no	10	LVI	Yes
095	GC-NPD		Acetone		2		
096	HPLC-UV				20	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLESS	Yes

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

Pyrimethanil							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
098	GC NPD	LC MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100	No Results Given						
103	LC-MS/MS	LC-MS/MS		TBP	20	LOOP	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108	LC-MS/MS	LC-MS/MS			8		Yes
109	HPLC-UV	None	Acetonitrile/Water	None	20	LOOP	Yes
110	GC-NPD	GC-MS	Hexane/Acetone		2	S/SLL	Yes
111	GC-NPD	Two Columns	Hexane		2	SPLITLESS	Yes
112	GG-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	No Results Given						
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	NPD	No	No	No	1	SPLITLESS	Yes
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC MS	GC MS			1	SPLIT/SPLITLESS	
128	GC-NPD	GC-MS	Isooctane/Toluene (90:10)	No	3	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132	No Results Given						
133	No Results Given						
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135	GC MS		EtAc		2	ON COLUMN	No

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

Quinoxifen							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	ECD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	LC-MS-MS		Water				Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	LC-MSMS	LC-MSMS	Diluted x 50 into MeOH	Carbendazim-d4	3		Yes
010	No Results Given						
013	LC-MS/MS				5	AS	Yes
015							
016	LC MS/MS				10	LOOP	No
017	LC/MSMS	No	ACN+Buffer	No	20		Yes
018	LC-MS/MS	GC-MS/MS		Triphenyl-phosphate	5		No
019	LC-MS/MS				5	LOOP	Yes
021							
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-TSD		Acetone	Ethion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029							
030	LC-MS/MS	LC-MS/MS	No	Yes	5		Yes
034	GC-ECD	Different Column	Acetone	Diclofention	1	SPLITLESS	Yes
036							
037							
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	LC-MS/MS	LC-MS/MS	Methanol	No	5		Yes
042	GC-NPD	HPLC-DAD	Isooctane		1	TPOCI	Yes
043	GC-ITD-MS		EA		1	SPLITLESS	Yes
044							
045	LC-MS-MS	GC-MS			5		
046	GC-ECD/PND	GC-MS	Acetone/Isooctane		1	SPLITLESS	Yes
047							
048	GC-ECD		Hexane/ Isooctane/ Diisopropylether	Yes	2	SPLITLESS	Yes

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

Quinoxifen							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GCMSMS			TPP	5	LV	Yes
052							
053							
054	GC/NPD	GC/ECD	Toluene		4	SOLVENT VENT PTV	Yes
056							
057	GC-ITD	GC-NPD	Hexane	None	1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS	No	No	1		No
062	GC-NPD		Toluol/Isooctane	Trifluralin	2	SPLIT/SPLITLESS	No
064							
066	GC-MS	GC-MS		Triphenyl-Ethylene	2	SPLITLESS	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	GC-ITD	GC-ITD	Isooctane-Toluene 9:1		2	SPLITLESS	Yes
074	GC-MS	GC-MS			2	SPLITLESS	Yes
075	GC-ECD	GC-ECD			1	ON-COLUMN	Yes
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079							
080							
081	LC-MS/MS			Thiabendazole-d6	10		Yes
087	LC-MS/MS	LC-MS/MS	MeOH	No	5		Yes
090	GC-ECD	GC-MS	Acetone and Hexane	No	2	DIRECT	Yes
091	No Results Given						
093	GC-MS			PCB138, TPP	3	PTV	Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-ECD		Acetone		2		
096	ECD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLES	Yes
098							
100							

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

Quinoxifen							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-ECD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-ECD	None	Isooctane	None	1	DIRECT	Yes
110	GC-NPD	GC-MS	Hexane/Acetone		2	S/SPL	Yes
111							
112	GC-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-ECD	GC-NPD			1	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	NPD	No	No	No	1	SPLITLESS	Yes
118	GC-MS/MS	GC-MS/MS	Acetonitrile	Triphenyl Phosphate	2	SPLITLESS	Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC ECD	GC MS			1	SPLIT/SPLITLESS	
128							
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132							
133							
134	GC-MS/MS	GC-MS/MS	Ciclohexane		10	SP/SPL PTV	Yes
135							

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

Tebuconazole							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	NPD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	LC-MS-MS		Water				Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	LC-MS/MS	LC-MS/MS	Diluted x50 into MeOH	Carbendazim-d4	3		Yes
010	No Results Given						
013							
015							
016	GC-MSD				2	SPLITLESS	No
017	LC/MSMS		ACN+Buffer		20		Yes
018	LC-MS/MS	GC-MS		Triphenyl-phosphate	5		No
019	LC-MS/MS				5	LOOP	Yes
021	GC/MSD	GC/MSD	CH ₃ CN	TPP	2	PTV	Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-TSD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-µECD-NPD	GC-MS	Isooctane		2	SPLITLESS	Yes
030	LC-MS/MS	LC-MS/MS		Yes	5		Yes
034							
036							
037							
040	LC-MSMS		Acetonitrile	Pirimicarb-D6	20		No
041	LC-MS/MS	LC-MS/MS	Methanol		5		Yes
042	GC-NPD	GC-MS	Isooctane		1	TPOCI	Yes
043	GC-NPD	GC-ITD-MS	EA		1	SPLITLESS	Yes
044							
045	NPD	LC-MS-MS			1		
046	GC-PND	GC-MS	Aceton/Isooctane		1	SPLITLESS	Yes
047							
048	GC-NPD	GC-MSMS	Hexane/ Isooctane/ Diisopropylether	Yes	2	SPLITLESS	Yes

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

Tebuconazole							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049							
052							
053							
054	GC/NPD		Toluene		4	SOLVENT VENT PTV	Yes
056							
057	GC-NPD	GC-MS	Hexane		1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	GC/MS	GC/MS			1	PTV	No
062	GC-NPD		Toluol/Isocetane	Trifluralin	2	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	LC-MS/MS	LC-MS/MS			3	PARTIAL	Yes
067	NPD-80	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	GC-NPD	GC-MS			2	SPLITLESS	Yes
075							
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080							
081	LC-MS/MS			Thiabendazole-d6	10		Yes
087	LC-MS/MS	LC-MS/MS	MeOH		5		Yes
090	GC-MS		Acetone and Hexane		2	PTV	Yes
091	No Results Given						
093	LC-MS/MS			PCB138, TPP	3		Yes
094	GC/MSD	GC/MSD	Acetonitrile		10	LVI	Yes
095	GC-NPD		Acetone		2		
096	NPD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLES	Yes
098	GC NPD	LC MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100							

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

Tebuconazole							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-NPD		Isooctane		1	DIRECT	Yes
110	GC-NPD	GC-MS	Hexane/Acetone		2	S/SSL	Yes
111	GC-NPD	Two Columns	Hexane		2	SPLITLESS	Yes
112	GG-MS (single-quad)	GC-MS	Ethyl Acetate: Cyclohexane 1:9	Ethoprophos	2	SPLITLESS	Yes
114	No Results Given						
115	GC-NPD				1	PULSED SPLITLESS	No
116							
117	NPD				1	SPLITLESS	Yes
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	GC-MS	GC-MS	EtAc		2	SPLITLESS	Yes
125	No Results Given						
127	GC MS	GC MS			1	SPLIT/SPLITLESS	
128							
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132							
133							
134	GC-MS/MS	GC-MS/MS	Ciclohex		10	SP/SPL PTV	Yes
135							

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

Tolyfluamid							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	ECD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	GC-MS-MS		Ethyl Acetate		2	SPLITLESS	Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	GC-MSMS	GC-MSMS	Diluted x 50 into EtOAc	DDE pp-d8	1	ON COLUMN	Yes
010	No Results Given						
013							
015	GC-ECD		Isopropyl Ether + Matrix		2	SPLITLESS	Yes
016	GC-MSD				2	SPLITLESS	No
017							
018							
019	GC-EC		Hexane-Acetone	Yes	1	SPLITLESS	Yes
021							
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-TSD		Acetone	Etion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029	GC-µECD-NPD	GC-MS	Isooctane		2	SPLITLESS	Yes
030	LC-MS/MS	LC-MS/MS	No	Yes	5		Yes
034	GC-ECD	Different Column	Acetone	Diclofention	1	SPLITLESS	Yes
036							
037							
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	GC-MS/MS	GC-MS/MS	Ethylacetate + Cyclohexane 1:1	No	4	SPLITLESS	Yes
042	GC-NPD	GC-ECD	Isooctane		1	TPOCI	Yes
043	GC-ECD	GC-TOF-MS	EA		1	SPLITLESS	Yes
044							
045	ECD	GC-MS			1		
046	GC-ECD		Acetone/Isooctane		1	SPLITLESS	Yes
047							
048	GC-ECD		Hexane/ Isooctane/ Diisopropylether	Yes	2	SPLITLESS	Yes

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

Tolyfluamid							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GC ECD	GCMSMS			1	SPLITLESS	Yes
052	GC-ECD	GC-MS	Hexane		2	ALS	Yes
053							
054	GC/ECD	GC/NPD	Toluene		1	SPLIT	Yes
056	GC-NPD	GC-MS (single-quad)	Isooctane		1	SPLITLESS	Yes
057	GC-ECD	GC-MS	Hexane	None	1	SPI	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS	No	No	1		No
062	GC-ECD		Toluol/Isooctane	PCB 97	1	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate	N	1	SPLITLESS	Yes
066	GC-MS	GC-MS		Triphenyl-Ethylene	2	SPLITLESS	Yes
067	ECD	GC-MS	Acetone/Hexane (1:1)		4	SPLIT	Yes
070	GC-NPD	GC-MS			2	SPLITLESS	Yes
071	GC-MS				1	PULSED SPLITLESS	No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	GC-MS	GC-MS			2	SPLITLESS	Yes
075							
076	GC/MS	None	Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079							
080	GC/ECD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-ECD	LC-MS/MS		tr-HCEO	2	SPLITLESS/SPLIT	Yes
087	GC-MS/MS	GC-MS/MS	EtoAc/Cyclohexane	No	2	SPLIT/SPLITLESS	Yes
090	GC-ECD	GC-MS	Acetone and Hexane	No	2	DIRECT	Yes
091	No Results Given						
093	LC-MS/MS			PCB138, TPP	3		Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-NPD		Acetone		2		
096	ECD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLES	Yes
098	GC ECD NPD	LC MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100	GC-ECD	GC-NPD	Ethyl Acetate		10	PTV	Yes

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

Tolyfluamid							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-ECD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-ECD	None	Isooctane	None	1	DIRECT	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SLL	Yes
111	GC-ECD	GC-NPD	Hexane		2	SPLITLESS	Yes
112							
114	No Results Given						
115	GC-ECD				2	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	ECD	No	No	No	1	SPI	Yes
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	GC-MS	GC-MS	EtAc	None	2	SPLITLESS	Yes
125	No Results Given						
127	GC ECD	GC MS			1	SPLIT/SPLITLESS	
128	GC-ECD	GC/MS	Isooctane/Toluene (90:10)	No	1	SPLITLESS	Yes
129	GC-MS (SQ)	GC-MS (SQ)			2	SPLITLESS	No
130	No Results Given						
132	GC/ECD	GC/MS	No		15	SOLVENT VENT	No
133							
134							
135	GC MS		EtAc		2	ON COLUMN	No

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

Triadimenol							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
001	NPD	GC-MS	Isooctane	Ethion	1	SPLITLESS	Yes
002	GC-MS		EtAc	Phenantren-D10	10	PTV	Yes
003							
005	LC-MS-MS		Water				Yes
008	GC-MS	GC-MS	Isooctane	Ethion	3	PTV	Yes
009	GC-MS/MS	GC-MS/MS	Diluted x50 into EtOAc	DDE pp-d8	1	ON COLUMN	Yes
010	No Results Given						
013							
015							
016	GC-MSD				2	SPLITLESS	No
017	LC/MSMS		ACN+Buffer		20		Yes
018	GC-MS	GC-MS		Triphenylmethane	3	PTV	No
019	LC-MS/MS				5	LOOP	Yes
021	GC/MSD	GC/MSD	CH3CN	TPP	2	PTV	Yes
024	GC-MS		Cyclohexane		1.5	SPLIT/SPLITLESS	Yes
025	GC-TSD		Acetone	Ethion	1	SPLITSPLITLESS	Yes
026	No Results Given						
028	No Results Given						
029							
030	LC-MS/MS	LC-MS/MS		Yes	5		Yes
034							
036							
037	GC-MS	GC-MS			10		No
040	GC-MS	GC-MS	Acetonitrile	PCB 138	1	SPLITLESS	No
041	LC-MS/MS	LC-MS/MS	Methanol		5		Yes
042	GC-NPD	GC-MS	Isooctane		1	TPOCI	Yes
043	GC-NPD	GC-ITD-MS	EA		1	SPLITLESS	Yes
044							
045	NPD	GC-MS			1		
046	GC-PND	GC-MS	Acetone/Isooctane		1	SPLITLESS	Yes
047							
048	LC-MSMS	LC-MSMS			5	FULL-LOOP	Yes

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

Triadimenol							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
049	GCMSMS			TPP	5	LV	Yes
052	GC-MS	GC-MS	Acetonitrile		2	MANUAL	No
053	No Results Given						
054	GC/NPD		Toluene		4	SOLVENT VENT PTV	Yes
056	No Results Given						
057	GC-NPD	GC-MS	Hexane		1	SPLITLESS	Yes
058	GC-MS (single-quad)	GC-MS (single-quad)	Acetone		1	SPLITLESS	Yes
061	LC-MS/MS	LC-MS/MS		No	1		No
062	GC-ECD		Toluol/Isooctane	PCB 97	1	SPLIT/SPLITLESS	No
064	GC-MS (single-quad)		Ethyl Acetate		1	SPLITLESS	Yes
066	LC-MS/MS	LC-MS/MS			3	PARTIAL	Yes
067	GC-NPD	GC-MS			2	SPLITLESS	Yes
070	No Results Given						
071	GC-MS				1	PULSED SPLITLESS	No
073	LC-MS/MS	LC-MS/MS	Methanol+ 0.025% HAC		5	LOOP	Yes
074	LC-MS/MS		Methanol		5	LOOP	Yes
075	GC-NPD	GC-NPD			3	SPLIT/SPLITLESS	Yes
076	GC/MS		Acetone	Atrazine D5	1	PULSED SPLITLESS	No
077	No Results Given						
078	No Results Given						
079	GC-MS/MS				10		
080	GC/NPD	GC/MSD	Acetone	Yes	3	SPLITLESS	Yes
081	GC-NPD	LC-MS/MS		TPP	2	SPLITLESS/SPLIT	Yes
087	LC-MS/MS	LC-MS/MS	MeOH	No	5		Yes
090	GC-MS		Acetone and Hexane	No	2	PTV	Yes
091	No Results Given						
093	LC-MS/MS			PCB138, TPP	3		Yes
094	GC/MSD	GC/MSD	Acetonitrile	No	10	LVI	Yes
095	GC-NPD		Acetone		2		
096	NPD		Hexane		1	DIRECT	Yes
097	GC-MS		Heptane	Yes	1	SPLITLES	Yes
098	GC NPD	LC MS/MS	Toluene	Yes	2	SPLITLESS	Yes
100	No Results Given						

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

Triadimenol							
Lab Code	Determination Technique	Confirmation Technique Used	Solvent recomposed (if any)	Internal Standard (if any)	Injection Volume (µl)	Injection Type	EUPT-FV9 standard solution used? (Yes/No)
103	GC-MS	GC-MS		TBP	2	SPLITLESS	Yes
104	GC-MS (ion trap)+ HPLC-(DAD)	GC-MS	Acetonitrile		1	SPLITLESS	
105	GC-NPD GC-MS		Isooctane with 20% Matrix	Ethion	1	SPLITLESS 250°C	Yes
106	No Results Given						
108							
109	GC-NPD	None	Isooctane	None	1	DIRECT	Yes
110	GC-ECD	GC-MS	Hexane/Acetone		2	S/SSL	Yes
111							
112							
114	No Results Given						
115	GC-ECD	GC-NPD			1	PULSED SPLITLESS	No
116	GC-MS	None	AcN	TPP	2	SPLITLESS	No
117	ECD	No	No	No	1	SPI	Yes
118	LC-MS/MS	LC-MS/MS	Acetonitrile		10		Yes
119	LC-MS/MS	LC-MS/MS			10		No
125	No Results Given						
127							
128							
129							
130	No Results Given						
132							
133							
134							
135							

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

Table 4. List of participating laboratories

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
AUSTRIA	Innsbruck	Austrian Agency for Food and Health Safety (AGES)	Yes
AUSTRIA	Vienna	Austrian Agency for Health and Food Safety, Competence Centre Residue Analysis, Vienna	Yes
BELGIUM	Bruxelles	Scientific Institute of Public Health (IPH)	Yes
BELGIUM	Zwijnaarde	FYTOLAB	Yes
BELGIUM	Marloie	Centre d'Economie Rurale Groupe - Laboratoire d'Hormonologie	Yes
BULGARY	Sofia	Central Laboratory for Chemical Testing and Control	Yes
CYPRUS	Nicosia	State General Laboratory	No
CZECH REPUBLIC	Prague 6	Institute of Chemical Technology Department of Food Chemistry and Analysis	Yes
DENMARK	Soeborg	The National Food Institute, Danish Technical University	No
EGYPT	Giza	Central Laboratory of Residue Pesticide Analysis. Ministry of Agriculture	Yes
ESTONIA	Saku (Harjumaa)	Agricultural Research Centre, Lab for Residues and Contaminants	Yes
ESTONIA	Tartu	Health Protection Inspectorate Tartu Laboratory	No
FINLAND	Espoo	Finnish Customs Laboratory	Yes
FRANCE	Montpellier	Laboratoire du SCL de Montpellier	Yes
FRANCE	Rennes	Laboratoire SCL-Finance Ministry, Rennes	No
FRANCE	Pessac	SCL Laboratoire de Pessac	Yes
FRANCE	Massy Cedex	SCL Laboratoire d'Ile de France - Massy	Yes
FRANCE	Villeneuve d'Ascq	Laboratoire SCL de Lille	Yes
FRANCE	Saint-Denis de la Réunion Cedex	Service Commun des Laboratoires	Yes
GERMANY	Bremen	Landesuntersuchungsamt für Chemie, Hygiene und Veterinärmedizin	Yes
GERMANY	Erlangen	Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit	Yes
GERMANY	Düsseldorf	39/2 Chemischen und Lebensmitteluntersuchung	Yes
GERMANY	Berlin	BBGes-ILAT, FB 26	No

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COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
GERMANY	Oldenburg	LAVES Lebensmittelinstitut Oldenburg	Yes
GERMANY	Bonn	Amt für Umwelt, Verbraucherschutz und Lokale Agenda	Yes
GERMANY	Essen	CGI Essen/Oberhausen	Yes
GERMANY	Bielefeld	Chemisches und Veterinäruntersuchungsamt- Ostwestfalen-Lippe (CVUA-OWL)	Yes
GERMANY	Hamburg	Institut für Hygiene und Umwelt	Yes
GERMANY	Fellbach	Chemisches und Veterinäruntersuchungsamt (CVUA) Stuttgart	Yes
GERMANY	Speyer	Landesuntersuchungsamt, Institut für Lebensmittelchemie	Yes
GERMANY	Berlin	Federal Office of Consumer Protection and Food Safety (BVL)	Yes
GREECE	Ioannina	Ministry of Rural Development and Food, Regional Centre of Plant Protection and Quality Control	Yes
GREECE	Athens	General Chemical State Laboratory. Division Pesticide Residue Laboratory	Yes
GREECE	Kiphissia, Athens	Pesticide Residues Laboratory, Benaki Phytopathological Institute	Yes
GREECE	Volos	Regional Center of Plant Protection and Quality Control of Magnesia. Pesticide Residue Laboratory	Yes
GREECE	Kavala	Ministry of Rural Development and Food – Peripheral Center of Kavala	Yes
GREECE	Iraklion Crete	Regional Centre of Plant Protection and Quality Control of Iraklion	Yes
HUNGARY	Velence	Agricultural Office of County Féjer, Plant Protection and Soil Conservation Directorate, Pesticide Residue Analytical Laboratory	Yes
HUNGARY	Szolnok	Plant Protection and Soil Conservation Directorate of Jász-Nagykun-Szolnok County	Yes
HUNGARY	Miskolc	Pesticide Residue Analytical Laboratory	Yes
HUNGARY	Hódmezovásárhely	Plant Protection and Soil Conservation Directorate. Agricultural Office of Csongrad County	Yes
HUNGARY	Kaposvár	Plant Protection and Soil Conservation Directorate. Agricultural Office of Somogy County	Yes
HUNGARY	Tanakajd	Agricultural Special Management Office Plant and Soil Protection Management Residue Analytical Laboratory	Yes

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COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
IRELAND	Celbridge, County Kildare	Pesticide Control Laboratory, Department of Agriculture and Food	Yes
ITALY	Trento	A.P.P.A. Trento-Settore Laboratorio e Controlli	Yes
ITALY	Bari	ARPA Puglia - Dipartimento di Bari	Yes
ITALY	Saint Christophe (Aosta)	ARPA Valle D'Aosta	Yes
ITALY	Arezzo	ARPAT Dipartimento di Arezzo	Yes
ITALY	Varese	Unità Operativa Laboratorio Chimico – ASL della Provincia di Varese	Yes
ITALY	Ragusa	AUSL N.7 RAGUSA ARPA SICILIA DAP RAGUSA. Laboratorio Chimico	Yes
ITALY	Roma	I.S.S. Dip. Ambiente e Connessa Prevenzione Primaria	Yes
ITALY	Verona	APRAV-Verona	Yes
ITALY	Firenze	ARPAT Dipartimento di Firenze	No
ITALY	Bergamo	Laboratorio Di Sanita Pubblica. ASL Provincia di Bergamo	Yes
ITALY	Cagliari	P.M.P. ASL 8 Cagliari	No
ITALY	Vicenza	A.R.P.A.V. Dipartimento di Vicenza	Yes
ITALY	Macerata	ARPA MARCHE - Dip. Macerata	No
NORWAY	Aas	Norwegian Institute for Agricultural and Environmental Research, Bioforsk Laboratory	Yes
POLAND	Warszawa	Laboratory of Warsaw Voivodeship Sanitary-Epidemiological Station	Yes
POLAND	Krakow	Wojewodzka Stacja Sanitarno-Epidemiologiczna w Krakowie	Yes
POLAND	Białystok	Instytut Ochrony Roslin Laboratorium Badania Pozostalosci Srodków Roslin	Yes
POLAND	Opole	Wojewodzka Stacja Sanitarno-Epidemiologiczna	Yes
POLAND	Skierniewice	Food Safety Laboratory	Yes
POLAND	Wroclaw	Wojewodzka Stacja Sanitarno-Epidemiologiczna w Wroclaw	Yes
PORTUGAL	Oeiras	Pesticide Residue Laboratory, Direcção-Geral de Protecção das Culturas.	Yes
PORTUGAL	Senhora da Hora	Laboratorio Regional Da Direcção Regional de Agricultura de Entre Douro E Minho	Yes

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COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
PORTUGAL	Camacha Madeira Island	Laboratório de Qualidade Agrícola	Yes
SLOVAKIA	Bratislava	State Veterinary and Food Institute	Yes
SLOVENIA	Maribor	Public Health Institute	Yes
SLOVENIA	Ljubljana	Agricultural Institute of Slovenia, Central Laboratories	Yes
SLOVENIA	Ljubljana	Institute for Public Health of Republic of Slovenia	Yes
SPAIN	Zizurkil	Laboratorio Agrario. Diputación Foral de Gipuzkoa	Yes
SPAIN	Cabrils	Laboratori Agroalimentari – DAR (Generalitat de Catalunya)	Yes
SPAIN	Burgos	Junta de Castilla y León. Laboratorio Agrario Regional	Yes
SPAIN	Villava Navarra	NASERSA	Yes
SPAIN	Logroño	Laboratorio Regional de la CCAA de La Rioja	Yes
SPAIN	Majadahonda (Madrid)	Centro Nacional de Alimentación	Yes
SPAIN	El Palmar, Murcia	Laboratorio Agroalimentario y de Sanidad Animal	Yes
SPAIN	Burjassot (Valencia)	Laboratorio Agroalimentario de Valencia	Yes
SPAIN	Santa Lucía de Tirajana	Laboratorio de Residuos – Instituto Tecnológico de Canarias	Yes
SWEDEN	Lidköping	Lantmännen Analycen AB	Yes
SWEDEN	Uppsala	National Food Administration, Chemistry Division 1	Yes
SWITZERLAND	Zurich	Official Food Control Authority of the Canton of Zurich	No
SWITZERLAND	Aarau	Amt für Verbraucherschutz Aargau	No
THE NETHERLANDS	Amsterdam	VWA-Food and Consumer Product Safety Authority	Yes
UNITED KINGDOM	Edinburgh	Scottish Agricultural Science Agency.	Yes
UNITED KINGDOM	York	Central Science Laboratory	Yes
UNITED KINGDOM	Teddington, Middlesex	Laboratory of the Government Chemist Limited	Yes
UNITED KINGDOM	Wolverhampton, West Midlands	Eurofins Laboratories Ltd	Yes