CRL-PROFICIENCY TEST 8, 2006

Pesticide Residues in Aubergine Homogenate

Final Report

Organiser:

Dr. Amadeo R. Fernández-Alba
Co-Head of CRL-MRM
University of Almería, Edificio Químicas CITE I, Ctra. Sacramento s/n
04120 Almería, SPAIN
Phone: +34 950015034; Fax: +34 950015645
E-mail: amadeo@ual.es
http://www.ual.es/GruposInv/EUPT/

Organising team at the University of Almería:

Ms. Paula Medina, Chemist.	University of Almería
Mr. Octavio Malato, Chemist.	University of Almería
Mr. Antonio Valverde Monterreal, Chemist.	University of Almería
Dr. Ana Agüera López, senior Chemist.	University of Almería

Scientific Committee:

Mr. Arne Andersson, Head of Division (QCG).	National Food Administration, Uppsala, Sweden.
Dr. Antonio Valverde, senior Chemist (QCG).	University of Almería, Spain.
Dr. Carmelo Rodríguez, senior Chemist (AG).	University of Almería, Spain.
Dr. Miguel Gamón, senior Chemist (AG).	Co-Head of CRL-MRM. Pesticide Residue Laboratory (Agro-Food Analysis Service) of the Generalitat Valenciana, Spain.
Dr. André de Kok, senior Chemist (AG).	Food and Consumer Product Safety Authority (VWA), Amsterdam, The Netherlands.
Dr. Tuija Pihlström, senior Chemist (AG).	National Food Administration, Uppsala, Sweden.
Mr. Stewart Reynolds, senior Chemist (AG).	Central Science Laboratory, York, United Kingdom.
Dr. Michlangelo Anastassiades, senior Chemist (AG).	CVUA Stuttgart, Fellbach, Germany.
Dr. Mette Erecius Poulsen, senior Chemist (AG).	Danish Institute for Food and Veterinary Research, Soeborg, Denmark.
Dr. Lutz Alder, senior Chemist (AG).	Federal Institute for Risk Assessment, Berlin, Germany.

QCG: Quality Control Group
AG: Advisory Group

CONTENTS

CRL-EUROPEAN COMMISSION PROFICIENCY TEST 8
ON PESTICIDE MULTIRESIDUE METHODS IN FRUIT AND VEGETABLES
2006

The Council Directives 86/362/EEC[1] and 90/642/EEC[2] 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. Up to now, PT 1 to PT 7 have been organised by two contractors, the Swedish Food Administration (PT 1 to PT 5) and the University of Almeria (PT 6 and PT 7).

Regulation (EC) No 882/2004[3] 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 comparative tests. The European Proficiency Test 8 has been organised under the umbrella of the CRL in Fruit and Vegetables at the University of Almería, Spain[4]. The Proficiency Test is an activity carried out annually on the basis of previous EUPTs. Participation in this 8th 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. Additionally, laboratories from Iceland, Norway and Romania were also invited to participate. A special case for this first CRL-EUPT was the inclusion of an Egyptian laboratory.

This report will be presented to the 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 twenty eight laboratories agreed to participate in the 8th European Commission Proficiency Test.

This proficiency test was performed in 2006 using aubergine homogenate. The aubergines were grown in the south of Spain, in Almeria, and were treated with a post-harvest treatment, using commercial formulations that were applied using a microspray technique. Sixteen pesticides were used for the treatments. Participating laboratories were provided with a 'blank' aubergine homogenate as well as the treated test material.

The test materials, 300 g of aubergine homogenate containing residues of pesticides, together with 300 g of 'blank' aubergine homogenate, were shipped to participants on the 29th May and 5th June, 2006. The deadline for submission of results to the Organiser was the 5th July 2006. The participants were provided with a list of sixty-two pesticides (Annex 1), which might have been present (or potentially present) in the test material and were asked to determine the levels of all the pesticide residues that they detected. Participants were also asked to analyse the blank test material and report residues of any pesticide they found which was 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 standards.

The median values of the analytical data submitted were used to obtain the assigned (true) values for each of the sixteen 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 16 compounds present.

Classical procedures for summing z-scores (SSZ and RSZ) were employed using the individual z-scores of the participating laboratories. 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. Only laboratories that fulfilled the criteria of detecting at least fourteen of the sixteen present pesticides (~90%) with no false positives reported, have been classified as having 'sufficient scope', and have therefore been placed in Category A. Within this category, the laboratories have been classified as 'good', 'satisfactory' or 'unsatisfactory'. All the other laboratories have been placed in Category B, and classified as having 'insufficient scope'. For laboratories in Category B, individual z-scores were calculated, but their overall performance has not been assessed, although they have been placed in order of the number of pesticides sought and the number of acceptable z-scores achieved.

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.

Acetamiprid, Azoxystrobin, Carbaryl, Imazalil and Carbendazim (the degradation product of Thiophanate-methyl) were determined using the LC-MS/MS method. All other pesticides (Bifenthrin, Bromopropylate, Chlorpyrifos, Cyprodinil, Diazinon, Dichlofluanid, Fludioxonil, Lambda-cyhalothrin, Myclobutanil, Parathion and Pirimicarb), were analysed using the GC method. For confirmation purposes, MS/MS spectra were used.

2.2 Preparation of treated test material

Before preparing the test material, the pesticides and suitable residue levels for the study were selected following recommendations made by the Quality Control Group, which had been specifically appointed for Proficiency Test 8. The aubergines were grown in the south of Spain, in Almeria. One hundred and thirty kilograms of aubergines were sampled and treated post-harvest with a commercial formulation dissolved in water and applied to the aubergines using a microspray. Formulations containing the individual pesticides were applied allowing one hour to elapse between applications. A portion was taken and analysed to check the residue levels present in the material in order to decide whether or not additional spraying was necessary. When the residue levels contained in the aubergines 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 aubergines 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 aubergines to be used for the production of the blank test material were organically grown in the same field as the test material - in Almeria, in the south of Spain. A homogenate was

prepared in the same way as the treated test material described above. Low level traces of Methomyl at concentrations below 0.01 mg/Kg were found to be present.

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' aubergine 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 and 2.2. The acceptance criteria for the test material to be sufficiently homogenous for the proficiency test were that F critical > F for (p = 0.05), and that $S_s/\sigma < 0.3$, S_s being the between sampling standard deviation and σ = RSD (25%) x the analytical sampling mean for all pesticides.

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

	Acetamiprid (mg/Kg)	**Azoxystrobin** (mg/Kg)	**Bifenthrin** (mg/Kg)	**Bromopropylate** (mg/Kg)	**Carbaryl** (mg/Kg)	**Cyprodinil** (mg/Kg)	**Chlorpyrifos** (mg/Kg)	**Diazinon** (mg/Kg)
Mean (mg/Kg)	0.900	1.96	0.755	0.568	1.45	2.19	0.666	0.425
F critical	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02
F	2.10	2.98	1.20	1.17	2.02	2.22	2.30	2.28
S_s/σ	0.03	0.07	0.12	0.14	0.21	0.12	0.24	0.29
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Ss: Between Sampling Standard Deviation

Table 2.2. Statistical evaluation of the homogeneity test data (n = 20 analyses)

	Dichlofluanid (mg/Kg)	**Fludioxonil** (mg/Kg)	**Imazalil** (mg/Kg)	**Lambda-cyhalothrin** (mg/Kg)	**Myclobutanil** (mg/Kg)	**Parathion** (mg/Kg)	**Pirimicarb** (mg/Kg)	**Carbendazim** (mg/Kg)
Mean (mg/Kg)	0.201	1.25	0.669	1.23	1.18	0.165	1.43	0.492
F critical	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02
F	2.64	2.65	2.98	1.69	2.09	2.76	1.92	1.01
S_s/σ	0.08	0.06	0.05	0.01	0.04	0.26	0.03	0.05
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Ss: 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 29th May 2006.
- Day 2: shortly after the deadline for reporting results, on 7th July 2006.

The individual results are given in Tables 2.3 and 2.4. 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 the results.

Table 2.3. Statistical test for analytical precision and to demonstrate stability

	Acetamiprid (mg/Kg)	Azoxystrobin (mg/Kg)	Bifenthrin (mg/Kg)	Bromopropylate (mg/Kg)	Carbaryl (mg/Kg)	Cyprodinil (mg/Kg)	Chlorpyrifos (mg/Kg)	Diazinon (mg/Kg)
Day 1 (1st sample)	0.900	2.00	0.753	0.568	1.40	2.19	0.630	0.428
Day 1 (2nd sample)	0.914	1.95	0.730	0.566	1.42	2.20	0.638	0.432
Mean 1	0.907	1.98	0.742	0.567	1.41	2.20	0.634	0.430
Day 2 (1st sample)	0.900	1.92	0.740	0.560	1.43	2.15	0.620	0.425
Day 2 (2nd sample)	0.940	1.92	0.725	0.563	1.45	2.17	0.630	0.428
Mean 2	0.920	1.92	0.733	0.562	1.44	2.16	0.625	0.427
(M1-M2)/M1	-0.014	0.028	0.012	0.010	-0.021	0.016	0.014	0.008
%	-1.43	2.78	1.21	0.97	-2.13	1.59	1.42	0.81

Table 2.4. Statistical test for analytical precision and to demonstrate stability

	Dichlofluanid (mg/Kg)	Fludioxonil (mg/Kg)	Imazalil (mg/Kg)	Lambda-cyhalothrin (mg/Kg)	Myclobutanil (mg/Kg)	Parathion (mg/Kg)	Pirimicarb (mg/Kg)	Carbendazim (mg/Kg)
Day 1 (1st sample)	0.200	1.20	0.669	1.23	1.14	0.165	1.40	0.500
Day 1 (2nd sample)	0.201	1.21	0.700	1.23	1.15	0.166	1.39	0.480
Mean 1	0.201	1.21	0.685	1.23	1.15	0.166	1.40	0.490
Day 2 (1st sample)	0.194	1.24	0.650	1.20	1.17	0.164	1.40	0.480
Day 2 (2nd sample)	0.197	1.20	0.660	1.22	1.19	0.163	1.30	0.470
Mean 2	0.195	1.22	0.655	1.21	1.18	0.164	1.35	0.475
(M1-M2)/M1	0.026	-0.012	0.043	0.014	-0.028	0.012	0.032	0.031
%	2.62	-1.24	4.31	1.43	-2.84	1.21	3.23	3.06

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 in boxes containing dry ice. The samples were sent on the 29th May and 5th June, 2006.

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 8 web page constructed especially for this Proficiency Test. A password was required to enter a restricted zone where the Protocol and the Pesticide List with the Minimum Required Performance Level (MRPL) established by the Organiser could be found. This information was sent by e-mail to all participant 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 8.

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 stipulated by the Advisory Group. The two robust statistical methods for the estimation of the RSD, gave only marginal differences in the results, 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 PT5 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 and 7

In these proficiency tests, the median was used to obtain the assigned concentration values for each pesticide.

This was then used to calculate the z-score. The target standard deviations (σ) were calculated using the relative FFP (fit-for-purpose) value, which was assigned as 25%. Furthermore, the Qn-method was also used to calculate standard deviations.

Sum of z-Scores: The RSZ and SSZ were also used but an additional new classification was introduced for PT6 that carried forward to PT 7 with the agreement of the Advisory Group as well as DG SANCO. This was used as the basis for separating the labs into two categories, A and B. To be classified as Category A, sufficient scope had to have been demonstrated. The scope had to be at least 90% of the total pesticides present in the sample and not having reported a false positive result.

The Weighted Sum of z-Scores (WSZ), where each z-score is multiplied by a weighting (penalty) factor (see 3.6.3) was used for laboratories classified as Category A, depending on how many of the pesticides contained in the sample were sought by the laboratories.

3.1.3 Proficiency Test 8

In this proficiency test, the median has also been used, together with a FFP RSD of 25% as well as the WSZ for Category A laboratories. Although it has not been used, Qn RSD has been reported as it is considered of interest to the participating laboratories.

Some laboratories have been marked with asterisks to encourage them to attain better results in future PT's.

3.2 False positives and negatives

3.2.1 False positives

In principle, results that show the presence of pesticides that were included in the pesticide list, and which were (i) not used in the preparation of the test material, (ii) and not detected by the Organiser (even following a repeat analysis) were treated as false positives - if they were reported at concentrations at or above the Minimum Required Performance Level (MRPL) as stipulated by the Organiser. Results reported that were lower than 0.01mg/Kg have been ignored by the Organiser and have not therefore been considered as false positives. No z-score values have been calculated for these results. A laboratory reporting a single false positive, even if reporting the necessary number of pesticides to have sufficient scope, will have been classified in Category B.

3.2.2 False negatives

Results for pesticides reported by the laboratories as not detected (ND), although they were used by the Organiser to treat the test material and were subsequently detected at, or above, the MRPL 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 MRPL and for the false negatives.

3.3 Estimation of the assigned values

To establish the assigned values, the median levels of all the reported results, excluding the outliers, were used. Individual results without any absolute values reported, such as detected (D), could not be used.

3.4 Fixed target standard deviations

To assign the target standard deviations for each individual pesticide, a fixed relative standard deviation fit-for-purpose (FFP RSD) was used. Based on previous experience and

recommendations by the Advisory Group and also as a result of the discussion session on proficiency testing at EPRW 2004 in Stockholm, Sweden, the fixed relative standard deviation (FFP RSD) was considered to be 25 %. The same target RSD has been applied to all the pesticides. The target standard deviation (σ) for each individual pesticide was calculated by multiplying this FFP RSD by the assigned value.

3.5 z-Scores

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

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

Where:

- x is the result reported by the participant or the MRPL for those labs not having detected the pesticide present in the sample
- X is the assigned value or true concentration
- σ is the target standard deviation (using the median and FFP RSD of 25%)

z-Score classification is as follows:

$\|z\| \leq 2$	Acceptable
$2 < \|z\| \leq 3$	Questionable
$\|z\| > 3$	Unacceptable

- Any z-score values of $|z| > 5$ has been reported as '+5', or '-5'.
- No calculation of z-score has been performed for any false positive result.
- For false negatives, the MRPL has been used to calculate the z-score. Whether it should be included or not in a graphical representation is being considered.

3.6 Combined z-Scores

In order to evaluate each laboratory's overall performance, and taking into account all the pesticides analysed, three methods were used to combine z-scores; the re-scaled sum of z-scores (RSZ), the sum of squared z-scores (SSZ) and the 'Weighted sum of z-scores' that was first used in EUPT 6.

3.6.1 RSZ

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

$$RSZ = \Sigma \, |z| \, / \, (n)$$

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.

3.6.2 SSZ

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

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

Where n is the number of z-scores.

3.6.3 Weighted Sum of z-Scores

This function 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 sample and no false positives. The weighting factor ω is defined as follows:

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

Therefore, the '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 factor 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 then been used to produce an overall classification of laboratories as 'good', 'satisfactory' or 'unsatisfactory' according to:

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

In this way, a simple, single combined value, very similar to the single z-scores, is produced - helping to encourage laboratories to improve their accuracy and analyse a greater number of target compounds.

This evaluation has not been applied to those participants with insufficient scope i.e. in Category B, which is for those laboratories reporting less than 90% of the pesticides present in the sample, or with any false positives.

4. RESULTS

4.1 Summary of reported results

One hundred and twenty-eight laboratories agreed to participate in this proficiency test and all of them submitted results. These results are presented in this report. Regarding the participation for the first time of an Egyptian laboratory (laboratory 129), it has been decided not to present their results in this report.

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

Table 4.1 Summary of Reported Results

Pesticides	No. of Reported Results	No. of Reported NA	No. of False negatives	% of the Total Reported Results *
Acetamiprid	78	47	3	61
Azoxystrobin	113	15	0	88
Bifenthrin	119	9	0	93
Bromopropylate	125	3	0	98
Carbaryl	108	17	3	84
Carbendazim	94	34	0	74
Chlorpyrifos	127	1	0	99
Cyprodinil	114	13	1	89
Diazinon	127	1	0	99
Dichlofluanid	113	5	10	88
Fludioxonil	92	33	3	72
Imazalil	107	14	7	84
Lambda-cyhalothrin	121	5	2	95
Myclobutanil	114	14	0	89
Parathion	114	10	4	89
Pirimicarb	114	14	0	89

***** The % of the total results expresses the ratio between the number of reported results for pesticides against the total number of laboratories submitting results (128).

NA = Not analysed
ND = Not detected

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 shown in Appendix 7. For an explanation of the symbols used in these tables, see Annex 1.

4.1.1 False positives

Just three laboratories reported additional pesticides to those applied to the test material. These pesticides and their residue levels reported are presented in Table 4.2, together with the MRPL. When the reported concentration of the erroneously detected pesticide was higher than the assigned MRPL value in the Pesticide List (Annex 1), the result is considered to be a false positive.

Even with only one false positive result, a laboratory cannot be classified in Category A.

Table 4.2. Laboratories that reported false positives in the treated test material: the pesticide name; reported concentration; Reporting Limit (RL) and Minimum Required Performance Limit (MRPL)

Pesticide	Laboratory Code	Concentration (mg/kg)	RL (mg/Kg)	MRPL (mg/Kg)
Kresoxim-methyl	EUPT8-062	0.069	-	0.05
Penconazole	EUPT8-086	0.088	0.02	0.05
Methidathion	EUPT8-103	0.536	0.02	0.02

4.1.2 False negatives

Pesticides actually present in the test material but reported as not detected (ND), were considered to be false negatives. Table 4.3 summarizes how many laboratories reported false negatives for each pesticide.

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

Laboratory Code	Acetamiprid	Azoxystrobin	Bifenthrin	Bromopropylate	Carbaryl	Carbendazim	Chlorpyrifos	Cyprodinil	Diazinon	Dichlofluanid	Fludioxonil	Imazalil	Lambda-cyhalothrin	Myclobutanil	Parathion	Pirimicarb
EUPT8-002					ND											
EUPT8-008											ND					
EUPT8-015										ND						
EUPT8-021												ND				
EUPT8-022															ND	
EUPT8-025										ND						
EUPT8-028										ND		ND				
EUPT8-030										ND						

Laboratory Code	Acetamiprid	Azoxystrobin	Bifenthrin	Bromopropylate	Carbaryl	Carbendazim	Chlorpyrifos	Cyprodinil	Diazinon	Dichlofluanid	Fludioxonil	Imazalil	Lambda-cyhalothrin	Myclobutanil	Parathion	Pirimicarb
EUPT8-039												ND				
EUPT8-050	ND															
EUPT8-059	ND									ND						
EUPT8-062											ND					
EUPT8-064										ND						
EUPT8-071					ND											
EUPT8-072	ND											ND	ND			
EUPT8-078											ND	ND				
EUPT8-082															ND	
EUPT8-103													ND			
EUPT8-106					ND					ND						
EUPT8-109										ND						
EUPT8-111								ND				ND				
EUPT8-117												ND			ND	
EUPT8-119										ND					ND	
EUPT8-126										ND						

4.1.3 Distribution of data

The distributions of the concentration of the sixteen pesticide residues reported by the laboratories have been plotted as histograms. See Appendix 2.

4.2 Assigned values and target standard deviations

To establish the assigned values, the medians of all the reported results were used, excluding those values that were distant from the median. The median did not change even when these outliers were included. A statistical programme was used to calculate the medians. All median values for all pesticides can be seen in Table 4.4.

Carbendazim has been considered separately. As stated in the Protocol, laboratories had to report the concentration of the pesticides sought as is defined in the Pesticide List (Annex 1). In the list, the residue definition for this pesticide reads as follows: Carbendazim (Sum of Benomyl + Carbendazim + Thiophanate-methyl, expressed as Carbendazim). For this reason, a letter was sent to clarify how this determination was done. From all the results received, only 34 laboratories reported the concentration as defined in the residue definition. The calculation of the median for this pesticide has been performed using only these 34 results reported. This median can be seen in Table 4.4.

The target standard deviation was obtained using a fixed FFP RSD value of 25%. In parallel, 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 sample

Pesticides	MRPL (mg/Kg)	Median (mg/Kg)	FFP RSD (%)	Qn RSD (%)
Acetamiprid	0.05	0.902	25	19
Azoxystrobin	0.05	1.95	25	22
Bifenthrin	0.05	0.810	25	23
Bromopropylate	0.05	0.580	25	22
Carbaryl	0.05	1.41	25	21
Carbendazim	0.1	0.464*	25	34
Chlorpyrifos	0.05	0.686	25	22
Cyprodinil	0.05	2.25	25	19
Diazinon	0.02	0.430	25	22
Dichlofluanid	0.05	0.200	25	29
Fludioxonil	0.05	1.27	25	28
Imazalil	0.02	0.667	25	29
Lambda-cyhalothrin	0.02	1.23	25	29
Myclobutanil	0.02	1.18	25	19
Parathion	0.05	0.163	25	23
Pirimicarb	0.05	1.45	25	18

* Median calculated only from the concentrations reported by the laboratories that quantified Carbendazim as defined in the residue definition stated in the Pesticide List.

4.3 Assessment of laboratory performance

4.3.1 z-Scores

z-Scores were calculated using the FFP RSD given for all the pesticides present. In Appendix 3, the individual z-scores are presented, together with the median for each laboratory and pesticide.

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

In Appendix 4, the graphical representations of the z-scores are presented. No z-scores have been calculated for false positives. False negative z-score results have been included on the chart for each pesticide. They are indicated by an asterisk.

As last year, the charts have been made using different colours according to the determination technique used for each particular pesticide.

For Carbendazim, the z-score has been calculated for all the laboratories that reported a concentration. The median used for this calculation is shown in point 4.2, and table 4.4, resulting from those laboratories that reported Carbendazim in accordance with the residue definition.

4.3.2 Combined z-Scores

The classical combined z-scores: RSZ and the SSZ values are listed in Appendix 5 for all laboratories.

Appendix 6 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 14 or more results, and also did not report any false positives. A graphical representation of the results for these laboratories can also be found in Appendix 7.

Ninety out of the one hundred and twenty-eight laboratories have been put into Category A (70%), from which 80% were classified as 'good', 8% as 'satisfactory' and 12% as 'unsatisfactory'.

Thirty six of the one hundred and twenty-eight laboratories reported results for less than fourteen pesticides. Several of these labs could also have been classified as 'good' based on the z-scores, but they failed to report results for the required 14 compounds.

Table 4.5 shows the laboratories in Category A, the number of pesticides reported, the WSZ value and the classification achieved.

Laboratories with false negatives in Category A are marked with an asterisk and laboratories with WSZ > 5 with a '+' mark.

Table 4.6 shows the laboratories in Category B, the number of pesticides reported, the number of results, and the number of acceptable z-score results. Laboratories reporting a false negative are marked with an asterik, and laboratories reporting a false positive are marked with a '+' mark.

A comparison between EUPT 6, 7 and 8 based on WSZ graphical representation for laboratories classified in Category A can be seen in Appendix 7. As a summary these are the results obtained for each Proficiency Test:

- For EUPT 6, out of 130 laboratories, 60 were in Category A with the following subdivision: 13 laboratories 'unsatisfactory', 11 'satisfactory' and 36 'good'.
- For EUPT 7, out of 128 laboratories, 63 were in Category A with the following subdivision: 13 laboratories 'unsatisfactory', 6 'satisfactory' and 44 'good'.
- For EUPT 8, out of 128 laboratories, 90 where in Category A with the following subdivision: 11 laboratories 'unsatisfactory', 7 'satisfactory' and 72 'good'.

Table 4.5 Laboratories in Category A:

reported number of pesticides sought, weighted sum of z-scores and classification

Lab Code	No. of Pesticides sought	WSZ	Classification
EUPT8-044	16	0.2	Good
EUPT8-083	16	0.3	Good
EUPT8-102	16	0.3	Good
EUPT8-096	16	0.3	Good
EUPT8-066	16	0.4	Good
EUPT8-046	16	0.4	Good
EUPT8-065	16	0.4	Good
EUPT8-017	16	0.4	Good
EUPT8-056	16	0.4	Good
EUPT8-081	16	0.4	Good
EUPT8-011	16	0.4	Good
EUPT8-005	16	0.4	Good
EUPT8-101	16	0.4	Good
EUPT8-116	16	0.4	Good
EUPT8-007	16	0.4	Good
EUPT8-087	16	0.4	Good
EUPT8-060	16	0.5	Good
EUPT8-026	16	0.5	Good
EUPT8-090	16	0.5	Good
EUPT8-068	16	0.5	Good
EUPT8-076	16	0.5	Good
EUPT8-053	16	0.5	Good
EUPT8-099	16	0.5	Good
EUPT8-052	16	0.6	Good
EUPT8-035	16	0.6	Good
EUPT8-061	16	0.6	Good
EUPT8-085	16	0.6	Good
EUPT8-105	16	0.6	Good
EUPT8-093	16	0.7	Good
EUPT8-010	16	0.7	Good
EUPT8-063	16	0.7	Good
EUPT8-104	16	0.7	Good
EUPT8-051	16	0.8	Good

Lab Code	No. of Pesticides sought	WSZ	Classification
EUPT8-048	16	0.9	Good
EUPT8-013	16	0.9	Good
EUPT8-115	16	0.9	Good
EUPT8-107	16	1.0	Good
EUPT8-089	16	1.1	Good
EUPT8-075	16	1.2	Good
EUPT8-033	16	1.3	Good
EUPT8-069	16	1.3	Good
EUPT8-009	16	1.4	Good
EUPT8-127	16	1.4	Good
EUPT8-031	16	1.4	Good
EUPT8-004	16	1.4	Good
EUPT8-084	16	1.4	Good
EUPT8-079	16	1.4	Good
EUPT8-014	16	1.4	Good
EUPT8-023	16	1.4	Good
EUPT8-082*	16	1.5	Good
EUPT8-008*	16	1.6	Good
EUPT8-100	16	1.7	Good
EUPT8-043	16	1.9	Good
EUPT8-095	16	1.9	Good
EUPT8-030*	16	1.9	Good
EUPT8-057	16	2.0	Good
EUPT8-022*	16	2.0	Good
EUPT8-001	16	2.1	Satisfactory
EUPT8-034	16	2.2	Satisfactory
EUPT8-088	16	2.2	Satisfactory
EUPT8-064*	16	2.9	Satisfactory
EUPT8-037	16	3.0	Satisfactory
EUPT8-036	16	3.2	Unsatisfactory
EUPT8-121	16	3.4	Unsatisfactory
EUPT8-059*	16	4.3	Unsatisfactory
EUPT8-006↑	16	5.5	Unsatisfactory
EUPT8-080	15	0.5	Good
EUPT8-092	15	0.6	Good

Lab Code	No. of Pesticides sought	WSZ	Classification
EUPT8-074	15	0.7	Good
EUPT8-018	15	0.7	Good
EUPT8-020	15	0.8	Good
EUPT8-029	15	0.8	Good
EUPT8-012	15	1.0	Good
EUPT8-077	15	1.4	Good
EUPT8-114	15	1.5	Good
EUPT8-067	15	1.7	Good
EUPT8-097	15	3.0	Satisfactory
EUPT8-032	15	3.2	Unsatisfactory
EUPT8-070	15	4.9	Unsatisfactory
EUPT8-071*↑	15	5.9	Unsatisfactory
EUPT8-016↑	15	7.4	Unsatisfactory
EUPT8-041	14	0.6	Good
EUPT8-110	14	1.0	Good
EUPT8-126*	14	1.2	Good
EUPT8-108	14	1.2	Good
EUPT8-038	14	1.5	Good
EUPT8-050*	14	3.0	Satisfactory
EUPT8-106*	14	3.1	Unsatisfactory
EUPT8-040	14	3.9	Unsatisfactory
EUPT8-111*↑	14	13.7	Unsatisfactory

↑ Laboratories that have a WSZ greater than 5.

* Laboratories reporting a false negative.

Table 4.6 Laboratories in Category B:
number of reported pesticides sought, acceptable z-scores number

Lab Code	No. of Pesticides sought	Num of acceptable z-scores
EUPT8-103*+	16	11
EUPT8-062*+	14	12
EUPT8-123	13	13
EUPT8-019	13	13
EUPT8-125	13	12
EUPT8-091	13	12
EUPT8-015*	13	12

Lab Code	No. of Pesticides sought	Num of acceptable z-scores
EUPT8-113	13	10
EUPT8-109*	13	8
EUPT8-128	13	8
EUPT8-025*	13	7
EUPT8-072*	13	7
EUPT8-112	12	11
EUPT8-021*	12	11
EUPT8-049	12	10
EUPT8-119*	12	7
EUPT8-122	11	11
EUPT8-024	11	11
EUPT8-027	11	11
EUPT8-094	11	11
EUPT8-120	11	11
EUPT8-054	11	10
EUPT8-078*	11	8
EUPT8-086+	11	5
EUPT8-047	10	10
EUPT8-002*	10	9
EUPT8-039*	10	9
EUPT8-003	10	8
EUPT8-124	10	8
EUPT8-058	9	8
EUPT8-028*	9	7
EUPT8-117*	9	5
EUPT8-118	8	8
EUPT8-073	8	7
EUPT8-045	7	3
EUPT8-055	6	6
EUPT8-042	3	2
EUPT8-098	1	1

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

5. CONCLUSIONS

128 participating laboratories submitted results for the analysis of the pesticides present in the treated aubergine homogenate test material.

The pesticide residue levels in the matrix concurred with the Quality Control Group´s proposed expectations. Although the levels could be considered rather high compared with the average residue concentrations encountered in real samples, laboratories still have to be able to accurately determine the concentration present even when they are well above their reporting level capability.

For each laboratory/pesticide combination, z-scores based on the FFP RSD were calculated. The different techniques used by the participant laboratories, either gas chromatography or liquid chromatography, were represented as z-score graphs. Asterisks were used to mark each bar of the chart that represented a false negative result (ND) reported by a laboratory. A classification was made using the simple descriptive terms 'acceptable, questionable and unacceptable'.

'The Weighted Sum of z-Scores', a criterion first introduced in the EUPT 6 proficiency test report, has been used to demonstrate the overall performance of the laboratories. Those laboratories reporting fourteen or more results, and not having submitted any false positive results, were classified as having sufficient scope and were therefore placed in Category A. Those laboratories that reported less than fourteen results were considered to have insufficient scope and were placed in Category B. Laboratories in Category A were also sub-classified as 'good', 'satisfactory' or 'unsatisfactory', depending on the values obtained after combining z-scores and obtaining a value for WSZ. Laboratories in Category A with WSZ > 5 were marked (↑) together with the laboratories reporting false negatives which were marked with an asterisk. The intention is to highlight those laboratories that although they reported a sufficient number of the pesticides present in the sample, their accuracy was unsatisfactory or their analysis lacked sensitivity.

For the remainder of the laboratories (the ones belonging to Category B) no combined Weighted Sum of z-Scores was calculated. However, the number of satisfactory z-scores 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. For Carbendazim, the median used was the one obtained only from the laboratories that reported this pesticide as stated in the residue definition. For this reason, laboratories were asked for extra information.

The presence of a very low level residue of Methomyl (<0.01 mg/Kg) in the blank aubergine homogenate supplied did not affect the results obtained from the treated test material.

The number of false positive are only three. This is very good and lower than in previous years.

The overall results obtained for z-scores for each pesticide present in the sample were very good. In some cases, the number of false negatives was high (e.g. Dichlofluanid 10, Imazalil 7). Imazalil is a basic compound that poses difficulties in various stages of analysis including partitioning (if the pH is not properly adjusted), GPC cleanup (due to adsorption) and GC analysis (due to tailing). Dichlofluanid is highly sensitive at high pH values and degrades both in standard solutions and sample extracts as well as during GC-injection. In the case of Carbaryl, false negatives were only reported from laboratories using gas chromatography. This analyte is known to degrade at high temperatures during gas chromatography injection, especially if the surfaces of the GC-Liner have become contaminated. Gas chromatography analysis is thus difficult and requires matrix-matched calibration and special care.

Because the results from this proficiency study were much better than those from previous EUPTs, the decision was made to include a comparison between EUPT 6, 7 and 8 based on WSZ, using the graphical representation for laboratories in Category A.

Ever since the MRPL was introduced in EUPT 6, the laboratories´ 'reporting levels' have been decreasing and better results have been achieved. The use of mass spectrometry, particularly MS/MS, could be another reason why the results from more participant laboratories have shown an overall improvement each year.

Participation in this year's 8th European Proficiency Test involved 25 EU member states, the EU-candidate countries Romania and Bulgaria, as well as Iceland and Norway, who regularly participate in the EU-monitoring programmes. This year some new EU laboratories have participated for the first time in the EU Proficiency Test.

Regarding the participation for the first time of an Egyptian laboratory, it is one of the CRL's duties, laid down in article 32 of Regulation (EC) N° 882/2004, to collaborate with laboratories responsible for analysing feed and food in third countries and to help them improve the quality of their analyses.

6. SUGGESTIONS FOR FUTURE WORK

The Organiser and the Scientific Committee of the EU Proficiency Test 8 consider that the last three PTs performed have provided a very valuable tool for the assessment of the analytical performance of laboratories in various countries throughout Europe and demonstrate their improvement over the years. The results of PT 6-8 have been compared to enable trends to be identified.

For future PTs, minor changes suggested by participants regarding the treatment of the data could be considered, such as an enlarged 'Possible Pesticide List' to be published nearly eight months in advance of starting the proficiency test. Therefore, the laboratories have enough time to purchase standards and validate methods for those new pesticides and then include them in their laboratory pesticide scope. The list will include mandatory pesticides that must be sought by the laboratory in order to be classified in Category A.

Another suggestion for future PTs, is that in Category A, there will be only 'good' or 'satisfactory' sub-classifications. As with PT 8, to be included in this new Category A, no false positives will be allowed. In addition, at least 90% of the pesticides present in the sample must be reported. Laboratories with sufficient scope but reporting a false negative result (as not detected) and/or with WSZ greater than 3, which are currently included in Category A, will from now onwards be considered separately.

Using the results from recent PTs, the Advisory Group will attempt to harmonise the methodology by recommending procedures that could be combined and adopted as a Reference Method.

These new changes are aimed at ensuring that each year laboratories attain a greater scope and better performances, and continue to adopt new techniques that aid their improvement.

7. REFERENCES

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7. UNE 66543

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APPENDIX 1. Homogeneity Data

Acetamiprid (mg/Kg)		Azoxystrobin (mg/Kg)		Bifenthrin (mg/Kg)		Bromopropylate (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.890	0.900	1.95	1.94	0.680	0.700	0.460	0.580
0.920	0.900	2.10	1.97	0.820	0.680	0.660	0.600
0.910	0.900	1.86	1.90	0.850	0.600	0.540	0.750
0.870	0.900	1.99	1.98	0.750	0.600	0.630	0.650
0.910	0.910	1.94	1.90	0.670	0.700	0.500	0.490
0.900	0.890	1.95	1.98	0.798	0.790	0.500	0.600
0.900	0.900	2.00	1.97	0.800	0.790	0.595	0.590
0.880	0.890	2.00	1.98	0.810	0.800	0.560	0.500
0.910	0.910	1.98	1.95	0.800	0.890	0.470	0.599
0.900	0.910	1.97	1.95	0.770	0.800	0.500	0.590

Carbaryl (mg/Kg)e		Carbendazim (mg/Kg)		Cyprodinil (mg/Kg)		Chlorpyrifos (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
1.46	1.43	0.551	0.450	2.15	2.10	0.605	0.780
1.50	1.49	0.540	0.490	2.35	2.30	0.679	0.690
1.50	1.60	0.520	0.530	2.20	2.18	0.670	0.686
1.38	1.45	0.490	0.520	2.10	2.18	0.650	0.600
1.40	1.46	0.495	0.520	2.11	2.20	0.560	0.507
1.00	1.40	0.550	0.500	2.30	2.30	0.700	0.690
1.40	1.50	0.501	0.462	2.20	2.00	0.600	0.701
1.60	1.50	0.534	0.470	2.30	2.20	0.689	0.735
1.49	1.60	0.520	0.800	2.25	2.30	0.686	0.699
1.50	1.70	0.500	0.480	1.90	2.19	0.690	0.709

Diazinon (mg/Kg)		Dichlofluanid (mg/Kg)		Fludioxonil (mg/Kg)		Imazalil (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.450	0.435	0.199	0.200	1.28	1.30	0.680	0.685
0.400	0.432	0.199	0.198	1.27	1.20	0.680	0.690
0.500	0.480	0.208	0.201	1.17	1.23	0.650	0.670
0.330	0.390	0.199	0.190	1.30	1.27	0.650	0.670
0.290	0.444	0.190	0.198	1.27	1.26	0.670	0.670
0.400	0.400	0.207	0.200	1.24	1.25	0.664	0.660
0.450	0.432	0.210	0.209	1.26	1.24	0.668	0.660
0.470	0.450	0.203	0.200	1.24	1.23	0.670	0.690
0.430	0.400	0.190	0.201	1.23	1.24	0.665	0.669
0.455	0.470	0.203	0.209	1.22	1.24	0.650	0.659

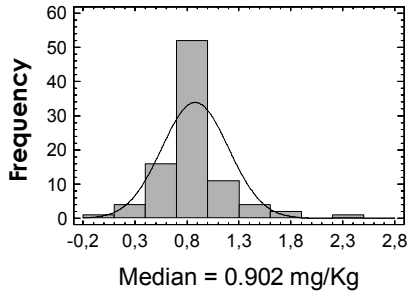
APPENDIX 1. Homogeneity Data

Lambda-cyhalothrin (mg/Kg)		Myclobutanil (mg/Kg)		Parathion (mg/Kg)		Pirimicarb (mg/Kg)	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
1.23	1.22	1.19	1.20	0.160	0.164	1.41	1.40
1.22	1.23	1.17	1.18	0.190	0.164	1.42	1.40
1.24	1.23	1.15	1.19	0.200	0.160	1.41	1.46
1.23	1.23	1.14	1.15	0.170	0.170	1.45	1.46
1.24	1.23	1.18	1.19	0.140	0.120	1.41	1.45
1.23	1.22	1.18	1.19	0.170	0.165	1.42	1.45
1.23	1.20	1.18	1.20	0.170	0.169	1.42	1.43
1.23	1.23	1.20	1.18	0.160	0.163	1.43	1.43
1.23	1.23	1.17	1.19	0.170	0.168	1.45	1.45
1.25	1.24	1.15	1.18	0.160	0.162	1.45	1.45

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

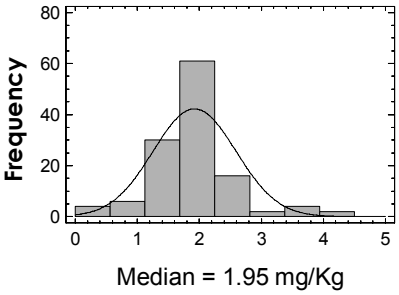
Results presented as histograms.

Acetamiprid



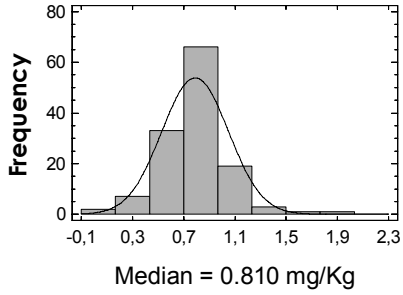
Median = 0.902 mg/Kg

Azoxystrobin



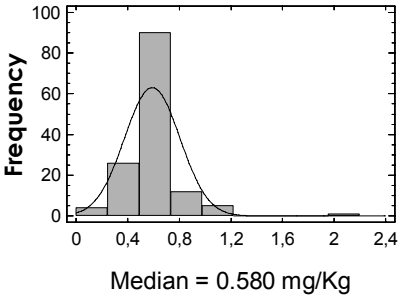
Median = 1.95 mg/Kg

Bifenthrin



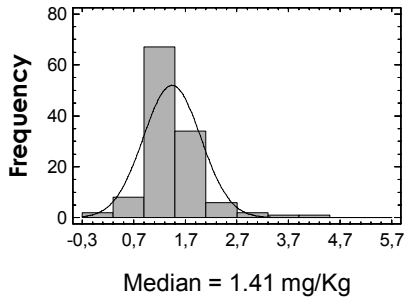
Median = 0.810 mg/Kg

Bromopropylate



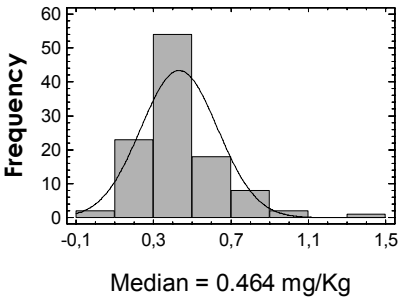
Median = 0.580 mg/Kg

Carbaryl



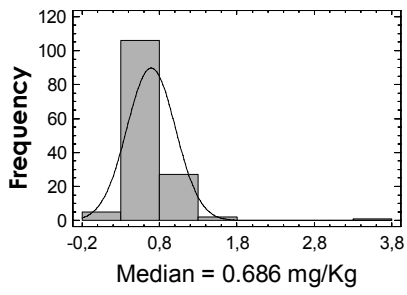
Median = 1.41 mg/Kg

Carbendazim



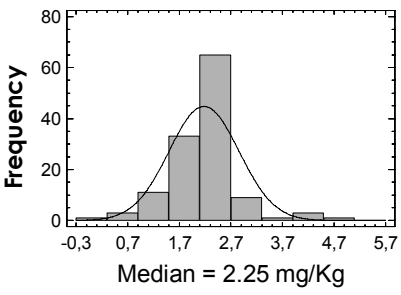
Median = 0.464 mg/Kg

Chlorpyrifos



Median = 0.686 mg/Kg

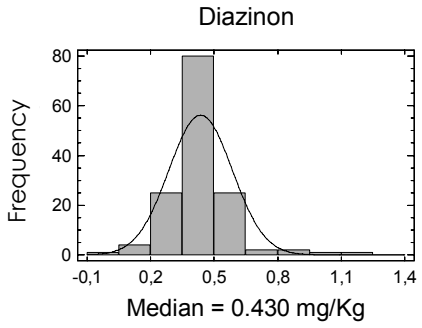
Cyprodinil

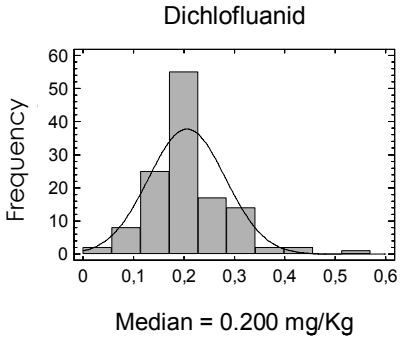


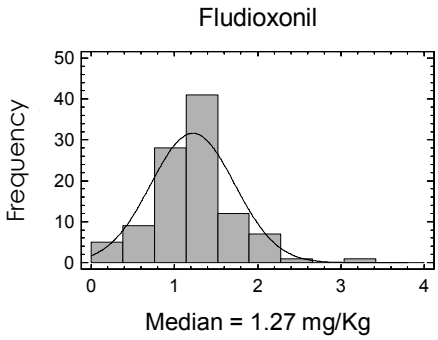
Median = 2.25 mg/Kg

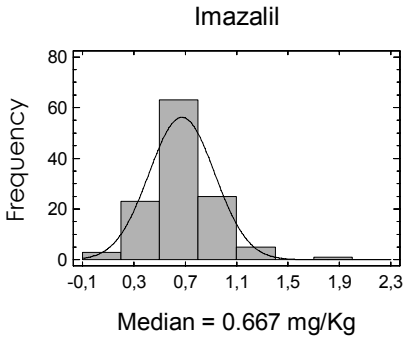
APPENDIX 2. Histograms of residue data for each pesticide for all the laboratories.

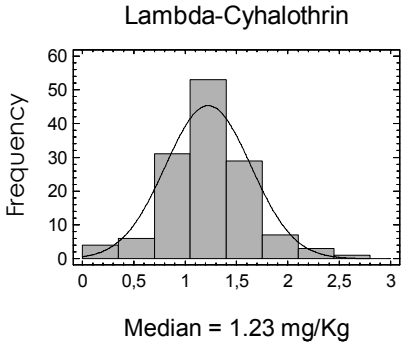
Results presented as histograms.

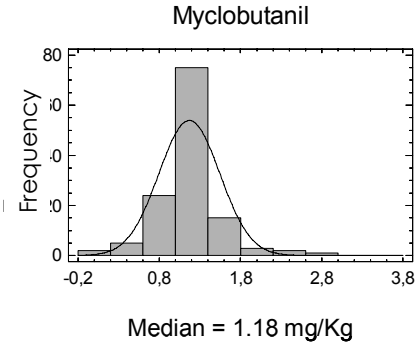


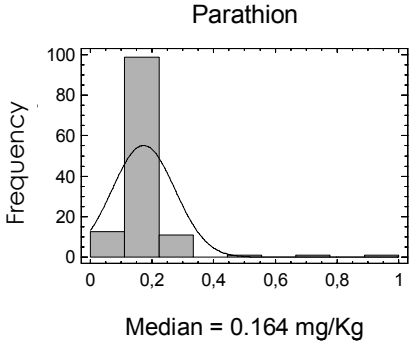


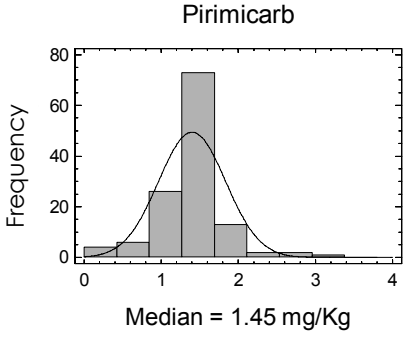












APPENDIX 3. Results (mg/kg) and z-scores for FFP RSD (25%).

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

Lab Code	Acetamiprid	z-Score (FFP RSD 25%)	Azoxystrobin	z-Score (FFP RSD 25%)	Bifenthrin	z-Score (FFP RSD 25%)	Bromopropylate	z-Score (FFP RSD 25%)
MRPL	0.05		0.05		0.05		0.05	
Median (mg/kg)	0.902		1.95		0.810		0.580	
1	0.900	0.0	2.10	0.3	0.690	-0.6	0.550	-0.2
2	NA		NA		1.00	0.9	0.636	0.4
3	NA		0.247	-3.5	0.949	0.7	0.758	1.2
4	0.673	-1.0	2.48	1.1	0.477	-1.6	0.407	-1.2
5	0.810	-0.4	2.15	0.4	0.820	0.0	0.600	0.1
6	0.940	0.2	1.76	-0.4	0.910	0.5	2.02	9.9
7	1.04	0.6	2.10	0.3	0.957	0.7	0.649	0.5
8	0.952	0.2	2.24	0.6	0.795	-0.1	0.506	-0.5
9	0.999	0.4	1.90	-0.1	0.919	0.5	0.609	0.2
10	0.953	0.2	2.24	0.6	0.908	0.5	0.663	0.6
11	0.870	-0.1	1.90	-0.1	0.940	0.6	0.640	0.4
12	NA		1.50	-0.9	0.441	-1.8	0.455	-0.9
13	0.911	0.0	2.08	0.3	0.828	0.1	0.602	0.2
14	0.947	0.2	1.28	-1.4	0.900	0.4	0.650	0.5
15	NA		1.96	0.0	1.06	1.2	0.840	1.8
16	NA		2.72	1.6	1.06	1.2	0.672	0.6
17	0.938	0.2	1.75	-0.4	0.755	-0.3	0.539	-0.3
18	NA		1.50	-0.9	0.530	-1.4	0.507	-0.5
19	1.01	0.5	2.43	1.0	NA		0.598	0.1
20	1.02	0.5	1.65	-0.6	0.600	-1.0	0.501	-0.5
21	NA		1.84	-0.2	0.765	-0.2	0.566	-0.1
22	0.615	-1.3	1.60	-0.7	0.624	-0.9	0.442	-1.0
23	0.632	-1.2	2.53	1.2	0.846	0.2	1.01	3.0
24	NA		NA		NA		0.700	0.8
25	NA		3.34	2.9	0.980	0.8	0.670	0.6
26	0.889	-0.1	2.17	0.5	0.945	0.7	0.700	0.8
27	NA		1.89	-0.1	0.673	-0.7	0.579	0.0
28	NA		NA		0.793	-0.1	0.452	-0.9
29	0.860	-0.2	2.00	0.1	0.955	0.7	0.667	0.6
30	1.08	0.8	2.41	0.9	0.863	0.3	0.610	0.2
31	0.839	-0.3	2.16	0.4	0.902	0.5	0.616	0.2
32	2.28	6.1	1.46	-1.0	0.734	-0.4	0.595	0.1
33	0.991	0.4	2.00	0.1	0.787	-0.1	0.548	-0.2
34	0.980	0.3	2.20	0.5	0.620	-0.9	0.550	-0.2
35	0.986	0.4	2.30	0.7	1.04	1.1	0.663	0.6
36	1.09	0.8	1.95	0.0	0.765	-0.2	0.491	-0.6
37	1.11	0.9	2.23	0.6	1.30	2.4	0.790	1.4
38	NA		1.65	-0.6	0.705	-0.5	0.597	0.1
39	NA		NA		0.726	-0.4	0.510	-0.5
40	NA		NA		1.18	1.8	0.921	2.4
41	0.513	-1.7	1.52	-0.9	0.872	0.3	0.601	0.1
42	NA		NA		NA		NA	
43	1.32	1.9	2.33	0.8	1.00	0.9	0.620	0.3
44	0.960	0.3	2.10	0.3	0.756	-0.3	0.526	-0.4
45	NA		NA		0.195	-3.0	0.192	-2.7
46	0.980	0.3	2.10	0.3	0.772	-0.2	0.620	0.3
47	NA		1.90	-0.1	0.650	-0.8	0.560	-0.1

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

Lab Code	Acetamiprid	z-Score (FFP RSD 25%)	Azoxystrobin	z-Score (FFP RSD 25%)	Bifenthrin	z-Score (FFP RSD 25%)	Bromopropylate	z-Score (FFP RSD 25%)
MRPL	0.05		0.05		0.05		0.05	
Median (mg/kg)	0.902		1.95		0.810		0.580	
48	0.608	-1.3	1.54	-0.8	0.559	-1.2	0.436	-1.0
49	NA		3.59	3.4	1.37	2.8	0.712	0.9
50	<0.05	-3.8	1.43	-1.1	0.911	0.5	0.561	-0.1
51	0.804	-0.4	1.91	-0.1	0.819	0.0	0.562	-0.1
52	0.922	0.1	2.14	0.4	0.983	0.9	0.623	0.3
53	0.853	-0.2	1.76	-0.4	0.777	-0.2	0.599	0.1
54	NA		2.27	0.7	NA		0.580	0.0
55	NA		NA		NA		NA	
56	0.900	0.0	1.95	0.0	0.800	0.0	0.550	-0.2
57	0.973	0.3	2.18	0.5	0.848	0.2	0.984	2.8
58	NA		NA		0.517	-1.4	0.531	-0.3
59	<0.01	-3.8	1.21	-1.5	0.540	-1.3	0.320	-1.8
60	0.930	0.1	1.82	-0.3	0.737	-0.4	0.542	-0.3
61	0.820	-0.4	1.72	-0.5	0.960	0.7	0.630	0.3
62	NA		1.23	-1.5	0.660	-0.7	0.737	1.1
63	0.724	-0.8	1.73	-0.5	0.765	-0.2	0.697	0.8
64	0.337	-2.5	1.65	-0.6	0.809	0.0	0.573	0.0
65	0.816	-0.4	2.25	0.6	0.808	0.0	0.520	-0.4
66	0.870	-0.1	1.94	0.0	0.835	0.1	0.449	-0.9
67	NA		2.53	1.2	0.999	0.9	0.694	0.8
68	0.815	-0.4	1.58	-0.8	0.792	-0.1	0.563	-0.1
69	0.742	-0.7	2.15	0.4	0.980	0.8	0.747	1.2
70	NA		2.13	0.4	0.870	0.3	0.640	0.4
71	0.320	-2.6	2.01	0.1	0.840	0.1	0.540	-0.3
72	<RL	-3.8	1.08	-1.8	0.700	-0.5	1.02	3.0
73	NA		NA		NA		0.760	1.2
74	0.700	-0.9	1.53	-0.9	0.650	-0.8	0.500	-0.6
75	0.710	-0.9	1.63	-0.7	0.947	0.7	0.536	-0.3
76	1.02	0.5	2.24	0.6	0.838	0.1	0.561	-0.1
77	NA		0.901	-2.2	0.460	-1.7	0.364	-1.5
78	NA		NA		0.581	-1.1	0.693	0.8
79	0.851	-0.2	1.61	-0.7	0.557	-1.2	0.427	-1.1
80	0.910	0.0	2.36	0.8	0.910	0.5	0.640	0.4
81	0.871	-0.1	2.13	0.4	0.852	0.2	0.692	0.8
82	0.955	0.2	2.27	0.7	1.13	1.6	0.708	0.9
83	0.941	0.2	1.95	0.0	0.815	0.0	0.557	-0.2
84	1.36	2.0	1.64	-0.6	0.593	-1.1	0.498	-0.6
85	0.842	-0.3	2.34	0.8	1.01	1.0	0.696	0.8
86	0.685	-1.0	NA		1.85	5.1	0.302	-1.9
87	0.925	0.1	2.29	0.7	0.886	0.4	0.637	0.4
88	1.02	0.5	2.20	0.5	0.841	0.2	0.598	0.1
89	0.746	-0.7	1.50	-0.9	0.724	-0.4	0.470	-0.8
90	0.987	0.4	1.55	-0.8	0.680	-0.6	0.577	0.0
91	NA		1.83	-0.2	0.570	-1.2	0.320	-1.8
92	0.942	0.2	1.67	-0.6	0.603	-1.0	0.456	-0.9
93	1.05	0.7	2.24	0.6	0.991	0.9	0.661	0.6
94	NA		1.31	-1.3	0.625	-0.9	0.524	-0.4
95	0.466	-1.9	2.10	0.3	0.771	-0.2	0.550	-0.2
96	0.800	-0.5	1.92	-0.1	0.813	0.0	0.571	-0.1

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

Lab Code	Acetamiprid	z-Score (FFP RSD 25%)	Azoxystrobin	z-Score (FFP RSD 25%)	Bifenthrin	z-Score (FFP RSD 25%)	Bromopropylate	z-Score (FFP RSD 25%)
MRPL	0.05		0.05		0.05		0.05	
Median (mg/kg)	0.902		1.95		0.810		0.580	
97	0.722	-0.8	0.782	-2.4	0.688	-0.6	0.404	-1.2
98	NA		NA		NA		NA	
99	0.931	0.1	1.92	-0.1	0.662	-0.7	0.430	-1.0
100	0.620	-1.3	0.691	-2.6	0.484	-1.6	0.323	-1.8
101	0.942	0.2	2.25	0.6	0.942	0.7	0.668	0.6
102	0.700	-0.9	2.05	0.2	0.810	0.0	0.690	0.8
103	1.88	4.3	1.40	-1.1	0.040	-3.8	0.564	-0.1
104	0.728	-0.8	2.24	0.6	0.903	0.5	0.753	1.2
105	0.854	-0.2	1.66	-0.6	0.560	-1.2	0.541	-0.3
106	NA		1.72	-0.5	1.04	1.1	0.810	1.6
107	0.904	0.0	2.32	0.8	0.864	0.3	0.658	0.5
108	NA		1.57	-0.8	0.261	-2.7	0.635	0.4
109	NA		3.99	4.2	0.370	-2.2	0.350	-1.6
110	NA		1.81	-0.3	0.738	-0.4	0.492	-0.6
111	NA		0.21	-3.6	0.842	0.2	0.123	-3.2
112	NA		1.82	-0.3	0.754	-0.3	0.369	-1.5
113	NA		1.36	-1.2	0.718	-0.5	0.551	-0.2
114	NA		2.18	0.5	0.700	-0.5	0.600	0.1
115	0.684	-1.0	1.95	0.0	0.582	-1.1	0.574	0.0
116	0.740	-0.7	1.87	-0.2	0.704	-0.5	0.495	-0.6
117	NA		NA		NA		0.334	-1.7
118	NA		NA		0.600	-1.0	0.304	-1.9
119	NA		3.72	3.6	1.07	1.3	0.924	2.4
120	NA		2.25	0.6	NA		0.420	-1.1
121	1.17	1.2	2.36	0.8	1.02	1.0	0.697	0.8
122	NA		2.15	0.4	0.810	0.0	0.730	1.0
123	NA		2.00	0.1	0.900	0.4	0.520	-0.4
124	0.480	-1.9	1.39	-1.1	0.830	0.1	0.630	0.3
125	NA		1.90	-0.1	0.850	0.2	0.650	0.5
126	NA		1.35	-1.2	0.636	-0.9	0.486	-0.6
127	0.954	0.2	2.19	0.5	1.01	1.0	0.683	0.7
128	NA		4.09	4.4	0.960	0.7	0.650	0.5

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	Carbaryl	z-Score (FFP RSD 25%)	Carbendazim	z-Score (FFP RSD 25%)	Chlorpirifos	z-Score (FFP RSD 25%)	Cyprodinil	z-Score (FFP RSD 25%)
MRPL	0.05		0.1		0.05		0.05	
Median (mg/kg)	1.41		0.464		0.686		2.25	
1	1.45	0.1	0.610	1.3	0.580	-0.6	1.90	-0.6
2	<RL	-3.9	NA		0.761	0.4	2.47	0.4
3	1.35	-0.2	NA		0.784	0.6	NA	
4	1.27	-0.4	0.398	-0.6	0.369	-1.8	0.686	-2.8
5	1.40	0.0	0.330	-1.2	0.770	0.5	2.58	0.6
6	1.76	1.0	0.845	3.3	0.650	-0.2	2.79	1.0
7	1.62	0.6	0.412	-0.4	0.714	0.2	2.33	0.2
8	1.42	0.0	0.464	0.0	0.873	1.1	1.71	-1.0
9	1.34	-0.2	0.770	2.6	0.729	0.3	2.08	-0.3
10	1.69	0.8	0.342	-1.1	0.772	0.5	2.80	1.0
11	1.40	0.0	0.250	-1.8	0.730	0.3	2.30	0.1
12	1.40	0.0	0.240	-1.9	0.530	-0.9	2.63	0.7
13	1.33	-0.2	0.724	2.2	0.731	0.3	2.48	0.4
14	1.33	-0.2	0.725	2.3	0.820	0.8	2.20	-0.1
15	0.804	-1.7	NA		0.888	1.2	2.31	0.1
16	1.68	0.8	0.252	-1.8	3.57	16.8	3.18	1.7
17	1.72	0.9	0.360	-0.9	0.600	-0.5	1.99	-0.5
18	1.60	0.6	0.280	-1.6	0.645	-0.2	1.84	-0.7
19	1.20	-0.6	0.277	-1.6	0.728	0.2	2.22	0.0
20	1.51	0.3	NA		0.487	-1.2	1.87	-0.7
21	1.27	-0.4	NA		0.686	0.0	2.19	-0.1
22	0.873	-1.5	0.498	0.3	0.676	-0.1	1.61	-1.1
23	0.979	-1.2	0.635	1.5	0.737	0.3	2.62	0.7
24	1.45	0.1	NA		0.735	0.3	2.23	0.0
25	2.65	3.5	NA		0.750	0.4	4.81	4.6
26	1.55	0.4	0.304	-1.4	0.782	0.6	2.38	0.2
27	NA		NA		0.616	-0.4	2.51	0.5
28	NA		0.414	-0.4	0.716	0.2	NA	
29	1.50	0.3	0.330	-1.2	0.735	0.3	2.48	0.4
30	1.47	0.2	0.500	0.3	0.766	0.5	2.07	-0.3
31	1.51	0.3	0.367	-0.8	0.692	0.0	2.37	0.2
32	0.995	-1.2	NA		0.545	-0.8	2.22	0.0
33	1.57	0.5	0.498	0.3	0.652	-0.2	2.33	0.2
34	1.20	-0.6	1.00	4.6	0.620	-0.4	2.10	-0.3
35	1.70	0.8	0.439	-0.2	0.675	-0.1	2.34	0.2
36	0.989	-1.2	0.282	-1.6	0.469	-1.3	2.64	0.7
37	1.83	1.2	0.54	0.7	1.02	1.9	3.15	1.6
38	1.51	0.3	NA		0.690	0.0	0.910	-2.4
39	1.59	0.5	0.476	0.1	0.506	-1.0	NA	
40	1.09	-0.9	0.418	-0.4	0.707	0.1	2.16	-0.2
41	1.34	-0.2	NA		0.601	-0.5	1.46	-1.4
42	0.400	-2.9	NA		0.380	-1.8	NA	
43	1.10	-0.9	0.800	2.9	0.790	0.6	2.21	-0.1
44	1.33	-0.2	0.381	-0.7	0.709	0.1	2.167	-0.1
45	NA		NA		0.401	-1.7	NA	
46	1.52	0.3	0.462	0.0	0.652	-0.2	2.27	0.0
47	NA		NA		0.680	0.0	2.50	0.5
48	1.51	0.3	0.321	-1.2	0.559	-0.7	1.52	-1.3

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

Lab Code	Carbaryl	z-Score (FFP RSD 25%)	Carbendazim	z-Score (FFP RSD 25%)	Chlorpirifos	z-Score (FFP RSD 25%)	Cyprodinil	z-Score (FFP RSD 25%)
MRPL	0.05		0.1		0.05		0.05	
Median (mg/kg)	1.41		0.464		0.686		2.25	
49	NA		NA		0.857	1.0	3.10	1.5
50	NA		NA		0.700	0.1	2.61	0.7
51	1.38	-0.1	0.512	0.4	0.840	0.9	2.12	-0.2
52	1.62	0.6	0.426	-0.3	0.921	1.4	2.17	-0.1
53	1.14	-0.8	0.250	-1.8	0.620	-0.4	2.32	0.1
54	1.47	0.2	NA		0.640	-0.3	NA	
55	NA		NA		0.480	-1.2	2.32	0.1
56	1.55	0.4	0.32	-1.2	0.650	-0.2	2.04	-0.4
57	1.45	0.1	0.416	-0.4	0.568	-0.7	2.24	0.0
58	NA		0.338	-1.1	0.495	-1.1	NA	
59	0.900	-1.4	0.250	-1.8	0.640	-0.3	0.950	-2.3
60	1.23	-0.5	0.414	-0.4	0.658	-0.2	1.81	-0.8
61	1.74	1.0	0.350	-1.0	0.780	0.5	1.81	-0.8
62	1.21	-0.5	NA		0.738	0.3	2.36	0.2
63	1.45	0.1	0.465	0.0	0.888	1.2	2.26	0.0
64	1.88	1.3	0.525	0.5	0.811	0.7	2.37	0.2
65	1.83	1.2	0.353	-1.0	0.654	-0.2	2.27	0.0
66	1.31	-0.3	0.519	0.5	0.705	0.1	2.37	0.2
67	2.19	2.2	0.291	-1.5	0.792	0.6	2.98	1.3
68	1.16	-0.7	0.280	-1.6	0.746	0.3	2.38	0.2
69	1.23	-0.5	0.652	1.6	0.718	0.2	2.79	1.0
70	1.37	-0.1	0.310	-1.3	0.700	0.1	2.43	0.3
71	<0.02	-3.9	NA		0.590	-0.6	4.12	3.3
72	NA		0.370	-0.8	0.500	-1.1	1.09	-2.1
73	4.50	8.8	NA		0.830	0.8	2.50	0.5
74	1.41	0.0	NA		0.540	-0.9	1.50	-1.3
75	0.990	-1.2	0.230	-2.0	0.685	0.0	2.50	0.5
76	1.62	0.6	0.364	-0.9	0.661	-0.1	2.55	0.5
77	1.38	-0.1	0.494	0.3	0.365	-1.9	1.54	-1.3
78	NA		NA		0.182	-2.9	2.24	0.0
79	1.21	-0.6	0.353	-1.0	0.392	-1.7	1.38	-1.5
80	1.26	-0.4	NA		0.780	0.5	2.59	0.6
81	1.36	-0.1	0.569	0.9	0.692	0.0	2.51	0.5
82	1.59	0.5	0.491	0.2	0.975	1.7	2.76	0.9
83	1.29	-0.3	0.548	0.7	0.618	-0.4	2.04	-0.4
84	1.23	-0.5	0.45	-0.1	0.643	-0.3	1.93	-0.6
85	1.20	-0.6	0.303	-1.4	0.796	0.6	2.64	0.7
86	1.04	-1.1	0.931	4.0	1.31	3.6	NA	
87	1.37	-0.1	0.517	0.5	0.807	0.7	2.49	0.4
88	1.05	-1.0	0.890	3.7	0.640	-0.3	2.18	-0.1
89	0.944	-1.3	0.347	-1.0	0.454	-1.4	1.90	-0.6
90	1.52	0.3	0.387	-0.7	0.589	-0.6	1.90	-0.6
91	1.22	-0.5	0.551	0.8	0.670	-0.1	1.01	-2.2
92	1.62	0.6	NA		0.597	-0.5	2.13	-0.2
93	1.54	0.4	0.277	-1.6	0.865	1.0	2.35	0.2
94	NA		NA		0.559	-0.7	2.39	0.3
95	1.49	0.2	0.433	-0.3	0.860	1.0	2.38	0.2
96	1.19	-0.6	0.447	-0.1	0.609	-0.4	1.94	-0.5
97	2.84	4.1	0.460	0.0	0.598	-0.5	1.09	-2.1
98	NA		0.450	-0.1	NA		NA	

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

Lab Code	Carbaryl	z-Score (FFP RSD 25%)	Carbendazim	z-Score (FFP RSD 25%)	Chlorpirifos	z-Score (FFP RSD 25%)	Cyprodinil	z-Score (FFP RSD 25%)
MRPL	0.05		0.1		0.05		0.05	
Median (mg/kg)	1.41		0.464		0.686		2.25	
99	1.25	-0.4	0.408	-0.5	0.570	-0.7	1.70	-1.0
100	1.09	-0.9	0.376	-0.8	0.371	-1.8	1.67	-1.0
101	1.64	0.7	0.357	-0.9	0.764	0.5	2.40	0.3
102	1.45	0.1	0.420	-0.4	0.730	0.3	2.30	0.1
103	2.27	2.5	0.510	0.4	0.812	0.7	2.08	-0.3
104	1.62	0.6	0.261	-1.8	0.713	0.2	1.90	-0.6
105	1.50	0.3	0.303	-1.4	0.909	1.3	1.86	-0.7
106	<0.02	-3.9	NA		0.600	-0.5	2.21	-0.1
107	1.76	1.0	0.657	1.7	0.828	0.8	2.67	0.8
108	1.45	0.1	NA		0.531	-0.9	1.98	-0.5
109	NA		NA		0.350	-2.0	1.19	-1.9
110	1.72	0.9	NA		0.486	-1.2	2.22	0.0
111	0.099	-3.7	NA		0.293	-2.3	<RL	-3.9
112	0.852	-1.6	NA		0.421	-1.5	NA	
113	2.37	2.7	1.34	7.6	0.607	-0.5	1.57	-1.2
114	1.36	-0.1	0.248	-1.9	0.750	0.4	1.96	-0.5
115	1.31	-0.3	0.408	-0.5	0.633	-0.3	1.91	-0.6
116	1.15	-0.7	0.278	-1.6	0.559	-0.7	2.27	0.0
117	1.37	-0.1	0.100	-3.1	0.956	1.6	NA	
118	NA		0.560	0.8	0.562	-0.7	NA	
119	NA		0.249	-1.9	0.960	1.6	1.80	-0.8
120	1.72	0.9	NA		0.560	-0.7	1.84	-0.7
121	1.90	1.4	0.557	0.8	0.828	0.8	2.70	0.8
122	NA		0.420	-0.4	0.670	-0.1	2.31	0.1
123	1.31	-0.3	0.280	-1.6	0.820	0.8	2.25	0.0
124	NA		0.240	-1.9	0.790	0.6	NA	
125	1.50	0.3	0.350	-1.0	0.850	1.0	2.31	0.1
126	1.61	0.6	0.419	-0.4	0.605	-0.5	1.67	-1.0
127	1.39	0.0	0.534	0.6	0.820	0.8	2.62	0.7
128	3.49	5.9	NA		0.765	0.5	2.49	0.4

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	Diazinon	z-Score (FFP RSD 25%)	Dichlofluanid	z-Score (FFP RSD 25%)	Fludioxonil	z-Score (FFP RSD 25%)	Imazalil	z-Score (FFP RSD 25%)
MRPL	0.02		0.05		0.05		0.02	
Median (mg/kg)	0.430		0.200		1.27		0.667	
1	0.980	5.1	0.18	-0.4	1.25	-0.1	0.580	-0.5
2	0.475	0.4	NA		NA		0.762	0.6
3	0.505	0.7	0.311	2.2	NA		NA	
4	0.510	0.7	0.133	-1.3	1.04	-0.7	0.754	0.5
5	0.450	0.2	0.17	-0.6	1.46	0.6	0.800	0.8
6	0.460	0.3	0.330	2.6	1.64	1.2	0.980	1.9
7	0.474	0.4	0.226	0.5	1.37	0.3	0.753	0.5
8	0.369	-0.6	0.213	0.3	<RL	-3.8	0.461	-1.2
9	0.470	0.4	0.183	-0.3	1.14	-0.4	0.703	0.2
10	0.456	0.2	0.185	-0.3	1.42	0.5	0.965	1.8
11	0.450	0.2	0.21	0.2	1.60	1.0	0.480	-1.1
12	0.330	-0.9	0.224	0.5	0.655	-1.9	0.610	-0.3
13	0.466	0.3	0.235	0.7	1.42	0.5	0.556	-0.7
14	0.533	1.0	0.233	0.7	1.38	0.3	0.709	0.3
15	0.374	-0.5	<RL	-3.0	NA		0.546	-0.7
16	0.542	1.0	0.328	2.6	0.955	-1.0	0.300	-2.2
17	0.365	-0.6	0.171	-0.6	1.29	0.1	0.737	0.4
18	0.425	0.0	0.175	-0.5	0.903	-1.2	0.705	0.2
19	0.472	0.4	0.292	1.8	1.62	1.1	0.446	-1.3
20	0.575	1.3	0.212	0.2	1.27	0.0	0.910	1.5
21	0.422	-0.1	0.193	-0.1	NA		<RL	-3.9
22	0.348	-0.8	0.226	0.5	0.599	-2.1	0.624	-0.3
23	0.471	0.4	0.193	-0.1	1.29	0.1	0.663	0.0
24	0.476	0.4	0.224	0.5	1.28	0.0	0.468	-1.2
25	0.620	1.8	<0.02	-3.0	NA		1.20	3.2
26	0.496	0.6	0.243	0.9	1.29	0.1	0.849	1.1
27	0.484	0.5	0.189	-0.2	NA		NA	
28	0.316	-1.1	<0.269	-3.0	NA		<0.016	-3.9
29	0.489	0.5	0.306	2.1	NA		0.510	-0.9
30	0.428	0.0	<RL	-3.0	1.05	-0.7	0.672	0.0
31	0.408	-0.2	0.178	-0.4	1.10	-0.5	0.607	-0.4
32	0.371	-0.5	0.175	-0.5	1.86	1.9	1.02	2.1
33	0.398	-0.3	0.193	-0.1	1.31	0.1	0.706	0.2
34	0.390	-0.4	0.16	-0.8	1.10	-0.5	0.620	-0.3
35	0.424	-0.1	0.17	-0.6	1.23	-0.1	0.525	-0.9
36	0.268	-1.5	0.178	-0.4	3.41	6.7	0.377	-1.7
37	0.500	0.7	0.16	-0.8	1.76	1.5	0.770	0.6
38	0.465	0.3	0.330	2.6	1.11	-0.5	0.950	1.7
39	0.351	-0.7	0.178	-0.4	NA		<0.0125	-3.9
40	0.503	0.7	0.517	6.3	2.08	2.6	0.787	0.7
41	0.342	-0.8	0.223	0.5	NA		0.633	-0.2
42	0.650	2.0	NA		NA		NA	
43	0.530	0.9	0.22	0.4	1.38	0.3	0.750	0.5
44	0.441	0.1	0.211	0.2	1.35	0.2	0.708	0.2
45	0.298	-1.2	NA		NA		0.278	-2.3
46	0.358	-0.7	0.196	-0.1	1.27	0.0	0.675	0.0
47	0.420	-0.1	0.18	-0.4	NA		NA	

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

Lab Code	Diazinon	z-Score (FFP RSD 25%)	Dichlofluanid	z-Score (FFP RSD 25%)	Fludioxonil	z-Score (FFP RSD 25%)	Imazalil	z-Score (FFP RSD 25%)
MRPL	0.02		0.05		0.05		0.02	
Median (mg/kg)	0.430		0.200		1.27		0.667	
48	0.381	-0.5	0.171	-0.6	0.801	-1.5	0.559	-0.6
49	0.539	1.0	0.206	0.1	1.42	0.5	NA	
50	0.557	1.2	0.125	-1.5	0.421	-2.7	0.289	-2.3
51	0.437	0.1	0.213	0.3	1.35	0.3	0.458	-1.3
52	0.605	1.6	0.208	0.2	1.58	1.0	0.744	0.5
53	0.486	0.5	0.237	0.7	0.822	-1.4	0.484	-1.1
54	1.22	7.3	0.27	1.4	NA		0.380	-1.7
55	0.360	-0.7	0.15	-1.0	NA		0.660	0.0
56	0.500	0.7	0.25	1.0	1.20	-0.2	0.880	1.3
57	0.388	-0.4	0.383	3.7	1.32	0.2	0.643	-0.1
58	0.248	-1.7	0.105	-1.9	NA		0.536	-0.8
59	0.500	0.7	<0.01	-3.0	0.520	-2.4	0.970	1.8
60	0.407	-0.2	0.222	0.4	0.851	-1.3	0.495	-1.0
61	0.410	-0.2	0.29	1.8	1.00	-0.9	0.810	0.9
62	0.329	-0.9	0.166	-0.7	< 0.05	-3.8	0.692	0.1
63	0.562	1.2	0.266	1.3	1.12	-0.5	0.770	0.6
64	0.905	4.4	<0.02	-3.0	1.77	1.6	0.881	1.3
65	0.426	0.0	0.148	-1.0	1.27	0.0	0.638	-0.2
66	0.466	0.3	0.216	0.3	1.24	-0.1	0.444	-1.3
67	0.494	0.6	0.187	-0.3	2.10	2.6	0.857	1.1
68	0.446	0.1	0.213	0.3	0.913	-1.1	0.657	-0.1
69	0.543	1.1	0.298	2.0	1.46	0.6	0.501	-1.0
70	0.500	0.7	0.170	-0.6	1.42	0.5	0.580	-0.5
71	0.410	-0.2	0.08	-2.4	2.00	2.3	1.03	2.2
72	0.290	-1.3	0.25	1.0	NA		<RL	-3.9
73	0.520	0.8	NA		NA		0.630	-0.2
74	0.390	-0.4	0.17	-0.6	0.840	-1.4	0.600	-0.4
75	0.460	0.3	0.091	-2.2	0.94	-1.0	0.469	-1.2
76	0.371	-0.5	0.167	-0.7	1.00	-0.9	0.584	-0.5
77	0.480	0.5	0.141	-1.2	0.975	-0.9	0.414	-1.5
78	0.320	-1.0	0.301	2.0	<RL	-3.8	<RL	-3.9
79	0.332	-0.9	0.173	-0.5	0.545	-2.3	0.978	1.9
80	0.460	0.3	0.20	0.0	1.50	0.7	0.800	0.8
81	0.413	-0.2	0.231	0.6	1.39	0.4	0.706	0.2
82	0.584	1.4	0.263	1.3	0.704	-1.8	0.810	0.9
83	0.379	-0.5	0.189	-0.2	1.14	-0.4	0.667	0.0
84	0.386	-0.4	0.187	-0.3	0.373	-2.8	0.524	-0.9
85	0.440	0.1	0.206	0.1	1.56	0.9	0.703	0.2
86	0.266	-1.5	0.332	2.6	NA		NA	
87	0.476	0.4	0.206	0.1	1.27	0.0	0.876	1.3
88	0.366	-0.6	0.205	0.1	1.10	-0.5	0.610	-0.3
89	0.274	-1.5	0.116	-1.7	0.879	-1.2	0.377	-1.7
90	0.391	-0.4	0.167	-0.7	1.06	-0.7	0.812	0.9
91	0.260	-1.6	0.24	0.8	NA		NA	
92	0.426	0.0	0.115	-1.7	1.36	0.3	0.769	0.6
93	0.513	0.8	0.146	-1.1	1.34	0.2	0.807	0.8
94	0.395	-0.3	0.184	-0.3	NA		NA	
95	0.528	0.9	0.288	1.8	1.18	-0.3	1.38	4.3

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

Lab Code	Diazinon	z-Score (FFP RSD 25%)	Dichlofluanid	z-Score (FFP RSD 25%)	Fludioxonil	z-Score (FFP RSD 25%)	Imazalil	z-Score (FFP RSD 25%)
MRPL	0.02		0.05		0.05		0.02	
Median (mg/kg)	0.430		0.200		1.27		0.667	
96	0.346	-0.8	0.207	0.1	1.20	-0.2	0.599	-0.4
97	0.354	-0.7	0.122	-1.6	NA		0.450	-1.3
98	NA		NA		NA		NA	
99	0.513	0.8	0.224	0.5	1.36	0.3	0.623	-0.3
100	0.273	-1.5	0.111	-1.8	1.69	1.3	0.901	1.4
101	0.439	0.1	0.18	-0.4	1.31	0.1	0.813	0.9
102	0.460	0.3	0.22	0.4	1.20	-0.2	0.550	-0.7
103	0.413	-0.2	0.21	0.2	0.053	-3.8	0.803	0.8
104	0.442	0.1	0.276	1.5	1.53	0.8	0.493	-1.0
105	0.418	-0.1	0.165	-0.7	1.07	-0.6	0.507	-1.0
106	0.350	-0.7	<0.01	-3.0	1.39	0.4	0.840	1.0
107	0.556	1.2	0.187	-0.3	1.09	-0.6	0.705	0.2
108	0.345	-0.8	0.152	-1.0	0.881	-1.2	0.789	0.7
109	0.110	-3.0	<0.02	-3.0	0.680	-1.9	0.380	-1.7
110	0.413	-0.2	0.133	-1.3	1.17	-0.3	0.705	0.2
111	0.074	-3.3	0.198	0.0	0.094	-3.7	<RL	-3.9
112	0.330	-0.9	0.062	-2.8	NA		0.533	-0.8
113	0.308	-1.1	0.118	-1.6	NA		1.19	3.1
114	0.360	-0.7	0.25	1.0	2.14	2.7	0.550	-0.7
115	0.544	1.1	0.129	-1.4	1.28	0.0	0.535	-0.8
116	0.434	0.0	0.205	0.1	1.03	-0.8	0.492	-1.0
117	0.451	0.2	0.448	5.0	NA		<RL	-3.9
118	0.267	-1.5	0.107	-1.9	NA		NA	
119	0.745	2.9	<0.02	-3.0	1.28	0.0	0.730	0.4
120	0.400	-0.3	0.19	-0.2	NA		0.700	0.2
121	0.509	0.7	0.298	2.0	0.959	-1.0	1.96	7.7
122	0.430	0.0	0.2	0.0	NA		NA	
123	0.400	-0.3	0.20	0.0	NA		0.450	-1.3
124	0.430	0.0	0.32	2.4	NA		NA	
125	0.360	-0.7	0.25	1.0	NA		NA	
126	0.411	-0.2	<RL	-3.0	NA		0.594	-0.4
127	0.480	0.5	0.251	1.0	1.53	0.8	0.676	0.1
128	0.518	0.8	0.213	0.3	2.07	2.5	NA	

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	Lambda-cyhalothrin	z-Score (FFP RSD 25%)	Myclobutanil	z-Score (FFP RSD 25%)	Parathion	z-Score (FFP RSD 25%)	Pirimicarb	z-Score (FFP RSD 25%)
MRPL	0.02		0.02		0.05		0.05	
Median (mg/kg)	1.23		1.18		0.163		1.45	
1	1.03	-0.7	1.12	-0.2	0.130	-0.8	1.60	0.4
2	1.23	0.0	1.17	0.0	NA		1.56	0.3
3	1.44	0.7	1.21	0.1	NA		1.87	1.2
4	1.49	0.8	0.764	-1.4	0.183	0.5	1.79	1.0
5	1.48	0.8	1.24	0.2	0.180	0.4	1.51	0.2
6	0.780	-1.5	1.04	-0.5	0.190	0.7	1.64	0.5
7	1.50	0.9	1.42	0.8	0.184	0.5	1.43	0.0
8	1.25	0.1	1.31	0.5	0.160	-0.1	1.59	0.4
9	1.37	0.5	1.12	-0.2	0.164	0.0	1.69	0.7
10	1.61	1.2	1.43	0.8	0.170	0.2	1.68	0.7
11	1.30	0.2	1.30	0.4	0.160	-0.1	1.40	-0.1
12	0.752	-1.6	0.987	-0.7	0.130	-0.8	1.17	-0.8
13	1.22	0.0	1.32	0.5	0.122	-1.0	1.47	0.1
14	1.34	0.4	1.20	0.1	0.200	0.9	1.13	-0.9
15	0.917	-1.0	1.18	0.0	0.203	1.0	1.20	-0.7
16	1.69	1.5	1.19	0.0	0.214	1.3	1.72	0.8
17	1.24	0.0	1.27	0.3	0.180	0.4	1.51	0.2
18	0.895	-1.1	0.970	-0.7	0.125	-0.9	1.58	0.4
19	1.66	1.4	NA		0.179	0.4	NA	
20	0.993	-0.8	1.40	0.7	0.110	-1.3	1.73	0.8
21	1.34	0.4	1.17	0.0	NA		0.93	-1.4
22	0.771	-1.5	1.00	-0.6	<0.02	-2.8	0.64	-2.2
23	0.817	-1.3	1.25	0.2	0.128	-0.8	1.45	0.0
24	1.24	0.0	NA		0.172	0.2	1.42	-0.1
25	1.60	1.2	1.28	0.3	0.270	2.6	1.81	1.0
26	1.23	0.0	1.24	0.2	0.185	0.6	1.48	0.1
27	1.18	-0.2	1.04	-0.5	0.183	0.5	1.21	-0.7
28	0.912	-1.0	NA		NA		1.12	-0.9
29	1.39	0.5	1.11	-0.2	0.171	0.2	1.46	0.0
30	1.15	-0.3	1.36	0.6	0.134	-0.7	2.58	3.1
31	1.24	0.0	1.42	0.8	0.164	0.0	0.164	-3.5
32	0.839	-1.3	1.63	1.5	0.204	1.0	1.25	-0.5
33	0.267	-3.1	1.12	-0.2	0.188	0.6	1.60	0.4
34	1.20	-0.1	1.10	-0.3	0.120	-1.0	1.60	0.4
35	1.58	1.1	1.53	1.2	0.135	-0.7	1.67	0.6
36	1.03	-0.7	1.20	0.1	0.078	-2.1	1.09	-1.0
37	2.34	3.6	1.95	2.6	0.190	0.7	1.90	1.3
38	1.04	-0.6	1.11	-0.2	0.145	-0.4	1.56	0.3
39	0.966	-0.9	NA		0.177	0.4	NA	
40	1.64	1.3	1.48	1.0	0.173	0.3	1.75	0.8
41	1.33	0.3	1.18	0.0	0.121	-1.0	1.34	-0.3
42	NA		NA		NA		NA	
43	1.67	1.4	1.30	0.4	0.170	0.2	1.97	1.5
44	1.15	-0.3	1.20	0.1	0.161	0.0	1.30	-0.4

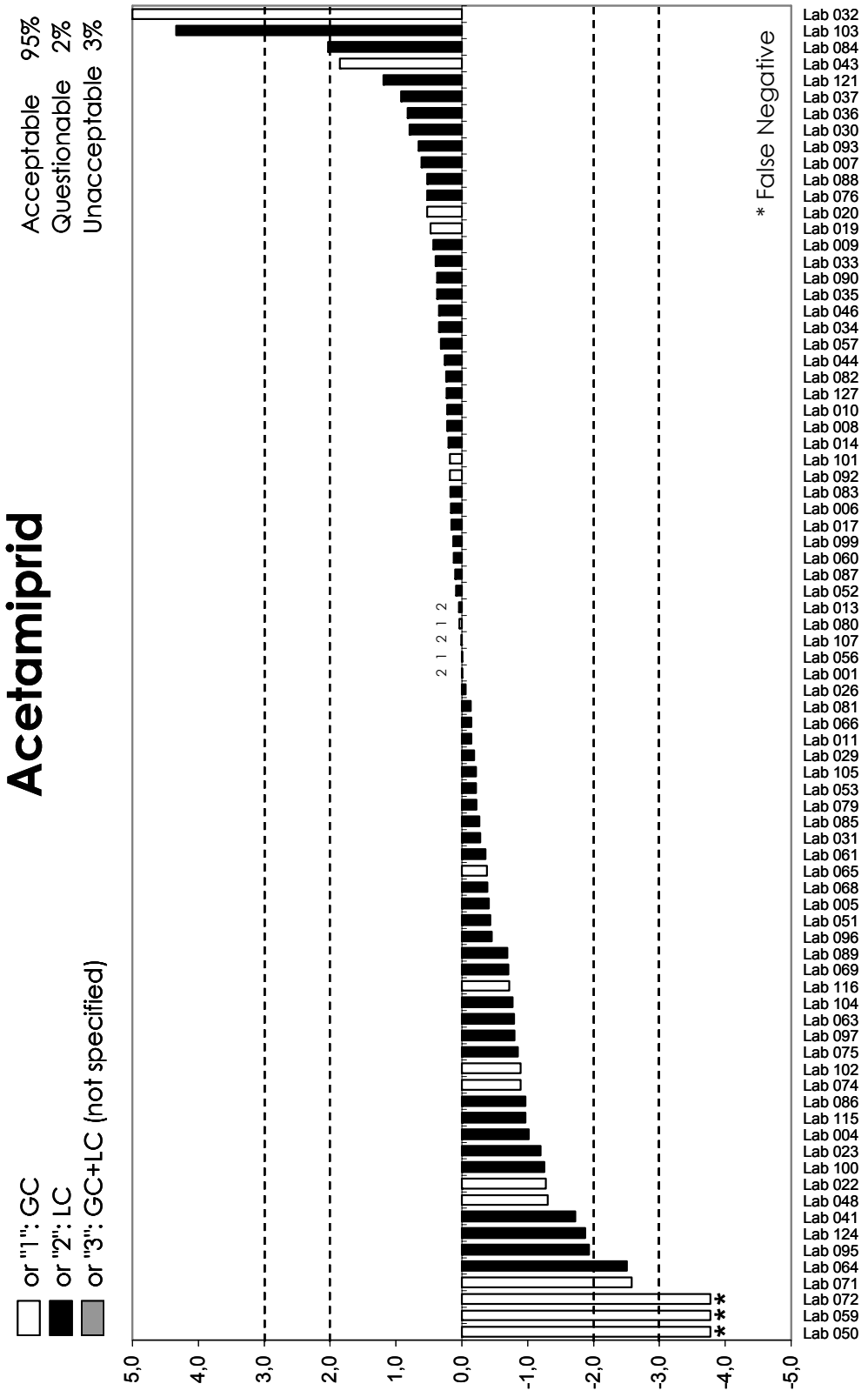
APPENDIX 3. Results (mg/kg) and z-scores for FFP RSD (25%).

Lab Code	Lambda-cyhalothrin	z-Score (FFP RSD 25%)	Myclobutanil	z-Score (FFP RSD 25%)	Parathion	z-Score (FFP RSD 25%)	Pirimicarb	z-Score (FFP RSD 25%)
MRPL	0.02		0.02		0.05		0.05	
Median (mg/kg)	1.23		1.18		0.163		1.45	
45	0.230	-3.3	NA		0.118	-1.1	NA	
46	1.19	-0.1	0.869	-1.1	0.135	-0.7	1.14	-0.8
47	1.82	1.9	1.00	-0.6	NA		1.20	-0.7
48	0.891	-1.1	0.895	-1.0	0.131	-0.8	1.52	0.2
49	1.40	0.6	1.39	0.7	0.190	0.7	1.44	0.0
50	1.84	2.0	1.16	-0.1	0.186	0.6	1.52	0.2
51	1.45	0.7	1.05	-0.4	0.250	2.2	1.20	-0.7
52	1.67	1.4	1.20	0.1	0.172	0.2	1.64	0.5
53	1.09	-0.5	1.12	-0.2	0.163	0.0	1.39	-0.2
54	1.68	1.5	1.00	-0.6	0.180	0.4	1.27	-0.5
55	NA		NA		0.110	-1.3	NA	
56	1.20	-0.1	1.20	0.1	0.150	-0.3	1.60	0.4
57	1.18	-0.2	0.936	-0.8	0.117	-1.1	1.41	-0.1
58	1.10	-0.4	NA		NA		0.673	-2.1
59	0.920	-1.0	0.500	-2.3	0.170	0.2	0.480	-2.7
60	1.20	-0.1	0.938	-0.8	0.166	0.1	1.73	0.8
61	1.40	0.6	1.12	-0.2	0.160	-0.1	1.35	-0.3
62	0.898	-1.1	1.24	0.2	0.073	-2.2	1.62	0.5
63	1.77	1.8	1.37	0.6	0.144	-0.5	1.44	0.0
64	1.33	0.3	1.15	-0.1	0.134	-0.7	1.53	0.2
65	1.21	-0.1	1.41	0.8	0.158	-0.1	1.31	-0.4
66	1.29	0.2	1.19	0.0	0.176	0.3	1.39	-0.2
67	1.60	1.2	1.42	0.8	0.137	-0.6	1.80	1.0
68	1.73	1.6	1.26	0.3	0.172	0.2	1.53	0.2
69	1.66	1.4	1.40	0.7	0.199	0.9	1.08	-1.0
70	0.680	-1.8	1.12	-0.2	0.700	13.2	1.38	-0.2
71	1.24	0.0	1.40	0.7	0.130	-0.8	2.98	4.2
72	<RL	-3.9	2.57	4.7	0.130	-0.8	NA	
73	NA		1.51	1.1	NA		1.39	-0.2
74	0.850	-1.2	1.03	-0.5	0.140	-0.6	1.45	0.0
75	1.61	1.2	1.08	-0.3	0.219	1.4	1.05	-1.1
76	1.52	0.9	1.01	-0.6	0.147	-0.4	1.58	0.4
77	0.740	-1.6	1.08	-0.3	0.113	-1.2	1.23	-0.6
78	0.648	-1.9	0.780	-1.4	0.157	-0.1	NA	
79	0.748	-1.6	0.762	-1.4	0.134	-0.7	0.888	-1.5
80	1.57	1.1	1.46	0.9	0.180	0.4	1.53	0.2
81	1.41	0.6	1.27	0.3	0.173	0.3	1.56	0.3
82	1.62	1.3	1.27	0.3	<RL	-2.8	1.87	1.2
83	1.23	0.0	1.14	-0.1	0.136	-0.7	1.36	-0.2
84	1.10	-0.4	0.802	-1.3	0.139	-0.6	1.26	-0.5
85	1.53	1.0	1.28	0.3	0.203	1.0	1.33	-0.3
86	2.13	2.9	1.56	1.3	0.535	9.2	NA	
87	1.47	0.8	1.13	-0.2	0.171	0.2	1.60	0.4
88	0.80	-1.4	1.18	0.0	0.250	2.2	1.19	-0.7
89	1.05	-0.6	0.720	-1.6	0.107	-1.4	0.729	-2.0
90	1.06	-0.6	1.10	-0.3	0.142	-0.5	1.55	0.3
91	0.985	-0.8	0.744	-1.5	0.130	-0.8	1.06	-1.1

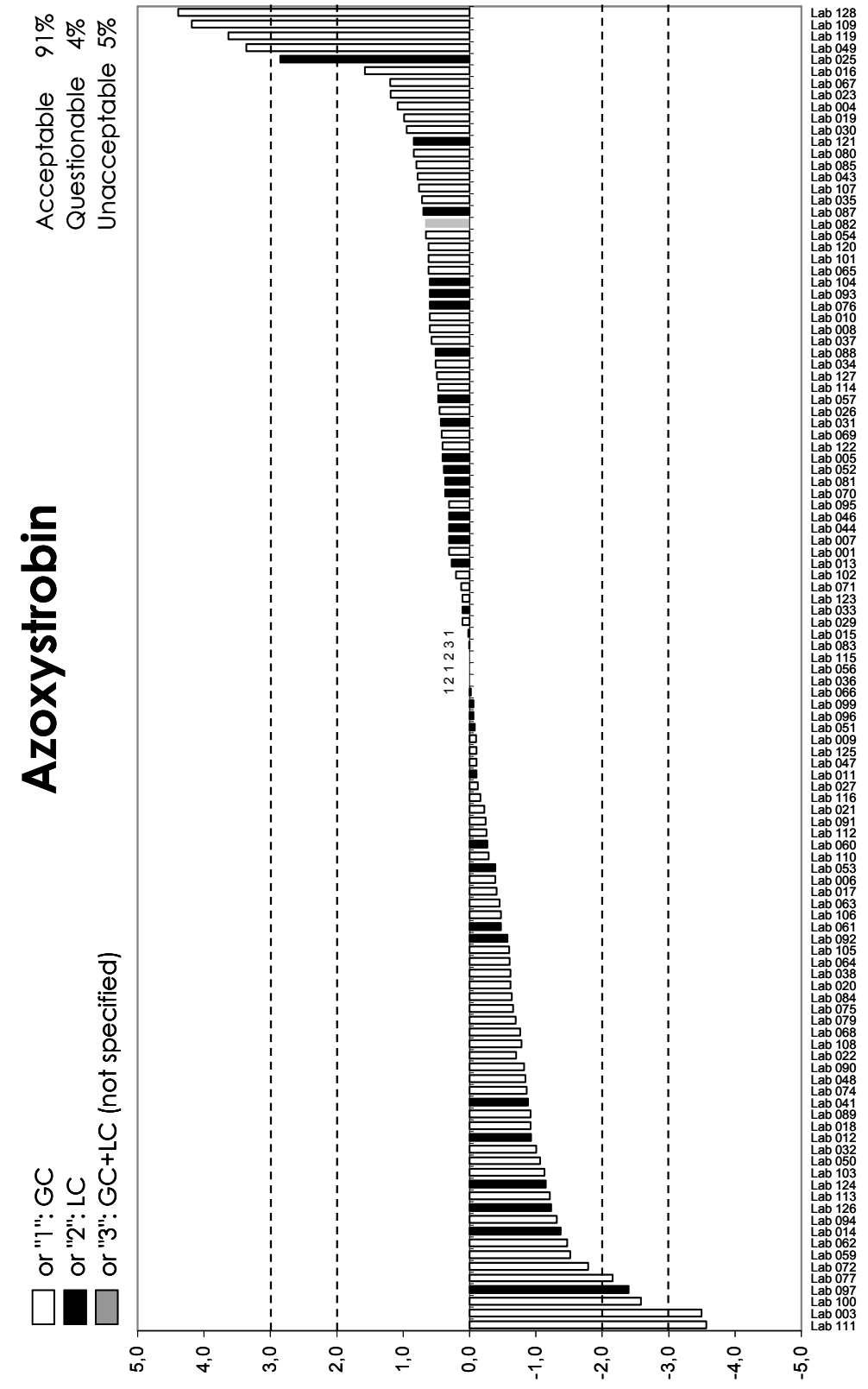
APPENDIX 3. Results (mg/Kg) and z-scores for FFP RSD (25%).

Lab Code	Lambda-cyhalothrin	z-Score (FFP RSD 25%)	Myclobutanil	z-Score (FFP RSD 25%)	Parathion	z-Score (FFP RSD 25%)	Pirimicarb	z-Score (FFP RSD 25%)
MRPL	0.02		0.02		0.05		0.05	
Median (mg/kg)	1.23		1.18		0.163		1.45	
92	0.911	-1.0	1.10	-0.3	0.155	-0.2	1.61	0.5
93	1.60	1.2	1.34	0.5	0.164	0.0	1.50	0.2
94	1.22	0.0	0.868	-1.1	0.151	-0.3	1.32	-0.3
95	1.25	0.1	1.24	0.2	0.178	0.4	1.05	-1.1
96	1.34	0.4	1.12	-0.2	0.145	-0.4	1.32	-0.3
97	0.960	-0.9	0.685	-1.7	0.134	-0.7	1.24	-0.6
98	NA		NA		NA		NA	
99	0.869	-1.2	1.04	-0.5	0.133	-0.7	1.56	0.3
100	0.730	-1.6	0.844	-1.1	0.118	-1.1	1.10	-1.0
101	1.39	0.5	1.24	0.2	0.165	0.1	1.62	0.5
102	1.27	0.1	1.20	0.1	0.130	-0.8	1.38	-0.2
103	<RL	-3.9	1.12	-0.2	0.193	0.8	1.40	-0.1
104	1.50	0.9	1.06	-0.4	0.135	-0.7	1.51	0.2
105	1.12	-0.4	0.785	-1.3	0.181	0.5	1.51	0.2
106	1.29	0.2	1.85	2.3	0.230	1.7	1.39	-0.2
107	1.55	1.0	1.31	0.4	0.178	0.4	1.63	0.5
108	0.956	-0.9	1.06	-0.4	0.128	-0.8	1.49	0.1
109	0.510	-2.3	0.920	-0.9	0.140	-0.6	1.03	-1.1
110	1.05	-0.6	1.42	0.8	0.250	2.2	1.59	0.4
111	0.558	-2.2	0.190	-3.4	0.020	-3.5	0.200	-3.4
112	0.834	-1.3	0.952	-0.8	0.101	-1.5	1.34	-0.3
113	0.958	-0.9	0.703	-1.6	0.134	-0.7	NA	
114	1.34	0.4	1.35	0.6	0.250	2.2	1.55	0.3
115	1.06	-0.6	1.01	-0.6	0.079	-2.1	1.27	-0.5
116	1.20	-0.1	1.18	0.0	0.162	0.0	1.42	-0.1
117	NA		NA		<RL	-2.8	1.53	0.2
118	1.30	0.2	NA		0.090	-1.8	NA	
119	1.69	1.5	NA		<0.01	-2.8	NA	
120	0.750	-1.6	NA		0.180	0.4	1.53	0.2
121	1.15	-0.3	1.64	1.6	0.175	0.3	1.02	-1.2
122	1.10	-0.4	1.10	-0.3	0.200	0.9	NA	
123	1.33	0.3	1.20	0.1	NA		1.44	0.0
124	1.25	0.1	NA		0.920	18.6	NA	
125	1.95	2.3	1.36	0.6	0.190	0.7	1.48	0.1
126	1.17	-0.2	0.971	-0.7	0.151	-0.3	1.21	-0.7
127	1.93	2.3	1.29	0.4	0.254	2.3	1.75	0.8
128	1.09	-0.5	2.71	5.2	0.315	3.8	1.30	-0.4

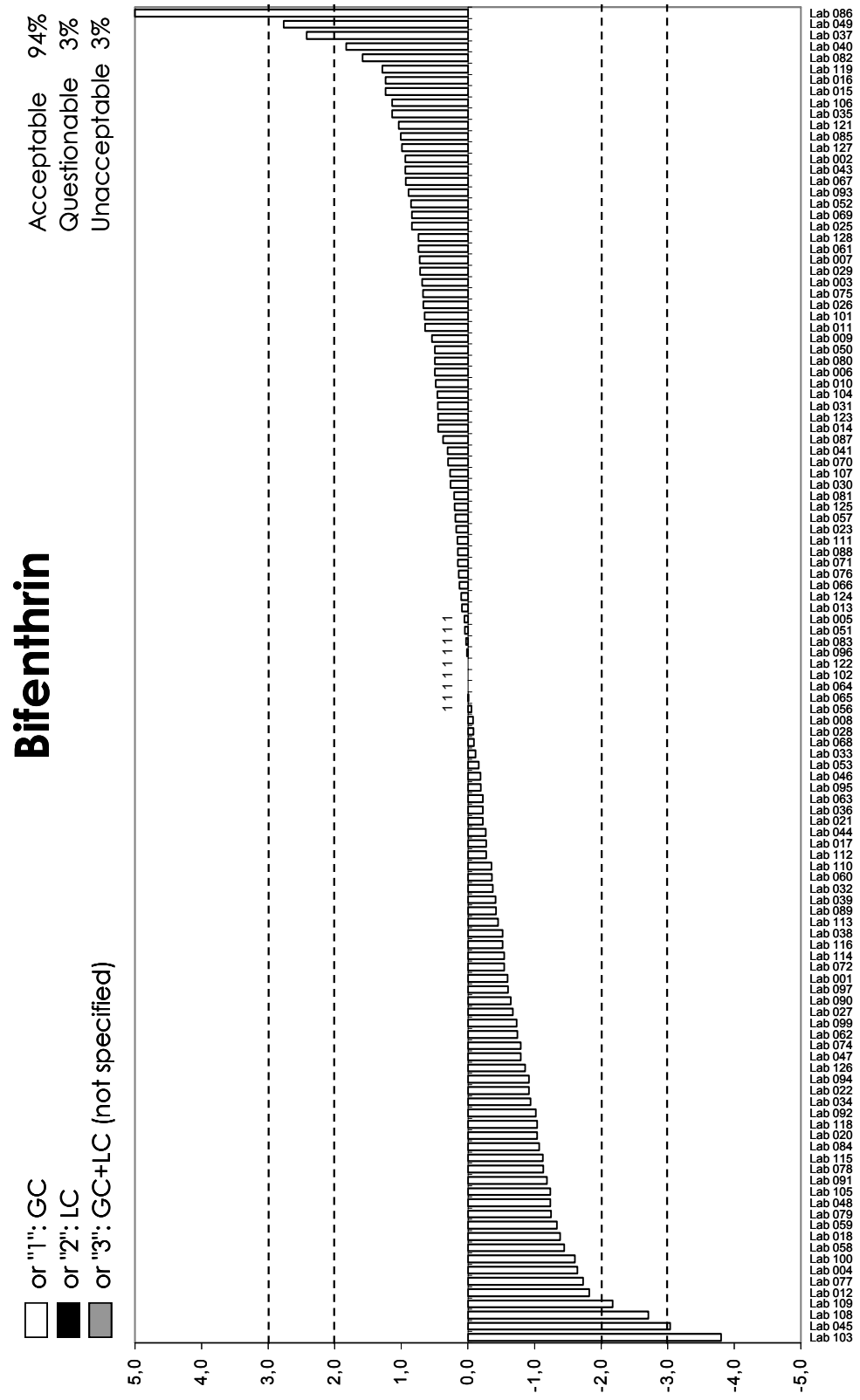
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



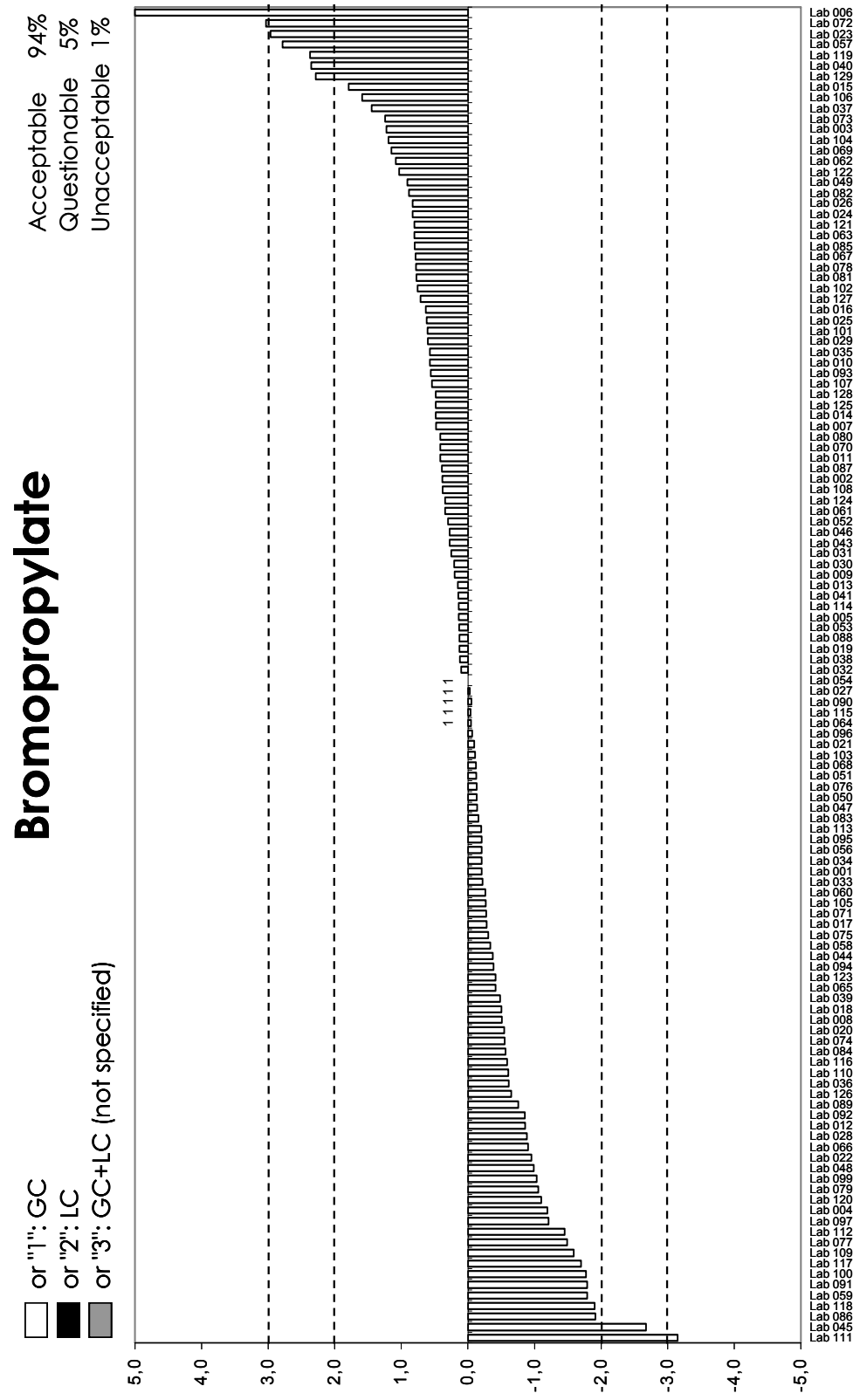
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



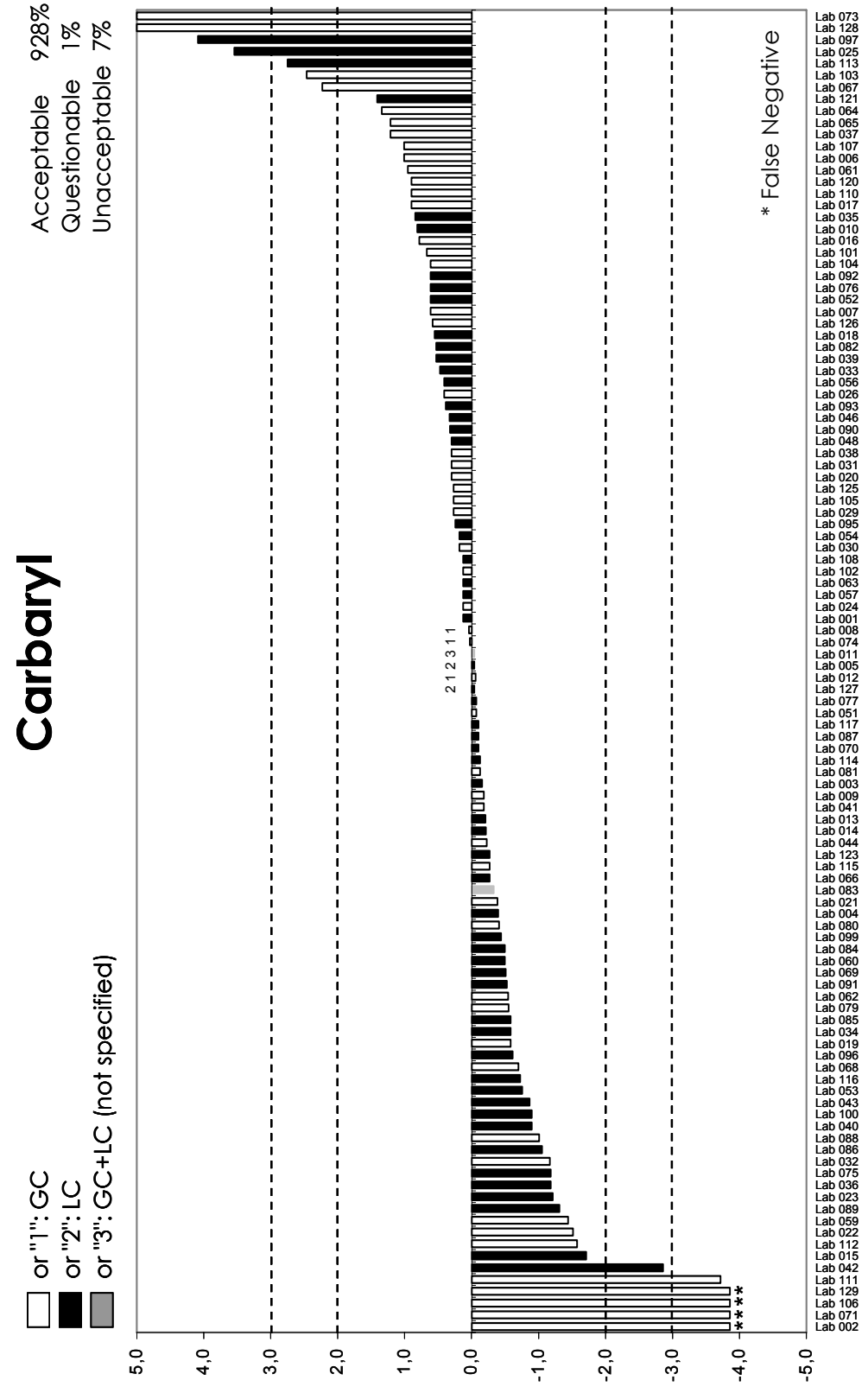
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



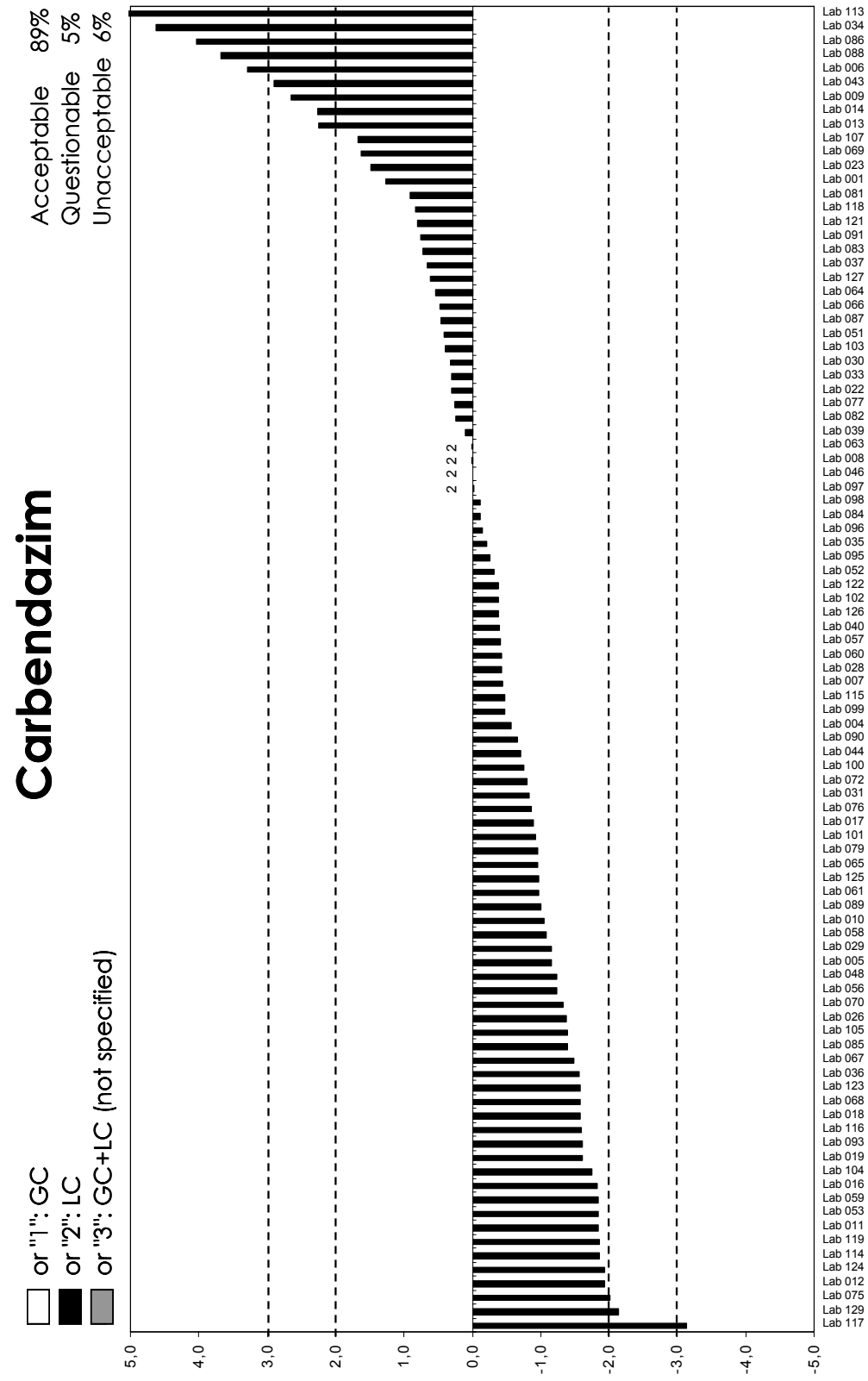
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



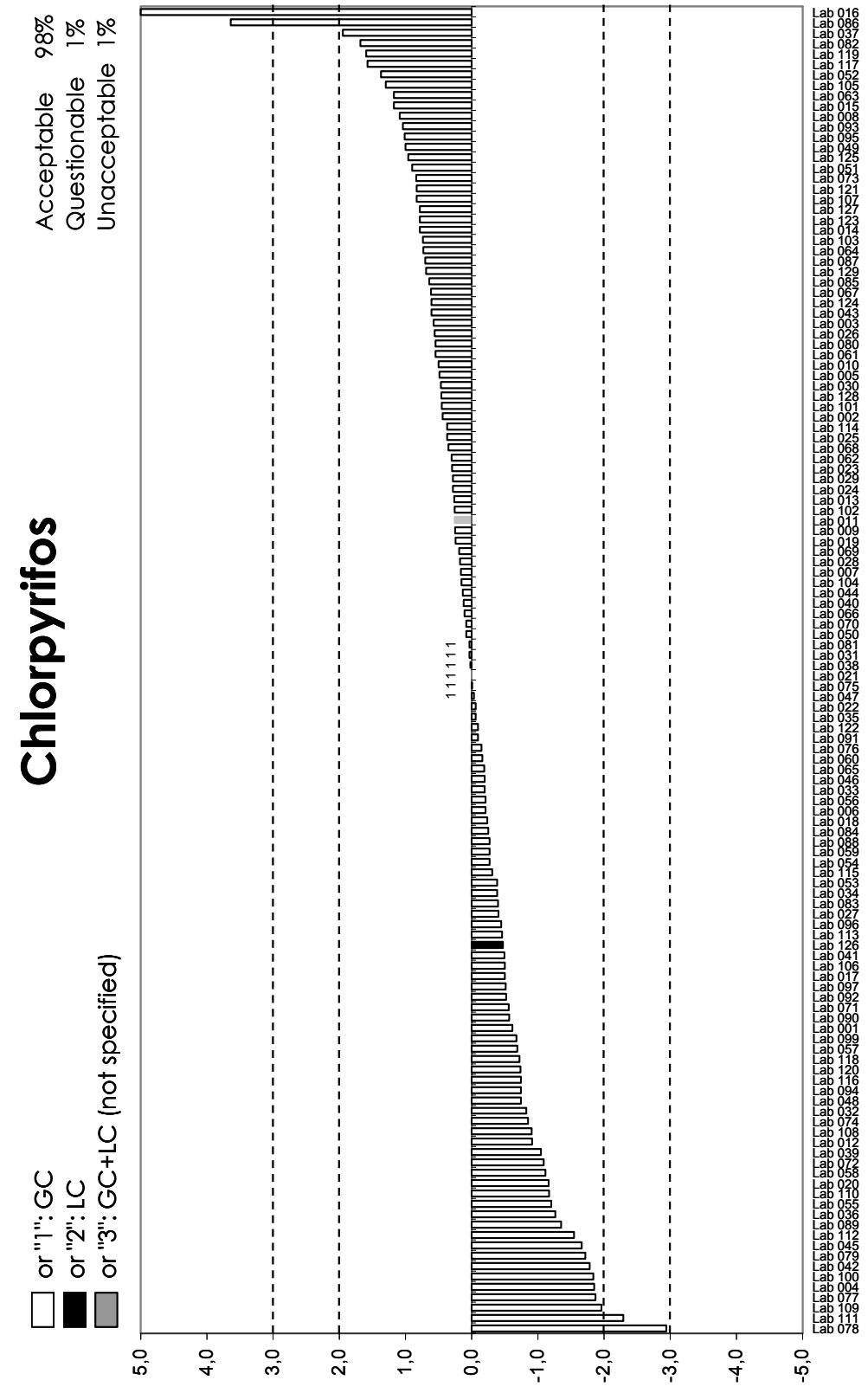
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



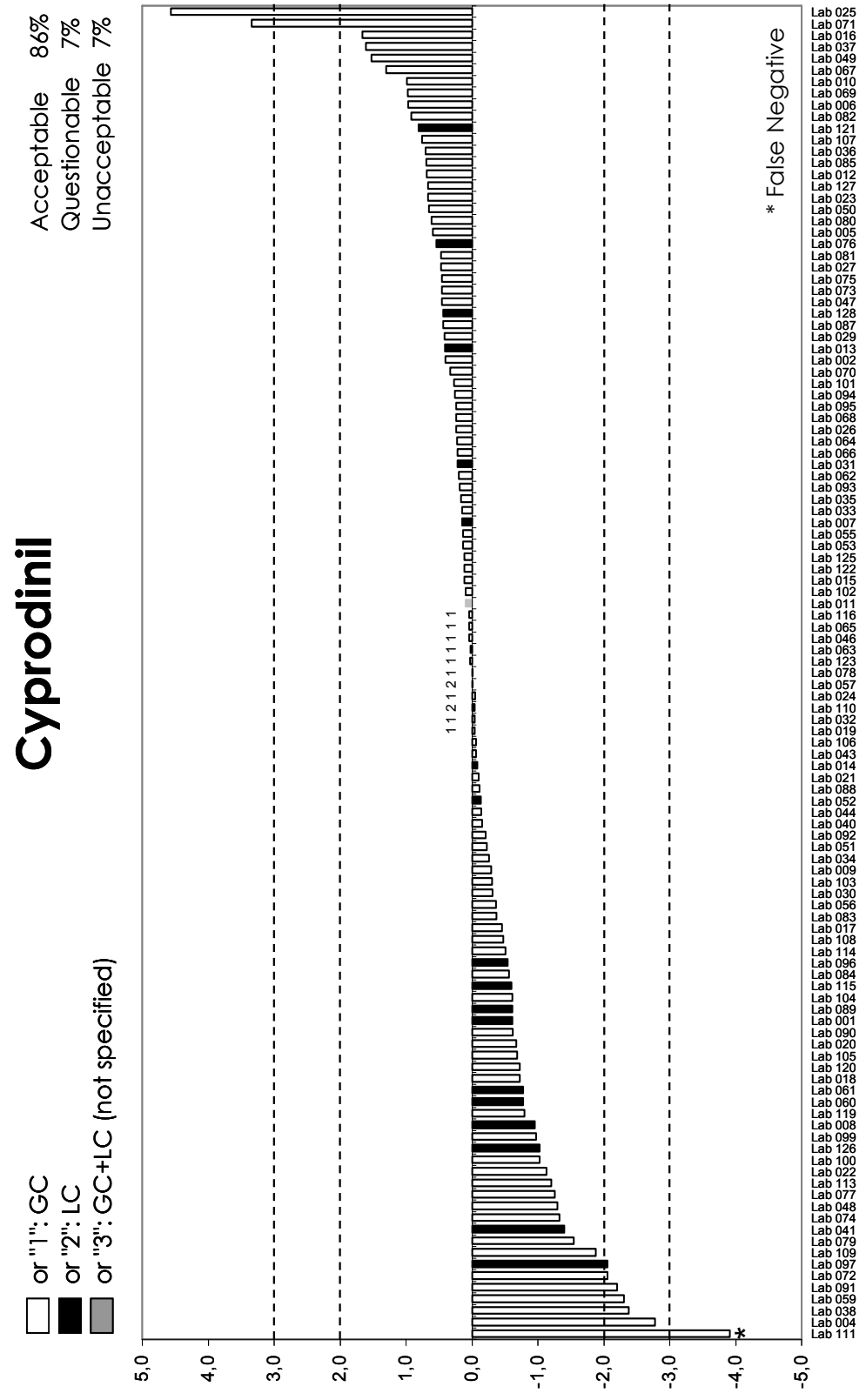
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



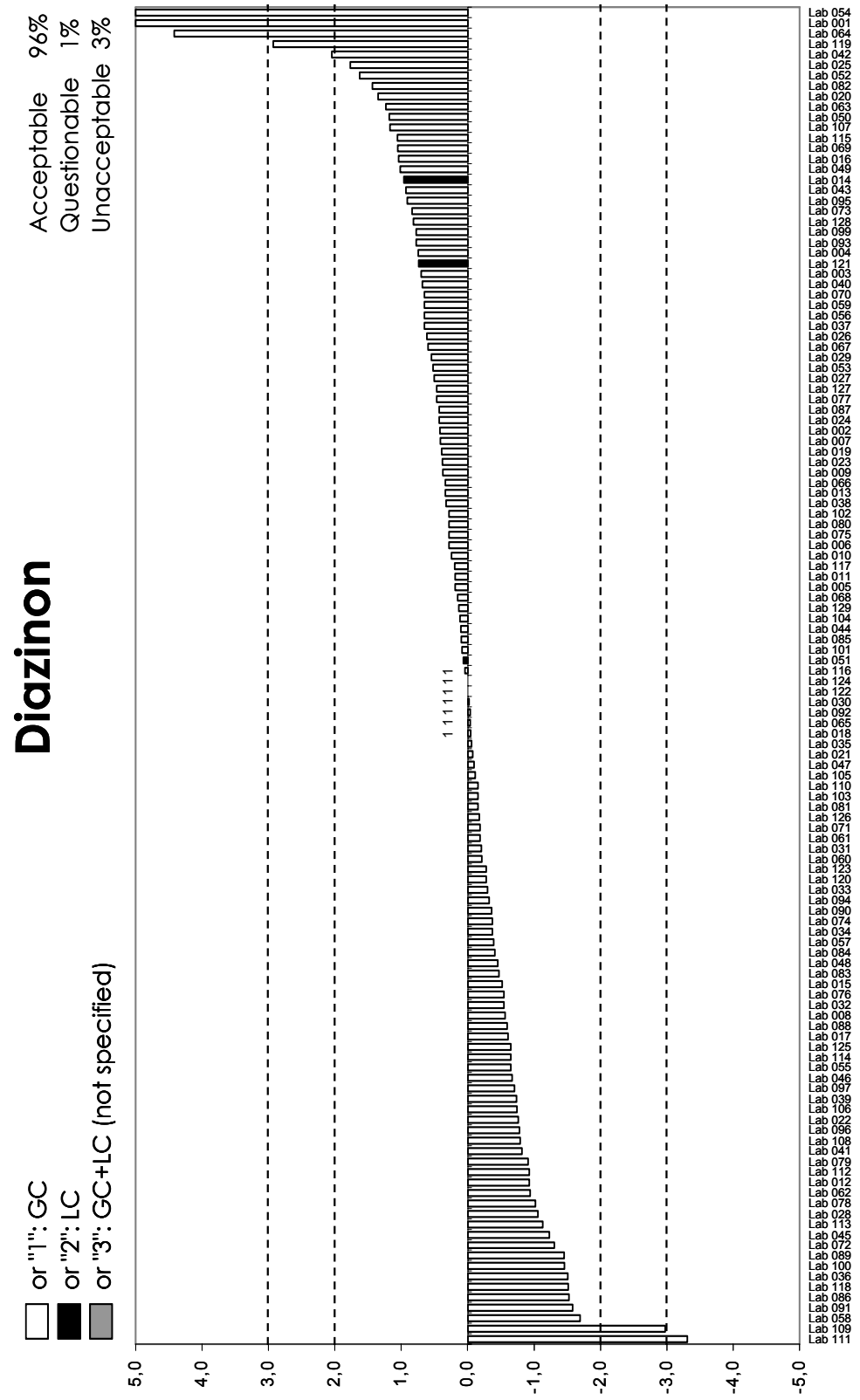
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



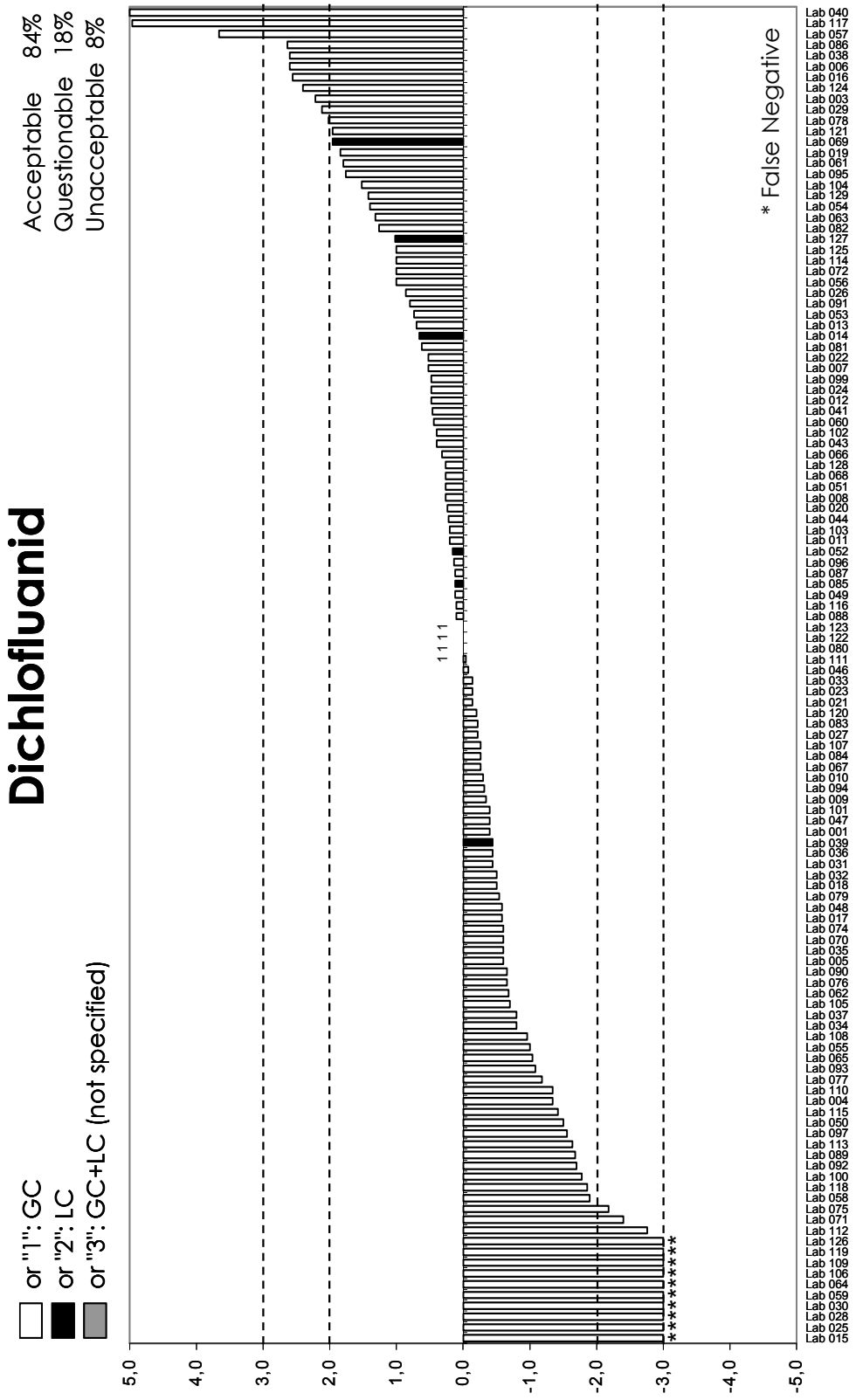
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



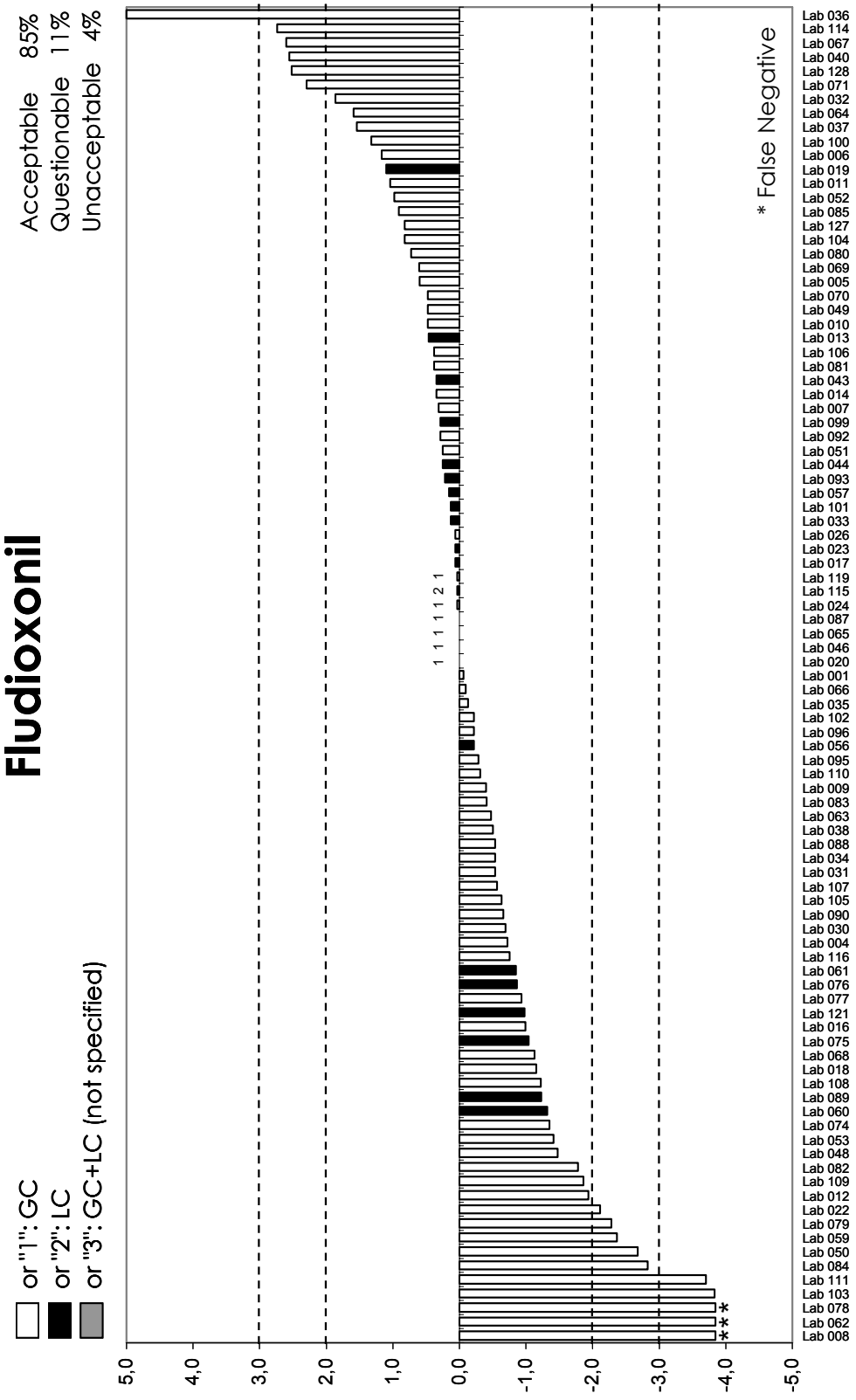
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



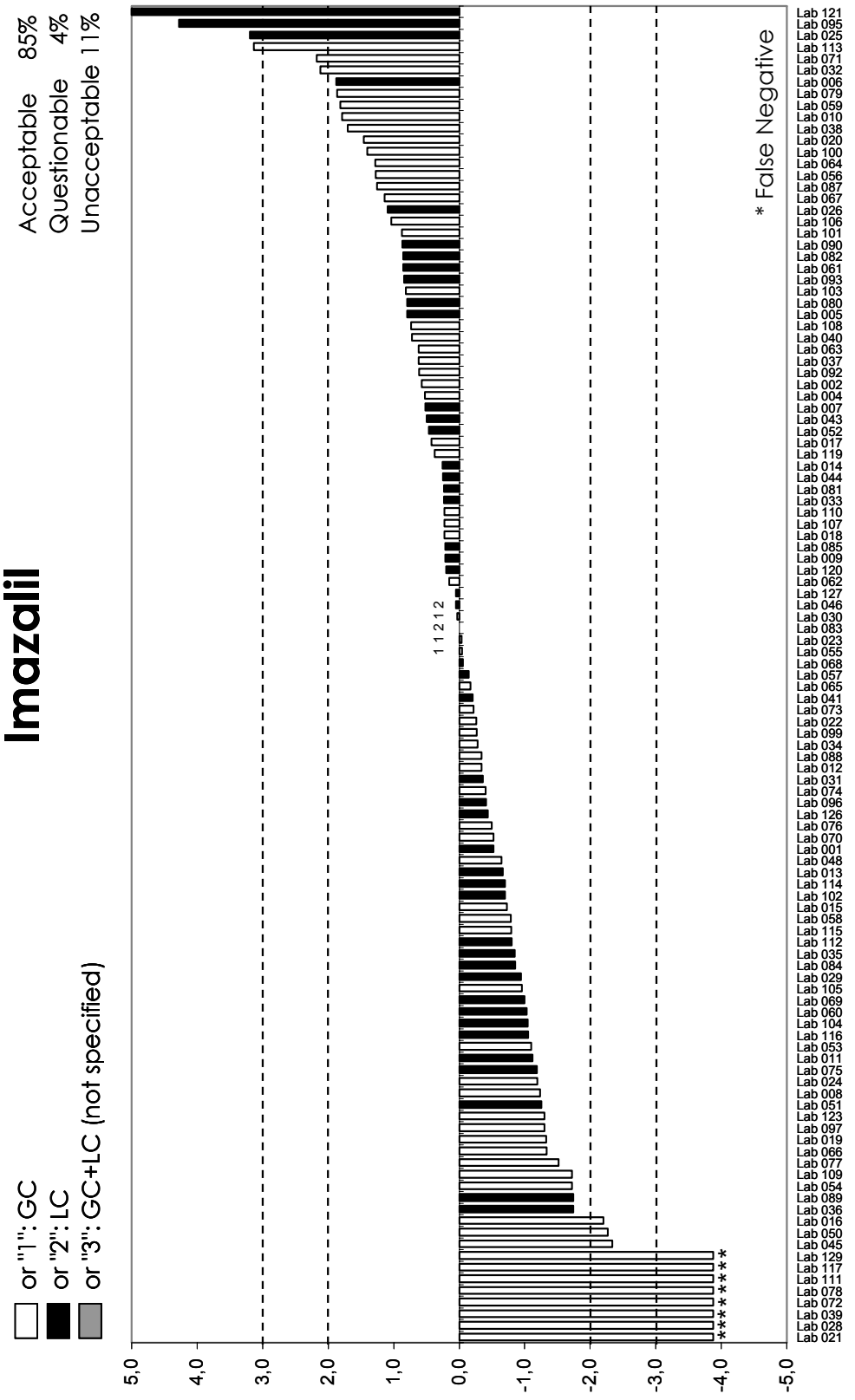
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



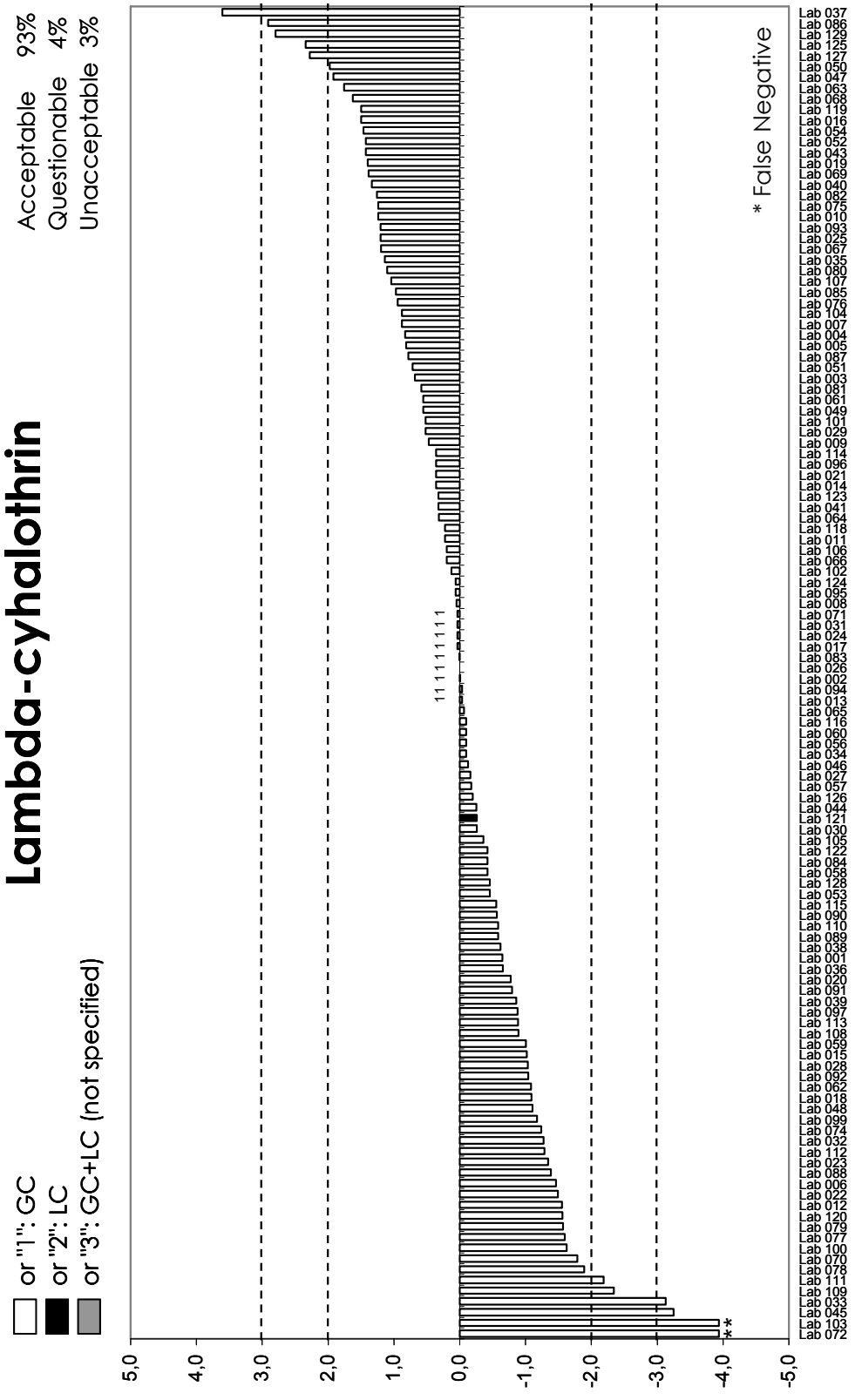
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



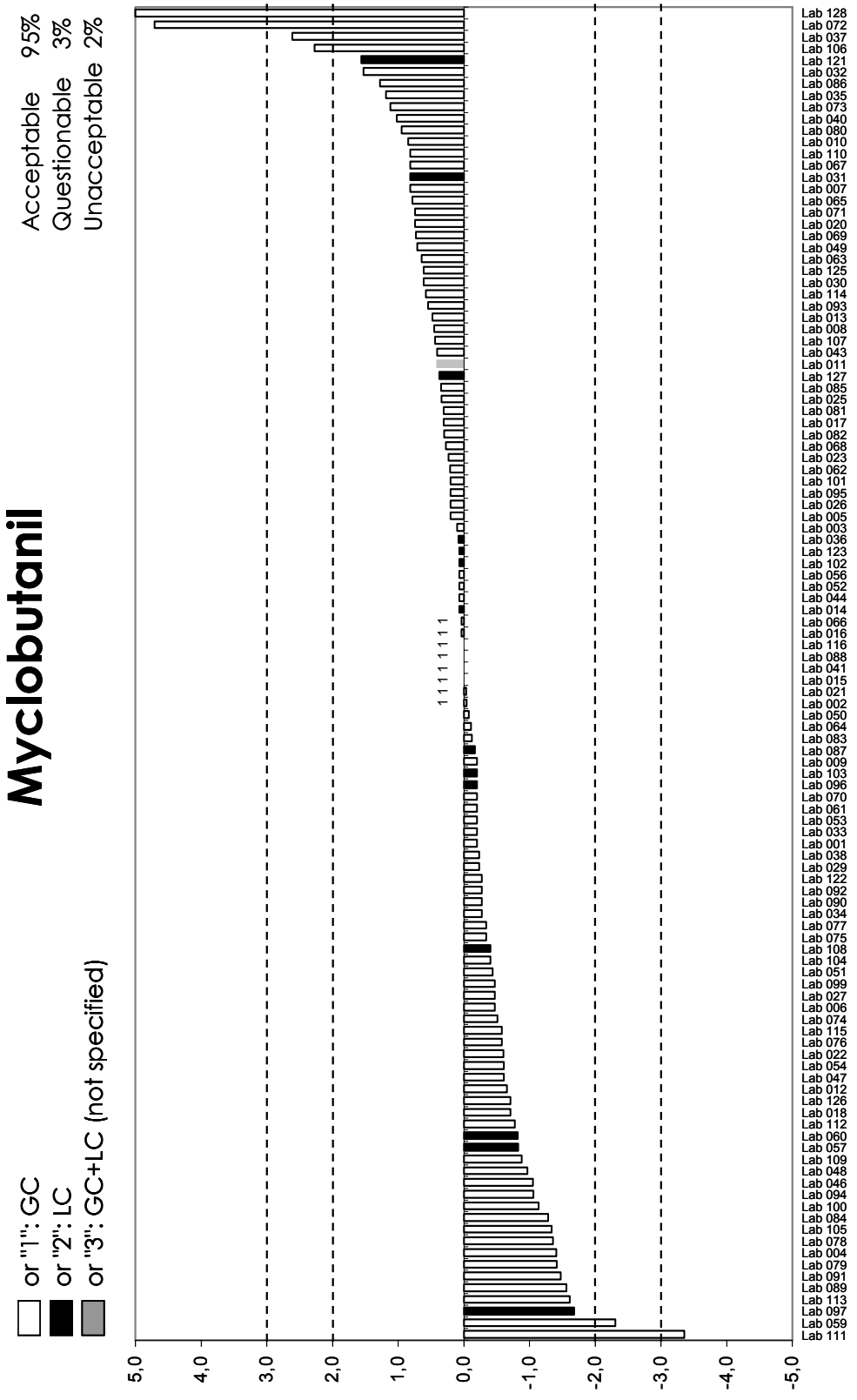
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



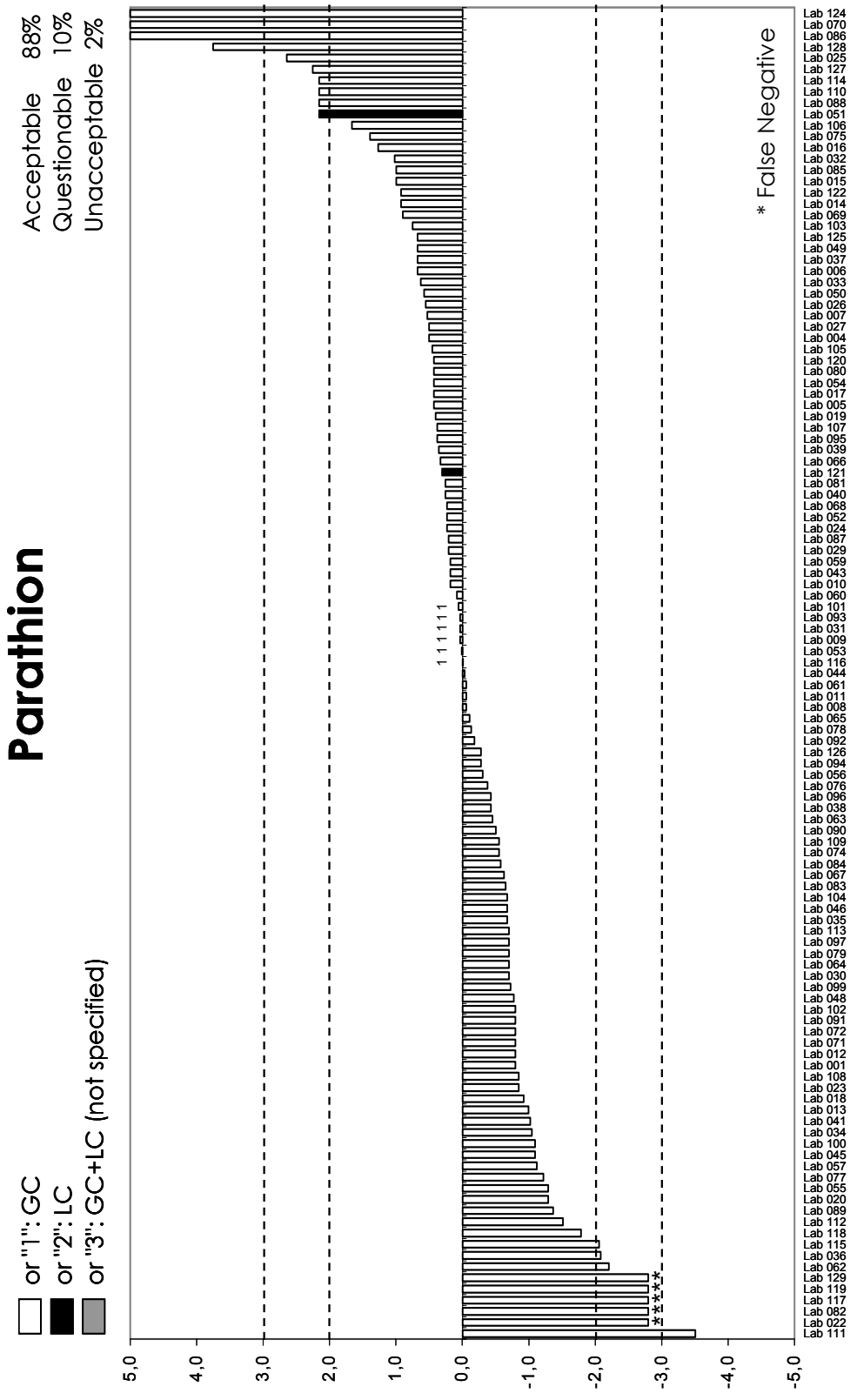
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



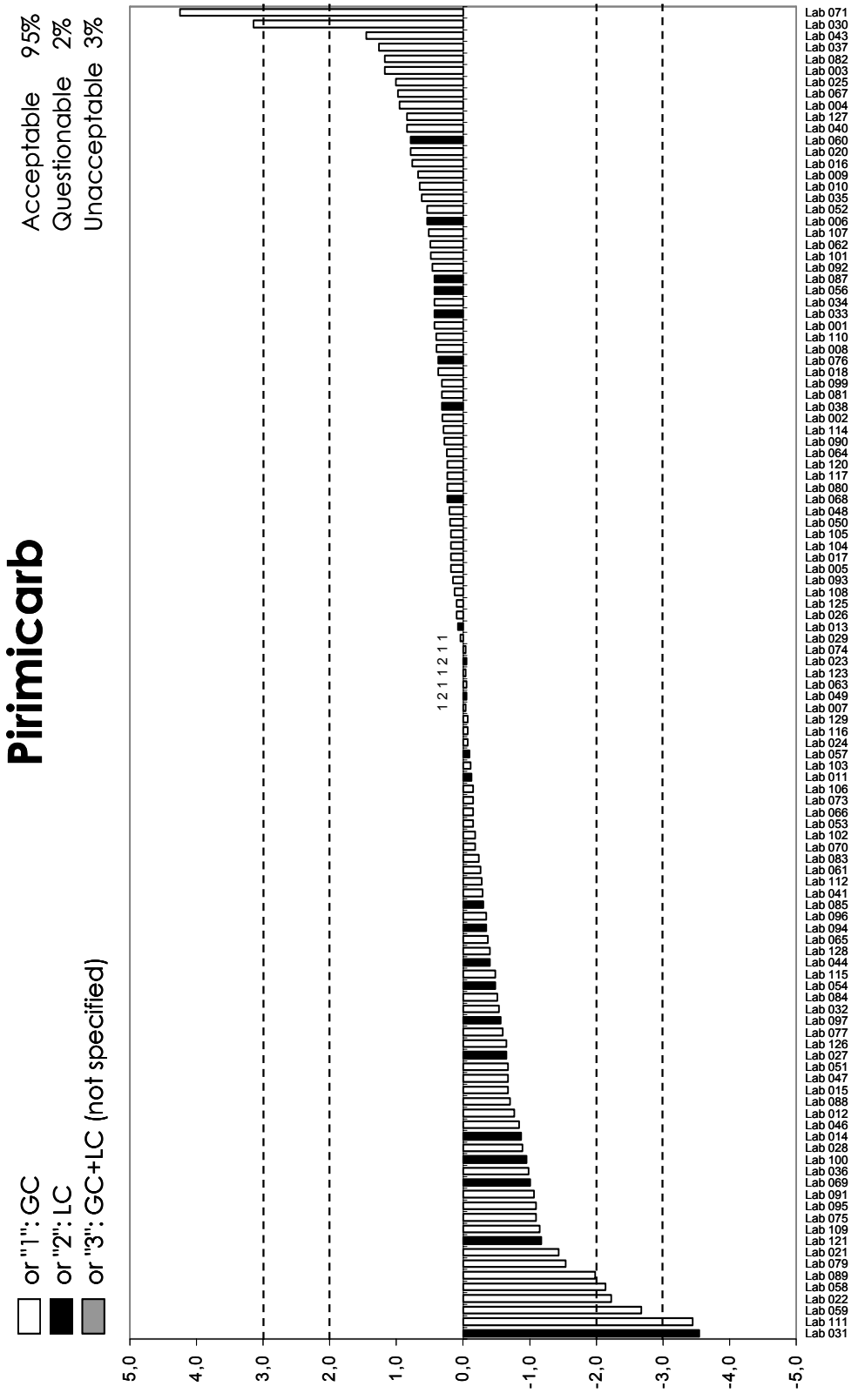
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25%).



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



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



APPENDIX 5. Combined z-scores RSZ and SSZ.

Lab Code	No. Of Pesticides Sought (n)	RSZ	SSZ
1	16	0.16	30.75
2	10	-0.04	16.88
3	10	0.37	21.81
4	16	-0.52	24.92
5	16	0.17	4.59
6	16	1.28	126.68
7	16	0.41	4.37
8	16	-0.26	19.82
9	16	0.27	8.84
10	16	0.52	10.23
11	16	0.00	6.74
12	15	-0.82	18.99
13	16	0.23	7.90
14	16	0.32	11.37
15	13	-0.18	21.36
16	15	1.66	311.83
17	16	-0.09	3.61
18	15	-0.58	10.75
19	13	0.26	12.85
20	15	-0.05	11.35
21	12	-0.52	17.53
22	16	-1.00	28.11
23	16	0.17	18.60
24	11	0.11	2.68
25	13	1.54	74.72
26	16	0.33	6.45
27	11	-0.11	2.09
28	9	-1.23	28.05
29	15	0.22	8.64
30	16	0.12	22.36
31	16	-0.23	15.26
32	15	0.43	54.31
33	16	-0.09	11.20
34	16	0.01	25.72
35	16	0.26	7.71
36	16	-0.25	63.51
37	16	1.31	43.13
38	14	0.01	17.14
39	10	-0.69	18.45
40	14	1.19	61.14
41	14	-0.41	8.26
42	3	-0.87	15.56
43	16	0.75	20.27
44	16	-0.05	1.39
45	7	-2.18	37.87
46	16	-0.16	3.23
47	10	-0.05	5.54
48	16	-0.82	14.70
49	12	1.09	25.64

APPENDIX 5. Combined z-scores RSZ and SSZ.

Lab Code	No. Of Pesticides Sought (n)	RSZ	SSZ
50	14	-0.45	36.33
51	16	0.09	8.76
52	16	0.54	9.60
53	16	-0.35	8.67
54	11	0.76	62.40
55	6	-0.68	4.56
56	16	0.07	5.33
57	16	0.24	24.35
58	9	-1.21	16.47
59	16	-1.44	64.25
60	16	-0.30	5.70
61	16	0.10	8.95
62	14	-0.65	26.76
63	16	0.33	10.49
64	16	0.23	42.67
65	16	-0.07	4.99
66	16	-0.05	3.40
67	15	0.80	24.16
68	16	-0.09	8.11
69	16	0.54	17.16
70	15	0.74	181.89
71	15	0.16	68.19
72	13	-0.86	89.11
73	8	1.62	82.12
74	15	-0.69	9.55
75	16	-0.43	19.47
76	16	-0.06	5.33
77	15	-1.01	24.26
78	11	-1.22	50.91
79	16	-0.94	26.90
80	15	0.47	5.57
81	16	0.31	3.06
82	16	0.53	26.08
83	16	-0.15	1.92
84	16	-0.55	18.01
85	16	0.32	8.57
86	11	2.12	165.05
87	16	0.38	4.33
88	16	0.14	22.99
89	16	-1.17	25.07
90	16	-0.28	4.95
91	13	-0.79	18.11
92	15	-0.28	7.56
93	16	0.34	10.05
94	11	-0.50	4.85
95	16	0.34	28.81
96	16	-0.26	2.43
97	15	-0.73	38.43
98	1	-0.12	0.01

APPENDIX 5. Combined z-scores RSZ and SSZ.

Lab Code	No. Of Pesticides Sought (n)	RSZ	SSZ
99	16	-0.32	6.66
100	16	-1.07	34.84
101	16	0.28	4.28
102	16	-0.05	3.13
103	16	-0.24	72.93
104	16	0.08	11.93
105	16	-0.39	10.14
106	14	-0.04	37.92
107	16	0.55	9.48
108	14	-0.62	14.44
109	13	-1.38	64.28
110	14	-0.03	10.52
111	14	-2.85	137.03
112	12	-1.12	20.88
113	13	0.30	85.65
114	15	0.25	19.03
115	16	-0.54	11.83
116	16	-0.43	6.51
117	9	-0.52	62.80
118	8	-0.97	14.90
119	12	0.44	54.88
120	11	-0.20	6.30
121	16	1.10	77.17
122	11	0.12	2.51
123	13	-0.16	5.46
124	10	1.72	362.49
125	13	0.39	10.00
126	14	-0.68	14.70
127	16	0.78	16.23
128	13	1.86	104.13

APPENDIX 6. 'Weighted Sum of z-Score' (WSZ) for laboratories in Category A.

Lab Code	z-Score Results																N of Pesticides	WSZ
	Acetamiprid	Azoxystrobinl	Bifenthrin	Bromopropylate	Carbaryl	Carbendazim	Chlorpyrifos	Cyprodinil	Diazinon	Dichlofluanid	Fludioxonil	Imazalil	Lambda-cyhalothrin	Myclobutanil	Parathion	Pirimicarb		
001	0.0	0.3	-0.6	-0.2	0.1	1.3	-0.6	-0.6	5.1	-0.4	-0.1	-0.5	-0.7	-0.2	-0.8	0.4	16	2.02
004	-1.0	1.1	-1.6	-1.2	-0.4	-0.6	-1.8	-2.8	0.7	-1.3	-0.7	0.5	0.8	-1.4	0.5	1.0	16	1.44
005	-0.4	0.4	0.0	0.1	0.0	-1.2	0.5	0.6	0.2	-0.6	0.6	0.8	0.8	0.2	0.4	0.2	16	0.44
006	0.2	-0.4	0.5	9.9	1.0	3.3	-0.2	1.0	0.3	2.6	1.2	1.9	-1.5	-0.5	0.7	0.5	16	5.22
007	0.6	0.3	0.7	0.5	0.6	-0.4	0.2	0.2	0.4	0.5	0.3	0.5	0.9	0.8	0.5	0.0	16	0.47
008	0.2	0.6	-0.1	-0.5	0.0	0.0	1.1	-1.0	-0.6	0.3	-3.8	-1.2	0.1	0.5	-0.1	0.4	16	1.61
009	0.4	-0.1	0.5	0.2	-0.2	2.6	0.3	-0.3	0.4	-0.3	-0.4	0.2	0.5	-0.2	0.0	0.7	16	0.79
010	0.2	0.6	0.5	0.6	0.8	-1.1	0.5	1.0	0.2	-0.3	0.5	1.8	1.2	0.8	0.2	0.7	16	0.68
011	-0.1	-0.1	0.6	0.4	0.0	-1.8	0.3	0.1	0.2	0.2	1.0	-1.1	0.2	0.4	-0.1	-0.1	16	0.43
013	0.0	0.3	0.1	0.2	-0.2	2.2	0.3	0.4	0.3	0.7	0.5	-0.7	0.0	0.5	-1.0	0.1	16	0.74
014	0.2	-1.4	0.4	0.5	-0.2	2.3	0.8	-0.1	1.0	0.7	0.3	0.3	0.4	0.1	0.9	-0.9	16	0.92
017	0.2	-0.4	-0.3	-0.3	0.9	-0.9	-0.5	-0.5	-0.6	-0.6	0.1	0.4	0.0	0.3	0.4	0.2	16	0.41
022	-1.3	-0.7	-0.9	-1.0	-1.5	0.3	-0.1	-1.1	-0.8	0.5	-2.1	-0.3	-1.5	-0.6	-2.8	-2.2	16	1.99
023	-1.2	1.2	0.2	3.0	-1.2	1.5	0.3	0.7	0.4	-0.1	0.1	0.0	-1.3	0.2	-0.8	0.0	16	1.14
026	-0.1	0.5	0.7	0.8	0.4	-1.4	0.6	0.2	0.6	0.9	0.1	1.1	0.0	0.2	0.6	0.1	16	0.50
030	0.8	0.9	0.3	0.2	0.2	0.3	0.5	-0.3	0.0	-3.0	-0.7	0.0	-0.3	0.6	-0.7	3.1	16	1.91
031	-0.3	0.4	0.5	0.2	0.3	-0.8	0.0	0.2	-0.2	-0.4	-0.5	-0.4	0.0	0.8	0.0	-3.5	16	1.43
033	0.4	0.1	-0.1	-0.2	0.5	0.3	-0.2	0.2	-0.3	-0.1	0.1	0.2	-3.1	-0.2	0.6	0.4	16	1.23
034	0.3	0.5	-0.9	-0.2	-0.6	4.6	-0.4	-0.3	-0.4	-0.8	-0.5	-0.3	-0.1	-0.3	-1.0	0.4	16	1.89
035	0.4	0.7	1.1	0.6	0.8	-0.2	-0.1	0.2	-0.1	-0.6	-0.1	-0.9	1.1	1.2	-0.7	0.6	16	0.58
036	0.8	0.0	-0.2	-0.6	-1.2	-1.6	-1.3	0.7	-1.5	-0.4	6.7	-1.7	-0.7	0.1	-2.1	-1.0	16	3.23
037	0.9	0.6	2.4	1.4	1.2	0.7	1.9	1.6	0.7	-0.8	1.5	0.6	3.6	2.6	0.7	1.3	16	2.94
043	1.9	0.8	0.9	0.3	-0.9	2.9	0.6	-0.1	0.9	0.4	0.3	0.5	1.4	0.4	0.2	1.5	16	1.23
044	0.3	0.3	-0.3	-0.4	-0.2	-0.7	0.1	-0.1	0.1	0.2	0.2	0.2	-0.3	0.1	0.0	-0.4	16	0.25
046	0.3	0.3	-0.2	0.3	0.3	0.0	-0.2	0.0	-0.7	-0.1	0.0	0.0	-0.1	-1.1	-0.7	-0.8	16	0.33
048	-1.3	-0.8	-1.2	-1.0	0.3	-1.2	-0.7	-1.3	-0.5	-0.6	-1.5	-0.6	-1.1	-1.0	-0.8	0.2	16	0.88
051	-0.4	-0.1	0.0	-0.1	-0.1	0.4	0.9	-0.2	0.1	0.3	0.3	-1.3	0.7	-0.4	2.2	-0.7	16	0.78
052	0.1	0.4	0.9	0.3	0.6	-0.3	1.4	-0.1	1.6	0.2	1.0	0.5	1.4	0.1	0.2	0.5	16	0.60
053	-0.2	-0.4	-0.2	0.1	-0.8	-1.8	-0.4	0.1	0.5	0.7	-1.4	-1.1	-0.5	-0.2	0.0	-0.2	16	0.54
056	0.0	0.0	0.0	-0.2	0.4	-1.2	-0.2	-0.4	0.7	1.0	-0.2	1.3	-0.1	0.1	-0.3	0.4	16	0.41
057	0.3	0.5	0.2	2.8	0.1	-0.4	-0.7	0.0	-0.4	3.7	0.2	-0.1	-0.2	-0.8	-1.1	-0.1	16	1.99
059	-3.8	-1.5	-1.3	-1.8	-1.4	-1.8	-0.3	-2.3	0.7	-3.0	-2.4	1.8	-1.0	-2.3	0.2	-2.7	16	4.29
060	0.1	-0.3	-0.4	-0.3	-0.5	-0.4	-0.2	-0.8	-0.2	0.4	-1.3	-1.0	-0.1	-0.8	0.1	0.8	16	0.48

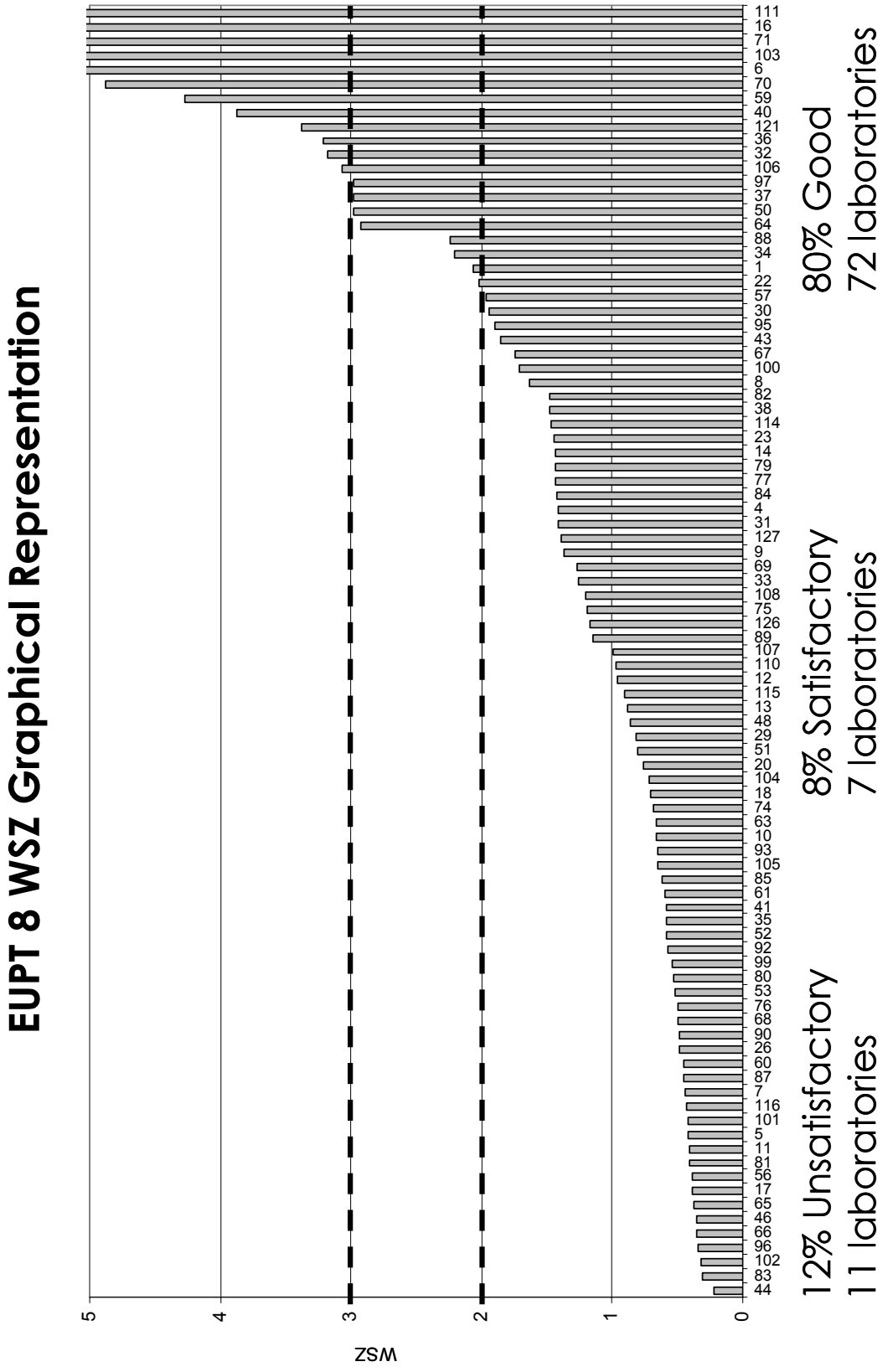
APPENDIX 6. 'Weighted Sum of z-Score' (WSZ) for laboratories in Category A.

Lab Code	z-Score Results																N of Pesticides	WSZ
	Acetamiprid	Azoxystrobinl	Bifenthrin	Bromopropylate	Carbaryl	Carbendazim	Chlorpyrifos	Cyprodinil	Diazinon	Dichlofluanid	Fludioxonil	Imazalil	Lambda-cyhalothrin	Myclobutanil	Parathion	Pirimicarb		
061	-0.4	-0.5	0.7	0.3	1.0	-1.0	0.5	-0.8	-0.2	1.8	-0.9	0.9	0.6	-0.2	-0.1	-0.3	16	0.62
063	-0.8	-0.5	-0.2	0.8	0.1	0.0	1.2	0.0	1.2	1.3	-0.5	0.6	1.8	0.6	-0.5	0.0	16	0.63
064	-2.5	-0.6	0.0	0.0	1.3	0.5	0.7	0.2	4.4	-3.0	1.6	1.3	0.3	-0.1	-0.7	0.2	16	2.90
065	-0.4	0.6	0.0	-0.4	1.2	-1.0	-0.2	0.0	0.0	-1.0	0.0	-0.2	-0.1	0.8	-0.1	-0.4	16	0.40
066	-0.1	0.0	0.1	-0.9	-0.3	0.5	0.1	0.2	0.3	0.3	-0.1	-1.3	0.2	0.0	0.3	-0.2	16	0.32
068	-0.4	-0.8	-0.1	-0.1	-0.7	-1.6	0.3	0.2	0.1	0.3	-1.1	-0.1	1.6	0.3	0.2	0.2	16	0.51
069	-0.7	0.4	0.8	1.2	-0.5	1.6	0.2	1.0	1.1	2.0	0.6	-1.0	1.4	0.7	0.9	-1.0	16	0.94
075	-0.9	-0.7	0.7	-0.3	-1.2	-2.0	0.0	0.5	0.3	-2.2	-1.0	-1.2	1.2	-0.3	1.4	-1.1	16	1.46
076	0.5	0.6	0.1	-0.1	0.6	-0.9	-0.1	0.5	-0.5	-0.7	-0.9	-0.5	0.9	-0.6	-0.4	0.4	16	0.52
079	-0.2	-0.7	-1.2	-1.1	-0.6	-1.0	-1.7	-1.5	-0.9	-0.5	-2.3	1.9	-1.6	-1.4	-0.7	-1.5	16	1.46
081	-0.1	0.4	0.2	0.8	-0.1	0.9	0.0	0.5	-0.2	0.6	0.4	0.2	0.6	0.3	0.3	0.3	16	0.37
082	0.2	0.7	1.6	0.9	0.5	0.2	1.7	0.9	1.4	1.3	-1.8	0.9	1.3	0.3	-2.8	1.2	16	1.44
083	0.2	0.0	0.0	-0.2	-0.3	0.7	-0.4	-0.4	-0.5	-0.2	-0.4	0.0	0.0	-0.1	-0.7	-0.2	16	0.27
084	2.0	-0.6	-1.1	-0.6	-0.5	-0.1	-0.3	-0.6	-0.4	-0.3	-2.8	-0.9	-0.4	-1.3	-0.6	-0.5	16	1.41
085	-0.3	0.8	1.0	0.8	-0.6	-1.4	0.6	0.7	0.1	0.1	0.9	0.2	1.0	0.3	1.0	-0.3	16	0.63
087	0.1	0.7	0.4	0.4	-0.1	0.5	0.7	0.4	0.4	0.1	0.0	1.3	0.8	-0.2	0.2	0.4	16	0.42
088	0.5	0.5	0.2	0.1	-1.0	3.7	-0.3	-0.1	-0.6	0.1	-0.5	-0.3	-1.4	0.0	2.2	-0.7	16	1.95
089	-0.7	-0.9	-0.4	-0.8	-1.3	-1.0	-1.4	-0.6	-1.5	-1.7	-1.2	-1.7	-0.6	-1.6	-1.4	-2.0	16	1.17
090	0.4	-0.8	-0.6	0.0	0.3	-0.7	-0.6	-0.6	-0.4	-0.7	-0.7	0.9	-0.6	-0.3	-0.5	0.3	16	0.51
093	0.7	0.6	0.9	0.6	0.4	-1.6	1.0	0.2	0.8	-1.1	0.2	0.8	1.2	0.5	0.0	0.2	16	0.67
095	-1.9	0.3	-0.2	-0.2	0.2	-0.3	1.0	0.2	0.9	1.8	-0.3	4.3	0.1	0.2	0.4	-1.1	16	1.91
096	-0.5	-0.1	0.0	-0.1	-0.6	-0.1	-0.4	-0.5	-0.8	0.1	-0.2	-0.4	0.4	-0.2	-0.4	-0.3	16	0.33
099	0.1	-0.1	-0.7	-1.0	-0.4	-0.5	-0.7	-1.0	0.8	0.5	0.3	-0.3	-1.2	-0.5	-0.7	0.3	16	0.56
100	-1.3	-2.6	-1.6	-1.8	-0.9	-0.8	-1.8	-1.0	-1.5	-1.8	1.3	1.4	-1.6	-1.1	-1.1	-1.0	16	1.73
101	0.2	0.6	0.7	0.6	0.7	-0.9	0.5	0.3	0.1	-0.4	0.1	0.9	0.5	0.2	0.1	0.5	16	0.45
102	-0.9	0.2	0.0	0.8	0.1	-0.4	0.3	0.1	0.3	0.4	-0.2	-0.7	0.1	0.1	-0.8	-0.2	16	0.34
104	-0.8	0.6	0.5	1.2	0.6	-1.8	0.2	-0.6	0.1	1.5	0.8	-1.0	0.9	-0.4	-0.7	0.2	16	0.74
105	-0.2	-0.6	-1.2	-0.3	0.3	-1.4	1.3	-0.7	-0.1	-0.7	-0.6	-1.0	-0.4	-1.3	0.5	0.2	16	0.67
107	0.0	0.8	0.3	0.5	1.0	1.7	0.8	0.8	1.2	-0.3	-0.6	0.2	1.0	0.4	0.4	0.5	16	0.65
115	-1.0	0.0	-1.1	0.0	-0.3	-0.5	-0.3	-0.6	1.1	-1.4	0.0	-0.8	-0.6	-0.6	-2.1	-0.5	16	0.93
116	-0.7	-0.2	-0.5	-0.6	-0.7	-1.6	-0.7	0.0	0.0	0.1	-0.8	-1.0	-0.1	0.0	0.0	-0.1	16	0.45
121	1.2	0.8	1.0	0.8	1.4	0.8	0.8	0.8	0.7	2.0	-1.0	7.7	-0.3	1.6	0.3	-1.2	16	3.34
127	0.2	0.5	1.0	0.7	0.0	0.6	0.8	0.7	0.5	1.0	0.8	0.1	2.3	0.4	2.3	0.8	16	1.35
012		-0.9	-1.8	-0.9	0.0	-1.9	-0.9	0.7	-0.9	0.5	-1.9	-0.3	-1.6	-0.7	-0.8	-0.8	15	0.98

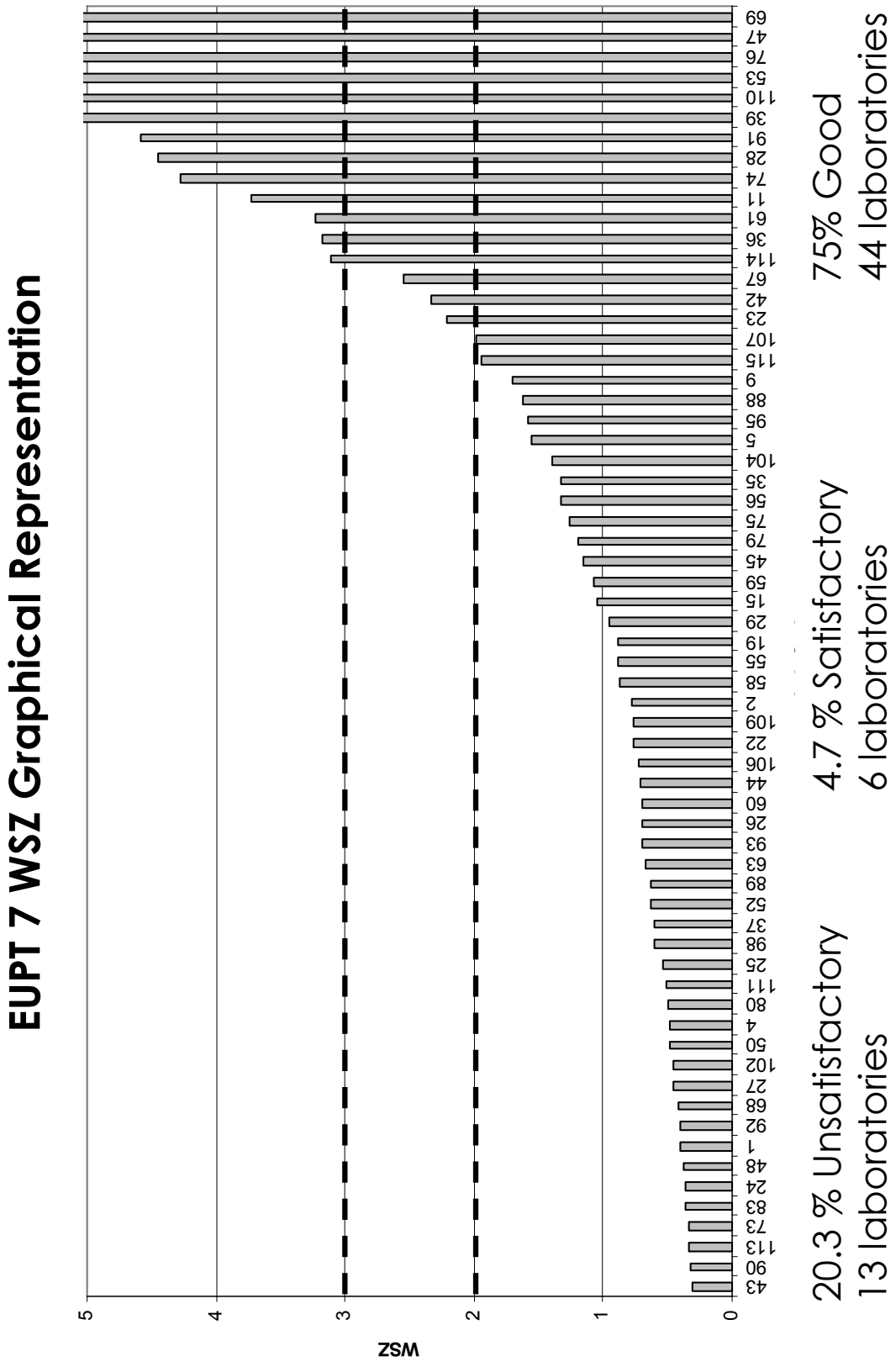
APPENDIX 6. 'Weighted Sum of z-Score' (WSZ) for laboratories in Category A.

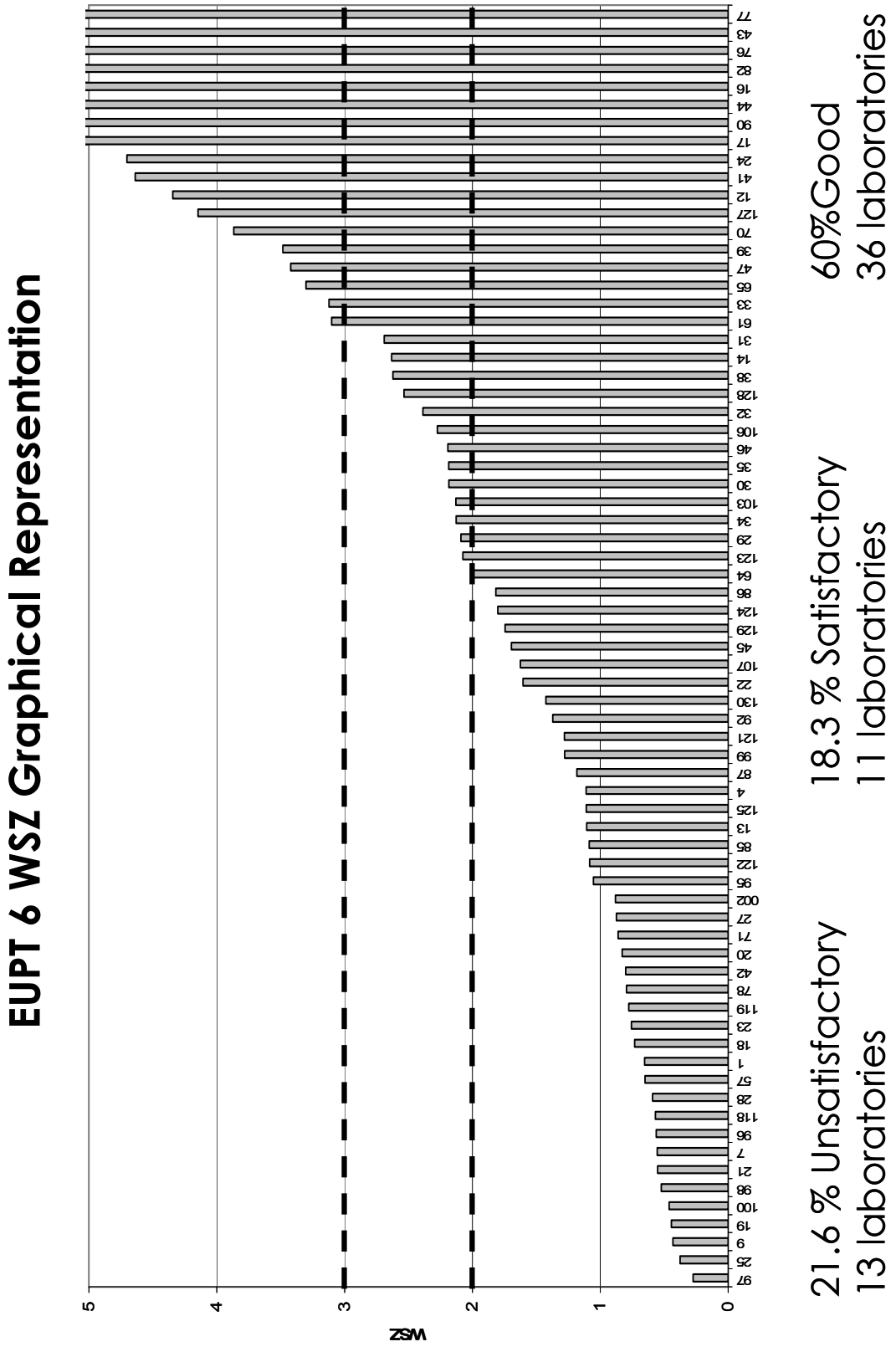
Lab Code	z-Score Results																N of Pesticides	WSZ
	Acetamiprid	Azoxystrobinl	Bifenthrin	Bromopropylate	Carbaryl	Carbendazim	Chlorpyrifos	Cyprodinil	Diazinon	Dichlofluanid	Fludioxonil	Imazalil	Lambda-cyhalothrin	Myclobutanil	Parathion	Pirimicarb		
016		1.6	1.2	0.6	0.8	-1.8	16.8	1.7	1.0	2.6	-1.0	-2.2	1.5	0.0	1.3	0.8	15	7.45
018		-0.9	-1.4	-0.5	0.6	-1.6	-0.2	-0.7	0.0	-0.5	-1.2	0.2	-1.1	-0.7	-0.9	0.4	15	0.73
020	0.5	-0.6	-1.0	-0.5	0.3		-1.2	-0.7	1.3	0.2	0.0	1.5	-0.8	0.7	-1.3	0.8	15	0.77
029	-0.2	0.1	0.7	0.6	0.3	-1.2	0.3	0.4	0.5	2.1		-0.9	0.5	-0.2	0.2	0.0	15	0.84
032	6.1	-1.0	-0.4	0.1	-1.2		-0.8	0.0	-0.5	-0.5	1.9	2.1	-1.3	1.5	1.0	-0.5	15	3.18
067		1.2	0.9	0.8	2.2	-1.5	0.6	1.3	0.6	-0.3	2.6	1.1	1.2	0.8	-0.6	1.0	15	1.76
070		0.4	0.3	0.4	-0.1	-1.3	0.1	0.3	0.7	-0.6	0.5	-0.5	-1.8	-0.2	13.2	-0.2	15	4.90
071	-2.6	0.1	0.1	-0.3	-3.9		-0.6	3.3	-0.2	-2.4	2.3	2.2	0.0	0.7	-0.8	4.2	15	5.90
074	-0.9	-0.9	-0.8	-0.6	0.0		-0.9	-1.3	-0.4	-0.6	-1.4	-0.4	-1.2	-0.5	-0.6	0.0	15	0.69
077		-2.2	-1.7	-1.5	-0.1	0.3	-1.9	-1.3	0.5	-1.2	-0.9	-1.5	-1.6	-0.3	-1.2	-0.6	15	1.40
080	0.0	0.8	0.5	0.4	-0.4		0.5	0.6	0.3	0.0	0.7	0.8	1.1	0.9	0.4	0.2	15	0.53
092	0.2	-0.6	-1.0	-0.9	0.6		-0.5	-0.2	0.0	-1.7	0.3	0.6	-1.0	-0.3	-0.2	0.5	15	0.57
097	-0.8	-2.4	-0.6	-1.2	4.1	0.0	-0.5	-2.1	-0.7	-1.6		-1.3	-0.9	-1.7	-0.7	-0.6	15	2.96
114		0.5	-0.5	0.1	-0.1	-1.9	0.4	-0.5	-0.7	1.0	2.7	-0.7	0.4	0.6	2.2	0.3	15	1.49
038		-0.6	-0.5	0.1	0.3		0.0	-2.4	0.3	2.6	-0.5	1.7	-0.6	-0.2	-0.4	0.3	14	1.47
040			1.8	2.4	-0.9	-0.4	0.1	-0.2	0.7	6.3	2.6	0.7	1.3	1.0	0.3	0.8	14	3.90
041	-1.7	-0.9	0.3	0.1	-0.2		-0.5	-1.4	-0.8	0.5		-0.2	0.3	0.0	-1.0	-0.3	14	0.59
050	-3.8	-1.1	0.5	-0.1			0.1	0.7	1.2	-1.5	-2.7	-2.3	2.0	-0.1	0.6	0.2	14	2.98
106		-0.5	1.1	1.6	-3.9		-0.5	-0.1	-0.7	-3.0	0.4	1.0	0.2	2.3	1.7	-0.2	14	3.07
108		-0.8	-2.7	0.4	0.1		-0.9	-0.5	-0.8	-1.0	-1.2	0.7	-0.9	-0.4	-0.8	0.1	14	1.20
110		-0.3	-0.4	-0.6	0.9		-1.2	0.0	-0.2	-1.3	-0.3	0.2	-0.6	0.8	2.2	0.4	14	0.98
111		-3.6	0.2	-3.2	-3.7		-2.3	-3.9	-3.3	0.0	-3.7	-3.9	-2.2	-3.4	-3.5	-3.4	14	13.67
126		-1.2	-0.9	-0.6	0.6	-0.4	-0.5	-1.0	-0.2	-3.0		-0.4	-0.2	-0.7	-0.3	-0.7	14	1.19

APPENDIX 7. EUPT8, 7 and 6 graphical representations for laboratories in Category A.



APPENDIX 7. EUPT8, 7 and 6 graphical representations for laboratories in Category A.




EUPT 6 WSZ Graphical Representation
ZSM
0
1
2
3
4
5
97 25 9 19 100 98 21 7 96 118 28 57 1 18 23 119 78 42 20 71 27 002 95 122 85 13 125 4 87 99 121 92 130 22 107 45 129 124 86 64 123 29 34 103 30 35 46 106 32 128 38 14 31 61 33 65 47 39 70 127 12 41 24 17 90 44 16 82 76 43 77
21.6 % Unsatisfactory
13 laboratories
18.3 % Satisfactory
11 laboratories
60%Good
36 laboratories

APPENDIX 8. Methods used by participants for determining pesticides.

NUMBER	REFERENCE METHOD
1	§35 LMBG 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	DFG S19 ASU §64 LFGB L 00.00-34
6	EN-12393
7	EN-14333 or EN-14185
8	Fillion et al. Journal of AOAC International 78-5-1995
9	FP017 or FP018 or FP086
10	Fresenius J Anal Chem (1995) 353: 183 - 190
11	Gilvydis Dm Walters SM (1990) JAOA Chem. 73
12	Internal Method
13	Internal Method MI/C/10/100 Rev. 3
14	Internal Method SAR (based on No. 7)
15	ISTIAN 97/23
16	Janson et al. Journal of Chromatography A 1023 (2004,9, 93-104
17	JB Leary
18	Klein, J., Alder, L. JAOAC 86, 1015 (2003)
19	KM 21 or KM 22
20	Leothay, S. Et al. JAOAC 88 (2005)
21	Local SOP
22	Luke's Method
23	M. Anastassiades et al JAOAC 86 (2003)
24	Methodenvorschlag EG Proficiency Test 1996/97
25	Multi Residue Method draft BfR
26	Official Method of Analysis (1990) 15th Ed., 985.22 AOAC Arlington VA
27	Proc. Int. Citriculture (1997) Vol. 3
28	Rev 3,1,1995 Method 531,1. National Exposure Research Laboratory Office of Research and Development, US Environmental Protection Agency, Cincinnati Ohio 45268
29	SC/PB-07; 28.10.2004 wyd.1
30	SLV M200
31	Validated Internal Method JAOAC 79-2 (1996)
32	VVMDC-T-012-023
33	Wyd. Met. PZH 2002

Some of these methods are the same (e.g. 1, 5 and 6 or 18 and 25) but we have preferred to use this time the inside country terminology.

APPENDIX 8. Methods used by participants for determining pesticides.

ACETAMIPRID													
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 71)
001	M	LC-MS/MS	0.004	106	1	12.5	5	-		7		LC-MS/MS	19
002	NA												
003	NA												
004	M	LC-MS/MS	0.002			12	5	DSPE		20		LC-MS/MS	23
005	M	HPLC-UV	0.05	84	1	20	6	SPE	TPP	5		LC-MS/MS	23
006	S	LC-MS/MS	0.02	90	2	15	4			10		LC-MS/MS	2
007	M	LC-MS/MS	0.01	115	1	10	6			5		LC-MS/MS	18
008	M	HPLC-DAD	0.01	100	2	5	5	SPE Florisil		20	Automatic	HPLC-DAD	12
009	S	LC-MS/MS	0.02	97.7	1	15	5	DSPE		10	Partial Loop	LC-MS/MS	20
010	S	GC-MS	0.05	93.8	1	15	5	O		20		HPLC-UV/DAD	23
011	M	LC-MS/MS	0.01	102	1	50	1			5		LC-MS/MS	12
012	NA												
013	M	LC-MS/MS	0.01	103.3	1	10	6		yes	5	Partial Loop	LC-MS/MS	12
014	M	GC-MS	0.05	>90	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015	NA												
016	NA												
017	S	HPLC-UV	0.05	85.1	1	30	1	GPC		20	Loop	HPLC-UV	21
018	NA												
019	M	HPLC-UV	0.1	132.9	1	25	1			3	Splitless	GC-NPD	14
020	S	GC-NPD	0.01	120	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	NA												
022	M	GC-MS	0.02	87	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	LC-MS/MS	0.05	84	1	10	6			20		LC-MS/MS	25
024	NA												
025	NA												
026	M		0.001			10	5	SPE		10		LC-MS/MS	23

APPENDIX 8. Methods used by participants for determining pesticides.

ACETAMIPRID													
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 71)
027	NA												
028	NA												
029	M	LC-MS/MS	0.01	103.9	1	10	acetone	DSPE	TPP	5	Rheodyne	LC-MS/MS	
030	S	HPLC-DAD	0.006	95	2	10	5	DSPE (PSA)		50		HPLC-DAD	23
031	M	LC-MS/MS	0.01	99	1	15	4			5	Loop	LC-MS/MS	
032	S	GC-MS	0.05	70	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	LC-MS/MS	0.01	107	1	10	5	DSPE	TPP	3		LC-MS/MS	23
034	M	LC-MS/MS	0.01	84	1	5	5			10		LC-MS/MS	23
035	S	LC-MS/MS	0.01	89	1	10	6	LL on Chem Elut		25		LC-MS/MS	18
036	S	GC-MS	0.01	88.5	1	10	6	LLE		20		LC-MS/MS	18
037	S	LC-MS/MS	0.01	101	1	10	5	DSPE		5	Micro Loop	LC-MS/MS	
038	NA												
039	NA												
040	NA												
041	M	LC-MS/MS	0.05	107	1	20/5	1			20		LC-MS/MS	2
042	NA												
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-ECD, GC-MS	6
044	M	GC-TOF	0.025	82	1	15	4			10	Full Loop	LC-MS/MS	
045	NA												
046	M	LC-MS/MS	0.05	103	1	15	5	DSPE		50		LC-MS/MS	23
047	NA												
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	NA												
050*	S		0.05			100	3	O		0.1	Splitless	GC-ECD	
051	M	LC-MS/MS	0.01	91	1	75	1			5		LC-MS/MS	30
052	M	LC-MS/MS	0.01			10	5	DSPE	TPP	3		LC-MS/MS	23

APPENDIX 8. Methods used by participants for determining pesticides.

ACETAMIPRID													
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 71)
053	S	LC-MS	0.05			10	1			25		HPLC-MS	
054	NA												
055	NA												
056	S	HPLC-UV	0.05	103.5	1	30	1	GPC		0.5	Direct	GC-ECD	21
057	M	LC-MS/MS	0.01			10	5	PSA	TPP	20		LC-MS/MS	23
058	NA												
059*	S		0.01			50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	M		0.01	112	1	10	6	LL		10		LC-MS/MS	23
061	S		0.05	89.7	1	30	1	GPC		20	Rheodyne	LC-MS	21
062	NA												
063	M	LC-MS/MS	0.01			10	6	LL		20	Loop	LC-MS/MS (triple-quad)	
064	M	LC-MS	0.01	98	1	10	5	O		2	Autosampler	HPLC-MS	23
065	S	GC-NPD	0.05	71.6	1	30	1			1	Splitless	GC-NPD	21
066	M	LC-MS/MS	0.01	88	1	100	2	GPC		20		LC-MS/MS	5
067	NA												
068	M	LC-MS/MS	0.05			10	5			20		LC-MS/MS	23
069	M	LC-MS/MS	0.01	93.4	1	10	6	SPE	TPP	10		LC-MS/MS	18
070	NA												
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-NPD	23
072*	S		0.05			100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS (ion trap)	6
073	NA												
074	S	GC-ECD	0.05	102	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	HPLC-UV	0.05			10	5	SPE	3	2	Splitless	HPLC-DAD/FL	23
076	M		0.01			50	2	LL		5		LC-MS/MS	12
077	NA												
078	NA												
079	M	LC-MS/MS	0.01	111	1	20	6	SPE		35		LC-MS/MS	

APPENDIX 8. Methods used by participants for determining pesticides.

ACETAMIPRID													
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 71)
080	M	GC-ECD	0.05	69.4	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	LC-MS/MS	0.05	94	1	10	1	SPE	yes	10	Loop	LC-MS/MS	12
082	M	LC-MS/MS	0.005			10	5	O		20		LC-MS/MS (triple-quad)	23
083	M	LC-MS/MS	0.05	90	1	10	5			7	Partial	LC-MS	23
084	M	LC-MS/MS	0.01	98	1	10	6			10		LC-MS/MS	
085	S	LC-MS/MS	0.05	89	1	50	6	SPE		25		LC-MS/MS	18
086	S	HPLC-PDA	0.01	97	1	20	6	LL, SPE		20		HPLC-UV	
087	M	LC-MS/MS	0.01	92	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
088	S	LC-MS/MS	0.005			10	6	Diatomaceous earth	TPP	25		LC-MS/MS	18
089	S	GC-ECD	0.04	118	1	50	1	GPC		10	Rheodyne	HPLC-DAD	6
090	M	LC-MS	0.05	99	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	NA												
092	M	GC-MS	0.05	97	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	HPLC-UV	0.05	104.3	1	15	1	SPE		20	Solvent Injection	HPLC-UV	21
094	NA												
095	M	LC-MS/MS	0.01			10	5	SPE		20	Loop	LC-MS/MS	23
096	M	LC-MS/MS	0.05	90	1	10	1			2.1		LC-MS/MS	12
097	M		0.010	75	1	20	1			20		LC-MS/MS	6
098	NA												
099	S	LC-MS/MS	0.01	91.1	1	20	4			5	Loop	LC-MS/MS	2
100	M	LC-MS/MS	0.005	102	1	5	1			5		LC-MS/MS	16
101	S	HPLC-DAD	0.05	104	1	30	1			0.1	TPOCI	GC-ECD	21
102	M	GC-MS	0.1			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	LC-MS	0.05			20	6	SPE	Isoproturon	15		HPLC-MS	18
104	S	LC-MS/MS	0.01	110	1	50	4	LL		5	Loop	LC-MS/MS	26
105	S	LC-MS/MS	0.05	80	2	20	CH_2Cl_2	GPC		20		LC-MS/MS	

APPENDIX 8. Methods used by participants for determining pesticides.

ACETAMIPRID													
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 71)
106	NA												
107	M	LC-MS/MS	0.05			10	5	O	Atrazin D5, TPP	20		LC-MS/MS	23
108	NA												
109	NA												
110	NA												
111	NA												
112	NA												
113	NA												
114	NA												
115	M	LC-MS/MS	0.01	89	2	10	5	LL		10		LC-MS/MS	21
116	M	GC-MS	0.02	83	1	15	4+Natrium Sulphate			1	PTV	GC-MS (single-quad)	22
117	NA												
118	NA												
119	NA												
120	NA												
121	M	LC-MS/MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	NA												
123	NA												
124	M	LC-MS/MS	0.01	89.7	1	15	1		TPP	10		LC-MS/MS	
125	NA												
126	NA												
127	M		0.01	103	1	10	5	SPE	TPP	3		LC-MS/MS ESI (+)	23
128	NA												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

AZOXYSTROBIN													
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 71)
001	M	LC-MS/MS	0.004	95	1	12.5	5	-		7		LC-MS/MS	19
002	NA												
003	S	GC-MS	0.02	109	1	15	4			2	Splitless	GC-µECD-NPD	2
004	M	GC-ECD	0.01			12	5	DSPE	Mirex / TPP	2	Split/Splitless	GC-ECD, GC-NPD	23
005	M	GC-MS	0.005	103	1	20	6	SPE	TPP	5		LC-MS/MS	23
006	S	LC-MS/MS	0.01	86	2	15	4			10		LC-MS/MS	2
007	M	GC-MS	0.02	89	1	15	4			1	Splitless	GC-MS	22
008	M	GC-MS	0.05	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.05	105.7	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	88.5	1	15	5	O		20		HPLC-UV/DAD	23
011	M	LC-MS/MS	0.01	101	1	50	1			5		LC-MS/MS	12
012	S	HPLC-DAD	0.01	81	2	10	1	GPC	yes	25	Autosampler	HPLC-DAD	15
013	M	LC-MS/MS	0.01	95.4	1	10	CH_3OH/H_2O buffered		yes	5	Partial Loop	LC-MS/MS	12
014	M	GC-MS	0.05	>80	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015	M	GC-MS	0.05	118	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.02	82	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	HPLC	0.03	78.1	1	30	1	GPC		1	Split 1/10	GC-ECD	21
018	S	GC-MS	0.05	81	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	M	GC-ECD	0.05	97.7	1	6.25	4			1	Splitless	GC-ECD	14
020	S	GC-NPD	0.02	100	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.05			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	94	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	GC-MS	0.05	76	1	75	acetone, cyclohexan and ethylacetate	GPC		1		GC-NPD	5
024	NA												
025	M	LC-MS/MS	0.05			10	1		TPP	20		LC-MS/MS	

APPENDIX 8. Methods used by participants for determining pesticides.

AZOXYSTROBIN													
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 71)
026	M		0.013			10	5	SPE		2	Split/Splitless	GC-MS	23
027	S		0.02	91	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028	NA												
029	M	GC-MS/MS	0.03	88.8	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030	M	GC-MS	0.02	98	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	LC-MS/MS	0.01	93	1	15	4			5	Loop	LC-MS/MS	
032	S	GC-MS	0.05	70	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	LC-MS/MS	0.01	115	1	10	5	DSPE	TPP	3		LC-MS/MS	23
034	M	GC-MS	0.01	93	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-ECD-NPD	0.02	125	1	15	4		PCB 97 (ECD) Trifluralin (NPD)	1 2	Split/Splitless	GC-ECD-NPD	2
036	S	GC-MS	0.01	69.2	1	10	6	LLE		20		LC-MS/MS	18
037	M	GC-MS	0.01	100	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.02			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	NA												
040	NA												
041	M	LC-MS/MS	0.05	92	1	20/5	1			20		LC-MS/MS	2
042	NA												
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-ECD, GC-MS	6
044	M	GC-TOF	0.05	92	1	15	4			10	Full Loop	LC-MS/MS	
045	NA												
046	M	LC-MS/MS	0.05	79	1	15	5	DSPE		50		LC-MS/MS	23
047	S	GC-ECD	0.05	93		5	3			2	Splitless	GC-ECD, GC-NPD	
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	M	GC-MS	0.05			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-NPD	0.05	90	2	100	3	O		0.1	Splitless	GC-ECD	
051	M	LC-MS/MS	0.01	85	1	75	1			5		LC-MS/MS	30

APPENDIX 8. Methods used by participants for determining pesticides.

AZOXYSTROBIN													
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 71)
052	M	LC-MS/MS	0.01			10	5	DSPE	TPP	3		LC-MS/MS	23
053	M	GC-MS	0.05			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	S	GC-MS	0.05	85	2	50	acetone acetone 3 3	SPE	M series Ronnel M series Ronnel	2 1 2 1	Splitless	GC-ECD GC-MS (single quad) GC-ECD GC-MS (single quad)	12
055	NA												
056	S	HPLC-UV	0.01	97.2	1	30	1	GPC		0.5	Direct	GC-ECD	21
057	M	LC-MS/MS	0.01			10	5	PSA	TPP	20		LC-MS/MS	23
058	NA												
059	S	GC-ECD	0.01	70	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	M		0.01	103	1	10	6	LL		10		LC-MS/MS	23
061	S	GC-ECD	0.005	100.9	1	30	1	GPC		20	Rheodyne	LC-MS	21
062	S	Different Column		77	2	10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.02			10	6	LL		2	PTV	GC-MS (single-quad)	
064	M	GC-MS	0.02	113	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-ECD	0.05	90.7	1	30	1			1	Splitless	GC-ECD	21
066	M	GC-ECD	0.005	75.9	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-ECD	0.01	108	1	10	5	SPE		1 to 2	Splitless/PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.01			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.05	80	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	S	LC-MS	0.05	114	1	10	4			5	Loop	LC-MS/MS	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-ECD	23
072	S	GC-MS	0.05	72	1	100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS(ion trap)	6
073	NA												
074	S	GC-ECD	0.05	108	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15

APPENDIX 8. Methods used by participants for determining pesticides.

AZOXYSTROBIN													
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 71)
075	M	GC-MS	0.05			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			50	2	LL		5		LC-MS/MS	12
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078	NA												
079	M	GC-MS	0.02	87	1	50	acetone/water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	94.8	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	LC-MS/MS	0.05	72	1	10	1	SPE	yes	10	Loop	LC-MS/MS	12
082	M	LC-MS/MS	0.005			10	5	O	- TPP	20 2	PTV	LC-MS/MS (triple-quad) GC-MS (single-quad)	23
083	M	GC-MS LC-MS/MS	0.05	92	1	30 30 10	1 1 5	GPC SPE -	TPP TPP -	3 3 7	Splitless Splitless Partial	GC-MS GC-MS LC-MS	12 12 23
084	M	GC-ECD	0.01	79	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD, GC-NPD, GC-ITD	
085	M	GC-MS	0.05	104	1	50	2	GPC		1	OC, SS	GC-NPD	5
086	NA												
087	M	LC-MS/MS	0.01	97	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
088	S	LC-MS/MS	0.005			10	6	Diatomaceous earth	TPP	25		LC-MS/MS	18
089	M	GC-MS	0.05	60	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	GC-MS	0.05	99	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	80	1	50	3	SPE		1	Splitless	GC-ECD	6
092	M	GC-MS	0.05	85	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	HPLC-UV	0.05	88.6	1	15	1	SPE		20	Solvent Injection	HPLC-UV	21
094	M	GC-ECD	0.02	70	1	25	7	O		2	Splitless	GC-ECD	2
095	M	GC-ECD, GC-NPD	0.03			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	LC-MS/MS	0.05	92	1	10	1			2.1		LC-MS/MS	12
097	M		0.010	65	1	20	1			20		LC-MS/MS	6
098	NA												
099	S	LC-MS/MS	0.01	90.4	1	20	4			5	Loop	LC-MS/MS	2

APPENDIX 8. Methods used by participants for determining pesticides.

AZOXYSTROBIN													
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 71)
100	M	GC-MS	0.04	75	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	6
101	S	HPLC-DAD	0.05	103	1	30	1			0.1	TPOCI	GC-ECD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	GC-ECD	0.03			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	DFG S19
104	S	GC-MS	0.03	127	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	70	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.5	120	2	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-MS	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-NPD	0.02			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.2	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-ECD	15
110	S	GC-MS	0.05	91	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.05			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	GC-ECD	0.005	86	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	9
114	S	GC-MS	0.05	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	LC-MS/MS	0.05	99	1	10	5	LL		10		LC-MS/MS	21
116	M	GC-MS	0.02	92	1	15	4			1	PTV	GC-MS	22
117	NA												
118	NA												
119	S	GC-MS	0.05	85	2	40	3	LL		1	Split/Splitless	GC-ECD, GC-NPD, GC-MS	6
120	S	GC-MS	0.05			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	LC-MS/MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	S	GC-ECD	0.05	73.34	2	5	3	GPC		2	Pulsed splitless	GC-ECD	
123	M	GC-MS	0.02	95	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	M	LC-MS/MS	0.05	82.6	1	15	1		TPP	10		LC-MS/MS	

APPENDIX 8. Methods used by participants for determining pesticides.

AZOXYSTROBIN													
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 71)
125	S	GC-ECD	0.2	79.4	1	5	CH_2Cl_2	DSPE		1	Splitless	GC-NPD	
126	M		0.05			15	1			10		LC-MS/MS	17
127	M	LC-MS/MS	0.01	90	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	23
128	S	GC-MS	0.05	94	1	25	2	GPC		1	Splitless	GC-MS	1

APPENDIX 8. Methods used by participants for determining pesticides.

BIFENTHRIN													
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 71)
001	M	GC-MS	0.004	96	1	25	1	GPC		1	Pulsed Splitless	GC-ECD, GC-NPD,GC-MS (single-quad)	19
002	M	GC-MSD	0.01	92.3	1	15	5	DSPE		10	LVI	GC-ITD (MS/MS)	23
003	S	GC-MS	0.01	96.8	1	15	4			2	Splitless	GC-µECD-NPD	2
004	S	GC-MS	0.01			12	5	DSPE	Mirex / TPP	1	Split/Splitless	GC-MS	23
005	M	GC-MS	0.005	81	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.01	91	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	80	1	15	4			1	Splitless	GC-MS	22
008	M	GC-MS	0.02	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	82.6	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	99.7	1	25	1	O		2	Split/Splitless	GC-ECD	21
011	M	GC-ITD, GC-ECD	0.05	99	1	50	1	GPC		1 2	Splitless	GC-ITD GC-ECD	12
012	S	GC-MS	0.01	73	2	10	1	GPC	yes	1	PTV	GC-ITD	15
013	M	GC-MS	0.05	89.2	1	50	Acetone	LL (isopropyl ether)		2	Splitless	GC-ECD, GC-NPD	22
014	M	GC-MS	0.05	>90	2	90	3	GPC + SPE	Aldrin	1.5	Split/Splitless	GC-ECD	5
015	M	GC-MS	0.05	92	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.03	108	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-MS	0.02	77.6	1	30	1	GPC		1	Split 1/10	GC-ECD	21
018	S	GC-MS	0.05	93	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	NA												
020	S	GC-ECD	0.01	70	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.05			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	88	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	S	GC-MS	0.05	73	1	75	acetone, cyclohexan and ethylacetate	GPC		1		GC-ECD	5
024	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

BIFENTHRIN													
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 71)
025	M	GC-MS	0.01			10	1		TPP	10		GC-MS/MS	
026	M		0.013			10	5	SPE		2	Split/Splitless	GC-MS	23
027	S		0.02	73	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028	S	GC-ECD	0.003	70	2	100	acetone, n-hexane, toluene	GPC,SPE		10	Solvent Vent PTV	GC-ECD	6
029	M	GC-MS/MS	0.02	99.7	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030	M	GC-MS	0.005	103	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	GC-MS	0.03	91	1	15	4		Bromofos-methyl	2	Split/Splitless Splitless mode	GC-MS(ITD)	
032	S	GC-MS	0.05	70	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	GC-MS	0.01	104	1	10	5	DSPE	Mirex	1	Solvent Vent PTV	GC-ECD, GC-MSD	
034	M	GC-MS	0.01	77	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-ECD-NPD	0.01	114	1	15	4		PCB 97 (ECD) Trifluralin (NPD)	1 2	Split/Splitless	GC-ECD-NPD	2
036	S	GC-MS	0.01	71.4	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80/20)	SPE - florisil		1	Direct	GC-ECD	6
037	M	GC-MS	0.01	103	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.01			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	S		0.0025	81	2	20	6	LL		10	Solvent Vent PTV	GC-ECD	6
040	S	GC-MS	0.05	102	2	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	M	GC-MS	0.02	112	1	20/5	1			2	Spliless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	2
042	NA												
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-ECD, GC-MS	6
044	M	GC-TOF	0.05	100	1	15	4		Hexachloro-benzene	1	Splitless	GC-ITD	
045	M	GC-MS	0.03	95	2	15	6	SBSE			TDU-CIS	GC-MS (single quad)	3
046	M	GC-MS/MS	0.02	105.3	1	15	4			10	PTV	GC-MS/MS	2
047	S	GC-ECD	0.05	96		5	3			2	Splitless	GC-ECD, GC-NPD	
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15

APPENDIX 8. Methods used by participants for determining pesticides.

BIFENTHRIN													
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 71)
049	M	GC-MS	0.05			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-ECD	0.05	91	2	100	3	O		0.1	Splitless	GC-ECD	
051	M	GC-ITD	0.05	96	1	75	1	GPC	Ditalimphos	2	Splitless	GC-ITD	30
052	M	GC-MS	0.02			10	5	DSPE	Triphenyl-methane	2	PTV	GC-MS	23
053	M	GC-MS	0.02			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	NA												
055	NA												
056	S	GC-MS	0.01	102.6	1	30	1	GPC		0.5	Direct	GC-ECD	21
057	S	GC-MSD	0.05			100	2	GPC, SPE		1	Splitless	GC-ECD, GC-MSD	5
058	M	GC-MS	0.05			15	4	-		1/10		GC-ECD, GC-TSD,GC-MS	2
059	S	GC-ECD/MS	0.01	85	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	S		0.01	81	1	50	2	GPC	tr-HCEO	2	Split/Splitless	GC-ECD	5
061	S		0.01	95	2	30	1	GPC		1	SPI	GC-ECD	21
062	S	Different Column				10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.005			80	2	GPC		1	Splitless	GC-ECD (single-quad)	
064	M	GC-MS	0.02	101	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-ECD	0.02	93.2	1	30	1			1	Splitless	GC-ECD	21
066	M	GC-ECD	0.005	79.1	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-ECD	0.005	100	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.02			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.05	105	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	M	GC-MS	0.05	127	1	5	acetone/ hexane/ ethyl acetate			2	Splitless	GC-MS/MS	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-ECD	23
072	S	GC-MS	0.05	73	1	100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS(ion trap)	6

APPENDIX 8. Methods used by participants for determining pesticides.

BIFENTHRIN													
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 71)
073	NA												
074	S	GC-ECD	0.05	92	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.05			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			10	5	DSPE		2	PTV	GC-MS (single-quad)	23
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078	M	GC-ECD	0.05	102	1	15	4			3 to 1	Pulsed Splitless/ on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	57	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	95.2	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	GC-MS	0.05	98	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082	M	GC-MS	0.01			10	5	O	TPP	2	PTV	GC-MS (single-quad)	23
083	M	GC-MS	0.05	93	1	30	1	GPC SPE	TPP	3	Splitless	GC-MS	12
084	M	GC-ITD	0.02	134	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD, GC-NPD, GC-ITD	
085	S	GC-MS	0.05	101	1	50	2	GPC		1	OC, SS	GC-ECD	5
086	S	GC-ECD	0.02	105	1	50	3	LL, SPE		2		GC-ECD, GC-NPD	
087	M	GC-MS/MS	0.01	97	1	10	5	DSPE		2	Split/Spliless	GC-MS/MS (Triple-Quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	M	GC-MS	0.05	100	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	GC-MS	0.05	78	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	85	2	25	3	O		1	Split/Splitless	GC-ECD	6
092	M	GC-MS	0.05	65	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.01	98.3	1	15	1			5	Splitless	GC-MS (ion-trap)	21
094	M	GC-ECD	0.02	104	1	25	7	O		2	Splitless	GC-ECD	2
095	M	GC-ECD	0.03			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	GC-MS/MS	0.05	77	1	10	1	GPC	DDE-pp D8	1	Direct	GC-MS and GC-MS/MS	12
097	M	GC-MS	0.010	85	1	20	1			2	Splitless	GC-ECD	6
098	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

BIFENTHRIN													
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 71)
099	M	GC-MS	0.01	94	1	20	4		TPP	20	PTV	GC-MS	2
100	M	GC-MS	0.02	90	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	6
101	S	GC-MS	0.05	97.7	1	30	1			0.1	TPOCI	GC-ECD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	GC-ECD	0.03			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	DF G S19
104	S	GC-MS	0.02	99	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	77	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.01	80	1	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-ECD	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-ECD	0.02			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-ECD	15
110	S	GC-MS	0.05	75	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.05			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	GC-ITD	0.006	103	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	9
114	S	GC-MS	0.05	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	GC-TOF	0.03	89	2	25	1	GPC		2	Splitless	GC-ECD	21
116	M	GC-MS	0.02	95	1	15	4			1	PTV	GC-MS	22
117	NA												
118	S	GC-MS	0.01	64.1	1	100	7	SPE		1	Direct	GC-ECD	6
119	S	GC-MS	0.02	85	2	40	3	LL		1	Split/Splitless	GC-ECD, GC-NPD, GC-MS	6
120	NA												
121	M	GC/MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	S	GC-ECD	0.05	81.98	2	5	3	GPC		2	Pulsed splitless	GC-ECD	

APPENDIX 8. Methods used by participants for determining pesticides.

BIFENTHRIN													
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 71)
123	M		0.02	89	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	M	GC-MS/MS	0.01	81.5	1	15	1		TPP	10		GC-ITD	
125	S	GC-ECD	0.01	77.4	1	5	diethyl ether, n-hexane	DSPE		1	Splitless	GC-ECD	
126	M		0.02			15	1			10		GC-MS/MS	17
127	M	LC-MS/MS	0.01	102	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	23
128	M	GC-MS	0.05	93	1	25	2	GPC		1	Splitless	GC-MS	1

APPENDIX 8. Methods used by participants for determining pesticides.

BROMOPROPYLATE													
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 71)
001	M	GC-MS	0.004	94	1	25	1	GPC		1	Pulsed Splitless	GC-ECD, GC-NPD,GC-MS (single-quad)	19
002	M	GC-MSD	0.01	96.2	1	15	5	DSPE		10	LVI	GC-ITD (MS/MS)	23
003	S	GC-MS	0.01	117	1	15	4			2	Splitless	GC-µECD-NPD	2
004	S	GC-MS	0.01			12	5	DSPE	Mirex / TPP	1	Split/Splitless	GC-MS	23
005	M	GC-MS	0.005	92	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.01	72	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	80	1	15	4			1	Splitless	GC-MS	22
008	M	GC-MS	0.01	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	102.2	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	99.7	1	25	1	O		2	Split/Splitless	GC-ECD	21
011	M	GC-ITD	0.01	104	1	50	1	GPC		1	Splitless	GC-ITD	12
012	S	GC-MS	0.01	71	2	10	1	GPC	yes	1	PTV	GC-ITD	15
013	M	GC-MS	0.05	93.3	1	50	Acetone	LL (isopropyl ether)		2	Splitless	GC-ECD, GC-NPD	22
014	M	GC-MS	0.05	>80	2	90	3	GPC + SPE	Aldrin	1.5	Split/Splitless	GC-ECD	5
015	M	GC-MS	0.05	94	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.03	102	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-MS	0.1	77.8	1	30	1	GPC		1	Split 1/10	GC-ECD	21
018	S	GC-MS	0.05	79	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	M	GC-MS	0.05	86.5	1	6.25	4			1	Splitless	GC-ECD	14
020	S	GC-ECD	0.01	77	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.05			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	91	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	S	GC-MS	0.05	103	1	75	acetone, cyclohexan and ethylacetate	GPC		1		GC-ECD	5
024	M	GC-MS	0.02	89	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26

APPENDIX 8. Methods used by participants for determining pesticides.

BROMOPROPYLATE													
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 71)
025	M	GC-MS	0.02			10	1		TPP	10	GC-MS/MS		
026	M		0.005			10	5	SPE		2	Split/Splitless	GC-MS	23
027	S		0.02	89	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028	S	GC-ECD	0.003	70	2	100	acetone, n-hexane, toluene	GPC,SPE		10	Solvent Vent PTV	GC-ECD	6
029	M	GC-MS/MS	0.01	82.2	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030	M	GC-MS	0.008	104	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	GC-MS	0.03	94	1	15	4		Bromofos-methyl	2	Split/Splitless Splitless mode	GC-MS(ITD)	
032	S	GC-MS	0.05	90	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	GC-MS	0.01	96	1	10	5	DSPE	Mirex	1	Solvent Vent PTV	GC-ECD, GC-MSD	
034	M	GC-MS	0.01	100	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-ECD-NPD	0.01	116	1	15	4		PCB 97 (ECD) Trifluralin (NPD)	1 2	Split/Splitless	GC-ECD-NPD	2
036	S	GC-MS	0.01	48.4	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80/20)	SPE - florisil		1	Direct	GC-ECD	6
037	M	GC-MS	0.01	99	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.01			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	S		0.0025	81	2	20	6	LL		10	Solvent Vent PTV	GC-ECD	6
040	S	GC-MS	0.05	90	1	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	M	GC-MS	0.02	99	1	20/5	1			2	Spliless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	2
042	NA												
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-ECD, GC-MS	6
044	M	GC-TOF	0.05	97	1	15	4		Hexachloro-benzene	1	Splitless	GC-ITD	
045	M	GC-MS	0.03	94	2	15	6	SBSE			TDU-CIS	GC-MS (single quad)	3
046	M	GC-MS/MS	0.05	107.2	1	15	4			10	PTV	GC-MS/MS	2
047	S	GC-ECD	0.05	94		5	3			2	Splitless	GC-ECD, GC-NPD	
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15

APPENDIX 8. Methods used by participants for determining pesticides.

BROMOPROPYLATE													
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 71)
049	M	GC-MS	0.05			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-ECD	0.05	98	2	100	3	O		0.1	Splitless	GC-ECD	
051	M	GC-ITD	0.02	105	1	75	1	GPC	Ditalimphos	2	Splitless	GC-ITD	30
052	M	GC-MS	0.01			10	5	DSPE	Triphenyl-methane	2	PTV	GC-MS	23
053	M	GC-MS	0.03			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	S	GC-MS	0.01	82	2	50	acetone acetone 3 3	SPE	M series Ronnel M series Ronnel	2 1 2 1	Splitless	GC-ECD GC-MS (single quad) GC-ECD GC-MS (single quad)	12
055	NA												
056	S	GC-MS	0.01	101	1	30	1	GPC		0.5	Direct	GC-ECD	21
057	M	LC-MS/MS	0.01			10	5	PSA	TPP	20		LC-MS/MS	23
058	M	GC-MS	0.05			15	4	-		1/10		GC-ECD, GC-TSD,GC-MS	2
059	S	GC-ECD/MS	0.01	80	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	S		0.01	97	1	50	2	GPC	tr-HCEO	2	Split/Splitless	GC-ECD	5
061	S		0.01	92	2	30	1	GPC		1	SPI	GC-ECD	21
062	S	Different Column		91	2	10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.005			10	6	LL		2	PTV	GC-MS (single-quad)	
064	M	GC-MS	0.02	93	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-ECD	0.02	99.5	1	30	1			1	Splitless	GC-ECD	21
066	M	GC-ECD	0.005	78.7	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-ECD	0.005	97	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.01			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.03	96	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	S	GC-ECD	0.05	107	1	20	hexane/ isopropyl-ether/ isooctane		Mirex	2	Splitless	GC-ECD	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-ECD	23

APPENDIX 8. Methods used by participants for determining pesticides.

BROMOPROPYLATE													
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 71)
072	S	GC-MS	0.05	99	1	100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS(ion trap)	6
073	M	GC-MS	0.02	90	1	50	1			1	Auto Injection	GC-MS (single-quad)	30
074	S	GC-ECD	0.01	72	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.02			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			10	5	DSPE		2	PTV	GC-MS (single-quad)	23
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078	M	GC-ECD	0.05	98	1	15	4			3 to 1	Pulsed Splitless / on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	64	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	96.5	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	GC-MS	0.05	82	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082	M	GC-MS	0.01			10	5	O	TPP	2	PTV	GC-MS (single-quad)	23
083	M	GC-MS	0.05	93	1	30	1	GPC SPE	TPP	3	Splitless	GC-MS	12
084	M	GC-ITD	0.02	98	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	
085	S	GC-MS	0.05	105	1	50	2	GPC		1	OC, SS	GC-ECD	5
086	S	GC-ECD	0.01	99	1	50	3	LL, SPE		2		GC-ECD, GC-NPD	
087	M	GC-MS/MS	0.01	97	1	10	5	DSPE		2	Split/Spliless	GC-MS/MS (Triple-Quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	M	GC-MS	0.05	85	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	GC-MS	0.05	102	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	60	1	25	3	O		1	Split/Splitless	GC-ECD	6
092	M	GC-MS	0.05	74	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.01	97.1	1	15	1			5	Splitless	GC-MS (ion-trap)	21
094	M	GC-ECD	0.02	103	1	25	7	O		2	Splitless	GC-ECD	2
095	M	GC-ECD	0.02			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	GC-MS/MS	0.05	86	1	10	1	GPC	DDE-pp D8	1	Direct	GC-MS and GC-MS/MS	12
097	M	GC-MS	0.010	88	1	20	1			2	Splitless	GC-ECD	6
098	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

BROMOPROPYLATE													
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 71)
099	M	GC-MS	0.01	76.1	1	20	4		TPP	20	PTV	GC-MS	2
100	M	GC-MS	0.02	93	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	6
101	S	GC-MS	0.02	102.7	1	30	1	GPC		0.1	TPOCI	GC-ECD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	GC-ECD	0.02			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	5
104	S	GC-MS	0.02	96	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	96	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.01	80	1	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-ECD	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-ECD	0.01			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-ECD	15
110	S	GC-MS	0.05	71	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.05			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	GC-ITD	0.025	94	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	9
114	S	GC-MS	0.05	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	GC-TOF	0.01	118	2	25	1	GPC		2	Splitless	GC-ECD	21
116	M	GC-MS	0.02	80	1	15	4			1	PTV	GC-MS	22
117	S	GC-MS	0.01	88	2	50	6	SPE	yes	1	Splitless	GC-ECD	15
118	M	GC-MS	0.002	76.97	1	100	3	GPC		1	Splitless	GC-ECD, GC-NPD	6
119	S	GC-MS	0.02			40	3	LL		1	Split/Splitless	GC-ECD,GC-NPD, GC-MS	6
120	S	GC-MS	0.01			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	GC-MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	S	GC-ECD	0.05	81.28	2	5	3	GPC		2	Pulsed splitless	GC-ECD	
123	M		0.01	95	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	

APPENDIX 8. Methods used by participants for determining pesticides.

BROMOPROPYLATE													
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 71)
124	M	GC-MS/MS	0.05	87.8	1	15	1		TPP	10		GC-ITD	
125	S	GC-ECD	0.02	76.2	1	5	CH_2Cl_2 Acetone	DSPE		1	Splitless	GC-ECD	
126	M		0.05			15	1			10		GC-MS/MS	17
127	M		0.01	100	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	23
128	M	GC-MS	0.05	124	1	25	2	GPC		1	Splitless	GC-MS	1

APPENDIX 8. Methods used by participants for determining pesticides.

CARBARYL													
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 71)
001	M	LC-MS/MS	0.004	104	1	12.5	5	-		7		LC-MS/MS	19
002*	M	GC-MSD	0.01			15	5	DSPE		10	LVI	GC-ITD (MS/MS)	23
003	S	HPLC-FL	0.04	97	1	20	4	GPC		50		HPLC-FL	2
004	M	LC-MS/MS	0.001			12	5	DSPE		20		LC-MS/MS	23
005	M	GC-MS	0.02	96	1	20	6	SPE	TPP	5		LC-MS/MS	23
006	S	GC-ITD	0.02	80	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	LC-MS/MS	0.01	107	1	10	6			5		LC-MS/MS	18
008	M	GC-MS	0.05	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	92.4	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	90.2	1	15	5	O		20		HPLC-UV/DAD	23
011	M	LC-MS/MS GC-ITD	0.01	100	1	50	1	- GPC		5 1	- Splitless	LC-MS/MS GC-ITD	12
012	S	HPLC-DAD	0.01	78	2	10	1	GPC	yes	1 25	PTV Autosampler	GC-ITD HPLC-DAD	15
013	M	LC-MS/MS	0.01	83.5	1	10	methanol/ water buffered		yes	5	Partial Loop	LC-MS/MS	12
014	M	GC-MS	0.05	>70	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015	S	LC-MS/MS	0.05	115	1	15	5	DSPE		20		LC-MS/MS	20
016	M	GC-MS	0.03	101	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-MS	0.05	114.8	1	30	1			1	Splitless	GC-ITD	21
018	S	GC-MS	0.05	88	2	50	3	LL		10	Rheodyne Valve	Post Column Derivatization HPLC-FLD	12
019	M	HPLC-FLD	0.1	79.1	1	0.75	4			100		HPLC-FLD	14
020	M	GC-MS	0.01	130	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.05			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	86.5	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	LC-MS/MS	0.05	78	1	10	6			20		LC-MS/MS	25
024	M	GC-MS	0.25	104	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
025	M	LC-MS/MS	0.1			10	1		TPP	20		LC-MS/MS	

APPENDIX 8. Methods used by participants for determining pesticides.

CARBARYL													
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 71)
026	M	GC-MS	0.001			10	5	SPE		10		LC-MS/MS	23
027	NA												
028	NA												
029	M	GC-MS/MS	0.05	93.1	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030	S	HPLC-DAD	0.006	97	2	10	5	DSPE (PSA)		50		HPLC-DAD	23
031	M	LC-MS/MS	0.01	97	1	15	4			5	Loop	LC-MS/MS	
032	S	GC-MS	0.05	70	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	LC-MS/MS	0.01	107	1	10	5	DSPE	TPP	3		LC-MS/MS	23
034	M	GC-MS	0.01	99	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	S	LC-MS/MS	0.01	95	1	10	6	LL on Chem Elut		25		LC-MS/MS	18
036	S	GC-MS	0.01	74.8	1	10	6	LLE		20		LC-MS/MS	18
037	M	GC-MS	0.01	87	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.02			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	S		0.03	90	2	10	4	SPE		20	Auto sampler	HPLC-FLD	7
040	S	GC-MS	0.05	92	1	25	3	DSPE		20	Rheodyne Valve	HPLC-FLD (Pickering)	15
041	M	GC-MS	0.02	117	1	20/5	1			2	Spliless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	2
042	S	GC-MS	0.01	1.83	1	50	CH_2Cl_2	SPE		10		HPLC-FLD derivatized post column	28
043	M	LC-MS/MS	0.05			5	1	LL		25		LC-MS/MS	32
044	M	GC-TOF	0.05	95	1	15	4		Hexachloro-benzene	1	Splitless	GC-ITD	
045	NA												
046	M	LC-MS/MS	0.05	88.5	1	15	5	DSPE		50		LC-MS/MS	23
047	NA												
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	NA												
050	NA												
051	M	LC-MS/MS	0.01	92	1	75	1			5		LC-MS/MS	30
052	M	LC-MS/MS	0.01			10	5	DSPE	TPP	3		LC-MS/MS	23

APPENDIX 8. Methods used by participants for determining pesticides.

CARBARYL													
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 71)
053	S	LC-MS	0.05			10	1			25		HPLC-MS	
054	S	GC-MS	0.05	80	2	50	Acetone 3	SPE	Ronnel	1	Splitless	GC-MS (single-quad)	
055	NA												
056	S	GC-MS	0.05	97.3	1	30	1			1	Wide Bore	GC-NPD	21
057	M	LC-MS/MS	0.01			10	5	PSA	TPP	20		LC-MS/MS	23
058	NA												
059	S	GC-MS	0.01	65	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	M		0.01	99	1	10	6	LL		10		LC-MS/MS	23
061	S	LC-MS	0.05			30	1	GPC		0.5-1	Splitless	GC-NPD	21
062	S	Different Column				10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	LC-MS/MS	0.02			10	6	LL		20	Loop	LC-MS/MS (triple-quad)	
064	M	GC-MS	0.02	81	1	10	5			2	PTV	GC-MS	23
065	S	GC-NPD	0.05	108.5	1	30	1			1	Splitless	GC-NPD	21
066	M	HPLC-UV	0.001	119	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-MS	0.02	85	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.1			50	3	GPC		2	PTV	GC-MS	5
069	M	LC-MS/MS	0.01	102.3	1	10	6	SPE	TPP	10		LC-MS/MS	18
070	S	LC-FL	0.05	93	1	50	4			20	Loop	HPLC-FL	12
071*	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless		23
072	NA												
073	M	GC-MS	0.03	94	1	50	1			1	Auto Injection	GC-MS (single-quad)	30
074	S	GC-NPD	0.05	105	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.02			50	CH_2Cl_2	SPE	BDMC	20		HPLC-FLD with ND	1
076	M		0.01			50	2	LL		5		LC-MS/MS	12
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

CARBARYL													
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 71)
079	M	GC-MS	0.02	67	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	97.3	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	LC-MS/MS	0.05	88	1	10	1	SPE	yes	10	Loop	LC-MS/MS	12
082	M	LC-MS/MS	0.005			10	5	O	- TPP	20 2	-PTV	LC-MS/MS (triple-quad) GC-MS (single-quad)	23
083	M	GC-MS LC-MS/MS	0.05	93	1	30 10	1 5	GPC -	TPP -	3 7	Splitless Partial	GC-MS LC-MS	12 23
084	M	LC-MS/MS	0.01	96	1	10	methanol/ ammonia acetate/ AcH (95:5)		$^{13}C_6$	10		LC-MS/MS	
085	S	HPLC-FLD	0.016	89	1	25	3	LL, SPE		20		HPLC-FL-post column derivatisation system	18
086	M	LC-MS/MS	0.01	99	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
087	M	LC-MS/MS	0,01	98	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	S	GC-MS	0.01	72	1	50	1	GPC	Trimetacarb	200	Rheodyne	HPLC-FLD	6
090	M	LC-MS	0.05	78	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	HPLC-FLD	0.01	96	2	1	4	SPE	Trimethacarb	100		HPLC-FLD	7
092	M	GC-MS	0.05	105	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	HPLC-UV	0.05	89.9	1	15	1	SPE		20	Solvent Injection	HPLC-UV	21
094	NA												
095	M	LC-MS/MS	0.01			10	5	SPE		20	Loop	LC-MS/MS	23
096	M	LC-MS/MS	0.02	89	1	10	1			2.1		LC-MS/MS	12
097	M		0.010	80	1	20	1			20		LC-MS/MS	6
098	NA												
099	S	LC-MS/MS	0.01	91.8	1	20	4			5	Loop	LC-MS/MS	2
100	M	GC-MS/MS	0.01	81	2	18.7	1	GPC		40		HPLC-DAD, HPLC-FLD	
101	S	HPLC-DAD	0.05	108.6	1	30	1			1	TPOCI	GC-NPD	21
102	M	HPLC-FLD	0.05			50	6	SPE		20		HPLC-FLD	
103	M	GC-NPD	0.1			50	Methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

CARBARYL													
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 71)
104	S	GC-MS	0.02	119	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	98	2	20	CH_2Cl_2	GPC		0.5	PTV	GC-MS/TOF	
106*	S	GC-MS	0.02			25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-MS	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-NPD	0.02			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	NA												
110	S	GC-MS	0.2	86	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.05			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	LC-MS/MS	0.006	92	1	10	6		C-13			LC-MS/MS	9
114	S	GC-MS	0.05	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	LC-MS/MS	0.008	85	1	10	5	LL		10		LC-MS/MS	21
116	M	GC-MS	0.04	80	1	15	1	SPE-LL		50		HPLC-F, HPLC-DAD	2
117	S	GC-MS	0.05	90	2	10	6	SPE		10	Splitless	HPLC-DAD	15
118	NA												
119	NA												
120	S	GC-MS	0.05			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	LC-MS/MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	NA												
123	M	HPLC-FL	0.05	93	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	NA												
125	S	GC-NPD	0.04	72.8	1	5	CH_2Cl_2	DSPE		1	Splitless	GC-NPD	
126	M		0.1			15	1			10		GC-MS/MS	17
127	M		0.01	99	1	10	5	SPE	TPP	3		LC-MS/MS ESI (+)	23
128	S	GC-MS	0.05	100	1	25	2	GPC		1	Splitless	GC-MS	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

CARBENDAZIM													
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 71)
001	M	LC-MS/MS	0.010	78	1	12.5	5	-		7		LC-MS/MS	19
002	NA												
003	NA												
004	M	LC-MS/MS	0.003			12	5	DSPE		20		LC-MS/MS	23
005	M	HPLC-UV	0.02	92	1	20	6	SPE	TPP	5		LC-MS/MS	23
006	S	LC-MS/MS	0.02	95	2	75	1	LL		10		HPLC-DAD/FLUO	7
007	M	LC-MS/MS	0.005	95	1	10	6		D4	5		LC-MS/MS	18
008	M	HPLC-DAD	0.1	100	2	5	5	SPE Florisil		20	Automatic	HPLC-DAD	12
009	S	LC-MS/MS	0.02	103	1	15	5	DSPE		10	Partial Loop	LC-MS/MS	20
010	S	LC-DAD	0.05	82.3	1	15	5	O		20		HPLC-UV/DAD	23
011	M	LC-MS/MS	0.01	112	1	50	1			5		LC-MS/MS	12
012	S	GC-MS	0.01	70	2	10	1	GPC	yes	25	Autosampler	HPLC-DAD	15
013	M	LC-MS/MS	0.01	97	1	10	methanol/ water buffered		yes	5	Partial Loop	LC-MS/MS	12
014	M		0.1	>90	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015	NA												
016	M	HPLC-FLD	0.02	92	1	75	1	GPC		20		HPLC-FLD	12
017	S	HPLC-UV	0.05	84.9	1	30	1	GPC		20	Loop	HPLC-UV	21
018	S	HPLC-UV	0.1	74	2	50	1	LL		10	Rheodyne Valve	HPLC-FLD	12
019	S	HPLC-FLD	0.1	88.9	1	25	1	LL		100		HPLC-UV	14
020	NA												
021	NA												
022	S	LC-MS	0.02	91	1	50	6	SPE		20		HPLC-DAD	9
023	M	LC-MS/MS	0.1	67	1	10	6			20		LC-MS/MS	25
024	NA												
025	NA												
026	M		0.001			100	2	GPC		2	Split/Splitless	GC-ECD	5
027	NA												
028	S	HPLC-UV	0.04	90	2	25	6	LL		10	Splitless	HPLC-UV	33

APPENDIX 8. Methods used by participants for determining pesticides.

CARBENDAZIM													
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 71)
029	S	HPLC-PDA	0.01	75	1	20	Acetone	O (SLE)		25	Rheodyne	HPLC-DAD	
030	S	HPLC-DAD	0.01	98	2	10	5	DSPE (PSA)		50		HPLC-DAD	23
031	M	LC-MS/MS	0.01	96	1	15	4			5	Loop	LC-MS/MS	
032	NA												
033	M	LC-MS/MS	0.01	105	1	10	5	DSPE	TPP	3		LC-MS/MS	23
034	M	LC-MS/MS	0.01	88	1	5	5			10		LC-MS/MS	23
035	S	LC-MS/MS	0.02	79	1	10	6	LL on Chem Elut		25		LC-MS/MS	18
036	S		0.04			25	4	SPE diol	Benzimidazole	100	Autosampler-full loop	HPLC-DAD	7
037	S	LC-MS/MS	0.01	91	1	10	5	DSPE		5	Micro Loop	LC-MS/MS	
038	NA												
039	S	HPLC-FLD	0.04	86	1	50	6	LL		10	Loop	HPLC-UV	11
040	S		0.1	85	1	50	1	O				HPLC-UV	
041	NA												
042	NA												
043	M	LC-MS/MS	0.05			5	1	LL		25		LC-MS/MS	32
044	M		0.025	88	1	15	4			10	Full Loop	LC-MS/MS	
045	NA												
046	M	LC-DAD	0.1	85	1	15	5	DSPE		50		LC-MS/MS	23
047	NA												
048	S		0.1			50	ethyl acetate + NH3	O		6		HPLC-DAD	
049	NA												
050	NA												
051	M	LC-MS/MS	0.01	88	1	75	1			5		LC-MS/MS	30
052	M	LC-MS/MS	0.01			10	5	DSPE	TPP	3		LC-MS/MS	23
053	S	LC-DAD	0.03			10	1	LL		20		HPLC-DAD	4
054	NA												
055	NA												
056	S	HPLC-UV	0.05	94	1	30	1	GPC, O		10	Rheodyne	HPLC-UV	21
057	M	LC-MS/MS	0.05			10	5	PSA	TPP	20		LC-MS/MS	23

APPENDIX 8. Methods used by participants for determining pesticides.

CARBENDAZIM													
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 71)
058	M	HPLC	0.03			15	4	-		1/10		HPLC-UV	2
059	S	HPLC	0.02	90	2	10	acetone/ hexane/ CH_2Cl_2	SPE		100		HPLC-UV	7
060	M		0.01	115	1	10	6	LL		10		LC-MS/MS	23
061	S		0.01	68.4	1	30	1	GPC		20	Rheodyne	LC-MS	21
062	NA												
063	M	LC-MS/MS	0.01			10	6	LL		20	Loop	LC-MS/MS (triple-quad)	
064	M	LC-MS	0.01			10	5	O		2	Autosampler	HPLC-MS	23
065	S	HPLC-UV	0.05	85.4	1	30	CH_2Cl_2/ n-hexane (4:6)	Extrelute		20	Direct	HPLC-UV	21
066	M	HPLC-DAD	0.02	95.2	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD,HPLC-UV, LC-MS/MS	5
067	M	HPLC-FL	0.1	91	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.02			10	5			20		LC-MS/MS	23
069	M	LC-MS/MS	0.01	88.6	1	10	6	SPE	TPP	10		LC-MS/MS	18
070	S	LC-MS	0.1	89	1	10	4			5	Loop	LC-MS/MS	12
071	NA												
072	S	HPLC-FLD	0.1	81	1	25	Ethyl acetate, acetone	LL		10	Autosampler	HPLC-UV	12
073	NA												
074	NA												
075	S	HPLC-UV/FLD	0.05			50	1	LL		20		HPLC-DAD/FLD	24
076	M		0.01			50	2	LL		5		LC-MS/MS	12
077	S	HPLC-FLD	0.05			10	1	GPC	Benzimidazole	10		HPLC-FLD	13
078	NA												
079	M	LC-MS/MS	0.01	92	1	20	Methanol/ Water	SPE		35		LC-MS/MS	
080	NA												
081	M	LC-MS/MS	0.1	99	1	10	1	LL	yes	10	Loop	LC-MS/MS	12
082	M	LC-MS/MS	0.005			10	5	O		20		LC-MS/MS (triple-quad)	23
083	M	LC-MS/MS	0.1	73	1	10	5			7	Partial	LC-MS	23

APPENDIX 8. Methods used by participants for determining pesticides.

CARBENDAZIM													
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 71)
084	M	LC-MS/MS	0.02	92	1	10	methanol/ ammonia acetate/ AcH (95:5)			10		LC-MS/MS	
085	S	LC-MS/MS	0.1	88	1	25	6	SPE, LL		20		HPLC-FLD	31
086	S	HPLC-FLD	0.005	90	1	25	1 6	LL LL, SPE		100		HPLC-FLD	
087	M	LC-MS/MS	0.01	83	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
088	S	LC-MS/MS	0.01			10	6	Diatomaceous earth	TPP	25		LC-MS/MS	18
089	S		0.04	91	1	50	1 (NaOH presence)	GPC		10	Rheodyne	HPLC-DAD	6
090	M	LC-MS	0.10	75	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	HPLC-UV	0.01	86	1	20	CH_2Cl_2, methanol			20	Loop	HPLC-UV	12
092	NA												
093	M	HPLC-UV	0.05	79.9	1	15	1	SPE		20	Solvent Injection	HPLC-UV	21
094	NA												
095	M	LC-MS/MS	0.01			10	5	SPE		20	Loop	LC-MS/MS	23
096	M	LC-MS/MS	0.05	86	1	10	1		D4	2.1		LC-MS/MS	12
097	M		0.010	75	1	20	1			20		LC-MS/MS	6
098	S	HPLC-DAD	0.06	75	1	25	1	LL		10	Autosampler	HPLC-DAD	29
099	S	LC-MS/MS	0.01	62.5	1	20	4			5	Loop	LC-MS/MS	2
100	M	HPLC-DAD	0.1	76	2	18.7	1	GPC		40		HPLC-DAD, HPLC-FLD	
101	S	LC-MS/MS	0.05	81.3	1	30	1	O		50	Autosampler	HPLC-DAD	21
102	M	HPLC-UV	0.1			25	6	SPE		25	Loop	HPLC-UV	
103	M	GC-MS	0.03			20	methanol/ water	SPE	Isoproturon	15		HPLC-MS	18
104	S	LC-MS/MS	0.01	95	1	50	4	LL		5	Loop	LC-MS/MS	26
105	S	HPLC-DAD	0.05	61	2	20	1	LL		20		HPLC-DAD	
106	NA												
107	M	LC-MS/MS	0.05			10	5	O	Atrazin D5, TPP	20		LC-MS/MS	23
108	NA												
109	NA												
110	NA												
111	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

CARBENDAZIM													
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 71)
112	NA												
113	M	LC-MS/MS	0.007	82	1	10	6					LC-MS/MS	9
114	S	HPLC-UV	0.01	80	2	75	1		LL	20	Loop	HPLC-DAD	7
115	M	LC-MS/MS	0.015	84	1	10	5	LL		10		LC-MS/MS	21
116	M	HPLC-DAD	0.05	72	1	15	1	SPE-LL		50		HPLC-F, HPLC-DAD	2
117	S	LC	0.05	91	2	10	6	SPE		10	Splitless	HPLC-DAD	15
118	S		0.04	60.25	1	25	7	LL		10	Loop	HPLC-UV	12
119	S	HPLC-DAD	0.02	85	2	75	1	LL		50		HPLC-DAD	7
120	NA												
121	M	LC-MS/MS	0.1			10	5	DSPE	TPP	2		LC-MS/MS	23
122	M	HPLC-UV	0.05	127.14	2	30	2	GPC		100	Loop	HPLC-UV	
123	M	HPLC-FL	0.05	78	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	M	LC-MS/MS	0.01	83.5	1	15	1		TPP	10		LC-MS/MS	
125	S		0.05	91.1	1	10	methanol, water	LL		10		HPLC	
126	M		0.1			15	1			10		GC-MS/MS	17
127	M		0.01	106	1	10	5	SPE	TPP	3		LC-MS/MS ESI (+)	23
128	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

CHLORPYRIFOS													
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 71)
001	M	GC-MS	0.01	90	1	25	1	GPC		1	Pulsed Splitless	GC-ECD, GC-NPD, GC-MS (single-quad)	19
002	M	GC-MSD	0.01	111.5	1	15	5	DSPE		10	LVI	GC-ITD (MS/MS)	23
003	S	GC-MS	0.01	115	1	15	4			2	Splitless	GC-µECD-NPD	2
004	S	GC-MS	0.01			12	5	DSPE	Mirex / TPP	1	Split/Splitless	GC-MS	23
005	M	GC-PND	0.005	93	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.01	89	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	82	1	15	4			1	Splitless	GC-MS	22
008	M	GC-MS	0.01	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	81.6	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	88.2	1	25	1	GPC		2	Split/Splitless	GC-NPD	21
011	M	LC-MS/MS GC-ITD GC-FPD	0.01	94	1	50	1	- GPC GPC		5 1 2	- Splitless Splitless	LC-MS/MS GC-ITD GC-FPD	12
012	S	GC-MS	0.01	82	2	10	1	GPC	yes	1	PTV	GC-ITD	15
013	M	GC-MS	0.02	95	1	50	7 Acetone	LL (isopropyl ether)		2	Splitless	GC-ECD, GC-NPD	22
014	M	GC-MS	0.05	>90	2	90	3	GPC + SPE	Aldrin	1.5	Split/Splitless	GC-ECD	5
015	M	GC-MS	0.05	98	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.01	93	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-NPD	0.02	92.1	1	30	1			1	Direct	GC-MS	21
018	S	GC-MS	0.05	93	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	M	GC-MS	0.05	92.3	1	12.5	4			3	Splitless	GC-NPD	14
020	S	GC-NPD	0.01	79	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.05			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.01	95.4	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	GC-MS	0.05	88	1	75	acetone, cyclohexan and ethyl-acetate	GPC		1		GC-NPD	5
024	M	GC-MS	0.02	86	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26

APPENDIX 8. Methods used by participants for determining pesticides.

CHLORPYRIFOS													
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 71)
025	M	GC-MS	0.02			10	1		TPP	10	GC-MS/MS		
026	M		0.003			10	5	SPE		2	Split/Splitless	GC-MS	23
027	S		0.02	95	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028	S	GC-ECD	0.002	65	2	100	acetone, n-hexane, toluene	GPC,SPE		10	Solvent Vent PTV	GC-ECD	6
029	M	GC-MS/MS	0.01	93	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030	M	GC-MS	0.01	100	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	GC-MS	0.03	91	1	15	4		Bromofos-methyl	2	Split/Splitless Splitless mode	GC-MS(ITD)	
032	S	GC-MS	0.02	101	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	GC-MS	0.01	106	1	10	5	DSPE	Mirex	1	Solvent Vent PTV	GC-ECD, GC-MSD	
034	M	GC-MS	0.01	96	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-FPD	0.01	86	1	25	4		Tributhyl-phophate	1	Split/Splitless	GC-FPD	2
036	S	GC-MS	0.02	59.4	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80/20)		Trichloronat	1	Direct	GC-FPD	6
037	M	GC-MS	0.01	97	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.01			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	S	GC-MS	0.0025	101.9	2	20	6	LL		10	Solvent Vent PTV	GC-NPD	6
040	S	GC-MS	0.05	87	2	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	M	GC-MS	0.01	94	1	20/5	1			2	Spliless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	2
042	S	GC-MS	0.05	1.2	1	15	4			1.5		GC-ITD	2
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-MS	6
044	M	GC-TOF	0.05	82	1	15	4		Hexachloro-benzene	1	Splitless	GC-ITD	
045	M	GC-MS	0.03	95	2	15	6	SBSE			TDU-CIS	GC-MS (single quad)	3
046	M	GC-MS/MS	0.01	107.3	1	15	4			10	PTV	GC-MS/MS	2
047	S	GC-ECD	0.05	93		5	3			2	Splitless	GC-ECD, GC-NPD	
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15

APPENDIX 8. Methods used by participants for determining pesticides.

CHLORPYRIFOS													
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 71)
049	M	GC-MS	0.05			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-ECD	0.05	99	2	100	3	O		0.1	Splitless	GC-NPD	
051	M	GC-ITD	0.03	96	1	75	1	GPC	Ditalimphos	2	Splitless	GC-ITD	30
052	M	GC-MS	0.01			10	5	DSPE	Triphenyl-methane	2	PTV	GC-MS	23
053	M	GC-MS	0.03			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	S	GC-MS	0.01	99	2	50	Acetona Acetona 3 3	SPE	M series Ronnel M series Ronnel	2 1 2 1	Splitless	GC-ECD GC-MS (single quad) GC-ECD GC-MS (single quad)	12
055	M	GC-NPD	0.01	85	2	10	CH_2Cl_2	GPC	Azobenzene	1	Splitless	GC-NPD	15
056	S	GC-MS	0.01	94.2	1	30	1			1	Wide Bore	GC-NPD	21
057	S	GC-MSD	0.01			100	2	GPC, SPE		1	Splitless	GC-ECD, GC-MSD	5
058	M	GC-MS	0.05			15	4	-		1/10		GC-ECD, GC-TSD,GC-MS	2
059	S	GC-PFPD/MS	0.01	85	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	S	LC-MS/MS	0.01	90	1	50	2	GPC	tr-HCEO	2	Split/Splitless	GC-ECD	5
061	S		0.05	116	1	30	1	GPC		0.5-1	Splitless	GC-NPD	21
062	S	Different Column		107	2	10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.005			10	6	LL		2	PTV	GC-MS (single-quad)	
064	M	GC-MS	0.02	101	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-NPD	0.02	101.6	1	30	1			1	Splitless	GC-NPD	21
066	M	GC-NPD, FPD	0.001	82.1	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD,HPLC-UV, LC-MS/MS	5
067	M	GC-ECD	0.005	102	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.01			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.01	85	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	S	GC-FPD	0.05	98	1	20	hexane/ isopropyl-ether/ isooctane			2	Splitless	GC-FPD	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-ECD	23

APPENDIX 8. Methods used by participants for determining pesticides.

CHLORPYRIFOS													
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 71)
072	S	GC-MS	0.05	74	1	100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS(ion trap)	6
073	M	GC-MS	0.01	98	1	50	1			1	Auto Injection	GC-MS (single-quad)	30
074	S	GC-NPD	0.01	77	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.01			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			10	5	DSPE		2	PTV	GC-MS (single-quad)	23
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078	M	GC-ECD	0.02	105	1	15	4			3 to 1	Pulsed Splitless / on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	53	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	93.8	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	GC-MS	0.05	81	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082	M	GC-MS	0.02			10	5	O	TPP	2	PTV	GC-MS (single-quad)	23
083	M	GC-MS	0.05	93	1	30	1	GPC SPE	TPP	3	Splitless	GC-MS	12
084	M	GC-ITD	0.04	104	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	
085	M	GC-MS	0.05	94	1	50	2	GPC		1	OC, SS	GC-ECD, GC-NPD	5
086	S	GC-ECD	0.01	98	1	50	3	LL, SPE		2		GC-ECD, GC-NPD	
087	M	GC-MS/MS	0.01	104	1	10	5	DSPE		2	Split/Spliless	GC-MS/MS (Triple-Quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	M	GC-MS	0.05	80	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	GC-MS	0.05	100	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	85	2	50	3	O		1	Split/Splitless	GC-NPD	6
092	M	GC-MS	0.05	71	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.01	93.7	1	15	1			5	Splitless	GC-MS (ion-trap)	21
094	M	GC-ECD	0.02	80	1	25	1	O		5	Splitless	GC-TSD	2
095	M	GC-ECD, GC-NPD	0.01			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	GC-MS/MS	0.02	76	1	10	1	GPC	DDE-pp D8	1	Direct	GC-MS and GC-MS/MS	12
097	S	GC-MS	0.010	69	1	20	1			2	Splitless	GC-FPD	6
098	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

CHLORPYRIFOS													
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 71)
099	M	GC-MS	0.02	87	1	20	4		TPP	20	PTV	GC-MS	2
100	M	GC-MS	0.01	95	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	6
101	S	GC-MS	0.02	91.7	1	30	1	GPC		0.1	TPOCI	GC-ECD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	GC-ECD	0.05			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	5
104	S	GC-MS	0.01	99	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	78	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.02	70	1	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-ECD	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-NPD	0.01			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-NPD	15
110	S	LC-MS/MS	0.05	71	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.05			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	GC-ITD	0.008	88	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	9
114	S	GC-MS	0.05	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	GC-TOF	0.05	95	2	25	1	GPC		2	Splitless	GC-ECD	21
116	M	GC-MS	0.02	88	1	15	4			1	PTV	GC-MS	22
117	S	GC-MS	0.01	77	2	50	6	SPE	yes	1	Splitless	GC-ECD, GC-NPD	15
118	M	GC-MS	0.002	76.56	1	100	3	GPC		1	Splitless	GC-ECD, GC-NPD	6
119	S	GC-MS	0.01			40	3	LL		1	Split/Splitless	GC-ECD,GC-NPD, GC-MS	6
120	S	GC-MS	0.05			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	GC-MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	S	GC-NPD	0.05	79.71	2	5	3	GPC		1	Splitless	GC-NPD	
123	M	GC-MS	0.05	98	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	

APPENDIX 8. Methods used by participants for determining pesticides.

CHLORPYRIFOS													
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 71)
124	M	GC-MS/MS	0.05	85.8	1	15	1		TPP	10		GC-ITD	
125	S	GC-ECD GC-NPD	0.01	78.3	1	5	CH_2Cl_2	DSPE		1	Splitless	GC-NPD	
126	M		0.05			15	1			10		LC-MS/MS	17
127	M		0.02	99	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	23
128	S	GC-MS	0.05	89	1	25	2	GPC		1	Splitless	GC-MS	1

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 71)
001	M	LC-MS/MS	0.004	95	1	12.5	5	-		7		LC-MS/MS	19
002	M	GC-MSD	0.01	80.3	1	15	5	DSPE		10	LVI	GC-ITD (MS/MS)	23
003	NA												
004	S	GC-MS	0.002			12	5	DSPE	Mirex / TPP	1	Split/Splitless	GC-MS	23
005	M	HPLC-UV	0.02	98	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.01	78	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	83	1	15	4			1	Splitless	GC-MS	22
008	M	HPLC-DAD	0.05	100	2	5	5	SPE Florisil		20	Automatic	HPLC-DAD	12
009	M	GC-MS	0.02	79.8	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	91.9	1	25	1	GPC		2	Split/Splitless	GC-NPD	21
011	M	LC-MS/MS GC-ITD	0.01	98	1	50	1	- GPC		5 1	- Splitless	LC-MS/MS GC-ITD	12
012	S	GC-MS	0.01	93	2	10	1	GPC	yes	1	PTV	GC-ITD	15
013	M	LC-MS/MS	0.01	83.2	1	10	methanol/ water buffered		yes	5	Partial Loop	LC-MS/MS	12
014	M	GC-MS	0.05	>90	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015	M	GC-MS	0.05	170	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.03	98	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	HPLC	0.05	99	1	30	1			1	Splitless	GC-ITD	21
018	S	GC-MS	0.05	79	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	S	GC-NPD	0.05	107	1	25	1			100		HPLC-UV	14
020	S	GC-NPD	0.1	103	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.05			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	90.8	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	GC-MS	0.05	76	1	75	acetone, cyclohexan and ethyl-acetate	GPC		1		GC-NPD	5
024	M	GC-MS	0.1	83	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
025	M	GC-MS	0.02			10	1		TPP	10	GC-MS/MS		

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 71)
026	M	LC-MS/MS	0.021			10	5	SPE		2	Split/Splitless	GC-MS	23
027	S		0.02	101	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028	NA												
029	M	GC-MS/MS	0.02	91.6	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030	M	GC-MS	0.004	99	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	LC-MS/MS	0.01	99	1	15	4			5	Loop	LC-MS/MS	
032	S	GC-MS	0.05	80	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	LC-MS/MS	0.01	107	1	10	5	DSPE	TPP	3		LC-MS/MS	23
034	M	GC-MS	0.01	101	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-ECD-NPD	0.05	102	1	15	4		PCB 97 (ECD) Trifluralin (NPD)	1 2	Split/Splitless	GC-ECD-NPD	2
036	S	LC-MS	0.02	72.3	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80/20)		Trichloronat	1	Direct	GC-TSD	6
037	M	GC-MS	0.01	98	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.02			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	NA												
040	S	GC-MS	0.05	88	1	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	M	LC-MS/MS	0.05	60	1	20/5	1			20		LC-MS/MS	2
042	NA												
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-MS	6
044	M	GC-TOF	0.05	89	1	15	4		Hexachloro-benzene	1	Splitless	GC-ITD	
045	NA												
046	M	GC-MS/MS	0.05	108.2	1	15	4			10	PTV	GC-MS/MS	2
047	S	GC-ECD	0.05	100		5	3			2	Splitless	GC-ECD, GC-NPD	
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	M	GC-MS	0.05			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-NPD	0.05	110	2	100	3	O		0.1	Splitless	GC-NPD	
051	M	GC-ITD	0.02	100	1	75	1	GPC	Ditalimphos	2	Splitless	GC-ITD	30
052	M	LC-MS/MS	0.01			10	5	DSPE	TPP	3		LC-MS/MS	23

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 71)
053	M	GC-MS	0.02			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	NA												
055	M	GC-NPD	0.01	90	2	10	CH_2Cl_2	GPC	Azobenzene	1	Splitless	GC-NPD	15
056	S	GC-MS	0.01	83.8	1	30	1			1	Wide Bore	GC-NPD	21
057	M	LC-MS/MS	0.01			10	5	PSA	TPP	20		LC-MS/MS	23
058	NA												
059	S	GC-MS	0.01	80	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	M		0.01	102	1	10	6	LL		10		LC-MS/MS	23
061	S		0.005	83.9	1	30	1	GPC		20	Rheodyne	LC-MS	21
062	S	Different Column				10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.01			10	6	LL		2	PTV	GC-MS (single-quad)	
064	M	GC-MS	0.02	104	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-NPD	0.05	82.4	1	30	1			1	Splitless	GC-NPD	21
066	M	GC-NPD	0.015	83.1	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD,HPLC-UV, LC-MS/MS	5
067	M	GC-MS	0.01	102	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.02			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.05	95	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	S	GC-TSD	0.05	93	1	20	hexane/ isopropyl-ether/ isooctane			2	Splitless	GC-NPD	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-NPD	23
072	S	GC-MS	0.05	71	1	100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS(ion trap)	6
073	M	GC-MS	0.02	92	1	50	1			1	Auto Injection	GC-MS (single-quad)	30
074	S	GC-NPD	0.05	81	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.01			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			50	2	LL		5		LC-MS/MS	12
077	M	GC-MS	0.02			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15

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 71)
078	M	GC-NPD	0.05	92	1	15	4			3 to 1	Pulsed Splitless / on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	74	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	94	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	GC-MS	0.05	96	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082	M	LC-MS/MS	0.005			10	5	O	- TPP	20 2	- PTV	LC-MS/MS (triple-quad) GC-MS (single-quad)	23
083	M	GC-MS	0.05	87	1	30	1	GPC	TPP	3	Splitless	GC-MS	12
084	M	GC-ITD	0.1	112	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	
085	M	GC-MS	0.05	94	1	50	2	GPC		1	OC, SS	GC-NPD	5
086	NA												
087	M	LC-MS/MS	0.01	95	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	S	GC-MS	0.04	97	1	50	1 (NaOH presence)	GPC		10	Rheodyne	HPLC-DAD	6
090	M	GC-MS	0.05	100	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	60	1	50	3	O		1	Split/Splitless	GC-NPD	6
092	M	GC-MS	0.05	79	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.01			15	5			5	Splitless	GC-MS(ion-trap)	21
094	M	GC-TSD	0.05	96	1	25	1	O		5	Splitless	GC-TSD	2
095	M	GC-NPD	0.02			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	LC-MS/MS	0.05	60	1	10	1			2.1		LC-MS/MS	12
097	M		0.010	79	1	20	1			20		LC-MS/MS	6
098	NA												
099	M	GC-MS	0.01	74.9	1	20	4		TPP	20	PTV	GC-MS	2
100	M	GC-MS	0.05	97	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	6
101	S	HPLC-DAD	0.05	105.8	1	30	1	GPC		1	TPOCI	GC-NPD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	GC-NPD	0.03			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	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 71)
104	S	GC-MS	0.01	73	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	98	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.01	90	2	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-MS	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-NPD	0.01			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-NPD	15
110	S	GC-MS	0.05	89	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111*	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	NA												
113	M	GC-ITD	0.005	83	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	9
114	S	GC-MS	0.02	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	LC-MS/MS	0.005	90	1	10	5	LL		10		LC-MS/MS	21
116	M	GC-MS	0.02	89	1	15	4			1	PTV	GC-MS	22
117	NA												
118	NA												
119	S	GC-MS	0.02			40	3	LL		1	Split/Splitless	GC-ECD,GC-NPD, GC-MS	6
120	S	GC-MS	0.05			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	LC-MS/MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	S	GC-NPD	0.01	77	2	5	3	GPC		1	Splitless	GC-NPD	
123	M		0.01	96	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	NA												
125	S	GC-NPD	0.03	79.4	1	5	CH_2Cl_2	DSPE		1	Splitless	GC-NPD	
126	M		0.02			15	1			10		LC-MS/MS	17
127	M	LC-MS/MS	0.01	107	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	23
128	M	GC-MS	0.05	110	1	25	2	GPC		1	Splitless	GC-MS	1

* 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 71)
001	M	GC-MS	0.01	92	1	25	1	GPC		1	Pulsed Splitless	GC-ECD, GC-NPD,GC-MS (single-quad)	M
002	M	GC-MSD	0.01	102.9	1	15	5	DSPE		10	LVI	GC-ITD (MS/MS)	M
003	S	GC-MS	0.01	107	1	15	4			2	Splitless	GC-µECD-NPD	S
004	M	GC-PND	0.004			12	5	DSPE	Mirex / TPP	2	Split/Splitless	GC-ECD, GC-NPD	M
005	M	GC-PND	0.005	80	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	M
006	S	GC-ITD	0.01	82	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	S
007	M	GC-MS	0.01	84	1	15	4			1	Splitless	GC-MS	M
008	M	GC-MS	0.01	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	M
009	M	GC-MS	0.02	78.8	1	15	4	GPC		2	Splitless	GC-MS	M
010	S	GC-MS	0.02	87.4	1	25	1	GPC		2	Split/Splitless	GC-NPD	S
011	M	LC-MS/MS GC-ITD GC-FPD	0.01	99	1	50	1	- GPC GPC		5 1 2	- Splitless Splitless	LC-MS/MS GC-ITD GC-FPD	M
012	S	GC-MS	0.01	85	2	10	1	GPC	yes	1	PTV	GC-ITD	S
013	M	GC-MS	0.020	91	1	50	Acetone	LL (isopropyl ether)		2	Splitless	GC-ECD, GC-NPD	M
014	M	GC-MS	0.02	>80	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	M
015	M	GC-MS	0.02	100	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	M
016	M	GC-MS	0.02	82.4	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	M
017	S	GC-MS	0.02	82.4	1	30	1			1	Direct	GC-NPD	S
018	S	GC-MS	0.02	97	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	S
019	M	GC-MS	0.05	94.6	1	12.5	4			3	Splitless	GC-NPD	M
020	S	GC-NPD	0.01	89	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	S
021	M	GC-MS	0.02			20	4	GPC		1	Pulsed Splitless	GC-MS	M
022	M	GC-MS	0.02	86.5	1	20	3			2	Splitless	GC-ECD, GC-NPD	M
023	M	GC-MS	0.02	74	1	75	acetone, cyclohexan and ethyl-acetate	GPC		1		GC-NPD	M
024	M	GC-MS	0.02	99	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	M

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 71)
025	M	GC-MS	0.02			10	1		TPP	10	GC-MS/MS		M
026	M		0.013			10	5	SPE		2	Split/Splitless	GC-MS	M
027	S		0.02	89	1	100	3			1	Splitless	GC-ECD, GC-NPD	S
028	S	GC-ECD	0.017	64	2	100	acetone, n-hexane, toluene	GPC,SPE		10	Solvent Vent PTV	GC-ECD	S
029	M	GC-MS/MS	0.01	88.4	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	M
030	M	GC-MS	0.01	100	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	M
031	M	GC-MS	0.03	92	1	15	4		Bromofos-methyl	2	Split/Splitless Splitless mode	GC-MS(ITD)	M
032	S	GC-MS	0.02	90	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	S
033	M	GC-MS	0.01	101	1	10	5	DSPE	Mirex	1	Solvent Vent PTV	GC-ECD, GC-MSD	M
034	M	GC-MS	0.01	94	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	M
035	M	GC-FPD	0.01	82	1	25	4		Tributhyl-phophate	1	Split/Splitless	GC-FPD	M
036	S	GC-MS	0.01	60.7	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80/20)		Trichloronat	1	Direct	GC-FPD	S
037	M	GC-MS	0.01	97	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	M
038	M	GC-MS	0.01			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	M
039	S	GC-MS	0.0025	59.3	2	20	6	LL		10	Solvent Vent PTV	GC-NPD	S
040	S	GC-MS	0.02	88	2	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	S
041	M	GC-MS	0.01	87	1	20/5	1			2	Spliless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	M
042	S	GC-MS	0.02	0.92	1	15	4			1.5		GC-ITD	S
043	M	GC-MS	0.02			10	1	GPC	Isodrin	1	Splitless	GC-ECD, GC-MS	M
044	M	GC-TOF	0.025	100	1	15	4		Hexachloro-benzene	1	Splitless	GC-ITD	M
045	M	GC-MS	0.01	90	2	15	6	SBSE			TDU-CIS	GC-MS (single quad)	M
046	M	GC-MS/MS	0.02	99.7	1	15	4			10	PTV	GC-MS/MS	M
047	S	GC-ECD	0.02	92		5	3			2	Splitless	GC-ECD, GC-NPD	S
048	S	GC-MS	0.02			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	S

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 71)
049	M	GC-MS	0.02			15	4	LL		10	Gvol Autosampler	GC-MS	M
050	S	GC-ECD	0.02	98	2	100	3	O		0.1	Splitless	GC-NPD	S
051	M	LC-MS/MS	0.01	82	1	75	1			5		LC-MS/MS	M
052	M	GC-MS	0.01			10	5	DSPE	Triphenyl-methane	2	PTV	GC-MS	M
053	M	GC-MS	0.01			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	M
054	S	GC-MS	0.02	81	2	50	Acetona Acetona 3 3	SPE	M series Ronnel M series Ronnel	2 1 2 1	Splitless	GC-ECD GC-MS (single quad) GC-ECD GC-MS (single quad)	S
055	M	GC-NPD	0.01	85	2	10	CH_2Cl_2	GPC	Azobenzene	1	Splitless	GC-NPD	M
056	S	HPLC-UV	0.01	104.2	1	30	1	GPC		1	Split/Splitless	GC-ITD	S
057	S	GC-MSD	0.01			100	2	GPC, SPE		1	Splitless	GC-ECD, GC-MSD	S
058	M	GC-MS	0.02			15	4	-		1/10		GC-ECD, GC-TSD,GC-MS	M
059	S	GC-PFPD/MS	0.01	80	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	S
060	S	LC-MS/MS	0.01	90	1	50	2	GPC	tr-HCEO	2	Split/Splitless	GC-ECD	S
061	S	LC-MS	0.02	88	1	30	1	GPC		0.5-1	Splitless	GC-NPD	S
062	S	Different Column				10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	S
063	M	GC-MS	0.005			10	6	LL		2	PTV	GC-MS (single-quad)	M
064	M	GC-MS	0.02	105	1	10	5	O		2	PTV	GC-MS	M
065	S	GC-NPD	0.02	100	1	30	1			1	Splitless	GC-NPD	S
066	M	GC-NPD	0.001	81.5	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	M
067	M	GC-ECD	0.02	95	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FL, HPLC-DAD	M
068	M	GC-MS	0.02			50	3	GPC		2	PTV	GC-MS	M
069	M	GC-MS	0.02	86	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	M
070	S	GC-FPD	0.02	96	1	20	hexane/ isopropyl-ether/ isooctane			2	Splitless	GC-FPD	S

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 71)
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-NPD	S
072	S	GC-MS	0.02	71	1	100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS(ion trap)	S
073	M	GC-MS		93	1	50	1			1	Auto Injection	GC-MS (single-quad)	M
074	S	GC-NPD	0.01	79	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	S
075	M	GC-MS	0.02			10	5	SPE	3	2	Splitless	GC-MSD	M
076	M		0.01			10	5	DSPE		2	PTV	GC-MS (single-quad)	M
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	M
078	M	GC-NPD	0.05	107	1	15	4			3 to 1	Pulsed Splitless / on-column	GC-NPD,GC-ECD	M
079	M	GC-MS	0.02	77	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	M
080	M	GC-MS	0.02	95.3	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	M
081	M	GC-MS	0.02	83	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	M
082	M	GC-MS	0.02			10	5	O	TPP	2	PTV	GC-MS (single-quad)	M
083	M	GC-MS	0.02	92	1	30	1	GPC SPE	TPP	3	Splitless	GC-MS	M
084	M	GC-ITD	0.02	110	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	M
085	M	GC-MS	0.02	92	1	50	2	GPC		1	OC, SS	GC-NPD	M
086	S	GC-NPD	0.01	86	1	50	3	LL, SPE		2		GC-ECD, GC-NPD	S
087	M	GC-MS/MS	0.01	94	1	10	5	DSPE		2	Split/Spliless	GC-MS/MS (Triple-Quad)	M
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	S
089	M	GC-MS	0.02	86	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	M
090	M	GC-MS	0.02	100	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	M
091	S	GC-MS	0.01	87	2	50	3	O		1	Split/Splitless	GC-NPD	S
092	M	GC-MS	0.02	82	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	M
093	M	GC-MS	0.01	94.4	1	15	1			5	Splitless	GC-MS (ion-trap)	M
094	M	GC-ECD	0.02	96	1	25	1	O		5	Splitless	GC-TSD	M
095	M	GC-ECD, GC-NPD	0.01			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	M
096	M	GC-MS/MS	0.02	81	1	10	1	GPC	DDE-pp D8	1	Direct	GC-MS and GC-MS/MS	M
097	S	GC-MS	0.010	70	1	20	1			2	Splitless	GC-FPD	S

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 71)
098	NA												
099	M	GC-MS	0.02	111.9	1	20	4		TPP	20	PTV	GC-MS	M
100	M	GC-MS	0.01	94	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	M
101	S	GC-NPD	0.02	94.2	1	30	1			0.1	TPOCI	GC-ECD	S
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	M
103	M	GC-NPD	0.03			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	M
104	S	GC-MS	0.01	99	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	S
105	S	GC-MS	0.05	89	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	S
106	S	GC-MS	0.01	80	1	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	S
107	M	GC-MS	0.02			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	M
108	M	GC-NPD	0.01			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	M
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-NPD	S
110	S	GC-MS	0.05	92	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	S
111	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	M
112	S	GC-MS	0.02			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	S
113	M	GC-ITD	0.01	78	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	M
114	S	GC-MS	0.02	80	2	50	3			1	Split/Splitless	GC-MS	S
115	M	GC-TOF	0.02	90	2	25	1	GPC		2	Splitless	GC-NPD	M
116	M	GC-MS	0.02	81	1	15	4			1	PTV	GC-MS	M
117	S	GC-MS	0.01	85	2	50	6	SPE	yes	1	Splitless	GC-NPD	S
118	M	GC-MS	0.002	87.86	1	100	3	GPC		1	Splitless	GC-ECD, GC-NPD	M
119	S	GC-MS	0.02			40	3	LL		1	Split/Splitless	GC-ECD,GC-NPD, GC-MS	S
120	S	GC-MS	0.05			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	S
121	M	GC-MS	0.02			10	5	DSPE	TPP	2		LC-MS/MS	M
122	S	GC-ECD	0.05	63.62	2	5	3	GPC		2	Pulsed splitless	GC-ECD	S
123	M	GC-MS	0.01	89	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	M

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 71)
124	M	GC-MS/MS	0.02	78.5	1	15	1		TPP	10		GC-ITD	M
125	S	GC-ECD GC-NPD	0.01	79.4	1	5	CH_2Cl_2	DSPE		1	Splitless	GC-NPD	S
126	M		0.02			15	1			10		GC-MS/MS	M
127	M	LC-MS/MS	0.01	97	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	M
128	S	GC-MS	0.05	66	1	25	2	GPC		1	Splitless	GC-MS	S

APPENDIX 8. Methods used by participants for determining pesticides.

DICHLOFLUANID													
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 71)
001	M	GC-MS	0.015	95	1	25	1	GPC		1	Pulsed Splitless	GC-ECD, GC-NPD,GC-MS (single-quad)	19
002	NA												
003	S	GC-MS	0.05	126	1	15	4			2	Splitless	GC-µECD-NPD	2
004	M	GC-ECD	0.0009			12	5	DSPE	Mirex / TPP	2	Split/Splitless	GC-ECD, GC-NPD	23
005	M	GC-ECD	0.02	84	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.01	76	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	94	1	15	4			1	Splitless	GC-MS	22
008	M	GC-MS	0.05	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	85.9	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	93.5	1	25	1	O		2	Split/Splitless	GC-ECD	21
011	M	LC-MS/MS GC-ITD	0.01	108	1	50	1	- GPC		5 1	- Splitless	LC-MS/MS GC-ITD	12
012	S	GC-MS	0.01	84	2	10	1	GPC	yes	1	PTV	GC-ITD	15
013	M	GC-MS	0.020	95.2	1	50	Acetone	LL (isopropyl ether)		2	Splitless	GC-ECD, GC-NPD	22
014	M	GC-MS	0.05	>80	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015*			0.05	47	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.01	92	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-MS	0.01	74.2	1	30	1	GPC		1	Split 1/10	GC-ECD	21
018	S	GC-MS	0.05	95	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	M	GC-ECD	0.05	96.7	1	6.25	4			1	Splitless	GC-ECD	14
020	S	GC-NPD	0.01	101	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.05			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	87	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	S	GC-MS	0.05	70	1	75	acetone, cyclohexan and ethyl-acetate	GPC		1		GC-ECD	5
024	M	GC-MS	0.02	94	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
025*	M	GC-MS	0.02			10	1		TPP	10	GC-MS/MS		

APPENDIX 8. Methods used by participants for determining pesticides.

DICHLOFLUANID													
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 71)
026	M	LC-MS/MS	0.002			100	2	GPC		2	Split/Splitless	GC-ECD	5
027	S		0.02	74	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028*	S	GC-NPD	0.269	60	2	100	acetone, n-hexane, toluene	GPC, SPE		10	Solvent Vent PTV	GC-NPD	6
029	M	GC-MS/MS	0.01	94.2	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030*	M	GC-MS	0.04	96	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	LC-MS/MS	0.01	95	1	15	4			5	Loop	LC-MS/MS	
032	S	GC-MS	0.02	90	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	GC-MS	0.01		1	10	5	DSPE	Mirex	1	Solvent Vent PTV	GC-ECD, GC-MSD	
034	M	GC-MS	0.01	103	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-ECD-NPD	0.01	65	1	15	4		PCB 97 (ECD) Trifluralin (NPD)	1 2	Split/Splitless	GC-ECD-NPD	2
036	S	GC-MS	0.01	57.2	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80/20)	SPE - florisil		1	Direct	GC-ECD	6
037	M	GC-MS	0.01	94	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.02			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	S	GC-MS	0.0063	58.3	2	20	6	LL		10	Solvent Vent PTV	GC-NPD	6
040	S	GC-MS	0.05	91	1	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	M	GC-MS	0.01	86	1	20/5	1			2	Spliless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	2
042	NA												
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-ECD, GC-MS	6
044	M	GC-TOF	0.05	73	1	15	4		Hexachloro-benzene	1	Splitless	GC-ITD	
045	NA												
046	M	GC-MS/MS	0.05	110.9	1	15	4			10	PTV	GC-MS/MS	2
047	S	GC-ECD	0.03	85		5	3			2	Splitless	GC-ECD, GC-NPD	
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	M	GC-MS	0.05			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-NPD	0.05	85	2	100	3	O		0.1	Splitless	GC-ECD	

APPENDIX 8. Methods used by participants for determining pesticides.

DICHLOFLUANID													
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 71)
051	M	GC-ITD	0.02	109	1	75	1	GPC	Ditalimphos	2	Splitless	GC-ITD	30
052	M	LC-MS/MS	0.02			10	5	DSPE	TPP	3		LC-MS/MS	23
053	M	GC-MS	0.05			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	S	GC-MS	0.02	83	2	50	Acetona Acetona 3 3	SPE	M series Ronnel M series Ronnel	2 1 2 1	Splitless	GC-ECD GC-MS (single quad) GC-ECD GC-MS (single quad)	12
055	M	GC-NPD	0.01	82	2	10	CH_2Cl_2	GPC	Azobenzene	1	Splitless	GC-NPD	15
056	S	GC-MS	0.05	102.1	1	30	1	GPC		0.5	Direct	GC-ECD	21
057	S	GC-MS	0.01			100	2	GPC, SPE		1	Splitless	GC-ECD, GC-MSD	5
058	M	GC-MS	0.05			15	4	-		1/10		GC-ECD, GC-TSD,GC-MS	2
059*	S		0.01			50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	S	LC-MS/MS	0.01	95	1	50	2	GPC	tr-HCEO	2	Split/Splitless	GC-ECD	5
061	S		0.05	78	2	30	1	GPC		1	SPI	GC-ECD	21
062	S	Different Column		85	2	10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.005			10	6	LL		2	PTV	GC-MS (single-quad)	
064*	M		0.02			10	5	O		2	PTV	GC-MS	23
065	S	GC-ECD	0.02	96	1	30	1			1	Splitless	GC-ECD	21
066	M	GC-ECD	0.01	79.5	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-ECD	0.005	62	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.02			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.05	84	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	M	GC-MS	0.05	73	1	5	acetone/ hexane/ ethyl acetate			2	Splitless	GC-MS/MS	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-ECD	23
072	S	GC-MS	0.05	73	1	100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS(ion trap)	6
073	NA												

APPENDIX 8. Methods used by participants for determining pesticides.

DICHLOFLUANID													
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 71)
074	S	GC-NPD	0.01	80	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.02			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			10	5	DSPE		2	PTV	GC-MS (single-quad)	23
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078	M	GC-ECD	0.05	119	1	15	4			3 to 1	Pulsed Splitless/ on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	92	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	93.9	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	GC-MS	0.05	79	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082	M	GC-MS	0.05			10	5	O	TPP	2	PTV	GC-MS (single-quad)	23
083	M	GC-MS LC-MS/MS	0.05	96	1	30 30 10	1 1 5	GPC SPE -	TPP TPP -	3 3 7	Splitless Splitless Partial	GC-MS GC-MS LC-MS	12 12 23
084	M	GC-ECD	0.01	71	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	
085	S	GC-MS	0.05	94	1	50	2	GPC		1	OC, SS	GC-ECD	5
086	S	GC-ECD	0.01	97	1	50	3	LL, SPE		2		GC-ECD, GC-NPD	
087	M	LC-MS/MS	0.01	97	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	M		0.07	82	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	GC-MS	0.05	95	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	85	2	25	3	O		1	Split/Splitless	GC-ECD	6
092	M	GC-MS	0.05	57	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.01			15	5			5	Splitless	GC-MS(ion-trap)	21
094	M	GC-ECD	0.02	99	1	25	7	O		2	Splitless	GC-ECD	2
095	M	GC-ECD	0.02			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	GC-MS/MS	0.05	84	1	10	1	GPC	DDE-pp D8	1	Direct	GC-MS and GC-MS/MS	12
097	M	GC-MS	0.010	90	1	20	1			2	Splitless	GC-ECD	6
098	NA												
099	M	GC-MS	0.02	119.8	1	20	4		TPP	20	PTV	GC-MS	2
100	M	GC-MS	0.05	91	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	6

APPENDIX 8. Methods used by participants for determining pesticides.

DICHLOFLUANID													
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 71)
101	S	GC-NPD	0.05	97.4	1	30	1	GPC		0.1	TPOCI	GC-ECD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	GC-NPD	0.02			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	5
104	S	GC-MS	0.01	104	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	70	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106*	S	GC-MS	0.5	120	1	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-ECD	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-ECD	0.01			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-NPD	15
110	S	LC-MS/MS	0.05	60	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.05			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	GC-ECD	0.013	67	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	9
114	S	GC-MS	0.05	60	2	50	3			1	Split/Splitless	GC-MS	6
115	M	GC-TOF	0.01	90	2	25	1	GPC		2	Splitless	GC-ECD	21
116	M	GC-MS	0.02	70	1	15	4			1	PTV	GC-MS	22
117	S	GC-MS	0.05	88	2	50	6	SPE	yes	1	Splitless	GC-ECD	15
118	M	GC-MS	0.002	108.42	1	100	3	GPC		1	Splitless	GC-ECD, GC-NPD	6
119*			0.02			40	3	LL		1	Split/Splitless	GC-ECD,GC-NPD, GC-MS	6
120	S	GC-MS	0.01			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	GC-MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	S	GC-ECD	0.05	83.06	2	5	3	GPC		2	Pulsed splitless	GC-ECD	
123	M	GC-MS	0.03	92	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	M	GC-MS/MS	0.1			15	1		TPP	1		GC-ECD, GC-PFPD	
125	S	GC-ECD	0.05	118.5	1	5	CH_2Cl_2	DSPE		1	Splitless	GC-NPD	

APPENDIX 8. Methods used by participants for determining pesticides.

DICHLOFLUANID													
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 71)
126*	M		0.02			15	1			10		GC-MS/MS	17
127	M		0.01	98	1	10	5	SPE	TPP	3		LC-MS/MS ESI (+)	23
128	M	GC-MS	0.05	157	1	25	2	GPC		1	Splitless	GC-MS	1

* 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 71)
001	M	GC-MS	0.01	85	1	25	1	GPC		1	Pulsed Splitless	GC-ECD, GC-NPD, GC-MS (single-quad)	19
002	NA												
003	NA												
004	S	GC-MS	0.012			12	5	DSPE	Mirex / TPP	1	Split/Splitless	GC-MS	23
005	M	HPLC-UV	0.02	104	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.02	81	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	83	1	15	4			1	Splitless	GC-MS	22
008*	M	GC-MS	0.01	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	103.1	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	94.5	1	25	1	O		2	Split/Splitless	GC-ECD	21
011	M	GC-ITD	0.01	98	1	50	1	GPC		1	Splitless	GC-ITD	12
012	S	GC-MS	0.01	79	2	10	1	GPC	yes	1 25	PTV Autosampler	GC-ITD HPLC-DAD	15
013	M	LC-MS/MS	0.01	92.8	1	10	6		yes	5	Partial Loop	LC-MS/MS	12
014	M	GC-MS	0.05	>80	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015	NA												
016	M	GC-MS	0.03	91	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-MS	0.05	99.4	1	30	1	GPC		20	Loop	HPLC-UV	21
018	S	GC-MS	0.05	75	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	S	GC-NPD	0.05	96.1	1	25	1			100		HPLC-UV	14
020	M	GC-MS	0.01	135	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	NA												
022	M	GC-MS	0.02	93	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	LC-MS/MS	0.05	81	1	10	6			20		LC-MS/MS	25
024	M	GC-MS	0.1	91	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
025	NA												
026	M		0.05			10	5	SPE		2	Split/Splitless	GC-MS	23
027	NA												

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 71)
028	NA												
029	NA												
030	M	GC-MS	0.01	100	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	GC-MS	0.03	83	1	15	4		Bromofos-methyl	2	Split/Splitless Splitless mode	GC-MS(ITD)	
032	S	GC-MS	0.05	80	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	LC-MS/MS	0.01	106	1	10	5	DSPE	TPP	3		LC-MS/MS	23
034	M	GC-MS	0.01	97	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-ECD-NPD	0.05	97	1	15	4		PCB 97 (ECD) Trifluralin (NPD)	1 2	Split/Splitless	GC-ECD-NPD	2
036	S		0.1	154	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80/20)		Trichloronat	1	Direct	GC-TSD	6
037	M	GC-MS	0.01	101	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.05			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	NA												
040	S	GC-MS	0.05	87	1	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	NA												
042	NA												
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-MS	6
044	M	GC-TOF	0.05	94	1	15	4			10	Full Loop	LC-MS/MS	
045	NA												
046	M	GC-MS/MS	0.05			15	4			10	PTV	GC-MS/MS	2
047	NA												
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	M	GC-MS	0.05			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-NPD	0.05	89	2	100	3	O		0.1	Splitless	GC-NPD	
051	M	GC-ITD	0.05	107	1	75	1	GPC	Ditalimphos	2	Splitless	GC-ITD	30
052	M	GC-MS	0.01			10	5	DSPE	Triphenyl-methane	2	PTV	GC-MS	23
053	M	GC-MS	0.02			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	NA												
055	NA												

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 71)
056	S	GC-MS	0.05	103.4	1	30	1			1	Wide Bore	GC-NPD	21
057	M	LC-MS/MS	0.01			10	5	PSA	TPP	20		LC-MS/MS	23
058	NA												
059	S	GC-MS	0.01	75	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	M		0.01	86	1	10	6	LL		10		LC-MS/MS	23
061	S		0.01			30	1	GPC		20	Rheodyne	LC-MS	21
062*	S		0.05	77	2	10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.03			10	6	LL		2	PTV	GC-MS (single-quad)	
064	M	GC-MS	0.02	126	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-NPD	0.05	80.6	1	30	1			1	Splitless	GC-NPD	21
066	M	GC-NPD	0.05	84.3	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-MS	0.02	114	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.05			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.05	68	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	S	GC-TSD	0.05	102	1	20	hexane/ isopropyl-ether/ isooctane			2	Splitless	GC-NPD	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-NPD	23
072	NA												
073	NA												
074	S	GC-NPD	0.05	104	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	S	GC-MS	0.05			50	1	LL		20		HPLC-DAD/FLD	24
076	M		0.01			50	2	LL		5		LC-MS/MS	12
077	M	GC-MS	0.02			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078*	M		0.05			15	4			3 to 1	Pulsed Splitless / on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	82	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	101	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2

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 71)
081	M	GC-MS	0.05	86	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082	M	GC-MS	0.05			10	5	O	TPP	2	PTV	GC-MS (single-quad)	23
083	M	GC-MS	0.05	89	1	30	1	SPE	TPP	3	Splitless	GC-MS	12
084	M	GC-ITD	0.04	92	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	
085	M	GC-MS	0.05	110	1	50	2	GPC		1	OC, SS	GC-NPD	5
086	NA												
087	M	GC-MS/MS	0.01	87	1	10	1	DSPE		2	Splitless	GC-MS/MS (triple-quad)	23
088	S		0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	S	GC-MS	0.04	92	1	50	1 (NaOH presence)	GPC		10	Rheodyne	HPLC-DAD	6
090	M	GC-MS	0.05	82	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	NA												
092	M	GC-MS	0.05	89	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	HPLC-UV	0.05	80.9	1	15	1	SPE		20	Solvent Injection	HPLC-UV	21
094	NA												
095	M	GC-NPD	0.02			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	LC-MS/MS	0.05	64	1	10	1			2.1		LC-MS/MS	12
097	NA												
098	NA												
099	S	LC-MS/MS	0.01	96.8	1	20	4			5	Loop	LC-MS/MS	2
100	M	GC-MS/MS	0.02	101	1	10	5	PSA	TPP	5	Large Volume	GC-MS/MS	23
101	S	LC-MS/MS	0.05	82	1	30	1	O		50	Autosampler	HPLC-DAD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	GC-NPD	0.05			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	DFG S19
104	S	GC-MS	0.05	126	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	89	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.01	110	2	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-MS	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23

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 71)
108	M	GC-NPD	0.02			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-NPD	15
110	S	GC-MS	0.15	93	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	NA												
113	NA												
114	S	GC-MS	0.05	70	2	50	3			1	Split/Splitless	GC-MS	6
115	M	LC-MS/MS	0.05	85	1	10	5	LL		10		LC-MS/MS	21
116	M	GC-MS	0.02	87	1	15	4			1	PTV	GC-MS	22
117	NA												
118	NA												
119	S	GC-MS	0.02			40	3	LL		1	Split/Splitless	GC-ECD,GC-NPD, GC-MS	6
120	NA												
121	M	LC-MS/MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	NA												
123	NA												
124	NA												
125	NA												
126	NA												
127	M		0.01	104	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	23
128	S	GC-MS	0.05	112	1	25	2	GPC		1	Splitless	GC-MS	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

IMAZALIL													
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 71)
001	M	LC-MS/MS	0.004	94	1	12.5	5	-		7		LC-MS/MS	19
002	M	GC-MSD	0.01	83.2	1	15	5	DSPE		10	LVI	GC-ITD (MS/MS)	23
003	NA												
004	S	GC-MS	0.01			12	5	DSPE	Mirex / TPP	1	Split/Splitless	GC-MS	23
005	M	GC-MS	0.01	97	1	20	6	SPE	TPP	5		LC-MS/MS	23
006	S	GC-ITD	0.05	85	2	75	1	LL		10		HPLC-DAD/FLUO	6
007	M	LC-MS/MS	0.01	83	1	10	6		D5	5		LC-MS/MS	18
008	M	GC-MS	0.01	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	S	LC-MS/MS	0.02	97	1	15	5	DSPE		10	Partial Loop	LC-MS/MS	20
010	S	GC-MS	0.02	98.8	1	25	1	O		2	Split/Splitless	GC-ECD	21
011	M	LC-MS/MS	0.01	70	1	50	1			5		LC-MS/MS	12
012	S	GC-MS	0.01	67	2	10	1	GPC	yes	1 25	PTV Autosampler	GC-ITD HPLC-DAD	15
013	M	LC-MS/MS	0.01	96	1	10	methanol/ water buffered		yes	5	Partial Loop	LC-MS/MS	12
014	M	GC-MS	0.02	>70	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015	M	GC-MS	0.02	109	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.05	84.5	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-MS	0.05	84.5	1	30	1			1	Direct	GC-NPD	21
018	S	GC-MS	0.02	94	2	15	Dichloro-methane	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	M	GC-ECD	0.05	82.2	1	12.5	4			3	Splitless	GC-NPD	14
020	S	GC-NPD	0.1	135	1	10.6	Dichloro-methane	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021*	M	GC-MS	0.03			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	88	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	LC-MS/MS	0.02	76	1	10	6			20		LC-MS/MS	25
024	M	GC-MS	0.25	65	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
025	M	LC-MS/MS	0.02			10	1		TPP	20		LC-MS/MS	
026	M	GC-MS	0.001			10	5	SPE		10		LC-MS/MS	23

APPENDIX 8. Methods used by participants for determining pesticides.

IMAZALIL													
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 71)
027	NA												
028*	S	GC-NPD	0.016	60	2	100	acetone, n-hexane, toluene	GPC, SPE		10	Solvent Vent PTV	GC-NPD	6
029	M	LC-MS/MS	0.01	97.4	1	10	Acetone	DSPE	TPP	5	Rheodyne	LC-MS/MS	
030	M	GC-MS	0.03	98	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	LC-MS/MS	0.01	75	1	15	4			5	Loop	LC-MS/MS	
032	S	GC-MS	0.05	60	2	15	Dichloro-methane	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	LC-MS/MS	0.01	106	1	10	5	DSPE	TPP	3		LC-MS/MS	23
034	M	GC-MS	0.01	85	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	S	LC-MS/MS	0.01	83	1	10	6	LL on Chem Elut		25		LC-MS/MS	18
036	S	GC-MS	0.02	48.2	1	10	6	LLE		20		LC-MS/MS	18
037	M	GC-MS	0.01	95	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.02			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	S	GC-MS	0.0125	20.2	2	20	6	LL		10	Solvent Vent PTV	GC-NPD	6
040	S	GC-MS	0.02	85	1	50	1	O		1	Split/Splitless	GC-MS (single-quad)	15
041	M	LC-MS/MS	0.02	70	1	20/5	1			20		LC-MS/MS	2
042	NA												
043	M	LC-MS/MS	0.02			5	1	LL	D5	25		LC-MS/MS	32
044	M	GC-TOF	0.025	88	1	15	4			10	Full Loop	LC-MS/MS	
045	M	GC-MS	0.02	90	2	15	6	SBSE			TDU-CIS	GC-MS (single quad)	3
046	M	LC-MS/MS	0.02	76.7	1	15	5	DSPE		50		LC-MS/MS	23
047	NA												
048	S	GC-MS	0.02			10	Dichloro-methane	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	NA												
050	S	GC-NPD	0.02	87	2	100	3	O		0.1	Splitless	GC-ECD	
051	M	LC-MS/MS	0.01	85	1	75	1			5		LC-MS/MS	30
052	M	LC-MS/MS	0.01			10	5	DSPE	TPP	3		LC-MS/MS	23
053	M	GC-MS	0.02			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22

APPENDIX 8. Methods used by participants for determining pesticides.

IMAZALIL													
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 71)
054	S	GC-MS	0.04	80	2	50	3	SPE	M-series Ronnel	2 1	Splitless	GC-ECD GC-MS (single quad)	12
055	M	GC-NPD	0.01	75	2	10	Dichloro-methane	GPC	Azobenzene	1	Splitless	GC-NPD	15
056	S	GC-ECD	0.05	100.5	1	30	1			1	Wide Bore	GC-NPD	21
057	M	LC-MS/MS	0.01			10	5	PSA	TPP	20		LC-MS/MS	23
058	M	GC-MS	0.05			15	4	-		1/10		GC-ECD, GC-TSD,GC-MS	2
059	S	GC-MS	0.01	75	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	M		0.01	96	1	10	6	LL		10		LC-MS/MS	23
061	S		0.01	50.9	1	30	1	GPC		20	Rheodyne	LC-MS	21
062	S	Different Column		84	2	10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.02			10	6	LL		2	PTV	GC-MS (single-quad)	
064	M	GC-MS	0.02	96	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-NPD	0.02	84.8	1	30	1			1	Splitless	GC-NPD	21
066	M	GC-NPD	0.02	90.7	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-MS	0.02	99	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.02	50	3					2	PTV	GC-MS	5
069	M	LC-MS/MS	0.01	63.8	1	10	6	SPE	TPP	10		LC-MS/MS	18
070	S	LC-MS	0.02	67	1	10	4			5	Loop	LC-MS/MS	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-NPD	23
072*	S		0.05			10	5	DSPE		2	Split/Splitless	GC-NPD	23
073	M	GC-MS	0.02	83	1	50	1			1	Auto Injection	GC-MS (single-quad)	30
074	S	GC-NPD	0.01	71	2	10	Dichloro-methane	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.02			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			50	2	LL		5		LC-MS/MS	12
077	M	GC-MS	0.02			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15

APPENDIX 8. Methods used by participants for determining pesticides.

IMAZALIL													
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 71)
078*	M		0.05			15	4			3 to 1	Pulsed Splitless / on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	113	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.02	98.8	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	LC-MS/MS	0.02	73	1	10	1	LL	yes	10	Loop	LC-MS/MS	12
082	M	LC-MS/MS	0.005			10	5	O		20		LC-MS/MS (triple-quad)	23
083	M	LC-MS/MS	0.02	94	1	10	5			7	Partial	LC-MS	23
084	M	LC-MS/MS	0.03	93	1	10	methanol/ ammonia acetate/ AcH (95:5)			10		LC-MS/MS	
085	S	LC-MS/MS	0.02	81	1	25	Dichloro-methane	SPE		25		LC-MS/MS	
086	NA												
087	M	LC-MS/MS	0.01	99	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
088	S		0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	M	GC-MS	0.04	75	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	LC-MS	0.02	70	1	15	Dichloro-methane			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	NA												
092	M	GC-MS	0.02	94	1	5	Dichloro-methane		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.02	84.1	1	15	1			5	Splitless	GC-MS (ion-trap)	21
094	NA												
095	M	LC-MS/MS	0.01			10	5	SPE		20	Loop	LC-MS/MS	23
096	M	LC-MS/MS	0.05	63	1	10	1			2.1		LC-MS/MS	12
097	M		0.010	72	1	20	1			20		LC-MS/MS	6
098	NA												
099	S	LC-MS/MS	0.01	91.5	1	20	4			5	Loop	LC-MS/MS	2
100	M	GC-MS/MS	0.05	97	1	10	5	PSA	TPP	5	Large Volume	GC-MS/MS	23
101	S	LC-MS/MS	0.02	98.9	1	30	1			0.1	TPOCI	GC-ECD	21
102	M	GC-MS	0.02			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	LC-MS	0.02			20	methanol/ water	SPE	Isoproturon	15		HPLC-MS	18
104	S	GC-MS	0.01	78	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26

APPENDIX 8. Methods used by participants for determining pesticides.

IMAZALIL													
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 71)
105	S	HPLC-DAD	0.05	65	2	20	1	LL		20		HPLC-DAD	
106	S	GC-MS	0.2	70	1	25	ethyl acetate, dichloro-methane (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-MS	0.02			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-NPD	0.01			10	Dichloro-methane			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	Dichloro-methane + acetone		Ethion	2	PTV	GC-NPD	15
110	S	GC-MS	0.05	85	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111*	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.02			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	LC-MS/MS	0.011	83	1	10	6					LC-MS/MS	9
114	S	GC-MS	0.02	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	LC-MS/MS	0.004	75	1	10	5	LL		10		LC-MS/MS	21
116	M	GC-MS	0.02	72	1	15	4			1	PTV	GC-MS	22
117*			0.05	90	2	10	6	SPE		10	Splitless	HPLC-DAD	15
118	NA												
119	S	GC-MS	0.05	85	2	40	3	LL		1	Split/Splitless	GC-ECD,GC-NPD, GC-MS	6
120	S	GC-MS	0.05			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	LC-MS/MS	0.02			10	5	DSPE	TPP	2		LC-MS/MS	23
122	NA												
123	M		0.02	81	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	NA												
125	NA												
126	M		0.02			15	1			10		LC-MS/MS	17
127	M		0.01	94	1	10	5	SPE	TPP	3		LC-MS/MS ESI (+)	23
128	NA												

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

LAMBDA-CYHALOTHRIN													
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 71)
001	M	GC-MS	0.008	80	1	25	1	GPC		1	Pulsed Splitless	GC-ECD, GC-NPD,GC-MS (single-quad)	19
002	M	GC-MSD	0.01	102.2	1	15	5	DSPE		10	LVI	GC-ITD (MS/MS)	23
003	S	GC-MS	0.01	107	1	15	4			2	Splitless	GC-µECD-NPD	2
004	M	GC-ECD	0.0009			12	5	DSPE	Mirex / TPP	2	Split/Splitless	GC-ECD, GC-NPD	23
005	M	GC-PND	0.01	80	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.01	96	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	94	1	15	4			1	Splitless	GC-MS	22
008	M	GC-MS	0.01	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	79.6	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.02	101.3	1	25	1	O		2	Split/Splitless	GC-ECD	21
011	M	GC-ECD	0.05	105	1	50	1	GPC		2	Splitless	GC-ECD	12
012	S	GC-MS	0.01	71	2	10	1	GPC	yes	1	PTV	GC-ITD	15
013	M	GC-MS	0.02	90.4	1	50	Acetone	LL (isopropyl ether)		2	Splitless	GC-ECD, GC-NPD	22
014	M	GC-MS	0.02	>70	2	90	3	GPC + SPE	Aldrin	1.5	Split/Splitless	GC-ECD	5
015	M	GC-MS	0.02	100	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.03	95	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-MS	0.02	86.3	1	30	1	GPC		1	Split 1/10	GC-ECD	21
018	S	GC-MS	0.02	93	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	M	GC-ECD	0.02	105.6	1	6.25	4			1	Splitless	GC-ECD	14
020	S	GC-NPD	0.1	98	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.02			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	89.5	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	S	GC-MS	0.02	33	1	75	acetone, cyclohexan and ethyl-acetate	GPC		1		GC-ECD	5
024	M	GC-MS	0.02	97	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
025	M	GC-MS	0.02			10	1		TPP	10	GC-MS/MS		

APPENDIX 8. Methods used by participants for determining pesticides.

LAMBDA-CYHALOTHRIN													
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 71)
026	M		0.017			10	5	SPE		2	Split/Splitless	GC-MS	23
027	S		0.02	89	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028	S	GC-ECD	0.002	80	2	100	acetone, n-hexane, toluene	GPC,SPE		10	Solvent Vent PTV	GC-ECD	6
029	M	GC-MS/MS	0.01	84.7	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030	M	GC-MS	0.05	96	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	GC-MS	0.03	94	1	15	4		Bromofos-methyl	2	Split/Splitless Splitless mode	GC-MS(ITD)	
032	S	GC-MS	0.02	70	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	GC-MS	0.01	105	1	10	5	DSPE	Mirex	1	Solvent Vent PTV	GC-ECD, GC-MSD	
034	M	GC-MS	0.01	94	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-ECD-NPD	0.02	120	1	15	4		PCB 97 (ECD) Trifluralin (NPD)	1 2	Split/Splitless	GC-ECD-NPD	2
036	S	GC-MS	0.01	58.8	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80/20)	SPE - florisil		1	Direct	GC-ECD	6
037	M	GC-MS	0.01	98	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.02			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	S	GC-NPD	0.0025	98.1	2	20	6	LL		10	Solvent Vent PTV	GC-ECD	6
040	S	GC-MS	0.02	104	2	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	M	GC-MS	0.01	115	1	20/5	1			2	Spliless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	2
042	NA												
043	M	GC-MS	0.02			10	1	GPC	Isodrin	1	Splitless	GC-ECD, GC-MS	6
044	M	GC-TOF	0.025	100	1	15	4		Hexachloro-benzene	1	Splitless	GC-ITD	
045	M	GC-MS	0.02	90	2	15	6	SBSE			TDU-CIS	GC-MS (single quad)	3
046	M	GC-MS/MS	0.02			15	4			10	PTV	GC-MS/MS	2
047	S	GC-ECD	0.02	95		5	3			2	Splitless	GC-ECD, GC-NPD	
048	S	GC-MS	0.02			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	M	GC-MS	0.02			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-NPD	0.02	105	2	100	3	O		0.1	Splitless	GC-ECD	

APPENDIX 8. Methods used by participants for determining pesticides.

LAMBDA-CYHALOTHRIN													
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 71)
051	M	GC-ITD	0.05	95	1	75	1	GPC	Ditalimphos	2	Splitless	GC-ITD	30
052	M	GC-MS	0.02			10	5	DSPE	Triphenyl-methane	2	PTV	GC-MS	23
053	M	GC-MS	0.02			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	S	GC-MS	0.05	80	2	50	Acetona Acetona 3 3	SPE	M series Ronnel M series Ronnel	2 1 2 1	Splitless	GC-ECD GC-MS (single quad) GC-ECD GC-MS (single quad)	12
055	NA												
056	S	GC-MS	0.01	98.2	1	30	1	GPC		0.5	Direct	GC-ECD	21
057	S	GC-MSD	0.01			100	2	GPC, SPE		1	Splitless	GC-ECD, GC-MSD	5
058	M	GC-MS	0.02			15	4	-		1/10		GC-ECD, GC-TSD,GC-MS	2
059	S	GC-ECD/MS	0.01	80	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	S		0.02	87	1	50	2	GPC	tr-HCEO	2	Split/Splitless	GC-ECD	5
061	S		0.01	97	2	30	1	GPC		1	SPI	GC-ECD	21
062	S	Different Column		70	2	10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.02			80	2	GPC		1	Splitless	GC-ECD (single-quad)	
064	M	GC-MS	0.02	106	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-ECD	0.02	98.9	1	30	1			1	Splitless	GC-ECD	21
066	M	GC-ECD, NPD	0.005	77.4	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-ECD	0.008	91	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.02			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.02	92	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	S	GC-ECD	0.02	84	1	20	hexane/ isopropyl-ether/ isooctane		Mirex	2	Splitless	GC-ECD	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-ECD	23
072*	S		0.02			10	5	DSPE		2	Split/Splitless	GC-ECD	23
073	NA												
074	S	GC-ECD	0.01	76	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15

APPENDIX 8. Methods used by participants for determining pesticides.

LAMBDA-CYHALOTHRIN													
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 71)
075	M	GC-MS	0.02			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			10	5	DSPE		2	PTV	GC-MS (single-quad)	23
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078	M	GC-ECD	0.05	105	1	15	4			3 to 1	Pulsed Splitless / on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	56	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.02	95	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	GC-MS	0.02	82	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082	M	GC-MS	0.02			10	5	O	TPP	2	PTV	GC-MS (single-quad)	23
083	M	GC-MS	0.02	110	1	30	1	GPC	TPP	3	Splitless	GC-MS	12
084	M	GC-ECD	0.01	95	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	
085	S	GC-MS	0.02	101	1	50	2	GPC		1	OC, SS	GC-ECD	5
086	S	GC-ECD	0.02	108	1	50	3	LL, SPE		2		GC-ECD, GC-NPD	
087	M	GC-MS/MS	0.01	97	1	10	5	DSPE		2	Split/Spliless	GC-MS/MS (Triple-Quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	M		0.02	79	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	GC-MS	0.02	105	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	97	2	25	3	O		1	Split/Splitless	GC-ECD	6
092	M	GC-MS	0.05	67	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.01	105.8	1	15	1			5	Splitless	GC-MS (ion-trap)	21
094	M	GC-ECD	0.02	97	1	25	7	O		2	Splitless	GC-ECD	2
095	M	GC-ECD, GC-NPD	0.02			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	GC-MS/MS	0.02	85	1	10	1	GPC	DDE-pp D8	1	Direct	GC-MS and GC-MS/MS	12
097	M	GC-MS	0.010	90	1	20	1			2	Splitless	GC-ECD	6
098	NA												
099	M	GC-MS	0.01	75.3	1	20	4		TPP	20	PTV	GC-MS	2
100	M	GC-MS	0.02	94	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	6
101	S	GC-MS	0.02	99.8	1	30	1			0.1	TPOCI	GC-ECD	21

APPENDIX 8. Methods used by participants for determining pesticides.

LAMBDA-CYHALOTHRIN													
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 71)
102	M	GC-MS	0.005			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103*	M	GC-ECD	0.02			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	5
104	S	GC-MS	0.01	103	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	77	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.01	80	1	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-MS	0.02			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-NPD	0.02			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-ECD	15
110	S	GC-MS	0.05	84	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.1			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.02			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	GC-ECD	0.005	69	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	9
114	S	GC-MS	0.02	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	GC-TOF	0.005	94	2	25	1	GPC		2	Splitless	GC-ECD	21
116	M	GC-MS	0.02	94	1	15	4			1	PTV	GC-MS	22
117	NA												
118	S	GC-MS	0.017	71.34	1	100	7	SPE		1	Direct	GC-ECD	6
119	S	GC-MS	0.02	85	2	40	3	LL		1	Split/Splitless	GC-ECD,GC-NPD, GC-MS	6
120	S	GC-MS	0.01			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	GC-MS	0.02			10	5	DSPE	TPP	2		LC-MS/MS	23
122	S	GC-ECD	0.05	62.97	2	5	3	GPC		2	Pulsed splitless	GC-ECD	
123	M		0.01	95	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	M	GC-MS/MS	0.02	74.9	1	15	1		TPP	10		GC-ITD	
125	S	GC-ECD	0.02	78.2	1	5	diethyl ether, n-hexane	DSPE		1	Splitless	GC-ECD	
126	M		0.02			15	1			10		GC-MS/MS	17

APPENDIX 8. Methods used by participants for determining pesticides.

LAMBDA-CYHALOTHRIN													
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 71)
127	M		0.02	108	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	23
128	M	GC-MS	0.05	38	1	25	2	GPC		1	Splitless	GC-MS	1

* 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 71)
001	M	GC-MS	0.01	92	1	25	1	GPC		1	Pulsed Splitless	GC-ECD, GC-NPD,GC-MS (single-quad)	19
002	M	GC-MSD	0.01	86.4	1	15	5	DSPE		10	LVI	GC-ITD (MS/MS)	23
003	S	GC-MS	0.01	102	1	15	4			2	Splitless	GC-µECD-NPD	2
004	S	GC-MS	0.01			12	5	DSPE	Mirex / TPP	1	Split/Splitless	GC-MS	23
005	M	HPLC-UV	0.005	101	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.02	73	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	86	1	15	4			1	Splitless	GC-MS	22
008	M	GC-MS	0.02	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	100.9	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.02	96.5	1	25	1	GPC		2	Split/Splitless	GC-NPD	21
011	M	LC-MS/MS GC-ITD	0.01	100	1	50	1	GPC		5 1	Splitless	LC-MS/MS GC-ITD	12
012	S	GC-MS	0.01	92	2	10	1	GPC	yes	1	PTV	GC-ITD	15
013	M	GC-MS	0.1	88.9	1	50	Acetone	LL (isopropyl ether)		2	Splitless	GC-ECD, GC-NPD	22
014	M	GC-MS	0.02	>80	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015	M	GC-MS	0.02	95	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.03	81	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-MS	0.05	85.7	1	30	1	GPC		1	Split 1/10	GC-ECD	21
018	S	GC-MS	0.02	78	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	NA												
020	S	GC-NPD	0.1	99	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.02			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	88.5	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	GC-MS	0.02	76	1	75	acetone. cyclohexan and ethyl-acetate	GPC		1		GC-NPD	5
024	NA												
025	M	GC-MS	0.01			10	1		TPP	10	GC-MS/MS		

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 71)
026	M		0.013			10	5	SPE		2	Split/Splitless	GC-MS	23
027	S		0.02	82	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028	NA												
029	M	GC-MS/MS	0.01	87.7	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030	M	GC-MS	0.01	97	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	LC-MS/MS	0.01	96	1	15	4			5	Loop	LC-MS/MS	
032	S	GC-MS	0.02	70	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	GC-MS	0.01	98	1	10	5	DSPE	Mirex	1	Solvent Vent PTV	GC-ECD, GC-MSD	
034	M	GC-MS	0.01	102	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-ECD-NPD	0.02	113	1	15	4		PCB 97 (ECD) Trifluralin (NPD)	1 2	Split/Splitless	GC-ECD-NPD	2
036	S	GC-MS	0.01	112	1	10	6	LLE		20		LC-MS/MS	18
037	M	GC-MS	0.01	103	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.02			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	NA												
040	S	GC-MS	0.02	91	1	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	M	GC-MS	0.02	106	1	20/5	1			2	Spliless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	2
042	NA												
043	M	GC-MS	0.02			10	1	GPC	Isodrin	1	Splitless	GC-ECD, GC-MS	6
044	M	GC-TOF	0.025	84	1	15	4			10	Full Loop	LC-MS/MS	
045	NA												
046	M	GC-MS/MS	0.02	78.4	1	15	4			10	PTV	GC-MS/MS	2
047	S	GC-ECD	0.05	85		5	3			2	Splitless	GC-ECD, GC-NPD	
048	S	GC-MS	0.02			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	M	GC-MS	0.02			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-ECD	0.02	95	2	100	3	O		0.1	Splitless	GC-NPD	
051	M	GC-ITD	0.02	93	1	75	1	GPC	Ditalimphos	2	Splitless	GC-ITD	30
052	M	LC-MS/MS	0.01			10	5	DSPE	TPP	3		LC-MS/MS	23

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 71)
053	M	GC-MS	0.02			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	S	GC-MS	0.05	99	2	50	3	SPE	M-series Ronnel	2 1	Splitless	GC-ECD GC-MS (single quad)	12
055	NA												
056	S	GC-MS	0.01	81.1	1	30	1	GPC		0.5	Direct	GC-ECD	21
057	M	LC-MS/MS	0.01			10	5	PSA	TPP	20		LC-MS/MS	23
058	NA												
059	S	GC-MS	0.01	75	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	M		0.01	107	1	10	6	LL		10		LC-MS/MS	23
061	S		0.02	62.1	1	30	1	GPC		20	Rheodyne	LC-MS	21
062	S	Different Column				10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.005			10	6	LL		2	PTV	GC-MS (single-quad)	
064	M	GC-MS	0.02	104	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-ECD	0.02	106.9	1	30	1			1	Splitless	GC-ECD	21
066	M	GC-ECD, NPD	0.01	80.1	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-ECD	0.02	91	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.02			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.01	87	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	M	GC-MS	0.02	129	1	5	acetone/ hexane/ ethyl acetate			2	Splitless	GC-MS/MS	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-ECD	23
072	S	GC-MS	0.02	109	1	100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS(ion trap)	6
073	M	GC-MS	0.03	92	1	50	1			1	Auto Injection	GC-MS (single-quad)	30
074	S	GC-NPD	0.02	101	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.02			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			10	5	DSPE		2	PTV	GC-MS (single-quad)	23
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15

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 71)
078	M	GC-NPD	0.05	98	1	15	4			3 to 1	Pulsed Splitless / on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	84	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.02	98.1	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	GC-MS	0.02	90	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082	M	GC-MS	0.02			10	5	O	TPP	2	PTV	GC-MS (single-quad)	23
083	M	GC-MS	0.02	98	1	30	1	SPE	TPP	3	Splitless	GC-MS	12
084	M	GC-ITD	0.01	110	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	
085	M	GC-MS	0.02	110	1	50	2	GPC		1	OC, SS	GC-NPD	5
086	S	GC-ECD	0.02	111	1	50	3	LL, SPE		2		GC-ECD, GC-NPD	
087	M	LC-MS/MS	0.01	98	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	M	GC-MS	0.03	69	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	GC-MS	0.02	100	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	85	2	50	3	O		1	Split/Splitless	GC-NPD	6
092	M	GC-MS	0.05	88	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.01	100.3	1	15	1			5	Splitless	GC-MS (ion-trap)	21
094	M	GC-TSD	0.02	76	1	25	7	O		2	Splitless	GC-ECD	2
095	M	GC-ECD, GC-NPD	0.02			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	LC-MS/MS	0.02	78	1	10	1			2.1		LC-MS/MS	12
097	M		0.010	77	1	20	1			20		LC-MS/MS	6
098	NA												
099	M	GC-MS	0.01	91.8	1	20	4		TPP	20	PTV	GC-MS	2
100	M	GC-MS	0.02	77	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	6
101	S	GC-NPD	0.02	92.7	1	30	1	GPC		0.1	TPOCI	GC-ECD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	GC-ECD	0.01			50	methanol. CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	5
104	S	LC-MS/MS	0.01	104	1	50	4	LL		5	Loop	LC-MS/MS	26

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 71)
105	S	GC-MS	0.05	79	2	50	acetone. methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.02	80	1	25	ethyl acetate. CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-MS	0.02			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-NPD	0.01			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-NPD	15
110	S	GC-MS	0.05	93	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.05			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.02			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	GC-ITD	0.025	86	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	9
114	S	GC-MS	0.02	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	GC-TOF	0.05	90	2	25	1	GPC		2	Splitless	GC-NPD	21
116	M	GC-MS	0.02	94	1	15	4			1	PTV	GC-MS	22
117	NA												
118	NA												
119	NA												
120	NA												
121	M	LC-MS/MS	0.02			10	5	DSPE	TPP	2		LC-MS/MS	23
122	S	GC-ECD	0.05	71.7	2	5	3	GPC		2	Pulsed splitless	GC-ECD	
123	M		0.02	95	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	NA												
125	S	GC-ECD GC-NPD	0.08	63.1	1	5	CH_2Cl_2	DSPE		1	Splitless	GC-NPD	
126	M		0.05			15	1			10		GC-MS/MS	17
127	M	GC-MS	0.01	101	1	10	5	SPE	TPP	3		LC-MS/MS ESI (+)	23
128	S	GC-MS	0.05	110	1	25	2	GPC		1	Splitless	GC-MS	1

APPENDIX 8. Methods used by participants for determining pesticides.

PARATHION													
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 71)
001	M	GC-MS	0.01	93	1	25	1	GPC		1	Pulsed Splitless	GC-ECD, GC-NPD,GC-MS (single-quad)	19
002	NA												
003	NA												
004	S	GC-MS	0.01			12	5	DSPE	Mirex / TPP	1	Split/Splitless	GC-MS	23
005	M	GC-PND	0.005	84	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.01	93	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	87	1	15	4			1	Splitless	GC-MS	22
008	M	GC-MS	0.02	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	81.3	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	91.2	1	25	1	GPC		2	Split/Splitless	GC-NPD	21
011	M	GC-ITD, GC-FPD	0.01	106	1	50	1	GPC		1	Splitless	GC-ITD GC-FPD	12
012	S	GC-MS	0.01	84	2	10	1	GPC	yes	1	PTV	GC-ITD	15
013	M	GC-MS	0.02	90.9	1	50	Acetone	LL (isopropyl ether)		2	Splitless	GC-ECD, GC-NPD	22
014	M	GC-MS	0.05	>90	2	90	3	GPC + SPE	Aldrin	1.5	Split/Splitless	GC-ECD	5
015	M	GC-MS	0.05	100	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.02	113	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-NPD	0.02	92.1	1	30	1			1	Splitless	GC-MS	21
018	S	GC-MS	0.05	88	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	M	GC-MS	0.05	96.8	1	12.5	4			3	Splitless	GC-NPD	14
020	S	GC-NPD	0.01	85	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	NA												
022*	M	GC-MS	0.02			20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	GC-MS	0.05	70	1	75	acetone, cyclohexan and ethyla-cetate	GPC		1		GC-NPD	5
024	M	GC-MS	0.02	99	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
025	M	GC-MS	0.05			10	1		TPP	10	GC-MS/MS		
026	M	GC-FPD	0.005			10	5	SPE		2	Split/Splitless	GC-MS	23

APPENDIX 8. Methods used by participants for determining pesticides.

PARATHION													
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 71)
027	S		0.02	79	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028	NA												
029	M	GC-MS/MS	0.01	90	1	20	3	SPE		4	Splitless	GC-ECD, GC-NPD	
030	M	GC-MS	0.01	99	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	GC-MS	0.03	93	1	15	4		Bromofos-methyl	2	Split/Splitless Splitless mode	GC-MS(ITD)	
032	S	GC-MS	0.02	80	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	GC-MS	0.01	107	1	10	5	DSPE	Mirex	1	Solvent Vent PTV	GC-ECD, GC-MSD	
034	M	GC-MS	0.01	100	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-FPD	0.01	79	1	25	4		Tributhyl-phophate	1	Split/Splitless	GC-FPD	2
036	S	GC-MS	0.01	72.4	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80/20)		Trichloronat	1	Direct	GC-TSD	6
037	M	GC-MS	0.01	90	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.01			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	S	GC-MS	0.0025	79	2	20	6	LL		10	Solvent Vent PTV	GC-ECD	6
040	S	GC-MS	0.05	90	2	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	M	GC-MS	0.01	88	1	20/5	1			2	Splitless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	22
042	NA												
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-MS	6
044	M	GC-TOF	0.05	89	1	15	4		Hexachloro-benzene	1	Splitless	GC-ITD	
045	M	GC-MS	0.03	90	2	15	6	SBSE			TDU-CIS	GC-MS (single quad)	3
046	M	GC-MS/MS	0.02	109.3	1	15	4			10	PTV	GC-MS/MS	22
047	NA												
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	M	GC-MS	0.05			15	4	LL		10	Gvol Autosampler	GC-MS	22
050	S	GC-ECD	0.05	96	2	100	3	O		0.1	Splitless	GC-NPD	
051	M	LC-MS/MS	0.01	89	1	75	1			5		LC-MS/MS	30
052	M	GC-MS	0.02			10	5	DSPE	Triphenyl-methane	2	PTV	GC-MS	23

APPENDIX 8. Methods used by participants for determining pesticides.

PARATHION													
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 71)
053	M	GC-MS	0.03			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	S	GC-MS	0.05	90	2	50	acetone acetone 3 3	SPE	M series Ronnel M series Ronnel	2 1 2 1	Splitless	GC-ECD GC-MS (single quad) GC-ECD GC-MS (single quad)	12
055	M	GC-NPD	0.01	85	2	10	CH_2Cl_2	GPC	Azobenzene	1	Splitless	GC-NPD	15
056	S	GC-MS	0.01	87.5	1	30	1			1	Wide Bore	GC-NPD	21
057	S	GC-MSD	0.01			100	2	GPC, SPE		1	Splitless	GC-ECD, GC-MSD	5
058	NA												
059	S	GC-PFPD/MS	0.01	80	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	S		0.01	99	1	50	2	GPC	tr-HCEO	2	Split/Splitless	GC-ECD	5
061	S		0.05	103	1	30	1	GPC		0.5-1	Splitless	GC-NPD	21
062	S	Different Column		79	2	10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	GC-MS	0.005			10	6	LL		2	PTV	GC-MS (single-quad)	
064	M	GC-MS	0.02	95	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-NPD	0.02	98.6	1	30	1			1	Splitless	GC-NPD	21
066	M	GC-NPD, FPD	0.001	80.6	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-ECD	0.006	106	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD,GC-FPD, GC-MS ,HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.02			50	3	GPC		2	PTV	GC-MS	5
069	M	GC-MS	0.02	70	1	25	2	GPC	Mirex / HCB	1	Split/Splitless	GC-ECD, GC-MS	6
070	S	GC-FPD	0.05	98	1	20	hexane/ isopropyl-ether/ isooctane			2	Splitless	GC-FPD	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-ECD	23
072	S	GC-MS	0.05	70	1	100	3	GPC		1	Pulsed Splitless (PTV)	GC-ECD, GC-MS(ion trap)	6
073	NA												
074	S	GC-NPD	0.01	71	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.02			10	5	SPE	3	2	Splitless	GC-MSD	23
076	M		0.01			10	5	DSPE		2	PTV	GC-MS (single-quad)	23

APPENDIX 8. Methods used by participants for determining pesticides.

PARATHION													
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 71)
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078	M	GC-ECD	0.02	95	1	15	4			3 to 1	Pulsed Splitless / on-column	GC-NPD,GC-ECD	2
079	M	GC-MS	0.02	111	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	94.8	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	GC-MS	0.05	84	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082*			0.02			10	5	O	TPP	2	PTV	GC-MS (single-quad)	23
083	M	GC-MS	0.05	93	1	30	1	GPC SPE	TPP	3	Splitless	GC-MS	12
084	M	GC-ITD	0.08	117	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	
085	S/M	GC-MS	0.05	98	1	50	2	GPC		1	OC, SS	GC-ECD, GC-NPD	5
086	S	GC-NPD	0.02	70	1	50	3	LL, SPE		2		GC-ECD, GC-NPD	
087	M	GC-MS/MS	0.01	98	1	10	5	DSPE		2	Split/Spliless	GC-MS/MS (Triple-Quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	M	GC-MS	0.05	94	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	GC-MS	0.05	97	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	103	2	50	3	O		1	Split/Splitless	GC-NPD	6
092	M	GC-MS	0.05	72	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.01	90.7	1	15	1			5	Splitless	GC-MS (ion-trap)	21
094	M	GC-TSD	0.02	87	1	25	7	O		2	Splitless	GC-ECD	2
095	M	GC-ECD, GC-NPD	0.01			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	GC-MS/MS	0.02	81	1	10	1	GPC	DDE-pp D8	1	Direct	GC-MS and GC-MS/MS	12
097	S	GC-FPD	0.010	65	1	20	1			2	Splitless	GC-FPD	6
098	NA												
099	M	GC-MS	0.02	88.7	1	20	4		TPP	20	PTV	GC-MS	22
100	M	GC-MS/MS	0.01	102	1	18.7	1	GPC	Azinphos Ethyl	1	Splitless	GC-ECD, GC-NPD, GC-FPD	6
101	S	GC-MS	0.02	95	1	30	1			0.1	TPOCI	GC-ECD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	
103	M	GC-NPD	0.01			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	5

APPENDIX 8. Methods used by participants for determining pesticides.

PARATHION													
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 71)
104	S	GC-MS	0.01	103	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	89	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.02	80	1	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-ECD	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-NPD	0.01			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-NPD	15
110			0.1	92	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.02			15	1	GPC	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.05			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	M	GC-ITD	0.025	100	1	25	2	GPC		1	Splitless/PTV	GC-ECD, GC-NPD, GC-ITD	9
114	S	GC-MS	0.05	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	GC-TOF	0.01	109	2	25	1	GPC		2	Splitless	GC-ECD	21
116	M	GC-MS	0.02	82	1	15	4			1	PTV	GC-MS	22
117*			0.01	87	2	50	6	SPE	yes	1	Splitless	GC-NPD	15
118	M	GC-MS	0.003	80.46	1	100	3	GPC		1	Splitless	GC-ECD, GC-NPD	6
119*			0.01			40	3	LL		1	Split/Splitless	GC-ECD,GC-NPD, GC-MS	6
120	S	GC-MS	0.05			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	GC-MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	S	GC-NPD	0.02	73.18	2	5	3	GPC		1	Splitless	GC-NPD	
123	NA												
124	M	GC-MS/MS	0.05	70	1	15	1		TPP	10		GC-ITD	
125	S	GC-NPD GC-MS	0.01	86.4	1	5	CH_2Cl_2	DSPE		1	Splitless	GC-NPD	
126	M		0.05			15	1			10		GC-MS/MS	17
127	M		0.02	99	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	23
128	S	GC-MS	0.05	116	1	25	2	GPC		1	Splitless	GC-MS	1

* NOT DETECTED

APPENDIX 8. Methods used by participants for determining pesticides.

PIRIMICARB													
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 71)
001	M	LC-MS/MS	0.004	97	1	12.5	5	-		7		LC-MS/MS	19
002	M	GC-MSD	0.01	91.5	1	15	5	DSPE		10	LVI	GC-ITD (MS/MS)	23
003	S	GC-MS	0.01	99.8	1	15	4			2	Splitless	GC-µECD-NPD	2
004	M	GC-PND	0.015			12	5	DSPE	Mirex / TPP	2	Split/Splitless	GC-ECD, GC-NPD	23
005	M	HPLC-UV	0.02	100	1	50	2	GPC	p,p'-DDE	1	Splitless	GC-MS	10
006	S	GC-ITD	0.01	83	2	50	1	SPE		1-2	SPI/splitless	GC-PFPD, GC-NPD, GC-ELCD, GC-ECD, GC-ITD	6
007	M	GC-MS	0.01	80	1	15	4			1	Splitless	GC-MS	22
008	M	GC-MS	0.16	100	2	5	5			50	Automatic TDS sampler	GC-MS (single-quad)	12
009	M	GC-MS	0.02	86.7	1	15	4	GPC		2	Splitless	GC-MS	2
010	S	GC-MS	0.05	95.1	1	25	1	GPC		2	Split/Splitless	GC-NPD	21
011	M	LC-MS/MS	0.01	98	1	50	1			5		LC-MS/MS	12
012	S	GC-MS	0.01	82	2	10	1	GPC	yes	1	PTV	GC-ITD	15
013	M	LC-MS/MS	0.01	105.5	1	10	methanol/ water buffered		yes	5	Partial Loop	LC-MS/MS	12
014	M	GC-MS	0.05	>90	2	10	5	O (dispersive SPE)	TPP	10		LC-MS/MS	23
015	M	GC-MS	0.05	92	1	15	5	DSPE		10		GC-NPD-ECD-FPD (P)	20
016	M	GC-MS	0.03	74	1	75	1	GPC	Aldrin	2	Pulsed Splitless	GC-MS (single-quad)	12
017	S	GC-MS	0.05	80.6	1	30	1			1	Direct	GC-NPD	21
018	S	GC-MS	0.05	96	2	15	CH_2Cl_2	GPC		1	Split/Splitless	GC-ECD GC-NPD, GC-PD	12
019	NA												
020	S	GC-NPD	0.01	103	1	10.6	CH_2Cl_2	DSPE		1	Splitless	GC-ECD, GC-NPD, GC-MS	15
021	M	GC-MS	0.05			20	4	GPC		1	Pulsed Splitless	GC-MS	12
022	M	GC-MS	0.02	86.8	1	20	3			2	Splitless	GC-ECD, GC-NPD	6
023	M	LC-MS/MS	0.05	92	1	10	6			20		LC-MS/MS	25
024	M	GC-MS	0.03	90	1	100	4	LL	Aldrin/ Ditalimfoss	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
025	M	GC-MS	0.05			10	1		TPP	10	GC-MS/MS		
026	M		0.007			10	5	SPE		2	Split/Splitless	GC-MS	23

APPENDIX 8. Methods used by participants for determining pesticides.

PIRIMICARB													
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 71)
027	S		0.02	108	1	100	3			1	Splitless	GC-ECD, GC-NPD	
028	S	GC-NPD	0.029	72	2	100	acetone, n-hexane, toluene	GPC, SPE		10	Solvent Vent PTV	GC-NPD	6
029	M	GC-MS/MS	0.01	100.5	1	10	5	DSPE	TPP	5	PTV	GC-MS/MS (triple-quad)	
030	M	GC-MS	0.005	95	2	10	5	DSPE(PSA)	TPP	2	Splitless	GC-MS	23
031	M	LC-MS/MS	0.01	93	1	15	4			5	Loop	LC-MS/MS	
032	S	GC-MS	0.05	86	2	15	CH_2Cl_2	GPC	Ethion	1	Splitless	GC-ECD, GC-TSD, GC-MS, HPLC-DAD	15
033	M	LC-MS/MS	0.01	105	1	10	5	DSPE	TPP	3		LC-MS/MS	23
034	M	GC-MS	0.01	99	1	10	acetone	SPE	PKB	2	Splitless	GC-MS	12
035	M	GC-ECD-NPD	0.02	99	1	15	4		PCB 97 (ECD) Trifluralin (NPD)	1 2	Split/Splitless	GC-ECD-NPD	2
036	S	LC-MS	0.03	78.5	1	50	methanol, ethyl acetate/ CH_2Cl_2 (80:20)		Trichloronat	1	Direct	GC-TSD	6
037	M	GC-MS	0.01	95	1	10	5	DSPE		2	Split/Splitless	GC-MS (single-quad)	
038	M	GC-MS	0.05			10	1		Azobenzene + Ethion	2	Direct	GC-ECD-FPD-NPD	12
039	NA												
040	S	GC-MS	0.05	85	1	25	3	DSPE		1	Split/Splitless	GC-MS (single-quad) or GC-FPD	15
041	M	GC-MS	0.02	98	1	20/5	1			2	Spliless	GC-ECD, GC-FPD, GC-MS (single quad), GC-ITD	2
042	NA												
043	M	GC-MS	0.05			10	1	GPC	Isodrin	1	Splitless	GC-MS	6
044	M	GC-TOF	0.025	78	1	15	4			10	Full Loop	LC-MS/MS	
045	NA												
046	M	GC-MS/MS	0.05	91.8	1	15	4			10	PTV	GC-MS/MS	2
047	S	GC-NPD	0.05	100		5	3			2	Splitless	GC-ECD, GC-NPD	
048	S	GC-MS	0.05			10	CH_2Cl_2	O	Ethion	1	Splitless	GC-ECD, GC-NPD	15
049	M	GC-MS	0.05			15	4	LL		10	Gvol Autosampler	GC-MS	2
050	S	GC-NPD	0.05	97	2	100	3	O		0.1	Splitless	GC-NPD	
051	M	GC-ITD	0.04	95	1	75	1	GPC	Ditalimphos	2	Splitless	GC-ITD	30

APPENDIX 8. Methods used by participants for determining pesticides.

PIRIMICARB													
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 71)
052	M	LC-MS/MS	0.01			10	5	DSPE	TPP	3		LC-MS/MS	23
053	M	GC-MS	0.03			10	4			2	Splitless	GC-ECD, GC-FPD, GC-NPD, GC-MS	22
054	S	GC-MS	0.03	85	2	50	acetone 3	SPE	Ronnel	1	Splitless	GC-MS (single-quad)	
055	NA												
056	S	GC-MS	0.05	102.3	1	30	1			1	Wide Bore	GC-NPD	21
057	M	LC-MS/MS	0.01			10	5	PSA	TPP	20		LC-MS/MS	23
058	M	GC-MS	0.05			15	4	-		1/10		GC-ECD, GC-TSD,GC-MS	2
059	S	GC-MS	0.01	75	2	50	3	SPE		1	Direct	GC-ECD, PFPD, MS	6
060	M		0.01	116	1	10	6	LL		10		LC-MS/MS	23
061	S		0.05	88.8	1	30	1	GPC		0.5-1	Splitless	GC-NPD	21
062	S	Different Column				10	1	GPC	Diclofention	1	Split/Splitless	GC-NPD, GC-ECD	15
063	M	LC-MS/MS	0.01			10	6	LL		20	Loop	LC-MS/MS (triple-quad)	
064	M	GC-MS	0.02	95	1	10	5	O		2	PTV	GC-MS	23
065	S	GC-NPD	0.05	80.8	1	30	1			1	Splitless	GC-NPD	21
066	M	GC-NPD	0.01	78.9	1	100	2	GPC		20		GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	5
067	M	GC-MS	0.04	95	1	10	5	SPE		1 to 2	Splitless and PTV	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FL, HPLC-DAD	23
068	M	GC-MS	0.05			50	3			2	PTV	GC-MS	5
069	M	LC-MS/MS	0.01	100.8	1	10	6	SPE	TPP	10		LC-MS/MS	18
070	M	GC-MS	0.05	119	1	5	acetone/ hexane/ ethyl acetate			2	Splitless	GC-MS/MS	12
071	S	GC-MS	0.02			10	5	DSPE		2	Split/Splitless	GC-NPD	23
072	NA												
073	M	GC-MS	0.01	92	1	50	1			1	Auto Injection	GC-MS (single-quad)	30
074	S	GC-NPD	0.01	79	2	10	CH_2Cl_2	GPC	Fenchlorphos	0.5	Split/Splitless	GC-ECD, GC-NPD	15
075	M	GC-MS	0.02			10	5	SPE	3	2	Splitless	GC-MSD	23

APPENDIX 8. Methods used by participants for determining pesticides.

PIRIMICARB													
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 71)
076	M		0.01			50	2	LL		5		LC-MS/MS	12
077	M	GC-MS	0.01			10	1	GPC	Azobenzene	1		GC-MS (single-quad)	15
078	NA												
079	M	GC-MS	0.02	86	1	50	acetone/ water	SPE	Atrazin D5	1	Pulsed Splitless	GC-MS	
080	M	GC-MS	0.05	95.2	1	15	4			1	Splitless	GC-ECD, GC-NPD, GC-ITD	2
081	M	GC-MS	0.05	108	1	10	1	SPE	yes	2	Split/Splitless	GC-MS	12
082	M	LC-MS/MS	0.005			10	5	O	TPP	202	PTV	LC-MS/MS (triple-quad) GC-MS (single-quad)	23
083	M	GC-MS LC-MS/MS	0.05	91	1	30	1	GPC	TPP	3	Splitless	GC-MS	12
084	M	GC-NPD	0.1	21	1	25	2	GPC	Ditalimfos	2	Splitless	GC-ECD,GC-NPD, GC-ITD	
085	S	LC-MS/MS	0.05	88	1	50	6	SPE		25		LC-MS/MS	18
086	NA												
087	M	LC-MS/MS	0.01	98	1	10	5	DSPE		10	Partial Loop	LC-MS/MS (triple-quad)	23
088	S	GC-MS	0.005			100	2	GPC	TPP	5	PTV	GC-MS	1
089	M	GC-MS	0.05	64	1	50	1	GPC		1	Split/Splitless	GC-ECD, GC-NPD, GC-FPD	6
090	M	LC-MS	0.05	93	1	15	CH_2Cl_2			1	Splitless	GC-ECD, GC-NPD, GC-MS, LC-MS/MS	12
091	S	GC-MS	0.01	98	2	50	3	O		1	Split/Splitless	GC-NPD	6
092	M	GC-MS	0.05	96	1	5	CH_2Cl_2		TFF	0.5	Split/Splitless	GC-MS	12
093	M	GC-MS	0.01	91.5	1	15	1			5	Splitless	GC-MS (ion-trap)	21
094	M	GC-TSD	0.05	90	1	25	1	O		5	Splitless	GC-TSD	2
095	M	GC-NPD	0.05			100	2	GPC		1	Splitless	GC-ECD,GC-NPD	5
096	M	LC-MS/MS	0.02	95	1	10	1			2.1		LC-MS/MS	12
097	M		0.010	76	1	20	1			20		LC-MS/MS	**6**
098	NA												
099	S	LC-MS/MS	0.01	92.1	1	20	4			5	Loop	LC-MS/MS	2
100	M	LC-MS/MS	0.001	90	1	5	1			5		LC-MS/MS	16
101	S	GC-MS	0.05	93.9	1	30	1			1	TPOCI	GC-NPD	21
102	M	GC-MS	0.01			50	2	GPC		2	Splitless or/and ColdOnColumn	GC-ECD, GC-NPD, GC-FPD, GC-MS (single-quad)	

APPENDIX 8. Methods used by participants for determining pesticides.

PIRIMICARB													
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 71)
103	M	GC-NPD	0.02			50	methanol, CH_2Cl_2	GPC	Bromophos-ethyl	2	Splitless	GC-ECD, GC-NPD, GC-MS	5
104	S	GC-MS	0.02	100	1	50	4	LL	Aldrin, Ditalimphos	1	Splitless	GC-ECD, GC-NPD, GC-MS	26
105	S	GC-MS	0.05	89	2	50	acetone, methanol	SPE		0.5	PTV	GC-MS/TOF	
106	S	GC-MS	0.01	70	1	25	ethyl acetate, CH_2Cl_2 (80:20)	SPE		2	Direct	GC-ECD, GC-NPD, GC-FPD, GC-MS	6
107	M	GC-MS	0.05			10	5	O		1.5	Split/Splitless	GC-ECD, GC-MS	23
108	M	GC-NPD	0.03			10	CH_2Cl_2			4	Splitless	GC-NPD, GC-ECD	15
109	S	GC-MS	0.02	70-120	2	10	CH_2Cl_2 + acetone		Ethion	2	PTV	GC-NPD	15
110	S	GC-MS	0.05	89	2	25	5	SPE	yes	3	PTV	GC-ECD, GC-NPD, GC-MS	8
111	M	GC-MS	0.1			15	1	GP	Phenantrene D10	1	Split/Splitless	GC-MS (single-quad)	12
112	S	GC-MS	0.05			15	5	O	yes	10	LVI	GC-ECD, GC-TSD, GC-PFPD, GC-ITD, HPLC-FLD	23
113	NA												
114	S	GC-MS	0.05	80	2	50	3			1	Split/Splitless	GC-MS	6
115	M	LC-MS/MS	0.04	87	1	10	5	LL		10		LC-MS/MS	21
116	M	GC-MS	0.02	95	1	15	4			1	PTV	GC-MS	22
117	S	GC-MS	0.02	106	2	10	6	SPE		10	Splitless	HPLC-DAD	15
118	NA												
119	NA												
120	S	GC-MS	0.05			10	1	GPC	TPP and Ethion	2	Splitless	GC-ECD, GC-NPD, GC-MS	12
121	M	LC-MS/MS	0.05			10	5	DSPE	TPP	2		LC-MS/MS	23
122	NA												
123	M		0.01	90	2	20	3	LL		1	Pulsed splitless	GC-ECD, GC-NPD	
124	NA												
125	S	GC-NPD	0.03	50.9	1	5	CH_2Cl_2	DSPE		1	Splitless	GC-NPD	
126	M		0.05			15	1			10		LC-MS/MS	17
127	M	LC-MS/MS	0.01	106	1	10	5	SPE	PCB 138, TPP	3	PTV	GC-MS EI	23
128	S	GC-MS	0.05	91	1	25	2	GPC		1	Splitless	GC-MS	1

Protocol

Instructions

Only laboratories that are involved in providing residue data in fruit and vegetables for their national monitoring programmes, and/or the EU co-ordinated monitoring programme are invited to participate in the 8th European Proficiency Test.

To participate, each laboratory will have to send by e-mail the **Application Form** to the Organiser. They will then receive confirmation of acceptance of their participation by e-mail with a **Laboratory Code;** subsequently this code must always be used in communications 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 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 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 confirmatory e-mail.

The **Pesticide List** will also be present at this site 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 15th May 2006, so that all participants know in good time before receipt of the test materials which pesticides might be present. Thus, may participants will not have time enough to buy any standards required and validate their methods, last year list was used an only two new pesticides where added. MPRL values (minimum performance reporting levels) for each pesticide will be given. These values are the levels that the laboratories should be able to attain.

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

Communications between participating laboratories during the test are 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 by **fax** a justification to verify that the payment procedure has started. **Payments without lab 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 in fruit and vegetable 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.
2. Preparation of the test materials. Homogeneity and stability testing performed by the Organiser.
3. Confirmation of the receipt of the participants Application Form and supplying the Laboratory Codes and security code to access to the Forms and this Protocol. Pesticide List available from the start.
4. Payment in advance for the shipment of the test materials indicating Lab Code, or 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 results has passed.
8. The Organiser will send a 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, 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 are (i) not used in the sample treatment, (ii) and not detected by the organizer even in a repeated 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 are detected 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 there will be a **median value** for every pesticide present.

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

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

Where $\delta = b_i * \mu_i$ 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 Organizer 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:

$|z| \leq 2$ 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 organizer will consider whether, or not, these values should appear in the histograms.

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

Although combine classical z-scores formulas are of less used they 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 detected pesticides

These formulas will only have informative purposes and will not be used for laboratory evaluations.

In order to evaluate each laboratory's performance, only those laboratories that <u>have reported at least 90% of the pesticides present</u>, and have reported no false positive results, will be classified according to the Weighted Sum of z-Scores. A fixed maximum value of 5 will be used 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 detected pesticides

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.

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

Organisation Address

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

Universidad de Almería

Edificio Químicas CITE I

Ctra. Sacramento s/n

04120 Almería - Spain

Phone Numbers: +34 950015034

+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 in aubergine. The aubergines were grown in Almería, Spain.

The pesticide treatments will be carried out as a post harvest treatment using 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 (–20ºC) prior to shipment to participants.

Two bottles, again chosen randomly, will be analysed over a period of time to confirm the stability of the pesticides in the test material (firstly when the test materials are shipped, and then a few days after the deadline for receipt of 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 08

Activity	Date
- Harvest of the aubergines.	April 2006
- Selection of pesticides and design of the web page and protocol.	28th April 2006
- Deadline for receiving the Application Form from invited laboratories.	12th May 2006
- Sample Treatment, Homogenisation, and Storage/Stability Test.	May 2006
- Sample distribution.	29th May -9th June 2006
- Deadline for receiving Form 1.	12th June 2006
- Deadline for receiving results: Forms 2 and 3.	5th July 2006
- Preliminary Report: **only results, no statistical treatment.**	September 2006
- Final Report.	14th October 2006

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 fill in 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 aubergine test material will be shipped together with 300g of 'blank' aubergine surrounded with dry ice and packed in boxes. The courier costs are charged 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 perform the analysis.

Application Form

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

In the Application From 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 12th May 2006, at the latest.

Shipping of Samples

The shipment of the test materials will be carried out during a two-week period because of the differences in the time that it takes to reach the different participant countries (from 2-5 days). A warning message will be sent out a week before shipment, and laboratories must make arrangements for the reception of the test materials. They should let the Organiser know 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 latest 12th June 2006, 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 decimals 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 (Form 2)

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

Samples Material for Analysis (Form 2)

The test material contains a certain number of pesticides from the Pesticide List. Please read carefully the list in Form 2 since the residue definitions are not given (see the Pesticide List).

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

Each laboratory must report only **one** result for each of the pesticides 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 procedure 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.

Form 2 must be sent to the Organiser by 5th of July 2006, 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.

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).

The organizer must receive Form 3 by mail by 5th July 2006, at the latest.

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

Sample Manipulation Advises

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

- Allow the test material to defrost in the refrigerator the afternoon before the analysis is performed.

- Once defrosted, 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: *EUPT08-Lab-_____*

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

Date of receipt: _____/_____/2006

EUPT08-blank-_____ EUPT08-sample-_____

Loses: YES _____ NO_____

Frozen: YES _____ NO_____

[X] 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 12th June 2006.
If no form is received by the Organiser, it will be assumed that the test material has been accepted by the laboratory.

Signature:

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

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

Form 2 (Results)

EUPT 08
CRL
European Proficiency Test 08

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								
Azinphos-methyl								
Azoxystrobin								
Bifenthrin								
Bromopropylate								
Bupirimate								
Captan								
Carbaryl								
Carbendazim								
Chlorothalonil								
Chlorpropham								
Chlorpyrifos								
Chlorpyrifos-methyl								
Cypermethrin								
Cyprodinil								
Deltamethrin								
Diazinon								
Dichlofluanid								
Dicofol								
Dimethoate								
Dimethomorph								
Endosulfan								
Fenhexamid								
Fenitrothion								
Fludioxonil								
Flusilazole								
Imazalil								
Imidacloprid								
Iprodione								
Kresoxim-methyl								
Lambda-cyhalothrin								
Malathion								

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)
Metalaxyl								
Methamidophos								
Methidathion								
Methiocarb								
Methomyl								
Monocrotophos								
Myclobutanil								
Oxydemeton-methyl								
Parathion								
Parathion-methyl								
Penconazole								
Phosalone								
Pirimicarb								
Pirimiphos-methyl								
Procymidone								
Propargite								
Propiconazole								
Pyrimethanil								
Spiroxamine								
Tetraconazole								
Thiabendazole								
Tolcloflos-methyl								
Tolylfluanid								
Triadimefon								
Triazophos								
Vinclozolin								

(1)) If the pesticide is not included in your analysis, fill **NA**. If the pesticide is included in your scope (analysed) fill **A.**
(2) Write the same code as you use in Form 3 for the analytical method used, e.g. A, B, C…
(3) Concentration determine in the sample (report only one result). **Record the concentrations for all pesticides according to the residue definition given in the Pesticide List.**
(4) Standards: **S** = standard/calibration in pure solvent, **M** = standard/calibration in matrix extract
(5) Give the determination technique used 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 compound (see residue definition in the pesticide list).
(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 have been originated from experiments performed in connection with the test and write "2" if recoveries reported have been originated from the validation data.

I agree to be responsible for completing and returning this form to the Organizer latest 5th July 2006. In case of no e-mail confirmation of reception of this document (in 3 or 4 days), I will contact the Organizer as soon as possible.

Signature:

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

Form 3 (Analytical Procedures Used)

Laboratory Code: _____ Date: _____

Complete one of these forms for every different analytical procedure used

Analytical Procedure (2): _____

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

Cleanup step (8): _____ Internal standard (if any): _____

Injection Volume: _____ Injection Type: _____

Determination (9): _____

Reference Method (Obligatory): _____

Signature:

[x] I agree to be responsible for delivering this form to the Organizer. In case of no e-mail confirmation of receipt of this form (in 3 or 4 days), I will contact the Organizer as soon as possible.

Please return this Form latest 5th July, 2006

(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 = 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 clean-up method

(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

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

EUPT 08
CRL
European Proficiency Test 08

PESTICIDES LIST FOR THE EUPT 8

Pesticide	MPRL (mg/Kg)	Pesticide	MPRL (mg/Kg)
Acephate	0.02	Kresoxim-methyl	0.05
Acetamiprid	0.05#	Lambda-cyhalothrin	0.02
Acrinathrin	0.05#	Malathion (Malathion + Malaoxon,expressed as Malathion)	0.05#
Aldicarb (Aldicarb + Aldicarb Sulphone+ Aldicarb Sulphoxide expressed as Aldicarb)	0.05	Metalaxyl (including Metalaxyl-M, sum of isomerers)	0.05
Azinphos-methyl	0.05#	Methamidophos	0.01
Azoxystrobin	0.05	Methidathion	0.02
Benomyl (See Carbendazim)		Methiocarb (Methiocarb + Methiocarb sulphone+ Methiocarb sulphoxide, expressed as Methiocarb)	0.05#
Bifenthrin	0.05	Methomyl (Methomyl + Thiodicarb,expressed as Methomyl)	0.05
Bromopropylate	0.05	Monocrotophos	0.03#
Bupirimate	0.05#	Myclobutanil	0.02
Captan (Sum of Captan and Folpet)	0.05#	Omethoate see Dimethoate	
Carbaryl	0.05#	Oxydemeton-methyl (Oxydemeton-methyl + Demeton-S-Methylsulfon, expressed as Oxydemeton-methyl)	0.02
Carbendazim (Benomyl + Carbendazim + Thiophanate-methyl, expressed as Carbendazim)	0.1	Parathion	0.05
Chlorothalonil	0.01	Parathion-methyl (Parathion-methyl + Paraoxon-metyl expressed as Parathion-methyl)	0.02
Chlorpropham	0.05#	Penconazole	0.05
Chlorpyriphos	0.05	Phosalone	0.05#
Chlorpyriphos-methyl	0.05	Pirimicarb	0.05#
Cypermethrin	0.05	Pirimiphos-methyl	0.05
Cyprodinil	0.05#	Procymidone	0.02
Deltamethrin	0.05	Propargite	0.05#
Diazinon	0.02	Propiconazole	0.05#
Dichlofluanid	0.05#	Pyrimethanil	0.05#
Dicofol	0.02	Spiroxamine	0.05

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

Pesticide	MPRL (mg/Kg)	Pesticide	MPRL (mg/Kg)
Dimethoate (Dimethoate + Omethoate, expressed as Dimethoate)	0.02	Tetraconazole	0.05#
Dimethomorph	0.05#	Thiabendazole	0.05
Endosulfan (α+β+Sulphate Endosulfan expressed as Endosulfan)	0.05	Thiodicarb see Methomyl	
Fenhexamid	0.05#	*Thiophanate-methyl* (see Carbendazim)	
Fenitrothion	0.05#	Tolclofos-methyl	0.05#
Flusilazole	0.05#	Tolylfluanid	0.05#
Fludioxonil	0.05#	Triadimefon (Triadimefon + Triadimenol expressed as Triadimefon)	0.1
Folpet see Captan		Triadimenol see Triadimefon	
Imazalil	0.02	Triazophos	0.02
Imidacloprid (only parent compound)	0.05#	Vinclozolin (only parent compound)	0.05
Iprodione	0.02		

If no EU-MRL are set at the lower limit of analytical determination or yet fixed, the MPRL is set by the CRL-EUPT 8 organizing committee and the figure is followed by #

ANNEX 2. List of laboratories invited to participate in PT8.

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
AUSTRIA	INNSBRUCK	AUSTRIAN AGENCY FOR FOOD AND HEALTH SAFETY (AGES) ANALYTICAL COMPETENCE FOR PLANT PROTECTION PRODUCTS	YES
AUSTRIA	VIENNA	AUSTRIAN AGENCY FOR HEALTH AND FOOD SAFETY, COMPETENCE CENTRE RESIDUE ANALYSIS VIENNA	YES
BELGIUM	BRUXELLES	INSTITUTE OF PUBLIC HEALTH (IPH)	YES
BELGIUM	ZWIJNAARDE	FYTOLAB	YES
BELGIUM	MARLOIE	CENTRE D´ECONOMIE RURALE - LABORATOIRE D´HORMONOLOGIE	YES
BULGARY	SOFIA	CENTRAL LABORATORY FOR CHEMICAL TESTING AND CONTROL	YES
CYPRUS	NICOSIA	STATE GENERAL LABORATORY	YES
CZECH REPUBLIC	PRAGUE 6	INSTITUTE OF CHEMICAL TECHNOLOGY, PRAGUE DEPARTMENT OF FOOD CHEMISTRY AND ANALYSIS	YES
CZECH REPUBLIC	PRAHA 5	CZECH AGRICULTURE AND FOOD INSPECTORATE	YES
DENMARK	SOEBORG	DANISH INSTITUTE FOR FOOD AND VETERINARY RESEARCH	YES
DENMARK	RINGSTED	DANISH FOOD AND VETERINARY ADMINISTRATION, REGIONAL PESTICIDE LABORATORY	YES
ESTONIA	TARTU	HEALTH PROTECTION INSPECTORATE TARTU LABORATORY	YES
ESTONIA	SAKU (HARJUMAA)	AGRICULTURAL RESEARCH CENTRE, LAB FOR RESIDUES AND CONTAMINANTS	YES
FINLAND	HELSINKI	ENVIROMENT CENTRE OF HELSINKI	YES
FINLAND	ESPOO	FINNISH CUSTOMS LABORATORY	YES
FRANCE	MONTPELLIER CEDEX 5	LABORATOIRE DE LA DGCCRF	YES
FRANCE	RENNES	LABORATOIRE DGCCRF-RENNES	YES
FRANCE	MASSY CEDEX	LABORATOIRE DGCCRF DE MASSY	YES
FRANCE	PESSAC	DGCCRF LABORATOIRE DE BORDEAUX	YES
FRANCE	ILLKIRCH	LABORATOIRE DGCCRF STRASBOURG	YES
FRANCE	VILLENEUVE D'ASCQ	LABORATOIRE DE LA CONCURRENCE, CONSOMMATION ET RÉPRESSION DES FRAUDES DE LILLE. LABORATOIRE DE LA CCRF DE LILLE-VILLENEUVE D´ASCQ	YES

ANNEX 2. List of laboratories invited to participate in PT8.

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
GERMANY	TRIER	LANDESUNTERSUCHUNGSAMT-INSTITUT FÜR LEBENSMITTELCHEMIE TRIER	YES
GERMANY	NEUMUENSTER	LANDESLABOR SCHLESWIG-HOLSTEIN	YES
GERMANY	POTSDAM	LANDESLABOR BRANDENBURG; FACHBEREICH L5	YES
GERMANY	ERFURT	THÜRINGER LANDESAMT FÜR LEBENSMITTELSICHERHEIT UND VERBRAUCHERSCHUTZ (TLLV)	YES
GERMANY	RECKLINGHAUSEN	GEMEINSAMES CHEMISCHES UND LEBENSMITTELUNTERSUCHUNGSAMT FÜR DEN KREIS RECKLINGHAUSEN UND DIE STADT GELSENKIRCHEN (CEL)	YES
GERMANY	OLDENBURG	LAVES LEBENSMITTELINSTITUT OLDENBURG	YES
GERMANY	ERLANGEN	BAYERISCHES LANDESAMT FÜR GESUNDHEIT UND LEBENSMITTELSICHERHEIT	YES
GERMANY	BREMEN	LANDESUNTERSUCHUNGSAMT BREMEN ZENTRALE ANALYTIK	YES
GERMANY	HAMBURG	INSTITUT FUR HYGIENE UND UMWELT	YES
GERMANY	ROSTOCK	LANDESAMT FÜR LANDWIRTSCHAFT, LEBENSMITTEL SICHERHEIT UND FISCHEREI MECKLENBURG-VORPOMMERN	YES
GERMANY	BIELEFELD	CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT OSTWESTFALEN-LIPPE (CVUA-OWL)	YES
GERMANY	HALLE	LANDESAMT FUR VERBRAUCHERSCHUTZ	YES
GERMANY	BONN	AMT FÜR UMWELT, VERBRAUCHERSCHUTZ UND LOKALE AGENDA	YES
GERMANY	HAGEN	CHEMISCHES UNTERSUCHUNGSAMT DER STADT HAGEN	YES
GERMANY	WUPPERTAL	CHEMISCHES UNTERSUCHUNGSINSTITUT BERGISCHES LAND	YES
GERMANY	DORTMUND	CHEMISCHES UND LEBENSMITTELUNTERSUCHUNGSAMT DER STADT DORTMUND	YES
GERMANY	MÜNSTER	CHEMISCHES LANDES- UND STAATLICHES VETERINÄRUNTERSUCHUNGSAMT	YES
GERMANY	ESSEN	CGI ESSEN/OBERHAUSEN	YES
GERMANY	BERLIN	BBGES-ILAT, FB 26	YES
GERMANY	SAARBRÜCKEN	LSGV (LANDESAMT FÜR SOZIALES, GESUNDHEITS UND VERBRAUCHERSCHUTZ)	YES
GERMANY	DRESDEN	LANDESUNTERSUCHUNGSANSTALT F. D. GESUNDHEITS-U. VET.-WESEN SACHSEN, DRESDEN	YES
GERMANY	CHEMNITZ	LUA SAXONY LAB CHEMNITZ	YES

ANNEX 2. List of laboratories invited to participate in PT8.

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
GERMANY	SPEYER	LANDESUNTERSUCHUNGSAMT, INSTITUT FUR LEBENSMITTELCHEMIE SPEYER	YES
GERMANY	DÜSSELDORF	39/2 CHEMISCHEN UND LEBENSMITTELUNTERSUCHUNG	YES
GERMANY	KASSEL	HESSISCHES LANDESLABOR, STANDORT KASSEL	YES
GERMANY	FELLBACH	CVUA STUTTGART	YES
GREECE	IOANNINA	MINISTRY OF RURAL DEVELOPMENT AND FOOD, REGIONAL CENTRE OF PLANT PROTECTION AND QUALITY CONTROL	YES
GREECE	KAVALA	MINISTRY RURAL DEVELOPMENT AND FOOD, PERIPHERAL CENTER OF KAVALA	YES
GREECE	KIPHISSIA, ATHENS	BENAKI PHYTOPATHOLOGICAL INSTITUTE, PESTICIDE RESIDUES LABORATORY	YES
GREECE	THESSALONIKI	REGIONAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL	YES
GREECE	ATHENS	GENERAL CHEMICAL STATE LABORATORY. DIVISION PESTICIDE RESIDUE LABORATORY	YES
HUNGARY	KAPOSVÁR	PLANT PROTECTION AND SOIL CONSERVATION SERVICE OF SOMOGY COUNTY	YES
HUNGARY	HÓDMEZOVÁSÁRHELY	PLANT HEALTH AND SOIL CONSERVATION SERVICE OF CSONGRAD COUNTY	YES
HUNGARY	NYIREGYHÁZA	PLANT PROTECTION AND SOIL CONSERVATION SERVICE OF SZABOLCS-SZATMÁR-BEREG COUNTY	YES
HUNGARY	TANAKAJD	PESTICIDE RESIDUE ANALYTICAL LABORATORY OF COUNTY VAS	YES
HUNGARY	SZOLNOK	PLANT PROTECTION AND SOIL CONSERVATION SERVICE OF JÁSZ-NAGYKUN-SZOLNOK COUNTY	YES
HUNGARY	MISKOLC	PLANT PROTECTION AND SOIL CONSERVATION SERVICE OF BORSOD-ABAÚJ-ZEMPLÉN COUNTY	YES
HUNGARY	VELENCE	PLANT PROTECTION AND SOIL CONSERVATION SERVICE OF FÉJER COUNTY. PESTICIDE RESIDUE ANALYTICAL LABORATORY	YES
ICELAND	REYKJAVÍK	ENVIRONMENT AND FOOD AGENCY OF ICELAND	YES
IRELAND	CELBRIDGE, COUNTY KILDARE	PESTICIDE CONTROL LABORATORY. DEPARTMENT OF AGRICULTURE AND FOOD	YES
ITALY	LA SPEZIA	A.R.P.A.L. LABORATORIO "CENTRO REGIONALE PESTICIDI"	YES
ITALY	LIVORNO	ARPAT DIP. PROV. LE DI LIVORNO	YES
ITALY	CHIESUOL DEL FOSSO (FERRARA)	ARPA SEZIONE PROVINCIALE DI FERRARA	YES
ITALY	BOLZANO	AGENZIA AMBIENTE BOLZANO	YES

ANNEX 2. List of laboratories invited to participate in PT8.

COUNTRY	CITY	LABORATORY NAME	REPORTED RESULTS
ITALY	SAINT CHRISTOPHE (AOSTA)	ARPA VALLE D´AOSTA	YES
ITALY	BARI	ARPA PUGLIA - DIPARTIMENTO DI BARI	YES
ITALY	ROMA	ISS. DIP. AMBIENTE E CONNESSA PREVENZIONE PRIMARIA-REPARTO ANTIPARASSITARI	YES
ITALY	NUORO	PRESIDIO MULTIZONALE DI PREVENZIONE AREA CHIMICA	YES
ITALY	TRENTO	A.P.P.A. TRENTO-SETTORE LAB. E CONTROLLI	YES
ITALY	NAPLES	ARPA CAMPANIA LABORATORIO SPECIALIZZATO FITOFARMACI	YES
ITALY	VARESE	UNITÁ OPERATIVA LABORATORIO CHIMICO - ASL PROVINCIA DI VARESE	YES
ITALY	AREZZO	ARPAT DIP AREZZO	YES
ITALY	MACERATA	ARPA MARCHE - DIP. MACERATA	YES
ITALY	FIRENZE	ARPAT DIPARTIMENTO DI FIRENZE	YES
ITALY	RAGUSA	AUSL N7 RAGUSA DAP RAGUSA ARPA SICILIA L.I.P. SEZIONE CHIMICA	YES
ITALY	CAGLIARI	P.M.P. ASL 8 CAGLIARI	YES
ITALY	LA LOGGIA (TORINO)	A.R.P.A PIEMONTE - POLO REGIONALE ALIMENTI	YES
ITALY	VERONA	APRAV-VERONA	YES
ITALY	PALERMO	ARPA SICILIA DAP PALERMO	YES
ITALY	VICENZA	A.R.P.A.V. DIPARIMENTO DI VICENZA	YES
ITALY	PORDENONE	ARPA - FVG DIPARTIMENTO DI PODENONE SERVIZIO TEMATICO-ANALITICO	YES
ITALY	SONDRIO	ARPA-DIP. SONDRIO	YES
ITALY	BERGAMO	LABORATORIO DI SANITA PUBBLICA. ASL PROVINCIA DI BERGAMO	YES
LATVIA	RIGA	NATIONAL DIAGNOSTIC CENTRE	YES
LITHUANIA	VILNIUS	NATIONAL VETERINARY LABORATORY	YES
LUXEMBOURG	LUXEMBOURG	CÔNTROLE DES DENRÉES ALIMENTARIES, LNS	YES
NORWAY	AAS	NORWEGIAN INSTITUTE FOR AGRICULTURAL AND ENVIRONMENTAL RESEARCH, BIOFORSK LABORATORY	YES
POLAND	SOSNICOWICE	PLANT PROTECTION INSTITUTE, BRANCH SOSNICOWICE	YES
POLAND	LODZ	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W LODZI	YES

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POLAND	POZNAN	PLANT PROTECTION INSTITUTE, DEPARTMENT OF PESTICIDE RESIDUE RESEARCH	YES
POLAND	SKIERNIEWICE	LABORATORY OF CONTAMINATION & PESTICIDES RESIDUE ANALYSES. RESEARCH INSTITUTE OF POMOLOGY AND FLORICULTURE	YES
POLAND	KRAKOW	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W KRAKOWICE	YES
POLAND	TRZEBNICA	PLANT PROTECTION INSTITUTE	YES
POLAND	RZESZOW	INSTITUTE OF PLANT PROTECTION. EXPERIMENTAL STATION	YES
POLAND	WARSAW	NATIONAL INSTITUTE OF HYGIENE. DPTO. ENVIROMENTAL TOXICOLOGY	YES
POLAND	RZESZOW	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W RZESZOWIE	YES
POLAND	KATOWICE	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W KATOWICACH	YES
POLAND	POZNAN	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W POZNANIU	YES
POLAND	OPOLE	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA	YES
POLAND	WARSZAWA	LABORATORY OF WARSAW VOIVODESHIP SANITARY-EPIDEMIOLOGICAL STATION	YES
POLAND	TORUN	STATE PLANT HEALTH AND SEED INSPECTION SERVICE, CENTRAL LABORATORY	YES
PORTUGAL	CAMACHA MADEIRA ISLAND	LABORATÓRIO DE QUALIDADE AGRÍCOLA - MADEIRA	YES
PORTUGAL	OEIRAS	DIRECÇÃO-GERAL DE PROTECÇÃO DAS CULTURAS. LABORATORIO DE RESIDUOS DE PESTICIDAS	YES
ROMANIA	BUCURESTI, SECTOR 6	CENTRAL LABORATORY FOR PESTICIDE RESIDUES CONTROL	YES
SLOVAKIA	BRATISLAVA	STATE VETERINARY AND FOOD INSTITUTE BRATISLAVA	YES
SLOVENIA	LJUBLJANA	CENTRAL LABORATORIES, AGRICULTURAL INSITUTE OF SLOVENIA	YES
SLOVENIA	MARIBOR	PUBLIC HEALTH INSTITUTE, ENVIRONMENTAL PROTECTION INSTITUTE	YES
SLOVENIA	LJUBLJANA	INSTITUTE FOR PUBLIC HEALTH OF REPUBLIC OF SLOVENIA	YES
SPAIN	LOGROÑO	LABORATORIO REGIONAL DE LA CCAA LA RIOJA	YES

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SPAIN	ZIZURKIL	LABORATORIO AGRARIO. DIPUTACIÓN FORAL DE GIPUZKOA	YES
SPAIN	EL PALMAR, MURCIA	LABORATORIO AGROALIMENTARIO Y DE SANIDAD ANIMAL	YES
SPAIN	VILLAVA NAVARRA	GOBIERNO DE NAVARRA - NEGOCIADO DE ANÁLISIS INSTRUMENTAL	YES
SPAIN	CABRILS	LABORATORI AGROALIMENTRI GENERALITAT DE CATALUNYA	YES
SPAIN	BURJASSOT (VALENCIA)	AGROALIMENTARIO GENERALITAT VALENCIANA	YES
SPAIN	A CORUÑA	LABORATORIO AGRARIO Y FITOPATOLÓGICO DE GALICIA	YES
SPAIN	MAJADAHONDA (MADRID)	CENTRO NACIONAL DE ALIMENTACION	YES
SPAIN	BURGOS	LABORATORIO AGRARIO REGIONAL. DIRECCIÓN GENERAL DE PRODUCCIÓN AGROPECUARIA - JUNTA DE CASTILLA Y LEÓN. LABORATORIO AGRARIO REGIONAL	YES
SPAIN	JAÉN	LABORATORIO DE PRODUCCIÓN Y SANIDAD VEGETAL	YES
SPAIN	ARAVACA (MADRID)	LABORATORIO ARBITRAL AGROALIMENTARIO DEL MAPA	YES
SPAIN	LA MOJONERA, ALMERIA	LABORATORIO DE PRODUCCIÓN Y SANIDAD VEGETAL DE ALMERÍA	YES
SPAIN	HUELVA	LABORATORIO DE PRODUCCIÓN Y SANIDAD VEGETAL DE HUELVA	YES
SWEDEN	LIDKÖPING	ANALYCEN NORDIC AB	YES
THE NETHERLANDS	AMSTERDAM	VWA-FOOD AND CONSUMER PRODUCT SAFETY AUTHORITY	YES
UNITED KINGDOM	WOLVERHAMPTON, WEST MIDLANDS	EUROFINS LABORATORIES LTD	YES
UNITED KINGDOM	TEDDINGTON, MIDDLESEX	LABORATORY OF THE GOVERNMENT CHEMIST LIMITED	YES

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UNITED KINGDOM	YORK	CENTRAL SCIENCE LABORATORY	YES
UNITED KINGDOM	EDINBURGH, SCOTLAND	SCOTTISH AGRICULTURAL SCIENCE AGENCY. CHEMISTRY SECTION	YES