

EURL-PROFICIENCY TEST-FV-15, 2013

Pesticide Residues in Potato Homogenate

Final Report

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EURL-EUROPEAN UNION PROFICIENCY TEST 15
FOR THE DETERMINATION OF PESTICIDES IN FRUIT AND VEGETABLES USING
MULTIRESIDUE METHODS
2013

According to Article 28 of Regulation 396/2005/EC (23rd February, 2005) of the European Parliament and of the Council, concerning maximum residue levels for pesticides in or on food and feed of plant and animal origin¹, all laboratories analysing samples for the official control of pesticide residues shall participate in the European Union Proficiency Tests (EUPTs) for pesticide residues organised by the European Union. These proficiency tests are carried out on an annual basis in order to continuously improve the quality, accuracy and comparability of the residue data reported by EU Member States to the European Union, as well as by other Member States, within the framework of the EU multi-annual coordinated control programme and national monitoring programmes.

Regulation (EC) No 882/2004² lays down the general tasks, duties and requirements for European Union Reference Laboratories (EURLs)³ for Food, Feed and Animal Health. Among these tasks is the provision for independently-organised comparative tests. European Proficiency Test 15 has been organised by the EURL in Fruit and Vegetables at the University of Almería, Spain⁴.

Participation in European Proficiency Test 15 was mandatory for all National Reference Laboratories (NRLs), as well as all other EU official laboratories, involved in the determination of pesticide residues in fruit and vegetables for the EU multi-annual control programme or for their own national monitoring programmes. Additionally, laboratories from Brazil, Croatia, Iceland, India, Israel, Malta, Norway, Serbia, Switzerland, Turkey and Uruguay, who had been invited to take part in the previous test, again participated. China, Morocco and Saudi Arabia participated in this test for the first time.

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

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

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

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

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

1. INTRODUCTION

One hundred and seventy-five laboratories agreed to participate in European Union Proficiency Test 15.

The proficiency test was performed in 2013 using potato homogenate. The potatoes were grown in Almería, Spain, and were treated post-harvest using commercial formulations and analytical standards - both were applied using a microspray technique. Eighteen pesticides were used for the treatments (nine as diluted commercial formulations and nine as standards dissolved in solvent). Participating laboratories were also provided with a 'blank' potato homogenate as well as the treated test item.

The test items, 300 g of potato homogenate containing pesticide residues, together with 300 g of 'blank' potato homogenate, were shipped to participants on 21st January 2013. The deadline for results submission to the Organiser was 13th February 2013. The participants were provided with a list of one hundred and seventy-five target pesticide residues (Annex 1) and informed that any of these pesticides might be present in the test item. They were asked to determine the residue levels of all the pesticides that they detected and report the concentrations. This list of target pesticides also contained the Minimum Required Reporting Level (MRRL) for each pesticide fixed at 0.01 mg/kg, except for the following pesticides which have lower MRRLs based on Regulation (EU) No. 396/2005 and EU Directive 2006/125/EU: cadusafos (0.006 mg/kg); dimethoate and omethoate (0.003 mg/kg); ethoprophos (0.008 mg/kg); fipronil (0.004 mg/kg) along with oxydemeton-methyl and demeton-S-methylsulfone (0.006 mg/kg).

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

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

For the assessment of overall laboratory performance, only the Average of the squared z-Scores (AZ^2) has been used. Laboratories that have 'sufficient scope' and were able to detect at least 90% of the pesticides present in the test item and report no false positives have been classified into Category A. Within this category, the laboratories have also been subclassified as 'good', 'satisfactory' or 'unsatisfactory', in relation to the overall accuracy of the results that they reported.

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

Laboratories that did not report results have not been classified into any category and are indicated in Annex 2 with the rest of laboratories that agreed to participate in EUPT-FV15 and the other laboratories that are not members of the European Union or EFTA.

2. TEST ITEMS

2.1 Analytical methods

The two analytical methods, described briefly below, were used in order to conduct the homogeneity and stability tests. These were:

- GC method [1]: The sample is extracted with ethyl acetate along with sodium chloride and anhydrous magnesium sulphate. The mixture is shaken and centrifuged. The final extract is injected into GC-MS/MS.
- LC method: The sample is extracted with ethyl acetate and sodium hydroxide. The mixture is shaken and centrifuged. The extract is evaporated and redissolved in methanol and directly injected into LC-MS/MS.

Acephate, chlorpropham, cypermethrin, chlorothalonil, diazinon, flutolanil, methiocarb, procymidone and spiroadiclofen were determined using the GC-based method described above. All other pesticides (azoxystrobin, fluopicolide, fosthiazate, iprovalicarb, linuron, pencycuron, prochloraz, thiabendazole, and thiacloprid) were analysed using the LC-based method described above. For identification purposes, MS/MS spectra were used.

2.2 Preparation of the treated test item

Before preparation of the test item, the pesticides and target residue levels were selected, following recommendations made by the Quality Control Group (QCG), which had been appointed specifically for Proficiency Test 15. One hundred and twenty-five kilograms of potato were treated, some with post-harvest commercial pesticide formulations dissolved in water (azoxystrobin, chlorothalonil, cypermethrin, diazinon, fosthiazate, pencycuron, procymidone, thiabendazole and thiacloprid) and then applied to the potatoes using a microspray. Others were treated with analytical standards dissolved in organic solvent (acephate, chlorpropham, fluopicolide, flutolanil, iprovalicarb, linuron, methiocarb, prochloraz and spiroadiclofen) then, likewise, applied to the potatoes using a microspray. After all the pesticides had been applied, a portion of the treated potato was taken and analysed to check if the residue levels present were close to the target levels or whether any additional spraying was necessary. When the residue levels in the potatoes were close to those recommended by the QCG, the entire sample was frozen and processed using liquid nitrogen and a mincer. The frozen minced potatoes were mixed in a constantly-spinning container until a homogeneous material was obtained. 300 g 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 item

The potatoes used for the production of the blank test item were organically grown in the same field as the test item. A homogenate was prepared in the same way as the treated test item described previously.

2.4 Homogeneity test

Ten bottles of the treated test item 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 twenty extracts that were analysed by GC and LC was also randomly chosen. The quantification by GC and LC was performed using calibration curves constructed from matrix-matched standards prepared from the 'blank' potato test item.

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

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

Pesticide	Mean Conc. (mg/Kg)	Ss^2	c	$Ss^2 < c$ Pass/Fail
Acephate	0.066	3.06×10^{-6}	4.72×10^{-5}	Pass
Azoxystrobin	0.181	9.94×10^{-6}	3.60×10^{-4}	Pass
Chlorothalonil	0.211	-2.41×10^{-5}	5.60×10^{-4}	Pass
Chlorpropham	1.453	1.40×10^{-4}	2.85×10^{-2}	Pass
Cypermethrin	0.114	-3.46×10^{-6}	1.68×10^{-4}	Pass
Diazinon	0.181	-2.31×10^{-6}	4.44×10^{-4}	Pass
Fluopicolide	0.123	5.06×10^{-6}	1.70×10^{-4}	Pass
Flutolanil	0.336	-4.22×10^{-5}	1.47×10^{-3}	Pass
Fosthiazate	0.076	9.30×10^{-6}	6.46×10^{-5}	Pass
Iprovalicarb	0.084	5.95×10^{-6}	7.77×10^{-5}	Pass
Linuron	0.107	1.74×10^{-5}	1.43×10^{-4}	Pass
Methiocarb	0.139	2.54×10^{-5}	2.60×10^{-4}	Pass
Pencycuron	0.332	9.54×10^{-6}	1.21×10^{-3}	Pass

Pesticide	Mean Conc. (mg/Kg)	Ss ²	c	Ss ² < c Pass/Fail
Prochloraz	0.048	4.22 x 10 ⁻⁷	2.61 x 10 ⁻⁵	Pass
Procymidone	0.120	5.34 x 10 ⁻⁶	1.93 x 10 ⁻⁴	Pass
Spirodiclofen	0.411	1.45 x 10 ⁻⁴	2.22 x 10 ⁻³	Pass
Thiabendazole	1.456	1.24 x 10 ⁻³	2.30 x 10 ⁻²	Pass
Thiacloprid	0.364	4.98 x 10 ⁻⁵	1.57 x 10 ⁻³	Pass

Ss: Between-Sampling Standard Deviation

As can be seen from Table 2.1, all the pesticides used to treat the matrix passed the homogeneity test.

2.5 Stability tests

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

The two occasions were:

- Day 1: coinciding with the first test items shipments, which took place on 21st January 2013.
- Day 2: shortly after the deadline for reporting results, on 13th February 2013.

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

Moreover, regarding the stability of the sample arriving not completely frozen, a duplicate analysis of a bottle reproducing the delivery conditions that the samples experienced during 48 hours was performed. The differences between the results of these analyses were not greater than 10 %. Laboratories could therefore be sufficiently confident in accepting the treated test item even if it was not completely frozen. Results for this 48 hours stability test are indicated in Table 2.3.

Table 2.2 Statistical test for analytical precision and to demonstrate results stability after a time-elapse interval

Pesticide	Concentration (mg/kg)							
	Day 1 (1 st analysis)	Day 1 (2 nd analysis)	Mean 1	Day 2 (1 st analysis)	Day 2 (2 nd analysis)	Mean 2	$\frac{(M2-M1)}{M1}$	%
Acephate	0.051	0.069	0.060	0.061	0.067	0.064	0.067	7
Azoxystrobin	0.159	0.158	0.159	0.171	0.176	0.174	0.095	9
Chlorothalonil	0.214	0.218	0.216	0.221	0.235	0.228	0.056	6
Chlorpropham	1.344	1.495	1.420	1.468	1.398	1.433	0.010	1
Cypermethrin	0.113	0.116	0.115	0.115	0.111	0.113	-0.013	-1
Diazinon	0.166	0.183	0.175	0.180	0.178	0.179	0.026	3
Fluopicolide	0.127	0.127	0.127	0.126	0.129	0.128	0.004	0
Flutolanil	0.321	0.331	0.326	0.325	0.323	0.324	-0.006	-1
Fosthiazate	0.061	0.059	0.060	0.061	0.065	0.063	0.050	5
Iprovalicarb	0.081	0.079	0.080	0.092	0.091	0.092	0.144	14
Linuron	0.093	0.087	0.090	0.088	0.086	0.087	-0.033	-3
Methiocarb	0.137	0.148	0.143	0.136	0.135	0.136	-0.049	-5
Pencycuron	0.327	0.321	0.324	0.370	0.369	0.370	0.140	14
Prochloraz	0.049	0.049	0.049	0.050	0.051	0.051	0.031	3
Procymidone	0.120	0.124	0.122	0.127	0.126	0.127	0.037	4
Spirodiclofen	0.443	0.451	0.447	0.438	0.441	0.440	-0.017	-2
Thiabendazole	1.245	1.259	1.252	1.375	1.385	1.380	0.102	10
Thiacloprid	0.295	0.292	0.294	0.306	0.310	0.308	0.049	5

Table 2.3 Statistical test for analytical precision and to demonstrate stability for the 48-hour time-elapse interval.

Pesticide	Concentration (mg/kg)							
	Day 1 (1 st analysis)	Day 1 (2 nd analysis)	Mean 1	48h (1 st analysis)	48h (2 nd analysis)	Mean 2	$\frac{(M2-M1)}{M1}$	%
Acephate	0.051	0.069	0.060	0.062	0.057	0.060	-0.008	-1
Azoxystrobin	0.159	0.158	0.159	0.169	0.164	0.167	0.050	5
Chlorothalonil	0.214	0.218	0.216	0.201	0.219	0.210	-0.028	-3
Chlorpropham	1.344	1.495	1.420	1.507	1.403	1.455	0.025	3
Cypermethrin	0.113	0.116	0.115	0.107	0.104	0.106	-0.079	-8
Diazinon	0.166	0.183	0.175	0.180	0.171	0.176	0.006	1
Fluopicolide	0.127	0.127	0.127	0.130	0.127	0.129	0.012	1
Flutolanil	0.321	0.331	0.326	0.323	0.309	0.316	-0.031	-3

Pesticide	Concentration (mg/kg)							
	Day 1 (1 st analysis)	Day 1 (2 nd analysis)	Mean 1	48h (1 st analysis)	48h (2 nd analysis)	Mean 2	$\frac{(M2-M1)}{M1}$	%
Fosthiazate	0.061	0.059	0.060	0.065	0.063	0.064	0.067	7
Iprovalicarb	0.081	0.079	0.080	0.086	0.082	0.084	0.050	5
Linuron	0.093	0.087	0.090	0.084	0.085	0.085	-0.061	-6
Methiocarb	0.137	0.148	0.143	0.144	0.135	0.140	-0.021	-2
Pencycuron	0.327	0.321	0.324	0.347	0.328	0.338	0.042	4
Prochloraz	0.049	0.049	0.049	0.053	0.050	0.052	0.051	5
Procymidone	0.120	0.124	0.122	0.123	0.117	0.120	-0.016	-2
Spirodiclofen	0.443	0.451	0.447	0.431	0.410	0.421	-0.059	-6
Thiabendazole	1.245	1.259	1.252	1.355	1.328	1.342	0.071	7
Thiacloprid	0.295	0.292	0.294	0.323	0.311	0.317	0.080	8

2.6 Distribution of test items and protocol to participants

One bottle of frozen treated test items and one bottle of frozen 'blank' material were shipped to each participant in boxes containing dry ice. The test items were sent on 21st January 2013.

Before sample shipment, the laboratories received full instructions (Annex 1) for the receipt, storage and analysis of the test items although they were encouraged to use their normal sample receipt procedure and method(s) of analysis. These instructions were uploaded onto the open site of the EURL-FV webpage as part of the Specific Protocol. The Application Form was also available as an on-line form. When applying to participate in the test, each laboratory decided on their own password, which was required in order to enter the restricted zone where Forms 0-5 could be accessed on-line. This information was made available when laboratories received an e-mail from the Organiser confirming their acceptance along with their Lab Code and thus allowing them to participate. This ensured that confidentiality was maintained throughout the duration of Proficiency Test 15. The Target Pesticide List and the Minimum Required Reporting Levels (MRRLs), as established by the Organiser, were uploaded onto the EURL-FV open website to allow laboratories sufficient time to purchase standards and to validate their methods.

3. STATISTICAL METHODS

3.1 False positives and negatives

3.1.1 False positives

These are results above the MRRLs that show the apparent presence of any pesticide listed in the Target Pesticide List, but which was: (i) not detected by the Organiser, even after repeated analyses, and (ii) not detected by most of the participating laboratories (i.e. 95 % of the laboratories) that had targeted that specific pesticide.

Results reported which were lower than the MRRL have been disregarded and have not therefore been considered to be false positives.

No z-score values have been calculated for false positive results. Any laboratory reporting a false positive, even when reporting the necessary number of pesticides to obtain sufficient scope, has been classified into Category B.

3.1.2 False negatives

These are results for any pesticide indicated by the laboratories as “analysed” but reported without numerical values, although they were used by the Organiser to treat the test item and were detected by the Organiser and the majority of the participants that had targeted this specific pesticide, at or above the MRRL.

z-Scores have been calculated for all pesticides detected and reported at levels at, or above, the MRRL, including false negatives. However, these z-scores were not taken into account in assessing the 90 %, or more, of pesticides present in the sample needed to be classified into Category A.

3.2 Estimation of the assigned values

The assigned values for each pesticide are based on the median level of the results reported by EU and EFTA countries laboratories, excluding outliers. Individual results without any numerical values reported, such as detected (D), were not considered. The spread of results for each pesticide was tested for multimodality. Taking into account the normative for robust analysis in ISO 13528 [3], the uncertainty was accompanying the assigned value for each pesticide, which was calculated according to the following equation:

$$u = \frac{1.25 \cdot \frac{Qn \text{ RSD} \cdot \text{Median}}{100}}{\sqrt{n}}$$

Where:

- u is the uncertainty in mg/Kg.
- Q_n RSD is the robust standard deviation.
- n is the total number of laboratories reporting a result for each pesticide, excluding outliers.

3.3 Fixed target standard deviations

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

3.4 z-Scores

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

$$z = (x - X) / \sigma$$

Where:

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

z-Score classification is as follows:

$|z| \leq 2$ Acceptable

$2 < |z| \leq 3$ Questionable

$|z| > 3$ Unacceptable

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

3.5 Combined z-Scores

In order to evaluate each laboratory's overall performance according to the quality of its results and its scope, two classifications - Category A and B - were used. To be classified into Category A, laboratories had to detect (that is *sought and detected*) 90 % or more of the total number of pesticides present in the test item and report no false positives. If these two requirements were met, then the combined z-scores were calculated as the 'Average of the Squared z-Scores' (AZ^2) [7].

3.5.1 The Average of the Squared z-Scores (AZ^2)

The 'Average of the Squared z-Scores' was introduced for the first time in EUPT 12. This formula consists of a weighting factor ω defined as follows:

$$\omega(Z_i) = Z_i$$

The Average of the Squared z-Scores formula (AZ^2) is:

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

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

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

$$\begin{aligned} |AZ^2| \leq 2 & \text{ Good} \\ 2 < |AZ^2| \leq 3 & \text{ Satisfactory} \\ |AZ^2| > 3 & \text{ Unsatisfactory} \end{aligned}$$

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

Laboratories that did not detect sufficient pesticides, or reported a false positive, have been placed in Category B and no combined z-score has been calculated.

In Appendices 5 and 6, only results of laboratories in Category A have been presented, along with their graphical representations.

4. RESULTS

4.1 Summary of reported results

One hundred and seventy-five laboratories agreed to participate in this proficiency test and all submitted results, except two. The results reported by all the laboratories are presented in this report. However, only results reported by laboratories from EU-countries and EFTA-countries (Iceland, Norway, and Switzerland) have been included in the statistical treatment. The results from the laboratories in Brazil, China, Croatia, India, Israel, Morocco, Saudi Arabia, Serbia, Turkey and Uruguay have not been included. This last group totals thirteen laboratories. Eighteen pesticides were used to treat the sample. For all of them statistical results have been calculated and presented in this report. A summary of the reported results can be seen below in Table 4.1.

Table 4.1 Summary of Reported Results

Pesticides	No. of Reported Results	No. of False Negative Results	No. of Not Analysed Results	Percentage of Reported Results (out of 160)
Acephate	124	8	28	78
Azoxystrobin	151	1	8	94
Chlorothalonil	134	5	21	84
Chlorpropham	134	3	23	84
Cypermethrin	146	6	8	91
Diazinon	159	0	1	99
Fluopicolide	95	0	65	59
Flutolanil	99	1	60	62
Fosthiazate	101	1	58	63
Iprovalicarb	124	0	36	78
Linuron	126	1	33	79
Methiocarb	128	4	28	80
Pencycuron	113	0	47	71
Prochloraz	134	3	23	84
Procymidone	153	1	6	96
Spirodiclofen	105	2	53	66
Thiabendazole	134	1	25	84
Thiacloprid	121	2	37	76

* The % of Reported Results comes from 160 laboratories. It does not take into account the 13 laboratories from Brazil, China, Croatia, India, Israel, Morocco, Saudi Arabia, Serbia, Turkey and Uruguay neither the two laboratories not submitting results.

Laboratories reported the presence of methiocarb sulfoxide in the test item, although it was not treated with this compound. The reason for its existence in the potatoes is that they were spiked with methiocarb, which degrades to methiocarb sulfoxide. This compound was not used for the evaluation of the laboratories, as it was found at a concentration very close to the MRRL (0.01

mg/kg), and as stated in the general protocol, "In cases of the assigned value being less than a factor of 4 times the MRRL, false negatives will not be assigned as this is not statistically justifiable". Dimethoate, endosulfan-alpha and endosulfan-beta were also reported by some of the laboratories although they were not intentionally used to treat the test item. They were also detected by the organisers at concentrations below 0.01 mg/kg. In this case their presence in the test item was due to contamination from the commercial formulations.

Sulfotep was also detected in the test item even though this pesticide was not employed to spike the potatoes. This may be attributed to the addition of diazinon to the test item, and sulfotep being a known impurity in the commercial formulation of diazinon. However, as sulfotep was not included in the target list of pesticides to be sought, it was not considered for the evaluation.

The laboratories that agreed to participate are listed in Annex 2. All results reported by the participants are given in Appendix 3, whilst the analytical methods used are given in Appendix 7 (only available in the electronic version).

4.1.1 False positives

Six laboratories from EU and EFTA-countries reported results for additional pesticides that had not been used to treat the test item. These pesticides and the residue levels reported are presented in Table 4.2 together with the MRRL. Where the reported concentrations of the erroneously-detected pesticide were higher than the assigned MRRL value in the Target Pesticide List (Annex 1), the result has been considered as a false positive.

One out of these six laboratories reporting a false positive result has not been classified into Category A despite achieving sufficient scope.

Table 4.2 Laboratories that reported as quantitative results for pesticides that were not present in the treated test item

Laboratory Code	Pesticide	Concentration (mg/kg)	Determination Technique	RL (mg/kg)	MRRL (mg/kg)
Lab038	Captan	0.131	GC-MS	0.01	0.01
Lab060	Dimethomorph	0.110	LC-MS/MS (QQQ)	0.01	0.01
Lab077	Carbendazim (sum of benomyl and carbendazim expressed as carbendazim)	0.040	GC-MS/MS (QQQ)	0.01	0.01
Lab114	Methiocarb sulfone	0.612	LC-MS/MS (QQQ)	0.01	0.01

Laboratory Code	Pesticide	Concentration (mg/kg)	Determination Technique	RL (mg/kg)	MRRL (mg/kg)
Lab128	Fludioxonil	0.123	LC-MS/MS (QQQ)	0.01	0.01
Lab160	Tebuconazole	0.011	LC-MS/MS (QQQ)	0.01	0.01

False positives from Brazil, China, Croatia, India, Israel, Morocco, Saudi Arabia, Serbia, Turkey and Uruguay (if any) have not been included in this table.

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

4.1.2 False negatives

Table 4.3 summarises the results from laboratories that reported false negatives.

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

Laboratory Code	Acephate	Azoxystrobin	Chlorothalonil	Chlorpropham	Cypermethrin	Diazinon	Fluopicolide	Flutolanil	Fosthiazate	Iprovalicarb	Linuron	Methiocarb	Pencycuron	Prochloraz	Procymidone	Spirodiclofen	Thiabendazole	Thiacloprid
002					ND													
003	ND																	
006			ND		ND													
010												ND						
012														ND				
027		ND	ND															
053														ND				
058									ND								ND	
060												ND						
063																		ND
064	ND				ND													
072					ND													
077	ND				ND													
083			ND	ND	ND			ND							ND	ND		
084	ND																	
085				ND							ND							
087	ND																	
089	ND																	

Laboratory Code	Acephate	Azoxystrobin	Chlorothalonil	Chlorpropham	Cypermethrin	Diazinon	Fluopicolide	Flutolanil	Fosthiazate	Iprovalicarb	Linuron	Methiocarb	Pencycuron	Prochloraz	Procymidone	Spirodiclofen	Thiabendazole	Thiacloprid	
094												ND							
133														ND					
134			ND																
138												ND							
145	ND																		
147	ND																		
153			ND																
160				ND															ND
172																		ND	

False negatives from Brazil, China, Croatia, India, Israel, Morocco, Saudi Arabia, Serbia, Turkey and Uruguay (if any) have not been included in this table.

4.1.3 Distribution of data

The distributions of the concentrations of the pesticides reported by the laboratories have been plotted as histograms after removing results that were distant from the main population (results that gave rise to z-scores above 5.0 in the first round calculation) in Appendix 2.

4.2 Assigned values and target standard deviations

The assigned values were based on the median values calculated using all the results reported by laboratories from EU and EFTA countries, but excluding those values that were far from the median, i.e. outliers. The assigned values for the eighteen pesticides and the uncertainties are presented in Table 4.4.

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

Table 4.4 Median values, uncertainty and %RSDs for all pesticides present in the test item.

Pesticides	MRRL (mg/kg)	Median (mg/kg)	Uncertainty (mg/kg)	FFP RSD (%)	Qn RSD (%)
Acephate	0.01	0.083	0.002	25	21.3
Azoxystrobin	0.01	0.203	0.003	25	15.3
Chlorothalonil	0.01	0.160	0.005	25	26.4

Pesticides	MRRL (mg/kg)	Median (mg/kg)	Uncertainty (mg/kg)	FFP RSD (%)	Qn RSD (%)
Chlorpropham	0.01	1.700	0.037	25	19.9
Cypermethrin	0.01	0.100	0.003	25	26.6
Diazinon	0.01	0.195	0.004	25	20.4
Fluopicolide	0.01	0.099	0.002	25	15.7
Flutolanil	0.01	0.410	0.007	25	14.1
Fosthiazate	0.01	0.080	0.002	25	19.4
Iprovalicarb	0.01	0.090	0.002	25	17.3
Linuron	0.01	0.098	0.002	25	20.4
Methiocarb	0.01	0.136	0.003	25	21.2
Pencycuron	0.01	0.269	0.005	25	16.5
Prochloraz	0.01	0.058	0.002	25	26.8
Procymidone	0.01	0.110	0.002	25	19.9
Spirodiclofen	0.01	0.444	0.011	25	20.0
Thiabendazole	0.01	1.710	0.041	25	22.1
Thiacloprid	0.01	0.338	0.007	25	18.4

4.3 Assessment of laboratory performance

4.3.1 z-Scores

z-Scores were calculated using the FFP RSD of 25 % for all the pesticides present. In Appendix 3, the individual z-scores are presented for each laboratory, together with the median values for each pesticide. The z-scores for Brazil, China, Croatia, India, Israel, Morocco, Saudi Arabia, Serbia, Turkey and Uruguay have been included in Appendix 3 but have not been considered in the following table.

Table 4.5 Classification of z-Scores for the pesticides reported

Pesticides	Acceptable (%)	Questionable (%)	Unacceptable (%)
Acephate	90.1	3.8	6.1
Azoxystrobin	98.0	0.7	1.3
Chlorothalonil	83.5	7.2	9.3
Chlorpropham	93.4	3.0	3.6
Cypermethrin	89.4	6.0	4.6
Diazinon	95.0	3.1	1.9

Fluopicolide	95.7	4.3	0.0
Flutolanil	96.0	2.0	2.0
Fosthiazate	96.0	2.0	2.0
Iprovalicarb	97.6	1.6	0.8
Linuron	95.2	4.0	0.8
Methiocarb	93.1	2.3	4.6
Pencycuron	97.3	1.8	0.9
Prochloraz	89.7	8.1	2.2
Procymidone	94.8	3.3	1.9
Spirodiclofen	90.6	4.7	4.7
Thiabendazole	95.6	3.0	1.4
Thiacloprid	95.0	2.5	2.5

z-Scores for false negative results have been calculated using the MRRL value given in the Target Pesticide List (Annex 1) or the RL value from the laboratory (whichever was lower).

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

4.3.2 Combined z-Scores

As previously mentioned in Section 3.5, only the AZ^2 formula has been applied to categorise the laboratories into Category A and B.

The table in Appendix 5 shows the values of individual z-scores for each pesticide and the combined 'Average of the Squared z-Scores' (AZ^2) for those EU and EFTA laboratories in Category A. In this category are the laboratories that sought and detected sixteen or more compounds and did not report any false positive result. A graphical representation of the results for these laboratories can also be found in Appendix 6.

Eighty-seven of the one hundred and sixty EU and EFTA laboratories that submitted results have been classified into Category A (54 %).

From the AZ^2 , ninety-two percent were classed as 'good', seven percent as 'satisfactory' and one percent as 'unsatisfactory'.

Of the seventy-three laboratories in Category B, one would have been in Category A if they had not reported a false positive result.

Table 4.6.1 shows the laboratories in Category A, the number of pesticides reported, the AZ² values and their subclassifications. Laboratories that reported false negative results in Category A are marked with an asterisk and laboratories with AZ² values greater than 3.0 have been marked with an '↑'.

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

The AZ² graphical representation for laboratories classified into Category A can be seen in Appendix 6. The National Reference Laboratories (NRLs) for Fruit and Vegetables have been plotted using a different colour.

Laboratory performance over the last three EUPTs using the AZ² formula has been summarized as follows:

- For EUPT-FV-15, out of 160 laboratories (EU and EFTA), 87 were in Category A with the following classes: 1 'unsatisfactory', 6 'satisfactory' and 80 'good'.
- For EUPT-FV-14, out of 151 laboratories (EU and EFTA), 83 were in Category A with the following classes: 5 'unsatisfactory', 2 'satisfactory' and 76 'good'.
- For EUPT-FV-13, out of 144 laboratories (EU and EFTA), 81 were in Category A with the following classes: 10 'unsatisfactory', 6 'satisfactory' and 65 'good'.

Table 4.6.1 Performance and Classification of laboratories in Category A using the AZ² formula

Lab Code	No. of z-scores achieved in total (n)	AZ ²	Classification
Lab111	18	0.0	Good
Lab093	18	0.1	Good
Lab017	18	0.1	Good
Lab044	18	0.1	Good
Lab097	18	0.1	Good
Lab034	18	0.1	Good
Lab120	18	0.2	Good
Lab018	18	0.2	Good
Lab119	18	0.2	Good
Lab121	18	0.2	Good
Lab065	18	0.2	Good
Lab024	18	0.2	Good
Lab054	18	0.2	Good
Lab099	18	0.2	Good
Lab005	18	0.2	Good
Lab068	18	0.3	Good

Lab Code	No. of z-scores achieved in total (n)	AZ ²	Classification
Lab173	18	0.3	Good
Lab066	18	0.3	Good
Lab074	18	0.3	Good
Lab028	18	0.3	Good
Lab171	16	0.3	Good
Lab112	18	0.4	Good
Lab166	18	0.4	Good
Lab022	18	0.4	Good
Lab007	18	0.4	Good
Lab103	18	0.4	Good
Lab030	18	0.4	Good
Lab061	18	0.4	Good
Lab059	18	0.4	Good
Lab067	18	0.4	Good
Lab011	18	0.4	Good
Lab029	18	0.5	Good
Lab073	18	0.5	Good
Lab015	18	0.5	Good
Lab132	18	0.5	Good
Lab137	18	0.5	Good
Lab020	18	0.5	Good
Lab165	18	0.5	Good
Lab051	18	0.5	Good
Lab163	18	0.5	Good
Lab100	17	0.5	Good
Lab092	18	0.5	Good
Lab025	18	0.6	Good
Lab107	18	0.6	Good
Lab123	18	0.6	Good
Lab049	18	0.6	Good
Lab050	18	0.6	Good
Lab161	18	0.7	Good
Lab033	17	0.7	Good
Lab106	18	0.7	Good
Lab079	18	0.7	Good
Lab046	18	0.7	Good
Lab118	18	0.7	Good
Lab035	18	0.8	Good
Lab055	18	0.8	Good
Lab110	18	0.8	Good
Lab039	18	0.8	Good
Lab090	18	0.9	Good

Lab Code	No. of z-scores achieved in total (n)	AZ ²	Classification
Lab102	18	0.9	Good
Lab104	18	1.0	Good
Lab062	18	1.0	Good
Lab078	18	1.1	Good
Lab145*	18	1.1	Good
Lab008	18	1.1	Good
Lab012*	18	1.2	Good
Lab086	17	1.2	Good
Lab057	17	1.2	Good
Lab002*	18	1.3	Good
Lab136	18	1.3	Good
Lab108	18	1.4	Good
Lab080	18	1.4	Good
Lab156	18	1.4	Good
Lab138*	17	1.4	Good
Lab075	18	1.6	Good
Lab052	18	1.6	Good
Lab109	18	1.6	Good
Lab021	17	1.6	Good
Lab129	18	1.7	Good
Lab026	18	1.8	Good
Lab043	18	2.0	Good
Lab037	18	2.1	Satisfactory
Lab004	18	2.1	Satisfactory
Lab105	18	2.3	Satisfactory
Lab064*	18	2.3	Satisfactory
Lab013	18	2.8	Satisfactory
Lab095	17	2.8	Satisfactory
Lab010*↑	17	5.0	Unsatisfactory

* Laboratories reporting a false negative result.

↑ Laboratories with AZ² values > 3

Table 4.6.2 Performance of laboratories in Category B

Lab Code	No. of acceptable z-scores	No. of pesticides detected	No. of total z-scores	% No. of detected z-scores No. of pesticides present
Lab038+	18	18	18	100
Lab001	14	15	15	83
Lab006*	14	15	17	83
Lab053*	12	15	16	83
Lab058*	15	15	17	83
Lab076	15	15	15	83

Lab Code	No. of acceptable z-scores	No. of pesticides detected	No. of total z-scores	% No. of detected z-scores No. of pesticides present
Lab101	14	15	15	83
Lab114+	14	15	15	83
Lab130	15	15	15	83
Lab143	15	15	15	83
Lab150	13	15	15	83
Lab158	13	15	15	83
Lab019	11	14	14	78
Lab032	13	14	14	78
Lab045	12	14	14	78
Lab082	14	14	14	78
Lab084*	9	14	15	78
Lab135	13	14	14	78
Lab140	14	14	14	78
Lab047	13	13	13	72
Lab048	12	13	13	72
Lab085*	12	13	15	72
Lab094*	13	13	14	72
Lab172*	13	13	14	72
Lab072*	11	12	13	67
Lab083*	12	12	18	67
Lab096	11	12	12	67
Lab151	12	12	12	67
Lab154	12	12	12	67
Lab063*	11	11	12	61
Lab069	11	11	11	61
Lab131	11	11	11	61
Lab149	11	11	11	61
Lab159	10	11	11	61
Lab160*+	10	11	13	61
Lab027*	7	10	12	56
Lab088	8	10	10	56
Lab098	5	10	10	56
Lab128+	10	10	10	56
Lab134*	10	10	11	56
Lab153*	7	10	11	56
Lab157	10	10	10	56
Lab014	9	9	9	50
Lab077*+	7	9	11	50
Lab146	9	9	9	50
Lab042	8	8	8	44
Lab070	7	8	8	44
Lab125	8	8	8	44
Lab142	8	8	8	44
Lab144	8	8	8	44

Lab Code	No. of acceptable z-scores	No. of pesticides detected	No. of total z-scores	% No. of detected z-scores No. of pesticides present
Lab009	6	7	7	39
Lab036	7	7	7	39
Lab060*+	7	7	8	39
Lab116	7	7	7	39
Lab117	7	7	7	39
Lab139	7	7	7	39
Lab141	7	7	7	39
Lab113	6	6	6	33
Lab126	6	6	6	33
Lab127	6	6	6	33
Lab168	6	6	6	33
Lab003*	5	5	6	28
Lab016	5	5	5	28
Lab089*	4	5	6	28
Lab133*	5	5	6	28
Lab147*	5	5	6	28
Lab152	5	5	5	28
Lab162	4	5	5	28
Lab031	3	4	4	22
Lab087*	4	4	5	22
Lab115	3	3	3	17
Lab170	1	3	3	17
Lab071	1	1	1	6

* Laboratories reporting a false negative result.

+ Laboratories reporting a false positive result.

5. CONCLUSIONS

One hundred and seventy-five laboratories agreed to participate in EUPT-FV-15. Out of these, only two did not submit results for the analysis of the treated potato homogenate test item. Thirteen of those submitting results were not from EU or EFTA countries, so no statistical analysis was conducted on their results.

The pesticide residue levels in the treated potato test item were in close agreement with the target levels proposed by the EURL Quality Control Group.

Five additional pesticides that were not used to treat the test item were reported by the laboratories and detected by the Organisers: methiocarb sulfoxide, dimethoate, endosulfan-alpha, endosulfan-beta and sulfotep. In the case of methiocarb sulfoxide, it is formed from the degradation of methiocarb. This pesticide was not used in the evaluation of the laboratories for statistical reasons. Dimethoate, endosulfan-alpha and endosulfan-beta were detected at concentrations below 0.01mg/kg and their presence in the test item was due to contamination of the commercial formulations. Sulfotep is also an impurity of a commercial formulation, in this case of diazinon. However, as sulfotep was not included in the target list of pesticides to be sought, it was not considered in the evaluation of the laboratories.

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

Average of Squared z-Scores formula was used for the overall evaluation of the participant laboratories. Laboratories reporting sixteen or more results, and no false positives, were considered to have sufficient scope and were therefore classified into Category A. Laboratories in Category A were also classed as 'good', 'satisfactory' or 'unsatisfactory'. Laboratories reporting false negatives were marked with an asterisk and those obtaining an AZ^2 value greater than 3 were marked with an '↑'.

Those laboratories that reported less than sixteen results were considered to have insufficient scope and were automatically classified into Category B, together with any of those reporting a false positive result. These laboratories have been categorised depending on the number of pesticides detected out of the total (eighteen). Laboratories reporting false negatives were marked with an asterisk. Laboratories having reported a false positive have been marked with a '+'.

The median value for each pesticide was used as the assigned value or "true" concentration, which was also used to calculate the z-scores.

Overall, the results were very good with regard to the z-scores for each pesticide present in the test item. Most of the pesticides had only a few unacceptable z-scores. Therefore, laboratories generally achieved accurate results for all the pesticides present in the test item – at, or above, 83.5 %. Chlorothalonil was the pesticide with the lowest percentage (83.5 %) of good results.

Comparing the 2012 PT with this year's, three pesticides were common to both: spirodiclofen, thiabendazole and thiacloprid. In all three cases, the percentage of reported results has increased this year: spirodiclofen from 58 to 66 %, thiabendazole from 79 to 84 % and thiacloprid from 71 to 76 %.

Moreover, although the percentage of laboratories in Category A (54 %) is similar to last year's (55 %), a comparison to the previous year percentages for laboratories in Category A classified as "unsatisfactory" shows a significant decrease from 6 % last year to 1 % this year.

Participation in this year's European Proficiency Test 15 involved at least one laboratory from each Member State. Additionally, Iceland, Norway and Switzerland participated as EFTA countries. Non-European laboratories in Brazil, Croatia, India, Israel, Serbia, Turkey and Uruguay also participated (as in previous years) although this year, they were joined by China, Morocco and Saudi Arabia for the first time. These Non-EU laboratories, however, are official laboratories in their own countries. As laid down in Article 32 of Regulation (EC) N° 882/2004, one of the EURL's duties is to collaborate with non EU laboratories that are responsible for analysing food and feed samples and to help them improve the quality of their analyses.

6. SUGGESTIONS FOR FUTURE WORK

The following suggestions were made by the Organiser and the Scientific Committee for EUPT-FV15.

As a result of the continuing trend of performance improvement, the stricter criteria applied to EUPT-FV-15 will be carried forward to the PT next year. The aim is that laboratories continue to increase the scope of their methods so that they are able to fully enforce EU legislation.

The harmonised MRRL will be maintained for all pesticides. The Target Pesticide List will contain individual analytes that must be sought and reported. No MRL residue definition will be requested. Evaluation will be performed only on individual components. This will allow a better statistical treatment of the data to be undertaken, and easier traceability of any possible analytical problems encountered by the laboratories.

The NRL-OfL network will be strengthened further by providing additional information to the NRLs on the performance of all the official laboratories in their country. This information will then be passed on to the OfLs and also be displayed on the EURL website. This new measure will encourage more frequent communication between laboratories and provide regular updates of information.

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

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APPENDIX 1. Homogeneity data.

Acephate (mg/kg)		Azoxystrobin (mg/kg)		Chlorothalonil (mg/kg)		Chlorpropham (mg/kg)	
Replicate 1	Replicate 2	Replicate 1	Replicate 2	Replicate 1	Replicate 2	Replicate 1	Replicate 2
0.066	0.065	0.178	0.180	0.214	0.212	1.461	1.438
0.064	0.067	0.181	0.178	0.203	0.220	1.433	1.438
0.073	0.064	0.171	0.177	0.217	0.210	1.548	1.444
0.070	0.066	0.174	0.185	0.217	0.215	1.533	1.469
0.065	0.068	0.179	0.178	0.206	0.213	1.465	1.476
0.062	0.064	0.184	0.180	0.209	0.215	1.368	1.389
0.064	0.064	0.185	0.189	0.213	0.187	1.423	1.263
0.061	0.070	0.188	0.188	0.204	0.220	1.375	1.515
0.074	0.063	0.181	0.177	0.224	0.205	1.644	1.401
0.065	0.069	0.185	0.177	0.214	0.211	1.471	1.507

Cypermethrin (mg/kg)		Diazinon (mg/kg)		Fluopicolide (mg/kg)		Flutolanil (mg/kg)	
Replicate 1	Replicate 2	Replicate 1	Replicate 2	Replicate 1	Replicate 2	Replicate 1	Replicate 2
0.118	0.111	0.184	0.177	0.118	0.123	0.343	0.329
0.114	0.116	0.178	0.184	0.124	0.123	0.328	0.341
0.114	0.112	0.194	0.180	0.119	0.115	0.349	0.327
0.124	0.115	0.190	0.183	0.119	0.126	0.361	0.335
0.115	0.117	0.180	0.182	0.117	0.126	0.343	0.344
0.112	0.109	0.174	0.175	0.126	0.121	0.325	0.320
0.114	0.101	0.177	0.157	0.122	0.125	0.331	0.301
0.109	0.119	0.169	0.188	0.130	0.130	0.317	0.353
0.124	0.111	0.205	0.177	0.123	0.122	0.366	0.324
0.112	0.115	0.179	0.186	0.124	0.121	0.334	0.341

Fosthiazate (mg/kg)		Iprovalicarb (mg/kg)		Linuron (mg/kg)		Methiocarb (mg/kg)	
Replicate 1	Replicate 2	Replicate 1	Replicate 2	Replicate 1	Replicate 2	Replicate 1	Replicate 2
0.075	0.074	0.085	0.088	0.097	0.100	0.142	0.140
0.074	0.076	0.083	0.082	0.101	0.112	0.136	0.144
0.068	0.072	0.085	0.085	0.098	0.105	0.149	0.140
0.075	0.077	0.087	0.084	0.102	0.111	0.147	0.146
0.074	0.078	0.080	0.081	0.101	0.102	0.137	0.138
0.080	0.077	0.083	0.084	0.104	0.107	0.129	0.133
0.078	0.076	0.081	0.085	0.110	0.115	0.133	0.115
0.085	0.081	0.087	0.087	0.113	0.112	0.128	0.142
0.074	0.075	0.089	0.089	0.115	0.103	0.158	0.138
0.075	0.074	0.083	0.080	0.114	0.115	0.137	0.142

APPENDIX 1. Homogeneity data.

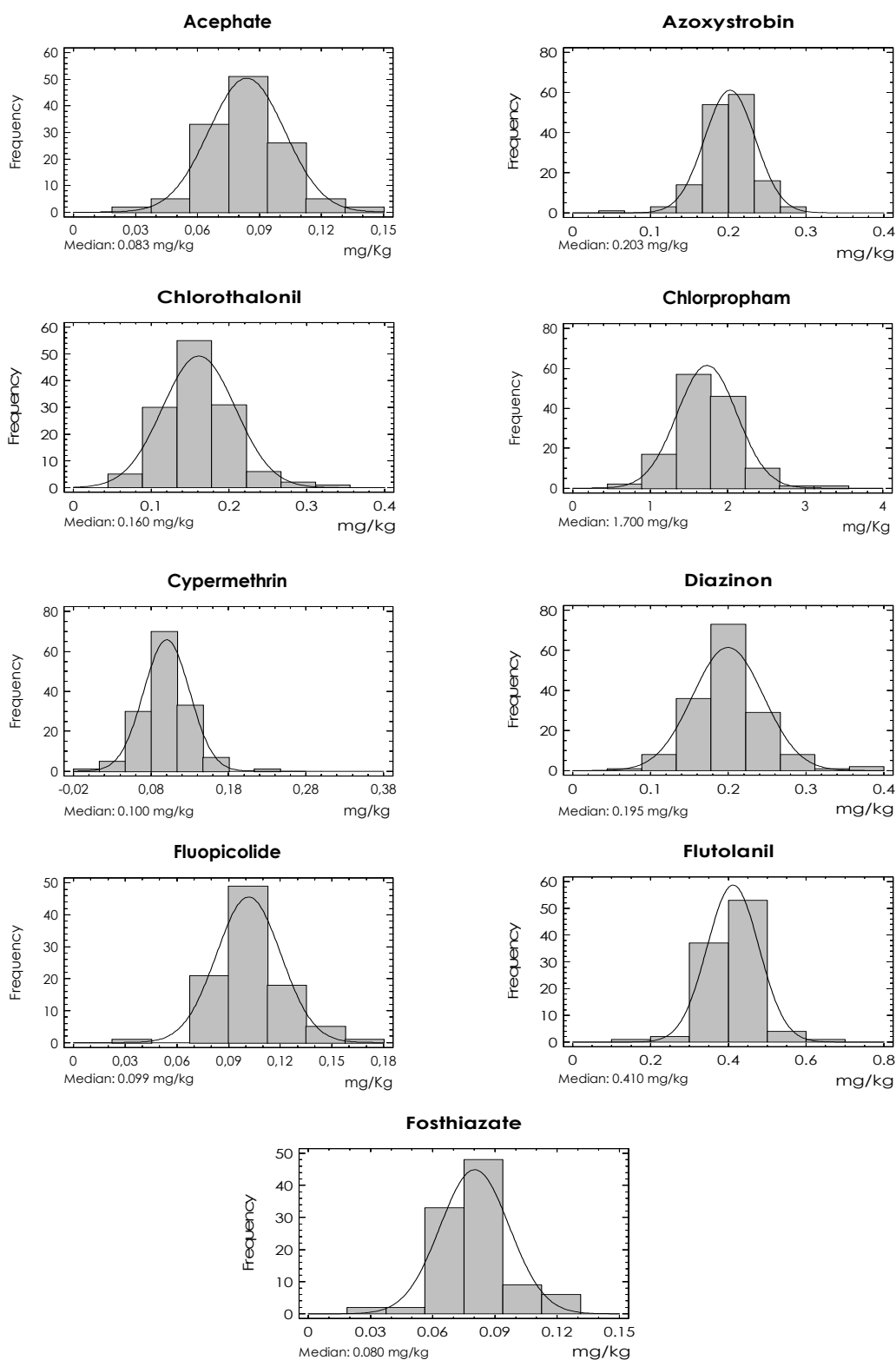
Pencycuron (mg/kg)		Prochloraz (mg/kg)		Procymidone (mg/kg)		Spirodiclofen (mg/kg)	
Replicate 1	Replicate 2	Replicate 1	Replicate 2	Replicate 1	Replicate 2	Replicate 1	Replicate 2
0.332	0.330	0.050	0.046	0.124	0.119	0.434	0.406
0.347	0.336	0.049	0.048	0.118	0.121	0.404	0.405
0.331	0.338	0.047	0.048	0.130	0.121	0.445	0.423
0.321	0.328	0.049	0.049	0.127	0.122	0.441	0.412
0.320	0.330	0.048	0.050	0.121	0.119	0.408	0.401
0.332	0.321	0.049	0.048	0.112	0.114	0.397	0.385
0.340	0.330	0.048	0.048	0.117	0.104	0.399	0.350
0.331	0.333	0.049	0.048	0.115	0.126	0.389	0.419
0.333	0.334	0.051	0.049	0.135	0.116	0.460	0.405
0.346	0.329	0.046	0.046	0.122	0.123	0.420	0.419

Thiabendazole (mg/kg)		Thiacloprid (mg/kg)	
Replicate 1	Replicate 2	Replicate 1	Replicate 2
1.466	1.472	0.358	0.348
1.512	1.467	0.352	0.360
1.329	1.398	0.340	0.354
1.438	1.482	0.386	0.353
1.436	1.474	0.355	0.354
1.480	1.464	0.350	0.363
1.491	1.487	0.365	0.387
1.499	1.469	0.387	0.353
1.412	1.417	0.374	0.366
1.468	1.460	0.379	0.386

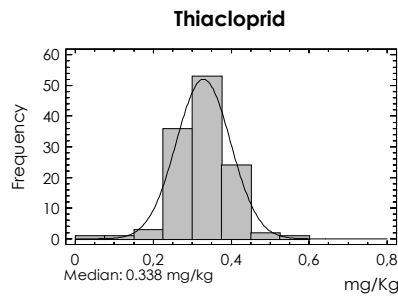
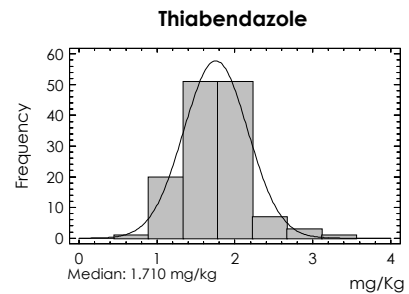
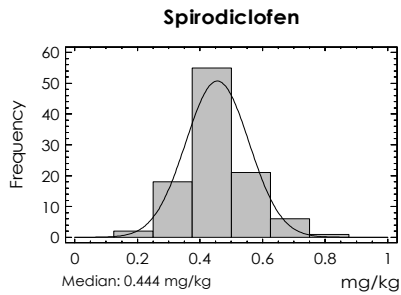
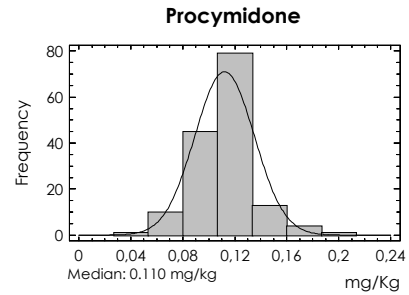
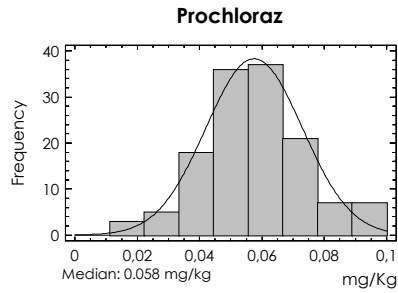
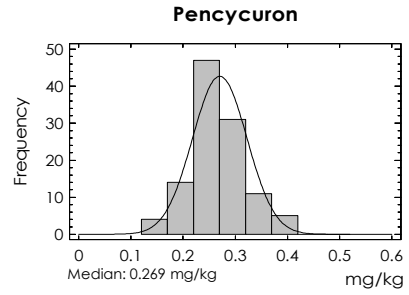
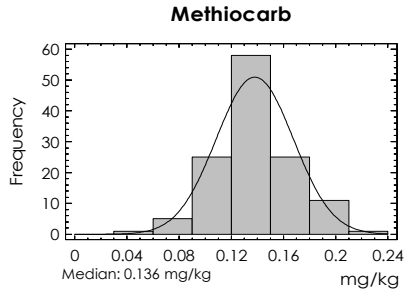
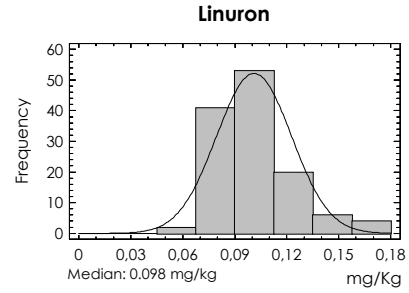
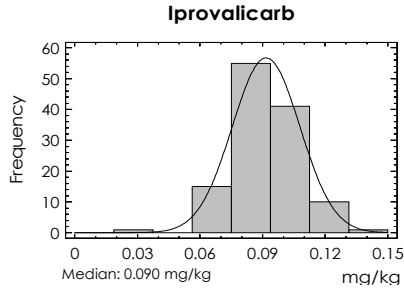
The sample numbers used for this test were: 15, 55, 82, 101, 113, 181, 190, 210, 222 and 238.

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

Results presented as histograms.



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



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

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

Lab Code	Acephate	Azoxystrobin		Chlorothalonil		Chlorpropham		Cypermethrin		Diazinon		Fluopicolide		Flutolanil		Fosfthiazate		
MRRL	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)		
Median (mg/kg)	0.083		0.203		0.160		1.700		0.100		0.195		0.099		0.410		0.080	
Lab001	0.035	-2.3	0.180	-0.5	NA		1.500	-0.5	0.078	-0.9	0.170	-0.5	NA		0.360	-0.5	0.068	-0.6
Lab002	0.101	0.8	0.162	-0.8	0.124	-0.9	1.232	-1.1	ND	-3.6	0.188	-0.2	0.084	-0.6	0.395	-0.1	0.053	-1.4
Lab003	ND	-3.5	0.231	0.6	0.181	0.5	1.010	-1.6	NA		0.111	-1.7	NA		NA		NA	
Lab004	0.088	0.2	0.178	-0.5	0.571	5.0	1.840	0.3	0.141	1.6	0.254	1.2	0.120	0.8	0.405	0.0	0.087	0.4
Lab005	0.102	0.9	0.207	0.1	0.133	-0.7	1.810	0.3	0.106	0.2	0.185	-0.2	0.117	0.7	0.455	0.4	0.092	0.6
Lab006	0.120	1.8	0.180	-0.5	ND	-3.8	2.110	1.0	ND	-3.6	0.340	3.0	NA		0.470	0.6	0.090	0.5
Lab007	0.076	-0.4	0.192	-0.2	0.126	-0.9	1.804	0.2	0.085	-0.6	0.193	-0.1	0.098	0.0	0.430	0.2	0.072	-0.4
Lab008	0.080	-0.2	0.172	-0.6	0.125	-0.9	3.010	3.1	0.102	0.1	0.171	-0.5	0.087	-0.5	0.325	-0.8	0.060	-1.0
Lab009	NA		0.218	0.3	0.137	-0.6	NA		0.069	-1.2	0.166	-0.6	NA		NA		0.079	-0.1
Lab010	0.140	2.7	0.390	3.7	NA		0.760	-2.2	0.030	-2.8	0.250	1.1	0.150	2.1	0.810	3.9	0.120	2.0
Lab011	0.070	-0.6	0.200	-0.1	0.150	-0.3	1.820	0.3	0.065	-1.4	0.180	-0.3	0.093	-0.2	0.384	-0.3	0.067	-0.7
Lab012	0.065	-0.9	0.187	-0.3	0.136	-0.6	2.433	1.7	0.084	-0.6	0.172	-0.5	0.098	0.0	0.357	-0.5	0.070	-0.5
Lab013	0.07	-0.6	0.18	-0.5	0.09	-1.8	1.45	-0.6	0.07	-1.2	0.13	-1.3	0.075	-1.0	0.39	-0.2	0.08	0.0
Lab014	0.086	0.1	0.250	0.9	NA		2.200	1.2	NA		0.270	1.5	NA		NA		NA	
Lab015	0.075	-0.4	0.170	-0.7	0.110	-1.3	1.400	-0.7	0.090	-0.4	0.170	-0.5	0.082	-0.7	0.340	-0.7	0.071	-0.5
Lab016	NA		0.130	-1.4	0.130	-0.8	2.410	1.7	NA		0.280	1.7	NA		NA		NA	
Lab017	0.068	-0.8	0.184	-0.4	0.171	0.3	1.630	-0.2	0.113	0.5	0.179	-0.3	0.093	-0.2	0.400	-0.1	0.086	0.3
Lab018	0.097	0.7	0.180	-0.5	0.160	0.0	1.500	-0.5	0.100	0.0	0.180	-0.3	0.089	-0.4	0.370	-0.4	0.076	-0.2
Lab019	0.140	2.7	0.224	0.4	0.250	2.3	1.779	0.2	0.098	-0.1	0.182	-0.3	NA		NA		NA	
Lab020	0.058	-1.2	0.196	-0.1	0.182	0.6	1.526	-0.4	0.124	1.0	0.237	0.8	0.102	0.1	0.431	0.2	0.081	0.1
Lab021	0.052	-1.5	0.226	0.5	0.179	0.5	1.950	0.6	0.112	0.5	0.310	2.3	NA		0.431	0.2	0.113	1.7
Lab022	0.109	1.2	0.215	0.2	0.161	0.0	1.560	-0.3	0.088	-0.5	0.218	0.5	0.091	-0.3	0.374	-0.4	0.089	0.5
Lab023	NA		0.181	-0.4	NA		NA		NA		0.208	0.3	NA		NA		NA	
Lab024	0.077	-0.3	0.208	0.1	0.192	0.8	1.850	0.4	0.106	0.2	0.238	0.9	0.094	-0.2	0.387	-0.2	0.074	-0.3
Lab025	0.062	-1.0	0.172	-0.6	0.112	-1.2	1.399	-0.7	0.109	0.4	0.155	-0.8	0.090	-0.4	0.340	-0.7	0.057	-1.2
Lab026	0.085	0.1	0.250	0.9	0.261	2.5	2.091	0.9	0.175	3.0	0.254	1.2	0.153	2.2	0.546	1.3	0.096	0.8
Lab027	0.070	-0.6	ND	-3.8	ND	-3.8	1.900	0.5	0.220	4.8	0.180	-0.3	NA		NA		0.170	4.5
Lab028	0.065	-0.9	0.203	0.0	0.201	1.0	1.590	-0.3	0.100	0.0	0.176	-0.4	0.100	0.0	0.387	-0.2	0.066	-0.7
Lab029	0.084	0.0	0.200	-0.1	0.220	1.5	1.700	0.0	0.120	0.8	0.210	0.3	0.091	-0.3	0.410	0.0	0.059	-1.1
Lab030	0.094	0.5	0.220	0.3	0.182	0.6	1.653	-0.1	0.096	-0.2	0.195	0.0	0.105	0.2	0.397	-0.1	0.093	0.7
Lab031	NA		NA		0.250	2.3	NA		NA		0.280	1.7	NA		NA		NA	
Lab032	0.070	-0.6	0.150	-1.0	0.120	-1.0	1.460	-0.6	0.040	-2.4	0.150	-0.9	NA		NA		NA	
Lab033	0.091	0.4	0.160	-0.8	0.210	1.3	1.900	0.5	0.064	-1.4	0.190	-0.1	NA		0.500	0.9	0.086	0.3
Lab034	0.062	-1.0	0.201	0.0	0.141	-0.5	1.512	-0.4	0.094	-0.2	0.171	-0.5	0.103	0.2	0.433	0.2	0.077	-0.2
Lab035	0.056	-1.3	0.190	-0.3	0.150	-0.3	1.920	0.5	0.112	0.5	0.253	1.2	0.100	0.0	0.405	0.0	0.068	-0.6
Lab036	NA		0.200	-0.1	NA		1.59	-0.3	0.097	-0.1	0.184	-0.2	NA		NA		NA	
Lab037	0.110	1.3	0.280	1.5	0.170	0.3	2.300	1.4	0.150	2.0	0.280	1.7	0.130	1.3	0.560	1.5	0.110	1.5
Lab038	0.084	0.0	0.203	0.0	0.195	0.9	1.290	-1.0	0.087	-0.5	0.221	0.5	0.099	0.0	0.478	0.7	0.094	0.7
Lab039	0.090	0.3	0.200	-0.1	0.145	-0.4	1.386	-0.7	0.115	0.6	0.165	-0.6	0.075	-1.0	0.305	-1.0	0.085	0.3
Lab040	0.098	0.7	0.301	1.9	0.180	0.5	1.669	-0.1	0.083	-0.7	0.205	0.2	0.099	0.0	0.394	-0.2	0.082	0.1
Lab041	0.087	0.2	0.266	1.2	0.186	0.7	1.584	-0.3	0.096	-0.2	0.204	0.2	0.112	0.5	0.334	-0.7	0.090	0.5

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

Lab Code	Acephate	Azoxystrobin		Chlorothalonil		Chlorpropham		Cypermethrin		Diazinon		Fluopicolide		Flutolanil		Fosthiazate	
		z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	
MRRL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Median (mg/kg)	0.083	0.203	0.160	1.700	0.100	0.195	0.099	0.410	0.080								
Lab042	NA		0.236	0.7	0.169	0.2	1.795	0.2	0.128	1.1	0.197	0.0	0.097	-0.1	0.425	0.1	NA
Lab043	0.088	0.2	0.219	0.3	0.565	5.0	1.887	0.4	0.124	1.0	0.266	1.4	0.110	0.4	0.464	0.5	0.075
Lab044	0.089	0.3	0.200	-0.1	0.130	-0.8	1.270	-1.0	0.100	0.0	0.170	-0.5	0.098	0.0	0.420	0.1	0.087
Lab045	0.110	1.3	0.190	-0.3	NA		NA		NA		0.310	2.3	0.110	0.4	0.660	2.4	0.120
Lab046	0.095	0.6	0.261	1.1	0.172	0.3	1.645	-0.1	0.078	-0.9	0.161	-0.7	0.096	-0.1	0.466	0.5	0.061
Lab047	0.087	0.2	0.249	0.9	NA		1.873	0.4	0.097	-0.1	0.191	-0.1	0.119	0.8	NA		NA
Lab048	NA		0.222	0.4	0.181	0.5	1.840	0.3	0.104	0.2	0.183	-0.3	0.117	0.7	NA		NA
Lab049	0.120	1.8	0.182	-0.4	0.196	0.9	1.779	0.2	0.144	1.8	0.164	-0.6	0.106	0.3	0.467	0.6	0.070
Lab050	0.069	-0.7	0.181	-0.4	0.128	-0.8	1.560	-0.3	0.078	-0.9	0.156	-0.8	0.077	-0.9	0.363	-0.5	0.064
Lab051	0.077	-0.3	0.181	-0.4	0.098	-1.6	1.594	-0.2	0.089	-0.4	0.193	-0.1	0.076	-0.9	0.347	-0.6	0.065
Lab052	0.090	0.3	0.192	-0.2	0.235	1.9	2.310	1.4	0.130	1.2	0.295	2.0	0.104	0.2	0.384	-0.3	0.094
Lab053	0.074	-0.4	0.233	0.6	0.076	-2.1	1.411	-0.7	0.063	-1.5	0.128	-1.4	NA		NA		0.026
Lab054	0.088	0.2	0.205	0.0	0.129	-0.8	1.754	0.1	0.130	1.2	0.195	0.0	0.114	0.6	0.369	-0.4	0.071
Lab055	0.064	-0.9	0.259	1.1	0.171	0.3	1.300	-0.9	0.140	1.6	0.198	0.1	0.118	0.8	0.493	0.8	0.076
Lab056	NA		NA		ND	-3.8	0.871	-2.0	NA		0.095	-2.1	NA		NA		NA
Lab057	0.082	-0.1	0.222	0.4	NA		1.068	-1.5	0.049	-2.0	0.129	-1.4	0.127	1.1	0.463	0.5	0.087
Lab058	0.066	-0.8	0.197	-0.1	0.169	0.2	1.967	0.6	0.112	0.5	0.202	0.1	NA		0.430	0.2	ND
Lab059	0.082	-0.1	0.214	0.2	0.163	0.1	1.970	0.6	0.153	2.1	0.224	0.6	0.106	0.3	0.430	0.2	0.083
Lab060	NA		0.180	-0.5	0.150	-0.3	NA		0.090	-0.4	0.190	-0.1	NA		NA		NA
Lab061	0.074	-0.4	0.200	-0.1	0.180	0.5	1.600	-0.2	0.120	0.8	0.150	-0.9	0.090	-0.4	0.410	0.0	0.073
Lab062	0.083	0.0	0.256	1.0	0.122	-1.0	1.81	0.3	0.104	0.2	0.192	-0.1	0.123	1.0	0.375	-0.3	0.067
Lab063	NA		0.204	0.0	0.155	-0.1	1.292	-1.0	0.105	0.2	0.204	0.2	NA		NA		NA
Lab064	ND	-3.5	0.240	0.7	0.150	-0.3	2.420	1.7	ND	-3.6	0.190	-0.1	0.100	0.0	0.440	0.3	0.100
Lab065	0.066	-0.8	0.218	0.3	0.159	0.0	1.912	0.5	0.093	-0.3	0.220	0.5	0.113	0.6	0.461	0.5	0.076
Lab066	0.076	-0.4	0.225	0.4	0.174	0.4	1.770	0.2	0.137	1.5	0.225	0.6	0.097	-0.1	0.410	0.0	0.077
Lab067	0.081	-0.1	0.236	0.7	0.186	0.7	1.871	0.4	0.119	0.8	0.196	0.0	0.099	0.0	0.401	-0.1	0.080
Lab068	0.090	0.3	0.200	-0.1	0.100	-1.5	1.900	0.5	0.090	-0.4	0.210	0.3	0.095	-0.2	0.400	-0.1	0.075
Lab069	0.074	-0.4	0.200	-0.1	0.150	-0.3	NA		0.097	-0.1	0.190	-0.1	NA		NA		NA
Lab070	NA		0.170	-0.7	0.160	0.0	2.200	1.2	0.150	2.0	0.170	-0.5	NA		NA		NA
Lab071	NA		NA		NA		NA		0.058	-1.7	NA		NA		NA		NA
Lab072	0.072	-0.5	0.167	-0.7	NA		2.593	2.1	ND	-3.6	0.163	-0.7	NA		0.322	-0.9	NA
Lab073	0.083	0.0	0.178	-0.5	0.218	1.5	1.450	-0.6	0.097	-0.1	0.170	-0.5	0.114	0.6	0.486	0.7	0.093
Lab074	0.055	-1.4	0.186	-0.3	0.190	0.8	1.490	-0.5	0.100	0.0	0.200	0.1	0.098	0.0	0.360	-0.5	0.080
Lab075	0.096	0.6	0.214	0.2	0.466	5.0	2.130	1.0	0.085	-0.6	0.229	0.7	0.102	0.1	0.436	0.3	0.079
Lab076	0.080	-0.2	0.240	0.7	NA		2.000	0.7	0.130	1.2	0.240	0.9	NA		NA		0.089
Lab077	ND	-3.5	0.270	1.3	0.140	-0.5	1.800	0.2	ND	-3.6	0.110	-1.7	NA		NA		0.120
Lab078	0.088	0.2	0.133	-1.4	0.135	-0.6	1.540	-0.4	0.097	-0.1	0.212	0.3	0.068	-1.3	0.406	0.0	0.089
Lab079	0.115	1.5	0.161	-0.8	0.160	0.0	2.050	0.8	0.087	-0.5	0.186	-0.2	0.105	0.2	0.477	0.7	0.076
Lab080	0.102	0.9	0.207	0.1	0.174	0.4	2.000	0.7	0.135	1.4	0.228	0.7	0.142	1.7	0.550	1.4	0.083
Lab081	0.078	-0.3	NA		NA		NA		0.104	0.2	0.201	0.1	NA		NA		NA
Lab082	0.082	-0.1	0.232	0.6	0.161	0.0	1.556	-0.3	NA		0.197	0.0	NA		NA		0.056
Lab083	0.093	0.5	0.237	0.7	ND	-3.8	ND	-4.0	ND	-3.6	0.229	0.7	0.113	0.6	ND	-3.9	0.086
Lab084	ND	-3.5	0.052	-3.0	0.052	-2.7	NA		0.061	-1.6	0.150	-0.9	0.043	-2.3	0.130	-2.7	0.120
Lab085	0.108	1.2	0.288	1.7	0.115	-1.1	ND	-4.0	0.082	-0.7	0.178	-0.4	NA		NA		NA

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

Lab Code	Acephate	Azoxystrobin		Chlorothalonil		Chlorpropham		Cypermethrin		Diazinon		Fluopicolide		Flutolanil		Fosthiazate		
	MRRL	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)		
Median (mg/kg)	0.083	0.203	0.160	1.700	0.100	0.195	0.099	0.410	0.080									
Lab086	0.130	2.2	0.200	-0.1	0.170	0.3	NA		0.130	1.2	0.220	0.5	0.100	0.0	0.360	-0.5	0.069	-0.6
Lab087	ND	-3.5	NA		0.190	0.8	NA		0.080	-0.8	0.130	-1.3	NA		NA		NA	
Lab088	NA		0.195	-0.2	0.260	2.5	1.210	-1.2	0.113	0.5	0.217	0.4	NA		NA		NA	
Lab089	ND	-3.5	0.173	-0.6	NA		2.500	1.9	0.160	2.4	0.206	0.2	NA		NA		NA	
Lab090	0.064	-0.9	0.150	-1.0	0.110	-1.3	1.400	-0.7	0.078	-0.9	0.140	-1.1	0.074	-1.0	0.300	-1.1	0.068	-0.6
Lab091	0.084	0.0	0.201	0.0	0.116	-1.1	1.366	-0.8	0.076	-0.9	0.181	-0.3	NA		0.414	0.0	0.102	1.1
Lab092	0.100	0.8	0.243	0.8	0.190	0.8	1.555	-0.3	0.076	-1.0	0.192	-0.1	0.120	0.8	0.485	0.7	0.105	1.3
Lab093	0.087	0.2	0.215	0.2	0.160	0.0	1.85	0.4	0.125	1.0	0.217	0.4	0.096	-0.1	0.407	0.0	0.076	-0.2
Lab094	0.100	0.8	0.150	-1.0	0.140	-0.5	1.680	0.0	0.050	-2.0	0.180	-0.3	NA		0.380	-0.3	NA	
Lab095	0.110	1.3	0.220	0.3	0.180	0.5	3.200	3.5	0.087	-0.5	0.360	3.4	NA		0.470	0.6	0.085	0.3
Lab096	NA		0.179	-0.5	0.177	0.4	NA		0.098	-0.1	0.260	1.3	NA		0.349	-0.6	NA	
Lab097	0.080	-0.2	0.214	0.2	0.129	-0.8	1.750	0.1	0.112	0.5	0.205	0.2	0.102	0.1	0.433	0.2	0.079	-0.1
Lab098	NA		0.158	-0.9	0.218	1.5	NA		0.129	1.2	0.426	4.7	NA		NA		NA	
Lab099	0.104	1.0	0.220	0.3	0.138	-0.6	2.080	0.9	0.103	0.1	0.223	0.6	0.093	-0.2	0.381	-0.3	0.089	0.5
Lab100	0.083	0.0	0.166	-0.7	NA		1.246	-1.1	0.076	-1.0	0.146	-1.0	0.089	-0.4	0.398	-0.1	0.061	-1.0
Lab101	0.076	-0.4	0.252	1.0	0.175	0.4	2.192	1.2	0.145	1.8	0.232	0.7	NA		NA		0.081	0.1
Lab102	0.053	-1.5	0.226	0.5	0.300	3.5	1.700	0.0	0.119	0.8	0.230	0.7	0.104	0.2	0.429	0.2	0.072	-0.4
Lab103	0.084	0.0	0.228	0.5	0.187	0.7	1.76	0.1	0.090	-0.4	0.233	0.8	0.096	-0.1	0.405	0.0	0.080	0.0
Lab104	0.098	0.7	0.232	0.6	0.176	0.4	2.640	2.2	0.114	0.6	0.237	0.8	0.119	0.8	0.407	0.0	0.090	0.5
Lab105	0.078	-0.3	0.212	0.2	0.182	0.6	1.200	-1.2	0.112	0.5	0.225	0.6	0.089	-0.4	0.374	-0.4	0.066	-0.7
Lab106	0.061	-1.1	0.150	-1.0	0.099	-1.5	1.360	-0.8	0.080	-0.8	0.202	0.1	0.092	-0.3	0.396	-0.1	0.060	-1.0
Lab107	0.093	0.5	0.25	0.9	0.16	0.0	2.3	1.4	0.079	-0.8	0.23	0.7	0.12	0.8	0.45	0.4	0.10	1.0
Lab108	0.079	-0.2	0.21	0.1	0.35	4.8	1.39	-0.7	0.098	-0.1	0.22	0.5	0.098	0.0	0.36	-0.5	0.081	0.1
Lab109	0.073	-0.5	0.220	0.3	0.200	1.0	1.500	-0.5	0.140	1.6	0.360	3.4	0.140	1.7	0.430	0.2	0.098	0.9
Lab110	0.078	-0.3	0.220	0.3	0.170	0.3	1.700	0.0	0.110	0.4	0.210	0.3	0.160	2.5	0.460	0.5	0.110	1.5
Lab111	0.090	0.3	0.190	-0.3	0.170	0.3	1.700	0.0	0.110	0.4	0.200	0.1	0.100	0.0	0.420	0.1	0.080	0.0
Lab112	0.096	0.6	0.165	-0.7	0.126	-0.9	1.545	-0.4	0.120	0.8	0.160	-0.7	0.085	-0.6	0.364	-0.4	0.068	-0.6
Lab113	NA		0.180	-0.5	0.170	0.3	NA		0.100	0.0	0.200	0.1	NA		NA		NA	
Lab114	0.075	-0.4	0.181	-0.4	0.113	-1.2	1.130	-1.3	0.084	-0.6	0.077	-2.4	NA		NA		NA	
Lab115	NA		NA		0.138	-0.6	NA		0.09	-0.4	0.207	0.2	NA		NA		NA	
Lab116	0.104	1.0	0.148	-1.1	0.117	-1.1	2.188	1.1	0.093	-0.3	0.218	0.5	NA		NA		NA	
Lab117	0.077	-0.3	0.133	-1.4	0.134	-0.7	NA		0.076	-1.0	0.195	0.0	NA		NA		NA	
Lab118	0.090	0.3	0.210	0.1	0.113	-1.2	1.490	-0.5	0.109	0.4	0.187	-0.2	0.093	-0.2	0.385	-0.2	0.113	1.7
Lab119	0.100	0.8	0.230	0.5	0.150	-0.3	1.800	0.2	0.120	0.8	0.220	0.5	0.100	0.0	0.440	0.3	0.088	0.4
Lab120	0.098	0.7	0.229	0.5	0.142	-0.5	1.72	0.0	0.103	0.1	0.223	0.6	0.097	-0.1	0.428	0.2	0.090	0.5
Lab121	0.092	0.4	0.230	0.5	0.130	-0.8	1.700	0.0	0.110	0.4	0.200	0.1	0.100	0.0	0.420	0.1	0.088	0.4
Lab122	0.072	-0.5	0.177	-0.5	0.102	-1.5	NA		0.307	5.0	0.143	-1.1	0.081	-0.7	0.283	-1.2	NA	
Lab123	0.080	-0.2	0.170	-0.7	0.130	-0.8	1.200	-1.2	0.085	-0.6	0.160	-0.7	0.084	-0.6	0.290	-1.2	0.072	-0.4
Lab124	0.082	-0.1	0.200	-0.1	0.140	-0.5	2.000	0.7	0.120	0.8	0.200	0.1	0.110	0.4	0.500	0.9	NA	
Lab125	0.070	-0.6	0.190	-0.3	0.100	-1.5	1.840	0.3	0.100	0.0	0.210	0.3	NA		NA		NA	
Lab126	0.100	0.8	0.190	-0.3	NA		NA		0.120	0.8	0.170	-0.5	NA		NA		NA	
Lab127	NA		0.233	0.6	NA		1.740	0.1	0.108	0.3	0.230	0.7	NA		NA		NA	
Lab128	0.114	1.5	0.232	0.6	NA		NA		0.110	0.4	0.218	0.5	NA		NA		NA	
Lab129	0.060	-1.1	0.220	0.3	0.410	5.0	1.700	0.0	0.120	0.8	0.210	0.3	0.085	-0.6	0.410	0.0	0.061	-1.0

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

Lab Code	Acephate	Azoxystrobin		Chlorothalonil		Chlorpropham		Cypermethrin		Diazinon		Fluopicolide		Flutolanil		Fosthiazate		
	MRRL	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)	0.01	z-Score (FFP RSD 25%)		
	Median (mg/kg)	0.083	0.203	0.160	1.700	0.100	0.195	0.099	0.410	0.080	z-Score (FFP RSD 25%)							
Lab130	0.084	0.0	0.220	0.3	NA		1.880	0.4	0.130	1.2	0.230	0.7	NA		NA		0.060	-1.0
Lab131	0.101	0.8	0.180	-0.5	0.174	0.4	1.25	-1.1	NA		0.172	-0.5	0.113	0.6	NA		NA	
Lab132	0.087	0.2	0.246	0.8	0.146	-0.4	1.850	0.4	0.122	0.9	0.249	1.1	0.113	0.6	0.443	0.3	0.076	-0.2
Lab133	NA		0.160	-0.8	0.140	-0.5	NA		0.071	-1.2	0.137	-1.2	NA		NA		NA	
Lab134	0.068	-0.7	0.196	-0.1	ND	-3.8	1.503	-0.5	0.077	-0.9	0.167	-0.6	NA		NA		NA	
Lab135	0.087	0.2	0.211	0.2	0.250	2.3	1.670	-0.1	0.126	1.0	0.208	0.3	NA		NA		NA	
Lab136	0.085	0.1	0.209	0.1	0.073	-2.2	1.644	-0.1	0.046	-2.2	0.135	-1.2	0.098	0.0	0.497	0.8	0.087	0.4
Lab137	0.073	-0.5	0.181	-0.4	0.104	-1.4	1.510	-0.4	0.062	-1.5	0.162	-0.7	0.074	-1.0	0.343	-0.7	0.075	-0.3
Lab138	0.100	0.8	0.190	-0.3	0.150	-0.3	1.720	0.0	0.160	2.4	0.190	-0.1	0.140	1.7	0.430	0.2	NA	
Lab139	NA		0.200	-0.1	0.190	0.8	1.700	0.0	0.120	0.8	0.200	0.1	NA		NA		NA	
Lab140	0.076	-0.4	0.225	0.4	0.212	1.3	2.100	0.9	0.140	1.6	0.255	1.2	NA		NA		NA	
Lab141	NA		0.180	-0.5	NA		1.500	-0.5	0.120	0.8	0.190	-0.1	NA		NA		NA	
Lab142	NA		0.222	0.4	0.204	1.1	1.160	-1.3	0.105	0.2	0.210	0.3	NA		NA		NA	
Lab143	0.068	-0.7	0.195	-0.2	0.180	0.5	1.44	-0.6	0.106	0.2	0.195	0.0	0.098	0.0	0.473	0.6	NA	
Lab144	0.097	0.7	0.215	0.2	0.200	1.0	NA		0.147	1.9	0.200	0.1	NA		NA		NA	
Lab145	ND	-3.5	0.220	0.3	0.16	0.0	1.200	-1.2	0.070	-1.2	0.170	-0.5	0.130	1.3	0.430	0.2	0.083	0.2
Lab146	NA		0.196	-0.1	0.176	0.4	1.580	-0.3	0.082	-0.7	0.178	-0.4	NA		NA		NA	
Lab147	ND	-3.5	NA		0.126	-0.9	1.727	0.1	0.088	-0.5	0.217	0.4	NA		NA		NA	
Lab148	0.074	-0.4	0.263	1.2	0.112	-1.2	0.998	-1.7	0.120	0.8	0.186	-0.2	0.176	3.1	0.426	0.2	ND	-3.5
Lab149	NA		0.212	0.2	0.052	-2.7	1.677	-0.1	0.088	-0.5	0.189	-0.1	0.106	0.3	0.437	0.3	NA	
Lab150	0.034	-2.4	0.210	0.1	0.150	-0.3	1.600	-0.2	0.130	1.2	0.180	-0.3	0.093	-0.2	NA		NA	
Lab151	NA		0.205	0.0	0.170	0.3	2.320	1.5	0.079	-0.8	0.161	-0.7	NA		NA		NA	
Lab152	NA		NA		0.150	-0.3	NA		0.100	0.0	0.170	-0.5	NA		NA		NA	
Lab153	NA		0.140	-1.2	ND	-3.8	0.796	-2.1	0.026	-3.0	0.098	-2.0	NA		NA		NA	
Lab154	0.107	1.1	0.178	-0.5	0.170	0.3	1.870	0.4	0.090	-0.4	0.250	1.1	NA		NA		NA	
Lab155	Participation Cancelled																	
Lab156	0.090	0.3	0.210	0.1	0.170	0.3	1.900	0.5	0.080	-0.8	0.200	0.1	0.110	0.4	0.470	0.6	0.030	-2.5
Lab157	NA		0.191	-0.2	NA		NA		0.074	-1.1	0.135	-1.2	NA		NA		NA	
Lab158	0.091	0.4	0.220	0.3	0.290	3.3	2.000	0.7	0.092	-0.3	0.200	0.1	NA		NA		NA	
Lab159	0.079	-0.2	0.205	0.0	0.061	-2.5	NA		0.103	0.1	0.150	-0.9	NA		NA		NA	
Lab160	0.045	-1.8	0.220	0.3	0.140	-0.5	ND	-4.0	0.078	-0.9	0.180	-0.3	NA		NA		NA	
Lab161	0.093	0.5	0.222	0.4	0.211	1.3	1.810	0.3	0.093	-0.3	0.276	1.6	0.081	-0.7	0.307	-1.0	0.091	0.6
Lab162	0.072	-0.5	NA		NA		NA		NA		0.240	0.9	NA		NA		NA	
Lab163	0.096	0.6	0.238	0.7	0.161	0.0	1.740	0.1	0.065	-1.4	0.246	1.0	0.098	0.0	0.514	1.0	0.091	0.6
Lab164	0.098	0.7	0.40	3.9	0.15	-0.3	2.1	0.9	0.12	0.8	0.21	0.3	0.12	0.8	0.40	-0.1	0.092	0.6
Lab165	0.084	0.0	0.202	0.0	0.107	-1.3	1.320	-0.9	0.069	-1.2	0.155	-0.8	0.105	0.2	0.307	-1.0	0.084	0.2
Lab166	0.069	-0.7	0.176	-0.5	0.178	0.5	1.322	-0.9	0.096	-0.2	0.179	-0.3	0.079	-0.8	0.355	-0.5	0.071	-0.5
Lab167	Participation Cancelled																	
Lab168	NA		0.198	-0.1	NA		1.48	-0.5	0.11	0.4	0.204	0.2	NA		NA		NA	
Lab169	NA		0.191	-0.2	0.037	-3.1	NA		0.137	1.5	0.193	-0.1	ND	-3.6	NA		NA	
Lab170	NA		NA		NA		NA		0.037	-2.5	0.097	-2.0	NA		NA		NA	
Lab171	0.068	-0.7	0.224	0.4	0.220	1.5	1.620	-0.2	0.104	0.2	0.190	-0.1	0.108	0.4	0.440	0.3	0.080	0.0
Lab172	0.063	-1.0	0.140	-1.2	0.115	-1.1	1.793	0.2	0.079	-0.8	0.174	-0.4	NA		NA		0.077	-0.2
Lab173	0.071	-0.6	0.230	0.5	0.205	1.1	1.752	0.1	0.108	0.3	0.217	0.4	0.082	-0.7	0.404	-0.1	0.073	-0.4

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

Lab Code	Acephate	z-Score (FFP RSD 25%)		Azoxystrobin	z-Score (FFP RSD 25%)		Chlorothalonil	z-Score (FFP RSD 25%)		Chlorpropham	z-Score (FFP RSD 25%)		Cypermethrin	z-Score (FFP RSD 25%)		Diazinon	z-Score (FFP RSD 25%)		Fluopicolide	z-Score (FFP RSD 25%)		Flutolanil	z-Score (FFP RSD 25%)		Fosthiazate	z-Score (FFP RSD 25%)		
MRRL	0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		
Median (mg/kg)	0.083	z-Score (FFP RSD 25%)		0.203	z-Score (FFP RSD 25%)		0.160	z-Score (FFP RSD 25%)		1.700	z-Score (FFP RSD 25%)		0.100	z-Score (FFP RSD 25%)		0.195	z-Score (FFP RSD 25%)		0.099	z-Score (FFP RSD 25%)		0.410	z-Score (FFP RSD 25%)		0.080	z-Score (FFP RSD 25%)		
Lab174	No Results Submitted																											
Lab175	NA		0.190	-0.3	0.210	1.3	NA		0.080	-0.8	0.160	-0.7	NA		NA		NA		NA		NA		NA		NA		NA	
Lab176	No Results Submitted																											
Lab177	NA		0.120	-1.6	0.099	-1.5	NA		0.194	3.8	0.169	-0.5	NA		NA		NA		NA		NA		NA		NA		NA	

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

Lab Code	Iprovalicarb	z-Score (FFP RSD 25%)	Linuron	z-Score (FFP RSD 25%)	Methiocarb	z-Score (FFP RSD 25%)	Pencycuron	z-Score (FFP RSD 25%)	Prochloraz	z-Score (FFP RSD 25%)	Procymidone	z-Score (FFP RSD 25%)	Spirodiclofen	z-Score (FFP RSD 25%)	Thiabendazole	z-Score (FFP RSD 25%)	Thiacloprid	z-Score (FFP RSD 25%)
MRRL	0.01		0.01		0.01		0.01		0.01		0.01		0.01		0.01		0.01	
Median (mg/kg)	0.090		0.098		0.136		0.269		0.058		0.110		0.444		1.710		0.338	
Lab001	0.075	-0.7	0.120	0.9	0.140	0.1	0.260	-0.1	0.066	0.6	0.097	-0.5	NA		1.300	-1.0	0.270	-0.8
Lab002	0.087	-0.1	0.136	1.6	0.163	0.8	0.243	-0.4	0.064	0.4	0.099	-0.4	0.435	-0.1	1.375	-0.8	0.393	0.7
Lab003	NA		NA		NA		NA		NA		0.133	0.8	NA		NA		NA	
Lab004	0.082	-0.4	0.098	0.0	0.146	0.3	0.316	0.7	0.066	0.6	0.121	0.4	0.684	2.2	1.150	-1.3	0.325	-0.2
Lab005	0.113	1.0	0.106	0.3	0.140	0.1	0.254	-0.2	0.052	-0.4	0.114	0.1	0.422	-0.2	1.920	0.5	0.381	0.5
Lab006	0.090	0.0	0.140	1.7	0.160	0.7	0.310	0.6	0.050	-0.6	0.130	0.7	0.390	-0.5	2.600	2.1	0.380	0.5
Lab007	0.083	-0.3	0.072	-1.1	0.096	-1.2	0.170	-1.5	0.048	-0.7	0.115	0.2	0.446	0.0	1.853	0.3	0.380	0.5
Lab008	0.063	-1.2	0.070	-1.1	0.085	-1.5	0.228	-0.6	0.041	-1.2	0.100	-0.4	0.401	-0.4	1.830	0.3	0.354	0.2
Lab009	NA		NA		NA		NA		0.025	-2.3	0.089	-0.8	NA		NA		NA	
Lab010	0.073	-0.8	0.150	2.1	ND	-4.0	0.560	4.3	0.068	0.7	0.110	0.0	0.640	1.8	1.820	0.3	0.440	1.2
Lab011	0.081	-0.4	0.069	-1.2	0.110	-0.8	0.240	-0.4	0.060	0.1	0.110	0.0	0.461	0.2	1.250	-1.1	0.245	-1.1
Lab012	0.095	0.2	0.076	-0.9	0.129	-0.2	0.279	0.1	ND	-3.3	0.063	-1.7	0.410	-0.3	1.664	-0.1	0.280	-0.7
Lab013	0.082	-0.4	0.09	-0.3	0.35	5.0	0.26	-0.1	0.035	-1.6	0.21	3.6	0.35	-0.8	1.75	0.1	0.33	-0.1
Lab014	NA		NA		0.160	0.7	0.240	-0.4	0.077	1.3	NA		NA		2.100	0.9	0.370	0.4
Lab015	0.077	-0.6	0.082	-0.7	0.110	-0.8	0.220	-0.7	0.046	-0.8	0.090	-0.7	0.360	-0.8	1.500	-0.5	0.290	-0.6
Lab016	NA		NA		NA		NA		NA		0.120	0.4	NA		NA		NA	
Lab017	0.077	-0.6	0.088	-0.4	0.128	-0.2	0.251	-0.3	0.060	0.1	0.109	0.0	0.425	-0.2	1.716	0.0	0.314	-0.3
Lab018	0.081	-0.4	0.100	0.1	0.130	-0.2	0.220	-0.7	0.042	-1.1	0.100	-0.4	0.470	0.2	1.700	0.0	0.370	0.4
Lab019	0.098	0.4	0.128	1.2	0.127	-0.3	0.268	0.0	0.050	-0.6	0.139	1.1	NA		1.932	0.5	0.128	-2.5
Lab020	0.090	0.0	0.088	-0.4	0.132	-0.1	0.268	0.0	0.078	1.4	0.126	0.6	0.364	-0.7	1.046	-1.6	0.317	-0.2
Lab021	0.117	1.2	0.159	2.5	0.166	0.9	0.418	2.2	0.062	0.3	0.126	0.6	0.515	0.6	2.350	1.5	0.361	0.3
Lab022	0.111	0.9	0.100	0.1	0.134	-0.1	0.253	-0.2	0.053	-0.3	0.079	-1.1	0.432	-0.1	1.080	-1.5	0.356	0.2
Lab023	0.071	-0.8	0.101	0.1	NA		NA		0.056	-0.1	NA		0.290	-1.4	0.744	-2.3	0.217	-1.4
Lab024	0.080	-0.4	0.092	-0.2	0.125	-0.3	0.260	-0.1	0.053	-0.3	0.132	0.8	0.545	0.9	1.710	0.0	0.316	-0.3
Lab025	0.068	-1.0	0.079	-0.8	0.112	-0.7	0.240	-0.4	0.054	-0.3	0.104	-0.2	0.400	-0.4	1.450	-0.6	0.250	-1.0
Lab026	0.129	1.7	0.106	0.3	0.155	0.6	0.294	0.4	0.070	0.8	0.125	0.5	0.570	1.1	2.000	0.7	0.396	0.7
Lab027	0.180	4.0	NA		0.100	-1.1	NA		NA		0.110	0.0	NA		2.300	1.4	0.230	-1.3
Lab028	0.074	-0.7	0.080	-0.7	0.130	-0.2	0.236	-0.5	0.065	0.5	0.102	-0.3	0.440	0.0	1.270	-1.0	0.278	-0.7
Lab029	0.077	-0.6	0.097	0.0	0.130	-0.2	0.310	0.6	0.072	1.0	0.120	0.4	0.580	1.2	1.800	0.2	0.270	-0.8
Lab030	0.104	0.6	0.111	0.5	0.180	1.3	0.333	1.0	0.068	0.7	0.119	0.3	0.552	1.0	1.965	0.6	0.424	1.0
Lab031	NA		NA		0.092	-1.3	NA		NA		0.120	0.4	NA		NA		NA	
Lab032	0.090	0.0	0.090	-0.3	0.120	-0.5	0.170	-1.5	0.030	-1.9	0.080	-1.1	NA		1.310	-0.9	0.270	-0.8
Lab033	0.110	0.9	0.095	-0.1	0.190	1.6	0.330	0.9	0.052	-0.4	0.120	0.4	0.510	0.6	2.100	0.9	0.350	0.1
Lab034	0.085	-0.2	0.096	-0.1	0.137	0.0	0.281	0.2	0.052	-0.4	0.108	-0.1	0.451	0.1	1.601	-0.3	0.292	-0.5
Lab035	0.078	-0.5	0.091	-0.3	0.153	0.5	0.290	0.3	0.096	2.6	0.137	1.0	0.379	-0.6	1.260	-1.1	0.299	-0.5
Lab036	NA		NA		NA		NA		0.060	0.1	0.104	-0.2	NA		2.03	0.7	NA	
Lab037	0.130	1.8	0.140	1.7	0.170	1.0	0.340	1.1	0.080	1.5	0.150	1.5	0.590	1.3	2.350	1.5	0.460	1.4
Lab038	0.106	0.7	0.111	0.5	0.152	0.5	0.288	0.3	0.051	-0.5	0.121	0.4	0.309	-1.2	1.987	0.6	0.400	0.7
Lab039	0.079	-0.5	0.083	-0.6	0.138	0.1	0.143	-1.9	0.064	0.4	0.107	-0.1	0.330	-1.0	1.621	-0.2	0.543	2.4
Lab040	0.086	-0.2	0.101	0.1	0.141	0.1	0.262	-0.1	0.039	-1.3	0.100	-0.4	0.325	-1.1	1.714	0.0	0.372	0.4
Lab041	0.091	0.0	0.107	0.4	0.147	0.3	0.256	-0.2	0.033	-1.7	0.107	-0.1	0.309	-1.2	1.646	-0.1	0.359	0.2
Lab042	NA		NA		NA		NA		NA		0.112	0.1	NA		NA		NA	
Lab043	0.085	-0.2	0.087	-0.4	0.140	0.1	0.316	0.7	0.059	0.1	0.138	1.0	0.670	2.0	1.534	-0.4	0.373	0.4

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

Lab Code	Iprovalicarb	Linuron		Methiocarb		Pencycuron		Prochloraz		Procymidone		Spirodiclofen		Thiabendazole		Thiacloprid		
	MRRL Median (mg/kg)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)		
	0.01 0.090	0.01 0.098	0.01 0.136	0.01 0.269	0.01 0.058	0.01 0.110	0.01 0.444	0.01 1.710	0.01 0.338									
Lab044	0.085	-0.2	0.098	0.0	0.140	0.1	0.290	0.3	0.057	-0.1	0.110	0.0	0.410	-0.3	1.600	-0.3	0.330	-0.1
Lab045	0.095	0.2	0.091	-0.3	0.140	0.1	0.250	-0.3	0.059	0.1	NA		0.460	0.1	1.800	0.2	0.340	0.0
Lab046	0.100	0.4	0.095	-0.1	0.156	0.6	0.301	0.5	0.044	-1.0	0.102	-0.3	0.369	-0.7	2.794	2.5	0.376	0.4
Lab047	0.111	0.9	0.117	0.8	0.163	0.8	NA		0.071	0.9	0.110	0.0	NA		1.666	-0.1	0.391	0.6
Lab048	0.102	0.5	0.091	-0.3	0.180	1.3	NA		0.084	1.8	0.140	1.1	0.497	0.5	0.805	-2.1	NA	
Lab049	0.085	-0.2	0.112	0.6	0.126	-0.3	0.231	-0.6	0.060	0.1	0.111	0.0	0.507	0.6	1.650	-0.1	0.255	-1.0
Lab050	0.083	-0.3	0.078	-0.8	0.131	-0.1	0.219	-0.7	0.040	-1.2	0.092	-0.7	0.326	-1.1	1.360	-0.8	0.232	-1.3
Lab051	0.073	-0.8	0.081	-0.7	0.109	-0.8	0.218	-0.8	0.039	-1.3	0.104	-0.2	0.392	-0.5	1.560	-0.4	0.306	-0.4
Lab052	0.101	0.5	0.166	2.8	0.179	1.3	0.349	1.2	0.050	-0.5	0.139	1.1	0.580	1.2	1.486	-0.5	0.476	1.6
Lab053	0.121	1.4	0.102	0.2	0.097	-1.1	0.167	-1.5	ND	-3.3	0.159	1.8	0.215	-2.1	1.574	-0.3	0.208	-1.5
Lab054	0.077	-0.6	0.087	-0.4	0.115	-0.6	0.285	0.2	0.066	0.6	0.101	-0.3	0.433	-0.1	1.698	0.0	0.327	-0.1
Lab055	0.109	0.8	0.129	1.3	0.145	0.3	0.335	1.0	0.079	1.4	0.131	0.8	0.444	0.0	2.100	0.9	0.408	0.8
Lab056	NA		NA		NA		NA		NA		ND	-3.6	NA		1.920	0.5	NA	
Lab057	0.109	0.8	0.128	1.2	0.189	1.6	0.306	0.6	0.053	-0.3	0.097	-0.5	0.697	2.3	1.550	-0.4	0.364	0.3
Lab058	0.093	0.1	0.092	-0.2	0.147	0.3	0.228	-0.6	0.068	0.7	0.123	0.5	ND	-3.9	1.820	0.3	0.372	0.4
Lab059	0.096	0.3	0.107	0.4	0.148	0.4	0.296	0.4	0.055	-0.2	0.134	0.9	0.486	0.4	1.964	0.6	0.374	0.4
Lab060	NA		NA		ND	-3.7	NA		NA		0.100	-0.4	NA		1.820	0.3	0.300	-0.4
Lab061	0.092	0.1	0.079	-0.8	0.150	0.4	0.400	1.9	0.067	0.6	0.110	0.0	0.470	0.2	1.700	0.0	0.310	-0.3
Lab062	0.089	0.0	0.132	1.4	0.196	1.8	0.358	1.3	0.055	-0.2	0.131	0.8	0.737	2.6	1.91	0.5	0.327	-0.1
Lab063	0.105	0.7	0.080	-0.7	NA		0.265	-0.1	0.061	0.2	0.126	0.6	NA		1.462	-0.6	ND	-3.9
Lab064	0.100	0.4	0.130	1.3	0.190	1.6	0.300	0.5	0.050	-0.6	0.170	2.2	0.500	0.5	2.000	0.7	0.410	0.9
Lab065	0.092	0.1	0.108	0.4	0.159	0.7	0.271	0.0	0.043	-1.0	0.112	0.1	0.422	-0.2	1.840	0.3	0.352	0.2
Lab066	0.088	-0.1	0.069	-1.2	0.130	-0.2	0.250	-0.3	0.070	0.8	0.112	0.1	0.407	-0.3	1.520	-0.4	0.327	-0.1
Lab067	0.097	0.3	0.123	1.0	0.090	-1.4	0.300	0.5	0.037	-1.4	0.112	0.1	0.446	0.0	2.017	0.7	0.355	0.2
Lab068	0.090	0.0	0.110	0.5	0.130	-0.2	0.270	0.0	0.050	-0.6	0.110	0.0	0.420	-0.2	2.200	1.1	0.365	0.3
Lab069	0.088	-0.1	NA		0.110	-0.8	NA		0.038	-1.4	0.088	-0.8	NA		1.200	-1.2	0.230	-1.3
Lab070	NA		NA		0.140	0.1	NA		0.090	2.2	0.090	-0.7	NA		NA		NA	
Lab071	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Lab072	0.065	-1.1	0.108	0.4	0.173	1.1	NA		0.053	-0.3	0.114	0.1	NA		1.710	0.0	0.357	0.2
Lab073	0.079	-0.5	0.090	-0.3	0.138	0.1	0.291	0.3	0.055	-0.2	0.093	-0.6	0.508	0.6	1.010	-1.6	0.346	0.1
Lab074	0.080	-0.4	0.100	0.1	0.125	-0.3	0.260	-0.1	0.060	0.1	0.110	0.0	0.410	-0.3	1.250	-1.1	0.250	-1.0
Lab075	0.090	0.0	0.098	0.0	0.136	0.0	0.281	0.2	0.049	-0.6	0.120	0.4	0.480	0.3	1.980	0.6	0.360	0.3
Lab076	0.110	0.9	0.120	0.9	0.160	0.7	0.310	0.6	0.067	0.6	0.120	0.4	0.540	0.9	2.200	1.1	0.370	0.4
Lab077	NA		NA		0.490	5.0	NA		0.090	2.2	0.090	-0.7	NA		1.700	0.0	NA	
Lab078	0.072	-0.8	0.101	0.1	0.085	-1.5	0.220	-0.7	0.016	-2.9	0.121	0.4	0.332	-1.0	1.600	-0.3	0.218	-1.4
Lab079	0.106	0.7	0.118	0.8	0.142	0.2	0.205	-1.0	0.029	-2.0	0.130	0.7	0.390	-0.5	2.210	1.2	0.388	0.6
Lab080	0.098	0.4	0.145	1.9	0.185	1.4	0.343	1.1	0.096	2.6	0.130	0.7	0.543	0.9	2.145	1.0	0.396	0.7
Lab081	NA		NA		NA		NA		NA		0.140	1.1	NA		NA		NA	
Lab082	0.102	0.5	NA		0.146	0.3	0.257	-0.2	0.055	-0.2	0.087	-0.8	0.396	-0.4	1.796	0.2	0.323	-0.2
Lab083	0.103	0.6	0.118	0.8	0.156	0.6	0.307	0.6	0.067	0.6	ND	-3.8	ND	-3.9	2.202	1.2	0.402	0.8
Lab084	0.037	-2.4	0.063	-1.4	0.052	-2.5	0.160	-1.6	NA		0.067	-1.6	0.230	-1.9	1.300	-1.0	NA	
Lab085	0.130	1.8	ND	-3.6	0.196	1.8	0.320	0.8	0.089	2.1	0.091	-0.7	0.330	-1.0	1.370	-0.8	0.328	-0.1
Lab086	0.140	2.2	0.087	-0.4	0.102	-1.0	0.270	0.0	0.059	0.1	0.180	2.5	0.370	-0.7	1.700	0.0	0.370	0.4
Lab087	NA		NA		NA		NA		NA		0.090	-0.7	NA		NA		NA	

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

Lab Code	Iprovalicarb	Linuron		Methiocarb		Pencycuron		Prochloraz		Procymidone		Spirodiclofen		Thiabendazole		Thiacloprid		
	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)	z-Score (FFP RSD 25%)		
	MRRL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Median (mg/kg)	0.090	0.098	0.136	0.269	0.058	0.110	0.444	1.710	0.338									
Lab088	NA		0.081	-0.7	NA		0.262	-0.1	0.068	0.7	0.116	0.2	1.550	5.0	NA		NA	
Lab089	NA		NA		NA		NA		NA		0.145	1.3	NA		NA		NA	
Lab090	0.075	-0.7	0.077	-0.9	0.100	-1.1	0.190	-1.2	0.037	-1.4	0.079	-1.1	0.340	-0.9	1.700	0.0	0.300	-0.4
Lab091	0.105	0.7	0.101	0.1	0.138	0.1	0.240	-0.4	0.040	-1.2	0.096	-0.5	0.227	-2.0	1.520	-0.4	0.311	-0.3
Lab092	0.101	0.5	0.070	-1.1	0.121	-0.4	0.258	-0.2	0.072	1.0	0.104	-0.2	0.513	0.6	1.530	-0.4	0.273	-0.8
Lab093	0.086	-0.2	0.100	0.1	0.124	-0.4	0.273	0.1	0.060	0.1	0.112	0.1	0.471	0.2	1.85	0.3	0.344	0.1
Lab094	NA		0.080	-0.7	ND	-3.7	0.230	-0.6	0.056	-0.1	0.100	-0.4	NA		1.160	-1.3	0.353	0.2
Lab095	0.063	-1.2	0.099	0.0	0.130	-0.2	0.270	0.0	0.051	-0.5	0.130	0.7	0.430	-0.1	3.500	4.2	0.240	-1.2
Lab096	0.122	1.4	0.076	-0.9	0.185	1.4	NA		0.035	-1.6	0.169	2.1	0.333	-1.0	1.230	-1.1	NA	
Lab097	0.090	0.0	0.104	0.2	0.164	0.8	0.275	0.1	0.069	0.8	0.105	-0.2	0.470	0.2	1.780	0.2	0.345	0.1
Lab098	NA		0.172	3.0	0.212	2.2	NA		0.049	-0.6	0.177	2.4	0.816	3.3	2.350	1.5	NA	
Lab099	0.092	0.1	0.100	0.1	0.144	0.2	0.293	0.4	0.066	0.6	0.101	-0.3	0.462	0.2	2.090	0.9	0.368	0.4
Lab100	0.088	-0.1	0.086	-0.5	0.114	-0.6	0.204	-1.0	0.045	-0.9	0.088	-0.8	0.439	0.0	2.019	0.7	0.271	-0.8
Lab101	0.100	0.4	0.162	2.6	0.160	0.7	0.374	1.6	0.079	1.4	0.142	1.2	NA		2.123	1.0	0.376	0.4
Lab102	0.085	-0.2	0.090	-0.3	0.112	-0.7	0.251	-0.3	0.058	0.0	0.119	0.3	0.466	0.2	1.670	-0.1	0.296	-0.5
Lab103	0.096	0.3	0.113	0.6	0.176	1.2	0.270	0.0	0.047	-0.8	0.128	0.7	0.486	0.4	2.44	1.7	0.336	0.0
Lab104	0.103	0.6	0.110	0.5	0.170	1.0	0.344	1.1	0.071	0.9	0.127	0.6	0.691	2.2	1.890	0.4	0.398	0.7
Lab105	0.080	-0.4	0.097	0.0	0.186	1.5	0.252	-0.3	0.058	0.0	0.131	0.8	1.070	5.0	3.000	3.0	0.274	-0.8
Lab106	0.080	-0.4	0.087	-0.4	0.122	-0.4	0.218	-0.8	0.060	0.1	0.107	-0.1	0.357	-0.8	1.100	-1.4	0.241	-1.1
Lab107	0.11	0.9	0.12	0.9	0.16	0.7	0.29	0.3	0.050	-0.6	0.11	0.0	0.46	0.1	1.5	-0.5	0.43	1.1
Lab108	0.085	-0.2	0.10	0.1	0.14	0.1	0.27	0.0	0.056	-0.1	0.11	0.0	0.42	-0.2	1.26	-1.1	0.37	0.4
Lab109	0.120	1.3	0.140	1.7	0.140	0.1	0.250	-0.3	0.089	2.1	0.110	0.0	0.520	0.7	2.000	0.7	0.370	0.4
Lab110	0.100	0.4	0.098	0.0	0.150	0.4	0.260	-0.1	0.090	2.2	0.110	0.0	0.420	-0.2	2.000	0.7	0.340	0.0
Lab111	0.086	-0.2	0.093	-0.2	0.130	-0.2	0.270	0.0	0.054	-0.3	0.110	0.0	0.440	0.0	1.700	0.0	0.330	-0.1
Lab112	0.071	-0.8	0.081	-0.7	0.121	-0.4	0.230	-0.6	0.055	-0.2	0.104	-0.2	0.476	0.3	1.438	-0.6	0.301	-0.4
Lab113	NA		NA		NA		NA		0.032	-1.8	0.100	-0.4	NA		NA		NA	
Lab114	0.076	-0.6	0.085	-0.5	0.115	-0.6	0.256	-0.2	0.050	-0.6	0.083	-1.0	0.401	-0.4	1.620	-0.2	0.285	-0.6
Lab115	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Lab116	NA		NA		NA		NA		NA		0.082	-1.0	NA		NA		NA	
Lab117	NA		0.086	-0.5	NA		NA		NA		0.095	-0.5	NA		NA		NA	
Lab118	0.119	1.3	0.091	-0.3	0.129	-0.2	0.386	1.7	0.080	1.5	0.124	0.5	0.337	-1.0	1.590	-0.3	0.293	-0.5
Lab119	0.100	0.4	0.100	0.1	0.150	0.4	0.320	0.8	0.065	0.5	0.120	0.4	0.450	0.1	1.700	0.0	0.370	0.4
Lab120	0.092	0.1	0.118	0.8	0.135	0.0	0.325	0.8	0.062	0.3	0.103	-0.3	0.399	-0.4	1.71	0.0	0.355	0.2
Lab121	0.110	0.9	0.110	0.5	0.140	0.1	0.330	0.9	0.063	0.3	0.120	0.4	0.410	-0.3	1.800	0.2	0.370	0.4
Lab122	0.075	-0.7	0.103	0.2	0.104	-0.9	0.207	-0.9	0.037	-1.4	NA		0.328	-1.0	1.501	-0.5	0.324	-0.2
Lab123	0.073	-0.8	0.076	-0.9	0.120	-0.5	0.220	-0.7	0.044	-1.0	0.098	-0.4	0.370	-0.7	2.000	0.7	0.260	-0.9
Lab124	0.079	-0.5	0.092	-0.2	0.130	-0.2	0.280	0.2	0.063	0.3	NA		0.480	0.3	1.900	0.4	0.300	-0.4
Lab125	NA		NA		NA		NA		NA		0.120	0.4	NA		1.410	-0.7	NA	
Lab126	0.100	0.4	NA		0.130	-0.2	NA		NA		NA		NA		NA		NA	
Lab127	0.097	0.3	NA		NA		NA		NA		0.107	-0.1	NA		NA		NA	
Lab128	NA		0.126	1.1	0.164	0.8	NA		0.074	1.1	0.133	0.8	NA		1.756	0.1	0.418	0.9
Lab129	0.077	-0.6	0.094	-0.2	0.140	0.1	0.290	0.3	0.062	0.3	0.120	0.4	0.510	0.6	1.700	0.0	0.270	-0.8
Lab130	0.100	0.4	0.110	0.5	0.170	1.0	0.330	0.9	0.070	0.8	0.140	1.1	0.580	1.2	1.950	0.6	0.360	0.3
Lab131	0.078	-0.5	NA		0.102	-1.0	NA		0.058	0.0	0.076	-1.2	NA		1.41	-0.7	NA	

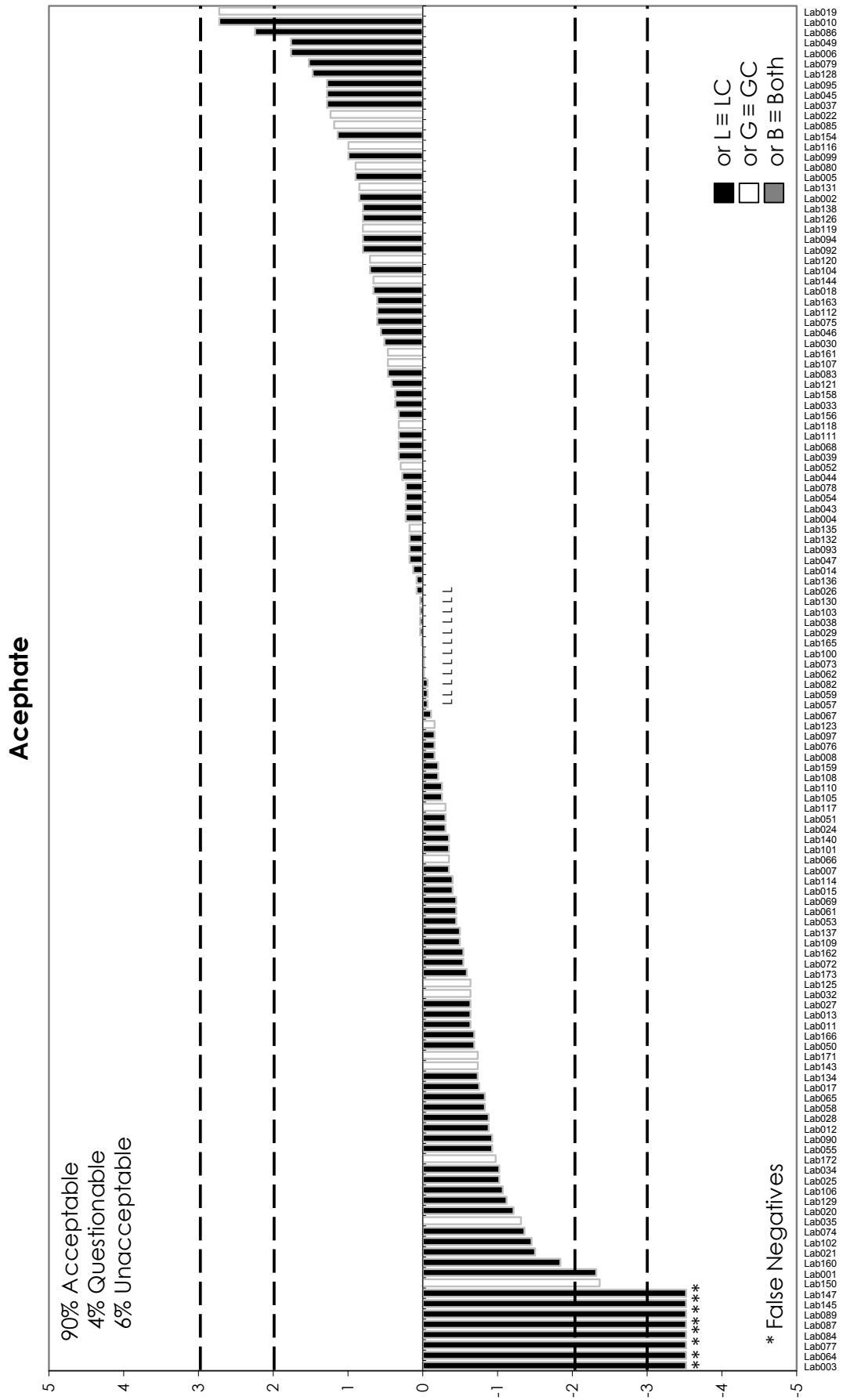
APPENDIX 3. Results (mg/kg) and z-scores for FFP RSD (25 %).

Lab Code	Iprovalicarb	z-Score (FFP RSD 25%)	Linuron	z-Score (FFP RSD 25%)	Methiocarb	z-Score (FFP RSD 25%)	Pencycuron	z-Score (FFP RSD 25%)	Prochloraz	z-Score (FFP RSD 25%)	Procymidone	z-Score (FFP RSD 25%)	Spirodiclofen	z-Score (FFP RSD 25%)	Thiabendazole	z-Score (FFP RSD 25%)	Thiacloprid	z-Score (FFP RSD 25%)					
	MRRL		0.01		0.01		0.01		0.01		0.01		0.01		0.01		0.01		0.01	0.01	0.01	0.01	0.01
	Median (mg/kg)		0.090		0.098		0.136		0.269		0.058		0.110		0.444		1.710		0.338				
Lab132	0.098	0.4	0.107	0.4	0.148	0.4	0.312	0.6	0.071	0.9	0.128	0.7	0.528	0.8	1.010	-1.6	0.355	0.2					
Lab133	NA		NA		NA		NA		ND	-3.3	0.074	-1.3	NA		NA		NA						
Lab134	NA		NA		0.101	-1.0	NA		0.034	-1.7	0.100	-0.4	NA		1.245	-1.1	0.312	-0.3					
Lab135	0.069	-0.9	0.094	-0.2	0.109	-0.8	0.277	0.1	0.065	0.5	0.159	1.8	NA		1.780	0.2	0.262	-0.9					
Lab136	0.111	0.9	0.090	-0.3	0.171	1.0	0.261	-0.1	0.062	0.3	0.113	0.1	0.560	1.0	2.940	2.9	0.338	0.0					
Lab137	0.081	-0.4	0.088	-0.4	0.136	0.0	0.246	-0.3	0.049	-0.6	0.091	-0.7	0.522	0.7	1.620	-0.2	0.291	-0.6					
Lab138	0.094	0.2	0.120	0.9	ND	-3.7	0.270	0.0	0.068	0.7	0.110	0.0	0.490	0.4	1.700	0.0	0.330	-0.1					
Lab139	NA		0.100	0.1	NA		NA		NA		0.110	0.0	NA		NA		NA						
Lab140	0.120	1.3	0.120	0.9	0.204	2.0	0.254	-0.2	0.066	0.6	0.108	-0.1	NA		2.150	1.0	0.430	1.1					
Lab141	NA		0.110	0.5	NA		NA		0.080	1.5	0.110	0.0	NA		NA		NA						
Lab142	NA		NA		NA		NA		0.066	0.6	0.111	0.0	NA		1.890	0.4	NA						
Lab143	0.083	-0.3	NA		NA		0.257	-0.2	0.055	-0.2	0.112	0.1	0.517	0.7	1.48	-0.5	0.382	0.5					
Lab144	NA		0.121	0.9	NA		NA		NA		0.124	0.5	NA		2.083	0.9	NA						
Lab145	0.080	-0.4	0.110	0.5	0.130	-0.2	0.260	-0.1	0.042	-1.1	0.100	-0.4	0.410	-0.3	1.900	0.4	0.380	0.5					
Lab146	0.090	0.0	NA		0.104	-0.9	NA		NA		0.098	-0.4	NA		1.700	0.0	NA						
Lab147	NA		NA		NA		NA		NA		0.131	0.8	NA		NA		NA						
Lab148	0.137	2.1	NA		0.141	0.1	0.282	0.2	0.059	0.1	0.118	0.3	0.356	-0.8	2.060	0.8	0.460	1.4					
Lab149	NA		NA		0.127	-0.3	0.254	-0.2	NA		0.117	0.3	0.308	-1.2	NA		NA						
Lab150	0.086	-0.2	0.099	0.0	0.120	-0.5	NA		0.038	-1.4	0.100	-0.4	0.450	0.1	1.700	0.0	0.160	-2.1					
Lab151	0.090	0.0	0.096	-0.1	0.100	-1.1	NA		0.031	-1.9	0.078	-1.2	NA		2.074	0.9	0.263	-0.9					
Lab152	NA		NA		NA		NA		0.050	-0.6	0.100	-0.4	NA		NA		NA						
Lab153	NA		0.077	-0.9	0.077	-1.7	NA		0.021	-2.6	0.046	-2.3	NA		1.813	0.2	0.351	0.2					
Lab154	NA		0.125	1.1	0.132	-0.1	NA		0.063	0.3	0.143	1.2	NA		1.190	-1.2	0.251	-1.0					
Lab155	Participation Cancelled																						
Lab156	0.100	0.4	0.050	-2.0	0.190	1.6	0.270	0.0	0.020	-2.6	0.080	-1.1	0.300	-1.3	2.000	0.7	0.420	1.0					
Lab157	0.094	0.2	0.100	0.1	NA		0.178	-1.4	0.051	-0.5	0.090	-0.7	NA		1.930	0.5	0.356	0.2					
Lab158	0.100	0.4	0.110	0.5	0.130	-0.2	0.420	2.2	0.057	-0.1	0.120	0.4	0.470	0.2	1.800	0.2	0.270	-0.8					
Lab159	0.104	0.6	0.098	0.0	0.125	-0.3	NA		0.041	-1.2	0.112	0.1	NA		1.685	-0.1	NA						
Lab160	0.092	0.1	0.085	-0.5	0.062	-2.2	NA		0.044	-1.0	0.098	-0.4	NA		1.200	-1.2	ND	-3.9					
Lab161	0.077	-0.6	0.076	-0.9	0.106	-0.9	0.205	-1.0	0.054	-0.3	0.109	0.0	0.342	-0.9	1.440	-0.6	0.256	-1.0					
Lab162	0.065	-1.1	0.090	-0.3	NA		NA		NA		NA		NA		NA		0.031	-3.6					
Lab163	0.103	0.6	0.096	-0.1	0.181	1.3	0.285	0.2	0.059	0.1	0.120	0.4	0.536	0.8	2.110	0.9	0.376	0.4					
Lab164	0.10	0.4	0.13	1.3	0.12	-0.5	0.30	0.5	0.072	1.0	0.10	-0.4	0.55	1.0	1.8	0.2	0.36	0.3					
Lab165	0.085	-0.2	0.112	0.6	0.149	0.4	0.245	-0.4	0.043	-1.0	0.083	-1.0	0.394	-0.5	2.010	0.7	0.334	0.0					
Lab166	0.075	-0.7	0.084	-0.6	0.110	-0.8	0.242	-0.4	0.048	-0.7	0.086	-0.9	0.419	-0.2	1.534	-0.4	0.281	-0.7					
Lab167	Participation Cancelled																						
Lab168	NA		NA		NA		NA		0.068	0.7	0.12	0.4	NA		NA		NA						
Lab169	NA		NA		0.088	-1.4	NA		NA		0.086	-0.9	NA		ND	-4.0	ND	-3.9					
Lab170	NA		NA		NA		NA		NA		0.055	-2.0	NA		NA		NA						
Lab171	0.080	-0.4	0.095	-0.1	0.126	-0.3	NA		0.073	1.0	0.110	0.0	0.490	0.4	1.400	-0.7	NA						
Lab172	NA		0.083	-0.6	0.128	-0.2	0.141	-1.9	0.045	-0.9	0.093	-0.6	NA		ND	-4.0	0.249	-1.1					
Lab173	0.080	-0.4	0.092	-0.2	0.130	-0.2	0.270	0.0	0.062	0.3	0.120	0.4	0.440	0.0	2.264	1.3	0.285	-0.6					
Lab174	No Results Submitted																						
Lab175	NA		NA		0.120	-0.5	NA		0.050	-0.6	NA		NA		1.330	-0.9	0.250	-1.0					

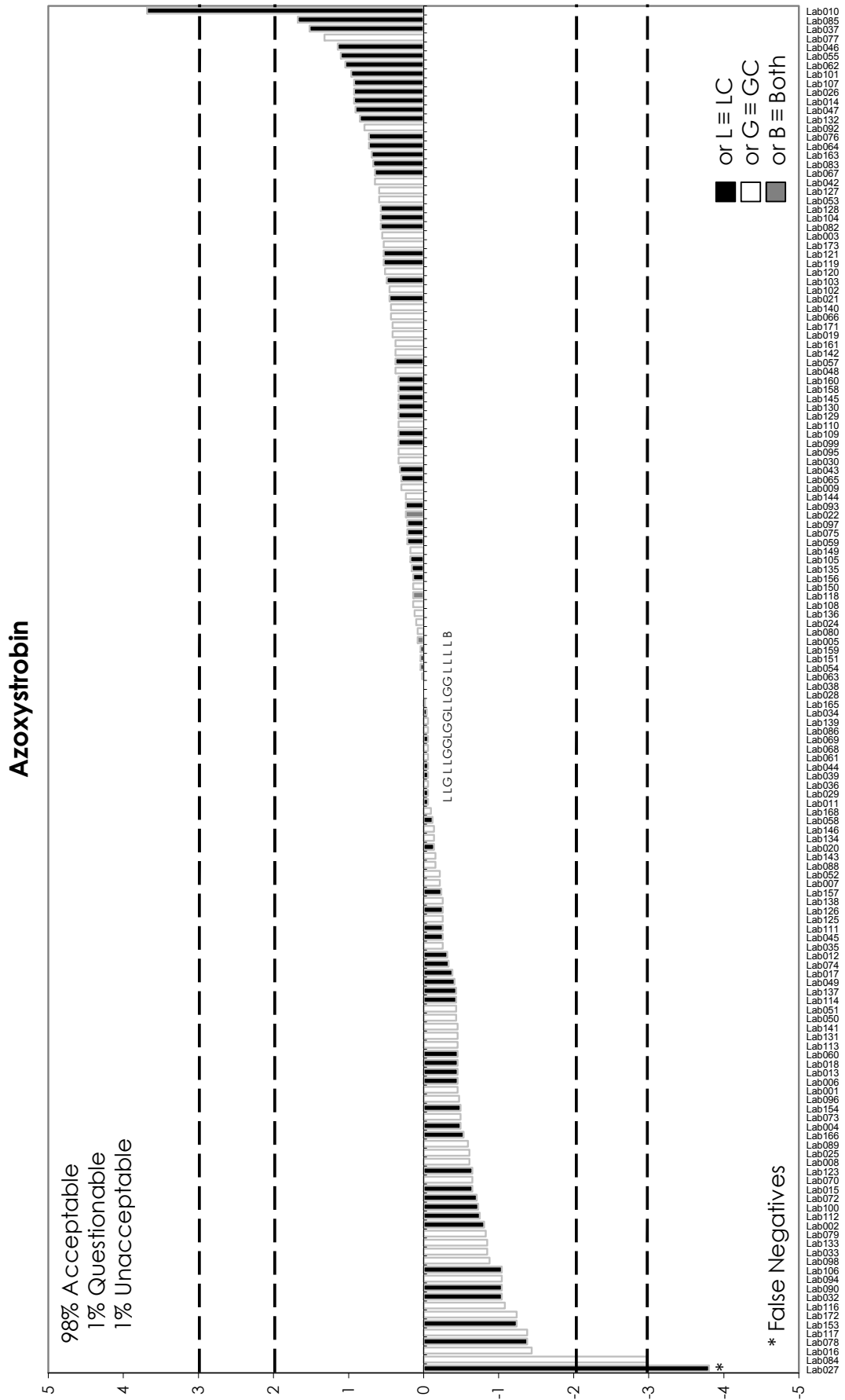
APPENDIX 3. Results (mg/Kg) and z-scores for FFP RSD (25%).

Lab Code	Iprovalicarb	z-Score (FFP RSD 25%)		Linuron	z-Score (FFP RSD 25%)		Methiocarb	z-Score (FFP RSD 25%)		Pencycuron	z-Score (FFP RSD 25%)		Prochloraz	z-Score (FFP RSD 25%)		Procymidone	z-Score (FFP RSD 25%)		Spirodiclofen	z-Score (FFP RSD 25%)		Thiabendazole	z-Score (FFP RSD 25%)		Thiacloprid	z-Score (FFP RSD 25%)	
MRRL	0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)		0.01	z-Score (FFP RSD 25%)	
Median (mg/kg)	0.090	z-Score (FFP RSD 25%)		0.098	z-Score (FFP RSD 25%)		0.136	z-Score (FFP RSD 25%)		0.269	z-Score (FFP RSD 25%)		0.058	z-Score (FFP RSD 25%)		0.110	z-Score (FFP RSD 25%)		0.444	z-Score (FFP RSD 25%)		1.710	z-Score (FFP RSD 25%)		0.338	z-Score (FFP RSD 25%)	
Lab176	No Results Submitted																										
Lab177	0.077	-0.6	0.084	-0.6	ND	-3.7	0.180	-1.3	0.016	-2.9	0.130	0.7	NA		ND	-4.0	ND	-3.9									

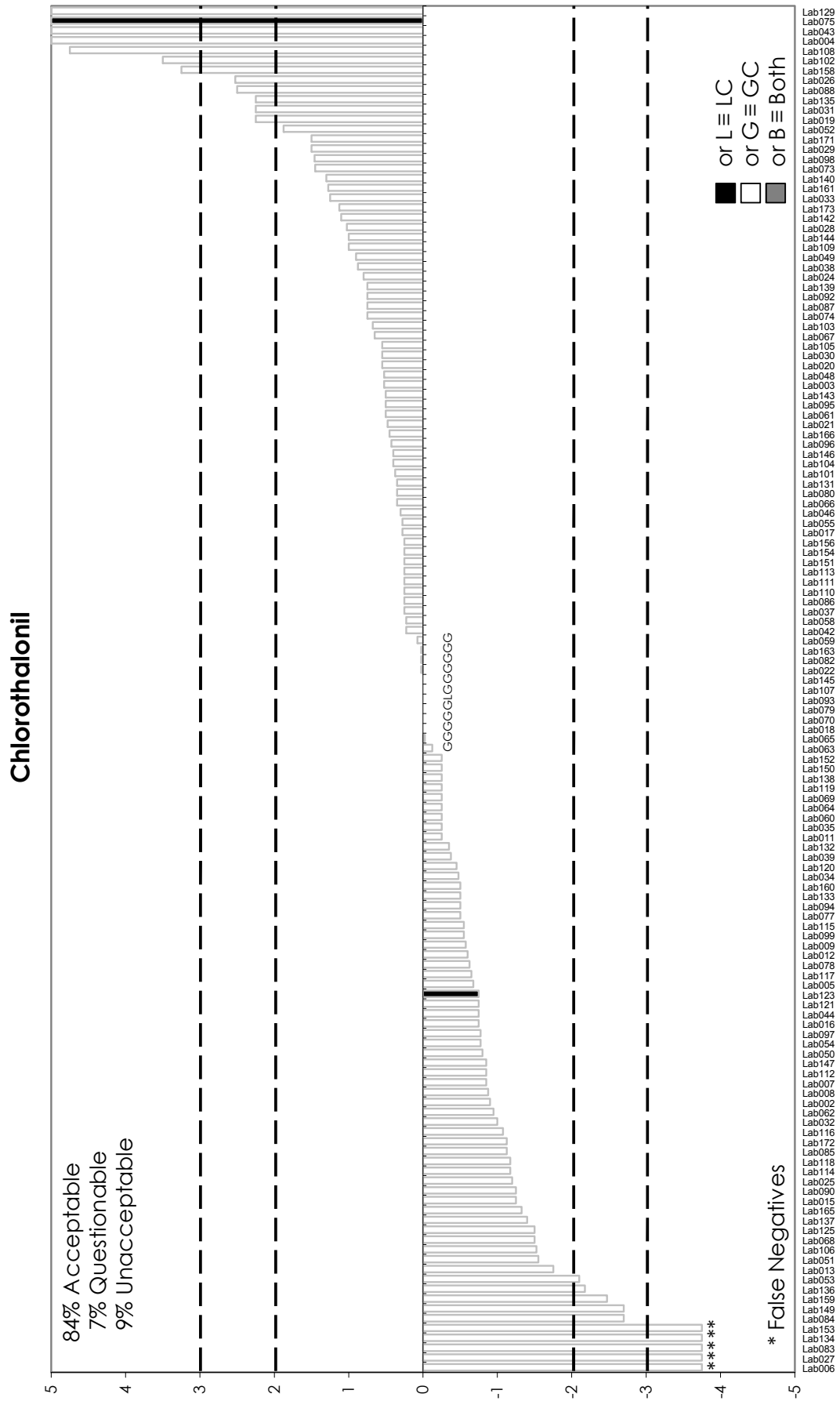
APPENDIX 4. Graphical representation of z-scores for FFP RSD (25 %).



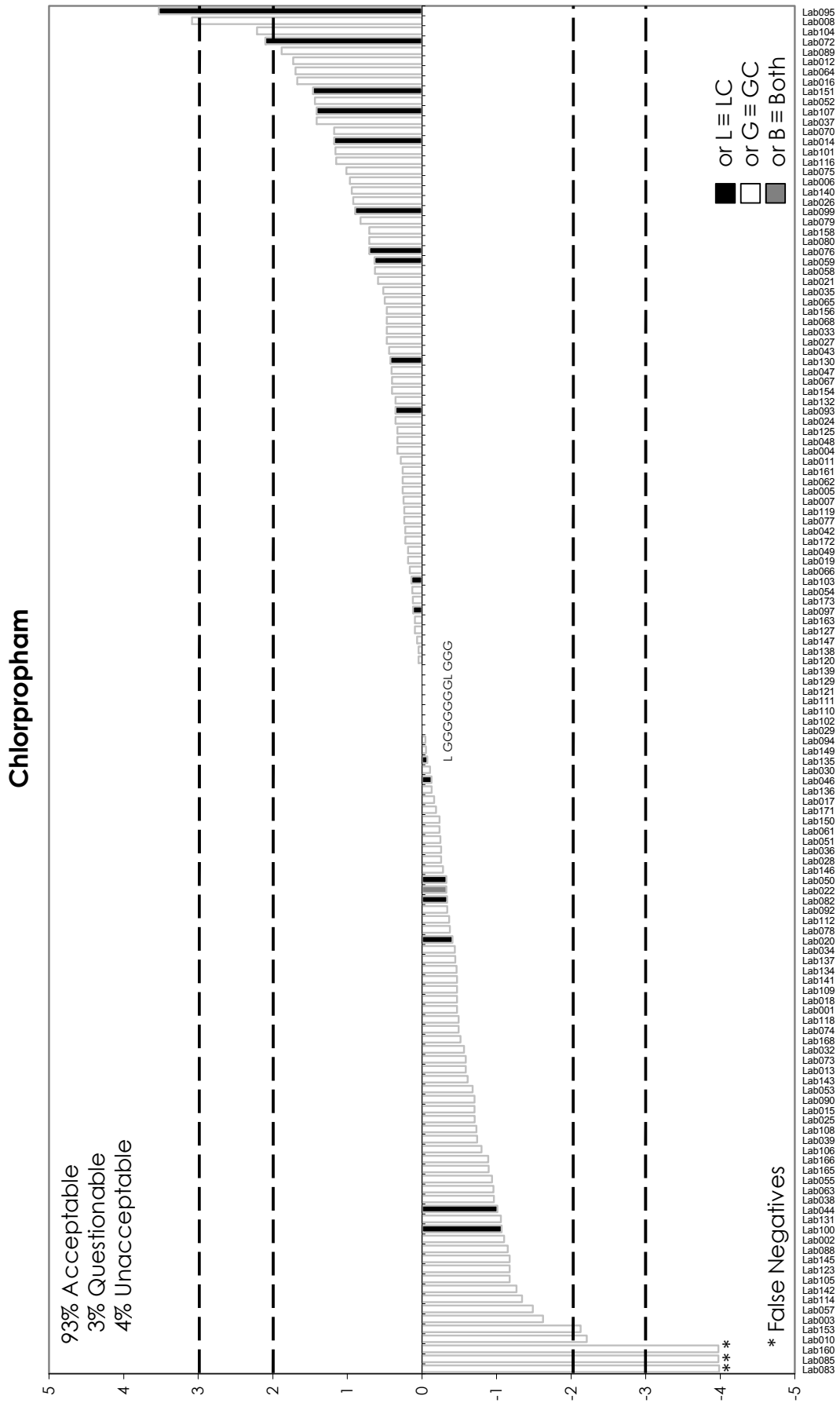
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25 %).



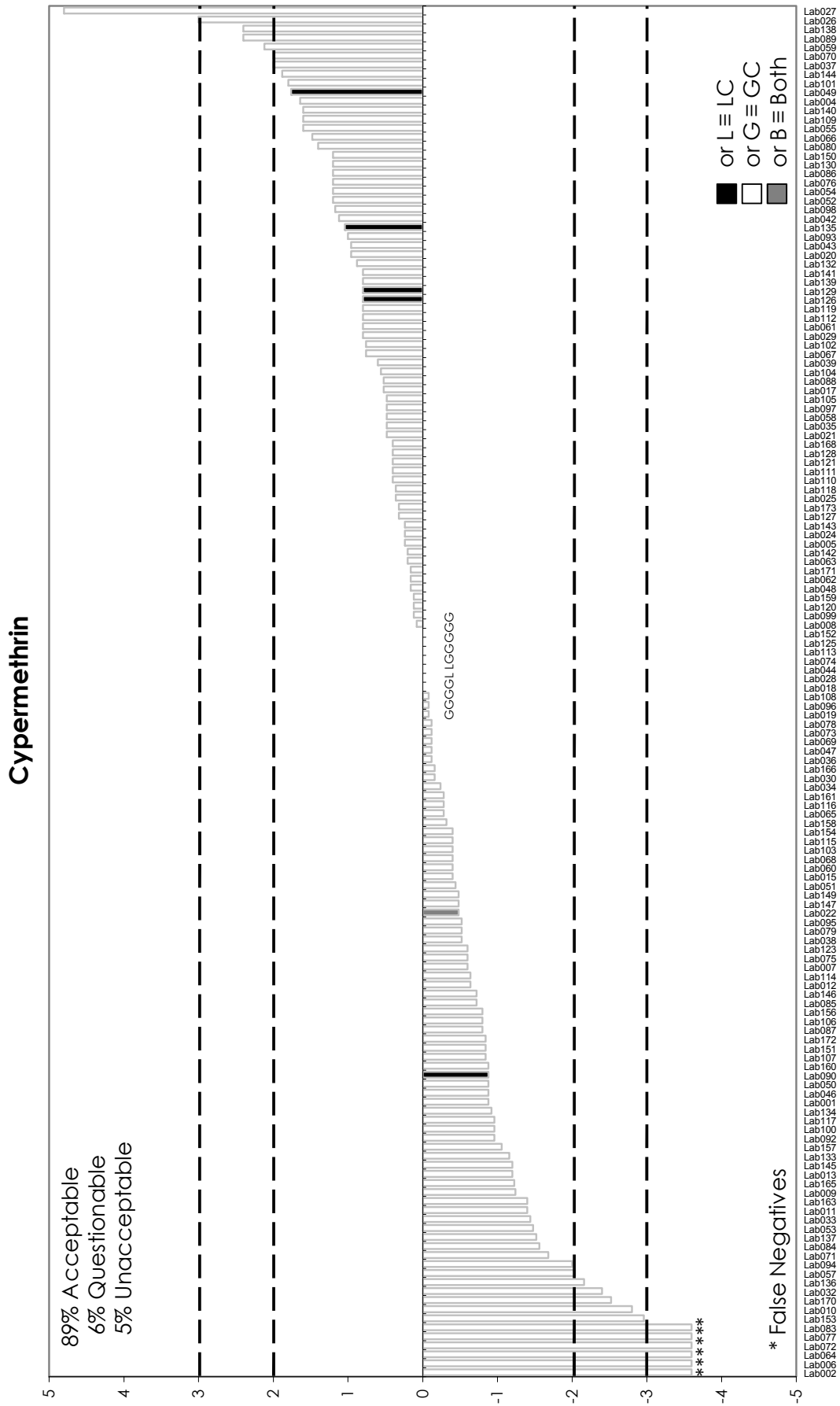
APPENDIX 4. Graphical representation of z-scores for FFP RSD (25 %).



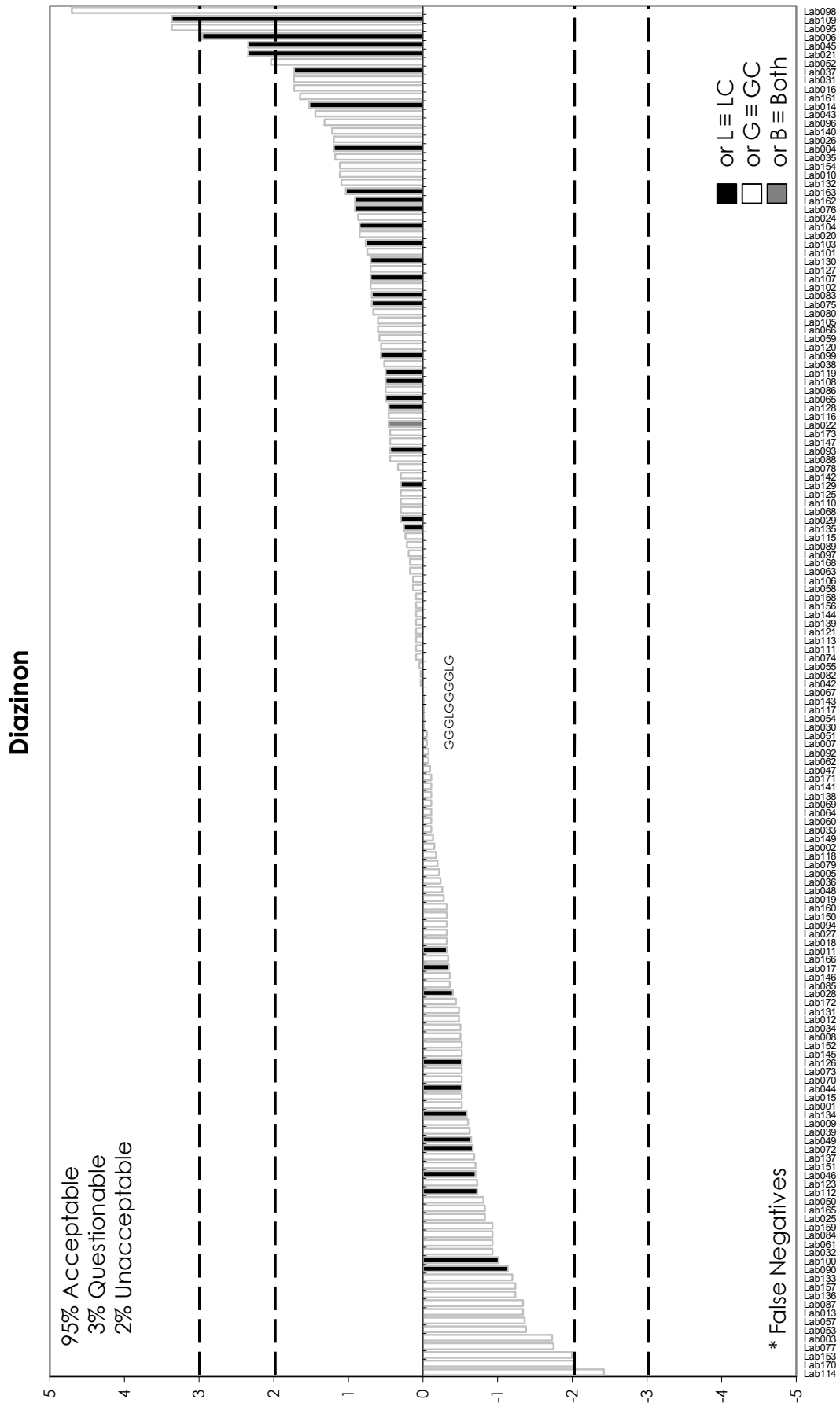
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25 %).



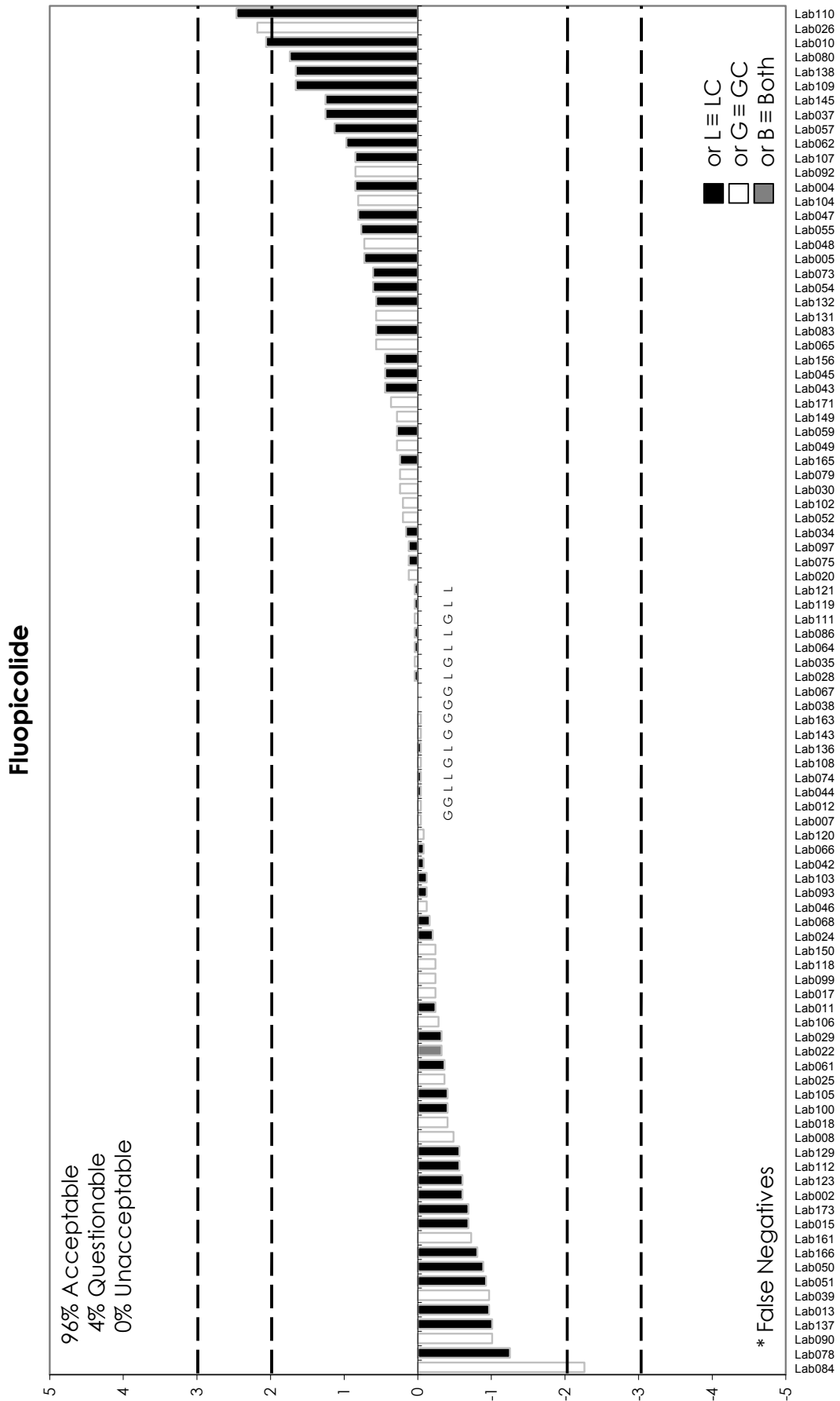
APPENDIX 4. Graphical representation of z-scores for FFP RSD (25 %).



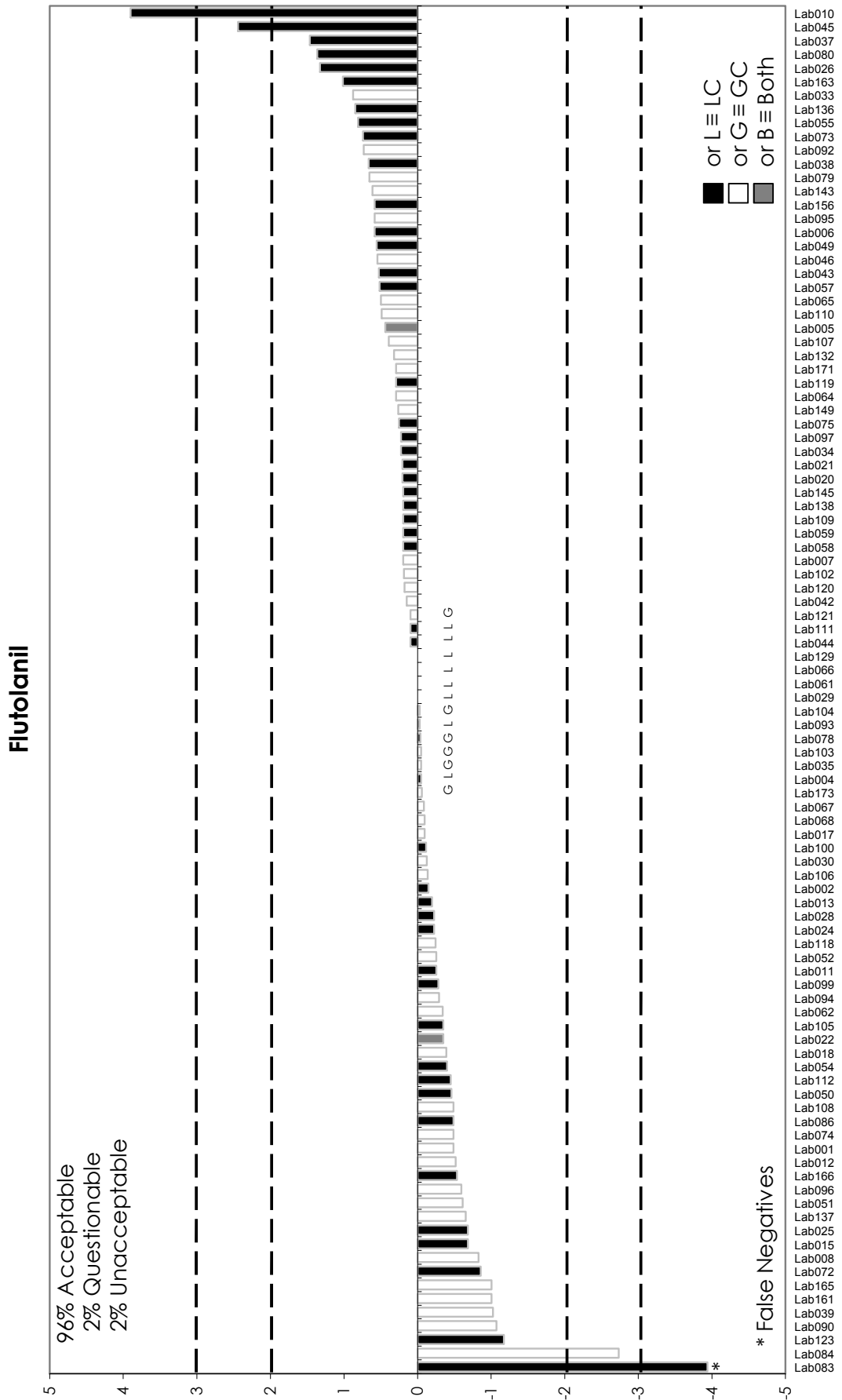
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25 %).



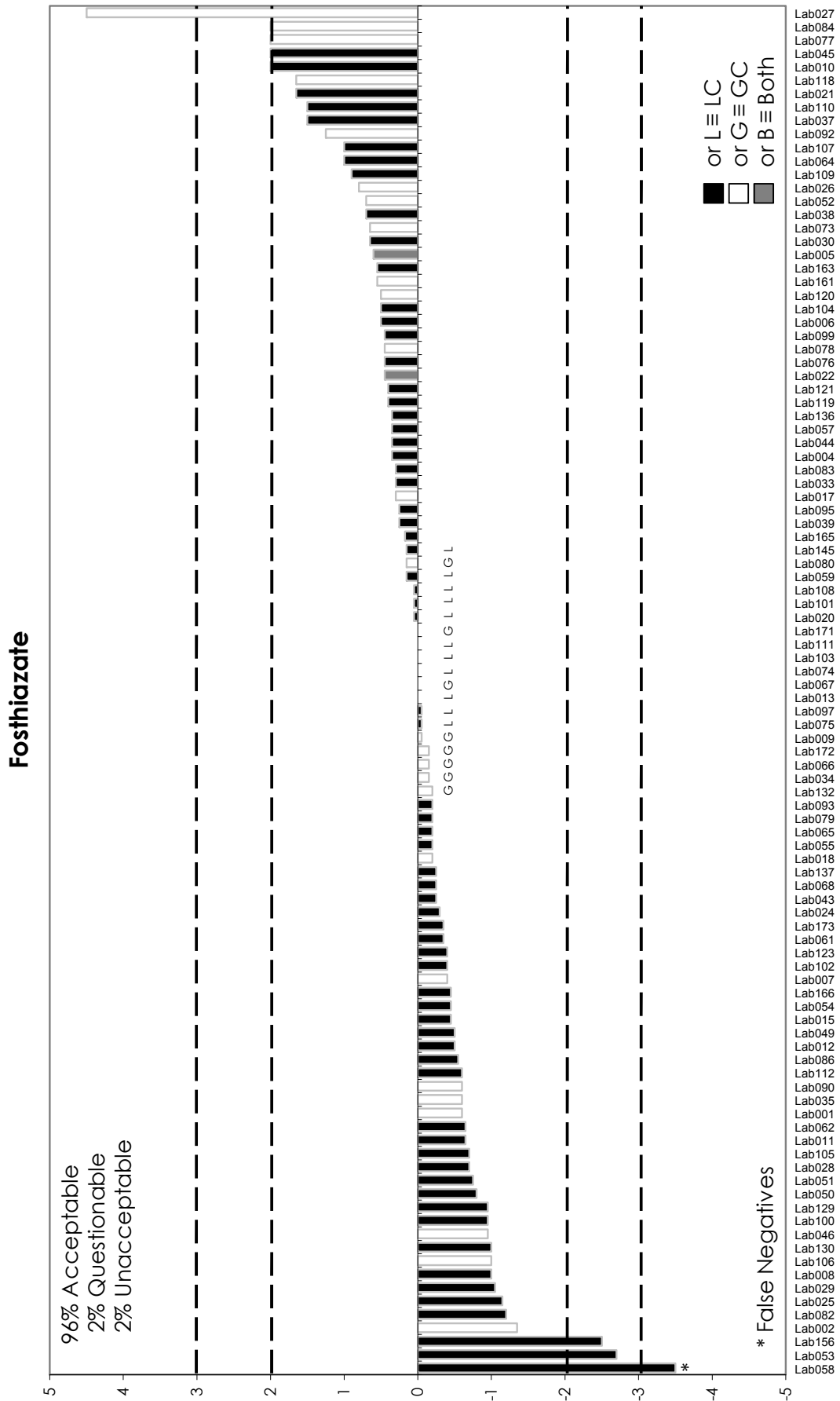
APPENDIX 4. Graphical representation of z-scores for FFP RSD (25 %).



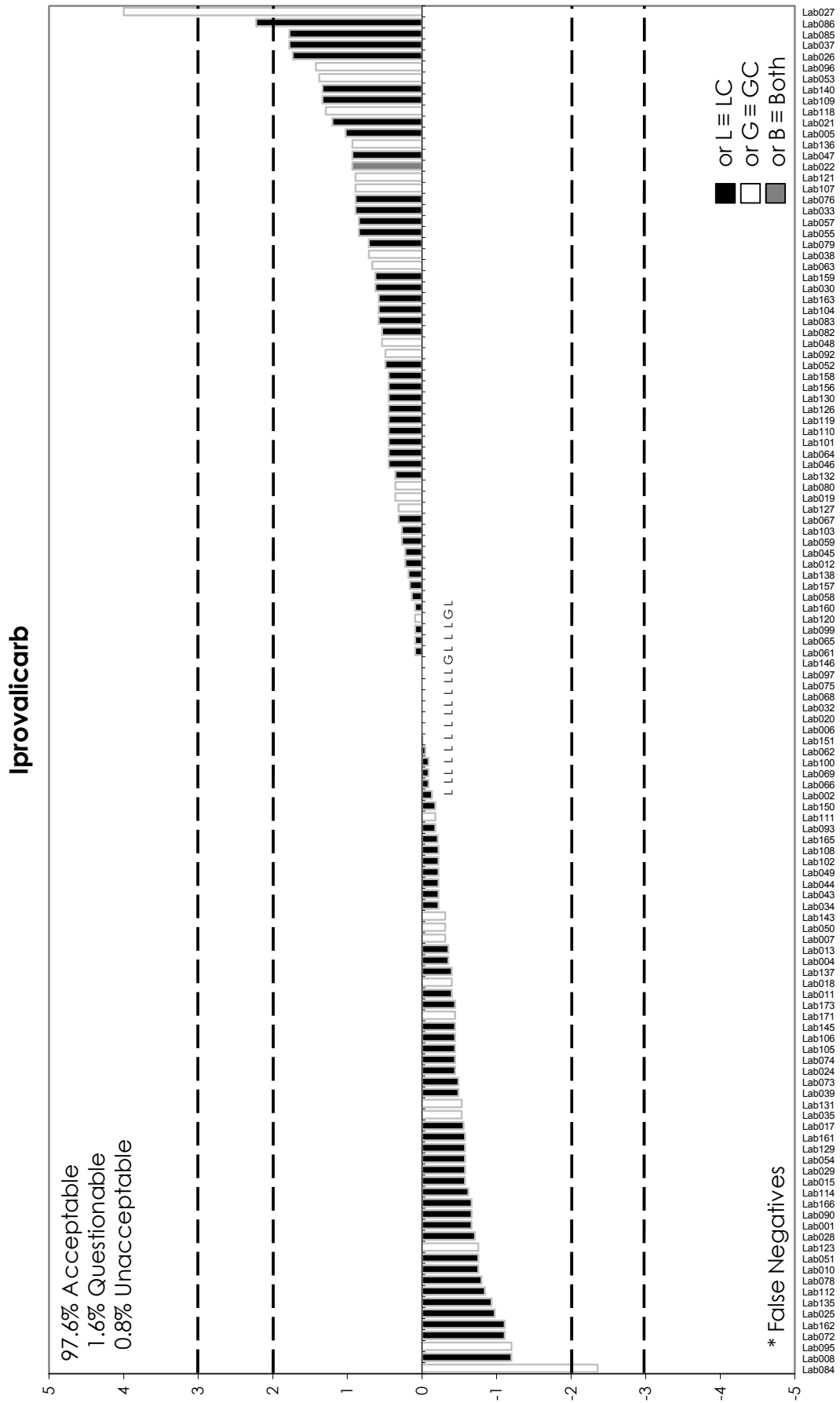
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25 %).



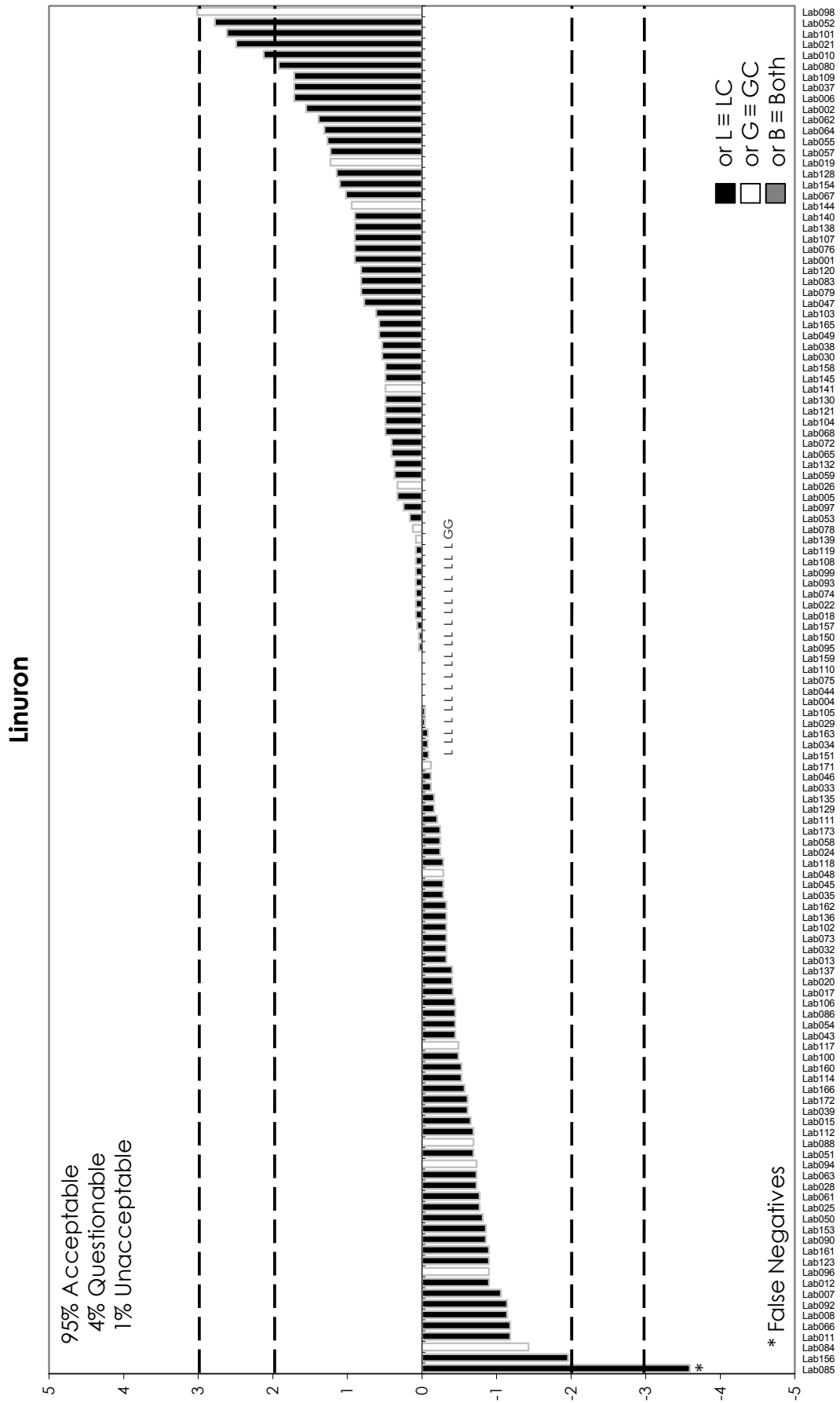
APPENDIX 4. Graphical representation of z-scores for FFP RSD (25 %).



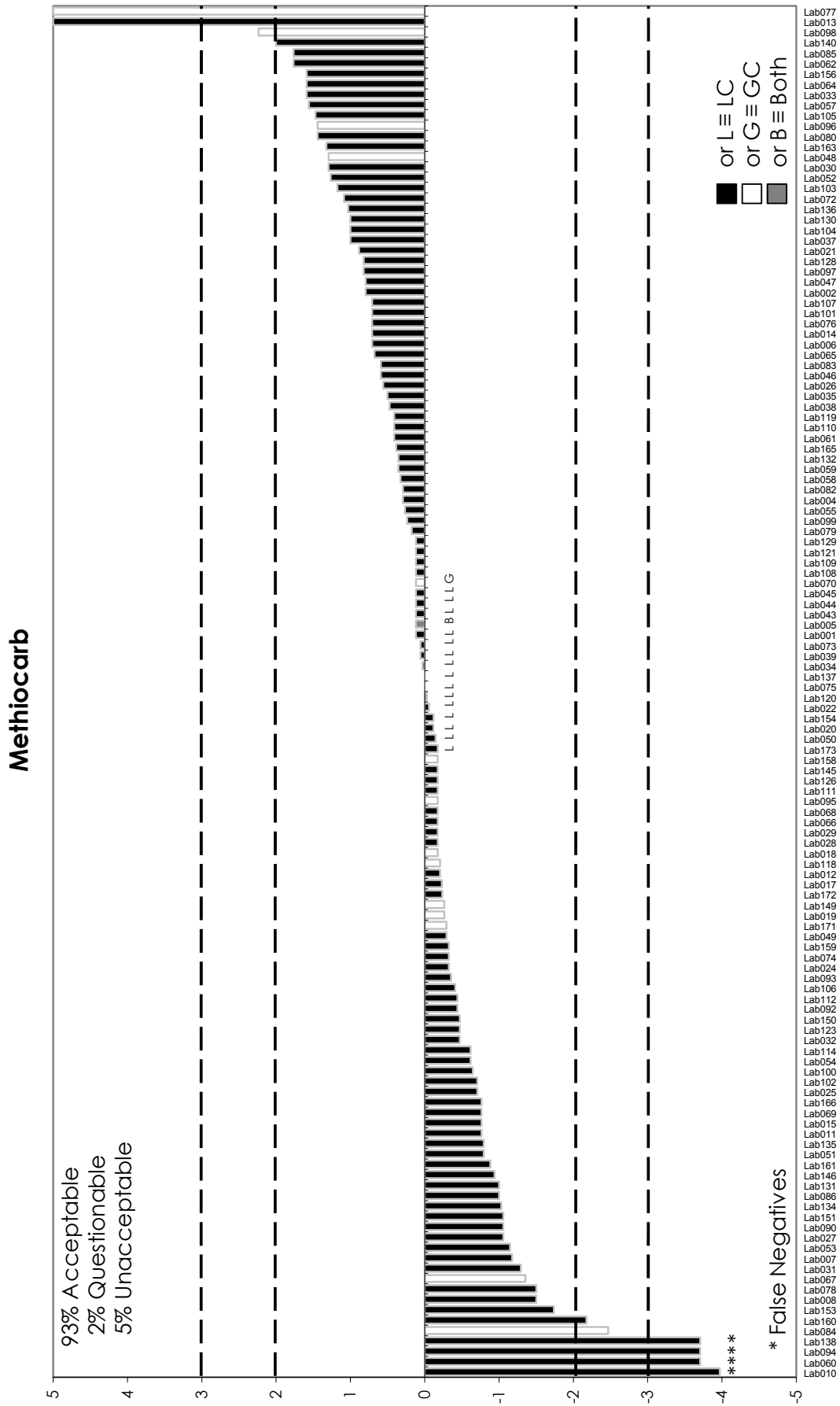
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25 %).



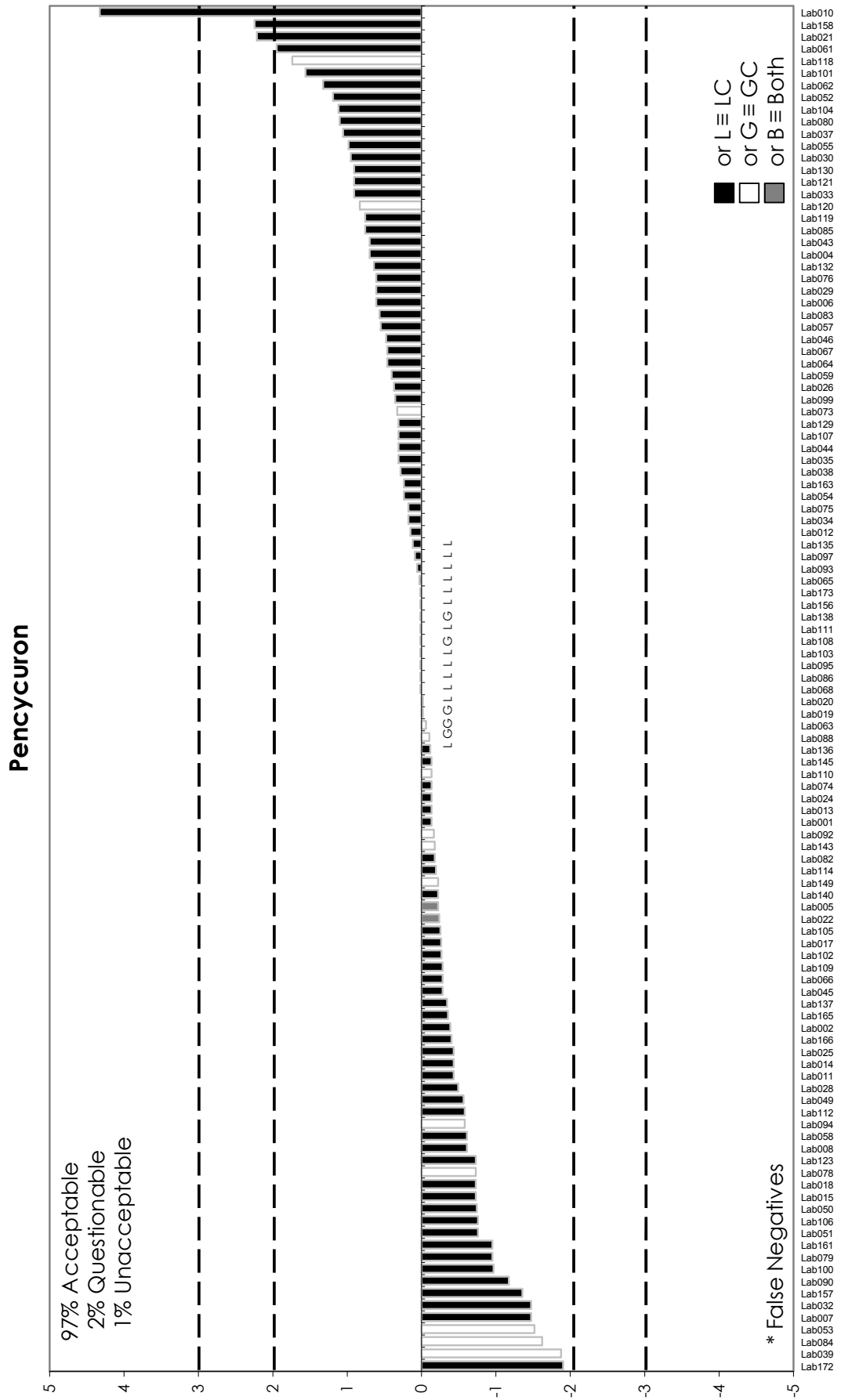
APPENDIX 4. Graphical representation of z-scores for FFP RSD (25 %).



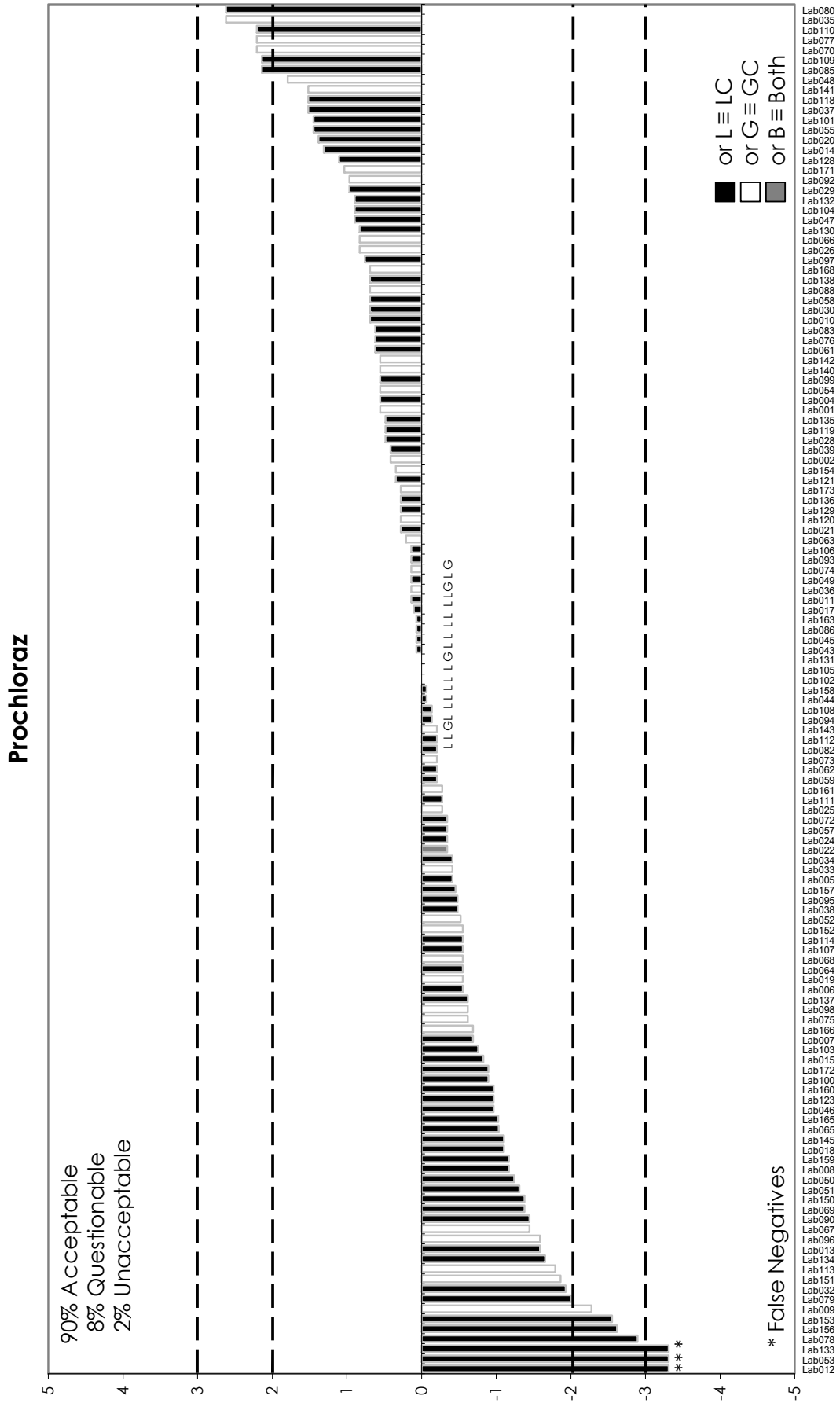
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25 %).



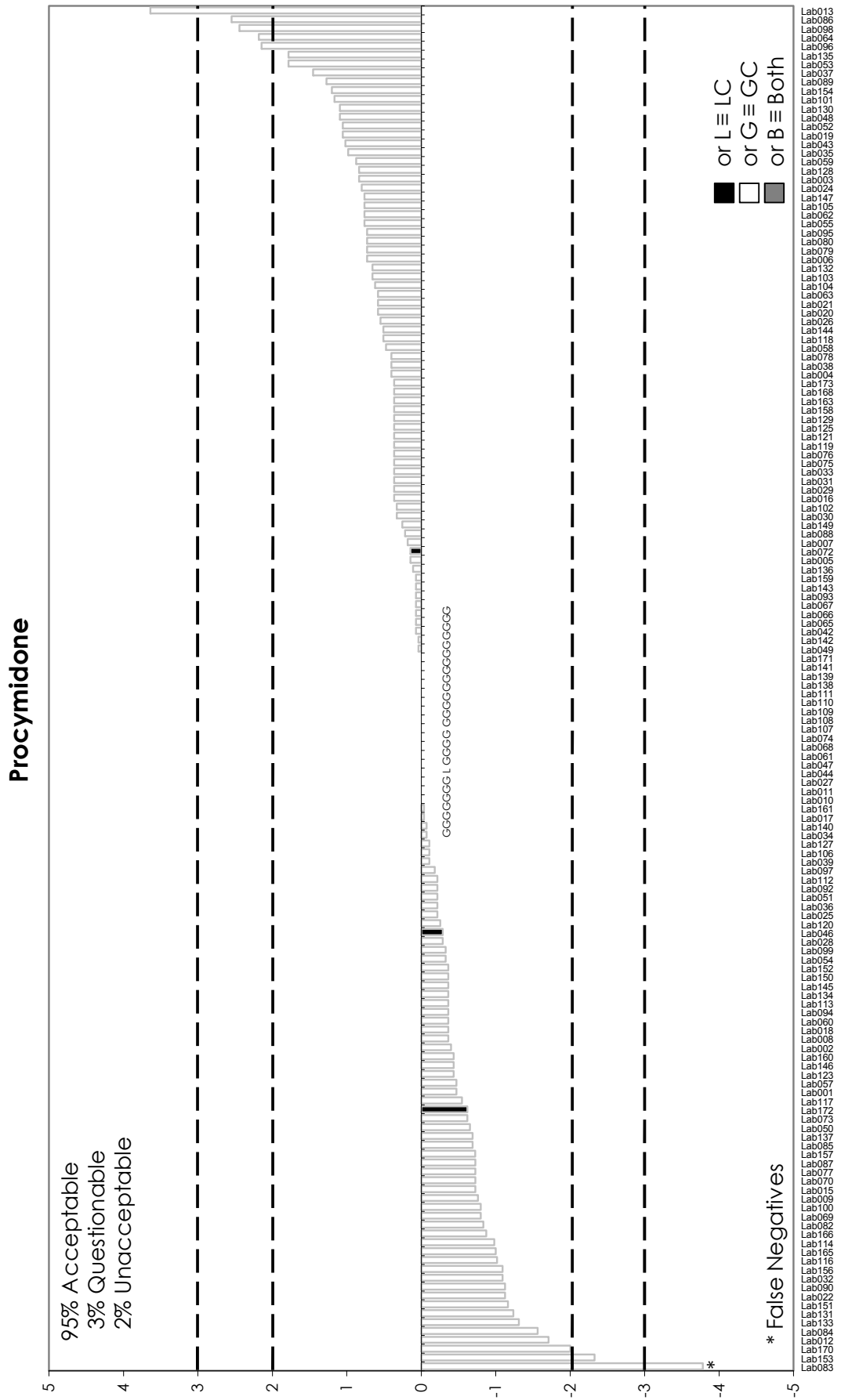
APPENDIX 4. Graphical representation of z-scores for FFP RSD (25 %).



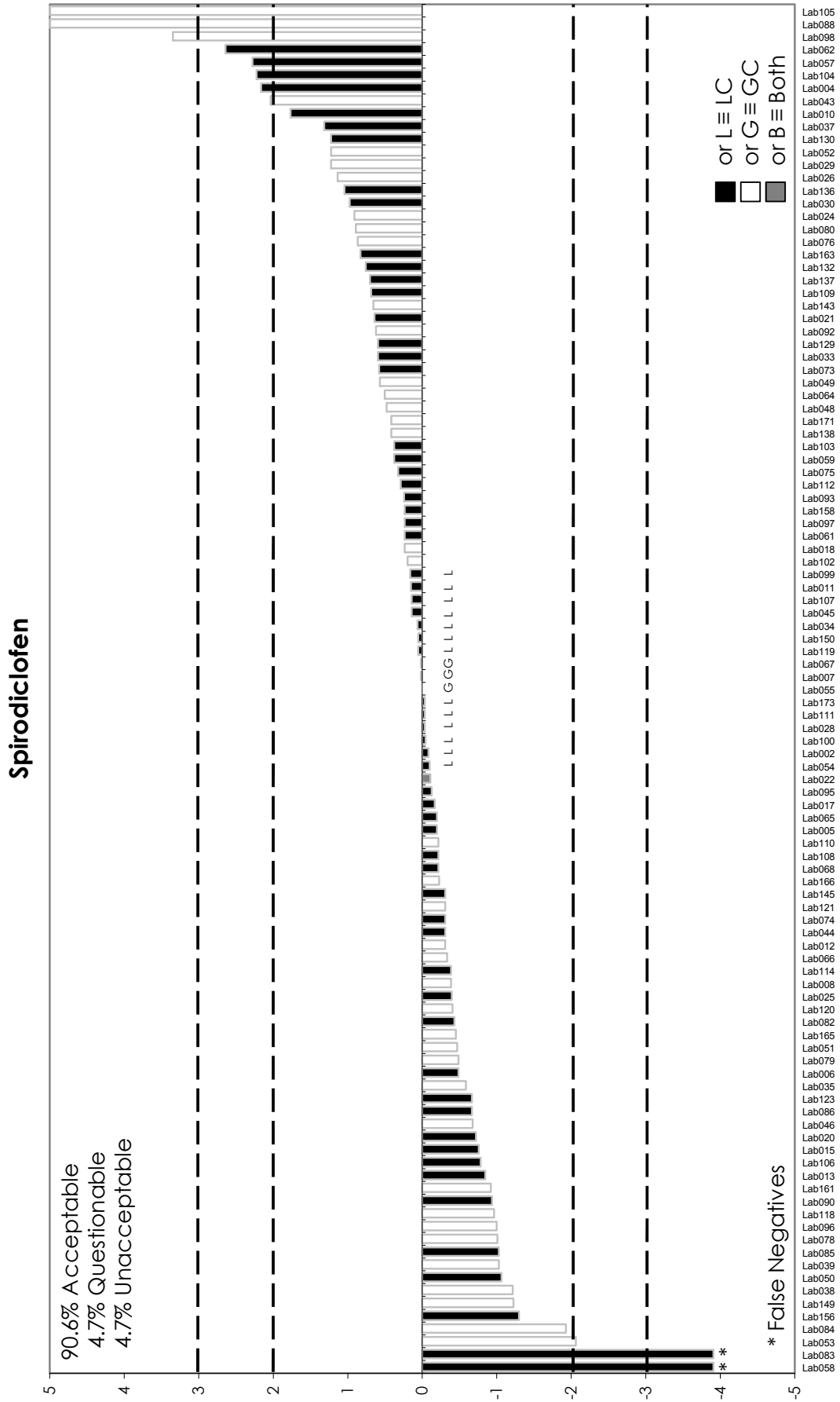
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25 %).



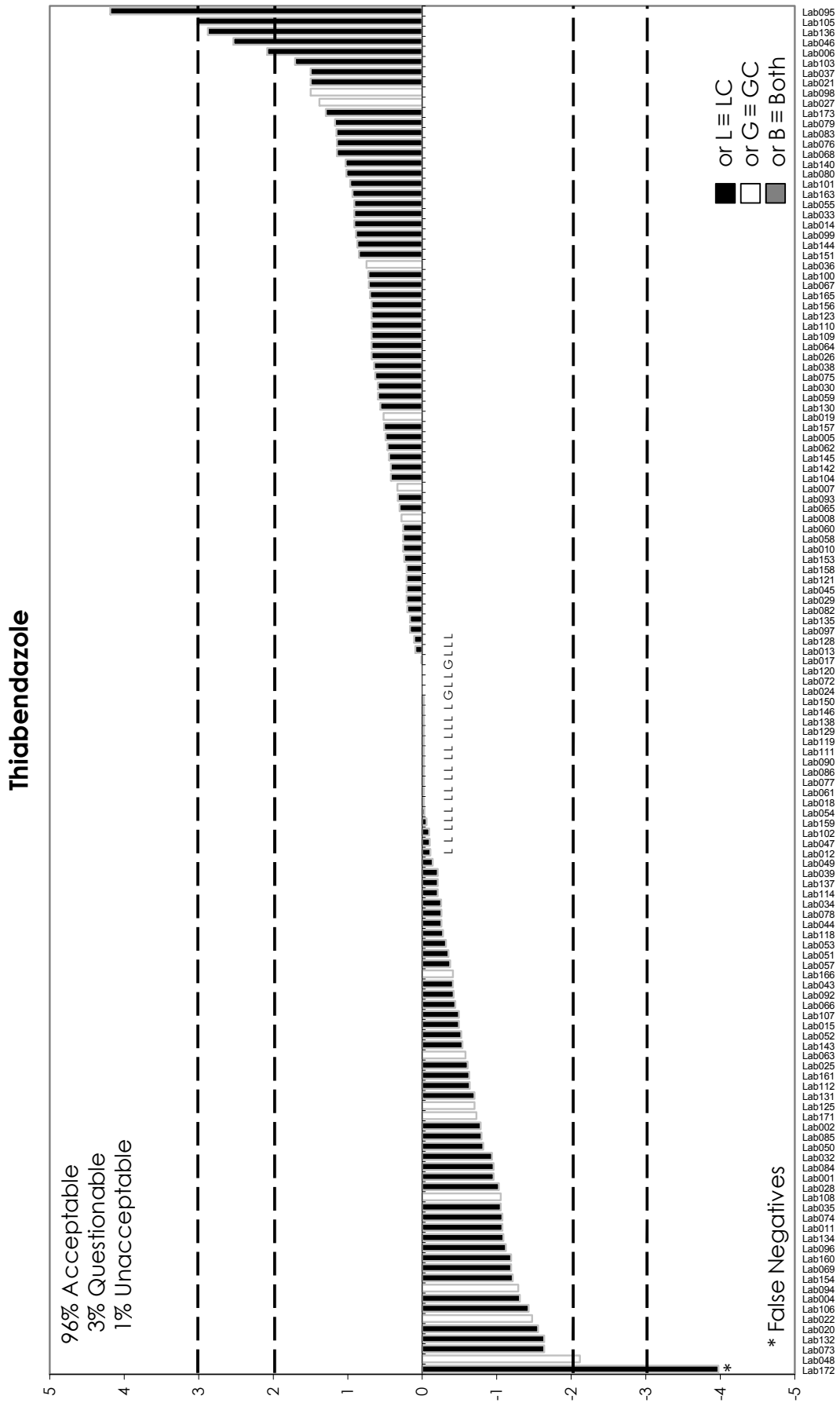
APPENDIX 4. Graphical representation of z-scores for FFP RSD (25 %).



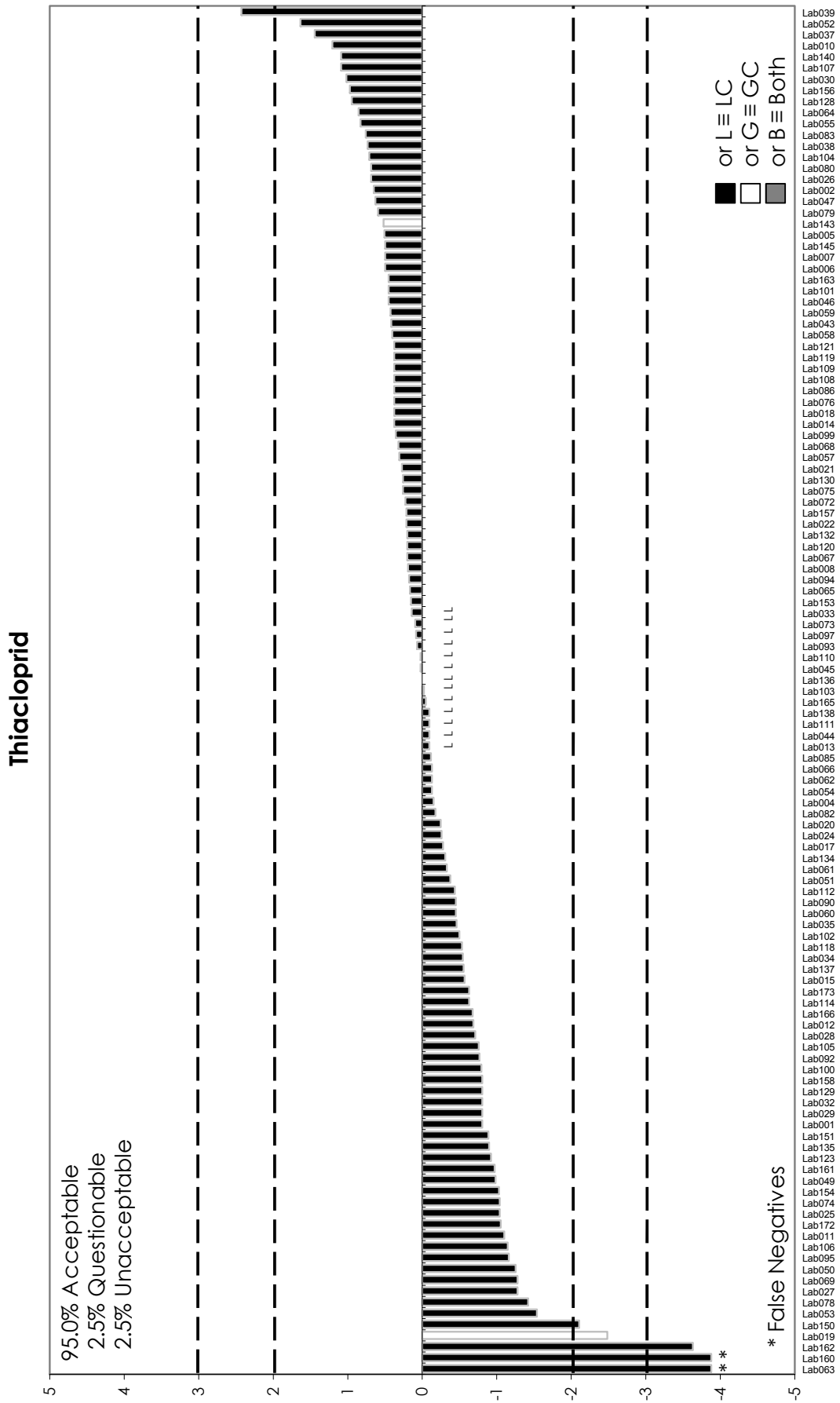
APPENDIX 4. Graphical Representation of z-scores for FFP RSD (25 %).



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



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



APPENDIX 5. Average of the Squared z-Score (AZ²) for laboratories in Category A.

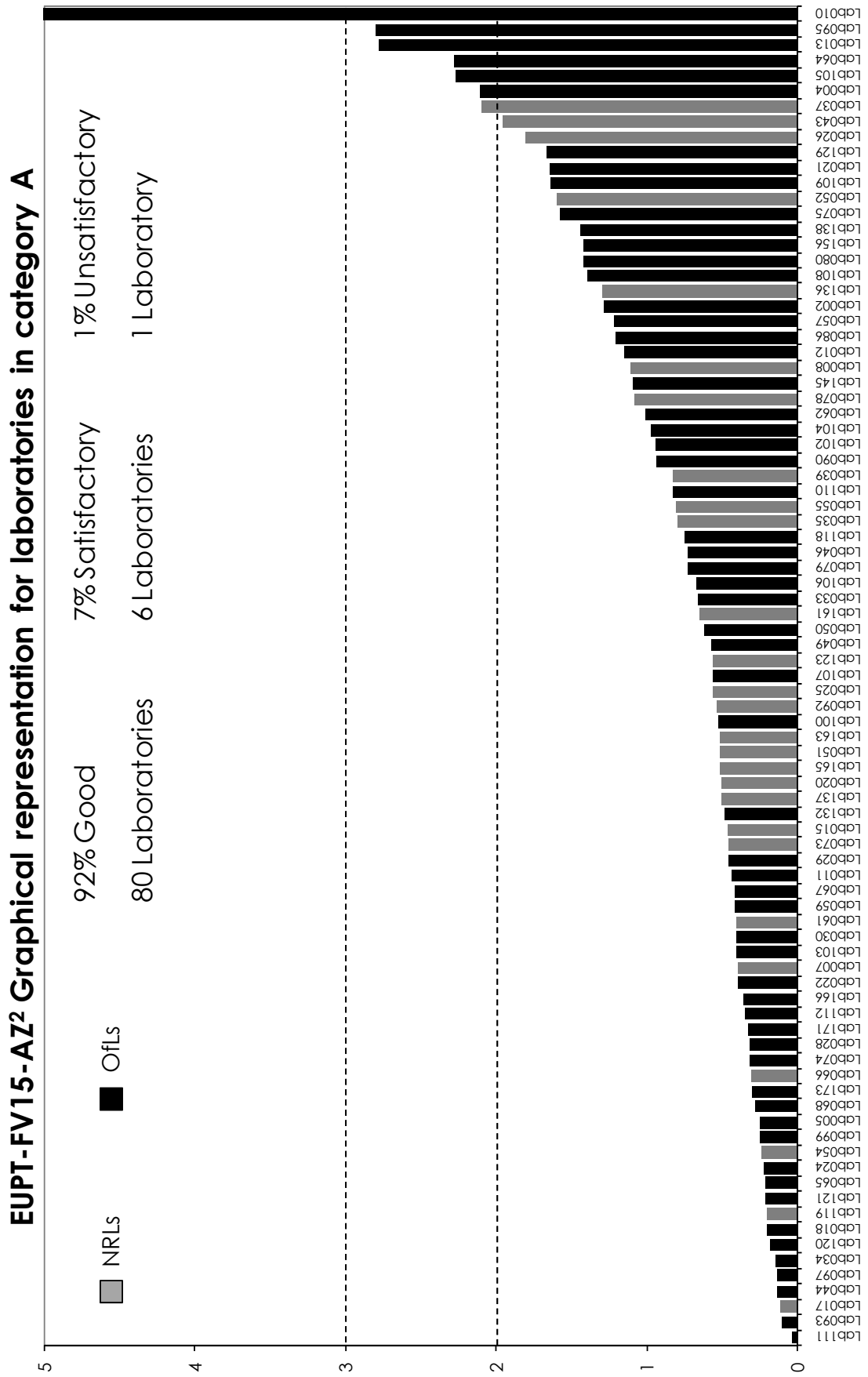
Lab Code	Acephate	Azoxystrobin	Chlorothalonil	Chlorpropham	Cypermethrin	Diazinon	Fluopicolide	Flutolanil	Fosthiazate	Iprovalicarb	Linuron	Methiocarb	Pencycuron	Prochloraz	Procymidone	Spirodiclofen	Thiabendazole	Thiacloprid	No. of Pesticides	AZ ²
	z-score																			
2	0.8	-0.8	-0.9	-1.1	-3.6	-0.2	-0.6	-0.1	-1.4	-0.1	1.6	0.8	-0.4	0.4	-0.4	-0.1	-0.8	0.7	17	1.3
4	0.2	-0.5	5.0	0.3	1.6	1.2	0.8	0.0	0.4	-0.4	0.0	0.3	0.7	0.6	0.4	2.2	-1.3	-0.2	18	2.1
5	0.9	0.1	-0.7	0.3	0.2	-0.2	0.7	0.4	0.6	1.0	0.3	0.1	-0.2	-0.4	0.1	-0.2	0.5	0.5	18	0.2
7	-0.4	-0.2	-0.9	0.2	-0.6	-0.1	0.0	0.2	-0.4	-0.3	-1.1	-1.2	-1.5	-0.7	0.2	0.0	0.3	0.5	18	0.4
8	-0.2	-0.6	-0.9	3.1	0.1	-0.5	-0.5	-0.8	-1.0	-1.2	-1.1	-1.5	-0.6	-1.2	-0.4	-0.4	0.3	0.2	18	1.1
10	2.7	3.7		-2.2	-2.8	1.1	2.1	3.9	2.0	-0.8	2.1	-4.0	4.3	0.7	0.0	1.8	0.3	1.2	16	5.0
11	-0.6	-0.1	-0.3	0.3	-1.4	-0.3	-0.2	-0.3	-0.7	-0.4	-1.2	-0.8	-0.4	0.1	0.0	0.2	-1.1	-1.1	18	0.4
12	-0.9	-0.3	-0.6	1.7	-0.6	-0.5	0.0	-0.5	-0.5	0.2	-0.9	-0.2	0.1	-3.3	-1.7	-0.3	-0.1	-0.7	17	1.2
13	-0.6	-0.5	-1.8	-0.6	-1.2	-1.3	-1.0	-0.2	0.0	-0.4	-0.3	5.0	-0.1	-1.6	3.6	-0.8	0.1	-0.1	18	2.8
15	-0.4	-0.7	-1.3	-0.7	-0.4	-0.5	-0.7	-0.7	-0.5	-0.6	-0.7	-0.8	-0.7	-0.8	-0.7	-0.8	-0.5	-0.6	18	0.5
17	-0.8	-0.4	0.3	-0.2	0.5	-0.3	-0.2	-0.1	0.3	-0.6	-0.4	-0.2	-0.3	0.1	0.0	-0.2	0.0	-0.3	18	0.1
18	0.7	-0.5	0.0	-0.5	0.0	-0.3	-0.4	-0.4	-0.2	-0.4	0.1	-0.2	-0.7	-1.1	-0.4	0.2	0.0	0.4	18	0.2
20	-1.2	-0.1	0.6	-0.4	1.0	0.8	0.1	0.2	0.1	0.0	-0.4	-0.1	0.0	1.4	0.6	-0.7	-1.6	-0.2	18	0.5
21	-1.5	0.5	0.5	0.6	0.5	2.3		0.2	1.7	1.2	2.5	0.9	2.2	0.3	0.6	0.6	1.5	0.3	17	1.6
22	1.2	0.2	0.0	-0.3	-0.5	0.5	-0.3	-0.4	0.5	0.9	0.1	-0.1	-0.2	-0.3	-1.1	-0.1	-1.5	0.2	18	0.4
24	-0.3	0.1	0.8	0.4	0.2	0.9	-0.2	-0.2	-0.3	-0.4	-0.2	-0.3	-0.1	-0.3	0.8	0.9	0.0	-0.3	18	0.2
25	-1.0	-0.6	-1.2	-0.7	0.4	-0.8	-0.4	-0.7	-1.2	-1.0	-0.8	-0.7	-0.4	-0.3	-0.2	-0.4	-0.6	-1.0	18	0.6
26	0.1	0.9	2.5	0.9	3.0	1.2	2.2	1.3	0.8	1.7	0.3	0.6	0.4	0.8	0.5	1.1	0.7	0.7	18	1.8
28	-0.9	0.0	1.0	-0.3	0.0	-0.4	0.0	-0.2	-0.7	-0.7	-0.7	-0.2	-0.5	0.5	-0.3	0.0	-1.0	-0.7	18	0.3
29	0.0	-0.1	1.5	0.0	0.8	0.3	-0.3	0.0	-1.1	-0.6	0.0	-0.2	0.6	1.0	0.4	1.2	0.2	-0.8	18	0.5
30	0.5	0.3	0.6	-0.1	-0.2	0.0	0.2	-0.1	0.7	0.6	0.5	1.3	1.0	0.7	0.3	1.0	0.6	1.0	18	0.4
33	0.4	-0.8	1.3	0.5	-1.4	-0.1		0.9	0.3	0.9	-0.1	1.6	0.9	-0.4	0.4	0.6	0.9	0.1	17	0.7
34	-1.0	0.0	-0.5	-0.4	-0.2	-0.5	0.2	0.2	-0.2	-0.2	-0.1	0.0	0.2	-0.4	-0.1	0.1	-0.3	-0.5	18	0.1
35	-1.3	-0.3	-0.3	0.5	0.5	1.2	0.0	0.0	-0.6	-0.5	-0.3	0.5	0.3	2.6	1.0	-0.6	-1.1	-0.5	18	0.8
37	1.3	1.5	0.3	1.4	2.0	1.7	1.3	1.5	1.5	1.8	1.7	1.0	1.1	1.5	1.5	1.3	1.5	1.4	18	2.1
39	0.3	-0.1	-0.4	-0.7	0.6	-0.6	-1.0	-1.0	0.3	-0.5	-0.6	0.1	-1.9	0.4	-0.1	-1.0	-0.2	2.4	18	0.8
43	0.2	0.3	5.0	0.4	1.0	1.4	0.4	0.5	-0.3	-0.2	-0.4	0.1	0.7	0.1	1.0	2.0	-0.4	0.4	18	2.0
44	0.3	-0.1	-0.8	-1.0	0.0	-0.5	0.0	0.1	0.4	-0.2	0.0	0.1	0.3	-0.1	0.0	-0.3	-0.3	-0.1	18	0.1
46	0.6	1.1	0.3	-0.1	-0.9	-0.7	-0.1	0.5	-1.0	0.4	-0.1	0.6	0.5	-1.0	-0.3	-0.7	2.5	0.4	18	0.7
49	1.8	-0.4	0.9	0.2	1.8	-0.6	0.3	0.6	-0.5	-0.2	0.6	-0.3	-0.6	0.1	0.0	0.6	-0.1	-1.0	18	0.6
50	-0.7	-0.4	-0.8	-0.3	-0.9	-0.8	-0.9	-0.5	-0.8	-0.3	-0.8	-0.1	-0.7	-1.2	-0.7	-1.1	-0.8	-1.3	18	0.6

APPENDIX 5. Average of the Squared z-Score (AZ²) for laboratories in Category A.

Lab Code	Acephate	Azoxystrobin	Chlorothaloni	Chlorpropham	Cypermethrin	Diazinon	Fluopicolide	Flutolanil	Fosthiazate	Iprovalicarb	Linuron	Methiocarb	Pencycuron	Prochloraz	Procymidone	Spirodiclofen	Thiabendazole	Thiacloprid	No. of Pesticides	AZ ²
	z-score																			
51	-0.3	-0.4	-1.6	-0.2	-0.4	-0.1	-0.9	-0.6	-0.8	-0.8	-0.7	-0.8	-0.8	-1.3	-0.2	-0.5	-0.4	-0.4	18	0.5
52	0.3	-0.2	1.9	1.4	1.2	2.0	0.2	-0.3	0.7	0.5	2.8	1.3	1.2	-0.5	1.1	1.2	-0.5	1.6	18	1.6
54	0.2	0.0	-0.8	0.1	1.2	0.0	0.6	-0.4	-0.5	-0.6	-0.4	-0.6	0.2	0.6	-0.3	-0.1	0.0	-0.1	18	0.2
55	-0.9	1.1	0.3	-0.9	1.6	0.1	0.8	0.8	-0.2	0.8	1.3	0.3	1.0	1.4	0.8	0.0	0.9	0.8	18	0.8
57	-0.1	0.4		-1.5	-2.0	-1.4	1.1	0.5	0.4	0.8	1.2	1.6	0.6	-0.3	-0.5	2.3	-0.4	0.3	17	1.2
59	-0.1	0.2	0.1	0.6	2.1	0.6	0.3	0.2	0.2	0.3	0.4	0.4	0.4	-0.2	0.9	0.4	0.6	0.4	18	0.4
61	-0.4	-0.1	0.5	-0.2	0.8	-0.9	-0.4	0.0	-0.4	0.1	-0.8	0.4	1.9	0.6	0.0	0.2	0.0	-0.3	18	0.4
62	0.0	1.0	-1.0	0.3	0.2	-0.1	1.0	-0.3	-0.7	0.0	1.4	1.8	1.3	-0.2	0.8	2.6	0.5	-0.1	18	1.0
64	-3.5	0.7	-0.3	1.7	-3.6	-0.1	0.0	0.3	1.0	0.4	1.3	1.6	0.5	-0.6	2.2	0.5	0.7	0.9	16	2.3
65	-0.8	0.3	0.0	0.5	-0.3	0.5	0.6	0.5	-0.2	0.1	0.4	0.7	0.0	-1.0	0.1	-0.2	0.3	0.2	18	0.2
66	-0.4	0.4	0.4	0.2	1.5	0.6	-0.1	0.0	-0.2	-0.1	-1.2	-0.2	-0.3	0.8	0.1	-0.3	-0.4	-0.1	18	0.3
67	-0.1	0.7	0.7	0.4	0.8	0.0	0.0	-0.1	0.0	0.3	1.0	-1.4	0.5	-1.4	0.1	0.0	0.7	0.2	18	0.4
68	0.3	-0.1	-1.5	0.5	-0.4	0.3	-0.2	-0.1	-0.3	0.0	0.5	-0.2	0.0	-0.6	0.0	-0.2	1.1	0.3	18	0.3
73	0.0	-0.5	1.5	-0.6	-0.1	-0.5	0.6	0.7	0.7	-0.5	-0.3	0.1	0.3	-0.2	-0.6	0.6	-1.6	0.1	18	0.5
74	-1.4	-0.3	0.8	-0.5	0.0	0.1	0.0	-0.5	0.0	-0.4	0.1	-0.3	-0.1	0.1	0.0	-0.3	-1.1	-1.0	18	0.3
75	0.6	0.2	5.0	1.0	-0.6	0.7	0.1	0.3	-0.1	0.0	0.0	0.0	0.2	-0.6	0.4	0.3	0.6	0.3	18	1.6
78	0.2	-1.4	-0.6	-0.4	-0.1	0.3	-1.3	0.0	0.5	-0.8	0.1	-1.5	-0.7	-2.9	0.4	-1.0	-0.3	-1.4	18	1.1
79	1.5	-0.8	0.0	0.8	-0.5	-0.2	0.2	0.7	-0.2	0.7	0.8	0.2	-1.0	-2.0	0.7	-0.5	1.2	0.6	18	0.7
80	0.9	0.1	0.4	0.7	1.4	0.7	1.7	1.4	0.2	0.4	1.9	1.4	1.1	2.6	0.7	0.9	1.0	0.7	18	1.4
86	2.2	-0.1	0.3		1.2	0.5	0.0	-0.5	-0.6	2.2	-0.4	-1.0	0.0	0.1	2.5	-0.7	0.0	0.4	17	1.2
90	-0.9	-1.0	-1.3	-0.7	-0.9	-1.1	-1.0	-1.1	-0.6	-0.7	-0.9	-1.1	-1.2	-1.4	-1.1	-0.9	0.0	-0.4	18	0.9
92	0.8	0.8	0.8	-0.3	-1.0	-0.1	0.8	0.7	1.3	0.5	-1.1	-0.4	-0.2	1.0	-0.2	0.6	-0.4	-0.8	18	0.5
93	0.2	0.2	0.0	0.4	1.0	0.4	-0.1	0.0	-0.2	-0.2	0.1	-0.4	0.1	0.1	0.1	0.2	0.3	0.1	18	0.1
95	1.3	0.3	0.5	3.5	-0.5	3.4		0.6	0.3	-1.2	0.0	-0.2	0.0	-0.5	0.7	-0.1	4.2	-1.2	17	2.8
97	-0.2	0.2	-0.8	0.1	0.5	0.2	0.1	0.2	-0.1	0.0	0.2	0.8	0.1	0.8	-0.2	0.2	0.2	0.1	18	0.1
99	1.0	0.3	-0.6	0.9	0.1	0.6	-0.2	-0.3	0.5	0.1	0.1	0.2	0.4	0.6	-0.3	0.2	0.9	0.4	18	0.2
100	0.0	-0.7		-1.1	-1.0	-1.0	-0.4	-0.1	-1.0	-0.1	-0.5	-0.6	-1.0	-0.9	-0.8	0.0	0.7	-0.8	17	0.5
102	-1.5	0.5	3.5	0.0	0.8	0.7	0.2	0.2	-0.4	-0.2	-0.3	-0.7	-0.3	0.0	0.3	0.2	-0.1	-0.5	18	0.9
103	0.0	0.5	0.7	0.1	-0.4	0.8	-0.1	0.0	0.0	0.3	0.6	1.2	0.0	-0.8	0.7	0.4	1.7	0.0	18	0.4
104	0.7	0.6	0.4	2.2	0.6	0.8	0.8	0.0	0.5	0.6	0.5	1.0	1.1	0.9	0.6	2.2	0.4	0.7	18	1.0
105	-0.3	0.2	0.6	-1.2	0.5	0.6	-0.4	-0.4	-0.7	-0.4	0.0	1.5	-0.3	0.0	0.8	5.0	3.0	-0.8	18	2.3
106	-1.1	-1.0	-1.5	-0.8	-0.8	0.1	-0.3	-0.1	-1.0	-0.4	-0.4	-0.4	-0.8	0.1	-0.1	-0.8	-1.4	-1.1	18	0.7

APPENDIX 5. Average of the Squared z-Score (AZ²) for laboratories in Category A.

Lab Code	Acephate	Azoxystrobin	Chlorothalonil	Chlorpropham	Cypermethrin	Diazinon	Fluopicolide	Flutolanil	Fosthiazate	Iprovalicarb	Linuron	Methiocarb	Pencycuron	Prochloraz	Procymidone	Spirodiclofen	Thiabendazole	Thiacloprid	No. of Pesticides	AZ ²
	z-score																			
107	0.5	0.9	0.0	1.4	-0.8	0.7	0.8	0.4	1.0	0.9	0.9	0.7	0.3	-0.6	0.0	0.1	-0.5	1.1	18	0.6
108	-0.2	0.1	4.8	-0.7	-0.1	0.5	0.0	-0.5	0.1	-0.2	0.1	0.1	0.0	-0.1	0.0	-0.2	-1.1	0.4	18	1.4
109	-0.5	0.3	1.0	-0.5	1.6	3.4	1.7	0.2	0.9	1.3	1.7	0.1	-0.3	2.1	0.0	0.7	0.7	0.4	18	1.6
110	-0.3	0.3	0.3	0.0	0.4	0.3	2.5	0.5	1.5	0.4	0.0	0.4	-0.1	2.2	0.0	-0.2	0.7	0.0	18	0.8
111	0.3	-0.3	0.3	0.0	0.4	0.1	0.0	0.1	0.0	-0.2	-0.2	-0.2	0.0	-0.3	0.0	0.0	0.0	-0.1	18	0.0
112	0.6	-0.7	-0.9	-0.4	0.8	-0.7	-0.6	-0.4	-0.6	-0.8	-0.7	-0.4	-0.6	-0.2	-0.2	0.3	-0.6	-0.4	18	0.4
118	0.3	0.1	-1.2	-0.5	0.4	-0.2	-0.2	-0.2	1.7	1.3	-0.3	-0.2	1.7	1.5	0.5	-1.0	-0.3	-0.5	18	0.7
119	0.8	0.5	-0.3	0.2	0.8	0.5	0.0	0.3	0.4	0.4	0.1	0.4	0.8	0.5	0.4	0.1	0.0	0.4	18	0.2
120	0.7	0.5	-0.5	0.0	0.1	0.6	-0.1	0.2	0.5	0.1	0.8	0.0	0.8	0.3	-0.3	-0.4	0.0	0.2	18	0.2
121	0.4	0.5	-0.8	0.0	0.4	0.1	0.0	0.1	0.4	0.9	0.5	0.1	0.9	0.3	0.4	-0.3	0.2	0.4	18	0.2
123	-0.2	-0.7	-0.8	-1.2	-0.6	-0.7	-0.6	-1.2	-0.4	-0.8	-0.9	-0.5	-0.7	-1.0	-0.4	-0.7	0.7	-0.9	18	0.6
129	-1.1	0.3	5.0	0.0	0.8	0.3	-0.6	0.0	-1.0	-0.6	-0.2	0.1	0.3	0.3	0.4	0.6	0.0	-0.8	18	1.7
132	0.2	0.8	-0.4	0.4	0.9	1.1	0.6	0.3	-0.2	0.4	0.4	0.4	0.6	0.9	0.7	0.8	-1.6	0.2	18	0.5
136	0.1	0.1	-2.2	-0.1	-2.2	-1.2	0.0	0.8	0.4	0.9	-0.3	1.0	-0.1	0.3	0.1	1.0	2.9	0.0	18	1.3
137	-0.5	-0.4	-1.4	-0.4	-1.5	-0.7	-1.0	-0.7	-0.3	-0.4	-0.4	0.0	-0.3	-0.6	-0.7	0.7	-0.2	-0.6	18	0.5
138	0.8	-0.3	-0.3	0.0	2.4	-0.1	1.7	0.2		0.2	0.9	-3.7	0.0	0.7	0.0	0.4	0.0	-0.1	16	1.4
145	-3.5	0.3	0.0	-1.2	-1.2	-0.5	1.3	0.2	0.2	-0.4	0.5	-0.2	-0.1	-1.1	-0.4	-0.3	0.4	0.5	17	1.1
156	0.3	0.1	0.3	0.5	-0.8	0.1	0.4	0.6	-2.5	0.4	-2.0	1.6	0.0	-2.6	-1.1	-1.3	0.7	1.0	18	1.4
161	0.5	0.4	1.3	0.3	-0.3	1.6	-0.7	-1.0	0.6	-0.6	-0.9	-0.9	-1.0	-0.3	0.0	-0.9	-0.6	-1.0	18	0.7
163	0.6	0.7	0.0	0.1	-1.4	1.0	0.0	1.0	0.6	0.6	-0.1	1.3	0.2	0.1	0.4	0.8	0.9	0.4	18	0.5
165	0.0	0.0	-1.3	-0.9	-1.2	-0.8	0.2	-1.0	0.2	-0.2	0.6	0.4	-0.4	-1.0	-1.0	-0.5	0.7	0.0	18	0.5
166	-0.7	-0.5	0.5	-0.9	-0.2	-0.3	-0.8	-0.5	-0.5	-0.7	-0.6	-0.8	-0.4	-0.7	-0.9	-0.2	-0.4	-0.7	18	0.4
171	-0.7	0.4	1.5	-0.2	0.2	-0.1	0.4	0.3	0.0	-0.4	-0.1	-0.3		1.0	0.0	0.4	-0.7		16	0.3
173	-0.6	0.5	1.1	0.1	0.3	0.4	-0.7	-0.1	-0.4	-0.4	-0.2	-0.2	0.0	0.3	0.4	0.0	1.3	-0.6	18	0.3



APPENDIX 7. Methods used by participants for determining pesticides.

Acephate																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.035	79	No	MeOH			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
002	0.01	D	0.101	104	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
003	0.03	ND				AcN											
004	0.001	D	0.088	84	No	AcN			10	No	Filter	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	IPP
005	0.01	D	0.102	32.3	Yes	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
006	0.01	D	0.12	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
007	0.01	D	0.076	92	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
008	0.02	D	0.08	51	Yes	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
009		NA															
010	-	D	0.14	-	No	AcN			15	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)		
011	0.01	D	0.07	86	No	AcN			10	No	DSPE	Pure solvent - Multiple level		Chilitec	LC-Orbitrap	Rec. from validation data	IPP
012	0.01	D	0.065	80	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Carbendazim-D3
013	0.01	D	0.07	100	Yes	AcN			10	No	DSPE	Standard addition					
014	0.01	D	0.086	85	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
015	0.01	D	0.075	84	No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
016		NA															
017	0.01	D	0.0676	100	No	EIOAc			10	Yes		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
018	0.01	D	0.097	97	No	EIOAc			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TBP
019	0.02	D	0.14	95	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	NPD	Two columns		Rec. from same batch	
020	0.01	D	0.058	95	No	MeOH						Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Oxfendazole
021	0.01	D	0.052	86	No	Acetone	DCM	EIOAc	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
022	0.02	D	0.109	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
023		NA															
024	0.01	D	0.077	85.5	No	AcN			10	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
025	0.01	D	0.062	86.1	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
026	0.01	D	0.085	83	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
027	0.05	D	0.07	90	No	AcN			12	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
028	0.01	D	0.065	84	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
029	0.01	D	0.084	Standard addition	Yes	EIOAc			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
030	0.01	D	0.094	113	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Isoproturon
031		NA															
032	0.01	D	0.07	96.7	No	AcN			15	No	DSPE	Matrix matched - Multiple level				Rec. from same batch	IPP
033	0.01	D	0.091	91	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
034	0.01	D	0.062	91	No	EIOAc			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D4
035	0.01	D	0.056	52	No	AcN			10	No	DSPE	Matrix matched - Single level	FPD	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	IPP
036		NA															
037	0.01	D	0.11	88	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.084	81.8	No	MeOH	Water		10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
039	0.01	D	0.09	72	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
040	0.01	NA															
041	0.01	NA															
042		NA															
043	0.01	D	0.088	120	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
044	0.01	D	0.089	93	No	Acetone	DCM	Petr. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
045	0.01	D	0.11	67	Yes	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Acephate																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	0.095	91.01	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
047	0.003	D	0.067	94	No	AcN			10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
048		NA															
049	0.01	D	0.12	84	No	EIOAc			20	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	0.049	84	No	AcN			15	No		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
051	0.01	D	0.077	86	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
052	0.01	D	0.0995	98.9	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	GC-MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IRIS
053	0.01	D	0.074	101	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
054	0.01	D	0.088		No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
055	0.01	D	0.064	82	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
056		NA															
057	0.01	D	0.062	88	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
058	0.01	D	0.064	101	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbofuran-D3
059	0.01	D	0.062	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
060		NA															
061	0.01	D	0.074	88	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.083	76	No	MeOH			10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
063		NA															
064	0.01	ND															
065	0.01	D	0.066	100	Yes	Acetone	DCM	Pair: Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
066	0.01	D	0.076	77	No	AcN			10	No	DSPE	Matrix matched - Multiple level	FPD	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.081	102.6	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
068	0.01	D	0.099	86	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	IPP
069	0.01	D	0.074	83	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
070		NA															
071		NA															
072	0.01	D	0.072	97.9	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
073	0.01	D	0.063	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbaryl-C13
074	0.01	D	0.055	65	No	AcN			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
075	0.01	D	0.096	76	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	IPP, Pirimicarb-D6
076	0.025	D	0.08	64	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
077	0.01	ND															
078	0.01	D	0.088	110	No	AcN	DCM		7.5	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
079	0.01	D	0.115	81	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	Sulfatep
080	0.01	D	0.102	73.2	No	Acetone	EIOAc	Cyclohexane	50	No	GFC	Matrix matched - Multiple level	MS/MS (QQQ)	GC-TOF	Rec. from same batch		
081	0.02	D	0.078	93.79	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MSD	GC-MS	Rec. from same batch	Triphenylmethan. IPP	
082	0.01	D	0.062	100	No	AcN			10	No	DSPE	Standard addition		LC-MS/MS (QQQ)	Via Standard addition		
083	0.005	D	0.093	94	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		LC-MS/MS (QQQ)	Rec. from same batch		
084	0.01	ND															
085	0.01	D	0.108	70.120	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	IPP	
086	0.01	D	0.13	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
087	0.01	ND															
088		NA															
089	0.01	ND															
090	0.01	D	0.064	75	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Pirimicarb-D6
091	0.01	D	0.0836	116	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from validation data	
092	0.02	D	0.1	104	No	AcN			10	No	SPE	Matrix matched - Multiple level		MS	GC-MS	Rec. from same batch	
093	0.01	D	0.087	93.7	No	AcN			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Acephate																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
094	0.01	D	0.1	106	No	AcN			10	Yes	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
095	0.01	D	0.11	50	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
096	0.01	NA							10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	Linuron-D6
098	0.01	NA							10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	
099	0.01	D	0.104	55	No	EIOAC			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
100	0.01	D	0.083	86	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
101	0.01	D	0.076	86	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
102	0.01	D	0.053	116	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
103	0.01	D	0.084	82	No	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
104	0.01	D	0.098	91	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Phimicarb-D6
105	0.01	D	0.078	80	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
106	0.01	D	0.061	76	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Orbitrap	Rec. from same batch	IRIS
107	0.01	D	0.093	98	No	AcN			10	No	DSPE	Pure solvent - Single level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
108	0.01	D	0.079	69	No	AcN			10/10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
109	0.01	D	0.073		No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
110	0.01	D	0.078	105	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from validation data	Desmethyn
111	0.005	D	0.09	85	No	AcN			5	Yes	DSPE	Standard addition		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from validation data	
112	0.01	D	0.096	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	Two columns	Rec. from same batch	IPP
113	0.01	NA							10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
114	0.01	D	0.075	87	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
115	0.01	NA							25	No	DSPE	Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
116	0.02	D	0.104	111.43	No	EIOAC			10	No	DSPE	Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
117	0.02	D	0.077	77.5	No	EIOAC			15	No	DSPE	Matrix matched - Single level	NPD		Two columns	Rec. from same batch	
118	0.01	D	0.09	79	No	AcN			10	No	DSPE	Pure solvent - Multiple level	PPD		GC-MS	Rec. from same batch	
119	0.01	D	0.1	90.4	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-PFPD	Rec. from same batch	IPP
120	0.01	D	0.098	116.0	No	AcN			10	No	DSPE	Matrix matched - Multiple level	plpd		GC-MS	Rec. from same batch	
121	0.01	D	0.092	83.7	No	AcN			10	No	DSPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch	
122	0.01	D	0.072	70	No	EIOAC			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	0.08	none	No	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
124	0.005	D	0.082	77	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data	
125	0.01	D	0.07	51	No	AcN			10	Yes	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	Tris-(2-chloro(4-chloromethyl)ethyl)fosfata
126	0.01	D	0.1	70	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	IPP
127	0.01	NA							10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
128	0.01	D	0.114	88	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
129	0.01	D	0.064	81	No	AcN			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data	
130	0.01	D	0.086	87	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
131	0.01	D	0.101	70	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from validation data	Fenchlorphos
132	0.01	D	0.087	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Via Standard addition	IPP
133	0.01	NA							10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
134	0.01	D	0.068	79.8	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
135	0.05	D	0.087	102	No	AcN			10	Yes	DSPE	Pure solvent - Multiple level	ECD		GC-MS	Rec. from same batch	Bromophos-methyl
136	0.01	D	0.085	79	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	IPP
137	0.01	D	0.073	94	No	AcN			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
138	0.01	D	0.1	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Via Standard addition	IPP
139	0.01	NA							10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Via Standard addition	
140	0.02	D	0.076	92	No	AcN	Acetone		10	No	DSPE	Matrix matched - Single level		MS		Rec. from same batch	
141	0.01	NA							10	No	DSPE	Matrix matched - Single level				Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Acephate																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
142	0.02	NA															
143	0.01	D	0.068	65	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
144	0.01	D	0.097	64	Yes	Acetone	DCM	EIOAc	100	No	GPC	Matrix matched - Multiple level	NPD			Rec. from same batch	
145	0.01	ND															
146		NA															
147	0.01	ND															
148	0.01	D	0.074	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	PCB 31
149		NA															
150	0.01	D	0.034	106.7	No	Acetone	DCM	Petr. Ether	20	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
151		NA															
152		NA															
153		NA															
154	0.01	D	0.107	matrix matched surrogate calibration	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Not applied	Carbonyl-D7
155																	
156	0.01	D	0.09	95	Yes	AcN			10			Participation Cancelled		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
157		NA															
158	0.01	D	0.091	70	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	IPP
159	0.02	D	0.079	61.7	No	AcN			9.952	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	IPP
160	0.01	D	0.045	66.5	No	EIOAc			20			Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
161	0.01	D	0.093	75	No	Acetone	AcN		10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level	FPD		GC-MS	Rec. from same batch	
162	0.01	D	0.072	80-120	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from validation data	
163	0.01	D	0.096	82	No	Acetone	DCM		15	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
164	0.01	D	0.098	97	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	IPP
165	0.01	D	0.0836	90	No	AcN			10			Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
166	0.01	D	0.069	83	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
167												Participation Cancelled					
168		NA															
169		NA															
170		NA															
171	0.01	D	0.068	110	No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
172	0.01	D	0.063	94	No	EIOAc			15	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
173	0.01	D	0.071	85	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from validation data	IPP
174												No Results Submitted					
175	0.01	NA															
176		NA										No Results Submitted					
177		NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Azoxystrobin																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.18	99	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	Caffein
002	0.01	D	0.162	86.8	No	AcN			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
003	0.05	D	0.231	73	No	EIOAc			50	No	GPC	Pure solvent - Multiple level	ECD		two columns	Rec. from same batch	
004	0.001	D	0.178	98	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	IPP
005	0.01	D	0.207	107	No	Acetone	DCM	Petr. Ether	15	No	Filter	Pure solvent - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	PCB 153
006	0.01	D	0.18	89	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Tr-(1,3-dichloro-isopropyl)phosphate
007	0.01	D	0.192	102	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Phenanthrene-D10
008	0.04	D	0.172	78	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-ITD-MS/MS	Rec. from same batch	IPP
009	0.01	D	0.218	119	No	Acetone	DCM	Petr. Ether	7.5	No		Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
010	0.001	D	0.39	-	No	AcN			15	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
011	0.01	D	0.2	102	No	AcN			10	No	DSPE	Pure solvent - Multiple level		Orbitrap	LC-Orbitrap	Rec. from validation data	IPP
012	0.01	D	0.187	80	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Carbendazim-D3
013	0.01	D	0.18	106	Yes	AcN			10	No	DSPE	Standard addition					
014	0.01	D	0.25	99	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
015	0.01	D	0.17	90	No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
016	0.3	D	0.13	100	No	DCM			10	No	GPC	Matrix matched - Multiple level	NPD		GC-MS	Rec. from validation data	
017	0.01	D	0.1835	99	No	EIOAc			10	Yes		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.18	93	No	EIOAc			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IBP
019	0.02	D	0.224	98	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
020	0.01	D	0.196	96	No	MeOH			10			Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Oxendazole
021	0.01	D	0.228	104	No	Acetone	DCM	EIOAc	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
022	0.01	D	0.215	108	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	
023	0.01	D	0.181	102.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
024	0.01	D	0.208	110	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	PCB 28
025	0.01	D	0.172	97.3	No	AcN			10	No		Matrix matched - Multiple level	ECD, NPD		GC-MS	Rec. from same batch	
026	0.05	ND	0.25	96.4	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
028	0.01	D	0.203	79	No	AcN			10		DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
029	0.01	D	0.2	310add	Yes	EIOAc			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
030	0.01	D	0.22	86	Yes	AcN			10		DSPE	Standard addition	MSD		LC-MS/MS (QQQ)	Via Standard addition	PCB 20
031		NA															
032	0.01	D	0.15	74.3	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
033	0.01	D	0.16	62	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
034	0.01	D	0.201	78	No	EIOAc			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbenazim-D4
035	0.01	D	0.19	97	No	AcN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
036	0.05	D	0.200	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
037	0.01	D	0.203	89	No	Acetone			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.203	89	No	Acetone			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	IPP
039	0.01	D	0.2	76	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
040	0.01	NA															
041	0.01	NA															
042	0.01	D	0.236		No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
043	0.01	D	0.219	115	No	Acetone			10	No	Quechers without PSA	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
044	0.01	D	0.2	89	No	Acetone	DCM	Petr. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
045	0.01	D	0.19	94	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Azoxystrobin																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
046	0.01	D	0.261	120	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
047	0.01	D	0.249	114	No	AcN			10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch		
048	0.05	D	0.222	83	No	DCM			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	Endosulfan lactone	
049	0.01	D	0.182	85	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
050	0.01	D	0.181	99	No	AcN			15	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from same batch	TOC/PP	
051	0.01	D	0.181	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	IPP	
052	0.01	D	0.192	101	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	IRIS	
053	0.01	D	0.233	113	No	EIOAc			10	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch		
054	0.01	D	0.205		No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
055	0.01	D	0.259	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
056		NA																
057	0.01	D	0.222	87	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch		
058	0.01	D	0.197	101	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	terbutylazin-D5	
059	0.01	D	0.214	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data		
060	0.01	D	0.18	87.7	No	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)		Rec. from validation data		
061	0.01	D	0.2	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP	
062	0.01	D	0.256	93	No	MeOH			10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		LC-MS/MS (QQQ)	Two columns	Rec. from same batch		
063	0.01	D	0.204	94.7	Yes	AcN			2	No	DSPE	Matrix matched - Multiple level	ECD		LC-ITQ	Rec. from same batch	IPP	
064	0.01	D	0.24	111	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
065	0.01	D	0.218	102	No	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	IPP	
066	0.01	D	0.225	91	No	Acetone	DCM		15	No		Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	IPP	
067	0.01	D	0.236	93.5	No	MeOH			10	Yes	DSPE	Matrix matched - Single level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	IPP	
068	0.01	D	0.2	87	Yes	MeOH			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from validation data	IPP	
069	0.01	D	0.2	118	No	AcN	DCM		10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
070	0.01	D	0.17	100	No	AcN			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	IPP	
071		NA																
072	0.01	D	0.167	101	No	AcN			10	No	SPE	Matrix matched - Multiple level			GC/MS/MS ITD	Rec. from same batch		
073	0.01	D	0.178	72	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC/MS/MS (QQQ)	Rec. from same batch		
074	0.01	D	0.186	98	No	AcN			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
075	0.01	D	0.214	103	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	IPP, Pirimicarb-D6	
076	0.01	D	0.24	91.1	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
077	0.01	D	0.27	-	No	EIOAc			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	Fenclorpirifos	
078	0.01	D	0.133	110	No	AcN	DCM		7.5	No		Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	IPP	
079	0.01	D	0.161	97	No	AcN			10	No	GPC	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	PCB 31	
080	0.01	D	0.207	75.6	No	Acetone	EIOAc	Cyclohexane	50	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch		
081		NA																
082	0.01	D	0.232	100	No	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
083	0.005	D	0.237	106	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
084	0.01	D	0.052	60	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition		
085	0.01	D	0.288	70-120	No	EIOAc			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
086	0.02	D	0.2	95	No	Toluene	Isopropanol		25	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch		
087		NA																
088	0.01	D	0.195	101	No	Acetone	DCM	Petr. Ether	100	No	SPE	Matrix matched - Single level	ECD		Two columns	Rec. from same batch		
089	0.01	D	0.173	91	No	Acetone	DCM	Petr. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	Pirimicarb-D6	
090	0.01	D	0.15	95	No	EIOAc			10	Yes	Filteration	Matrix matched - Single level		MS/MS (QQQ)	LC-Q-TOF	Rec. from validation data		
091	0.01	D	0.2008	96	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch		
092	0.01	D	0.243	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IRIS	
093	0.01	D	0.215	101.7	No	AcN			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10	

APPENDIX 7. Methods used by participants for determining pesticides.

Azoxystrobin																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
094	0.01	D	0.15	110	No	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition		
095	0.005	D	0.22	104	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP	
096	0.01	D	0.179	97	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	TCPP	
097	0.01	D	0.214	100	Yes	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	Linuron-D6	
098	0.01	D	0.1584	76	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch		
099	0.01	D	0.22	102	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Chlorpyrifos-D10	
100	0.01	D	0.166	82	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
101	0.01	D	0.282	102.4	No	AcN			10	No	DSPE	Pure solvent - Single level		MS/MS (QQQ)	GC-MS	Rec. from same batch		
102	0.01	D	0.226	102	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	GC-MS	Rec. from same batch		
103	0.01	D	0.228	113	No	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Phimicarb-D6	
104	0.01	D	0.232	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
105	0.01	D	0.212	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Orbitrap	Rec. from same batch	IRIS	
106	0.01	D	0.15	88	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	IPP	
107	0.01	D	0.23	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch		
108	0.01	D	0.21	111	No	AcN			10.0	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Via Standard addition	IPP	
109	0.01	D	0.22		No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Desmethyn	
110	0.01	D	0.22	80	No	AcN			10	No	DSPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from validation data		
111	0.005	D	0.19	115	No	AcN			5	Yes	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data		
112	0.01	D	0.165	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	Two columns	Rec. from same batch	IPP	
113	0.01	D	0.18	110	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Single level	ECD		Two columns	Rec. from validation data		
114	0.01	D	0.181	86	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
115	NA																	
116	0.04	D	0.148	87.43	No	isopropyl alcohol	Toluene		25	No	SPE	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch		
117	0.02	D	0.133	91.5	No	EIOAc	1,1,1-trichloro-2,2,2-trifluoroethane-Toluene		50	No		Matrix matched - Single level	ECD		Two columns	Rec. from same batch		
118	0.01	D	0.21	125	No	AcN			15	No	DSPE	Pure solvent - Multiple level	ECD	DAD	Two columns	Rec. from same batch		
119	0.01	D	0.23	95.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch		
120	0.01	D	0.279	98.0	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	IPP	
121	0.01	D	0.23	114.9	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch		
122	0.01	D	0.177	82.58	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
123	0.01	D	0.17	93.6	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
124	0.005	D	0.2	90	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
125	0.01	D	0.19	106	No	AcN			10	Yes	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	Tris-(2-chloroethylmethyl)ethylfosfate	
126	0.01	D	0.19	94	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
127	0.01	D	0.233	106	No	AcN			10	Yes	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	IPP	
128	0.01	D	0.232	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
129	0.01	D	0.22	97	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data		
130	0.01	D	0.22	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
131	0.01	D	0.180	87	No	Acetone	MeOH		50	No	SPE	Pure solvent - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from validation data	Fenchlorphos	
132	0.01	D	0.246	100	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	IPP	
133	0.025	D	0.16	85	No	Acetone			50	No	SPE	Pure solvent - Multiple level	ECD		GC-MS	Other pesticide	PCB 44	
134	0.01	D	0.196	79.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch		
135	0.01	D	0.211	97	No	AcN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
136	0.01	D	0.209	82	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP	
137	0.01	D	0.181	101	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP	
138	0.01	D	0.19	100	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from validation data	IPP	
139	0.1	D	0.2	93.4	No	DCM/Acetone			5	No	DSPE	Pure solvent - Single level	ECD		GC/ECD, GC/NPD	Rec. from validation data		

APPENDIX 7. Methods used by participants for determining pesticides.

Azoxystrobin																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
140	0.05	D	0.225	90	No	AcN			10		DSPE	Matrix matched - Single level	Ion trap		LC-MS	Rec. from validation data		
141	0.01	D	0.18	94	No	DCM	Acetone	EIOAc	5	No		Pure solvent - Multiple level	ECD		Two columns	Via Standard addition		
142	0.01	D	0.222	87.8	No	Acetone	DCM		20	No	GPC	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch		
143	0.05	D	0.195	97	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD/NPD		GC-MS/MS (QQQ)	Rec. from same batch		
144	0.05	D	0.215	89	Yes	Acetone	DCM	EIOAc	100	No	GPC	Matrix matched - Multiple level	ECD		LC-MS/MS (QQQ)	Rec. from same batch		
145	0.01	D	0.22	87.2	No	AcN			10	No		Matrix matched - Multiple level	TOF		LC-MS/MS (QQQ)	Rec. from same batch	IPP	
146	0.05	D	0.196	80	No	EIOAc			50	No	GPC	Matrix matched - Multiple level				Rec. from same batch		
147		NA																
148	0.01	D	0.263	110	No	AcN			10	No	DSPE	Matrix matched - Multiple level	M&D		GC-MS	Via Standard addition	PCB 31	
149	0.01	D	0.212	104	No	AcN			10	Yes	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS	Rec. from same batch	IPP	
150	0.01	D	0.21	97.4	No	Acetone	DCM	Petr. Ether	20	No	GPC	Matrix matched - Multiple level	M&D		GC-MS	Rec. from same batch	IPP	
151	0.01	D	0.205		Yes	AcN			10	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)		IPP	
152		NA																
153	0.01	D	0.14	53	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
154	0.01	D	0.178	matrix matched surrogate calibration	No	AcN			10	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)	Not applied	Carbonyl-D7	
155																		
156	0.01	D	0.21	95	Yes	AcN			10	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)	Via Standard addition		
157	0.01	D	0.191	96	No	1% HOAc in MeCN			15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
158	0.01	D	0.22	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	IPP	
159	0.05	D	0.205	94.1	No	AcN			9.952	Yes	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	IPP	
160	0.01	D	0.222	117.5	No	EIOAc			20	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
161	0.01	D	0.222	80	No	Acetone	AcN		10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch		
162		NA																
163	0.01	D	0.238	102	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level			GC-MS/MS (QQQ)	Rec. from same batch		
164	0.01	D	0.40	98	No	AcN			15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
165	0.01	D	0.202	103	No	AcN			10	No		Matrix matched - Multiple level			GC-MS/MS (QQQ)	Rec. from same batch	IPP	
166	0.01	D	0.176	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
167																		
168	0.01	D	0.198	90	Yes				5		SPE	Standard addition	ECD		Two columns	Rec. from validation data		
169	0.01	D	0.191	88.4	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch		
170		NA																
171	0.01	D	0.224	89	No	AcN			10	No	DSPE	Matrix matched - Multiple level	M&D		GC-MS	Rec. from same batch	IPP	
172	0.01	D	0.14	70	No	EIOAc			15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch		
173	0.01	D	0.23	92	No	EIOAc	Cyclohexane		10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data		
174												No Results Submitted						
175	0.01	NA										No Results Submitted						
176												No Results Submitted						
177	0.01	D	0.12	85	No	AcN			10	No	SPE	Matrix matched - Multiple level	M&D		GC-MS	Rec. from same batch		

APPENDIX 7. Methods used by participants for determining pesticides.

Chlorothalonil																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	NA	0.124	99.8	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
003	0.05	D	0.181	85	No	EIOAc			50	No	GPC	Pure solvent - Multiple level	ECD		two columns	Rec. from same batch	IPP
004	0.001	D	0.571	89	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Via Standard addition	IPP
005	0.01	D	0.133	78	No	Acetone	DCM	Petr. Ether	15	No	Filter	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 153
006	0.01	ND															
007	0.01	D	0.126	97	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Phenanthrene-D10
008	0.01	D	0.125	78	No	EIOAc			37.5	No	GPC	Matrix matched - Multiple level	ECD		GC-ITD-MS/MS	Rec. from same batch	IPP
009	0.01	D	0.137	91	No	Acetone	DCM	Petr. Ether	7.5	No		Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
010	0.01	NA															
011	0.01	D	0.15	79	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	IPP
012	0.01	D	0.136	80	No	AcN			10	No		Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	Parathion-methyl,D6
013	0.01	D	0.09	80	Yes	EIOAc			10	No	Liquid/liquid partitioning	Standard addition					
014		NA															
015	0.01	D	0.11	89	No	EIOAc			50	Yes	GPC	Matrix matched - Multiple level	IDT		GC-MS	Rec. from same batch	
016	0.2	D	0.13	100	No	DCM			10	No	GPC	Matrix matched - Multiple level	NPD		GC-MS	Rec. from validation data	
017	0.01	D	0.171	102	No	EIOAc			10	Yes		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.16	79	No	EIOAc			10	No	SPE	Matrix matched - Multiple level	TOF		GC-TOF	Rec. from same batch	IBP
019	0.01	D	0.25	136	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
020	0.01	D	0.182	97	No	Acetone			50	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
021	0.01	D	0.179	110	No	Acetone	DCM	EIOAc	15	No	Liquid/liquid partitioning	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
022	0.02	D	0.161	80	No	AcN			10	Yes		Pure solvent - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	Parathion-ethyl
023		NA															
024	0.01	D	0.192	117	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 28
025	0.01	D	0.112	105.7	No	AcN			10	No		Matrix matched - Multiple level	ECD, NPD		GC-MS	Rec. from same batch	
026	0.01	D	0.261	118	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	IPP
027	0.1	ND															
028	0.01	D	0.201	93	Yes	AcN			10	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	
029	0.01	D	0.222	310 odd	Yes	EIOAc			10	No	DSPE	Standard addition	MS/MS (QQQ)		GC-MS	Via Standard addition	PCB 20
030	0.01	D	0.182	92	Yes	AcN			10	No	DSPE	Standard addition	MSD		GC-MS	Via Standard addition	
031	0.01	D	0.25	159	Yes	Acetone	DCM		15	No		Pure solvent - Multiple level	IDT		GC-MS	Rec. from same batch	IPP
032	0.01	D	0.12	114.4	No	AcN			15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
033	0.01	D	0.21	102	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
034	0.01	D	0.141	83	No	EIOAc			10	Yes	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Trifluralin-D14
035	0.01	D	0.15	75	No	EIOAc			25	No		Matrix matched - Single level	MSD		GC-MS	Rec. from same batch	IPP
036		NA															
037	0.01	D	0.17	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	IPP
038	0.01	D	0.195	75	No	Acetone			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	HCB
039	0.01	D	0.145	86	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
040	0.01	NA															
041	0.01	NA															
042	0.05	D	0.169		No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS		
043	0.01	D	0.565	97	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from same batch	IPP
044	0.01	D	0.13	81	No	Acetone	DCM	Petr. Ether	10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
045		NA															
046	0.01	D	0.172	81.32	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Chlorothalonil																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
047		NA									DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	
048	0.05	D	0.181	88	No	DCM			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Endosulfan lactone
049	0.01	D	0.196	81	No	EIOAc			20	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from same batch	TDGPP
050	0.01	D	0.128	77	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	IPP
051	0.01	D	0.098	93	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	IPMI
052	0.01	D	0.235	97.8	No	AcN			10	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	used spiked blank samples for analyte calibration	
053	0.01	D	0.076	103	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
054	0.01	D	0.129		No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	Bromophos-methyl
055	0.01	D	0.171	68	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
056	0.01	ND															
057	NA	NA															
058	0.01	D	0.169	104	No	AcN			10	Yes	MgSO4+NaCl	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	HCH-gamma-D6
059	0.01	D	0.163	101	No	AcN	Cyclohexane		10	No	DSPE	Matrix matched - Single level	ECD		GC-MS/MS (QQQ)	Rec. from validation data	
060	0.01	D	0.15	79.28	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
061	0.01	D	0.18	113	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
062	0.01	D	0.122	87	No	Acetone	Cyclohexane	EIOAc	75	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
063	0.01	D	0.155	72.2	Yes	AcN			2	No		Matrix matched - Multiple level	ECD		Two columns		
064	0.01	D	0.15	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		Two columns	Rec. from same batch	Bromophos-methyl
065	0.01	D	0.159	107	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	Antiracene
066	0.01	D	0.174	86	No	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.186	54.3	No	AcN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
068	0.01	D	0.1	62	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from validation data	IPP
069	0.01	D	0.15	109	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	IDI		MS/MS (IID)	Rec. from same batch	IPP
070	0.01	D	0.16	103	No	AcN			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	IPP
071	NA	NA															
072	NA	NA															
073	0.01	D	0.218	109	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
074	0.01	D	0.19	109	No	AcN			10	Yes	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
075	0.01	D	0.466	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	IPP, Pirimicarb-D6
076	NA	NA															
077	0.01	D	0.14	93	No	EIOAc			10	Yes	DSPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	Fenchylphos
078	0.01	D	0.135	93	No	Acetone	DCM	Petr. Ether	7.5	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	IPP
079	0.01	D	0.16	72	No	AcN			10	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 31
080	0.005	D	0.174	72	No	Acetone	EIOAc	Cyclohexane	50	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch	
081	NA	NA															
082	0.01	D	0.161	100	No	AcN			10	No	DSPE	Standard addition	MSD		GC-MS	Via Standard addition	
083	0.01	ND	0	0	No												
084	0.01	D	0.052	60	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
085	0.01	D	0.115	70-120	No												
086	0.01	D	0.17	45	Yes	toluene	Isopropanol		25	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	HCH-alpha-D6
087	0.01	D	0.19	100	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Via Standard addition	
088	0.01	D	0.26	83	No	Acetone	DCM	Petr. Ether	100	No	SPE	Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
089	NA	NA															
090	0.05	D	0.11	80	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Phimicarb-D6
091	0.01	D	0.1164	119	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from validation data	
092	0.01	D	0.19	83	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IRIS
093	0.01	D	0.160	101.5	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nicarbazin
094	0.01	D	0.14	106	Yes	Acetone	DCM		15	No		Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	

APPENDIX 7. Methods used by participants for determining pesticides.

Chlorothalonil																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
065	0.01	D	0.18	97	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
066	0.01	D	0.177	51	Yes	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	TPP
067	0.01	D	0.129	75	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-TOF	Rec. from same batch	Tris-(1,3-dichloropropyl)-phosphate
098	0.01	D	0.2184	53	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
092	0.01	D	0.138	61	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	PCB
100		NA															
101	0.01	D	0.175	105.8	No	AcN			10	Yes	DSPE	Pure solvent - Multiple level	IDT			Rec. from same batch	Trichloronate
102	0.01	D	0.3	98	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD			Rec. from same batch	
103	0.01	D	0.187	72	No	AcN			10	Yes	Liquid/liquid partitioning	Standard addition	MS/MS (QQQ)			Rec. from same batch	TPP
104	0.01	D	0.176	106	No	AcN			10	Yes		Matrix matched - Multiple level	MSD		GC-TOF	Rec. from same batch	Chlorpyrifos-D10
105	0.01	D	0.182	100	No	AcN			10	Yes		Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	TPP
106	0.01	D	0.099	63	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
107	0.01	D	0.16	104	No	AcN			10	No	DSPE	Pure solvent - Single level	MSD		GC-MS	Rec. from same batch	TPP
108	0.01	D	0.35	114	No	AcN			10.0	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Via Standard addition	
109	0.01	D	0.2		No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	Dimethyltin
110	0.01	D	0.17	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch	PCB 31
111	0.005	D	0.17	107	No	AcN			5	Yes		Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
112	0.01	D	0.126	70	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	PCB 108
113	0.01	D	0.17	91	No	Acetone	DCM	Petr. Ether	1.5	No	DSPE	Matrix matched - Single level	ECD		Two columns	Rec. from validation data	
114	0.01	D	0.113	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
115	0.01	D	0.138	89.8	Yes	Acetone	DCM	Petr. Ether	1.5	No	SPE	Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
116	0.03	D	0.117	25.65	Yes	Isopropyl alcohol	Toluene		2.5	No		Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
117	0.02	D	0.134	82.5	No	EIOAc	1,1-difluorobutane-toluene		50	No		Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
118	0.01	D	0.113	99	No	AcN			1.5	No	DSPE	Pure solvent - Multiple level	ECD		Two columns	Rec. from same batch	
119	0.01	D	0.15	82.3	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-ECD	Rec. from same batch	TPP
120	0.01	D	0.142	99.7	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
121	0.01	D	0.13	71	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-ECD	Rec. from same batch	
122	0.01	D	0.102	80	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	0.13	89.8	No	Acetone	DCM	Petr. Ether	1.5	No	Liquid/liquid partitioning	Pure solvent - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
124	0.01	D	0.14	88	No	Acetone	DCM	Petr. Ether	1.5	No		Matrix matched - Single level	MSD		GC-MS	Rec. from same batch	
125	0.01	D	0.1	125	No	AcN			10	Yes	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	Tris-(2-chloroethyl)ethylfosfate
126		NA															
127		NA															
128		NA															
129	0.01	D	0.41	95	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from validation data	PCB 52
131	0.01	D	0.174	77	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MSD			Rec. from validation data	Fenchlorphos
132	0.01	D	0.146	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	TPP
133	0.025	D	0.14	90	No	Acetone			50	No	SPE	Pure solvent - Multiple level	ECD		GC-MS	Other pesticide	PCB 44
134	0.01	ND															
135	0.01	D	0.25	67	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level	ECD		GC-MS	Rec. from same batch	Bromophos-methyl
136	0.01	D	0.073	69	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
137	0.01	D	0.104	111	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
138	0.01	D	0.15	85	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from validation data	TPP
139	0.02	D	0.19	98.4	No	DCM/Acetone			5	No	DSPE	Pure solvent - Single level	ECD		GC/ECD, GC/NPD	Rec. from validation data	

APPENDIX 7. Methods used by participants for determining pesticides.

Chlorothalonil																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
140	0.01	D	0.212	85	No	AcN			10		DSPE	Matrix matched - Single level	Ion trap			Rec. from validation data	
141		NA															
142	0.01	D	0.204	127	No	Acetone	DCM	EIOAc	20	No	GPC	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
143	0.01	D	0.180	92	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD/NPD		GC-MS/MS (QQQ)	Rec. from same batch	
144	0.05	D	0.2	93	Yes	Acetone	DCM	EIOAc	100	No	GPC	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
145	0.01	D	0.16	118	No	Acetone	DCM	Petr. Ether 40-60	6	No		Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
146	0.05	D	0.176	106	No	EIOAc			6	No	GPC	Matrix matched - Multiple level	IDT		GC-IDF	Rec. from same batch	
147	0.01	D	0.126	87	No	Acetone	DCM		7.5	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	IPP
148	0.01	D	0.112	70	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Via Standard addition	PCB 31
149	0.01	D	0.052	73	No	AcN			10	Yes		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	IPP
150	0.01	D	0.15	93.6	No	Acetone	DCM	Petr. Ether	20	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
151	0.01	D	0.17	130	No	AcN			10	No	GPC	Matrix matched - Multiple level	MS/MS ITD		MS/MS ITD	Rec. from same batch	IPP
152	0.03	D	0.15	90	No	Acetone	DCM	Petr. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
153	0.01	ND															
154	0.01	D	0.17		No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Not applied	IPP
155												Participation Cancelled					
156	0.01	D	0.17	95	Yes	AcN			10				MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	
157		NA															
158	0.01	D	0.29	140	No	AcN			10	Yes		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
159	0.02	D	0.061	55.5	Yes	AcN			9.999	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
160	0.01	D	0.14	73	No	EIOAc			20			Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
161	0.01	D	0.211	69	No	Acetone	AcN		10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
162		NA															
163	0.01	D	0.161	81	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	MS/MS (ITD)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
164	0.01	D	0.15	70	No	AcN			15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	
165	0.01	D	0.107	90	No	EIOAc			30		GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Tetrahydroethylene
166	0.01	D	0.178	110	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
167												Participation Cancelled					
168		NA															
169	0.01	D	0.037	84.7	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	PCB 18
170		NA															
171	0.01	D	0.22	70	No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
172	0.01	D	0.115	64	No	EIOAc			15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
173	0.01	D	0.205	94	No	EIOAc	Cyclohexane		10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
174												No Results Submitted					
175	0.01	NA															
176												No Results Submitted					
177	0.01	D	0.099	85	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Chlorpropham																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	1.5	95	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Caffein
002	0.01	D	1.232	97.1	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
003	0.05	D	1.01	101	No	EIOAc			50	No	GFC	Pure solvent - Multiple level	NPD		Two columns	Rec. from same batch	IPP
004	0.001	D	1.84	76	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		Via Standard addition	Rec. from same batch	PCB 153
005	0.01	D	1.81	77	No	Acetone	DCM	Petf. Ether	15	No	Filter	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	Tr(1,3-dichloro-isobutyl)phosphate
006	0.025	D	2.11	58	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Phenanthrene-D10
007	0.01	D	1.804	100	No	ACN			37.5	No	SPE	Matrix matched - Multiple level	MSP		GC-ITD-MS/MS	Rec. from same batch	IPP
008	0.05	D	3.01	95	No	EIOAc					GFC	Matrix matched - Multiple level	NPD		GC-ITD-MS/MS	Rec. from same batch	IPP
009		NA			No				15	No	SPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)		
010	0.01	D	0.76	-	No	ACN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	IPP
011	0.01	D	1.82	107	No	ACN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	Parathion-methyl,D6
012	0.01	D	2.433	80	No	ACN			10	No	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
013	0.01	D	1.45	101	Yes	ACN			10	No	DSPE	Standard addition		MS/MS (QQQ)		Rec. from same batch	
014	0.01	D	2.2	97	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	IDT		LC-MS/MS (QQQ)	Rec. from same batch	
015	0.01	D	1.4	90	No	EIOAc			50	Yes	GFC	Matrix matched - Multiple level	NPD		GC-MS	Rec. from same batch	
016	0.05	D	2.41	100	No	DCM			10	No	GFC	Matrix matched - Multiple level	NPD		GC-MS/MS (QQQ)	Rec. from validation data	
017	0.01	D	1.63	115	No	EIOAc			10	Yes	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IBP
018	0.01	D	1.5	71	No	EIOAc			10	No	SPE	Matrix matched - Multiple level	TOF		Two columns	Rec. from same batch	
019	0.05	D	1.779	98	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level	NPD		GC-MS/MS (QQQ)	Rec. from same batch	Oxendazole
020	0.01	D	1.526	115	No	MeOH			10		Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
021	0.01	D	1.95	102	No	Acetone	DCM	EIOAc	15	No		Pure solvent - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
022	0.01	D	1.56	104	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSP		LC-MS/MS (QQQ)	Rec. from same batch	
023		NA			No				10	No		Matrix matched - Multiple level	MS/MS (QQQ)				PCB 28
024	0.01	D	1.85	105	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	IPP
025	0.01	D	1.399	100.2	No	ACN			10	No	DSPE	Matrix matched - Multiple level	ECD, NPD		GC-MS	Rec. from same batch	
026	0.01	D	2.091	117	No	ACN			12	No	DSPE	Matrix matched - Multiple level	NPD		GC-MS	Rec. from same batch	
027	0.05	D	1.9	103	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSP		GC-MS	Spiked sample	
028	0.01	D	1.59	76	No	ACN			10	No	DSPE	Pure solvent - Multiple level	MSP		GC-MS	Rec. from same batch	
029	0.01	D	1.7	316 add	Yes	EIOAc			10	No	DSPE	Standard addition	MS/MS (QQQ)			Via Standard addition	PCB 20
030	0.01	D	1.653	83	Yes	ACN			10	No	DSPE	Standard addition	MSP			Via Standard addition	
031		NA			No				15	No	DSPE	Matrix matched - Multiple level	MSP		GC-MS	Rec. from same batch	IPP
032	0.01	D	1.46	66.8	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MSP		GC-MS	Rec. from same batch	IPP
033	0.01	D	1.9	62	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MSP		GC-MS	Rec. from same batch	Trifluralin-D14
034	0.05	D	1.512	92	No	EIOAc			10	Yes	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
035	0.01	D	1.92	90	No	ACN			10	No	DSPE	Matrix matched - Single level	MSP		GC-MS/MS (QQQ)	Rec. from same batch	
036	0.05	D	1.59	80	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
037	0.01	D	2.3	90	No	ACN			10	Yes	DSPE	Matrix matched - Single level	MSP		GC-MS/MS (QQQ)	Rec. from same batch	IPP
038	0.01	D	1.29	86	No	Acetone			10	No	SPE	Matrix matched - Multiple level	MSP		GC-MS/MS (QQQ)	Rec. from same batch	IPP
039	0.01	D	1.386	76	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	HCB
040	0.01	NA			No												
041	0.01	NA			No												
042	0.01	D	1.795		No	ACN			10		DSPE	Matrix matched - Multiple level	MSP		GC-MS	Rec. from same batch	IPP
043	0.01	D	1.887	112	No	ACN			10	No	Quenchers without PSA	Matrix matched - Multiple level	TOF		LC-MS/MS (QQQ)	Rec. from same batch	IPP
044	0.01	D	1.27	81	No	Acetone	DCM	Petf. Ether	10	No		Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	IPP
045		NA			No												

APPENDIX 7. Methods used by participants for determining pesticides.

Chlorpropham																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	1.645	90	Yes	ACN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
047	0.01	D	1.873	97	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Diazinon-D10
048	0.05	D	1.84	117	No	DCM			10	Yes	DSPE	Pure solvent - Single level	NPD		GC-MS	Rec. from validation data	Ethion
049	0.01	D	1.779	95	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	1.56	111	No	ACN			15	No		Matrix matched - Single level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
051	0.01	D	1.594	104	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	IPP
052	0.01	D	2.31	119.1	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	IPM
053	0.01	D	1.411	92	No	EIOAc			10	No	GFC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
054	0.01	D	1.754		No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	used spiked blank samples for analyte calibration	
055	0.01	D	1.3	99	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	Bromophos-methyl
056	0.01	D	0.871	88.6	No	EIOAc			25	Yes	DSPE	Matrix matched - Multiple level	NPD		GC-MS	Via Standard addition	
057	0.01	D	1.068	69	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
058	0.01	D	1.967	101	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	HCH-gamma-D6
059	0.01	D	1.970	93	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from validation data	
060		NA															
061	0.01	D	1.6	112	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
062	0.01	D	1.81	106	No	Acetone	Cyclohexane	EIOAc	75	No	GFC	Matrix matched - Multiple level	NPD		GC-MS/MS (QQQ)	Rec. from same batch	
063	0.01	D	1.292	82.66	Yes	ACN			2	No		Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
064	0.01	D	2.42	115	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Bromophos-methyl
065	0.01	D	1.912	93	No	Acetone	DCM	Petf. Ether	15	No		Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	Antiacene
066	0.01	D	1.77	94	No	Acetone	DCM		15	No	GFC	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	1.871	104.5	No	Acetone	Cyclohexane	EIOAc	20	Yes		Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nitrofen, IPP
068	0.01	D	1.9	82	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from validation data	IPP
069		NA															
070	0.01	D	2.2	95	No	ACN			10	No	DSPE	Pure solvent - Single level	NPD		GC-MS	Rec. from validation data	IPP
071		NA															
072	0.01	D	2.593	106.7	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
073	0.01	D	1.45	89	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
074	0.01	D	1.49	80	No	ACN			10	Yes	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
075	0.01	D	2.13	104	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	IPP, Pirimicarb-D6
076	0.01	D	2	76.9	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	IPP
077	0.01	D	1.8	-	No	EIOAc			10	Yes	DSPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	Fenclorpirfos
078	0.01	D	1.54	103	No	Acetone	DCM	Petf. Ether	7.5	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	IPP
079	0.01	D	2.05	91	No	ACN			10	No	GFC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 31
080	0.03	D	2	76.9	No	Acetone	EIOAc	Cyclohexane	50	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch	
081		NA															
082	0.01	D	1.556	100	No	ACN			10	No	DSPE	Standard addition	MS/MS (QQQ)		LC-MS/MS (QQQ)	Via Standard addition	
083	0.006	ND	0	0	No				10								
084		NA															
085	0.01	ND															
086		NA															
087		NA															
088	0.01	D	1.21	89	No	Acetone	DCM	Petf. Ether	100	No	SPE	Matrix matched - Single level	NPD		Two columns	Rec. from same batch	
089	0.01	D	2.5	86	No	Acetone	DCM	Petf. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
090	0.01	D	1.4	93	No	EIOAc			10	Yes	filtration	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Pirimicarb-D6
091	0.01	D	1.366	95	No	ACN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
092	0.01	D	1.555	94	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IRIS
093	0.01	D	1.85	102.0	No	ACN			10	Yes		Matrix matched - Multiple level	MS/MS (QQQ)		LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Chlorpropham																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
060	0.01	D	1.68	112	No	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Via Standard addition	
095	0.05	D	3.2	92	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
096		NA							10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	Linuron-D6
098		NA							10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
099	0.01	D	2.08	66	No	EIOAC			10	No	DSPE	Pure solvent - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
100	0.01	D	1.246	85	No	ACN			10	No	DSPE	Matrix matched - Single level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
101	0.01	D	2.192	126	No	ACN			10	No	DSPE	Pure solvent - Multiple level	IDT	MS/MS (QQQ)	GC-MS	Rec. from same batch	Trichloronate
102	0.01	D	1.7	96	No	ACN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS	Rec. from same batch	
103	0.01	D	1.76	124	No	ACN			10	No	DSPE	Standard addition	TOF	MS/MS (QQQ)	GC-MS	Rec. from same batch	
104	0.01	D	2.64	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
105	0.01	D	1.2	70-120	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Rec. from same batch	IPP
106	0.01	D	1.36	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Rec. from same batch	
107	0.01	D	2.3	110	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Rec. from same batch	
108	0.01	D	1.39	86	No	ACN			10.0	No	DSPE	Matrix matched - Single level	MSD	MS/MS (QQQ)	GC-MS	Rec. from same batch	IPP
109	0.01	D	1.5		No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Via Standard addition	Deemethyn
110	0.01	D	1.7	90	No	ACN			10	No	DSPE	Matrix matched - Multiple level	TOF	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
111	0.005	D	1.7	112	No	ACN			5	Yes	DSPE	Standard addition	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	PCB 31
112	0.01	D	1.545	80	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	PCB 108
113		NA							10		DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
114	0.01	D	1.13	77	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
115		NA							25	No		Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
116	0.04	D	2.188	94.29	No	EIOAC			25	No		Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
117		NA							15	No		Pure solvent - Multiple level	NPD		GC-MS	Rec. from same batch	
118	0.01	D	1.49	92	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS	Rec. from same batch	IPP
119	0.01	D	1.8	98.6	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS	Rec. from same batch	
120	0.01	D	1.72	96.0	No	ACN			10	No	DSPE	Pure solvent - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Rec. from validation data	
121	0.01	D	1.7	89.6	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Rec. from same batch	
122		NA							10		DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	1.2	95.8	No	Acetone	DCM	Petf. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
124	0.01	D	2	94	No	Acetone	DCM	Petf. Ether	15	No	DSPE	Standard addition	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS	Rec. from same batch	
125	0.01	D	1.84	76	No	ACN			10	Yes	DSPE	Standard addition	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS/MS (QQQ)	Via Standard addition	Tri-(2-chloro(4-chloromethyl)ethyl)fosfata
126		NA							10		DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
127	0.01	D	1.74	85	No	ACN			10		DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	
128		NA							10		DSPE	Pure solvent - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
129	0.01	D	1.7	91	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
130	0.01	D	1.88	99	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
131	0.01	D	1.25	95	No	Acetone	MeOH		50	No	SPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from validation data	Fenclorophos
132	0.01	D	1.85	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	IPP
133		NA							10		DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
134	0.01	D	1.503	72	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	IPP
135	0.01	D	1.67	102	No	ACN			10	Yes	DSPE	Pure solvent - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
136	0.01	D	1.644	94	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Rec. from same batch	IPP
137	0.01	D	1.51	102	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	IPP
138	0.01	D	1.72	93	No	ACN			10	No	DSPE	Matrix matched - Single level	MSD	MS/MS (QQQ)	GC-MS	Rec. from validation data	IPP
139	0.05	D	1.7	103.4	No	DCM/Acetone			5	No	DSPE	Pure solvent - Single level	NPD		GC/ECD, GC/NPD	Rec. from validation data	
140	0.05	D	2.1	88	No	ACN			10	No	DSPE	Matrix matched - Single level	ion trap		Two columns	Rec. from validation data	
141	0.05	D	1.5	92	No	DCM	Acetone		5	No	DSPE	Pure solvent - Multiple level	NPD		Two columns	Rec. from validation data	

APPENDIX 7. Methods used by participants for determining pesticides.

Chlorpropham																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
142	0.01	D	1.16	76.2	No	Acetone	DCM	EIOAc	20	Yes	GPC	Matrix matched - Multiple level	NPD		GC-MS/MS (QQQ)	Rec. from same batch	
143	0.01	D	1.44	98	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
144		NA															
145	0.01	D	1.2	119.9	No	Acetone	DCM	Petf. Ether 40:60	12	No	DSPE	Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
146	0.05	D	1.58	105	No	EIOAc			10	Yes	DSPE	Matrix matched - Multiple level	ID1		GC-TOF	Rec. from same batch	
147	0.02	D	1.727	80	No	Acetone	DCM		7.5	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
148	0.01	D	0.998	83	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	PCB 31
149	0.01	D	1.677	99	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	GC-MS/MS, Ion trap		GC-MS/MS (QQQ)	Rec. from same batch	IPP
150	0.01	D	1.6	94.6	No	Acetone	DCM	Petf. Ether	20	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
151	0.01	D	2.32		Yes	ACN			10	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)		
152		NA															
153	0.01	D	0.796	89	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
154	0.01	D	1.87	matched surrogate calibration	No	ACN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Not applied	IPP
155																	
156	0.01	D	1.9	95	Yes	ACN			10			Participation Cancelled	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	
157		NA															
158	0.01	D	2	80	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	IPP
159		NA															
160	0.01	ND															
161	0.01	D	1.81	98	No	Acetone	ACN		10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level	NPD		GC-MS	Rec. from same batch	
162		NA															
163	0.01	D	1.74	90	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (ITD)	Rec. from same batch	
164	0.01	D	2.1	108	No	ACN			15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
165	0.05	D	1.32	92	No	EIOAc			30	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Tetraphenylethylene
166	0.01	D	1.322	98	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
167												Participation Cancelled					
168	0.01	D	1.48	80	Yes				5		SPE	Standard addition	ECD		Two columns	Rec. from validation data	
169		NA															
170		NA															
171	0.01	D	1.62	77	No	ACN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
172	0.01	D	1.793	86	No	EIOAc			15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
173	0.01	D	1.752	93	No	EIOAc	Cyclohexane		10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
174		NA										No Results Submitted					
175		NA															
176		NA										No Results Submitted					
177		NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Cypermethrin																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPIC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.078	99	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Caffein
002	0.01	ND															
003		NA															
004	0.005	ND	0.141	86	No	NA											
005	0.01	D	0.106	105	No	Acetone	DCM	Petr. Ether	15	No	Filter	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 153
006	0.01	ND															
007	0.01	D	0.085	95	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Phenanthrene-D10
008	0.02	D	0.102	95	No	EIOAC			37.5	No	GPC	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
009	0.01	D	0.069	75	No	Acetone	DCM	Petr. Ether	7.5	No		Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
010	0.05	D	0.03	-	No	AcN			15	No	SPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
011	0.01	D	0.065	109	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	TPP
012	0.01	D	0.084	80	No	AcN			10	No		Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	Parathion-methyl-D6
013	0.01	D	0.07	117	Yes	AcN			10	No	DSPE	Standard addition					
014		NA															
015	0.01	D	0.09	88	No	EIOAC			50	Yes		Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
016		NA															
017	0.01	D	0.113	102	No	EIOAC			10	Yes	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.1	74	No	EIOAC			10	No		Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from same batch	TBP
019	0.02	D	0.098	80	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
020	0.01	D	0.124	98	No	Acetone			50	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
021	0.01	D	0.112	95	No	Acetone	DCM	EIOAC	15	No		Pure solvent - Multiple level	MS/MS (QQQ)			Rec. from same batch	
022	0.02	D	0.088	85	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	
023		NA															
024	0.01	D	0.106	101	No	EIOAC			10	No		Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	PCB 28
025	0.01	D	0.109	99.5	No	AcN			10	No		Matrix matched - Multiple level	ECD, NPD		GC-MS	Rec. from same batch	
026	0.01	D	0.175	112.2	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	TPP
027	0.1	D	0.22	107	No	AcN			12	No		Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
028	0.01	D	0.1	102	No	AcN			10	No		Pure solvent - Multiple level			MS/MS (QQQ)	Rec. from same batch	
029	0.01	D	0.12	Stodd	Yes	EIOAC			10	No	DSPE	Standard addition	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
030	0.01	D	0.096	87	Yes	AcN			10		DSPE	Standard addition	MSD			Via Standard addition	PCB 20
031		NA															
032	0.01	D	0.04	83.9	No	AcN			15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
033	0.01	D	0.064	66	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
034	0.05	D	0.094	93	No	EIOAC			10	Yes	SPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	Trifluralin-D14
035	0.01	D	0.112	87	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	TPP
036	0.05	D	0.097	99	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
037	0.01	D	0.15	105	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.087	75	No	Acetone			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	TPP
039	0.01	D	0.115	85	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB
040	0.01	NA															
041	0.01	NA															
042	0.02	D	0.128		No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS		
043	0.01	D	0.124	104	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level	TOF		LC-MS/MS (QQQ)	Rec. from same batch	TPP
044	0.01	D	0.1	84	No	Acetone	DCM	Petr. Ether	10	No		Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
045		NA															
046	0.01	D	0.078	81.64	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Cypermethrin																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
047	0.005	D	0.097	90	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	Cypermethrin-D6
048	0.05	D	0.104	82	No	DCM			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	Endosulfan lactone
049	0.01	D	0.144	80	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	0.078	103	No	ACN			15	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from same batch	TOC/PP
051	0.01	D	0.089	76	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	TPP
052	0.01	D	0.13	100.6	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	IRIS
053	0.01	D	0.063	117	No	EIOAC			10	No	GFC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
054	0.01	D	0.13		No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Spiked blank samples	
055	0.01	D	0.14	78	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	Bromophos-methyl
056		NA															
057	0.01	D	0.049	93	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
058	0.01	D	0.112	96	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Cypermethrin-D6
059	0.01	D	0.153	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from validation data	
060	0.01	D	0.09	83.81	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	
061	0.01	D	0.12	114	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
062	0.01	D	0.104	83	No	Acetone	Cyclohexane	EIOAC	75	No	GFC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
063	0.01	D	0.105	74.8	Yes	ACN			2			Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
064	0.01	ND															
065	0.01	D	0.093	97	No	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	Anthracene
066	0.01	D	0.137	80	No	Acetone	DCM		15	No		Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.119	100.5	No	Acetone	Cyclohexane	EIOAC	20	Yes	GFC	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nitrofen TPP
068	0.01	D	0.09	54	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from validation data	
069	0.01	D	0.097	104	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	IDT		MS/MS (ID)	Rec. from same batch	TPP
070	0.01	D	0.15	90	No	ACN			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	TPP
071	0.01	D	0.058	103.7	No	ACN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
072	0.01	ND															
073	0.01	D	0.097	70	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	
074	0.01	D	0.1	88	No	ACN			10	Yes	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
075	0.01	D	0.085	73	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	IPP, Pirimicarb-D6
076	0.01	D	0.13	109	No	MeOH	DCM	EIOAC	50	No	GFC	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	Mirex
078	0.01	D	0.097	97	No	Acetone	DCM	Petr. Ether	7.5	No		Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	TPP
079	0.01	D	0.087	92	No	ACN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 31
080	0.02	D	0.135	82.7	No	Acetone	EIOAC	Cyclohexane	50	No	GFC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch	
081	0.01	D	0.104	70.55	No	ACN			10	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Via Standard addition	Triphenylmethan TPP
082		NA															
083	0.01	ND	0	0	No				10	No							
084	0.01	D	0.061	60	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
085	0.01	D	0.082	70-120	No												
086	0.01	D	0.13	103	No	toluene	Isopropanol		25	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	HCH-alpha-D6
087	0.01	D	0.08	83	Yes	ACN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Via Standard addition	
088	0.01	D	0.113	93	No	Acetone	DCM	Petr. Ether	100	No	SPE	Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
089	0.01	D	0.16	88	No	Acetone	DCM	Petr. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
090	0.01	D	0.078	94	No	EIOAC			10	Yes	Filtration	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	Pirithiob-D6
091	0.01	D	0.0763	105	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IRIS
092	0.02	D	0.026	70	No	ACN			10	No	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
093	0.01	D	0.125	97.7	No	ACN			10	Yes					GC-MS	Rec. from same batch	
094	0.01	D	0.05	110	No	Acetone	DCM		15	No		Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	

APPENDIX 7. Methods used by participants for determining pesticides.

Cypermethrin																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
065	0.01	D	0.087	94	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
096	0.01	D	0.098	104	Yes	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	TCPP
067	0.01	D	0.112	102	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Tris-(1,3-dichloroisopropyl)-phosphate
098	0.01	D	0.1293	79	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	PCB
099	0.01	D	0.103	78	No	EtOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	Chlorpyrifos-D10
100	0.01	D	0.076	82	No	AGN			10	No	DSPE	Matrix matched - Single level	IT/MS/MS		GC-MS	Rec. from same batch	Trichloronate
101	0.05	D	0.145	130	No	AGN			10	No	DSPE	Pure solvent - Multiple level	IDT		GC-MS	Rec. from same batch	
102	0.01	D	0.119	105	No	AGN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
103	0.01	D	0.09	100	No	AGN			10	No	DSPE	Standard addition	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
104	0.01	D	0.114	104	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-TOF	Rec. from same batch	Mirex
105	0.01	D	0.112	70-120	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
106	0.01	D	0.08	96	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
107	0.01	D	0.078	87	No	AGN			10	No	DSPE	Pure solvent - Single level	IDT		GC-MS	Rec. from same batch	TPP
108	0.01	D	0.098	71	No	AGN			10.0	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Via Standard addition	
109	0.01	D	0.14		No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS		Desmefryn
110	0.01	D	0.11	75	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS		
111	0.005	D	0.11	115	No	AGN			5	Yes	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	PCB 31
112	0.01	D	0.12	80	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from validation data	PCB 108
113	0.01	D	0.11	89	No	Acetone	DCM	Petr. Ether	1.5	No	DSPE	Matrix matched - Single level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
114	0.01	D	0.084	70	No	AcN			10	No	DSPE	Matrix matched - Single level	ECD		GC-MS/MS (QQQ)	Rec. from validation data	
115	0.01	D	0.09	93.6	Yes	Acetone	DCM	Petr. Ether	1.5	No	DSPE	Matrix matched - Single level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
116	0.008	D	0.093	101.16	No	isopropylalcohol	Toluene		2.5	No	SPE	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
117	0.02	D	0.076	86	No	EtOAc	n-methylpentane-toluene		50	No		Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
118	0.01	D	0.109	75	No	AcN			1.5	No	DSPE	Pure solvent - Multiple level	ECD		GC-MS	Rec. from same batch	
119	0.01	D	0.12	90.3	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
120	0.01	D	0.103	84.0	No	AGN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
121	0.01	D	0.11	100.8	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
122	0.01	D	0.307	90	No	EtOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	0.065	92.9	No	Acetone	DCM	Petr. Ether	1.5	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
124	0.02	D	0.12	98	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Tris-(2-chloroethyl)ethylphosphate
125	0.01	D	0.11	98	No	AcN			10	Yes	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	TPP
126	0.01	D	0.12	75	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
127	0.01	D	0.108	145	Yes	AGN			10	No	DSPE	Standard addition	MSD		GC-MS	Rec. from same batch	TPP
128	0.01	D	0.11	101	No	AGN			10	No	DSPE	Matrix matched - Single level	ECD		GC-MS	Rec. from same batch	PCB 198
129	0.01	D	0.12	92	No	AGN			10	No	DSPE	Pure solvent - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from validation data	
130	0.01	D	0.13	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
131	NA																
132	0.01	D	0.122	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	TPP
133	0.025	D	0.071	80	No	Acetone			50	No	SPE	Pure solvent - Multiple level	ECD		GC-MS	Other pesticide	PCB 44
134	0.01	D	0.077	70.4	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
135	0.01	D	0.126	122	Yes	AGN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
136	0.01	D	0.046	97	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
137	0.01	D	0.062	88	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
138	0.01	D	0.16	93	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from validation data	TPP

APPENDIX 7. Methods used by participants for determining pesticides.

Cypermethrin																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
139	0.03	D	0.12	80.3	No	n-Hexane/diethyl ether			5	No	DSPE	Pure solvent - Single level	ECD		GC/ECD	Rec. from same batch	
140	0.05	D	0.14	85	No	AcN			10		DSPE	Matrix matched - Single level	ion trap		Two columns	Rec. from validation data	
141	0.01	D	0.12	115	No	DCM	Acetone		5	No		Pure solvent - Multiple level	ECD		Two columns	Rec. from validation data	
142	0.01	D	0.105	103.2	No	Acetone	DCM	EIOAc	20	No	GPC	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
143	0.01	D	0.106	93	No	Acetone	DCM	EIOAc	20	No	Liquid/Liquid partitioning	Matrix matched - Multiple level	ECD/NPD		GC-MS/MS (QQQ)	Rec. from same batch	
144	0.05	D	0.147	80	Yes	Acetone	DCM	EIOAc	100	No	GPC	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
145	0.01	D	0.07	81.5	No	Acetone	DCM	Petr. Ether 40-60	6	No		Matrix matched - Multiple level	ECD		GC-TOF	Rec. from same batch	
146	0.05	D	0.082	77	No	EIOAc	DCM		50	No	GPC	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	TPP
147	0.02	D	0.088	82	No	Acetone	DCM		7.5	No	Liquid/Liquid partitioning	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	PCB 31
148	0.01	D	0.12	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from validation data	
149	0.01	D	0.088	105	No	AcN	DCM	Petr. Ether	20	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
150	0.02	D	0.13	93.2	No	Acetone	DCM		20	No	GPC	Matrix matched - Multiple level	MS/MS I/D		MS/MS I/D	Rec. from same batch	TPP
151	0.01	D	0.079	120	No	AcN			10	No		Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
152	0.05	D	0.1	81	No	Acetone	DCM	Petr. Ether	15	No	Liquid/Liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
153	0.01	D	0.026	107	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
154	0.01	D	0.09		No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Not applied	TPP
155																	
156	0.01	D	0.08	95	Yes	AcN			10				MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	
157	0.01	D	0.0736	87	No	EIOAc			15			Matrix matched - Multiple level	GC-IT-MS/MS		GC-IT-MS/MS	Rec. from same batch	
158	0.01	D	0.092	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
159	0.05	D	0.103	91.4	No	AcN			9.999	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
160	0.02	D	0.078	91	No	EIOAc			20			Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
161	0.01	D	0.093	89	No	Acetone	AcN		10	Yes	Liquid/Liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
162		NA															
163	0.01	D	0.045	85	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	ECD		GC-MS/MS (I/D)	Rec. from same batch	
164	0.01	D	0.12	70	No	AcN			15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	TPP
165	0.05	D	0.0694	90	No	EIOAc			30		GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Tetrahydroethylene
166	0.01	D	0.096	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
167																	
168	0.01	D	0.11	87	Yes	AcN			5		SPE	Standard addition	ECD		Two columns	Rec. from validation data	
169	0.01	D	0.137	108.15	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		MS/MS (QQQ)	Rec. from same batch	PCB 18
170	0.01	D	0.037	120	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (I/D)		MS/MS (I/D)	Via Standard addition	
171	0.01	D	0.104	105	No	AcN			20		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
172	0.01	D	0.079	88	No	EIOAc			15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
173	0.01	D	0.108	95	No	EIOAc	Cyclohexane		10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
174												No Results Submitted					
175	0.01	NA															
176												No Results Submitted					
177	0.01	D	0.194	85	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Diazinon																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.17	92	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Caffein
002	0.01	D	0.188	88.3	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
003	0.02	D	0.111	67	No	EIOAc			50	No	GFC	Pure solvent - Multiple level	NPD		Two columns	Rec. from same batch	
004	0.001	D	0.254	93	No	AcN			10	No	Filter	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Via Standard addition	TPP
005	0.01	D	0.185	82	No	Acetone	DCM	Petr. Ether	15	No	Filter	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 153
006	0.01	D	0.34	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	Tri-(1,3-dichloro-isopropyl)phosphate
007	0.01	D	0.193	105	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Phenanthrene-D10
008	0.01	D	0.171	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level	FPD		GC-ITD-MS/MS	Rec. from same batch	TPP
009	0.01	D	0.166	86	No	Acetone	DCM	Petr. Ether	7.5	No	SPE	Matrix matched - Single level	NPD		Two columns	Rec. from same batch	
010	0.01	D	0.25	-	No	AcN			15	No	SPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
011	0.01	D	0.18	88	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	TPP
012	0.01	D	0.172	80	No	AcN			10	No	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	Parathion-methyl-D6
013	0.01	D	0.13	105	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
014	0.01	D	0.27	97	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	IDT		GC-MS/MS (QQQ)	Rec. from same batch	
015	0.01	D	0.17	91	No	EIOAc			50	Yes	GFC	Matrix matched - Multiple level	NPD		GC-MS	Rec. from validation data	
016	0.04	D	0.28	100	No	DCM			10	No	GFC	Matrix matched - Multiple level	NPD		GC-MS/MS (QQQ)	Rec. from same batch	
017	0.01	D	0.1787	103	No	EIOAc			10	Yes	SPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
018	0.01	D	0.18	93	No	EIOAc			10	No	SPE	Matrix matched - Multiple level	TOF		Two columns	Rec. from same batch	
019	0.01	D	0.182	86	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	NPD		GC-MS/MS (QQQ)	Rec. from same batch	
020	0.01	D	0.237	97	No	Acetone			50	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
021	0.01	D	0.31	94	No	Acetone			15	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
022	0.01	D	0.218	112	No	AcN	DCM	EIOAc	10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	
023	0.01	D	0.208	91.1	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
024	0.01	D	0.238	102	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
025	0.01	D	0.155	98.5	No	AcN			10	No	DSPE	Matrix matched - Multiple level	NPD		GC-MS	Rec. from same batch	
026	0.01	D	0.254	96.4	No	AcN			10	No	DSPE	Matrix matched - Multiple level	NPD		GC-MS	Rec. from same batch	
027	0.05	D	0.18	77	No	AcN			12	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	PCB 28
028	0.01	D	0.176	97	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
029	0.01	D	0.21	Standard	Yes	EIOAc			10	No	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
030	0.01	D	0.195	95	Yes	AcN			10	No	DSPE	Standard addition	MSD		GC-MS/MS (QQQ)	Via Standard addition	PCB 20
031	0.01	D	0.28	72	No	Acetone	DCM		15	No	DSPE	Standard addition	IDT		GC-MS/MS (QQQ)	Rec. from validation data	
032	0.01	D	0.15	77.1	No	AcN			15	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
033	0.01	D	0.19	95	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
034	0.01	D	0.171	91	No	EIOAc			10	Yes	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Trifluridin-D14
035	0.01	D	0.253	98	No	AcN			10	No	DSPE	Matrix matched - Single level	FPD		GC-MS/MS (QQQ)	Rec. from same batch	TPP
036	0.01	D	0.184	88	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
037	0.01	D	0.28	108	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	TPP
038	0.01	D	0.221	86	No	Acetone			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
039	0.01	D	0.165	89	No	Acetone	DCM	Petr. Ether	15	No	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	HCB
040	0.01	NA															
041	0.01	NA															
042	0.01	D	0.197		No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
043	0.01	D	0.266	77	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from same batch	TPP
044	0.01	D	0.17	78	No	Acetone	DCM	Petr. Ether	10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
045	0.01	D	0.31	65	Yes	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Diazinon																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	0.161	89.11	Yes	AGN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
047	0.005	D	0.191	92	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Diazinon-D10
048	0.05	D	0.183	105	No	DCM			20	No	DSPE	Pure solvent - Single level	NPD		GC-MS	Rec. from validation data	Ethion
049	0.01	D	0.164	83	No	Acetone			15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TOCPP
050	0.01	D	0.156	96	No	AGN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
051	0.01	D	0.193	96	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	PCB 209
052	0.01	D	0.295	224.3	Yes	AGN			10	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
053	0.01	D	0.128	113	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Spiked blank samples	
054	0.01	D	0.195		No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	Bromophos-methyl
055	0.01	D	0.198	110	No	AGN			25	No	DSPE	Matrix matched - Multiple level	NPD		GC-MS	Via Standard addition	
056	0.01	D	0.095	95.3	No	EIOAc			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
057	0.01	D	0.129	82	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Diazinon-D10
058	0.01	D	0.202	98.7	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from validation data	
059	0.01	D	0.224	94	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from validation data	
060	0.01	D	0.19	86.98	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
061	0.01	D	0.15	97	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.192	113	No	Acetone	Cyclohexane	EIOAc	7	No	GPC	Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
063	0.01	D	0.204	106.9	Yes	AGN			2	No	DSPE	Matrix matched - Multiple level	MSD		Two columns	Rec. from same batch	Bromophos-methyl
064	0.01	D	0.19	105	No	AGN			15	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	TPP
065	0.01	D	0.22	100	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	FPD		GC-MS/MS (QQQ)	Rec. from same batch	
066	0.01	D	0.225	92	No	Acetone	DCM		20	No	GPC	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nitrofen, TPP
067	0.01	D	0.196	102.8	No	Acetone	Cyclohexane	EIOAc	10	Yes	DSPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from validation data	TPP
068	0.01	D	0.21	75	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level	ID1		MS/MS (IITD)	Rec. from same batch	TPP
069	0.01	D	0.19	95	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Pure solvent - Single level	NPD		GC-MS	Rec. from validation data	TPP
070	0.01	D	0.17	89	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	TPP
071		NA															
072	0.01	D	0.163	96.3	No	AGN			10	No	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC/MS/MS IITD	Rec. from same batch	
073	0.01	D	0.17	91	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
074	0.01	D	0.2	117	No	AGN			10	Yes	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
075	0.01	D	0.229	101	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP, Pirimicarb-D6
076	0.01	D	0.24	88.8	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
077	0.01	D	0.11	-	No	EIOAc			10	Yes	DSPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	Fenchiothios
078	0.01	D	0.212	106	No	Acetone	DCM	Petr. Ether	7.5	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
079	0.01	D	0.186	97	No	AGN			10	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 31
080	0.005	D	0.228	81.4	No	Acetone	EIOAc		50	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch	
081	0.01	D	0.201	91.99	No	AGN			10	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Via Standard addition	Triphenylmethan, TPP
082	0.005	D	0.197	100	No	AGN			10	No	DSPE	Standard addition			LC-MS/MS (QQQ)	Via Standard addition	
083	0.005	D	0.229	102	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
084	0.01	D	0.15	95	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
085	0.01	D	0.178	70.120	No				10	No	DSPE	Matrix matched - Multiple level					
086	0.02	D	0.22	123	No	toluene	Isopropanol		25	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
087	0.01	D	0.13	89	Yes	AGN			10	No	DSPE	Matrix matched - Single level	ECD		GC-MS	Via Standard addition	HCH- α / β -D6
088	0.01	D	0.217	99	No	Acetone	DCM	Petr. Ether	100	No	DSPE	Matrix matched - Single level	NPD		Two columns	Rec. from same batch	
089	0.01	D	0.206	85	No	Acetone	DCM	Petr. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
090	0.01	D	0.14	102	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level	MSD		MS/MS (QQQ)	Rec. from same batch	Primicarb-D6
091	0.01	D	0.1814	101	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-Q-TOF	Rec. from validation data	
092	0.01	D	0.192	100	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IRIS
093	0.01	D	0.217	98.0	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Diazinon																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
094	0.01	D	0.18	110	No	Acetone			15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
095	0.01	D	0.36	107	No	AcN	DCM		10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
096	0.01	D	0.26	82	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	Triphenylmethan
097	0.01	D	0.205	95	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch	
098	0.01	D	0.4355	96	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch	
099	0.01	D	0.223	85	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Chlorpyrifos-D10
100	0.01	D	0.146	82	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Trichloronate
101	0.01	D	0.232	97.1	No	AcN			10	No	DSPE	Pure solvent - Multiple level	IDT		GC-MS	Rec. from same batch	
102	0.01	D	0.23	97	No	AcN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
103	0.01	D	0.233	86	No	AcN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
104	0.01	D	0.237	95	No	AcN			10	No	DSPE	Standard addition	MS/MS (QQQ)		LC-Q-TOF	Rec. from same batch	Primiticarb-D6
105	0.01	D	0.225	84	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
106	0.01	D	0.202	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
107	0.01	D	0.23	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
108	0.01	D	0.22	107	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
109	0.01	D	0.36		No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Desmethyl
110	0.01	D	0.21	106	No	AcN			10	No	DSPE	Matrix matched - Multiple level	TOF		LC-MS/MS (QQQ)	Rec. from validation data	
111	0.005	D	0.2	93	No	AcN			5	Yes	DSPE	Standard addition	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from validation data	PCB 31
112	0.01	D	0.16	80	No	AcN			10	Yes	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
113	0.01	D	0.2	92	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
114	0.01	D	0.077	70	Yes	AcN			10	No	DSPE	Pure solvent - Multiple level	FPD		GC-MS/MS (QQQ)	Rec. from same batch	
115	0.01	D	0.207	83.8	Yes	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
116	0.01	D	0.218	101.35	No	EIOAc			25	No	DSPE	Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
117	0.02	D	0.195	115	No	EIOAc			50	No	DSPE	Matrix matched - Single level	NPD		Two columns	Rec. from same batch	
118	0.01	D	0.187	85	No	AcN			15	No	DSPE	Pure solvent - Multiple level	NPD		GC-MS	Rec. from same batch	
119	0.01	D	0.22	95.1	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-PPPD	Rec. from same batch	IPP
120	0.01	D	0.223	78.0	No	AcN			10	No	DSPE	Matrix matched - Multiple level	plpfd		GC-MS	Rec. from same batch	
121	0.01	D	0.2	103.2	No	AcN			10	No	DSPE	Pure solvent - Multiple level	ECD		GC-MS	Rec. from same batch	Tris-(1,3-dichloropropyl)-phosphate
122	0.01	D	0.143	81.12	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	0.16	92.5	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
124	0.005	D	0.2	94	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
125	0.01	D	0.21	78	No	AcN			10	Yes	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	Tris-(2-chloroethyl)ethylphosphate
126	0.01	D	0.17	75	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	IPP
127	0.01	D	0.23	101	No	AcN			10	Yes	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
128	0.01	D	0.218	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
129	0.01	D	0.21	97	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from validation data	
130	0.01	D	0.23	88	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
131	0.01	D	0.172	89	No	Acetone	MeOH		50	No	SPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from validation data	Fenclorophos
132	0.01	D	0.249	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	IPP
133	0.01	D	0.137	80	No	Acetone			50	No	SPE	Pure solvent - Multiple level	ECD		GC-MS	Other pesticide	PCB 44
134	0.01	D	0.167	81.8	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	IPP
135	0.01	D	0.208	127	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	IPP
136	0.01	D	0.135	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
137	0.01	D	0.162	100	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP
138	0.01	D	0.19	89	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from validation data	IPP
139	0.01	D	0.2	102.6	No	DCM/Acetone			5	No	DSPE	Pure solvent - Single level	NPD		GC/ECD, GC/NPD	Rec. from validation data	
140	0.01	D	0.255	91	No	AcN			10	No	DSPE	Matrix matched - Single level	ion trap		LC-MS	Rec. from validation data	

APPENDIX 7. Methods used by participants for determining pesticides.

Diazinon																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
141	0.01	D	0.19	74	No	DCM	Acetone	EIOAc	5	No	GPC	Pure solvent - Multiple level	NPD		Two columns	Rec. from validation data	
142	0.01	D	0.21	94.2	No	Acetone	DCM	EIOAc	20	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
143	0.01	D	0.195	97	No	AcN	DCM	EIOAc	100	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
144	0.01	D	0.2	102	No	Acetone	DCM	EIOAc	100	No	GPC	Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
145	0.01	D	0.17	109.4	No	Acetone	DCM	Petr. Ether 40-60	12	No	GPC	Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	TPP
146	0.02	D	0.178	76	No	EIOAc	DCM	Petr. Ether 40-60	50	No	GPC	Matrix matched - Multiple level	TOP		GC-MS	Rec. from same batch	TPP
147	0.01	D	0.217	85	No	Acetone	DCM	Petr. Ether 40-60	7.5	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	PCB 31
148	0.01	D	0.186	75	No	AcN	DCM	Petr. Ether 40-60	10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from validation data	TPP
149	0.01	D	0.189	86	No	AcN	DCM	Petr. Ether 40-60	10	Yes	DSPE	Matrix matched - Multiple level	FPD		GC-MS	Rec. from same batch	TPP
150	0.01	D	0.18	93.1	No	Acetone	DCM	Petr. Ether 40-60	20	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
151	0.01	D	0.161	80	No	AcN	DCM	Petr. Ether 40-60	10	No	GPC	Matrix matched - Multiple level	MS/MS ITD		MS/MS ITD	Rec. from same batch	TPP
152	0.02	D	0.17	78	No	Acetone	DCM	Petr. Ether 40-60	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level	NPD		GC-MS	Rec. from same batch	
153	0.01	D	0.098	96	No	EIOAc	DCM	Petr. Ether 40-60	10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
154	0.01	D	0.25	matrix matched surrogate calibration	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Not applied	TPP
155	0.01	D	0.2	95	Yes	AcN			10			Participation Cancelled	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	
156	0.01	D	0.135	76	No	EIOAc			15			Matrix matched - Multiple level	GC-IT-MS/MS		GC-IT-MS/MS	Rec. from same batch	
157	0.01	D	0.2	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
158	0.01	D	0.15	85.9	No	AcN			9.999	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
159	0.01	D	0.18	70	No	EIOAc			20			Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
160	0.01	D	0.276	123	No	Acetone	AcN		10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level	FPD		GC-MS	Rec. from same batch	
161	0.01	D	0.24	80-120	No	AcN			15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data	
162	0.01	D	0.246	108	No	Acetone	DCM	Petr. Ether 40-60	15	No	DSPE	Matrix matched - Multiple level	MSD		MS/MS (QQQ)	Rec. from same batch	
163	0.01	D	0.21	80	No	AcN			15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	TPP
164	0.01	D	0.155	90	No	EIOAc			30	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Tetraphenyl ethylene
165	0.01	D	0.179	80	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
166	0.01	D	0.204	92	Yes	AcN			5			Standard addition	NPD		Two columns	Rec. from validation data	
167	0.01	D	0.193	85	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
168	0.01	D	0.097	70	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (IT)		MS/MS (IT)	Via Standard addition	
169	0.01	D	0.19	80	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
170	0.01	D	0.174	77	No	EIOAc			15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
171	0.01	D	0.217	95	No	EIOAc	Cyclohexane		10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
172	0.01	D	0.217	95	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
173	0.01	NA										No Results Submitted					
174	0.01	NA										No Results Submitted					
175	0.01	NA										No Results Submitted					
176	0.01	D	0.169	85	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Fluopicolide																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	NA	D 0.084	74.5	No	AcN			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
003	0.001	NA	D 0.12	96	No	AcN			10	No	Filter	Matrix matched - Multiple level		MS/MS (QQQ)		Via Standard addition	TPP
004	0.001	D	0.117	110	No	Acetone	DCM	Petf. Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
006	0.01	NA	D 0.098	105	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD	GC-MS	GC-MS	Rec. from same batch	Phenanthrene-D10
008	0.01	D	0.087	84	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD	GC-ITD-MS/MS	GC-ITD-MS/MS	Rec. from same batch	TPP
009	0.01	NA	D 0.15	-	No	AcN			15	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
011	0.01	D	0.093	98	No	AcN			10	No	DSPE	Pure solvent - Multiple level		Orbitrap	LC-Orbitrap	Rec. from validation data	TPP
012	0.01	D	0.098	80	No	AcN			10	No		Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	Parathion-methyl-D6
013	0.01	D	0.075	84	Yes	AcN			10	No	DSPE	Standard addition					
014	0.01	NA	D 0.082	92	No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
016	0.01	NA	D 0.093	96	No	EIOAc			10	Yes		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.089	84	No	EIOAc			10	No	SPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from same batch	TBP
019	0.01	NA	D 0.102	107	No	Acetone			50		Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
020	0.01	NA	D 0.091	109	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	
022	0.01	D	0.094	88.4	No	AcN			10	No		Pure solvent - Multiple level		MS/MS (QQQ)	GC-MS	Via Standard addition	
024	0.01	D	0.09	97.9	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD, NPD		GC-MS	Rec. from same batch	
025	0.01	D	0.153	91.7	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	TPP
026	0.01	NA	D 0.1	103	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
028	0.01	D	0.091	Std good	Yes	EIOAc			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	PCB 20
029	0.01	D	0.105	86	Yes	AcN			10		DSPE	Standard addition	MSD			Via Standard addition	
030	0.01	NA	D 0.082	92	No	EIOAc			10	No		Matrix matched - Multiple level					
031	0.01	NA	D 0.1	103	No	AcN			10	Yes		Matrix matched - Multiple level					
032	0.01	NA	D 0.103	79	No	EIOAc			10	No	DSPE	Matrix matched - Single level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	Corbendazin-D4
033	0.01	NA	D 0.1	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch	TPP
034	0.01	D	0.099	88	No	Acetone			10	Yes	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	TPP
037	0.01	D	0.075	82	No	Acetone	DCM	Petf. Ether	15	No	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from validation data	TCB
039	0.01	D	0.075	82	No	Acetone			15	No		Matrix matched - Multiple level	MS/MS (QQQ)				
040	0.01	NA	D 0.097	108	No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS		
041	0.01	NA	D 0.11	108	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level					
043	0.01	D	0.098	82	No	Acetone	DCM	Petf. Ether	10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
044	0.01	D	0.11	75	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
045	0.01	D	0.096	nd	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Fluopicolide																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correct in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
047	0.01	D	0.119	102	No	AcN			10	Yes	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
048	0.05	D	0.117	92	No	DCM			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS/MS (QQQ)	Rec. from validation data	Endosulfan lactone
049	0.01	D	0.106	110	No	Acetone			20	No	Liquid/Liquid partitioning	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	0.077	96	No	AcN			15	No		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
051	0.01	D	0.076	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP
052	0.01	D	0.104	101.2	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	TRIS
053		NA															
054	0.01	D	0.114		No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Spiked blank samples	
055	0.01	D	0.118	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
056		NA															
057	0.01	D	0.127	91	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
058		NA															
059	0.01	D	0.106	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
060		NA															
061	0.01	D	0.09	94	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.123	99	No	MeOH			10	No	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
063		NA															
064	0.01	D	0.1	81	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-ITQ	Rec. from same batch	TPP
065	0.01	D	0.113	91	No	Acetone		Petr. Ether	15	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	Anthracene
066	0.01	D	0.097	84	No	AcN		DCM	10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
067	0.01	D	0.099	128	No	Acetone		Cyclohexane	20	Yes	GPC	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nitrofen, TPP
068	0.01	D	0.095	74	Yes	MeOH		DCM	10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
069		NA															
070		NA															
071		NA															
072		NA															
073	0.01	D	0.114	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	Carbam-C13
074	0.01	D	0.098	92	No	AcN			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
075	0.01	D	0.102	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	TPP, Pirimicarb-D6
076		NA															
077		NA															
078	0.02	D	0.068	110	No	AcN			7.5	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TPP
079	0.01	D	0.105	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 31
080	0.003	D	0.142	107.3	No	MeOH		DCM	10	No	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D3
081		NA															
082		NA															
083	0.005	D	0.113	107	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
084	0.01	D	0.043	60	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
085		NA															
086	0.01	D	0.1	83	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
087		NA															
088		NA															
089		NA															
090	0.01	D	0.074	89	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level	MS/MS (QQQ)			Rec. from same batch	Pirimicarb-D6
091		NA															
092	0.02	D	0.12	103	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TRIS
093	0.01	D	0.096	100.6	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10
094		NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Fluopicolide																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
065		NA																
066		NA																
097	0.01	D	0.102	98	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	Linuron-D6	
098		NA																
099	0.01	D	0.093	88	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	GC-MS/MS (QQQ)	GC-MS/MS (QQQ)	Via Standard addition	PCB	
100	0.01	D	0.089	80	No	ACN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10	
101		NA																
102	0.01	D	0.104	98	No	ACN			10	No	DSPE	Matrix matched - Single level	MSD			Rec. from same batch		
103	0.01	D	0.096	87	No	ACN			10	No	DSPE	Standard addition	TOF	MS/MS (QQQ)	GC-MS	Rec. from same batch	Chlorpyrifos-D10	
104	0.01	D	0.119	100	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
105	0.01	D	0.089	83	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch		
106	0.01	D	0.092	98	No	ACN			10	No	DSPE	Pure solvent - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Rec. from same batch		
107	0.01	D	0.12	93	No	ACN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Via Standard addition	TPP	
108	0.01	D	0.098	105	No	ACN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS			
109	0.01	D	0.14		No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	Desmethyln	
110	0.01	D	0.16	104	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-TOF	Rec. from validation data	PCB 31	
111	0.003	D	0.1	100	No	ACN			5	Yes		Standard addition	MS/MS (QQQ)		Two columns	Rec. from same batch	TPP	
112	0.01	D	0.085	80	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)				
113		NA																
114		NA																
115		NA																
116		NA																
117		NA																
118	0.01	D	0.093	70	No	AcN			15	No	DSPE	Pure solvent - Multiple level	ECD	MS/MS (QQQ)	GC-MS	Rec. from same batch		
119	0.01	D	0.1	86.5	No	ACN			10	No		Matrix matched - Multiple level			GC-MS/MS (QQQ)	Rec. from same batch	TPP	
120	0.01	D	0.097	79.2	No	ACN			10	No		Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch		
121	0.01	D	0.1	111.1	No	ACN			10	No	DSPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch		
122	0.01	D	0.081	85.31	No	EIOAc			10	No		Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
123	0.01	D	0.084	none	No	Acetone	DCM		15	No		Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rolling spike		
124	0.01	D	0.11	100	No	Acetone	DCM		15	No	Liquid/liquid partitioning	Matrix matched - Single level	MSD		GC-MS	Rec. from same batch		
125		NA																
126		NA																
127		NA																
128		NA																
129	0.01	D	0.085	98	No	AcN			10		DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data		
130		NA																
131	0.01	D	0.113	70	No	Acetone	MeOH		50	No	SPE	Pure solvent - Multiple level	MSD			Rec. from same batch	Fenchlorphos	
132	0.01	D	0.113	100	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP	
133		NA																
134		NA																
135		NA																
136	0.01	D	0.098	101	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
137	0.01	D	0.074	98	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
138	0.01	D	0.14	96	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Via Standard addition	TPP	
139		NA																
140		NA																
141		NA																
142		NA																

APPENDIX 7. Methods used by participants for determining pesticides.

Fluopicolide																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
143	0.01	D	0.098	97	No	Acetone			20	No	Liquid/Liquid partitioning	Matrix matched - Multiple level	ECD/NPD		Two columns	Rec. from same batch	
144		NA										Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
145	0.01	D	0.13	87.5	No	AcN			10	No							
146		NA															
147		NA															
148	0.01	D	0.176	75	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Tri-(1,3-dichloropropyle)-phosphate
149	0.01	D	0.106	103	No	AcN			10	Yes	DSPE	Matrix matched - Single level	MS/MS (QQQ)			Rec. from same batch	TPP
150	0.01	D	0.093	96.7	No	Acetone	DCM	Petr. Ether	20	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
151		NA															
152		NA															
153		NA															
154		NA															
155																	
156	0.01	D	0.11	95	Yes	AcN			10					MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
157		NA															
158		NA															
159		NA															
160		NA															
161	0.01	D	0.081	65	No	Acetone	AcN		10	Yes	Liquid/Liquid partitioning	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
162		NA															
163	0.01	D	0.098	100	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (TD)	Rec. from same batch	
164	0.01	D	0.12	101	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
165	0.01	D	0.105	103	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP
166	0.01	D	0.079	91	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
167																	
168		NA															
169	0.01	ND															
170		NA															
171	0.01	D	0.108	90	No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
172		NA															
173	0.01	D	0.082	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
174																	
175		NA															
176																	
177		NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Flutolanil																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.36	100	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	Caffein
002	0.01	D	0.395	101	No	AcN			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
003	NA	NA															
004	0.001	D	0.405	98	No	AcN			10	No	Filter	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
005	0.01	D	0.455	105	No	Acetone	DCM	Petf. Ether	15	No		Pure solvent - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	PCB 153
006	0.01	D	0.47	100	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	GC-MS	Rec. from same batch	Tri-(1,3-dichloro-isopropyl)phosphate
007	0.01	D	0.43	107	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-ITD-MS/MS	Rec. from same batch	Phenanthrene-D10
008	0.01	D	0.325	84	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-ITD-MS/MS	Rec. from same batch	TPP
009	NA	NA															
010	0.001	D	0.81	-	No	AcN			15	No		Standard addition	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
011	0.01	D	0.384	99	No	AcN			10	No	DSPE	Pure solvent - Multiple level		Orbitrap	LC-Orbitrap	Rec. from validation data	TPP
012	0.01	D	0.357	80	No	AcN			10	No		Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	Parathion-methyl-D6
013	0.01	D	0.39	105	Yes	AcN			10	No	DSPE	Standard addition					
014	NA	NA															
015	0.01	D	0.34	92	No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
016	NA	NA															
017	0.01	D	0.4	105	No	EIOAc			10	Yes		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.37	79	No	EIOAc			10	No	SPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from same batch	TBP
019	NA	NA															
020	0.01	D	0.481	105	No	MeOH			10			Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Oxendazole
021	0.01	D	0.451	96	No	Acetone		EIOAc	15	No	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	MS/MS (QQQ)	Rec. from same batch	
022	0.01	D	0.374	110	No	AcN	DCM		10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
023	NA	NA															
024	0.01	D	0.387	92.9	No	AcN			10	No		Pure solvent - Multiple level		MS/MS (QQQ)			
025	0.01	D	0.34	95.5	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
026	0.01	D	0.546	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	MS/MS (QQQ)	Rec. from same batch	
027	NA	NA															
028	0.01	D	0.387	91	No	AcN			10		DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
029	0.01	D	0.41	Std add	Yes	EIOAc			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	PCB 20
030	0.01	D	0.397	73	Yes	AcN			10		DSPE	Standard addition	MSD			Via Standard addition	
031	NA	NA															
032	NA	NA															
033	0.01	D	0.5	60	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
034	0.01	D	0.453	71	No	EIOAc			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D4
035	0.01	D	0.405	90	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from same batch	TPP
036	NA	NA															
037	0.01	D	0.56	98	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.478	93.3	No	MeOH	Water		10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	HCB
039	0.01	D	0.305	90	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
040	0.01	NA															
041	0.01	NA															
042	0.01	D	0.425		No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
043	0.01	D	0.464	95	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
044	0.01	D	0.42	82	No	Acetone	DCM	Petf. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
045	0.01	D	0.66	64	Yes	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Flutolanil																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Work? Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	0.466	nd	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)				
047		NA															
048		NA															
049	0.01	D	0.467	111	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	0.363	98	No	AcN			15	No		Matrix matched - Single level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
051	0.01	D	0.387	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	TPP
052	0.01	D	0.384	105.4	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TRIS
053		NA															
054	0.01	D	0.369		No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Spiked blank samples	
055	0.01	D	0.493	104	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
056		NA															
057	0.01	D	0.463	93	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
058	0.01	D	0.43	108	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	Isoproturon-D6
059	0.01	D	0.480	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from validation data	
060		NA															
061	0.01	D	0.41	95	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.375	96	No	Acetone	Cyclohexane	EIOAc	75	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
063		NA															
064	0.01	D	0.44	105	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		Two columns	Rec. from same batch	Bromophos-methyl
065	0.01	D	0.461	100	No	Acetone		Perfr. Ether	15	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	Anthracene
066	0.01	D	0.41	92	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.401	100	No	Acetone	Cyclohexane	EIOAc	20	Yes	GPC	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nitrofen, TPP
068	0.01	D	0.4	87	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from validation data	TPP
069		NA															
070		NA															
071		NA															
072	0.01	D	0.322	98	No	AcN			10	No	SPE	Matrix matched - Multiple level	MS		GC/MS/MS I/D	Rec. from same batch	
073	0.01	D	0.486	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Carbaryl-C13
074	0.01	D	0.36	104	No	AcN			10	Yes	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
075	0.01	D	0.436	104	No	AcN			10	No	DSPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch	TPP, Pirimicarb-D6
076		NA															
077		NA															
078	0.02	D	0.406	107	No	Acetone	DCM	Perfr. Ether	7.5	No		Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	TPP
079	0.01	D	0.477	93	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 31
080	0.005	D	0.55	101.8	No	MeOH	DCM		10	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D3
081		NA															
082		NA															
083	0.006	ND	0	0	No				10								
084	0.01	D	0.13	60	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
085		NA															
086	0.01	D	0.36	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
087		NA															
088		NA															
089		NA															
090	0.01	D	0.3	92	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level	MS/MS (QQQ)		LC-Q-TOF	Rec. from same batch	Pirimicarb-D6
091	0.01	D	0.4144	91	No	AcN			10	No		Matrix matched - Multiple level	MSD		GC-MS	Rec. from validation data	
092	0.01	D	0.485	114	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TRIS
093	0.01	D	0.407	101.5	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Flutolanil																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
094	0.01	D	0.38	110	Yes	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
095	0.005	D	0.47	87	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
096	0.01	D	0.349	41	Yes	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	ICPP
097	0.01	D	0.453	96	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level			GC-TOF	Rec. from same batch	Linuron-D6
098		NA															
099	0.01	D	0.381	85	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Via Standard addition	
100	0.01	D	0.398	86	No	ACN			10	No	DSPE	Matrix matched - Single level			LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
101		NA															
102	0.01	D	0.429	102	No	ACN			10	No	DSPE	Matrix matched - Single level	MSD			Rec. from same batch	
103	0.01	D	0.405	109	No	ACN			10	No	DSPE	Standard addition	MS/MS (QQQ)			Rec. from same batch	TPP
104	0.01	D	0.407	100	No	ACN			10	No	DSPE	Matrix matched - Multiple level	TOF			Rec. from same batch	Chlorpyrifos-D10
105	0.01	D	0.374	90	No	ACN			10	No	DSPE	Matrix matched - Multiple level			GC-MS/MS (QQQ)	Rec. from same batch	TPP
106	0.01	D	0.396	102	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD			Rec. from same batch	
107	0.01	D	0.45	81	No	ACN			10	No	DSPE	Pure solvent - Single level	ID1			Rec. from same batch	
108	0.01	D	0.36	85	No	ACN			10,0	No	DSPE	Matrix matched - Single level	MSD			Rec. from same batch	TPP
109	0.01	D	0.43		No	ACN			10	No	DSPE	Matrix matched - Multiple level			GC-MS	Via Standard addition	
110	0.01	D	0.46	101	No	ACN			10	No	DSPE	Matrix matched - Multiple level	TOF			Rec. from validation data	Desmetryn
111	0.005	D	0.42	106	No	ACN			5	Yes	DSPE	Standard addition			LC-MS/MS (QQQ)	Rec. from validation data	
112	0.01	D	0.364	80	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level			Two columns	Rec. from validation data	
113		NA													Two columns	Rec. from same batch	TPP
114		NA															
115		NA															
116		NA															
117		NA															
118	0.01	D	0.385	95	No	ACN			15	No	DSPE	Pure solvent - Multiple level			GC-MS	Rec. from same batch	
119	0.01	D	0.44	104,6	No	ACN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	TPP
120	0.01	D	0.428	95,8	No	ACN			10	No	DSPE	Pure solvent - Multiple level	ECD		GC-MS	Rec. from same batch	
121	0.01	D	0.42	84,2	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-ECD	Rec. from same batch	
122	0.01	D	0.283	81,28	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	0.29	84,6	No	Acetone	DCM	Perf. Ether	15	No	Liquid/liquid partitioning	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
124	0.01	D	0.5	90	No	Acetone	DCM	Perf. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Single level	MSD		GC-MS	Rec. from same batch	
125		NA															
126		NA															
127		NA															
128		NA															
129	0.01	D	0.41	93	No	ACN			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data	
130		NA															
131		NA															
132	0.01	D	0.443	96	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	TPP
133		NA															
134		NA															
135		NA															
136	0.01	D	0.497	98	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	TPP
137	0.01	D	0.343	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
138	0.01	D	0.43	87	No	ACN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Via Standard addition	TPP
139		NA															
140		NA															
141		NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Flutolanil																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
142	NA	NA															
143	0.01	D	0.473	95	No	Acetone			20	No	Liquid/Liquid partitioning	Matrix matched - Multiple level	EGD/NPD		Two columns	Rec. from same batch	
144	NA	NA															
145	0.01	D	0.43	88.1	No	AcN			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
146	NA	NA															
147	NA	NA															
148	0.01	D	0.426	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	PCB 31
149	0.01	D	0.437	105	No	AcN			10	Yes	DSPE	Matrix matched - Single level	MS/MS (QQQ)			Rec. from same batch	TPP
150	NA	NA															
151	NA	NA															
152	NA	NA															
153	NA	NA															
154	NA	NA															
155																	
156	0.01	D	0.47	95	Yes	AcN			10					MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
157	NA	NA															
158	NA	NA															
159	NA	NA															
160	NA	NA															
161	0.01	D	0.307	65	No	Acetone	AcN		10	Yes	Liquid/Liquid partitioning	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
162	NA	NA															
163	0.01	D	0.514	95	No	Acetone	DCM	Pelt. Ether	15	No		Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
164	0.01	D	0.40	80	No	AcN			15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	TPP
165	0.01	D	0.307	93	No	EtOAc			30		GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Tetrahydroethylene
166	0.01	D	0.355	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
167																	
168	NA	NA															
169	NA	NA															
170	NA	NA															
171	0.01	D	0.44	85	No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
172	NA	NA															
173	0.01	D	0.404	93	No	EtOAc	Cyclohexane		10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
174																	
175	NA	NA															
176																	
177	NA	NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Fosthiazate																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.068	76	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Caffein
002	0.01	D	0.083	85.7	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
003		NA															
004	0.001	D	0.087	93	No	AcN			10	No	Filter	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Via Standard addition	TPP
005	0.01	D	0.092	106	No	Acetone	DCM	Petfr. Ether	15	No		Pure solvent - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	PCB 153
006	0.01	D	0.09	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	Tri-(1,3-dichloro-isopropyl)phosphate
007	0.01	D	0.072	97	No	AcN			10	No	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	Phenanthrene-D10
008	0.01	D	0.06	97	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
009	0.01	D	0.079	111	No	Acetone	DCM	Petfr. Ether	7.5	No		Matrix matched - Single level	MS/MS (QQQ)		Two columns	Rec. from same batch	
010		D	0.12	-	No	AcN			15	No		Standard addition	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
011	0.01	D	0.067	98	No	AcN			10	No	DSPE	Pure solvent - Multiple level		Orbitrap		Rec. from validation data	TPP
012	0.01	D	0.07	85	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)		
013	0.01	D	0.08	82	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)				Carbendazim-D3
014		NA															
015	0.01	D	0.071	90	No	EIOAc			50	Yes		Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
016		NA															
017	0.01	D	0.086	97	No	EIOAc			10	Yes		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.076	96	No	EIOAc			10	No	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
019		NA															
020	0.01	D	0.081	108	No	MeOH			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	Oxendazole
021	0.01	D	0.113	97	No	Acetone		EIOAc	15	No	Liquid/Liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
022	0.01	D	0.089	100	No	AcN	DCM		10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
023		NA															
024	0.01	D	0.074	97.7	No	AcN			10	No		Pure solvent - Multiple level	MS/MS (QQQ)			Via Standard addition	
025	0.01	D	0.057	97.8	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
026	0.01	D	0.096	101.4	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
027	0.05	D	0.17	104	No	AcN			12	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Spiked sample	
028	0.01	D	0.066	93	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
029	0.01	D	0.059	Std add	Yes	EIOAc			10	No		Standard addition	MS/MS (QQQ)		LC-MS/MS (QQQ)	Via Standard addition	
030	0.01	D	0.093	150	Yes	AcN			10	No	DSPE	Standard addition	MS/MS (QQQ)		MS/MS (QQQ)	Via Standard addition	Isoproturon
031		NA															
032		NA															
033	0.01	D	0.086	99	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
034	0.01	D	0.077	93	No	EIOAc			10	Yes	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Trifluralin-D14
035	0.01	D	0.068	81	No	AcN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
036		NA															
037	0.01	D	0.11	92	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.094	90.1	No	MeOH			10	Yes	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		MS/MS (QQQ)	Rec. from same batch	
039	0.01	D	0.085	75	No	Acetone	DCM	Petfr. Ether	15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
040	0.01	NA															
041	0.01	NA															
042		NA															
043	0.01	D	0.075	108	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level	MS/MS (QQQ)		MS/MS (QQQ)	Rec. from same batch	TPP
044	0.01	D	0.087	91	No	Acetone	DCM	Petfr. Ether	10	No		Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	TPP
045	0.01	D	0.12	66	Yes	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Fosthiazate																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	0.061	88.78	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
047	NA	NA															
048	0.01	D	0.07	88	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	0.064	94	No	AcN			15	No		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
051	0.01	D	0.085	90	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
052	0.01	D	0.094	113.1	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TRIS
053	0.01	D	0.026	85	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
054	0.01	D	0.071	No	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Spiked blank samples	
055	0.01	D	0.076	68	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
056	NA	NA															
057	0.01	D	0.087	92	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
058	0.01	ND															
059	0.01	D	0.083	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
060	0.01	NA															
061	0.01	D	0.073	103	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.067	94	No	MeOH			10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
063	0.01	NA															
064	0.01	D	0.1	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-ITQ	Rec. from same batch	TPP
065	0.01	D	0.076	92	No	Acetone	DCM	Pair: Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
066	0.01	D	0.077	76	No	Acetone	DCM		15	No		Matrix matched - Single level	FPD		GC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.08	107.3	No	Acetone	Cyclohexane	EIOAc	20	Yes	GPC	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nitrofen, TPP
068	0.01	D	0.075	85	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
069	NA	NA															
070	NA	NA															
071	NA	NA															
072	0.01	NA															
073	0.01	D	0.093	100	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)			
074	0.01	D	0.08	92	No	AcN			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
075	0.01	D	0.079	88	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	TPP, Pirimicarb-D6
076	0.01	D	0.089	88.4	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
077	0.01	D	0.12	-	No	EIOAc			10	Yes	DSPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	Fenchlorphos
078	0.02	D	0.089	100	No	Acetone	DCM	Pair: Ether	7.5	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
079	0.01	D	0.076	97	No	AcN			10	No	GPC	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	Sulfotep
080	0.005	D	0.083	77.6	No	Acetone	EIOAc	Cyclohexane	50	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	
081	NA	NA															
082	0.01	D	0.056	100	No	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
083	0.005	D	0.086	103	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
084	0.01	D	0.12	60	No	AcN			10	No	DSPE	Matrix matched - Multiple level	NPD		GC-MS	Via Standard addition	
085	NA	NA															
086	0.01	D	0.069	82	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
087	NA	NA															
088	NA	NA															
089	0.01	NA															
090	0.01	D	0.068	94	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level	MS/MS (QQQ)		LC-Q-TOF	Rec. from same batch	Pirimicarb-D6
091	0.01	D	0.1016	96	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from validation data	
092	0.02	D	0.105	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS	Rec. from same batch	TRIS
093	0.01	D	0.076	100.2	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Fosthiazate																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
094	NA																
095	0.005	D	0.065	98	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
096	NA																
097	0.01	D	0.079	98	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Linuron-D6
098	NA																
099	0.01	D	0.089	97	No	EtOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
100	0.01	D	0.061	87	No	ACN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
101	0.01	D	0.081	107.4	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
102	0.01	D	0.072	69	No	ACN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
103	0.01	D	0.08	90	No	ACN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Pirimicarb-D6
104	0.01	D	0.09	100	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
105	0.01	D	0.066	114	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	TPP
106	0.01	D	0.06	92	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Rec. from same batch	
107	0.01	D	0.10	104	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
108	0.01	D	0.081	85	No	ACN			10.0	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
109	0.01	D	0.098		No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF		Desmetryn
110	0.01	D	0.11	102	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from validation data	
111	0.005	D	0.08	100	No	ACN			5	Yes		Standard addition		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from validation data	
112	0.01	D	0.068	80	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	Two columns	Rec. from same batch	TPP
113	NA																
114	NA																
115	NA																
116	NA																
117	NA																
118	0.01	D	0.113	71	No	ACN			15	No		Pure solvent - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
119	0.01	D	0.088	96.2	No	ACN			10	No		Matrix matched - Multiple level	NPD	MS/MS (QQQ)	GC-PFPD	Rec. from same batch	TPP
120	0.01	D	0.090	108.0	No	ACN			10	No		Matrix matched - Multiple level	plpd	MS/MS (QQQ)	GC-MS	Rec. from same batch	
121	0.01	D	0.088	106.6	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
122	NA																
123	0.01	D	0.072	none	No	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rolling spike	
124	NA																
125	NA																
126	NA																
127	NA																
128	NA																
129	0.01	D	0.061	97	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
130	0.01	D	0.06	98	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
131	NA																
132	0.01	D	0.076	98	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	GC-MS/MS (QQQ)	Via Standard addition	TPP	
133	NA																
134	NA																
135	NA																
136	0.01	D	0.087	104	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
137	0.01	D	0.075	106	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
138	NA																
139	NA																
140	NA																
141	NA																

APPENDIX 7. Methods used by participants for determining pesticides.

Fosthiazate																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
142		NA																
143		NA																
144		NA																
145	0.01	D	0.083	89.3	No	AcN			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
146		NA																
147		NA																
148	0.01	ND																
149		NA																
150		NA																
151		NA																
152		NA																
153		NA																
154		NA																
155																		
156	0.01	D	0.03	95	Yes	AcN			10					MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
157		NA																
158		NA																
159		NA																
160		NA																
161	0.01	D	0.091	97	No	Acetone	AcN		10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level	FPD		GC-MS	Rec. from same batch		
162		NA																
163	0.01	D	0.091	100	No	Acetone	DCM	Pet. Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
164	0.01	D	0.092	98	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
165	0.01	D	0.0835	101	No	AcN			10			Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP	
166	0.01	D	0.071	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
167																		
168		NA																
169		NA																
170		NA																
171	0.01	D	0.08	104	No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP	
172	0.01	D	0.077	74	No	EtOAc			15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch		
173	0.01	D	0.073	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP	
174																		
175		NA																
176																		
177		NA																

APPENDIX 7. Methods used by participants for determining pesticides.

Iprovalicarb																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.075	95	No	MeOH			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
002	0.01	D	0.087	82.3	Yes	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
003		NA															
004	0.001	D	0.082	92	No	AcN			10	No	Filter	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
005	0.01	D	0.113	112	No	Acetone	DCM	Petf. Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
006	0.01	D	0.09	91	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Tri-(1,3-dichloro-isopropyl)phosphate
007	0.01	D	0.083	99	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Phenanthrene-D10
008	0.01	D	0.063	95	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
009		NA										Standard addition					
010	0.001	D	0.073	-	No	AcN			15	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
011	0.01	D	0.081	97	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
012	0.01	D	0.095	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Carbendazim-D3
013	0.01	D	0.082	84	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		
014		NA										Standard addition					
015	0.01	D	0.077	88	No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
016		NA															
017	0.01	D	0.074	101	No	EIOAc			10	Yes		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.081	84	No	EIOAc			10	No	SPE	Matrix matched - Multiple level	TOF	GC-MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP
019	0.05	D	0.098	96	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level		Two columns	Rec. from same batch		
020	0.01	D	0.09	103	No	MeOH			10	No		Matrix matched - Multiple level		LC-MS/MS (QQQ)	Rec. from same batch		Oxendazole
021	0.01	D	0.117	105	No	Acetone	DCM	EIOAc	15	No	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
022	0.01	D	0.111	88	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
023	0.01	D	0.071	90.3	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
024	0.01	D	0.08	92.7	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
025	0.01	D	0.068	100.3	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
026	0.05	D	0.129	110.9	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Rec. from same batch	
027	0.05	D	0.18	94	No	AcN			12	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Spiked sample	
028	0.01	D	0.074	104	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
029	0.01	D	0.077	Std add	Yes	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
030	0.01	D	0.104	121	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Isoproturon
031		NA										Standard addition					
032	0.01	D	0.09	79.4	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
033	0.01	D	0.11	94	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
034	0.01	D	0.085	83	No	EIOAc			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D4
035	0.01	D	0.078	81	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD	GC-MS	Rec. from same batch	TPP	
036		NA															
037	0.01	D	0.13	100	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.106	90	No	Acetone			10	No	SPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP
039	0.01	D	0.079	75	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
040	0.01	NA															
041	0.01	NA															
042		NA															
043	0.01	D	0.085	103	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
044	0.01	D	0.085	7.6	No	Acetone	DCM	Petf. Ether	10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
045	0.01	D	0.095	82	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Iprovalicarb																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	0.1	103.17	Yes	ACN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
047	0.003	D	0.111	114	No	ACN			10	Yes	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	MS/MS (QQQ)	Rec. from same batch	
048	0.05	D	0.102	80	No	DCM			20	No	DSPE	Pure solvent - Single level		MS/MS (QQQ)	GC-MS	Rec. from validation data	Ethion
049	0.01	D	0.085	91	No	Acetone			15	No	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	IDCPP
050	0.01	D	0.083	110	No	ACN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)		Rec. from same batch	TPP
051	0.01	D	0.073	104	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TRIS
052	0.01	D	0.101	98.8	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
053	0.01	D	0.121	87	No	EIOAc			10	No	GPC	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
054	0.01	D	0.077	100	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Spiked blank samples	
055	0.01	D	0.109	83	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
056		NA															
057	0.01	D	0.109	96	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
058	0.01	D	0.093	105	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Isoproturon-D6
059	0.01	D	0.096	96	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
060		NA															
061	0.01	D	0.092	103	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.089	97	No	MeOH			10	No	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
063	0.01	D	0.105	93.9	Yes	ACN			2	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	Two columns	Rec. from same batch	
064	0.01	D	0.1	133	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-ITQ	Rec. from same batch	TPP
065	0.01	D	0.092	100	No	Acetone	DCM		15	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
066	0.01	D	0.088	86	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.097	100.1	No	MeOH			10	Yes	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
068	0.01	D	0.09	91	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
069	0.01	D	0.088	116	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
070		NA															
071		NA															
072	0.01	D	0.065	100.8	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
073	0.01	D	0.079	108	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbaryl-C13
074	0.01	D	0.08	111	No	ACN			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
075	0.01	D	0.09	96	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	TPP, Pirimicarb-D6
076	0.025	D	0.11	92.5	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
077		NA															
078	0.01	D	0.072	110	No	ACN	DCM		7.5	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	MS/MS (QQQ)	Rec. from same batch	TPP
079	0.01	D	0.106	98	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	MS/MS (QQQ)	Rec. from same batch	Sulfotep
080	0.05	D	0.098	76.8	No	Acetone	EIOAc		50	No	GPC	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	
081		NA															
082	0.01	D	0.102	100	No	ACN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
083	0.005	D	0.103	104	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
084	0.01	D	0.037	60	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Via Standard addition	
085	0.01	D	0.13	70.120	No												
086	0.01	D	0.14	83	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
087		NA															
088		NA															
089		NA															
090	0.01	D	0.075	97	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level		MS/MS (QQQ)		Rec. from same batch	Pirimicarb-D6
091	0.01	D	0.1052	97	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from validation data	
092	0.01	D	0.101	110	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	TRIS
093	0.01	D	0.086	103.7	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Iprovalicarb																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
064		NA															
095 0.01	D	0.063	88	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
096 0.01	D	0.122	100	Yes	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	LCPP
097 0.01	D	0.09	96	No	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Linuron-D6
098		NA															
099 0.01	D	0.092	104	No	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
100 0.01	D	0.088	79	No	No	ACN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
101 0.01	D	0.1	111.4	No	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
102 0.01	D	0.085	71	No	No	ACN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
103 0.01	D	0.096	117	No	No	ACN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Primicarb-D6
104 0.01	D	0.103	97	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
105 0.01	D	0.08	103	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		Orbitrap	LC-Orbitrap	Rec. from same batch	IRS
106 0.01	D	0.08	99	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level	IDT		LC-MS/MS (QQQ)	Rec. from same batch	
107 0.01	D	0.11	94	No	No	ACN			10	No	DSPE	Pure solvent - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
108 0.01	D	0.085	88	No	No	ACN			10.0	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
109 0.01	D	0.12		No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from validation data	Desmetryn
110 0.005	D	0.1	102	No	No	ACN			10	Yes	DSPE	Standard addition	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from validation data	PCB 31
111 0.005	D	0.086	79	No	No	ACN			5	Yes	DSPE	Standard addition	MS/MS (QQQ)		Two columns	Rec. from same batch	TPP
112 0.01	D	0.071	80	No	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
113		NA															
114 0.01	D	0.076	86	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
115		NA															
116		NA															
117		NA															
118 0.01	D	0.119	133	No	No	ACN			15	No		Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
119 0.01	D	0.1	94.9	No	No	ACN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP
120 0.01	D	0.092	98.0	No	No	ACN			10	No		Matrix matched - Multiple level	MSD		GC-MS	Rec. from validation data	
121 0.01	D	0.11	102.9	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	
122 0.01	D	0.075	86.18	No	No	EIOAc			10	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
123 0.01	D	0.073	94.5	Yes	No	Acetone		Petf. Ether	15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
124 0.005	D	0.079	92	No	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
125		NA															
126 0.01	D	0.1	75	No	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	TPP
127 0.01	D	0.097	108	No	No	ACN			10		DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	TPP
128		NA															
129 0.01	D	0.077	98	No	No	ACN			10		DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
130 0.01	D	0.1	97	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
131 0.01	D	0.078	98	No	No	Acetone		MeOH	50	No	SPE	Pure solvent - Multiple level	MSD			Rec. from validation data	Fenchlorphos
132 0.01	D	0.098	95	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
133		NA															
134		NA															
135 0.01	D	0.069	97	No	No	ACN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
136 0.01	D	0.111	85	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
137 0.01	D	0.081	103	No	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
138 0.01	D	0.094	91	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
139		NA															
140 0.05	D	0.12	89	No	No	ACN		Acetone	10		DSPE	Matrix matched - Single level			LC-MS	Rec. from validation data	
141		NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Iprovalicarb																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
142	0.01	NA																
143	0.01	D	0.063	86	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP	
144		NA																
145	0.01	D	0.08	93.4	No	ACN			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
146	0.05	D	0.09	88	No	EtOAc			50	No	GPC	Matrix matched - Multiple level	TOF			Rec. from same batch	TPP	
147		NA																
148	0.01	D	0.137	70	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Tri-(-)-3-dichloropropyle)-phosphate	
149		NA																
150	0.01	D	0.086	97.9	No	Acetone	DCM		20	No	GPC	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
151	0.01	D	0.0898		Yes	ACN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		TPP	
152		NA																
153		NA																
154		NA																
155																		
156	0.01	D	0.1	95	Yes	ACN			10	No				MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
157	0.01	D	0.0937	102	No	1% HOAc in MeCN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
158	0.01	D	0.1	110	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
159	0.05	D	0.104	97.9	No	ACN			9.952	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
160	0.01	D	0.092	123	No	EtOAc			20			Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
161	0.01	D	0.077	109	No	ACN			12	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch		
162	0.01	D	0.065	80-120	No	ACN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data		
163	0.01	D	0.103	108	No	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch		
164	0.01	D	0.10	97	No	ACN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
165	0.01	D	0.0852	101	No	ACN			10			Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP	
166	0.01	D	0.075	94	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
167																		
168		NA																
169		NA																
170		NA																
171	0.01	D	0.08	100	No	ACN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP	
172		NA																
173	0.01	D	0.08	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP	
174																		
175		NA																
176																		
177	0.01	D	0.077	85	No	ACN			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		

APPENDIX 7. Methods used by participants for determining pesticides.

Linuron																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction In Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
0001	0.01	D	0.12	132	No	MeOH			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0002	0.01	D	0.136	85.2	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0003	NA	NA				AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Via Standard addition	TPP	
0004	0.001	D	0.098	89	No	AcN			15	No	Filter	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0005	0.01	D	0.106	102	No	Acetone	DCM	Petf. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Tri-(1,3-dichloro-isopropyl)phosphate	
0006	0.025	D	0.14	120	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0007	0.01	D	0.072	87	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0008	0.01	D	0.07	92	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0009	NA	NA			No	AcN			15	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP	
0010	0.001	D	0.15	-	No	AcN			10	No	DSPE	Pure solvent - Multiple level		Orbitrap	LC-Orbitrap			
0011	0.01	D	0.069	98	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP	
0012	0.01	D	0.076	80	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Carbendazim-D3	
0013	0.01	D	0.09	88	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)			
0014	NA	NA			No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0016	NA	NA			No	EIOAc			10	Yes		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0017	0.01	D	0.0878	97	No	EIOAc			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
0018	0.01	D	0.1	99	No	EIOAc			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0019	0.05	D	0.128	125	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level	NPD	MS/MS (QQQ)	Two columns	Rec. from same batch		
0020	0.01	D	0.088	89	No	MeOH			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Oxendazole	
0021	0.01	D	0.159	108	No	Acetone		EIOAc	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0022	0.01	D	0.11	102	No	AcN	DCM		10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0023	0.01	D	0.101	93.3	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0024	0.01	D	0.092	82.6	No	AcN			10	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0025	0.01	D	0.079	96.1	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0026	0.01	D	0.106	91.9	No	AcN			10	No	DSPE	Matrix matched - Multiple level	NPD	MS/MS (QQQ)	GC-MS	Rec. from same batch	TPP	
0027	NA	NA			No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0028	0.01	D	0.08	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0029	0.01	D	0.097	313 add	Yes	EIOAc			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Isoproturon	
0030	0.01	D	0.111	130	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
0031	NA	NA				AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0032	0.01	D	0.09	73.8	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0033	0.01	D	0.095	70	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0034	0.01	D	0.096	79	No	EIOAc			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D4	
0035	0.01	D	0.091	90	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
0036	NA	NA				AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0037	0.01	D	0.14	105	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0038	0.01	D	0.111	91.2	No	MeOH			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
0039	0.01	D	0.083	80	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch		
0040	0.01	NA																
0041	0.01	NA																
0042	NA	NA																
0043	0.01	D	0.087	107	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
0044	0.01	D	0.098	88	No	Acetone	DCM	Petf. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
0045	0.01	D	0.091	92	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		

APPENDIX 7. Methods used by participants for determining pesticides.

Linuron																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	0.095	93.32	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
047	0.01	D	0.117	111	No	AcN			10	Yes	Liquid/Liquid partitioning	Matrix matched - Multiple level	ECD	MS/MS (QQQ)	GC-MS	Rec. from same batch	Endosulfan lactone
048	0.05	D	0.091	74	No	DCM			20	No	DSPE	Pure solvent - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
049	0.01	D	0.112	99	No	Acetone			15	No	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	0.078	106	No	AcN			10	No		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
051	0.01	D	0.081	92	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	IRIS
052	0.01	D	0.166	105.1	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
053	0.01	D	0.102	118	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Spiked blank samples	
054	0.01	D	0.087		No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
055	0.01	D	0.129	76	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
056		NA															
057	0.01	D	0.128	62	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	Isoproturon-D6
058	0.01	D	0.092	112	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
059	0.01	D	0.107	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
060		NA															
061	0.01	D	0.079	97	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.132	95	No	MeOH			10	No	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
063	0.01	D	0.08	92.8	Yes	Acetone			20	No	SPE	Matrix matched - Multiple level		UV			
064	0.01	D	0.13	85	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-ITQ	Rec. from same batch	TPP
065	0.01	D	0.108	94	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
066	0.01	D	0.069	82	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.123	113.6	No	MeOH			10	Yes	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
068	0.01	D	0.11	89	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
069		NA															
070		NA															
071		NA															
072	0.01	D	0.108	110.5	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
073	0.01	D	0.09	82	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbaryl-C13
074	0.01	D	0.1	101	No	AcN			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
075	0.01	D	0.098	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	IPP, Pirimicarb-D6
076	0.01	D	0.12	89.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
077		NA															
078	0.02	D	0.101		No	Acetone	DCM	Petr. Ether	7.5	No		Pure solvent - Multiple level	MS/MS (QQQ)				TPP
079	0.01	D	0.118	94	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Sulfafep
080	0.02	D	0.145	116.8	No	MeOH	DCM		10	No	Liquid/Liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D3
081		NA															
082		NA															
083	0.005	D	0.118	104	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
084	0.01	D	0.063	60	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
085	0.01	ND															
086	0.01	D	0.087	101	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
087		NA															
088	0.05	D	0.081	79	No	Acetone	DCM	Petr. Ether	100	No	SPE	Matrix matched - Single level	NPD		Two columns	Rec. from same batch	
089		NA															
090	0.01	D	0.077	90	No	EIOAC			10	Yes	Filtration	Matrix matched - Single level		MS/MS (QQQ)	Rec. from same batch	Pirimicarb-D6	
091	0.01	D	0.1011	94	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from validation data	
092	0.02	D	0.07	90	No	Acetone	DCM		10	No	Liquid/Liquid partitioning	Pure solvent - Multiple level		UV	GC-MS	Rec. from same batch	
093	0.01	D	0.100	100.0	No	AcN			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Linuron																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
064	0.01	D	0.08	108	No	Acetone			15	No		Matrix matched - Multiple level			GC-MS	Via Standard addition	
095	0.005	D	0.099	96	No	AcN	DCM		10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
096	0.01	D	0.076	86	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD	GC-MS	Via Standard addition	TPP	
097	0.01	D	0.104	97	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
098	0.01	D	0.1718	90	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)		Rec. from same batch	
099	0.01	D	0.1	91	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Via Standard addition	Chlorpyrifos-D10
100	0.01	D	0.086	77	No	AcN			10	No	DSPE	Matrix matched - Single level			LC-MS/MS (QQQ)	Rec. from same batch	TPP
101	0.01	D	0.162	81.3	No	AcN			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
102	0.01	D	0.09	80	No	AcN			10	No	DSPE	Matrix matched - Single level			LC-MS/MS (QQQ)	Rec. from same batch	
103	0.01	D	0.113	111	No	AcN			10	No	DSPE	Standard addition			LC-Q-TOF	Rec. from same batch	Pimnicarb-D6
104	0.01	D	0.11	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
105	0.01	D	0.097	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
106	0.01	D	0.087	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-Orbitrap	Rec. from same batch	IRS
107	0.01	D	0.12	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch	
108	0.01	D	0.10	88	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Via Standard addition	
109	0.01	D	0.14		No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)		
110	0.01	D	0.098	105	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from validation data	Desmetryn
111	0.005	D	0.093	98	No	AcN			5	Yes	DSPE	Standard addition			Two columns	Rec. from validation data	
112	0.01	D	0.081	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			Two columns	Rec. from same batch	TPP
113		NA															
114	0.01	D	0.085	80	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
115		NA															
116		NA															
117	0.05	D	0.086	72	No	EIOAc	2,2,4-trimethylpentane-Toluene		50	No		Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
118	0.01	D	0.091	90	No	AcN			15	No	DSPE	Pure solvent - Multiple level			DAD	Rec. from same batch	
119	0.01	D	0.1	84.7	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	
120	0.01	D	0.118	94.00	No	AcN			10	No	DSPE	Pure solvent - Multiple level			DAD	Rec. from validation data	TPP
121	0.01	D	0.11	113.5	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from validation data	
122	0.01	D	0.103	90.69	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	0.074	88	No	Acetone		Pest. Ether	15	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
124	0.005	D	0.092	92	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	
125		NA															
126		NA															
127		NA															
128	0.01	D	0.126	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	
129	0.01	D	0.094	94	No	AcN			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data	
130	0.01	D	0.11	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	
131		NA															
132	0.01	D	0.107	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Via Standard addition	TPP
133		NA															
134		NA															
135	0.01	D	0.094	107	No	AcN			10	Yes	DSPE	Pure solvent - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
136	0.01	D	0.09	91	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
137	0.01	D	0.088	100	No	AcN			10	No	DSPE	Pure solvent - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
138	0.01	D	0.12	69	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Via Standard addition	TPP
139	0.05	D	0.1	89.2	No	DCM/Acetone			5	No	DSPE	Pure solvent - Single level	NPD		GC/ECD, GC/NPD	Rec. from validation data	
140	0.025	D	0.12	80	No	AcN	Acetone		10	No	DSPE	Matrix matched - Single level			LC-MS	Rec. from validation data	

APPENDIX 7. Methods used by participants for determining pesticides.

Linuron																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
141	0.05	D	0.11	109	No	DCM	Acetone		5	No		Pure solvent - Multiple level	ECD		Two columns	Rec. from validation data		
142		NA																
143		NA																
144	0.025	D	0.121	72	Yes	Acetone	DCM	EIOAc	100	No	GPC	Matrix matched - Multiple level	ECD		LC-MS/MS (QQQ)	Rec. from same batch		
145	0.01	D	0.11	85.3	No	AcN			10	No		Standard addition			LC-MS/MS (QQQ)	Rec. from same batch		
146		NA																
147		NA																
148		NA																
149		NA																
150	0.01	D	0.099	97.8	No	Acetone	DCM	Petr. Ether	20	No	GPC	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP	
151	0.01	D	0.0958		Yes	AcN			10	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)			
152		NA																
153	0.01	D	0.077	117	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
154	0.01	D	0.125	matrix matched surrogate calibration	No	AcN			10	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)	Not applied	Carbonyl-D7	
155												Participation Cancelled						
156	0.01	D	0.05	95	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Via Standard addition		
157	0.01	D	0.0995	90	No	1% HOAc in MeCN			15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
158	0.01	D	0.11	60	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP	
159	0.05	D	0.098	91.9	No	AcN		9.952	Yes		DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP	
160	0.01	D	0.065	126.3	No	EIOAc			20	No		Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch		
161	0.01	D	0.076	88	No	AcN			12	No		Matrix matched - Multiple level			GC-MS/MS (QQQ)	Rec. from same batch		
162	0.01	D	0.09	80/120	No	AcN			15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data		
163	0.01	D	0.096	90	No	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
164	0.01	D	0.13	115	No	AcN			15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
165	0.01	D	0.112	107	No	AcN			10	No		Matrix matched - Multiple level			GC-MS/MS (QQQ)	Rec. from same batch	TPP	
166	0.01	D	0.084	92	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
167												Participation Cancelled						
168		NA																
169		NA																
170		NA																
171	0.01	D	0.095	72	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP	
172	0.01	D	0.083	77	No	AcN			10	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	Antor	
173	0.01	D	0.092	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data	TPP	
174												No Results Submitted						
175		NA										No Results Submitted						
176												No Results Submitted						
177	0.01	D	0.084	85	No	AcN			10	No	SPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		

APPENDIX 7. Methods used by participants for determining pesticides.

Methiocarb																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.14	94	No	MeOH			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
002	0.01	D	0.163	111	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
003	0.01	NA															
004	0.001	D	0.146	89	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Via Standard addition	TPP
005	0.01	D	0.14	96.3	No	Acetone	DCM	Petr. Ether	15	No	Filter	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	PCB 153
006	0.01	D	0.16	106	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Ti-(1,3-dichloro-isopropyl)phosphate
007	0.01	D	0.096	83	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
008	0.01	D	0.085	83	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
009	0.01	NA															
010	0.001	NA															
011	0.01	D	0.11	93	No	AcN			10	No	DSPE	Pure solvent - Multiple level		Orbitrap	LC-Orbitrap	Rec. from validation data	TPP
012	0.01	D	0.129	85	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Carberidazim-D3
013	0.01	D	0.35	80	Yes	AcN			10	No	DSPE	Standard addition					
014	0.01	D	0.16	92	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
015	0.01	D	0.11	99	No	EIOAC			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
016	0.01	NA															
017	0.01	D	0.1282	100	No	EIOAC			10	Yes		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
018	0.01	D	0.13	81	No	EIOAC			10	No	SPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from same batch	TBP
019	0.05	D	0.127	101	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level			Two columns	Rec. from same batch	
020	0.01	D	0.132	99	No	MeOH			10	No		Matrix matched - Multiple level	NPD		LC-MS/MS (QQQ)	Rec. from same batch	Oxendazole
021	0.01	D	0.166	107	No	Acetone	DCM	EIOAC	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
022	0.01	D	0.134	106	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
023	0.01	NA															
024	0.01	D	0.125	90.7	No	AcN			10	No		Pure solvent - Multiple level		MS/MS (QQQ)		Via Standard addition	
025	0.01	D	0.112	94.8	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
026	0.01	D	0.155	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
027	0.01	D	0.1	121	No	AcN			12	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TPP
028	0.01	D	0.13	84	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
029	0.01	D	0.13	313 add	Yes	EIOAC			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
030	0.01	D	0.18	120	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Isoprothuron
031	0.01	D	0.092	65	Yes	DCM			30	No	SPE	Pure solvent - Single level		Fluorescence		Rec. from same batch	
032	0.01	D	0.12	91.2	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
033	0.005	D	0.19	90	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
034	0.01	D	0.137	80	No	EIOAC			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D4
035	0.01	D	0.153	105	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
036	0.01	NA															
037	0.01	D	0.17	99	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.152	98.1	No	MeOH			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
039	0.01	D	0.138	73	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
040	0.01	NA															
041	0.01	NA															
042	0.01	NA															
043	0.01	D	0.14	105	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TPP
044	0.01	D	0.14	92	No	Acetone	DCM	Petr. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
045	0.01	D	0.14	95	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Methiocarb																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	0.156	87.72	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
047	0.01	D	0.163	110	No	AcN			10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
048	0.05	D	0.18	106	No	DCM			10		DSPE	Pure solvent - Single level			GC-MS	Rec. from validation data	Ethion
049	0.01	D	0.126	88	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	0.181	93	No	AcN			15	No		Matrix matched - Single level			LC-MS/MS (QQQ)	Rec. from same batch	TPP
051	0.01	D	0.109	92	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TRIS
052	0.01	D	0.179	110.7	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
053	0.01	D	0.097	109	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	
054	0.01	D	0.115		No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Spiked blank samples	
055	0.01	D	0.145	82	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
056		NA															
057	0.01	D	0.189	87	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch	Isoproturon-D6
058	0.01	D	0.147	98.7	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
059	0.01	D	0.148	92	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data	
060	0.01	ND															
061	0.01	D	0.15	100	No	AcN			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.196	97	No	MeOH			10	No	Liquid/liquid partitioning	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
063		NA															
064	0.01	D	0.159	107	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-ITQ	Rec. from same batch	TPP
065	0.01	D	0.13	82	No	AcN		Petr. Ether	15	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP
066	0.01	D	0.09	78.2	No	Acetone			20	Yes	GPC	Matrix matched - Single level			GC-MS/MS (QQQ)	Rec. from same batch	Nitrofen, TPP
067	0.01	D	0.13	86	Yes	MeOH	Cyclohexane	EIOAc	10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from validation data	TPP
068	0.01	D	0.13	123	No	AcN	DCM		10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP
069	0.01	D	0.11	99	No	AcN			10	No	DSPE	Pure solvent - Single level			GC-MS	Rec. from validation data	TPP
070	0.01	D	0.14	99	No	AcN			10	No	DSPE	Pure solvent - Single level			GC-MS	Rec. from validation data	TPP
071		NA															
072	0.01	D	0.173	106.3	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
073	0.01	D	0.138	92	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	Carbaryl-C13
074	0.01	D	0.125	92	No	AcN			10	Yes	SPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP
075	0.01	D	0.136	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch	TPP, Pirimicarb-D6
076	0.01	D	0.16	86.8	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP
077	0.01	D	0.49	-	No	EIOAc			10	Yes	DSPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	Fenchlorphos
078	0.01	D	0.085	112	No	AcN	DCM		7.5	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
079	0.01	D	0.142	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	Sulfotep
080	0.005	D	0.185	111.5	No	MeOH	DCM		10	No	Liquid/liquid partitioning	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D3
081		NA															
082	0.01	D	0.146	100	No	AcN			10	No	DSPE	Standard addition			LC-MS/MS (QQQ)	Via Standard addition	
083	0.005	D	0.156	105	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
084	0.01	D	0.052	60	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
085	0.01	D	0.186	70-120	No												
086	0.01	D	0.102	81	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
087		NA															
088		NA															
089		NA															
090	0.01	D	0.1	90	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level			MS/MS (QQQ)	Rec. from same batch	Pirimicarb-D6
091	0.01	D	0.138	94	No	AcN			10	No		Matrix matched - Multiple level			LC-Q-TOF	Rec. from validation data	
092	0.02	D	0.121	95	No	AcN			10	No	SPE	Pure solvent - Multiple level			GC-MS	Rec. from same batch	
093	0.01	D	0.124	94.2	No	AcN			10	Yes		Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Methiocarb																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
064	0.01	ND																
095	0.005	D	0.13	92	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP	
096	0.01	D	0.185	98	Yes	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	ICPP	
097	0.01	D	0.164	95	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level			GC-TOF	Rec. from same batch	Linuron-D6	
098	0.01	D	0.2119	88	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level				Rec. from same batch		
099	0.01	D	0.144	90	No	EIOAC			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Via Standard addition		
100	0.01	D	0.114	81	No	ACN			10	No	DSPE	Matrix matched - Single level			LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10	
101	0.01	D	0.16	105.8	No	ACN			10	No	DSPE	Pure solvent - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP	
102	0.01	D	0.112	78	No	ACN			10	No	DSPE	Matrix matched - Single level			MS/MS (QQQ)	Rec. from same batch		
103	0.01	D	0.176	133	No	ACN			10	No	DSPE	Standard addition			LC-MS/MS (QQQ)	Rec. from same batch		
104	0.01	D	0.17	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level			LC-Q-TOF	Rec. from same batch	Pirimicarb-D6	
105	0.01	D	0.186	103	No	ACN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP	
106	0.01	D	0.122	76	No	ACN			10	No	DSPE	Matrix matched - Multiple level			LC-Orbitrap	Rec. from same batch	IRIS	
107	0.01	D	0.16	102	No	ACN			10	No	DSPE	Pure solvent - Multiple level			GC-MS	Rec. from same batch		
108	0.01	D	0.14	88	No	ACN			10.0	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Via Standard addition		
109	0.01	D	0.14		No	ACN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
110	0.01	D	0.15	106	No	ACN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from validation data	Desmetryn	
111	0.005	D	0.13	94	No	ACN			5	Yes	DSPE	Standard addition			GC-MS/MS (QQQ)	Rec. from validation data		
112	0.01	D	0.121	80	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP	
113		NA																
114	0.01	D	0.115	74	No	ACN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
115		NA																
116		NA																
117		NA																
118	0.01	D	0.129	93	No	ACN			15	No		Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch		
119	0.01	D	0.15	89.5	No	ACN			10	No		Matrix matched - Multiple level			GC-MS/MS (QQQ)	Rec. from same batch	TPP	
120	0.01	D	0.135	95.0	No	ACN			10	No		Pure solvent - Multiple level			HPLC/UV	Rec. from validation data		
121	0.01	D	0.14	108.7	No	ACN			10	No	DSPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch		
122	0.01	D	0.104	88.09	No	EIOAC			10	No		Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
123	0.01	D	0.12	102	No	Acetone	DCM		15	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
124	0.005	D	0.13	96	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
125		NA																
126	0.01	D	0.13	85	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP	
127		NA																
128	0.01	D	0.164	101	No	ACN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data		
129	0.01	D	0.14	95	No	ACN			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data		
130	0.01	D	0.17	107	No	ACN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch		
131	0.004	D	0.102	108	No	ACN			10	No	DSPE	Pure solvent - Multiple level			Fluorescence	Rec. from validation data		
132	0.01	D	0.148	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Via Standard addition	TPP	
133		NA																
134	0.01	D	0.101	68.5	No	ACN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP	
135	0.01	D	0.109	101	No	ACN			10	Yes	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP	
136	0.01	D	0.171	81	No	ACN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP	
137	0.01	D	0.136	105	No	ACN			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	TPP	
138	0.01	ND																
139		NA																
140	0.05	D	0.204	105	No	ACN	Acetone		10		DSPE	Matrix matched - Single level			LC-MS	Rec. from validation data		
141		NA																

APPENDIX 7. Methods used by participants for determining pesticides.

Methiocarb																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
142		NA																
143		NA																
144		NA																
145	0.01	D	0.13	87.4	No	AcN			10	No	GPC	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
146	0.02	D	0.104	85	No	EIOAc			50	No		Pure solvent - Multiple level		Fluorescence	GC-IDF	Rec. from same batch	Trimetacarb	
147		NA																
148	0.01	D	0.141	70	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Tris-(1,3-dichlorisopropyle)-phosphate	
149	0.01	D	0.127	97	No	AcN			10	Yes	DSPE	Matrix matched - Single level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
150	0.01	D	0.12	97.5	No	Acetone	DCM	Petr. Ether	20	No	GPC	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
151	0.01	D	0.1		Yes	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
152		NA																
153	0.01	D	0.077	67	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
154	0.005	D	0.132	matrix matched surrogate calibration	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Not applied	Carbaryl-D7	
155																		
156	0.01	D	0.19	95	Yes	AcN			10			Participation Cancelled		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
157		NA																
158	0.01	D	0.13	100	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
159	0.05	D	0.125	88.1	Yes	AcN			9.952	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
160	0.01	D	0.062	100.7	No	EIOAc			20			Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
161	0.01	D	0.106	104	No	AcN			12	No		Matrix matched - Multiple level		MS	GC-MS/MS (QQQ)	Rec. from same batch		
162		NA																
163	0.01	D	0.181	100	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch		
164	0.01	D	0.12	101	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
165	0.01	D	0.149	102	No	AcN			10			Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP	
166	0.01	D	0.11	92	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
167												Participation Cancelled						
168		NA																
169	0.01	D	0.088	76.9	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch		
170		NA																
171	0.01	D	0.124	110	No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP	
172	0.01	D	0.128	89	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Amfor	
173	0.01	D	0.13	92	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP	
174												No Results Submitted						
175	0.01	NA																
176												No Results Submitted						
177	0.01	ND																

APPENDIX 7. Methods used by participants for determining pesticides.

Pencycuron																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.26	84	No	MeOH			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
002	0.01	D	0.243	105	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
003	0.001	NA		87	No	AcN			10	No	Filter	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
004	0.001	D	0.316	103	No	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	PCB 153
005	0.01	D	0.284	92	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
006	0.01	D	0.31	94	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
007	0.01	D	0.17	99	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
008	0.01	D	0.228	99	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-ITQ	Rec. from same batch	
009	0.01	NA			No							Standard addition					
010	0.001	D	0.56	-	No	AcN			15	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
011	0.01	D	0.24	89	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-Orbitrap		
012	0.01	D	0.279	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Carbendazim-D3
013	0.01	D	0.26	77	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)		
014	0.01	D	0.24	94	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
015	0.01	D	0.22	88	No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
016	0.01	NA			No							Matrix matched - Single level					
017	0.01	D	0.2513	103	No	EIOAc			10	Yes		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.22	96	No	EIOAc			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TBP
019	0.02	D	0.268	92	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
020	0.01	D	0.288	92	No	MeOH			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Oxendazole
021	0.01	D	0.418	103	No	Acetone	DCM	EIOAc	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
022	0.01	D	0.283	110	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	
023	0.01	NA			No							Pure solvent - Multiple level					
024	0.01	D	0.26	96.7	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
025	0.01	D	0.24	94.7	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
026	0.01	D	0.294	101.4	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
027	0.01	NA			No							Pure solvent - Multiple level					
028	0.01	D	0.236	82	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
029	0.01	D	0.31	Std add	Yes	EIOAc			10	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
030	0.01	D	0.333	103	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
031	0.01	NA			No							Standard addition				Via Standard addition	Isoprothuron
032	0.01	D	0.17	70.6	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
033	0.01	D	0.33	66	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		LC-MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
034	0.01	D	0.281	62	No	EIOAc			10	Yes	DSPE	Matrix matched - Multiple level		LC-MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D4
035	0.01	D	0.29	119	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
036	0.01	NA			No							Matrix matched - Multiple level					
037	0.01	D	0.34	96	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.288	90	No	MeOH			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	HCB
039	0.01	D	0.143	85	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
040	0.01	NA			No							Matrix matched - Multiple level					
041	0.01	NA			No							Matrix matched - Multiple level					
042	0.01	NA			No							Matrix matched - Multiple level					
043	0.01	D	0.316	105	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
044	0.01	D	0.29	93	No	Acetone	DCM	Petr. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
045	0.01	D	0.25	75	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Pencycuron																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	0.301	86.25	Yes	ACN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
047		NA															
048		NA															
049	0.01	D	0.231	70	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	0.219	95	No	ACN			15	No		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
051	0.01	D	0.218	105	No	ACN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	IRIS
052	0.01	D	0.349	106.1	No	ACN			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
053	0.01	D	0.167	93	No	EIOAc			10	No	GPC	Matrix matched - Multiple level	MSD	GC-MS	Rec. from same batch		
054	0.01	D	0.285	ACN	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Spiked blank samples	
055	0.01	D	0.335	87	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
056		NA															
057	0.01	D	0.306	107	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Isoproturon-D6
058	0.01	D	0.298	89.3	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
059	0.01	D	0.286	103	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
060		NA															
061	0.01	D	0.4	85	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.358	82	No	MeOH			10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
063	0.01	D	0.265	76.5	Yes	ACN			2	No		Matrix matched - Multiple level	NPD	Two columns			
064	0.01	D	0.3	117	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-ITQ	Rec. from same batch	TPP
065	0.01	D	0.271	97	No	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
066	0.01	D	0.25	91	No	ACN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.3	98.2	No	MeOH			10	Yes		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
068	0.01	D	0.27	86	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
069		NA															
070		NA															
071		NA															
072		NA															
073	0.01	D	0.291	91	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)				
074	0.01	D	0.26	98	No	ACN			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
075	0.01	D	0.281	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP, Pirimicarb-D6
076	0.01	D	0.31	89.9	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
077		NA															
078	0.01	D	0.22	102	No	Acetone	DCM	Petr. Ether	7.5	No		Matrix matched - Multiple level	MS/MS (QQQ)				TPP
079	0.01	D	0.205	97	No	ACN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Sulfalep
080	0.005	D	0.343	109.5	No	MeOH	DCM		10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D3
081		NA															
082	0.01	D	0.257	100	No	ACN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via standard addition	
083	0.005	D	0.307	107	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
084	0.01	D	0.16	70	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via standard addition	
085	0.01	D	0.32	70.120	No												
086	0.01	D	0.27	81	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
087		NA															
088	0.05	D	0.262	84	No	Acetone	DCM	Petr. Ether	100	No	SPE	Matrix matched - Single level	NPD		Two columns	Rec. from same batch	
089		NA															
090	0.01	D	0.19	98	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Pirimicarb-D6
091	0.01	D	0.2398	100	No	ACN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from validation data	
092	0.01	D	0.258	113	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IRIS
093	0.01	D	0.273	100.7	No	ACN			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Pencycuron																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
094	0.01	D	0.23	82	No	Acetone	DCM		1.5	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Via Standard addition	
095	0.005	D	0.27	94	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
096	NA	NA															
097	0.01	D	0.275	100	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Liuron-D6
098	NA	NA															
099	0.01	D	0.293	92	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
100	0.01	D	0.204	81	No	AGN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
101	0.01	D	0.374	105.7	No	AGN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
102	0.01	D	0.251	85	No	AGN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
103	0.01	D	0.27	88	No	ACN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
104	0.01	D	0.344	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Phirmicarb-D6
105	0.01	D	0.252	95	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
106	0.01	D	0.218	85	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Orbitrap	Rec. from same batch	IRS
107	0.01	D	0.229	98	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
108	0.01	D	0.27	91	No	ACN			100	No	DSPE	Matrix matched - Single level	MSD	MS/MS (QQQ)	GC-MS	Via Standard addition	TPP
109	0.01	D	0.25		No	AGN			100	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Desmethyn
110	0.01	D	0.26	90	No	AGN			10	No	DSPE	Matrix matched - Multiple level	TOF	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
111	0.005	D	0.27	103	No	AGN			5	Yes	DSPE	Standard addition		MS/MS (QQQ)	Two columns	Rec. from validation data	
112	0.01	D	0.23	80	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	Two columns	Rec. from same batch	TPP
113	NA	NA															
114	0.01	D	0.256	90	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
115	NA	NA															
116	NA	NA															
117	NA	NA															
118	0.01	D	0.386	88	No	ACN			1.5	No	DSPE	Pure solvent - Multiple level	NPD	MS/MS (QQQ)	GC-MS	Rec. from same batch	
119	0.01	D	0.32	108	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	TPP
120	0.01	D	0.325	97.0	No	ACN			10	No	DSPE	Pure solvent - Multiple level	NPD	MS/MS (QQQ)	GC-MS	Rec. from validation data	
121	0.01	D	0.33	111	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
122	0.01	D	0.207	95.2	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	0.22	95.4	Yes	Acetone	DCM	Petr. Ether	15	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
124	0.005	D	0.28	94	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
125	NA	NA															
126	NA	NA															
127	NA	NA															
128	NA	NA															
129	0.01	D	0.29	97	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
130	0.01	D	0.33	97	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
131	NA	NA															
132	0.01	D	0.312	97	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
133	NA	NA															
134	NA	NA															
135	0.01	D	0.277	99	No	ACN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
136	0.01	D	0.261	71	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
137	0.01	D	0.246	93	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
138	0.01	D	0.27	106	No	ACN			10	No	DSPE	Matrix matched - Single level	MSD	MS/MS (QQQ)	GC-MS	Rec. from validation data	TPP
139	NA	NA															
140	0.02	D	0.254	103	No	ACN	Acetone		10		DSPE	Matrix matched - Single level		MS		Rec. from same batch	
141	NA	NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Pencycuron																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
142	0.01	NA																
143	0.01	D	0.257	115	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP	
144	0.01	NA																
145	0.01	D	0.26	88	No	ACN			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
146	0.01	NA																
147	0.01	NA																
148	0.01	D	0.282	74	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	PCB 31	
149	0.01	D	0.254	83	No	ACN			10	Yes	DSPE	Matrix matched - Single level	MS/MS (QQQ)			Rec. from same batch	TPP	
150	0.01	NA																
151	0.01	NA																
152	0.01	NA																
153	0.01	NA																
154	0.01	NA																
155	0.01	D	0.27	95	Yes	ACN			10			Participation Cancelled						
156	0.01	D	0.178	111	No	1% HOAc in MeCN			15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Via Standard addition		
157	0.01	D	0.42	80	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch		
158	0.01	NA																TPP
159	0.01	NA																
160	0.01	NA																
161	0.01	D	0.205	70	No	ACN			12	No		Matrix matched - Multiple level		MS	GC-MS/MS (QQQ)	Rec. from same batch		
162	0.01	NA																
163	0.01	D	0.285	94	No	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch		
164	0.01	D	0.30	98	No	ACN			15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch		
165	0.01	D	0.245	101	No	ACN			10			Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP	
166	0.01	D	0.242	96	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch		
167	0.01	NA										Participation Cancelled						
168	0.01	NA																
169	0.01	NA																
170	0.01	NA																
171	0.01	NA																
172	0.01	D	0.141	60	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	Antor	
173	0.01	D	0.27	93	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from validation data	TPP	
174	0.01	NA										No Results Submitted						
175	0.01	NA										No Results Submitted						
176	0.01	D	0.180	85	No	ACN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch		

APPENDIX 7. Methods used by participants for determining pesticides.

Prochloraz																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.066	94	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Caffein
002	0.01	D	0.064	65.4	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
003	0.001	NA															
004	0.001	D	0.066	95	No	AcN			10	No	Filter	Matrix matched - Multiple level		MS/MS (QQQ)		Via Standard addition	TPP
005	0.01	D	0.052	104	No	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)		Rec. from same batch	
006	0.01	D	0.05	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Tri-(1,3-dichloro-isopropyl)phosphate
007	0.01	D	0.048	95	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
008	0.01	D	0.041	85	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
009	0.01	D	0.025	80	No	Acetone	DCM	Petr. Ether	7.5	No		Matrix matched - Single level	ECD	MS/MS (QQQ)		Rec. from same batch	
010	0.001	D	0.068	-	No	AcN			15	No		Standard addition		MS/MS (QQQ)		Rec. from same batch	
011	0.01	D	0.06	87	No	AcN			10	No	DSPE	Pure solvent - Multiple level		Orbitrap		Rec. from validation data	TPP
012	0.01	ND															
013	0.01	D	0.035	87	Yes	AcN			10	No	DSPE	Standard addition					
014	0.01	D	0.077	94	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
015	0.01	D	0.046	96	No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
016		NA															
017	0.01	D	0.0595	104	No	EIOAc			10	Yes		Matrix matched - Single level		MS/MS (QQQ)		Rec. from same batch	
018	0.01	D	0.042	89	No	EIOAc			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TBP
019	0.04	D	0.05	78	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	NPD	MS/MS (QQQ)		Rec. from same batch	
020	0.01	D	0.078	96	No	MeOH			10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Oxendazole
021	0.01	D	0.062	90	No	Acetone	DCM		15	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
022	0.01	D	0.053	101	No	AcN		EIOAc	10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)		Rec. from same batch	
023	0.01	D	0.056	77.8	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
024	0.01	D	0.053	85.7	No	AcN			10	No		Pure solvent - Multiple level		MS/MS (QQQ)		Via Standard addition	
025	0.01	D	0.054	94.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD, NPD	MS/MS (QQQ)		Rec. from same batch	TPP
026	0.01	D	0.07	102.5	No	AcN			10	No	DSPE	Matrix matched - Multiple level			GC-MS		
027		NA															
028	0.01	D	0.065	80	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)		Rec. from same batch	
029	0.01	D	0.072	310 add	Yes	EIOAc			10	No		Standard addition		MS/MS (QQQ)		Via Standard addition	
030	0.01	D	0.068	130	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)		Via Standard addition	Isoproturon
031		NA															
032	0.01	D	0.03	79.4	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
033	0.01	D	0.052	62	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS		TPP
034	0.01	D	0.052	85	No	EIOAc			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Carbendazim-D4
035	0.01	D	0.096	131	No	AcN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)		TPP
036	0.05	D	0.040	85	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)		
037	0.01	D	0.08	99	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
038	0.01	D	0.051	94.7	No	MeOH			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
039	0.01	D	0.064	71	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
040	0.01	NA															
041	0.01	NA															
042		NA															
043	0.01	D	0.059	120	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TPP
044	0.01	D	0.057	88	No	Acetone	DCM	Petr. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TPP
045	0.01	D	0.059	103	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Prochloraz																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
046	0.01	D	0.044	98.35	Yes	AGN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
047	0.003	D	0.071	113	No	AGN			10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	MS/MS (QQQ)	Rec. from same batch		
048	0.05	D	0.084	68	No	DCM			10		DSPE	Pure solvent - Single level	NPD		GC-MS	Rec. from validation data	Ethion	
049	0.01	D	0.06	103	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
050	0.01	D	0.04	92	No	AGN			15	No		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
051	0.01	D	0.039	96	No	AGN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
052	0.01	D	0.0504	98.7	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	TRIS	
053	0.01	ND			No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Spiked blank samples		
054	0.01	D	0.066		No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
055	0.01	D	0.079	74	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
056		NA																
057	0.01	D	0.053	87	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	Propiconazole-D5	
058	0.01	D	0.068	105	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
059	0.01	D	0.055	97	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data		
060		NA																
061	0.01	D	0.067	110	No	AGN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
062	0.01	D	0.055	83	No	MeOH			10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
063	0.01	D	0.061	96.6	Yes	AGN			2			Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch		
064	0.01	D	0.05	88	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-ITQ	Rec. from same batch	TPP	
065	0.01	D	0.043	94	No	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
066	0.01	D	0.07	80	No	Acetone	DCM		15	No		Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch		
067	0.01	D	0.037	75.8	No	Acetone	Cyclohexane		20	Yes	GPC	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nitrofen, TPP	
068	0.01	D	0.05	67	Yes	MeOH	DCM	EIOAc	10	No	DSPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from validation data	TPP	
069	0.01	D	0.038	126	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
070	0.01	D	0.09	91	No	AGN			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	TPP	
071		NA																
072	0.01	D	0.053	102.5	No	AGN			10		DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
073	0.01	D	0.055	64	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch		
074	0.01	D	0.06	89	No	AGN			10	Yes	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP	
075	0.01	D	0.049	98	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	TPP, Pirimicarb-D6	
076	0.025	D	0.067	85.5	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
077	0.01	D	0.09	-	No	EIOAc			10	Yes	DSPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	Fenchlorphos	
078	0.01	D	0.016	100	No	AGN	DCM		7.5	No		Matrix matched - Multiple level		MS/MS (QQQ)	MS/MS (QQQ)	Rec. from same batch	TPP	
079	0.01	D	0.029	96	No	AGN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Sulfotep	
080	0.005	D	0.096	105.3	No	MeOH	DCM		10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D3	
081		NA																
082	0.01	D	0.055	100	No	AGN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
083	0.005	D	0.067	106	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
084		NA																
085	0.01	D	0.089	70-120	No													
086	0.01	D	0.059	100	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
087		NA																
088	0.01	D	0.068	108	No	Acetone	DCM	Petr. Ether	100	No	SPE	Matrix matched - Single level	ECD		Two columns	Rec. from same batch		
089		NA																
090	0.01	D	0.037	99	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level		MS/MS (QQQ)	Rec. from same batch	Pirimicarb-D6		
091	0.01	D	0.04	97	No	AGN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from validation data		
092	0.01	D	0.072	119	No	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TRIS	
093	0.01	D	0.060	99.9	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10	

APPENDIX 7. Methods used by participants for determining pesticides.

Prochloraz																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
094	0.01	D	0.056	105	No	AGN			10	Yes	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
095	0.005	D	0.051	96	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
096	0.01	D	0.035	95	Yes	AGN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Via Standard addition	TCPP	
097	0.01	D	0.069	99	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	Linuron-D6	
098	0.01	D	0.049	69	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch		
099	0.01	D	0.066	104	No	EIOAC			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
100	0.01	D	0.045	87	No	AGN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10	
101	0.01	D	0.079	108.3	No	AGN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
102	0.01	D	0.058	102	No	AGN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
103	0.01	D	0.047	91	No	AGN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Pirimicarb-D6	
104	0.01	D	0.071	97	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
105	0.01	D	0.058	100	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Orbitrap	Rec. from same batch	IRIS	
106	0.01	D	0.06	91	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch		
107	0.01	D	0.050	98	No	AGN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
108	0.01	D	0.056	92	No	AGN			10.0	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
109	0.01	D	0.089	99	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Desmetryn	
110	0.01	D	0.09	94	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from validation data		
111	0.005	D	0.054	94	No	AGN			5	Yes	DSPE	Standard addition		GC-MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from validation data		
112	0.01	D	0.055	80	No	AGN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP	
113	0.01	D	0.032	80	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Single level	ECD	MS/MS (QQQ)	two columns	Rec. from same batch		
114	0.01	D	0.05	87	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
115		NA																
116		NA																
117		NA																
118	0.01	D	0.08	95	No	AGN			15	No	DSPE	Pure solvent - Multiple level		DAD	GC-MS	Rec. from same batch		
119	0.01	D	0.065	96.9	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP	
120	0.01	D	0.062	96.0	No	AGN			10	No	DSPE	Matrix matched - Multiple level	ECD	MS/MS (QQQ)	GC-MS	Rec. from validation data		
121	0.01	D	0.063	104.6	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch		
122	0.01	D	0.037	90.3	No	EIOAC			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
123	0.01	D	0.044	104.5	No	Acetone	DCM	Petr. Ether	15	No	Liquid/liquid partitioning	Pure solvent - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
124	0.02	D	0.063	77	No	Acetone	DCM	Petr. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Single level			GC-MS	Rec. from same batch		
125		NA																
126		NA																
127		NA																
128	0.01	D	0.074	93	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
129	0.01	D	0.062	96	No	AGN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data		
130	0.01	D	0.07	93	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
131	0.01	D	0.058	70	No	AGN			10	No	DSPE	Pure solvent - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	Fenchlorphos	
132	0.01	D	0.071	92	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP	
133	0.01	ND																
134	0.01	D	0.034	81.6	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
135	0.01	D	0.065	90	No	AGN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
136	0.01	D	0.062	102	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
137	0.01	D	0.049	105	No	AGN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
138	0.01	D	0.068	85	No	AGN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP	
139		NA																
140	0.05	D	0.066	82	No	AGN			10	No	DSPE	Matrix matched - Single level	Ion trap		LC-MS	Rec. from validation data		
141	0.01	D	0.08	83	No	DCM	Acetone		5	No	DSPE	Pure solvent - Multiple level	ECD		two columns	Rec. from validation data		

APPENDIX 7. Methods used by participants for determining pesticides.

Prochloraz																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
142	0.01	D	0.066	93.3	No	Acetone	DCM	EIOAC	20	Yes	GPC	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
143	0.01	D	0.055	92	No	AcN			10		DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
144		NA							10	No		Standard addition			LC-MS/MS (QQQ)	Rec. from same batch	
145	0.01	D	0.042	92.3	No	AcN			10						LC-MS/MS (QQQ)		
146		NA															
147		NA															
148	0.01	D	0.059	110	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	PCB 31
149		NA															
150	0.01	D	0.038	97.8	No	Acetone	DCM	Petr. Ether	20	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	
151	0.01	D	0.031	120	No	AcN			10	No		Matrix matched - Multiple level	MS/MS I/D		MS/MS I/D	Rec. from same batch	TPP
152	0.05	D	0.05	70	No	Acetone	DCM	Petr. Ether	15	No	Liquid/Liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
153	0.01	D	0.021	40	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
154	0.01	D	0.063	matrix matched surrogate calibration	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Not applied	TPP
155												Participation Cancelled					
156	0.01	D	0.02	95	Yes	AcN			10		DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Via Standard addition	
157	0.01	D	0.0514	97	No	1% HOAc in MeCN			15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
158	0.01	D	0.057	100	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
159	0.05	D	0.041	96.9	No	AcN			9.952	Yes	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
160	0.01	D	0.044	73.2	No	EIOAC			20			Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
161	0.01	D	0.054	71	No	Acetone	AcN		10	Yes	Liquid/Liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
162		NA															
163	0.01	D	0.059	103	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
164	0.01	D	0.072	108	No	AcN			15	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
165	0.01	D	0.0431	94	No	AcN			10			Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
166	0.01	D	0.048	86	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
167												Participation Cancelled					
168	0.01	D	0.068	90	Yes				5		SPE	Standard addition	NPD		Two columns	Rec. from validation data	
169		NA															
170		NA															
171	0.01	D	0.073	99	No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
172	0.01	D	0.045	71	No	EIOAC			15	No		Matrix matched - Multiple level			GC-MS/MS (QQQ)	Rec. from same batch	
173	0.01	D	0.062	90	No	EIOAC	Cyclohexane		10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
174												No Results Submitted					
175	0.01	NA															
176												No Results Submitted					
177	0.01	D	0.016	85	No	AcN			10	No	SPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Procymidone																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.097	97	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Caffein
002	0.01	D	0.099	87.2	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
003	0.03	D	0.133	79	No	EIOAc			50	No	GFC	Pure solvent - Multiple level	ECD		Two columns	Rec. from same batch	
004	0.001	D	0.121	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		Via Standard addition	Rec. from same batch	TPP
005	0.01	D	0.114	96.7	No	Acetone	DCM	Petr. Ether	15	No	Filter	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 153
006	0.025	D	0.13	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD			Rec. from same batch	Tri(1,3-dichloro-isopropyl)phosphate
007	0.01	D	0.115	101	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-ID-MSMS	Rec. from same batch	Phenanthrene-D10
008	0.02	D	0.1	85	No	EIOAc			37.5	No	GFC	Matrix matched - Multiple level	ECD		GC-ID-MSMS	Rec. from same batch	TPP
009	0.01	D	0.089	107	No	Acetone	DCM	Petr. Ether	7.5	No		Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
010	0.01	D	0.11	-	No	AcN			15	No	SPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
011	0.01	D	0.11	99	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	TPP
012	0.01	D	0.063	80	No	AcN			10	No	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	Parathion-methyl-D6
013	0.01	D	0.21	96	Yes	AcN			10	No	DSPE	Standard addition					
014		NA															
015	0.01	D	0.09	92	No	EIOAc			50	Yes	GFC	Matrix matched - Multiple level	IDT		GC-MS	Rec. from same batch	
016	0.06	D	0.12	100	No	DCM			10	No	GFC	Matrix matched - Multiple level	NPD		GC-MS	Rec. from validation data	
017	0.01	D	0.109	96	No	EIOAc			10	Yes		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
018	0.01	D	0.1	79	No	EIOAc			10	No	SPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from same batch	TBP
019	0.01	D	0.139	96	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
020	0.01	D	0.126	106	No	Acetone			50	No	Liquid/liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
021	0.01	D	0.126	101	Yes	Acetone	DCM	EIOAc	15	No	Liquid/liquid partitioning	Pure solvent - Multiple level	MS/MS (QQQ)			Rec. from same batch	
022	0.01	D	0.079	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Parathion-ethyl
023		NA															
024	0.01	D	0.132	97	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	
025	0.01	D	0.104	100.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD NPD		GC-MS	Rec. from same batch	PCB 28
026	0.01	D	0.125	105.8	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	TPP
027	0.02	D	0.11	102	No	AcN			12	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Spiked sample	
028	0.01	D	0.102	85	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	
029	0.01	D	0.12	Std add	Yes	EIOAc			10	No	DSPE	Standard addition	MS/MS (QQQ)			Via Standard addition	
030	0.01	D	0.119	89	Yes	AcN			10	No	DSPE	Standard addition	MSD			Via Standard addition	PCB 20
031	0.01	D	0.12	75	No	Acetone	DCM		15	No		Pure solvent - Multiple level	IDT		GC-MS	Rec. from same batch	
032	0.01	D	0.08	74.6	No	AcN			15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
033	0.01	D	0.12	105	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
034	0.01	D	0.108	105	No	EIOAc			10	No	SPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Trifluridin-D14
035	0.01	D	0.137	105	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
036	0.02	D	0.104	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
037	0.01	D	0.15	113	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.121	86	No	Acetone			10	No	SPE	Matrix matched - Multiple level	MSD			Rec. from same batch	TPP
039	0.01	D	0.107	86	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Single level	MS/MS (QQQ)		GC-MS	Rec. from same batch	HCB
040	0.01	NA															
041	0.01	NA															
042	0.01	D	0.112		No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS		
043	0.01	D	0.138	101	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level	TOF			Rec. from same batch	TPP

APPENDIX 7. Methods used by participants for determining pesticides.

Procymidone																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
044	0.01	D	0.11	94	No	Acetone	DCM	Petr. Ether	10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
045		NA															
046	0.01	D	0.102	92.25	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Diazinon-D10
047	0.01	D	0.11	98	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Endosulfan lactone
048	0.05	D	0.14	98	No	DCM			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	
049	0.01	D	0.111	93	No	Acetone			20	No	Liquid/liquid partitioning	Pure solvent - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from validation data	
050	0.01	D	0.092	105	No	AcN			15	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from same batch	TDOPP
051	0.01	D	0.104	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
052	0.01	D	0.139	123.5	Yes	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TRIS
053	0.01	D	0.159	11.6	No	EIOAc			10	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
054	0.01	D	0.101		No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Spiked/blank samples	
055	0.01	D	0.131	75	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	Bromophos-methyl
056	0.01	ND															
057	0.01	D	0.097	104	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
058	0.01	D	0.123	93.3	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-methyl-D6
059	0.01	D	0.134	92	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from validation data	
060	0.01	D	0.1	97.4	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
061	0.01	D	0.11	103	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
062	0.01	D	0.131	89	No	Acetone	Cyclohexane	EIOAc	75	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
063	0.01	D	0.126	86.5	Yes	AcN			2	No	DSPE	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	Bromophos-methyl
064	0.01	D	0.17	105	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Atrifracene
065	0.01	D	0.112	95	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	
066	0.01	D	0.112	90	No	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.112	103.5	No	Acetone	Cyclohexane	EIOAc	20	Yes	GPC	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nitrafen, TPP
068	0.01	D	0.11	50	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from validation data	TPP
069	0.01	D	0.098	100	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	IDT		MS/MS (ITD)	Rec. from same batch	TPP
070	0.01	D	0.09	97	No	AcN			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	TPP
071		NA															
072	0.01	D	0.114	97	No	AcN			10	No	SPE	Matrix matched - Multiple level		MS	GC/MS/MS ITD	Rec. from same batch	
073	0.01	D	0.093	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
074	0.01	D	0.11	98	No	AcN			10	Yes	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
075	0.01	D	0.12	100	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	TPP, Pirimicarb-D6
076	0.01	D	0.12	104	No	MeOH	DCM	EIOAc	50	No	GPC	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	Mirax
077	0.01	D	0.09	-	No	EIOAc			10	Yes	DSPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	Fenclorophos
078	0.01	D	0.121	100	No	Acetone	DCM	Petr. Ether	7.5	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
079	0.01	D	0.13	98	No	AcN			10	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 31
080	0.01	D	0.13	84.6	No	Acetone	EIOAc	Cyclohexane	50	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Via Standard addition	Triphenylmethan, TPP
081	0.01	D	0.14	116.67	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Via Standard addition	
082	0.01	D	0.087	100	No	AcN			10	No	DSPE	Standard addition	MSD		GC-MS	Via Standard addition	
083	0.066	ND	0	0	No				10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
084	0.01	D	0.067	80	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
085	0.01	D	0.091	70-120	No		Isopropanol			No	DSPE	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
086	0.02	D	0.18	107	No	Toluene			25	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS	Via Standard addition	HCH-alpha-D6
087	0.01	D	0.09	95	Yes	AcN			100	No	DSPE	Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
088	0.01	D	0.116	92	No	Acetone	DCM	Petr. Ether	100	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	
089	0.01	D	0.145	93	No	Acetone	DCM	Petr. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Single level	MSD		GC-MS	Rec. from same batch	Pirimicarb-D6
090	0.01	D	0.079	86	No	EIOAc			10	Yes	Filtration	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
091	0.01	D	0.0963	92	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	

APPENDIX 7. Methods used by participants for determining pesticides.

Procymidone																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
092	0.02	D	0.104	115	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IRIS	
093	0.01	D	0.112	94.0	No	AcN			10	Yes	SPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10	
094	0.01	D	0.1	112	No	Acetone	DCM		15	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	IPP	
095	0.005	D	0.13	107	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	ICPP	
096	0.01	D	0.169	86	Yes	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	Triphenylmethan	
097	0.01	D	0.105	95	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-TOF	Rec. from same batch		
098	0.01	D	0.1772	97	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch		
099	0.01	D	0.101	93	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	PCB	
100	0.01	D	0.088	76	No	AcN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10	
101	0.01	D	0.142	107.3	No	AcN			10	No	DSPE	Pure solvent - Multiple level	IDT		MS	Rec. from same batch	Trichloronate	
102	0.01	D	0.119	89	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD		MS/MS (QQQ)	Rec. from same batch	IPP	
103	0.01	D	0.128	95	No	AcN			10	No	DSPE	Standard addition	MS/MS (QQQ)		MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10	
104	0.01	D	0.127	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level	TOF		GC-MS	Rec. from same batch	IPP	
105	0.01	D	0.131	70-120	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP	
106	0.01	D	0.107	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch		
107	0.01	D	0.11	92	No	AcN			10	No	DSPE	Pure solvent - Single level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	IPP	
108	0.01	D	0.11	81	No	AcN			10.0	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Via Standard addition		
109	0.01	D	0.11	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from validation data	Desmethyl	
110	0.01	D	0.11	97	No	AcN			5	Yes	DSPE	Matrix matched - Multiple level	TOF		LC-MS/MS (QQQ)	Rec. from validation data	PCB 31	
111	0.005	D	0.11	97	No	AcN			5	Yes	DSPE	Standard addition	MS/MS (QQQ)		GC-MS	Rec. from same batch	PCB 108	
112	0.01	D	0.104	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch		
113	0.01	D	0.1	101	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Single level	ECD		Two columns	Rec. from same batch		
114	0.01	D	0.083	75	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch		
115		N/A																
116	0.04	D	0.082	94.96	No	Isopropyl alcohol	Toluene		25	No	SPE	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch		
117	0.02	D	0.095	75	No	EIOAc	Trimethylpentane-2,2,4-Toluene		50	No		Matrix matched - Single level	ECD		Two columns	Rec. from same batch		
118	0.01	D	0.124	120	No	AcN			15	No	DSPE	Pure solvent - Multiple level	ECD		Two columns	Rec. from same batch		
119	0.01	D	0.12	90.1	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-ECD	Rec. from same batch	IPP	
120	0.01	D	0.103	82.0	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch		
121	0.01	D	0.12	86.5	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-ECD	Rec. from same batch		
122		N/A																
123	0.01	D	0.098	none	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	rolling spike		
124		N/A																
125	0.01	D	0.12	87	No	AcN			10	Yes	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	Tris-(2-chloro(4-chloromethyl)ethyl)phosphate	
126		N/A																
127	0.01	D	0.107	91	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from same batch	IPP	
128	0.01	D	0.133	109	No	AcN			10	No	DSPE	Matrix matched - Single level	ECD		GC-MS	Rec. from same batch	Lindane-delta	
129	0.01	D	0.12	98	No	AcN			10	No	DSPE	Pure solvent - Multiple level	MSD		GC-MS	Rec. from validation data	PCB 52	
130	0.01	D	0.14	86	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch		
131	0.01	D	0.076	83	No	Acetone	MeOH		50	No	SPE	Pure solvent - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from validation data	Fenclorophos	
132	0.01	D	0.128	100	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	IPP	
133	0.01	D	0.074	90	No	AcN			10	No	SPE	Pure solvent - Multiple level	ECD		GC-MS	Rec. from validation data	PCB 44	
134	0.01	D	0.1	80.8	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch		
135	0.01	D	0.159	118	No	AcN			10	Yes	DSPE	Pure solvent - Multiple level	ECD		GC-MS	Rec. from same batch	Bromophos-methyl	
136	0.01	D	0.113	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP	
137	0.01	D	0.091	99	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	IPP	

APPENDIX 7. Methods used by participants for determining pesticides.

Procymidone																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
138	0.01	D	0.11	101	No	AcN			10	No	DSPE	Matrix matched - Single level	MSD		GC-MS	Rec. from validation data	TPP
139	0.02	D	0.11	93.7	No	DCM/Acetone			5	No	DSPE	Pure solvent - Single level	ECD		GC-ECD, GC-NPD	Rec. from validation data	
140	0.02	D	0.108	91	No	AcN			10	No	DSPE	Matrix matched - Single level	ion trap		Two columns	Rec. from validation data	
141	0.02	D	0.111	95	No	DCM	Acetone		5	No	DSPE	Pure solvent - Multiple level	ECD		Two columns	Rec. from validation data	
142	0.01	D	0.111	84.9	No	Acetone	DCM	EIOAc	20	No	GFC	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch	
143	0.01	D	0.112	93	No	Acetone			20	No	Liquid/Liquid/partitioning	Matrix matched - Multiple level	ECD/NPD		GC-MS/MS (QQQ)	Rec. from same batch	
144	0.02	D	0.124	110	Yes	Acetone	DCM	EIOAc	100	No	GFC	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
145	0.01	D	0.1	87.2	No	Acetone	DCM	Petr. Ether 40-60	6	No	GFC	Matrix matched - Multiple level	ECD		Two columns	Rec. from same batch	
146	0.02	D	0.098	90	No	EIOAc			7.5	No	GFC	Matrix matched - Multiple level	TOF		GC-MS	Rec. from same batch	TPP
147	0.01	D	0.131	83	No	Acetone	DCM		7.5	No	Liquid/Liquid/partitioning	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
148	0.01	D	0.118	84	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		Via Standard addition	PCB 31	
149	0.01	D	0.117	97	No	AcN			10	Yes	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
150	0.01	D	0.1	94.3	No	Acetone	DCM	Petr. Ether	20	No	GFC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
151	0.01	D	0.078	90	No	AcN			10	No		Matrix matched - Multiple level	MS/MS I/D		MS/MS I/D	Rec. from same batch	TPP
152	0.03	D	0.1	100	No	Acetone	DCM	Petr. Ether	15	No	Liquid/Liquid/partitioning	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	
153	0.01	D	0.046	89	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
154	0.01	D	0.143	matrix matched surrogate calibration	No	AcN			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Not applied	TPP
155	0.01	D	0.08	95	Yes	AcN			10			Participation Cancelled	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	
157	0.01	D	0.0901	77	No	EIOAc			15		DSPE	Matrix matched - Multiple level	GC-IT-MS/MS		GC-IT-MS/MS	Rec. from same batch	
158	0.01	D	0.12	110	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
159	0.01	D	0.112	90.8	No	AcN			9.999	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
160	0.02	D	0.098	81	No	EIOAc			20		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
161	0.01	D	0.109	87	No	Acetone	AcN		10	Yes	Liquid/Liquid/partitioning	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
162		NA															
163	0.01	D	0.12	102	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level	MS (I/D)		GC-MS/MS (QQQ)	Rec. from same batch	
164	0.01	D	0.10	90	No	AcN			30	No	GFC	Matrix matched - Multiple level	MSD		GC-MS/MS (QQQ)	Rec. from same batch	TPP
165	0.01	D	0.0825	90	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	Tetrahydroethylene
166	0.01	D	0.086	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
167												Participation Cancelled					
168	0.01	D	0.12	90	Yes				5		SPE	Standard addition	ECD		Two columns	Rec. from validation data	
169	0.01	D	0.086	113	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		MS/MS (I/D)	Rec. from same batch	PCB 18
170	0.01	D	0.055	110	No	EIOAc			10	No	DSPE	Matrix matched - Multiple level	MS/MS (I/D)		MS/MS (I/D)	Via Standard addition	
171	0.01	D	0.11	90	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP
172	0.01	D	0.093	92	No	EIOAc			15	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
173	0.01	D	0.12	93	No	EIOAc	Cyclohexane		10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	
174												No Results Submitted					
175		NA										No Results Submitted					
176												No Results Submitted					
177	0.01	D	0.130	85	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Spirodiclofen																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	NA	D 0.435	108	No	AcN			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
003	0.01	NA	D 0.684	97	No	AcN			10	No	Filter	Matrix matched - Multiple level		MS/MS (QQQ)		Via Standard addition	TPP
004	0.02	D	0.422	105	No	Acetone	DCM	Petr. Ether	15	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
006	0.01	D	0.39	86	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Tri-(1,3-dichloro-isopropyl)phosphate
007	0.01	D	0.446	104	No	AcN			10	No	SPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Phenanthrene-D10
008	0.02	D	0.401	89	No	EIOAc			37.5	No	GPC	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	
009	0.02	NA	D 0.44	-	No	AcN			15	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)		
011	0.01	D	0.461	91	No	AcN			10	No	DSPE	Pure solvent - Multiple level		Chirapak	LC-Orbitrap	Rec. from validation data	TPP
012	0.01	D	0.41	80	No	AcN			10	No		Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from validation data	Parathion-methyl-D6
013	0.01	D	0.35	82	Yes	AcN			10	No	DSPE	Standard addition					
014	0.01	NA	D 0.36	89	No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
016	0.01	NA	D 0.4254	106	No	EIOAc			10	Yes		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.47	89	No	EIOAc			10	No	SPE	Matrix matched - Multiple level	TOF		GC-MS/MS (QQQ)	Rec. from same batch	TBP
019	0.01	NA	D 0.344	89	No	MeOH			10			Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Oxendazole
020	0.01	D	0.515	96	No	Acetone	DCM	EIOAc	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
021	0.01	D	0.492	113	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	
023	0.01	D	0.29	87.4	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
024	0.01	D	0.545	101	No	EIOAc			10	No		Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	PCB 28
025	0.01	D	0.4	94.1	No	AcN			10	No	DSPE	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	TPP
026	0.01	D	0.57	102.2	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
027	0.01	NA	D 0.44	92	No	AcN			10		DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
028	0.01	D	0.58	Standard	Yes	EIOAc			10	No	DSPE	Standard addition	MS/MS (QQQ)			Via Standard addition	
029	0.01	D	0.552	124	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)		Via Standard addition	Isoproturon
031	0.01	NA	D 0.33	82	No	Acetone			10	No		Matrix matched - Multiple level					
032	0.01	NA	D 0.51	104	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
034	0.01	D	0.451	79	No	EIOAc			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D4
035	0.01	D	0.379	67	No	AcN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
036	0.01	NA	D 0.59	101	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.309	80	No	Acetone			10	No	SPE	Matrix matched - Multiple level	MSD			Rec. from same batch	TPP
039	0.01	D	0.33	82	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	HCB
040	0.01	NA	D 0.41	86	No	Acetone			10	No		Matrix matched - Multiple level					
041	0.01	NA	D 0.67	118	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level	TOF			Rec. from same batch	TPP
042	0.01	NA	D 0.41	86	No	Acetone	DCM	Petr. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
043	0.01	D	0.41	86	No	Acetone			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
045	0.01	D	0.46	78	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Spirodiclofen																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	0.369	nd	Yes	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)		
047		NA															
048	0.05	D	0.497	87	No	DCM			10	No	DSPE	Pure solvent - Single level	ECD		GC-MS	Rec. from validation data	Endosulfan lactone
049	0.01	D	0.507	95	No	Acetone			20	No	Liquid/Liquid partitioning	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	0.326	86	No	AcN			15	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Rec. from same batch	TPP
051	0.01	D	0.392	101	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
052	0.01	D	0.58	114.3	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TRIS
053	0.01	D	0.215	92	No	EIOAc			10	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
054	0.01	D	0.433		No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-MS/MS (QQQ)	Spiked blank samples	Bromophos-methyl
055	0.01	D	0.444	100	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
056		NA															
057	0.01	D	0.697	111	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch	
058	0.01	ND															
059	0.01	D	0.486	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data	
060		NA															
061	0.01	D	0.47	97	No	AcN			10	No	DSPE	Pure solvent - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	0.737	75	No	MeOH			10	No	Liquid/Liquid partitioning	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
063		NA															
064	0.01	D	0.5	70	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	Bromophos-methyl
065	0.01	D	0.422	95	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Pure solvent - Multiple level	ECD		LC-MS/MS (QQQ)	Rec. from same batch	TPP
066	0.01	D	0.407	72	No	Acetone	DCM		15	No	DSPE	Matrix matched - Single level			GC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	0.446	95.9	No	Acetone	Cyclohexane	EIOAc	20	Yes	GPC	Matrix matched - Single level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	Nitrofen, TPP
068	0.01	D	0.42	73	Yes	MeOH	DCM		10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from validation data	TPP
069		NA															
070		NA															
071		NA															
072		NA															
073	0.01	D	0.508	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	Carbaryl-C13
074	0.01	D	0.41	110	No	AcN			10	Yes	SPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP
075	0.01	D	0.48	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level			MS/MS (QQQ)	Rec. from same batch	TPP, Pirimicarb-D6
076	0.01	D	0.54	104	No	MeOH	DCM	EIOAc	50	No	GPC	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch	Mirex
077		NA															
078	0.01	D	0.382	97	No	Acetone	DCM	Petr. Ether	7.5	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from same batch	TPP
079	0.01	D	0.39	77	No	AcN			10	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch	PCB 31
080	0.005	D	0.543	77.6	No	Acetone	EIOAc	Cyclohexane	50	No	GPC	Matrix matched - Multiple level	MS/MS (QQQ)		GC-TOF	Rec. from same batch	
081		NA															
082	0.01	D	0.396	100	No	AcN			10	No	DSPE	Standard addition			LC-MS/MS (QQQ)	Via standard addition	
083	0.01	ND	0	0	No												
084	0.01	D	0.23	76	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via standard addition	
085	0.01	D	0.33	70.120	No												
086	0.01	D	0.37	88	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
087		NA															
088	0.05	D	1.55	99	No	Acetone	DCM	Petr. Ether	100	No	SPE	Matrix matched - Single level	ECD		Two columns	Rec. from same batch	
089		NA															
090	0.01	D	0.34	90	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level	MS/MS (QQQ)		LC-Q-TOF	Rec. from same batch	Pirimicarb-D6
091	0.01	D	0.2268	86	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS	Rec. from validation data	
092	0.01	D	0.513	119	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TRIS
093	0.01	D	0.471	97.3	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		LC-Q-TOF	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Spirodiclofen																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
064		NA															
095_0.01	D	0.43	98	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
096_0.01	D	0.333	46	Yes	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Via Standard addition	TCPP
097_0.01	D	0.47	98	No	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Litruon-D6
098_0.01	D	0.8155	59	No	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)			Rec. from same batch	
099_0.01	D	0.462	101	No	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
100_0.01	D	0.439	86	No	No	ACN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
101		NA															
102_0.01	D	0.466	98	No	No	ACN			10	No	DSPE	Matrix matched - Single level	MS/MS (QQQ)		GC-MS	Rec. from same batch	
103_0.01	D	0.486	81	No	No	ACN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Phimicarb-D6
104_0.01	D	0.691	94	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	TPP
105_0.01	D	1.07	70-120	No	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	Orbitrap	LC-Orbitrap	Rec. from same batch	IRS
106_0.01	D	0.357	85	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
107_0.01	D	0.46	101	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
108_0.01	D	0.42	73	No	No	ACN			100	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
109_0.01	D	0.52		No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Desmethyn
110_0.01	D	0.42	93	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level	TOF	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
111_0.005	D	0.44	107	No	No	ACN			5	Yes	DSPE	Standard addition		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from validation data	
112_0.01	D	0.476	80	No	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	Two columns	Rec. from same batch	TPP
113		NA															
114_0.01	D	0.401	70	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
115		NA															
116		NA															
117		NA															
118_0.01	D	0.357	119	No	No	ACN			15	No	DSPE	Pure solvent - Multiple level	ECD	MS/MS (QQQ)	GC-MS	Rec. from same batch	
119_0.01	D	0.45	103.1	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-ECD	Rec. from same batch	TPP
120_0.01	D	0.399	83.3	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level	ECD	GC-MS	GC-MS	Rec. from same batch	
121_0.01	D	0.41	91.4	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
122_0.01	D	0.328	103	No	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
123_0.01	D	0.37	99.2	No	No	Acetone	DCM	Petr. Ether	15	No	Liquid/liquid partitioning	Pure solvent - Multiple level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
124_0.01	D	0.48	99	No	No	Acetone	DCM	Petr. Ether	15	No	Liquid/liquid partitioning	Matrix matched - Single level		GC-MS	GC-MS	Rec. from same batch	
125		NA															
126		NA															
127		NA															
128		NA															
129_0.01	D	0.51	80	No	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
130_0.01	D	0.58	109	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
131		NA															
132_0.01	D	0.528	98	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
133		NA															
134		NA															
135		NA															
136_0.01	D	0.56	116	No	No	ACN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
137_0.01	D	0.522	76	No	No	ACN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
138_0.01	D	0.49	108	No	No	ACN			10	No	DSPE	Matrix matched - Single level	MSD	GC-MS	GC-MS	Rec. from validation data	TPP
139		NA															
140		NA															
141		NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Spirodiclofen																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
142	0.01	NA																
143	0.01	D	0.517	93	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS/MS (QQQ)	Rec. from same batch		
144		NA																
145	0.01	D	0.41	90.3	No	ACN			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
146		NA																
147		NA																
148	0.01	D	0.356	70	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via Standard addition	PCB 31	
149	0.01	D	0.308	113	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level	ECD		LC-MS/MS (QQQ)	Rec. from same batch		
150	0.01	D	0.45	93.2	No	Acetone	DCM	Petr., Ether	20	No	GPC	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
151		NA																
152		NA																
153		NA																
154		NA																
155																		
156	0.01	D	0.3	95	Yes	AcN			10					MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition		
157		NA																
158	0.01	D	0.47	70	No	ACN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TPP	
159		NA																
160		NA																
161	0.01	D	0.342	73	No	Acetone	AcN		10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD		GC-MS	Rec. from same batch		
162		NA																
163	0.01	D	0.536	110	No	Acetone	DCM	Petr., Ether	15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch		
164	0.01	D	0.55	84	No	ACN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
165	0.01	D	0.394	91	No	EIOAC			30		GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	Tetrahydroethylene	
166	0.01	D	0.419	89	No	ACN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch		
167																		
168		NA																
169		NA																
170		NA																
171	0.01	D	0.49	104	No	ACN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	TPP	
172		NA																
173	0.01	D	0.44	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP	
174																		
175		NA																
176																		
177		NA																

APPENDIX 7. Methods used by participants for determining pesticides.

Thiabendazole																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
0001	0.01	D	1.3	90	No	MeOH			10	No	SPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0002	0.01	D	1.375	87	No	AcN			10	No		Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0003	NA	NA				AcN											
0004	0.001	D	1.15	95	No	AcN			10	No	Filter	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
0005	0.01	D	1.92	91.6	No	Acetone	DCM	Petf. Ether	15	No		Pure solvent - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0006	0.01	D	2.6	89	No	AcN			10	No	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Tr-(1,3-dichloro-isopropyl)phosphate
0007	0.01	D	1.853	92	No	AcN			10	No	SPE	Matrix matched - Multiple level			GC-MS	Rec. from same batch	Phenanthrene-D10
0008	0.01	D	1.83	100	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-ITD-MS/MS	Rec. from same batch	TPP
0009	NA	NA															
0101	0.001	D	1.82	-	No	AcN			15	No		Standard addition		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP
0101	0.01	D	1.25	82	No	AcN			10	No	DSPE	Pure solvent - Multiple level			LC-Orbitrap		
0102	0.01	D	1.664	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	Carbendazim-D3
0103	0.01	D	1.75	75	Yes	AcN			10	No	DSPE	Standard addition					
0104	0.01	D	2.1	91	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0105	0.01	D	1.5	80	No	EIOAc			50	Yes		Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0106	NA	NA															
0107	0.01	D	17.159	103	No	EIOAc			10	Yes		Matrix matched - Single level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0108	0.01	D	1.7	74	No	EIOAc			10	No	SPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
0109	0.03	D	1.932	83	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
0200	0.01	D	1.046	100	No	MeOH			10			Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Oxendazole
0201	0.01	D	2.35	94	No	Acetone	DCM	EIOAc	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0202	0.01	D	1.08	113	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	
0203	0.01	D	0.744	79.5	No	AcN			10	No	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0204	0.01	D	1.71	79.8	No	AcN			10	No	DSPE	Pure solvent - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
0205	0.01	D	1.45	91.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0206	0.01	D	2	104	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		LC-MS/MS (QQQ)	Rec. from same batch	
0207	0.1	D	2.3	68	No	AcN			12	No	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Spiked sample	
0208	0.01	D	1.27	85	No	AcN			10	No	DSPE	Pure solvent - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0209	0.01	D	1.8	Standard	Yes	EIOAc			10	No	DSPE	Standard addition		M/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
0300	0.01	D	1.965	99	Yes	AcN			10	No	DSPE	Standard addition		M/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Isoprofluron
0301	NA	NA															
0302	0.01	D	1.31	72.1	No	AcN			15	No	DSPE	Matrix matched - Single level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0303	0.01	D	2.1	87	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0304	0.01	D	1.601	76	No	EIOAc			10	Yes	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D4
0305	0.01	D	1.26	106	No	AcN			10	No	DSPE	Matrix matched - Single level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
0306	0.05	D	2.03	70	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
0307	0.01	D	2.35	98	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0308	0.01	D	1.987	94.9	No	MeOH			10	Yes	SPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
0309	0.01	D	1.621	70	No	Acetone	DCM	Petf. Ether	15	No		Matrix matched - Multiple level		M/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	
0400	0.01	NA															
0401	0.01	NA															
0402	NA	NA															
0403	0.01	D	1.534	120	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
0404	0.01	D	1.6	88	No	Acetone	DCM	Petf. Ether	10	No		Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
0405	0.01	D	1.8	88	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		M/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Thiabendazole																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
046	0.01	D	2.794	80.28	Yes	AcN			10	Yes	DSPF	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
047	0.003	D	1.666	105	No	AcN			10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
048	0.05	D	0.805	101	No	DCM			10		DSPF	Pure solvent - Single level	NPD		GC-MS	Rec. from validation data	Ethion
049	0.01	D	1.65	95	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
050	0.01	D	1.36	94	No	AcN			15	No		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
051	0.01	D	1.56	79	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
052	0.01	D	1.486	98.6	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IRIS
053	0.01	D	1.574	88	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
054	0.01	D	1.698		No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Spiked blank samples	
055	0.01	D	2.1	75	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
056	0.01	D	1.92	75.7	Yes	EIOAc	HCl		35			Pure solvent - Multiple level		DAD	Via Standard addition		
057	0.01	D	1.55	69	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
058	0.01	D	1.82	107	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D3
059	0.01	D	1.944	101	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
060	0.01	D	1.82	90.8	No	Acetone	DCM		15	No		Pure solvent - Multiple level		MS/MS (QQQ)	Rec. from validation data		
061	0.01	D	1.7	99	No	AcN		petroleum ether	10	No	DSPF	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
062	0.01	D	1.91	86	No	MeOH			10	No		Matrix matched - Multiple level	NPD		Two columns		
063	0.01	D	1.462	75	Yes	AcN			2	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-ITQ	Rec. from same batch	IPP
064	0.01	D	2	91	No	AcN			10	No	DSPF	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
065	0.01	D	1.84	90	No	Acetone	DCM	Petr. Ether	15	No	DSPF	Pure solvent - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
066	0.01	D	1.52	83	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
067	0.01	D	2.017	100.3	No	MeOH			10	Yes	DSPF	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
068	0.01	D	2.2	73	Yes	MeOH	DCM		10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	IPP
069	0.01	D	1.2	90	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
070		NA															
071		NA															
072	0.01	D	1.71	98.2	No	AcN			10		DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
073	0.01	D	1.01	85	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbaryl-C13
074	0.01	D	1.25	91	No	AcN			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
075	0.01	D	1.98	97	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	IPP, Phthalcarb-D6
076	0.05	D	2.2	83.6	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
077	0.01	D	1.7	-	No	EIOAc			10	Yes	Liquid/liquid partitioning	Pure solvent - Multiple level		Fluorescence	GC-MS/MS (QQQ)	Rec. from same batch	
078	0.01	D	1.6	107	No	AcN	DCM		7.5	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
079	0.01	D	2.21	91	No	AcN	DCM		10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Sulfotep
080	0.02	D	2.145	114	No	MeOH	DCM		10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D3
081		NA															
082	0.01	D	1.796	100	No	AcN			10	No	DSPF	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
083	0.005	D	2.202	107	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
084	0.01	D	1.3	75	No	DCM			10	No	SPE	Pure solvent - Multiple level		DAD	GC-MS	Via Standard addition	
085	0.01	D	1.37	70.120	No				10	No							
086	0.01	D	1.7	67	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
087		NA															
088		NA															
089		NA															
090	0.01	D	1.7	88	No	EIOAc			10	Yes	Filtration	Matrix matched - Single level		MS/MS (QQQ)		Rec. from same batch	Primicarb-D6
091	0.01	D	1.52	87	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from validation data	
092	0.05	D	1.53	77	No	EIOAc	0.1M HCl		10	Yes	DSPF	Pure solvent - Multiple level		Fluorescence	GC-MS	Rec. from same batch	
093	0.01	D	1.85	98.8	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10

APPENDIX 7. Methods used by participants for determining pesticides.

Thiabendazole																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
064	0.01	D	1.16	104	No	Acetone			15	No	DSPE	Matrix matched - Multiple level	MSD	MS/MS (QQQ)	GC-MS	Via Standard addition	
095	0.01	D	3.5	89	No	AcN	DCM		10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
096	0.01	D	1.23	155	Yes	AcN			5		DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
097	0.01	D	1.78	95	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from same batch	Linuron-D6
098	0.01	D	23.498	79	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
099	0.01	D	2.09	92	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	Chlorpyrifos-D10
100	0.01	D	2.019	72	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
101	0.01	D	2.123	87.5	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
102	0.01	D	1.67	77	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
103	0.01	D	2.44	91	No	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Primiticarb-D6
104	0.01	D	1.89	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
105	0.01	D	3	77	No	AcN			1-10		DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Orbitrap	Rec. from validation data	TRIS
106	0.01	D	1.1	79	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	TPP
107	0.01	D	1.5	85	Yes	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	GC-MS	Via Standard addition	Desmefltn
108	0.01	D	1.26	93	No	AcN			10.0	No	DSPE	Matrix matched - Single level	MSD	MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
109	0.01	D	2		No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-TOF	Rec. from validation data	
110	0.01	D	2	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from validation data	
111	0.005	D	1.7	101	No	AcN			5	Yes	DSPE	Standard addition		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from validation data	
112	0.01	D	1.438	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	Two columns	Rec. from same batch	TPP
113		NA															
114	0.01	D	1.62	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
115		NA															
116		NA															
117		NA															
118	0.01	D	1.59	70	No	AcN			15	No	DSPE	Pure solvent - Multiple level		DAD	GC-MS	Rec. from same batch	
119	0.01	D	1.7	93.9	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	TPP
120	0.01	D	1.71	91.0	No	AcN			10	No	DSPE	Pure solvent - Single level	NPD	MS/MS (QQQ)	GC-MS	Rec. from validation data	
121	0.01	D	1.8	97.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
122	0.01	D	1.501	89.98	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	2	102	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
124	0.005	D	1.9	87	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
125	0.01	D	1.41	79	No	AcN			10	Yes	DSPE	Standard addition	MS/MS (QQQ)		GC-MS/MS (QQQ)	Via Standard addition	Tris-(2-chloro(4-chloromethyl)ethyl)fosfate
126		NA															
127		NA															
128	0.01	D	1.756	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
129	0.01	D	1.7	91	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
130	0.01	D	1.95	84	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
131	0.01	D	1.41	80	No	EIOAc			20	No	Liquid/liquid partitioning	Pure solvent - Multiple level		DAD	GC-MS	Rec. from validation data	TPP
132	0.01	D	1.01	99	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
133		NA															
134	0.01	D	1.245	89.9	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
135	0.01	D	1.78	59	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
136	0.01	D	2.94	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
137	0.01	D	1.62	106	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
138	0.01	D	1.7	100	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
139		NA															
140	0.025	D	2.15	101	No	AcN	Acetone		10		DSPE	Matrix matched - Single level			LC-MS	Rec. from validation data	
141		NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Thiabendazole																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
142	0.01	D	1.89	75.6	No	EIOAC	EIOAC	MeOH	30	Yes	Liquid/Liquid partitioning	Pure solvent - Multiple level		Fluorescence	DAD	Rec. from same batch	
143	0.01	D	1.48	103	No	Acetone			20	Yes	Liquid/Liquid Extraction	Pure solvent - Multiple level		DAD	HPLC-DAD	Rec. from same batch	
144	0.05	D	2.083	103	No	EIOAC	Water		75	No	Liquid/Liquid partitioning	Pure solvent - Multiple level		UV	HPLC-DAD	Rec. from same batch	
145	0.01	D	1.9	86.5	No	AcN			10	No		Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
146	0.02	D	1.7	86	No	EIOAC			50	No	GPC	Pure solvent - Multiple level		DAD	GC-TOF	Rec. from same batch	
147	NA	NA			No												
148	0.01	D	2.06	81	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MSD		GC-MS	Via standard addition	PCB 31
149	NA	NA			No												
150	0.05	D	1.7	94.1	No	Acetone	DCM	Petr. Ether	20	No	GPC	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	
151	0.01	D	2.074		Yes	AcN			10	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)		IPP
152	NA	NA															
153	0.01	D	1.813	91	No	AcN			10	No	DSPE	Matrix matched - Multiple level			LC-MS/MS (QQQ)	Rec. from same batch	
154	0.01	D	1.19		No	AcN			10	No		Matrix matched - Multiple level			LC-MS/MS (QQQ)	Net applied	Carbaryl-D7
155																	
156	0.01	D	2	95	Yes	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via standard addition	
157	0.01	D	1.93	88	No	1% HOAc in MeCN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
158	0.01	D	1.8	70	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
159	0.05	D	1.685	73.5	No	AcN			9.952	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	IPP
160	0.01	D	1.2	126.6	No	EIOAC			20		DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
161	0.01	D	1.44	77	No	AcN			12	No		Matrix matched - Multiple level		MS	GC-MS/MS (QQQ)	Rec. from same batch	
162	NA	NA															
163	0.01	D	2.11	103	No	Acetone	DCM	Petr. Ether	15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS	Rec. from same batch	
164	0.01	D	1.8	95	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
165	0.01	D	2.01	102	No												
166	0.01	D	1.534	83	No	AcN			10	No	DSPE	Matrix matched - Multiple level	MS/MS (QQQ)		GC-MS/MS (QQQ)	Rec. from same batch	
167																	
168	NA	NA															
169	0.01	ND															
170	NA	NA															
171	0.01	D	1.4	70	No	AcN			10		DSPE	Matrix matched - Multiple level	MSD		GC-MS	Rec. from same batch	IPP
172	0.01	ND															
173	0.01	D	2.284	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	IPP
174																	
175	0.01	NA															
176																	
177	0.01	ND															

APPENDIX 7. Methods used by participants for determining pesticides.

Thiacloprid																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
001	0.01	D	0.27	96	No	MeOH			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
002	0.01	D	0.393	83.2	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
003		NA															
004	0.01	D	0.325	113	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via standard addition	TPP
005	0.01	D	0.381	114	No	Acetone	DCM	Petr. Ether	15	No	Filter	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
006	0.01	D	0.38	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Tri-1,3-dichloro-isopropylphosphate
007	0.01	D	0.38	99	No				10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-ITQ	Rec. from same batch	
008	0.01	D	0.354	108	No	AcN											
009		NA															
010	0.001	D	0.44	-	No	AcN			15	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)		
011	0.01	D	0.245	109	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-Orbitrap	Rec. from validation data	TPP
012	0.01	D	0.28	80	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		
013	0.01	D	0.33	92	Yes	AcN			10	No	DSPE	Standard addition					
014	0.01	D	0.37	91	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
015	0.01	D	0.29	76	No	EIOAc			50	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
016		NA															
017	0.01	D	0.3144	99	No	EIOAc			10	Yes		Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
018	0.01	D	0.37	81	No	EIOAc			10	No	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
019	0.05	D	0.128	65	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level	NPD		Two columns	Rec. from same batch	
020	0.01	D	0.317	102	No	MeOH			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Octadecane
021	0.01	D	0.341	95	No	Acetone	DCM	EIOAc	15	No	Liquid/liquid partitioning	Matrix matched - Multiple level					
022	0.01	D	0.356	108	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
023	0.01	D	0.217	81.8	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
024	0.01	D	0.316	95.5	No	AcN			10	No		Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via standard addition	
025	0.01	D	0.25	93.5	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
026	0.01	D	0.396	107.7	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
027	0.01	D	0.23	102	No	AcN			12	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
028	0.01	D	0.278	85	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via standard addition	
029	0.01	D	0.27	Standard	Yes	EIOAc			10	No	DSPE	Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
030	0.01	D	0.424	109	Yes	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)		Via standard addition	Isopropruron
031		NA															
032	0.01	D	0.27	75.3	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
033	0.01	D	0.35	107	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
034	0.01	D	0.292	77	No	EIOAc			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Carbendazim-D4
035	0.01	D	0.299	105	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
036		NA															
037	0.01	D	0.46	90	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
038	0.01	D	0.4	94.6	No	MeOH			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
039	0.01	D	0.543	70	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	
040	0.01	NA															
041	0.01	NA															
042		NA															
043	0.01	D	0.373	112	No	AcN			10	No	Quechers without PSA	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
044	0.01	D	0.33	83	No	Acetone	DCM	Petr. Ether	10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
045	0.01	D	0.34	97	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
046	0.01	D	0.376	98.75	Yes	AcN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	

APPENDIX 7. Methods used by participants for determining pesticides.

Thiacloprid																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
047	0.003	D	0.391	106	No	AcN			10	Yes	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch		
048		NA																
049	0.01	D	0.255	77	No	Acetone			20	No	Liquid/liquid partitioning	Pure solvent - Multiple level		MS/MS (QQQ)		Rec. from same batch		
050	0.01	D	0.232	93	No	AcN			15	No	Liquid/liquid partitioning	Matrix matched - Single level		LC-MS/MS (QQQ)		Rec. from same batch		
051	0.01	D	0.306	73	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	IPP	
052	0.01	D	0.476	113.5	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TRIS	
053	0.01	D	0.208	104	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch		
054	0.01	D	0.327		No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Spiked blank samples		
055	0.01	D	0.408	92	No	AcN			10	No	DSPF	Matrix matched - Multiple level		LC-MS/MS (QQQ)		Rec. from same batch		
056		NA																
057	0.01	D	0.364	84	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Isoproturon-D6	
058	0.01	D	0.372	103	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch		
059	0.01	D	0.374	95	No	AcN			10	No	DSPF	Matrix matched - Multiple level		LC-MS/MS (QQQ)		Rec. from validation data		
060	0.01	D	0.3	91.25	No	Acetone	DCM		15	No		Pure solvent - Multiple level		MS/MS (QQQ)		Rec. from same batch		
061	0.01	D	0.31	80	No	AcN		Petr. Ether	10	No	DSPF	Pure solvent - Multiple level		LC-MS/MS (QQQ)		Rec. from same batch		
062	0.01	D	0.327	99	No	MeOH			10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch		
063	0.01	ND																
064	0.01	D	0.41	117	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	IPP	
065	0.01	D	0.352	101	No	Acetone	DCM	Petr. Ether	15	No	DSPF	Pure solvent - Multiple level		MS/MS (QQQ)		Rec. from same batch	IPP	
066	0.01	D	0.327	87	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch		
067	0.01	D	0.355	105.7	No	MeOH			10	Yes	DSPF	Matrix matched - Single level		MS/MS (QQQ)		Rec. from same batch	IPP	
068	0.01	D	0.365	84	Yes	MeOH	DCM		10	No	DSPF	Matrix matched - Multiple level		LC-MS/MS (QQQ)		Rec. from validation data	IPP	
069	0.01	D	0.23	84	No	AcN			10	No	DSPF	Matrix matched - Multiple level		LC-MS/MS (QQQ)		Rec. from same batch	IPP	
070		NA																
071		NA																
072	0.01	D	0.357	103.2	No	AcN			10		DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch		
073	0.01	D	0.346	112	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Carbaryl-C13	
074	0.01	D	0.25	76	No	AcN			10	Yes	SPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	IPP	
075	0.01	D	0.36	95	No	AcN			10	No	DSPF	Matrix matched - Multiple level		GC-MS		Rec. from same batch	IPP, Pflimicarb-D6	
076	0.01	D	0.37	89.6	No	AcN			10	No	DSPF	Matrix matched - Multiple level		LC-MS/MS (QQQ)		Rec. from same batch	IPP	
077		NA																
078	0.01	D	0.218	112	No	AcN	DCM		7.5	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	IPP	
079	0.01	D	0.388	98	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Sulfotep	
080	0.005	D	0.396	112.3	No	MeOH	DCM		10	No	Liquid/liquid partitioning	Matrix matched - Multiple level		LC-MS/MS (QQQ)		Rec. from same batch	Carbendazim-D3	
081		NA																
082	0.01	D	0.323	100	No	AcN			10	No	DSPF	Standard addition		MS/MS (QQQ)		Via Standard addition		
083	0.005	D	0.402	109	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		LC-MS/MS (QQQ)		Rec. from same batch		
084		NA																
085	0.01	D	0.328	70-120	No	AcN			10	No	DSPF	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch		
086	0.01	D	0.37	76	No	AcN			10	No	DSPF	Matrix matched - Multiple level		LC-MS/MS (QQQ)		Rec. from same batch		
087		NA																
088		NA																
089		NA																
090	0.01	D	0.3	81	No	EtOAc			10	Yes	Filtration	Matrix matched - Single level		MS/MS (QQQ)		Rec. from same batch	Pflimicarb-D6	
091	0.01	D	0.3114	101	No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from validation data		
092	0.02	D	0.273	99	No	AcN			10	No	SPE	Matrix matched - Multiple level		MS		Rec. from same batch		
093	0.01	D	0.344	104.0	No	AcN			10	Yes	DSPF	Matrix matched - Multiple level		LC-Q-TOF		Rec. from same batch	Chlorpyrifos-D10	
094	0.01	D	0.353	112	No	AcN			10	Yes	DSPF	Standard addition		LC-MS/MS (QQQ)		Via Standard addition		

APPENDIX 7. Methods used by participants for determining pesticides.

Thiacloprid																	
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used
065	0.005	D	0.24	80	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
096		NA															
097	0.01	D	0.345	101	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	Linuron-D6
098		NA															
099	0.01	D	0.348	93	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
100	0.01	D	0.271	86	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Chlorpyrifos-D10
101	0.01	D	0.376	94.9	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)		Rec. from same batch	TPP
102	0.01	D	0.296	84	No	AcN			10	No	DSPE	Matrix matched - Single level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
103	0.01	D	0.336	112	No	AcN			10	No	DSPE	Standard addition		MS/MS (QQQ)		Rec. from same batch	
104	0.01	D	0.398	93	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-Q-TOF	Rec. from same batch	Primitcarb-D6
105	0.01	D	0.274	95	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
106	0.01	D	0.241	85	No	AcN			10	No	DSPE	Matrix matched - Multiple level		Orbitrap	LC-Orbitrap	Rec. from same batch	TR5
107	0.01	D	0.43	84	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
108	0.01	D	0.37	92	No	AcN			10.0	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	
109	0.01	D	0.37	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		Desmethyln
110	0.01	D	0.34	102	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	Standard addition	Rec. from validation data	
111	0.005	D	0.33	95	No	AcN			5	Yes	DSPE	Standard addition		MS/MS (QQQ)	Two columns	Rec. from validation data	
112	0.01	D	0.301	80	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	Two columns	Rec. from same batch	TPP
113		NA															
114	0.01	D	0.285	85	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
115		NA															
116		NA															
117		NA															
118	0.01	D	0.293	85	No	AcN			15	No	DSPE	Pure solvent - Multiple level		DAD	GC-MS	Rec. from same batch	
119	0.01	D	0.37	110.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TPP
120	0.01	D	0.355	98.0	No	AcN			10	No	DSPE	Pure solvent - Multiple level		DAD	HPLC/DV	Rec. from validation data	
121	0.01	D	0.37	112.6	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	GC-ECD	Rec. from same batch	
122	0.01	D	0.324	85.79	No	EIOAc			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
123	0.01	D	0.26	78.5	No	Acetone	DCM		15	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
124	0.005	D	0.3	91	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
125		NA															
126		NA															
127		NA															
128	0.01	D	0.418	105	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
129	0.01	D	0.27	98	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	
130	0.01	D	0.36	94	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
131		NA															
132	0.01	D	0.355	97	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via Standard addition	TPP
133		NA															
134	0.01	D	0.312	92.8	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
135	0.01	D	0.282	94	No	AcN			10	Yes	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
136	0.01	D	0.338	91	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	TPP
137	0.01	D	0.291	104	No	AcN			10	No	DSPE	Pure solvent - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	
138	0.01	D	0.33	98	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)		Via Standard addition	TPP
139		NA															
140	0.02	D	0.43	95	No	AcN	Acetone		10		DSPE	Matrix matched - Single level			LC-MS	Rec. from validation data	
141		NA															
142		NA															

APPENDIX 7. Methods used by participants for determining pesticides.

Thiacloprid																		
Lab. Code	Reporting Level (mg/kg)	Scope of Method	Official Concentration (mg/kg)	Recovery %	Recovery Correction in Routine Work?	Solvent 1	Solvent 2	Solvent 3	Sample Weight (g)	pH Adjustment	Clean Up	Calibration	GC Detector	HPLC Detector	Confirmation Method	Recovery Approach	ISTD Used	
143	0.01	D	0.382	103	No	Acetone			20	No	Liquid/liquid partitioning	Matrix matched - Multiple level	ECD/NPD		Two columns	Rec. from same batch		
144		NA										Standard addition		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
145	0.01	D	0.38	86	No	AcN			10	No						Rec. from same batch		
146		NA																
147		NA																
148	0.01	D	0.46	75	No	AcN			10	Yes	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via standard addition	Tris-(1,3-dichloroisopropyle)-phosphate	
149		NA																
150	0.01	D	0.16	97.1	No	Acetone	DCM	Petr. Ether	20	No	GPC	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
151	0.01	D	0.263		Yes	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)		TPP	
152		NA																
153	0.01	D	0.351	83	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
154	0.01	D	0.251		No	AcN			10	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Not applied	Carbaryl-D7	
155																		
156	0.01	D	0.42	95	Yes	AcN			10			Participation Cancelled		MS/MS (QQQ)	LC-MS/MS (QQQ)	Via standard addition		
157	0.01	D	0.356	94	No	1% HOAc in MeCN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
158	0.01	D	0.27	60	No	AcN			10	Yes		Matrix matched - Multiple level		MS/MS (QQQ)		Rec. from same batch	TPP	
159		NA																
160	0.01	ND																
161	0.01	D	0.256	109	No	AcN			12	No		Matrix matched - Multiple level		MS	GC-MS/MS (QQQ)	Rec. from same batch		
162	0.01	D	0.031	80-120	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data		
163	0.01	D	0.376	98	No	Acetone	DCM	Petr. Ether	15	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
164	0.01	D	0.36	92	No	AcN			15	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
165	0.01	D	0.354	104	No	AcN			10			Matrix matched - Multiple level		MS/MS (QQQ)	GC-MS/MS (QQQ)	Rec. from same batch	TPP	
166	0.01	D	0.281	96	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch		
167												Participation Cancelled						
168		NA																
169	0.01	ND																
170		NA																
171		NA																
172	0.01	D	0.249	79	No	AcN			15	No		Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from same batch	Antor	
173	0.01	D	0.285	91	No	AcN			10	No	DSPE	Matrix matched - Multiple level		MS/MS (QQQ)	LC-MS/MS (QQQ)	Rec. from validation data	TPP	
174		NA										No Results Submitted						
175	0.01	NA																
176		NA										No Results Submitted						
177	0.01	ND																

GENERAL PROTOCOL

for EU Proficiency Tests for Pesticide Residues in Food and Feed

Introduction

This protocol contains general procedures valid for all European Union Proficiency Tests (EUPTs) organised on behalf of the European Commission, DG-SANCO⁵ by the four European Union Reference Laboratories (EURLs) for pesticide residues in food and feed. These EUPTs are directed at all National Reference Laboratories (NRLs) and Official Laboratories (OfLs) within the EU Member States. Laboratories outside of this EURL/NRL/OfL-Network⁶ may be permitted to participate on a case-by-case basis after consultation with DG-SANCO.

The following four EURLs for pesticide residues were appointed by DG-SANCO based on regulation 882/2004/EC⁷:

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

NRLs are appointed by Member State based on the provisions of Regulation 882/2004/EC, whereas OfLs are laboratories that are actively involved in official controls following Article 26 of Regulation 396/2004/EC (e.g. by conducting pesticide residue analyses within the framework of national and/or EU-controlled programmes).

According to Article 28 (3) of Regulation 396/2005/EC⁸, all laboratories analysing samples for the official control of pesticide residues shall participate in the European Union Proficiency Test(s) organised by the European Union. The aim of these EUPTs is to obtain information regarding the quality, accuracy and comparability of the pesticide residue data in food and feed sent to the European Union within the framework of the national control programmes and the co-ordinated multiannual community control programme⁹. Participating laboratories will be provided with an assessment of their analytical performance and the reliability of their data – compared to the other participating laboratories.

⁵ DG-SANCO = European Commission, Health and Consumer Protection Directorate-General

⁶ For more information about the EURL/NRL/OfL-Network please refer to the EURL-Web-portal under: <http://www.eurl-pesticides.eu>

⁷ Regulation (EC) No 882/2004 of the European Parliament and of the Council on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. Published at OJ of the EU L191 of 28.05.2004

⁸ Regulation (EC) No 396/2005, published at OJ of the EU L70 of 16.03.2005, as last amended by Regulation 839/2008 published at OJ of the EU L234 of 30.08.2008.

⁹ European Commission Proficiency Tests for Pesticide Residues in Fruits and Vegetables, Trends in Analytical Chemistry, 2010, 29 (1), 70-83.

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EUPT-Panel

EUPTs are organised by individual EURLs or by more than one EURL in joint cooperation.

An **Organising Team** is appointed from the EURL(s) in charge. This team is responsible for all administrative and technical matters concerning the organisation of the PT, e.g. PT-announcement; Test Item production; undertaking the homogeneity and stability tests; packing and shipment of Test Item, as well as the handling and first assessment of participants' results.

Approved by DG SANCO, expert scientists with long-term experience in pesticide residue analysis will be chosen as members of a joint **EUPT-Scientific Committee** (SC). This Committee is made up of the following two subgroups:

- a) An independent **Quality Control Group** (QCG) and
- b) An **Advisory Group** (AG)

The SC's role is to help the organisers make decisions regarding the EUPT design: the selection of pesticides to be included in the Target Pesticide List (see below); the establishment of the Minimum Required Reporting Levels (MRRLs); the evaluation and statistical treatment of the results and the drafting of the protocol and final report. The QCG has the additional function of supervising the quality of the EUPT and to assist the EURL in confidential aspects such as the choice of the pesticides to be present in the Test Item and the concentration levels at which they should be present in the Test Item.

The EUPT-Organising Team and the EUPT-Scientific Committee (the AG and the QCG) together form the **EUPT-Panel**.

The present EUPT General Protocol was drafted by the EUPT-Panel and was approved by DG-SANCO.

EUPT Participants

All NRLs operating in the same area as the organising EURL are legally obliged to participate in EUPTs - as well as all OfLs whose scope overlaps with that of the EUPT. The four EURLs will be annually issuing and distributing via the EURL website, a joint list of all OfLs that shall participate in all EUPTs to be conducted within a given year. The "list of obliged labs" is to be considered as tentative as it will be only based on information submitted by OfLs concerning their commodity scope and status. The legal obligation of NRLs and OfLs to participate in EUPTs arises from:

- Art. 28 of Reg. 396/2005/EC (for all OfLs analyzing for pesticide residues within the framework of official controls in food or feed)
- Art. 33 of Reg. 882/2004/EC (for all NRLs)

If necessary the "list of obliged labs" will be updated within the same year to take account of any changes in the lab profiles.

NRLs are responsible for checking whether all relevant OfLs within their network are included in the list of obliged laboratories and whether the contact information is correct.

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The NRLs should further make arrangements to urge all relevant OfLs within their network to participate in all EUPT relevant to them.

OfLs are urged to keep their own profiles within the EURL-DataPool up-to-date, especially their commodity and pesticide scopes and their contact information.

Any OfL not intending to participate in a given EUPT will have to explain to the EURL its reasons for non-participation without prejudice of any legal action taken against it for not participating. This also applies to initially participating laboratories that do not deliver results.

Official labs from EFTA countries and EU-candidate countries are also welcome to participate in the EUPTs. In special cases, the Organisers, upon consultation with DG-SANCO, will also allow laboratories outside of the EURL/NRL/OfL-Network to participate in EUPTs.

Confidentiality

The proprietor of all EUPT data is DG-SANCO and thus has access to all information.

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

As laid down in Regulation 882/2004, NRLs are responsible for evaluating and improving their own OfL network. For this reason, the EURLs will provide the OfL laboratory codes to their NRLs together with the final report. This will allow NRLs to correlate the laboratories within their network and their performance. Furthermore, the EURLs reserve the right to share EUPT results and codes among themselves: for example, for the purpose of evaluating overall lab performance as requested by DG-SANCO.

Communication

The official language used in all EUPTs is English.

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

Announcement / Invitation Letter

The announcement of the individual EUPT will be issued at least 3 months before the Test Item is distributed to the laboratories. The announcement will be published on the EURL portal and additionally distributed via e-mail to the NRL/OfL mailing list available to the EURLs. The announcement will contain an invitation letter, details on how to register and where to find additionally-related documents, as well as some preliminary information on the specific protocol

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such as the tentative calendar, the name of the commodity expected to be used, and the tentative Target Pesticide List.

Target Pesticide List

This list contains all analytes (pesticides and metabolites) to be tested, along with the Minimum Required Reporting Levels (MRRLs) valid for the specific EUPT. The MRRLs are based upon the lowest MRLs found either in Regulation 396/2005/EC or Commission Directive 2006/125/EC (Baby Food Directive).

In some cases, that will be clearly marked, results calculated according to the pesticide residue definition may be requested with those residue definitions differing from the legal ones in certain cases.

Specific Protocol

For each EUPT a Specific Protocol will be published at least 2 weeks before the Test Item is distributed to the laboratories. This protocol will contain all the information previously included in the Invitation Letter but in its final version, in addition to information on payment for delivery service and/or participation. It will furthermore include instructions on how to handle the Test Item upon receipt, on how to submit results, and any other relevant information.

General procedures for reporting results

Laboratories are responsible for reporting their results to the Organiser within the stipulated deadlines. Any pesticide that was targeted by a participating laboratory should be reported as "analysed". Each laboratory must report only one result for each of the analytes detected in the Test Items, using the analytical procedure(s) that they would routinely use for each compound for monitoring purposes. The residue levels of the pesticides detected should be expressed in mg/kg and in some cases for products of animal origin in µg/kg fat.

One Test Item is intentionally treated with pesticides and one is not. Both Test Items have to be analysed by the laboratories and any pesticide detected in them shall be reported.

Correction of results for recovery

According to the Method Validation and Quality Control Procedures for Pesticide Residues Analysis in Food and Feed, (Document SANCO), it is common practice that pesticide analysis results are not corrected for recovery, but may be corrected if the average recovery is significantly different from 100% (typically if outside the 70-120% range with good precision), therefore, if residue data are adjusted for recovery, then this must be indicated on the specific field of the 'reporting result form'. Laboratories are required to report whether their results were adjusted for recovery and, if this was the case, the recovery (as percentage) used should be also

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reported. No recovery data are required where correction for recovery results automatically from using the 'standard addition(s)' approach, or isotopically-labelled internal standards (in both cases with spiking of the Test Item at the beginning of the extraction procedures). In these cases, the laboratories should report the calculation technique used for the results instead of the recovery data.

Methodology information

All laboratories are requested to provide information on the analytical method(s) they have used. If no sufficient information on the methodology used is provided, the Organiser reserves the right not to accept the analytical results reported by the participants concerned.

Results evaluation

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

– False Positives

These are results reported above the MRRLs that suggest the presence of pesticides that were listed in the Target Pesticide List, but which were: (i) not detected by the Organiser, even after repeated analyses, and/or (ii) not detected by the overwhelming majority (e.g. 95%) of the participating laboratories that had targeted the specific pesticide. However, in certain instances, case-by-case decisions by the EUPT-Panel may be necessary.

Any results reported that are lower than the MRRL will not be considered as false positives, even though these results should not have been reported.

– False Negatives

These are results for pesticides reported by the laboratories as "analysed" but without reporting numerical values although they were used by the Organiser to treat the Test Item and were detected by the Organiser and the majority of the participants that had targeted these specific pesticides, at or above the MRRL. Results reported as <RL (RL= Reporting Limit of the laboratory) will be considered as not detected and will be judged as false negatives. However, in certain instances, case-by-case decisions by the EUPT-Panel may be necessary.

In cases of the assigned value being less than a factor of 4 times the MRRL, false negatives will not be assigned as this is not statistically justifiable.

– Estimation of the true concentration (μ)

The "true" concentration (assigned value) will be typically estimated using the median of all the results. In special justifiable cases, the EUPT-Panel may decide to use only part of the population of results to establish the median (e.g. only results with z-scores ≤ 5.0 , or by excluding results generated by a method that demonstrably generates significantly biased results, e.g. due to incomplete extraction).

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

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

$$\delta = b_i * \mu_i \quad \text{with } b_i = 0.25 \text{ (25\% FFP RSD)}$$

The percentage FFP RSD is set at 25% based on experience from previous EUPTs¹⁰. The EUPT-Panel reserves the right to also employ other approaches on a case-by-case basis considering analytical difficulties and experience gained from previous proficiency tests.

– **z-scores**

This parameter is calculated using the following formula:

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

Where: x_i is the value reported by the laboratory, μ_i the assigned value, and δ_i the standard deviation at that level for each pesticide (i).

Any z-scores of > 5 will be reported as >5 and where combined z-scores are calculated a value of "5" will be used.

z-Scores will be interpreted in the following way:

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

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

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

z-Scores will not be calculated for any false positive result.

– **Category A and B classification**

The EUPT-Panel will decide whether to classify the laboratories into two groups - A or B. Laboratories that detect a sufficiently high percentage of the pesticides present in the Test Item (e.g. at least 90%) and reported no false positives will have demonstrated 'sufficient scope' and will therefore be classified into Category A. The 90% criterion will be applied following Table 1.

¹⁰ Comparative Study of the Main Top-down Approaches for the Estimation of Measurement Uncertainty in Multiresidue Analysis of Pesticides in Fruits and Vegetables. J. Agric. Food Chem., 2011, 59(14), 7609-7619.

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Table 1. No. of pesticides needed to be detected to have sufficient scope.

No. of Pesticides Present in the Sample (N)	90%	No. of Pesticides needed to be detected to have sufficient scope (n)	n
3	2.7	3	N
4	3.6	4	
5	4.5	4	N - 1
6	5.4	5	
7	6.3	6	
8	7.2	7	
9	8.1	8	
10	9.0	9	
11	9.9	10	
12	10.8	11	
13	11.7	12	
14	12.6	13	
15	13.5	13	N - 2
16	14.4	14	
17	15.3	15	
18	16.2	16	
19	17.1	17	
20	18.0	18	
21	18.9	19	
22	19.8	20	
23	20.7	21	
24	21.6	22	
25	22.5	22	N - 3
26	23.4	23	

For evaluation of the overall performance of laboratories within Category A, the Average of the Squared z-Score (AZ^2)^{11,12} will be used.

Laboratories within Category B will be ranked according to the total number of pesticides present in the sample. The number of acceptable z-scores achieved will be presented too. The EURL-Panel retains the right to calculate combined z-scores (see below) also for Category B labs, e.g. for informative purposes, provided that a minimum number of results (z-scores) is available.

¹¹ Formerly named "Sum of squared z-scores (SZ^2)"

¹² Laboratory assessment by combined z-score values in proficiency tests: experience gained through the EUPT for pesticide residues in fruits and vegetables. Anal. Bioanal. Chem., 2010, 397, 3061–3070.

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– Combined z-scores

For evaluation of the overall performance, the Average of the Squared z-Score (AZ^2) will be used. The AZ^2 is calculated as follows:

$$AZ^2 = \frac{\sum_{i=1}^n |z_i| |z_i|}{n}$$

This formula multiplies each z-score by itself and not by an arbitrary number. Based on the AZ^2 achieved, the laboratories are classified as follows:

Formula	Good	Satisfactory	Unsatisfactory
AZ^2	≤ 2	$2 < AZ^2 \leq 3$	$AZ^2 > 3$

Combined z-scores are considered to be of lesser importance than the individual z-scores. The EUPT-Panel retains the right not to calculate AZ^2 if it is considered as not being useful. In the case of EUPT-SRMs, where only few results per lab are available, the Average of the Absolute z-scores (AAZ) will be calculated for informative purposes, but only for labs within Category A and as long as 5 or more z-scores are available.

Publication of results

The EURLs will publish a preliminary report, containing tentative medians and z-score values for all pesticides present in the test sample, within 2 months from the deadline for result submission.

The Final Report will be published after the EUPT-Panel has discussed the results. Taking into account that the EUPT-Panel meets normally only once a year to discuss the results of all EUPTs organised annually by the EURLs in the running year, the final report may be published up to 8 months after the deadline for results submission.

Certificates of participation

Along with the Final Report, the EURL Organiser will deliver a Certificate of Participation to each participating laboratory with the z-score achieved for each pesticide and the combined z-scores calculated (if any) together with the classification into Category A and B.

Feedback

After the distribution of the final report of an EUPT, participating laboratories will be given the opportunity to give their feedback to the Organiser and make suggestions for future improvements.

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Follow-up activities

Laboratories are expected to undertake follow-up activities to trace back to the source of any erroneous or (strongly) deviating results - including all false positives and false negatives, along with results with $|z| > 2$.

Upon request, the laboratory's corresponding NRL, or EURL, are to be informed of the outcome of these traceability activities.

According to instructions by DG-SANCO, the "Protocol for management of underperformance in comparative testing and/or lack of collaboration of National Reference Laboratories (NRLs) with EU Reference Laboratories (EURLs) activities" will be followed for NRLs.

Disclaimer

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

Laboratory Rights

After the Final Report has been sent, the laboratories will have the right to communicate the nonconformity of their result evaluation in written form. Any detected errors in the preliminary report should also be reported to the Organiser. The Organiser, assisted by the Scientific Committee, will decide upon any re-evaluation and will give a corresponding explanation.



EUPT-FV15 SPECIFIC PROTOCOL

European Union Proficiency Test for Pesticide Residues in Fruits and Vegetables

(2013)

Introduction

This protocol is complementary to the General Protocol of EU Proficiency Tests (EUPTs) for Pesticide Residues in Food and Feed. This Proficiency Test is organized by the EURL for Pesticide Residues in Fruit and Vegetables covering Multiresidue Methods (MRM) of analysis.

Test material

This proficiency test is based on the pesticide residue analysis of potato. The potatoes were grown in Almería, Spain.

The pesticide treatments will be carried out post-harvest using either commercial formulations or using standard solutions 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 to check for homogeneity.

The test material will be stored frozen (-20°C) prior to shipment to participants.

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

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

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All analytical determinations concerning the test material treatment analysis will be performed in a laboratory which is ISO 17025 accredited.

Steps to follow

This Proficiency Test will be made up of the following 8 essential steps:

1. To participate, each laboratory must complete the Application Form on-line, available on the EURL-FV Web page, before the deadline stipulated on the Calendar. It is recommended that laboratories download the Target Pesticide List from this website. Laboratories should carefully read the Target Pesticide List, where important information about the reporting of the results, as well as the Minimum Required Reporting Limits (MRRLs), is given. The MRRLs do not always correspond with the EU MRLs set for potatoes.

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

3. The sample delivery will cost **175 Euros** for EU and EFTA laboratories and **200 Euros** for any other participants. The payment procedure must have started before 21st January. An e-mail showing the bank transfer confirmation, or similar, must have been sent beforehand; or may be requested at any time by the Organizer. **Payments without a Laboratory Code or Invoice Number identifying them will not be considered as paid.**

4. **Form 0 - Laboratory Scope** will be placed in the restricted area and will be open to participants from the 10th – 18th January 2013, prior to test material shipment. The aim is that laboratories provide information regarding their scope of analysis before receipt of the test material and detailed information regarding which pesticide is within the accredited scope of the lab and which is not.

5. When the participant laboratories receive the test material (and not before), they must enter the restricted area again and submit **Form 1 - Test Material Receipt** to inform the Organizer that they have accepted the test material. This Form has a deadline: 25th January 2013, which must be met. If no test material has been received by this deadline, please contact the Organiser via e-mail (cferrer@ual.es, or omalato@ual.es)

6. The participant laboratories must respect the deadline for submitting their results - 13th February 2013 - using **Form 2 – Detected pesticides; Form 3 - Results** and **Form 4 - Methods** on-line.

7. One final form, **Form 5 - Additional Information Requested** can be filled in after the deadline has passed. This Form will be available from 20th – 27th February 2013. Not all laboratories will need to fill this in. It will depend upon information reported on previous Forms.

8. The Organiser will evaluate the results at the end of the proficiency test, once the deadline for receipt of results has passed. The Organiser will upload an electronic version onto the EURL-FV

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website and afterwards send a hard copy of the Final Report to each participant laboratory. This report will include information regarding the design of the test, the homogeneity and stability results, a statistical evaluation of the participant's results as well as graphical displays of the results and any conclusions. Further relevant information considered to be of value may also be included.

Form 0 - Laboratory Scope

Before the participant laboratories receive the sample, the restricted area will be open so that their laboratory scopes can be recorded. Form 0 will need to be filled in to ascertain which of the pesticides in the Target Pesticide List were actually sought. It is possible that the laboratory, after receipt of the test material, performs further validations for some of the pesticides and then reports results for these pesticides. Therefore, the information on this Form will be made available again for possible modification in Form 2. This year, again, no residue definition needs to be followed so only individual contributions will be requested.

This form will also request information on which of the pesticides sought by the laboratory is within the laboratory's accredited scope.

Amount of Test Material

Participants will receive:

- Approximately 300 g of potato test material treated with pesticides.
- Approximately 300 g of 'blank' potato test material.

Shipment of Test Materials

All Test Materials will be frozen and packed in polystyrene boxes surrounded by dry ice and packed into cardboard boxes.

The shipment of the test materials will be carried out over a one-week period from the 21st January 2013. The Organizer will try to ensure that all the packages arrive on the same day to each laboratory. An information message will be sent out by e-mail before shipment. Laboratories must make their own arrangements for the receipt of the package. They must inform the Organizer of any public holidays in their country/city during the delivery period given in the calendar, as well as making the necessary arrangements for receiving the shipment, even if the laboratory is closed.

ANNEX 1. Protocols and Target list of pesticides to be sought.

Advice on Test Material Handling

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

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

Form 1 - Test Material Receipt

Once the laboratory has received the test materials, their arrival must be reported to the Organizer using Form 1 in the restricted area; filling in the date of receipt, the condition of the test material, and its acceptance. The deadline for acceptance (or non-acceptance) is 25th January 2013. If the laboratory does not respond by this date, the Organizer will assume that the test material has been received and accepted.

If any laboratory has not received the test material by 24th January, they must inform the Organizer **immediately** by e-mail (cferrer@ual.es and omalato@ual.es)

Submission of results:

Once the laboratory has analysed the test material and is ready to submit their data, they must enter their results at various steps on the 3 forms by accessing the restricted area in the EURL –FV website: <http://www.eurl-pesticides.eu>

Detected Pesticides – Form 2

In Form 2, the information entered in Form 0 – Laboratory Scope, will be made available again. Those new pesticides sought should be indicated in this step.

For each pesticide included in the laboratory scope, the Limit of Quantification (LOQs) will be requested. The MRRL and the participant's own LOQ will be used to help identify false negative results.

The laboratory should mark the pesticides which have been detected twice given that these have been sought and then detected.

Before this, a new question will have been requested as to which approach was used for the relative expanded uncertainty estimation in multiresidue methods for fruit and vegetables.

This form can be filled in at various stages - so once entered, the data will be saved, and you can add further data at a later date.

ANNEX 1. Protocols and Target list of pesticides to be sought.

Results – Form 3

In this step, the laboratory should report the measured concentrations for each determination. All concentrations must be expressed in mg/kg together with the recovery as a percentage.

The number of significant figures should be based on the guidelines provided in SANCO/12495/2011. Additional significant figures may be recorded for the purpose of statistical analysis. Please bear this in mind when reporting data:

- Residue levels < 0.01 mg/kg should be rounded to one significant figure
- Residue levels \geq 0.01 mg/kg and < 10 mg/kg should be rounded to two significant figures
- Residue levels \geq 10 mg/kg may be rounded to three significant figures or to a whole number.

Results should not be reported where a pesticide was not detected or was detected below the laboratory LOQ. In both cases, this should be recorded as 'ND' or <LOQ. If a pesticide was not sought, it should be recorded as 'NA' (Not Analysed). The actual results/residue levels measured must be reported as numbers.

Methods – Form 4

In this step, the laboratory must report the details of the analytical methods they used. A list including all the pesticides detected in the sample will be shown along with a pesticide reference number. Laboratories may describe a method for the first pesticide and use this pesticide reference number to refer to other pesticides determined using the same method.

Again in this form, information must always be saved so that you can go back to it and continue at any time before the final reporting deadline - which for all forms is 13th February 2013. Any results reported after this deadline will not be included in the statistical treatment, nor in the final report.

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

False Negatives or Further Information – Form 5

This Form will be available only for those laboratories reporting that they sought a pesticide present in the test material but for which no method was reported in Form 4. If a laboratory accesses this Form and it is empty, this will mean that there is no need to enter further information. This Form will be available after the deadline is over - from 20th – 27th February 2013.

ANNEX 1. Protocols and Target list of pesticides to be sought.

Calendar

ACTIVITY	DATE
Publishing the Target Pesticide List, Calendar and Matrix on the Web page	22 nd October 2012
Receiving Application Form from invited laboratories.	From 3 rd December 2012 to 7 th January 2013
Specific Protocol published on the Website	7 th January at the latest
Deadline for receiving Laboratory scope: Form 0	10 th -18 th January 2013
Sample distribution.	21 st January 2013
Deadline for receiving sample acceptance: Form 1	25 th January 2013
Deadline for receiving results: Form 2, Form 3 and Form 4	13 th February 2013
Filling in Form 5	20 th – 27 th February 2013
Preliminary Report: only results, no statistical treatment	April 2013
Final Report distributed to the Laboratories	December 2013

Cost of test material shipment.

EU and EFTA laboratories will be charged **175€** for the shipment cost. Other laboratories will be charged **200 €**. Regarding payment procedures - each laboratory can specify their details and invoice requests when applying for the test. Payment details are as follows:

BANK NAME: CAJAMAR - Caja Rural Sociedad Corporativa de Crédito

BANK ACCOUNT HOLDER: Universidad de Almería

BANK ADDRESS: Office Number 990. Universidad de Almería. Spain

ACCOUNT NUMBER: 30580130172731005000

IBAN: ES0730580130172731005000

SWIFT: CCRIES2A

CONCEPT: Invoice No. or Lab Code

Contact information

The official organising group details are as follows:

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

ANNEX 1. Protocols and Target list of pesticides to be sought.

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

Dr. Amadeo R. Fernández-Alba	EURL-FV amadeo@ual.es +34 950015034
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Quality Control Group

Dr. Antonio Valverde, University of Almería, Spain
Mr. Stewart Reynolds, Senior Chemist, FERA, York, United Kingdom

Statistical Group

Dr. Carmelo Rodríguez, Senior Mathematician, University of Almería, Spain

Advisory Group

Dr. André de Kok, Senior Chemist, NVWA, Wageningen, The Netherlands.
Dr. Tuija Pihlström, Senior Chemist NFA, Uppsala, Sweden.
Dr. Sonja Masselter, Senior Chemist, AGES, Innsbruck, Austria.
Dr. Darinka Stajnbaher, Senior Chemist, Maribor, Slovenia.
Dr. Magnus Jezussek, Senior Chemist, Erlangen, Germany.
Dr. Miguel Gamón, Senior Chemist, Laboratorio Agroalimentario, Valencia, Spain.
Dr. Mette Erecius Poulsen, Senior Chemist, NFI, Copenhagen, Denmark.
Mr. Ralf Lippold, Senior Chemist, CVUA, Freiburg, Germany.
Dr. Michelangelo Anastasiades, Senior Chemist, CVUA, Stuttgart, Germany.

ANNEX 1. Protocols and Target list of pesticides to be sought.

TARGET PESTICIDE LIST FOR THE EUPT-FV 14

Pesticide (*New pesticides this year)	MRRL (mg/Kg)
3-hydroxy-carbofuran	0.01
Acephate	0.01
Acetamiprid	0.01
Acrinathrin	0.01
Aldicarb	0.01
Aldicarb Sulfone	0.01
Aldicarb Sulfoxide	0.01
Amitraz	0.01
Azinphos-methyl	0.01
Azoxystrobin	0.01
Benfuracarb	0.01
Bifenthrin	0.01
Bitertanol	0.01
Boscalid	0.01
Bromopropylate	0.01
Bromuconazole	0.01
Bupirimate	0.01
Buprofezin	0.01
Cadusafos	0.006
Captan	0.01
Carbaryl	0.01
Carbendazim (sum of benomyl and carbendazim expressed as carbendazim)	0.01
Carbofuran	0.01
Carbosulfan	0.01
Chlorfenapyr	0.01
Chlorfenvinphos	0.01
Chlorobenzilate	0.01
Chlorothalonil	0.01
Chlorpropham (only parent compound)	0.01
Chlorpyrifos	0.01
Chlorpyrifos-methyl	0.01
Clofentezine (only parent compound)	0.01
Clothianidin	0.01
Cyfluthrin (cyfluthrin incl. other mixtures of constituent isomers (sum of isomers))	0.01
Cypermethrin (cypermethrin incl. other mixtures of constituent isomers (sum of isomers))	0.01
Cyproconazole	0.01
Cyprodinil	0.01
Deltamethrin	0.01
Demeton-S-methylsulfone	0.006
Desmethyl-pirimicarb	0.01
Diazinon	0.01
Dichlofluanid (only parent compound)	0.01
Dichlorvos	0.01
Dicloran	0.01
Dicofol	0.01
Difenoconazole	0.01
Diflubenzuron	0.01
Dimethoate	0.003
Dimethomorph	0.01
Dimethylaminosulfotoluidide (DMST)	0.01
Diphenylamine	0.01
DMF (2,4-Dimethylformanilide)	0.01
DMPF (N-2,4-Dimethylphenyl-N-Methyl-formamidine)	0.01
Endosulfan alpha	0.01
Endosulfan beta	0.01
Endosulfan sulfate	0.01
EPN	0.01
Epoxiconazole	0.01
Ethion	0.01
Ethoprophos	0.008
Etofenprox	0.01

ANNEX 1. Protocols and Target list of pesticides to be sought.

Pesticide (*New pesticides this year)	MRRL (mg/Kg)
Fenamiphos	0.01
Fenamiphos sulfone	0.01
Fenamiphos sulfoxide	0.01
Fenarimol	0.01
Fenazaquin	0.01
Fenbuconazole	0.01
Fenhexamid	0.01
Fenitrothion	0.01
Fenoxycarb	0.01
Fenpropathrin	0.01
Fenpropimorph	0.01
Fenthion	0.01
Fenthion oxon	0.01
Fenthion oxon sulfone	0.01
Fenthion oxon sulfoxide	0.01
Fenthion sulfone	0.01
Fenthion sulfoxide	0.01
Fipronil (only parent compound)	0.004
Fludioxonil	0.01
Flufenoxuron	0.01
Fluopicolide*	0.01
Fluquinconazole	0.01
Flusilazole	0.01
Flutolanil*	0.01
Flutriafol	0.01
Folpet	0.01
Fosthiazate	0.01
Hexaconazole	0.01
Hexythiazox	0.01
Imazalil	0.01
Imidacloprid	0.01
Indoxacarb (Indoxacarb as sum of the isomers S and R)	0.01
Iprodione	0.01
Iprovalicarb	0.01
Isofenphos-methyl	0.01
Kresoxim-methyl	0.01
Lambda-Cyhalothrin	0.01
Linuron	0.01
Lufenuron	0.01
Malaaxon	0.01
Malathion	0.01
Mepanipyrim (only parent compound)	0.01
Metaflumizone	0.01
Metaxyl and metaxyl-M	0.01
Metconazole	0.01
Methamidophos	0.01
Methidathion	0.01
Methiocarb	0.01
Methiocarb sulfone	0.01
Methiocarb sulfoxide	0.01
Methomyl	0.01
Methoxyfenozide	0.01
Monocrotophos	0.01
Myclobutanil	0.01
Omethoate	0.003
Orthophenylphenol	0.01
Oxadixyl	0.01
Oxamyl	0.01
Oxydemeton-methyl	0.006
Paclobutrazole	0.01
Paraoxon-methyl	0.01
Parathion-ethyl	0.01
Parathion-methyl	0.01
Penconazole	0.01

ANNEX 1. Protocols and Target list of pesticides to be sought.

Pesticide (*New pesticides this year)	MRRL (mg/Kg)
Pencycuron	0.01
Pendimethalin	0.01
Phenthoate	0.01
Phosalone	0.01
Phosmet	0.01
Phosmet oxon	0.01
Phoxim	0.01
Pirimicarb	0.01
Pirimiphos-methyl	0.01
Prochloraz (only parent compound)	0.01
Procymidone	0.01
Profenofos	0.01
Propargite	0.01
Propiconazole	0.01
Propyzamide	0.01
Prothioconazole (Prothioconazole-desthio)	0.01
Prothiofos	0.01
Pyraclostrobin	0.01
Pyridaben	0.01
Pyrimethanil	0.01
Pyriproxyfen	0.01
Quinoxifen	0.01
Spinosad (sum of spinosyn A and spinosyn D, expr. as spinosad)	0.01
Spirodiclofen	0.01
Spiroxamine	0.01
Tau-Fluvalinate	0.01
Tebuconazole	0.01
Tebufenozide	0.01
Tebufenpyrad	0.01
Teflubenzuron	0.01
Tefluthrin	0.01
Tetraconazole	0.01
Tetradifon	0.01
Thiabendazole	0.01
Thiacloprid	0.01
Thiamethoxam	0.01
Thiodicarb	0.01
Thiophanate-methyl	0.01
Tolclofos-methyl	0.01
Tolyfluanid	0.01
Triadimefon	0.01
Triadimenol	0.01
Triazophos	0.01
Trichlorfon (only parent compound)	0.01
Trifloxystrobin	0.01
Triflumuron	0.01
Trifluralin	0.01
Triticonazole	0.01
Vinclozolin (only parent compound)	0.01
Zoxamide	0.01

This list is based on Commission Regulation (EU) No 788/2012.
The MRRs are based in Regulation (EC) No. 396/2005 and Commission Directive 2006/125/EC.

ANNEX 2. List of laboratories that agreed to participate in EUPT-FV15.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
AUSTRIA	AUSTRIAN AGENCY FOR HEALTH AND FOOD SAFETY, INSTITUTE FOR FOOD SAFETY, PESTICIDE AND FOOD ANALYTICS (PLMA)	Innsbruck	YES
AUSTRIA	Institut Dr. Wagner	Lebring	YES
AUSTRIA	MA 38 - LEBENSMITTELUNTERSUCHUNGSANSTALT DER STADT WIEN	Vienna	YES
BELGIUM	SCIENTIFC INSTITUTE OF PUBLIC HEALTH	Bruxelles	YES
BELGIUM	LOVAP NV	Geel	YES
BELGIUM	LABORATOIRE AGRO-ANALYSES	Metz	YES
BELGIUM	FEDERAAL LABORATORIUM VOOR DE VOEDSELVEILIGHEID	Tervuren	CANCELLED
BELGIUM	FYTOLAB CVBA	Zwijnaarde	YES
BRAZIL	ASSOCIASSAO INSTITUTO DE TECNOLOGIA DE PERNAMBUCO - ITEP	Recife	YES
BULGARIA	CENTRAL LABORATORY FOR CHEMICAL TESTING AND CONTROL	Sofia	YES
BULGARIA	EURO LAB	Svilengrad	YES
CHINA	KEY LABORATORY OF CHEMICAL SAFETY AND HEALTH, CHINESE CENTER FOR DISEASE CONTROL AND PREVENTION	Beijing	YES
CHINA	LABORATORY OF FOOD CHEMISTRY, CHINA CENTRE FOR FOOD SAFETY RISK ASSESSMENT	Beijing	YES
CROATIA	INSTITUTE OF PUBLIC HEALTH SPLIT	Split	YES
CROATIA	EUROINSPEKT CROATIAKONTROLA D.O.O.	Zagreb	YES
CROATIA	FOOD CONTROL CENTER	Zagreb	YES
CYPRUS	PESTICIDES RESIDUES LABORATORY OF STATE GENERAL LABORATORY	Nicosia	YES
CZECH REPUBLIC	UNITED KINGDOMZUZ	Brno	YES
CZECH REPUBLIC	INSTITUTE OF CHEMICAL TECHNOLOGY PRAGUE, DEPT. OF FOOD ANALYSIS AND NUTRITION	Prague	YES
CZECH REPUBLIC	CZECH AGRICULTURE AND FOOD INSPECTION AUTHORITY	Prague	YES
DENMARK	DANISH VETERINARY AND FOOD ADMINISTRATION	Ringsted	YES
DENMARK	DTU NATIONAL FOOD INSTITUTE	Soeborg	YES
ESTONIA	AGRICULTURAL RESEARCH CENTRE (ARC), LABORATORY FOR RESIDUES AND CONTAMINANTS (LRC)	Saku	YES
ESTONIA	TARTU LABORATORY OF HEALTH BOARD	Tartu	YES
FINLAND	FINNISH CUSTOMS LABORATORY	Espoo	YES
FINLAND	METROPOLILAB	Helsinki	YES
FRANCE	GIRPA	Beaucouze	YES
FRANCE	CERECO SUD	Garons	YES

ANNEX 2. List of laboratories that agreed to participate in EUPT-FV15.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
FRANCE	CAPINOV (TRISKALIA)	Landerneau	YES
FRANCE	LABORATOIRE DÉPARTEMENTAL DE LA SARTHE	Le Mans	YES
FRANCE	LABORATOIRE DU SCL-MASSY	Massy Cedex	YES
FRANCE	LABORATOIRE DU SCL DE MONTPELLIER	Montpellier	YES
FRANCE	IDAC	Nantes Cedex3	YES
FRANCE	CENTRE ANALYSE MEDITERRANÉE PYRÉNÉES CAMP	Perpignan	YES
FRANCE	SCL - RENNES	Rennes	YES
GERMANY	THUERINGER LANDESAMT FUER LEBENSMITTELSICHERHEIT UND VERBRAUCHERSCHUTZ	Bad Langensalza	YES
GERMANY	FEDERAL OFFICE OF CONSUMER PROTECTION AND FOOD SAFETY (BVL)	Berlin	YES
GERMANY	CHEMISCHES UND LEBENSMITTELUNTERSUCHUNGSAMT DER STADT DORTMUND	Bochum	YES
GERMANY	CVUA RHEINLAND	Bonn	YES
GERMANY	LANDESUNTERSUCHUNGSAMT FÜR CHEMIE, HYGIENE UND VETERINÄRMEDIZIN BREMEN	Bremen	YES
GERMANY	CVUA-OWL (CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT OSTWESTFALEN-LIPPE)	Detmold	YES
GERMANY	LUA SACHSEN, DEUTSCHLAND	Dresden	YES
GERMANY	AMT FÜR VERBRAUCHERSCHUTZ, DÜSSELDORF	Düsseldorf	YES
GERMANY	BAYERISCHES LANDESAMT FUER GESUNDHEIT UND LEBENSMITTELSICHERHEIT	Erlangen	YES
GERMANY	CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT STUTTGART (CVUAS)	Fellbach	YES
GERMANY	LANDESLABOR BERLIN-BRANDENBURG	Frankfurt	YES
GERMANY	GALAB LABORATORIES GmbH	Geesthacht	YES
GERMANY	LANDESAMT FÜR VERBRAUCHERSCHUTZ SACHSEN-ANHALT (LAV)	Halle	YES
GERMANY	EUROFINS DR. SPECHT LABORATORIEN GmbH	Hamburg	YES
GERMANY	INSTITUT FUER HYGIENE UND UMWELT	Hamburg	YES
GERMANY	LANDWIRTSCHAFTLICHES TECHNOLOGIEZENTRUM AUGUSTENBERG	Karlsruhe	YES
GERMANY	LANDESBETRIEB HESSISCHES LANDESLABOR	Kassel	YES
GERMANY	LUFA-ITL GmbH	Kiel	YES
GERMANY	CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT RHEIN-RUHR WUPPER	Krefeld	YES
GERMANY	ZInstSanBw Kiel Abt. III	Kronshagen	YES
GERMANY	CVUA-MEL CHEMISCHES UND VETERINÄRUNTERSUCHUNGSAMT MUENSTERLAND-EMSCHER-LIPPE	Muenster	YES
GERMANY	STATE LABORATORY SCHLESWIG-HOLSTEIN	Neumuenster	YES

ANNEX 2. List of laboratories that agreed to participate in EUPT-FV15.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
GERMANY	NIEDERSAECHSISCHES LANDESAMT FUER VERBRAUCHERSCHUTZ UND LEBENSMITTELSICHERHEIT, LVI OLDENBURG	Oldenburg	YES
GERMANY	LANDESAMT FÜR LANDWIRTSCHAFT, LEBENSMITTELSICHERHEIT UND FISCHEREI MECKLENBURG-VORPOMMERN	Rostock	YES
GERMANY	LANDESAMT FÜR VERBRAUCHERSCHUTZ	Saarbrücken	YES
GERMANY	LANDESUNTERSUCHUNGSAMT RHEINLAND-PFALZ INSTITUT FÜR LEBENSMITTELCHEMIE SPEYER	Speyer	YES
GERMANY	LABOR FRIEDLE GmbH	Tegernheim	YES
GREECE	PESTICIDE RESIDUES LABORATORY, D CHEMICAL DIVISION OF ATHENS, GENERAL CHEMICAL STATE LABORATORY	Athens	YES
GREECE	LABORATORY OF PESTICIDE RESIDUE ANALYSIS IN FRUITS & VEGETABLES, REGIONAL CENTRE OF CROP PROTECTION & QUALITY CONTROL OF IOANNINA, MINISTRY OF RURAL DEVELOPEMENT & FOOD	Ioannina	YES
GREECE	REGIONAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL OF IRAKLION , LABORATORY OF PESTICIDE RESIDUES	Iraklion Greece	YES
GREECE	PERIFERAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL OF KAVALA - MINISTRY OF RULAR DEVELOPMENT & FOOD	Kavala	YES
GREECE	PESTICIDE RESIDUES LABORATORY, BENAKI PHYTOPATHOLOGICAL INSTITUTE	Kifissia	YES
GREECE	PESTICIDE RESIDUE LABORATORY OF REGIONAL CENTRE OF PLANT PROTECTION AND QUALITY CONTROL OF PIRAEUS	Lykovrissi	YES
GREECE	REGIONAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL OF NAFPLIO, LABORATORY OF PESTICIDE RESIDUES	Nafplio	YES
GREECE	REGIONAL CENTER OF PLANT PROTECTION AND QUALITY CONTROL OF ACHAIA, LAB OF PESTICIDE RESIDUES	Patra	YES
GREECE	REGIONAL CENTRE OF PLANT PROTECTION AND QUALITY CONTROL OF THESSALONIKI, LABORATORY OF PESTICIDE RESIDUES	Thessaloniki	YES
GREECE	REGIONAL CENTER OF PLANT PROTECTION & QUALITY CONTROL OF MAGNESIA, VOLOS	Volos	YES
HUNGARY	NATIONAL FOOD CHAIN SAFETY OFFICE, DIRECTORATE OF PLANT PROTECTION AND SOIL CONSERVATION, PESTICIDE RESIDUE ANALYTICAL LABORATORY OF HÓDMEZOVÁSÁRHELY	Hodmezovasarhely	YES
HUNGARY	NATIONAL FOOD CHAIN SAFETY OFFICE, DPPSCA PESTICIDE RESIDUE ANALYTICAL LABORATORY, MISKOLC	Miskolc	YES
HUNGARY	NATIONAL FOOD CHAIN SAFETY OFFICE DPPSCA PESTICIDE RESIDUE ANALYTICAL LABORATORY, SZOLNOK	Szolnok	YES
HUNGARY	NATIONAL FOOD CHAIN SAFETY OFFICE, DPPSCA PESTICIDE ANALYTICAL LABORATORY, VELENCE	Velence	YES
ICELAND	MATIS OHF.	Reykjavík	NO
INDIA	NATIONAL REFERRAL LABORATORY FOR PRODUCTS OF PLANT ORIGIN	Pune	YES
IRELAND	PESTICIDE CONTROL LABORATORY	Celbridge	YES
ISRAEL	PESTICIDE RESIDUES LABORATORY, PLANT PROTECTION & INSPECTION SERVICES (PPIS)	Beit-Dagan	YES

ANNEX 2. List of laboratories that agreed to participate in EUPT-FV15.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
ITALY	ARPA PUGLIA - POLO DI SPECIALIZZAZIONE "ALIMENTI" - BARI	Bari	YES
ITALY	LABORATORIO DI SANITA' PUBBLICA ASL PROVINCIA DI BERGAMO	Bergamo	YES
ITALY	LANDESAGENTUR FÜR UMWELT - LABOR FÜR CHROMATOGRAPHIE	Bozen	YES
ITALY	LABORATORIO CONTAMINANTI AMBIENTALI - REPARTO CHIMICA ALIMENTI OA - ISTITUTO ZOOPROFILATTICO SPERIMENTALE LOMBARDA EMILIA ROMAGNA	Brescia	YES
ITALY	ARPA EMILIA ROMAGNA, LABORATORIO INTEGRATO, POLO ANALITICO REGIONALE FITOFARMACI	Ferrara	YES
ITALY	LABORATORIO SANITA' PUBBLICA AREA VASTA TOSCANA CENTRO	Firenze	YES
ITALY	ARPA PIEMONTE POLO ALIMENTI	La Loggia	YES
ITALY	ARPAL - AGENZIA REGIONALE PER LA PROTEZIONE DELL'AMBIENTE LIGURE - DIPARTIMENTO DI LA SPEZIA UO LABORATORIO	La Spezia	YES
ITALY	ARPALAZIO SEZIONE DI LATINA	Latina	YES
ITALY	ISTITUTO ZOOPROFILATTICO SPERIMENTALE DELLE VENEZIE	Legnaro	YES
ITALY	ARPA MARCHE - DIP. MACERATA	Macerata	YES
ITALY	LABORATORIO DI PREVENZIONE DI MILANO	Milano	YES
ITALY	A.R.P.A. CAMPANIA-LABORATORIO MULTIZONALE REGIONALE MICOTOSSINE E FITOFARMACI- SETTORE FITOFARMACI	Naples	YES
ITALY	LABORATORIO CONTAMINANTI AMBIENTALI	Perugia	YES
ITALY	ARPA FVG LABORATORIO UNICO MULTISITO - SEDE DI PORDENONE	Pordenone	YES
ITALY	ARPA LAZIO	Rome	YES
ITALY	ISTITUTO SUPERIORE DI SANITÀ	Rome	YES
ITALY	ISTITUTO ZOOPROFILATTICO SPERIMENTALE LAZIO E TOSCANA	Rome	YES
ITALY	ARPA VALLE D'AOSTA	Saint Christophe	YES
ITALY	ISTITUTO ZOOPROFILATTICO SPERIMENTALE DELLA SARDEGNA	Sassari	YES
ITALY	ISTITUTO ZOOPROFILATTICO SPERIMENTALE DELL'ABRUZZO E MOLISE "G. CAPORALE"	Teramo	YES
ITALY	APPA TRENTO SETTORE LABORATORIO E CONTROLLI	Trento	YES
ITALY	A.S.L. DELLA PROVINCIA DI VARESE - U.O. LABORATORIO CHIMICO	Varese	YES
ITALY	A.R.P.A. VENETO - SERVIZIO LABORATORI VERONA	Verona	YES
LATVIA	INSTITUTE OF FOOD SAFETY, ANIMAL HEALTH AND ENVIRONMENT "BIOR"	Riga	YES
LITHUANIA	NATIONAL FOOD AND VETERINARY RISK ASSESSMENT INSTITUTE	Vilnius	YES
LUXEMBOURG	LABORATOIRE NATIONAL DE SANTÉ - ALIMENTAIRE	Luxembourg	YES
MOROCCO	EACCE	Casablanca	YES

ANNEX 2. List of laboratories that agreed to participate in EUPT-FV15.

COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
NORWAY	BIOFORSK, PLANT HEALTH AND PLANT PROTECTION DIVISION, PESTICIDE CHEMISTRY SECTION	Aas	YES
POLAND	WOJEWÓDZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W ŁÓDZI	Łódź	YES
POLAND	PLANT PROTECTION INSTITUTE-NATIONAL RESEARCH INSTITUTE, PESTICIDE RESIDUE LABORATORY IN BIALYSTOK	Białystok	YES
POLAND	WOJEWODZKA STACJA SANITARNO-EPIDEMIOLOGICZNA W OPOLE	Opole	YES
POLAND	INSTITUTE OF PLANT PROTECTION - NATIONAL RESEARCH INSTITUTE, DEPARTMENT OF PESTICIDE RESIDUE RESEARCH	Poznan	YES
POLAND	INSTITUTE OF PLANT PROTECTION - NATIONAL RESEARCH INSTITUTE, RESIDUE ANALYSES LABORATORY, REGIONAL EXPERIMENTAL STATION IN RZESZOW	Rzeszow	YES
POLAND	INSTITUTE OF HORTICULTURE, FOOD SAFETY LABORATORY	Skiernewice	YES
POLAND	INSTITUTE OF PLANT PROTECTION-NATIONAL INSTITUTE SOSNICOWICE BRANCH, LABORATORY OF PESTICIDE RESIDUE RESEARCH	Sosnicowice	YES
POLAND	MAIN INSPECTORATE OF PLANT HEALTH AND SEED INSPECTION, CENTRAL LABORATORY	Torun	YES
POLAND	PLANT PROTECTION INSTITUTE-NATIONAL RESEARCH INSTITUTE, PESTICIDE RESIDUE LABORATORY IN TRZEBNICA	Trzebnica	YES
POLAND	VOIVODSHIP SANITARY-EPIDEMIOLOGICAL STATION IN WARSAW- PESTICIDE RESIDUE LABORATORY	Warsaw	YES
POLAND	WOJEWÓDZKA STACJA SANITARNO-EPIDEMIOLOGICZNA WE WROCŁAWIU - DZIAŁ LABORATORYJNY	Wrocław	YES
PORTUGAL	LABORATÓRIO REGIONAL DE VETERINÁRIA E SEGURANÇA ALIMENTAR	Funchal	YES
PORTUGAL	INIAV - UEISTA - LABORATÓRIO DE RESÍDUOS DE PESTICIDAS - OEIRAS	Oeiras	YES
PORTUGAL	LABORATÓRIO DE QUÍMICA AGRÍCOLA E AMBIENTAL DA DRAPN	Senhora Da Hora	YES
ROMANIA	LABORATORY FOR PESTICIDES RESIDUES CONTROL IN PLANTS AND VEGETABLES	Bucharest	YES
ROMANIA	SANITARY VETERINARY AND FOOD SAFETY DIRECTORATE	Bucharest	YES
ROMANIA	SANITARY VETERINARY AND FOOD SAFETY LABORATORY IASI	Iasi	YES
SAUDI ARABIA	RIYADH FOOD MONITORING LABORATORY	Riyadh	YES
SERBIA	SP LABORATORIJA	Becej	YES
SLOVAKIA	NATIONAL REFERENCE CENTRE FOR PESTICIDE RESIDUES, PUBLIC HEALTH AUTHORITY OF SLOVAK REPUBLIC	Bratislava	YES
SLOVAKIA	STATE VETERINARY AND FOOD INSTITUTE	Bratislava	YES
SLOVENIA	INSTITUTE OF PUBLIC HEALTH INSTITUTE MARIBOR (ZAVOD ZA ZDRAVSTVENO VARSTVO MARIBOR)-LJ	Ljubljana	YES
SLOVENIA	KMETIJSKI INŠTITUT SLOVENIJE (AGRICULTURAL INSTITUTE OF SLOVENIA)	Ljubljana	YES
SLOVENIA	INSTITUTE OF PUBLIC HEALTH MARBOR (ZAVOD ZA ZDRAVSTVENO VARSTVO MARIBOR)	Maribor	YES
SPAIN	LABORATORIO AGRARIO Y FITOPATOLOGICO DE GALICIA	Abegondo	YES
SPAIN	LABORATORIO DE RESIDUOS-DEPARTAMENTO DE ANÁLISIS AMBIENTAL - INSTITUTO TECNOLÓGICO DE CANARIAS, S. A.	Agüimes	YES

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SPAIN	LABORATORIO AGRARIO REGIONAL	Albacete	CANCELLED
SPAIN	ANALYTICA ALIMENTARIA GmbH	Almeria	YES
SPAIN	LABORATORIO PROVINCIAL DE SALUD PUBLICA DE ALMERIA	Almeria	YES
SPAIN	LABORATORIO AGROALIMENTARIO DE GRANADA	Atarfe, Granada	YES
SPAIN	LABORATORIO DE SALUD PÚBLICA DE BADAJOZ	Badajoz	YES
SPAIN	LABORATORY OF BARCELONA PUBLIC HEALTH AGENCY	Barcelona	YES
SPAIN	LABORATORIO AGRARIO REGIONAL - JUNTA DE CASTILLA Y LEÓN	Burgos	YES
SPAIN	LABORATORIO AGROALIMENTARIO DE VALENCIA	Burjassot	YES
SPAIN	LABORATORI AGROALIMENTARI - DAAM	Cabrils	YES
SPAIN	LABORATORIO AGROALIMENTARIO DE EXTREMADURA. DEPARTAMENTO DE ANÁLISIS DE RESIDUOS	Cáceres	NO
SPAIN	LABORATORIO DE SALUD PUBLICA DE CUENCA	Cuenca	YES
SPAIN	LABORATORIO AGROALIMENTARIO Y DE SANIDAD ANIMAL	El Palmar, Murcia	YES
SPAIN	LABORATORIO DE SANIDAD VEGETAL DE HUELVA	Huelva	YES
SPAIN	LABORATORIO DE PRODUCCIÓN Y SANIDAD VEGETAL	La Mojonera, Almería	YES
SPAIN	LABORATORIO REGIONAL DE LA CCAA DE LA RIOJA	Logroño	YES
SPAIN	LABORATORIOS ECOSUR, S.A.	Lorquí	YES
SPAIN	LABORATORIO ARBITRAL AGROALIMENTARIO	Madrid	YES
SPAIN	LABORATORIO DE SALUD PÚBLICA DE MADRID	Madrid	YES
SPAIN	CENTRO NACIONAL DE ALIMENTACION	Majadahonda, Madrid	YES
SPAIN	LABORATORIO PRODUCCION Y SANIDAD VEGETAL	Mengibar, Jaen	YES
SPAIN	LABORATORIO DE SANIDAD VEGETAL	Oviedo	YES
SPAIN	SALUD PÚBLICA DE PALMA	Palma	YES
SPAIN	AINIA	Paterna	YES
SPAIN	CNTA	San Adrián	YES
SPAIN	LABORATORIO QUÍMICO MICROBIOLÓGICO, S.A.	San Ginés, Murcia	YES
SPAIN	NASERTIC	Villava	YES
SPAIN	LABORATORIO AGROAMBIENTAL DE ZARAGOZA	Zaragoza	YES
SWEDEN	EUROFINS FOOD & AGRO TESTING SWEDEN AB	Lidköping	YES
SWEDEN	NATIONAL FOOD AGENCY (NFA), CHEMICAL UNIT 1	Uppsala	YES

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COUNTRY	LABORATORY NAME	CITY	REPORTED RESULTS
SWITZERLAND	AMT FÜR VERBRAUCHERSCHUTZ AARGAU (CANTONAL OFFICE OF CONSUMER PROTECTION AARGAU)	Aarau	YES
SWITZERLAND	SERVICE DE LA CONSOMMATION ET DES AFFAIRES VÉTÉRINAIRES (SCAV)	Geneve	YES
SWITZERLAND	KANTONALES LABOR ZÜRICH	Zurich	YES
THE NETHERLANDS	GROEN AGROCONTROL	Delfgauw	YES
THE NETHERLANDS	LABORATORIUM ZEEUWS-VLAANDEREN BV	Graauw	YES
THE NETHERLANDS	LABORATORY DR A VERWEY AGROGROUP	Rotterdam	YES
THE NETHERLANDS	NVWA - NETHERLANDS FOOD AND CONSUMER PRODUCT SAFETY AUTHORITY	Wageningen	YES
TURKEY	SGS MERSIN FOOD CONTROL LABORATORY (FORMER MSM)	Mersin	YES
UNITED KINGDOM	SASA (SCIENCE AND ADVICE FOR SCOTTISH AGRICULTURE)	Edinburgh	YES
UNITED KINGDOM	LABORATORY OF THE GOVERNMENT CHEMIST (LGC)	Teddington	YES
UNITED KINGDOM	EUROFINS FOOD TESTING UNITED KINGDOM LTD	Wolverhampton	YES
UNITED KINGDOM	THE FOOD AND ENVIRONMENT RESEARCH AGENCY	York	YES
URUGUAY	PHARMACOGNOSY & NATURAL PRODUCTS	Montevideo	YES