PROFICIENCY TEST 6, 2004

Incurred Residues of Pesticides in Tomato Homogenate

Final Report

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EUROPEAN COMMISSION'S PROFICIENCY TEST 6 ON PESTICIDE RESIDUES IN FRUIT AND VEGETABLES, 2004

The 6th European Commission's Proficiency Test was performed in 2004 using tomato homogenate. The tomatoes were grown in the south of Spain, in Almeria, and were treated with two different types of pesticide applications: a field treatment similar to normal commercial practice and a post harvest treatment where commercial formulations were applied using a microspray. Thirteen pesticides were used for the treatments. Participating laboratories were provided with a 'blank' tomato homogenate as well as the treated test material.

One hundred and thirty laboratories agreed to participate in the proficiency test.
The medians from the analytical data submitted were used to calculate the assigned concentrations of the thirteen pesticide residues. Using these, together with the standard deviations, z-Scores were calculated for every laboratory for the thirteen pesticides. The standard deviation was calculated in two ways, using a fit-for-purpose (FFP) target standard deviation based on the experience of the Advisory Group and also using Qn, robust statistics.
Classical procedures for summing z-Scores (SSZ and RSZ) were calculated for all the individual z-Scores of the participating laboratories. For the assessment of the overall laboratory performance a new criteria has also been applied. Only laboratories that fulfilled the criteria of detecting at least eleven of the thirteen pesticides (~90%) have been classified as having 'sufficient scope', and have been assigned to Category A. Within this category, the laboratories have been classified as 'good', 'satisfactory' or 'unsatisfactory'. All the other laboratories have been put into Category B, and classified as having 'insufficient scope'. For laboratories in Category B, individual z-Scores have been calculated, but their overall performance using the new criteria has not been assessed.
These results are presented in this report.

1. INTRODUCTION

The Council Directives (86/362/EEC and 90/642/EEC) provide for the organization and financial support for regular proficiency testing of the laboratories that perform analyses for their national monitoring programmes. These proficiency tests are performed in order to assure the quality, accuracy and comparability of the residue data sent by EU Member States to the European Commission and to the other Member States on an annual basis.The EU Commission's Proficiency Tests 1-5 were carried out from 1996-2003, and were all organized by the Swedish National Food Administration. This year, the University of Almeria, Spain, organized the 6th European Proficiency Test. Participation in this proficiency test was open to all official national or regional analytical laboratories involved in the determination of pesticide residues in fruit and vegetables in Member States of the EU and, additionally, Norway and Romania as invited countries.

A total of one hundred and thirty laboratories in Europe agreed to participate in the 6th Proficiency Test. The test material, 400 g of tomato homogenate containing residues of pesticides, together with 400 g of blank tomato homogenate, were shipped to participants on 17th, 18th, 25th and 31st May, 2004. The deadline for submission of results to the organiser was 12th July 2004. The participants were provided with a list of fifty-seven pesticides (Annex 1), which might be present in the test material and they were asked to determine the levels of all the pesticides they detected. Participants were also asked to analyse the blank test material and report residues of the pesticides they found from the same list of pesticides. This blank material was intended for use in performing recovery experiments with the pesticides found in the test material and for the preparation of matrix-matched standards, if necessary.

2. TEST MATERIALS

2.1 Analytical methods

Three analytical methods, described briefly below, were used for the homogeneity and stability tests as well as other procedures by the organisers at the laboratory of Coexphal (Almeria):

- GC method [1]: ethyl acetate extraction in the presence of sodium sulfate, filtration, addition of more sodium sulfate, evaporation, re-dissolution in cyclohexane and determination by GC-MS/MS.
- LC method [2]: ethyl acetate extraction in the presence of sodium sulfate and addition of sodium hydroxide, filtration, addition of more sodium sulfate, evaporation, re-dissolution in methanol, and determination by LC-MS/MS.
- For dithiocarbamates [3]: acid digestion was carried out, followed by UV determination of CS_2

Thiabendazole, imidacloprid and azoxystrobin (Table 1) were determined using the LC-MS/MS method. All other pesticides except dithiocarbamates, (Table 1) were analysed using the GC method. For confirmation purposes, MS/MS spectra were used except in the case of dithiocarbamates.

2.2 Preparation of treated test material

Before the preparation of the test material, the pesticides and suitable residue levels for the study were selected and recommended by the Advisory Group, which had been appointed for Proficiency Test 6. The tomatoes were grown in the south of Spain, in Almeria. A field treatment was undertaken (Table 1). A portion of the crop was sampled and analysed to check the residue levels that had been incurred. Following the field treatment one hundred kilograms of tomatoes were sampled and treated post-harvest with a commercial formulation dissolved in water and applied to the tomatoes using a microspray (Table1). Different formulations were applied for each of the pesticides allowing one hour between applications. A portion was taken and analysed to check the residue levels. When the tomatoes contained residue levels close to those agreed by the Advisory Group they were frozen and chopped using liquid nitrogen and a mincer, then mixed in a constantly spinning container especially designed and built up by the organiser until a homogeneous material was obtained. One pesticide, metalaxyl, was found to be present as a contaminant in the test material (but not in the blank), either because of cross contamination in the field, or because a contaminant was present in one of the commercial formulations. The concentration of metalaxyl was below the Limit of Determination (LOD) or minimum required performance level (MRPL) recommended by the PT6 Advisory Group that must be used by the participating laboratories. Therefore the residue data reported for metalaxyl is presented in this report for information purposes only. Portions of 400 g per bottle, 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.

Table 1. Pesticides, field-treated and following harvest.

Pesticide	Field-treatment	Post-harvest treatment
Acrinathrin		Yes
Azoxystrobin		Yes
Bromopropylate		Yes
Chlorothalonil		Yes
Diazinon		Yes
Dimethoate		Yes
Endosulfan		Yes
Imazalil		Yes
Imidacloprid	Yes	
Dithiocarbamates (CS_2)		Yes
Oxydemeton-methyl		Yes
Procymidone		Yes
Thiabendazole	Yes	

2.3 Preparation of blank test material

The tomatoes to be used for the production of the blank test material were organically grown in the same area as the test material, in the south of Spain, in Almería. The homogenate was prepared in the same way as the incurred test material described above. The blank test material did not contain any residues of the pesticides listed in Annex 1, at, or above the reporting levels applied.

2.4 Homogeneity test

Ten bottles were randomly chosen from those stored in the freezer and analyses were performed on duplicate portions taken from each bottle. The sequence of analyses was determined using a table of randomly generated numbers. The injection sequence of the 20 extracts analysed by GC and LC was also randomly chosen. The quantification by GC and LC was performed using a 3-point calibration curve and matrix matched standards. One standard mixture was used, for GC and LC. 'Dithiocarbamates' were determined as carbon disulfide, following acid digestion and using a UV detector.

The statistical evaluation was performed according to the international harmonized protocol prepared by AOAC, ISO and IUPAC [4, 5]. The individual residue data from the homogeneity tests are given in Appendix 1. The results of the statistical analyses are given in Table 2A-B. The acceptance criteria to be sufficiently homogenous was that Fcritical > F. The F-test was passed for all pesticides (p = 0.05).

Table 2A. Statistical evaluation of the homogeneity test data (n=20 analyses)

Pesticide	Acrinathrin	Azoxystrobin	Bromopropylate	Chlorothalonil	Diazinon	Dimethoate	Endosulfan
Mean, mg/kg	0.298	0.241	0.468	1.65	3.97	0.16	0.38
SD, mg/kg	0.006	0.005	0.001	0.01	0.102	0.001	0.004
F-critical	3.18	3.18	3.18	3.18	3.17	3.18	3.18
F	1.15	1.02	1.11	1.37	1.02	1.56	1.21
Passed/Failed	Passed	Passed	Passed	Passed	Passed	Passed	Passed

Table 2B. Statistical evaluation of the homogeneity test data (n=20 analyses)

Pesticide	Imazalil	Imidacloprid	Dithiocarbamates (CS_2)	Metalaxyl	Oxydemeton-methyl	Procymidone	Thiabendazole
Mean, mg/kg	0.188	0.238	0.787	0.048	0.199	0.418	0.331
SD, mg/kg	0.007	0.002	0.021	0.02	0.001	0.002	0.005
F-critical	3.18	3.18	3.18	3.18	3.18	3.18	3.18
F	1.10	1.44	1.02	1.25	2.20	1.20	1.45
Passed/Failed	Passed	Passed	Passed	Passed	Passed	Passed	Passed

Thus, overall, the F-test showed that the material was sufficiently homogeneous for the PT with respect to all 13 pesticides and the SDs demonstrated that the analytical precision was acceptable.

2.5 Stability tests

The three analytical methods described briefly above (at point 2.1) were also used for the stability tests. The tests were performed on two occasions. On each occasion, one bottle stored in the freezer was chosen randomly and duplicate analyses were performed.

The two occasions were:

- Day 1: coinciding with the first sample shipment, which took place 17^{th} /18^{th} of May 2004.
- Day 2: shortly after the deadline for reporting results, 12^{th} July 2004.

The individual results are given in Tables 3A-B. In general, these tests did not show any significant decrease in the levels of the pesticides and were considered to be acceptable as a stable test material. However, there was a significant decrease (>10%) for dithiocarbamates from Day 1 to Day 2 although it was considered a stable test material.

Table 3 A. Statistical test for analytical precision

Pesticide	Acrinathrin	Azoxystrobin	Bromopropylate	Chlorothalonil	Diazinon	Dimethoate	Endosulfan
Day 1 (mg/kg)							
1st analysis	0.311	0.250	0.464	1.657	4.023	0.153	0.384
2nd analysis	0.305	0.257	0.469	1.659	4.027	0.157	0.385
Mean 1	0.308	0.253	0.467	1.658	4.025	0.155	0.385
Day 2 (mg/kg)							
1st analysis	0.288	0.231	0.438	1.610	3.678	0.147	0.372
2nd analysis	0.294	0.234	0.432	1.609	3.680	0.145	0.375
Mean 2	0.291	0.233	0.435	1.610	3.679	0.146	0.374
$\frac{\text{(Mean 1-Mean 2)}}{\text{Mean 1}}$	0.055	0.079	0.069	0.029	0.086	0.058	0.029

Table 3 B. Statistical test for analytical precision

Pesticide	Imazalil	Imidacloprid	Dithiocarbamates (CS_2)	Metalaxyl	Oxydemeton -methyl	Procymidone	Thiabendazole
Day 1 (mg/kg)							
1st analysis	0.197	0.244	0.857	0.050	0.202	0.417	0.325
2nd analysis	0.200	0.240	0.850	0.050	0.205	0.420	0.328
Mean 1	0.199	0.242	0.854	0.050	0.204	0.419	0.327
Day 2 (mg/kg)							
1st analysis	0.193	0.239	0.759	0.044	0.194	0.425	0.345
2nd analysis	0.195	0.234	0.752	0.043	0.198	0.42	0.344
Mean 2	0.194	0.237	0.756	0.044	0.196	0.423	0.345
(Mean 1-Mean 2) / Mean 1	0.025	0.021	0.115	0.120	0.039	-0.010	-0.055

2.6 Distribution of test material and protocol to participants

One bottle of incurred test sample and one bottle of blank test material were shipped in boxes containing dry ice. The samples were sent on the 17th and 18th May, 2004. Unfortunately the 20th May was a holiday in nearly all European countries and only one country notified the organiser of this in advance. Because of this problem, the receipts of many shipments were delayed and the test materials had thawed out. This meant that the organisers were obliged to send out repeat shipments to some countries. After this delay, all labs received their test material (with an exception of one lab that did not accept it). Because of the delay, the deadline for reporting results was extended by one week.

Before shipment of the samples, the laboratories received full instructions (Annex 1) for the receipt, storage and analysis of the test materials, although they were encouraged to use their normal sample receipt procedure and methods of analysis. These instructions where uploaded onto the web page built especially for this Proficiency Test. There were two parts, *the list of pesticides MRPLs*, which was the minimum required performance level, and the *Protocol*, with a common code to access through the web page. This information was notified by email to all participant labs so confidentiality was maintained through out the entire Proficiency Test 6.

3. STATISTICAL METHODS

3.1 Background

3.1.1 Proficiency Tests 1-5

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

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

In Proficiency Test 4, the same two robust statistical methods were compared and again only marginal differences were found.

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

The sums of scores, the RSZ, SSZ and RLP were also calculated as for the last Proficiency Test (PT5).

3.1.2 Proficiency Test 6

In this proficiency test the median was used to obtain the assigned concentration values for each pesticide.

This was then used to calculate the z-Score. The SD was calculated by using the FFP value, which was assigned as 25%. Furthermore Qn was also calculated as SD value.

Sum of z-Scores: The RSZ and SSZ were also used but an additional new criterion was introduced for PT6 in agreement with the Advisory Group as well as DG Sanco. This was used as the basis to separate the labs into two categories, A and B. To be in Category A, sufficient scope had to have been demonstrated. This scope was that 11 or more results must have been submitted with no false positives. All labs reporting less than 11 results, or having reported a false positive were put into Category B.

3.2 False positives and negatives

3.2.1 False positives

In principle, pesticide residues unknown to the organizer that were reported by a small numbers of participant laboratories were treated as false positives, considering them only when the reported concentration was above their RL or MRPL. If the residue was below the laboratory's RL, then the organisation recommends to these labs should, in future PTs, ensure that they comply with the instructions issued by the organiser for reporting results.

3.2.2 False negatives

Results that did not reveal pesticide residues in the test material, although they were actually present, were considered to be false negatives, although there was one exception. Before taking a decision, the true value, the MRPL and the labs RL were all considered. Only if the RL was above the assigned value, and considering what was stated in the Protocol, the laboratories were not penalised, and no z-Score was calculated. If the RL was below the true value but above the MRPL, it was considered to be a false negative result. Laboratories should have adjusted their reporting levels to meet the MRPLs requested by the organisation.

z-Scores for false negatives were calculated in two ways: if the RL was above the MRPL, then the MRPL was used, and if the RL was below the MRPL then the RL was used, if labs did not report a value for their RL, then the MRPL was used.
Metalaxyl was at a lower residue level than the MRPL, and was therefore not considered in the overall statistical assessment of laboratory performance.

3.3 Estimation of the assigned concentration

To calculate the assigned values, the medians of all the reported results were used. Individual results reported that expressed uncertainty such as detected **(D)** or using a '**>'** sign were not used.

3.4 Estimation of the target standard deviation

Two procedures were used to calculate the standard deviation (SD); one using fixed standard deviations (fit-for-purpose, FFP) based on individual's experience and as agreed by the Advisory Group. The other was using the robust statistic Qn. (Appendix 3).
The standard deviation (SD) was calculated as a result of applying these procedures and multiplying by the assigned value or true concentration.

3.4.1 Fixed standard deviations (fit-for-purpose)

The relative standard deviation (RSD) was considered to be 25 %, according to the Advisory Group agreement, and also what was concluded from the discussion session on proficiency testing at EPRW 2004 in Stockholm, Sweden. This was to apply the same RSD to all the pesticides.

3.4.2 Robust statistic: Qn

Using Qn [6] the SD was calculated from the results after the differences between all laboratory results had been calculated. The SD is the 25^{th} percentile of these differences, multiplied by a factor of 2.2194.

3.5 z-Scores

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

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

Where:

- x is the result reported by the participant or the RL or MRPL for those labs not having detected the pesticide present in the sample (the MRPL was only used when no RL was reported)
- X is the assigned value or true concentration
- σ is the target standard deviation (using the median and FFP of 25%)

No calculation of z-Score has been performed for false positive results or laboratories with a RL above the true assigned value.

3.6 Combined scores

In order to evaluate each laboratory's overall performance, taking into account all the pesticides analysed, three methods were used to combine z-Scores the re-scaled sum of z-Scores (RSZ), the sum of squared z-Scores (SSZ) and a new procedure for combining z-Scores called the 'Weighted sum of z-Scores'.

3.6.1 RSZ

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

$$RSZ = \Sigma z / n$$

Where n is the number of z-Scores

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

3.6.2 SSZ

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

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

Where n is the number of z-Scores

3.6.3 Weighted sum of z-Scores

This function has been applied this year as a first approach for improvment on how to get a aglobal evaluation of the participating laboratories and it was only applied to labs with sufficient scope (those in Category A), i.e. those labs that have reported 11 or more results with no false positives. The individual z-Scores were multiplied by weighted factors.

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

So for each lab,

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

The three factors were then divided by the number of reported results (n) from each lab.

The 'Weighted sum of z-Scores' has then been used to produce an overall classification of laboratories as 'good', 'satisfactory' or 'unsatisfactory' according to:

$\lvert z \rvert \leq 2$	good
$2 < \lvert z \rvert \leq 3$	satisfactory
$\lvert z \rvert > 3$	unsatisfactory

In this way, a simple, single combined value, very similar to the single z-Scores, is produced that should help to promote laboratories to analyse of a greater number of target compounds.

This function has not been applied to those participants with insufficient scope, in Category B, which is for the laboratories reporting less than 11 results, or with false positives.

4. RESULTS

4.1 Summary of results reported

One hundred and thirty laboratories agreed to participate in this proficiency test and one hundred and twenty-six submitted results, of which one arrived after the deadline.

One laboratory declined to participate for a special reason, two submitted combined results together, and the two others did not submit any results.

The results of the one hundred twenty-six participating laboratories are presented in this report.

One hundred and twenty eight from the 130 laboratories were from EU Member States, of which twenty-eight were from the new EU countries.

A summary of the results reported can be seen in Table 4.

Table 4 Types of Results

Pesticides	Nº of Results Reported	Nº of NA Reported	Nº of ND Reported	% of the Total Results *
Acrinathrin	69	53	4	94.5
Azoxystrobin	92	27	7	92.9
Bromopropylate	118	7	1	99.2
Chlorothalonil	114	9	3	97.4
Diazinon	124	2	0	100
Dimethoate	114	4	8	93.4
Endosulfan	119	5	2	98.3
Imazalil	88	23	15	85.3
Imidacloprid	52	69	5	91.1
Dithiocarbamates expressed as CS_2	78	45	3	96.3
Metalaxyl (*informative*)	73	13	40	64.3
Oxydemeton-methyl	42	73	11	79.3
Procymidone	120	6	0	100
Thiabendazole	88	31	7	92.6

***** The % of the total results are calculated from the results of the labs that sought these compounds excluding the number of NAs
NA = Not analysed
ND = Not detected

The laboratories that agreed to participate are listed in Annex 2. All data reported by the participants, including the analytical results (Appendix 3), recoveries and analytical methods used, are given in Appendix 7. For an explanation of the symbols used in the tables, see Annex 1.

The participating laboratories did not report any residues in the blank test material from the pesticides listed in Annex 1.

4.1.1 False positives

Some laboratories reported finding additional pesticides in the incurred test materials.

These pesticides and the residue levels reported are presented in Table 5. They were not considered to be false positives, if the concentration was below the laboratory's reporting limit or the MRPLs, or if the pesticides were not intended to be sought from the list of the fifty-seven pesticides included in the EUPT6 (Annex I).

Three labs would have been classified in Category A, but have been put into Category B, because they reported a false positive.

Table 5. Laboratories that reported false positives

Pesticides	Lab Code	Concentration	RL (mg/kg)	MRPL (mg/kg)
Carbendazim	061	0.037	0.02	0.1
	064	0.135		0.1
	103	0.145	0.05	0.1
Fenhexamid	026	0.343	0.05	0.05
Lambda-cyhalothrin	090	0.10	0.02	0.02
	092	0.026	0.02	0.02
	105	0.043	0.02	0.02
Pirimiphos-methyl	120	0.15	0.01	0.05
Tolyfluanid	119	0.060	0.03	0.05
Vinclozolin	105	0.125	0.05	0.05

4.1.2 False negatives

Results reported as not detected, for pesticides that were present in the samples, were considered to be false negatives except for those having a reporting limit above the assigned value. These are given in Table 6.

Table 6 Types of non-detected (ND) results reported by participants

Nº of False negatives Median	Acrinathrin (MRPL 0,05) 0,284	Azoxystrobin (MRPL 0,05) 0,225	Bromopropylate (MRPL 0,05) 0,490	Chlorothalonil (MRPL 0,01) 1,626	Diazinon (MRPL 0,02) 3.955	Dimethoate (MRPL 0,02) 0,132	Endosulfan (MRPL 0,05) 0,344
ND: RL> X	0	0	0	0	0	0	0
ND:RL≤MRPL	5	5	1	3	0	5	2
ND: RL>MRPL	0	2	0	0	0	3	0
Total	5	7	1	3	0	8	2

RL is the reporting limit given by the laboratory
MRPL is the minimum required performance level
X is the true concentration

Nº of False negatives Median	Imazalil (MRPL 0,02) 0,167	Imidacloprid (MRPL 0,05) 0,232	Dithiocarbamates expressed as CS_2 (MRPL 0,05) 0,810	Oxydemeton-methyl (MRPL 0,02) 0,199	Procymidone (MRPL 0,02) 0,412	Thiabendazole (MRPL 0,05) 0,313
ND: RL> X	3	0	0	1	0	1
ND:RL≤MRPL	8	5	1	7	0	3
ND: RL>MRPL	7	0	2	4	0	4
Total	15	5	3	11	0	7

RL is the reporting limit given by the laboratory
MRPL is the minimum required performance level
X is the true concentration

4.1.3 Distribution of data

The distributions of the individual mean values, including false negative results, for the fourteen pesticides (metalaxyl, for information only) are plotted as histograms from the analytical data supplied by the 126 laboratories.

4.2 Assigned concentrations and target standard deviations

To calculate the assigned values the medians of all the reported results were used. The standard deviation was obtained in two ways, FFP and Qn. z-Scores were calculated for both.

The results for the assessment of the assigned residue levels and for the different calculations of standard deviations are given in Appendix 3.

For acrinathrin, azoxystrobin, chlorothlonil, dimethoate, imazalil, dithiocarbamates, oxydemeton-methyl and thiabendazole the z-Score using the Qn value was higher than that using the FFP value. It was decided therefore by the organisation and the Advisory Group, that the z-Scores using Qn for the RSD should not be represented graphically, and the combined z-Scores were not calculated.

4.3 Assessment of the laboratory performance

4.3.1 z-Scores

The criteria for defining the acceptability of the z-Scores are:

$\lvert z \rvert \leq 2$	acceptable
$2 < \lvert z \rvert \leq 3$	questionable
$\lvert z \rvert > 3$	unacceptable

In Appendix 3 the individual z-Scores are presented, together with the median for each laboratory and pesticide. Both the z-Scores calculated using the RSD from FFP and Qn are given. False negatives are included in the z-Scores.

In Appendix 4 the graphic representations of the z-Scores using the RSD from FFP are presented. No z-Scores from false negatives have been presented.

4.3.2 Combined z-Scores

The classical combined z-Scores: RSZ and the SSZ values are listed in Appendix 5 for all laboratories, used as accepted formulas.

Appendix 6 shows a table with the values of individual z-Scores for each pesticide and the new combined 'Weighted sum of z-Scores' for those labs in Category A. It is important to mention that it is a new criterion and it has been used as a first approach and further improvement can be expected. In this category are the laboratories that have reported 11 or more results and have not reported any false positives. A graphical representation of the results for these laboratories can also be found.

Sixty from the one hundred and twenty-six laboratories are in Category A (48%), from which 60% are classified as 'good', 18% as 'satisfactory' and 21% as 'unsatisfactory'.

Sixty-six of the one hundred and twenty-six laboratories reported results for less than eleven pesticides. Several of these labs could also have been classified as 'good', but they failed to report results for the required 11 compounds. Thirty of the sixty-six laboratories detected nine or ten pesticides.

Table 7 Laboratories that are either in Category A, or in Category B.

Category A Laboratories: those with sufficient scope, having reported 11 to 13 results, and classified into good, satisfactory and unsatisfactory.

Num of Reported Pesticides	Lab Code	Scope	Classification
13	Lab001	Sufficient	Good
13	Lab018	Sufficient	Good
13	Lab019	Sufficient	Good
13	Lab020	Sufficient	Good
13	Lab021	Sufficient	Good
13	Lab023	Sufficient	Good
13	Lab025	Sufficient	Good
13	Lab028	Sufficient	Good
13	Lab045	Sufficient	Good
13	Lab078	Sufficient	Good
13	Lab085	Sufficient	Good
13	Lab086	Sufficient	Good
13	Lab095	Sufficient	Good
13	Lab096	Sufficient	Good
13	Lab097	Sufficient	Good
13	Lab098	Sufficient	Good
13	Lab100	Sufficient	Good
13	Lab124	Sufficient	Good
13	Lab125	Sufficient	Good
13	Lab130	Sufficient	Good
13	Lab030	Sufficient	Satisfactory
13	Lab031	Sufficient	Satisfactory
13	Lab032	Sufficient	Satisfactory
13	Lab038	Sufficient	Satisfactory
13	Lab123	Sufficient	Satisfactory
13	Lab128	Sufficient	Satisfactory
13	Lab024	Sufficient	Unsatisfactory
13	Lab039	Sufficient	Unsatisfactory

Num of Reported Pesticides	Lab Code	Scope	Classification
13	Lab041	Sufficient	Unsatisfactory
13	Lab043	Sufficient	Unsatisfactory
13	Lab044	Sufficient	Unsatisfactory
13	Lab065	Sufficient	Unsatisfactory
12	Lab007	Sufficient	Good
12	Lab009	Sufficient	Good
12	Lab013	Sufficient	Good
12	Lab022	Sufficient	Good
12	Lab027	Sufficient	Good
12	Lab042	Sufficient	Good
12	Lab057	Sufficient	Good
12	Lab071	Sufficient	Good
12	Lab087	Sufficient	Good
12	Lab107	Sufficient	Good
12	Lab122	Sufficient	Good
12	Lab129	Sufficient	Good
12	Lab029	Sufficient	Satisfactory
12	Lab035	Sufficient	Satisfactory
12	Lab046	Sufficient	Satisfactory
12	Lab017	Sufficient	Unsatisfactory
12	Lab047	Sufficient	Unsatisfactory
12	Lab076	Sufficient	Unsatisfactory
12	Lab127	Sufficient	Unsatisfactory
11	Lab002/3	Sufficient	Good
11	Lab004	Sufficient	Good
11	Lab099	Sufficient	Good
11	Lab121	Sufficient	Good
11	Lab034	Sufficient	Satisfactory
11	Lab106	Sufficient	Satisfactory
11	Lab012	Sufficient	Unsatisfactory
11	Lab016	Sufficient	Unsatisfactory
11	Lab033	Sufficient	Unsatisfactory

Category B Laboratories: those with an insufficient scope, having reported less than 11 results or a false positive.

Num of Reported Pesticides	Lab Code	Scope	Reported False positive
12	Lab061	Insufficient	Yes
12	Lab119	Insufficient	Yes
11	Lab090	Insufficient	Yes
10	Lab005	Insufficient	
10	Lab008	Insufficient	
10	Lab014	Insufficient	
10	Lab015	Insufficient	
10	Lab037	Insufficient	
10	Lab058	Insufficient	
10	Lab064	Insufficient	Yes

Num of Reported Pesticides	Lab Code	Scope	Reported False positive
10	Lab066	Insufficient	
10	Lab070	Insufficient	
10	Lab077	Insufficient	
10	Lab082	Insufficient	
10	Lab092	Insufficient	Yes
10	Lab101	Insufficient	
10	Lab103	Insufficient	Yes
10	Lab110	Insufficient	
10	Lab118	Insufficient	
9	Lab026	Insufficient	Yes
9	Lab036	Insufficient	
9	Lab062	Insufficient	
9	Lab067	Insufficient	
9	Lab068	Insufficient	
9	Lab069	Insufficient	
9	Lab072	Insufficient	
9	Lab075	Insufficient	
9	Lab079	Insufficient	
9	Lab094	Insufficient	
9	Lab104	Insufficient	
9	Lab113	Insufficient	
9	Lab114	Insufficient	
9	Lab115	Insufficient	
8	Lab011	Insufficient	
8	Lab040	Insufficient	
8	Lab054	Insufficient	
8	Lab056	Insufficient	
8	Lab063	Insufficient	
8	Lab073	Insufficient	
8	Lab093	Insufficient	
8	Lab102	Insufficient	
8	Lab111	Insufficient	
8	Lab112	Insufficient	
8	Lab116	Insufficient	
8	Lab117	Insufficient	
7	Lab048	Insufficient	
7	Lab049	Insufficient	
7	Lab059	Insufficient	
7	Lab081	Insufficient	
7	Lab084	Insufficient	
7	Lab089	Insufficient	
7	Lab091	Insufficient	
7	Lab108	Insufficient	
7	Lab109	Insufficient	
6	Lab006	Insufficient	
6	Lab010	Insufficient	
6	Lab051	Insufficient	
6	Lab083	Insufficient	

Num of Reported Pesticides	Lab Code	Scope	Reported False positive
5	Lab055	Insufficient	
5	Lab088	Insufficient	
4	Lab060	Insufficient	
4	Lab120	Insufficient	Yes
3	Lab050	Insufficient	
3	Lab105	Insufficient	Yes
2	Lab052	Insufficient	
0	Lab053	Insufficient	
0	Lab074	No Results	
0	Lab080	No Results	
0	Lab126	No Results	

5. CONCLUSIONS

Twenty-five countries, including Norway and Romania that do not belong to the EU, participated in this 6th European Proficiency Test. Eight countries were new European members.

The majority of the invited laboratories submitted the results of their analyses of the pesticides present in the homogenate tomato test material (126 from 130). Only 48% from 126 laboratories were able to determine 11 or more of the pesticides present in the test material. These laboratories are classified in Category A (sufficient scope) while the rest are in Category B (insufficient scope). A large number also reported results for the contaminant metalaxyl (73 from 126).

The assigned values were calculated using ALL the results submitted.

For each laboratory/pesticide combination, z-Scores based on the FFP and Qn/median were calculated. Only for the FFP for 25%, there is a graphical representation. The z-Scores were used to assign an overall performance using the descriptive classifications 'acceptable', 'questionable' or 'unacceptable' (Eq. 1). Typically acceptable submitted results were around an 85%, 7% of 'questionable' and a 5% of 'unacceptable'. So, it is noticeable that the reported results from laboratories have a high-quality although there are variable results according to the number of pesticides reported. The number of reported results varies from 42 (for oxydemeton-methyl) to 124 (for diazinon).

The classical combined z-Scores were calculated for all the labs and a new criterion was used as this year first approach. It is a very valuable formula that represents very easy and significantly the laboratories performance although as it is new, it could be modified in the future and its acceptance has to be valorised. It was applied for those labs with sufficient scope (Category A). This new classification was used to assign a combined value: 'good', 'satisfactory' or 'insufficient'. In this Category A, there are 60 from 126 laboratories from which 60% are classified as 'good', 18% as 'satisfactory' and 21% as 'Insufficient'. The rest of the labs (66 from 126) have been assigned to Category B, with insufficient scope.

A significant decrease in the number of false positive and negatives reported from previous PTs has been noticed. Some explanation for this may be because more laboratories are now using MS/MS techniques.

6. SUGGESTIONS FOR FUTURE WORK

The Advisory Group appointed for Proficiency Test 6 recommend maintaining the use of the 25% FFP criteria for use in the statistical treatment of future PTs. Thus the results from future PTs will be more comparable.

To give these PTs a greater relevance, it was pointed out the convenience of announcing future actions to be held from the results derived from future reports. The possibility of relating the codes with the names of the labs was considered. The usefulness of including in the Final Report a harmonized list of target pesticides agreed by the Advisory Group for use in the next PT was also considered, so that participant laboratories could obtain standards on time and validate their methods in order to broaden the scope of the pesticides that they look for.

It is also worth reiterating the problems encountered this year with the shipment of samples by asking participating labs to help the organisers by making every effort to ensure that the test material can be put into freezer storage immediately on receipt.

More over, it would be very interesting to recalculate the z-Scores and 'Weighted sum of z-Scores' for previous PTs using the 25% FFP, so that directly comparable data are obtained and clearer information regarding any trends in labs performances can be seen.

To evaluate false negatives, the Protocol should be changed and MRPLs should be applied for cases where the laboratory either gives no Reporting Limit (RL) or gives a RL higher than MRPL (insufficient sensitivity). A RL given by the laboratory, which is below, or equal to the MRPL, should be used for the calculation of z-Scores (as in this PT).

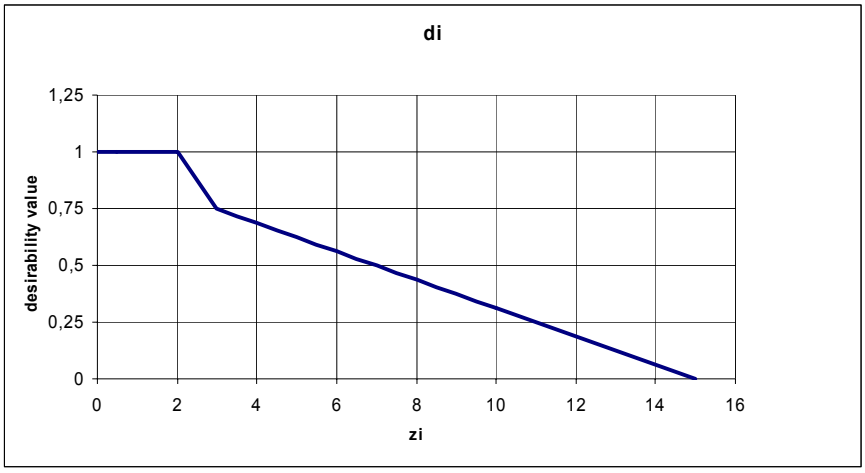
For future work a Desirability Function (D) proposal will be considered defined as the product of individual desirability functions di.

$$D = \prod_i d_i$$

D takes value between 0 (the less desirable) and 1 (the most desirable). Each individual di is built segment by segment as follows:

- For z<2 di = 1
- For 2<z<3 di decreases linearly from 1to 0.75
- For 3<z<15 di decreases linearly from 0.75 to 0
- For z>15 di = 0

The figure bellows illustrate this function.



The D function is obtained by multiplying all the individual desirability obtained for all the compounds. The D values will range from 0 to 1. It can be expressed as a percentage since 1 = 100%.

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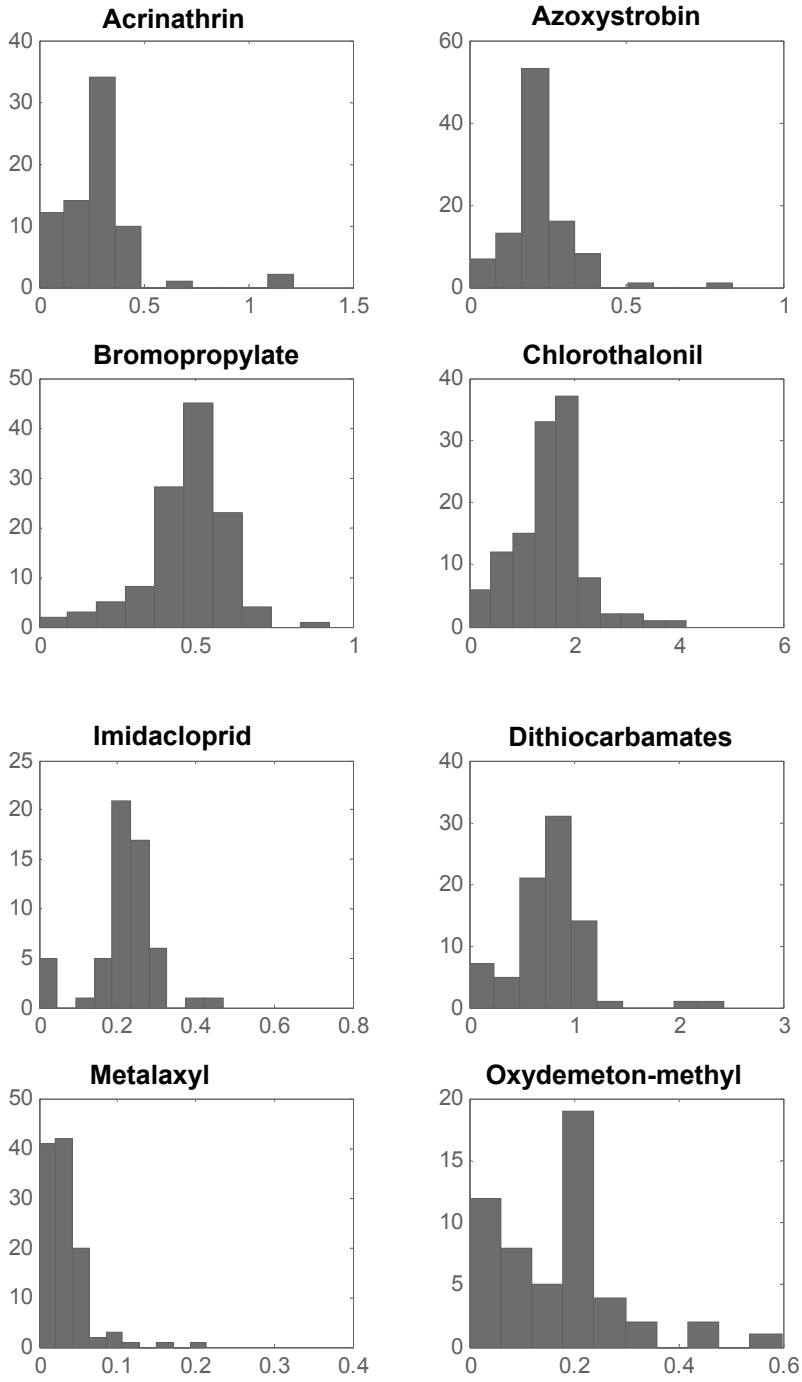
APPENDIX 1. Homogeneity Data

Bottle	Acrinathrin mg/kg		Azoxystrobin mg/kg		Bromopropylate mg/kg		Chlorothalonil mg/kg		Diazinon mg/kg	
1	0.308	0.307	0.250	0.251	0.467	0.466	1.66	1.66	4.002	4.003
2	0.308	0.307	0.249	0.248	0.466	0.468	1.66	1.66	4.002	4.008
3	0.299	0.298	0.235	0.236	0.470	0.470	1.63	1.63	4.004	4.005
4	0.289	0.289	0.237	0.237	0.469	0.469	1.65	1.65	4.015	4.018
5	0.295	0.296	0.238	0.238	0.468	0.468	1.63	1.63	3.995	3.996
6	0.294	0.294	0.240	0.240	0.467	0.468	1.65	1.65	4.004	4.005
7	0.294	0.294	0.245	0.245	0.468	0.468	1.66	1.65	3.670	3.675
8	0.299	0.298	0.242	0.243	0.468	0.469	1.65	1.65	3.998	3.999
9	0.298	0.299	0.239	0.238	0.467	0.468	1.66	1.66	4.009	4.008
10	0.299	0.299	0.238	0.239	0.467	0.467	1.63	1.64	4.002	4.001

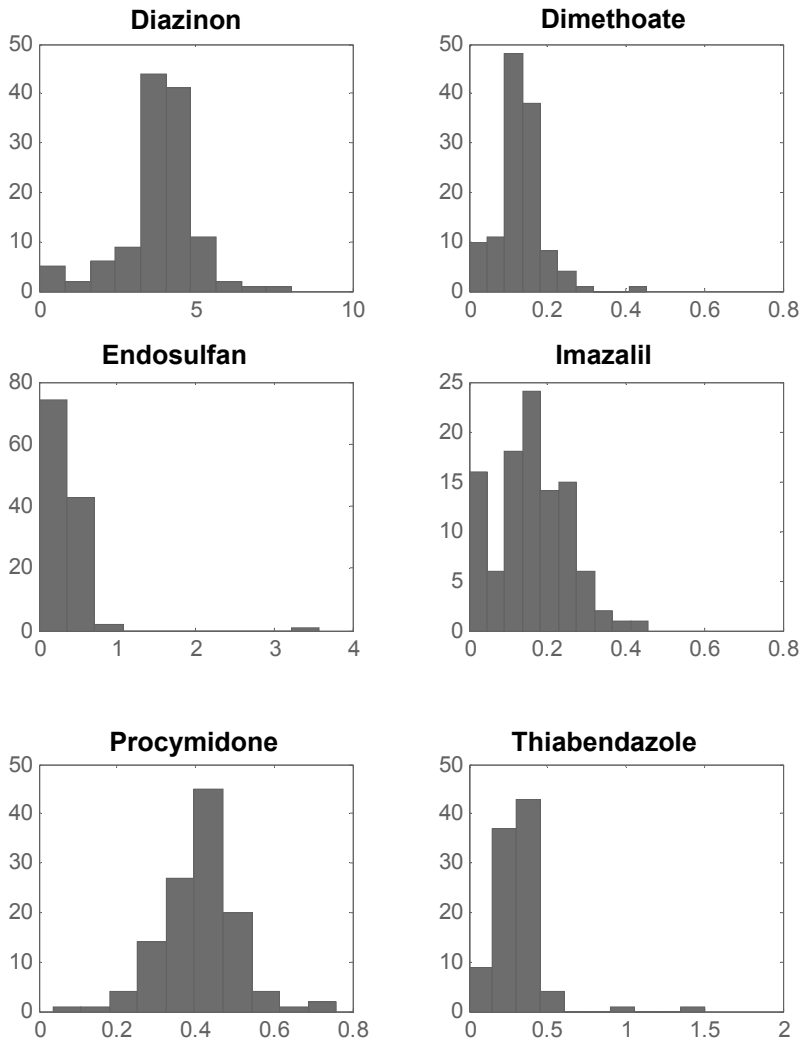
Bottle	Dimethoate mg/kg		Endosulfan mg/kg		Imazalil mg/kg		Imidacloprid mg/kg		Dithiocarabamates mg/kg	
1	0.155	0.156	0.385	0.386	0.194	0.195	0.242	0.240	0.800	0.801
2	0.154	0.155	0.374	0.374	0.192	0.192	0.239	0.238	0.756	0.755
3	0.153	0.154	0.385	0.384	0.193	0.193	0.239	0.239	0.790	0.795
4	0.157	0.157	0.384	0.385	0.190	0.191	0.240	0.240	0.792	0.793
5	0.152	0.153	0.373	0.375	0.187	0.189	0.239	0.239	0.750	0.752
6	0.155	0.155	0.380	0.380	0.190	0.191	0.235	0.235	0.805	0.806
7	0.155	0.154	0.385	0.384	0.185	0.185	0.237	0.237	0.810	0.809
8	0.155	0.154	0.383	0.383	0.186	0.185	0.238	0.238	0.798	0.799
9	0.156	0.155	0.384	0.384	0.170	0.172	0.235	0.235	0.765	0.768
10	0.155	0.155	0.385	0.384	0.189	0.188	0.238	0.238	0.798	0.798

Bottle	Oxydemeton-methyl mg/kg		Metalaxyl mg/kg		Procymidone mg/kg		Thiabendazole mg/kg	
1	0.199	0.200	0.050	0.050	0.419	0.420	0.326	0.327
2	0.198	0.199	0.045	0.046	0.415	0.415	0.320	0.322
3	0.198	0.199	0.045	0.045	0.416	0.416	0.330	0.331
4	0.198	0.199	0.049	0.049	0.416	0.416	0.335	0.332
5	0.199	0.200	0.048	0.049	0.418	0.418	0.330	0.329
6	0.200	0.200	0.049	0.049	0.418	0.418	0.340	0.339
7	0.202	0.201	0.050	0.050	0.417	0.418	0.335	0.334
8	0.200	0.200	0.047	0.048	0.417	0.418	0.335	0.335
9	0.196	0.197	0.048	0.048	0.419	0.419	0.328	0.329
10	0.199	0.199	0.050	0.050	0.423	0.422	0.328	0.328

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



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



APPENDIX 3. Results (mg/kg) and z-Score for FFP and Q_n

Lab Code MPRL/ Median (mg/kg)	Acrinathrin 0.05 / 0.284	z-Score (FFP 25%)	z-Score (Qn 34%)	Azoxystrobin 0.05 / 0.225	z-Score (FFP 25%)	z-Score (Qn 27%)	Bromopropylate 0.05 / 0.490	z-Score (FFP 25%)	z-Score (Qn 21%)	Chlorothalonil 0.01 / 1.626	z-Score (FFP 25%)	z-Score (Qn 33%)	Diazinon 0.02 / 3.955	z-Score (FFP 25%)	z-Score (Qn 21%)
001	0.382	1.4	1.0	0.237	0.2	0.2	0.584	0.8	0.9	1.830	0.5	0.4	4.340	0.4	0.5
002/3	0.389	1.5	1.1	0.238	0.2	0.2	0.618	1.0	1.3	1.890	0.7	0.5	4.410	0.5	0.6
004	NA			0.220	-0.1	-0.1	0.520	0.2	0.3	2.040	1.0	0.8	4.620	0.7	0.8
005	NA			0.242	0.3	0.3	0.584	0.8	0.9	1.620	0.0	0.0	4.440	0.5	0.6
006	>0.160			0.112	-2.0	-1.9	0.371	-1.0	-1.2	NA			>0.16		
007	0.325	0.6	0.4	0.229	0.1	0.1	0.439	-0.4	-0.5	1.350	-0.7	-0.5	3.520	-0.4	-0.5
008	NA			0.222	-0.1	-0.1	0.324	-1.4	-1.6	0.950	-1.7	-1.3	3.165	-0.8	-1.0
009	NA			0.194	-0.6	-0.5	0.511	0.2	0.2	1.390	-0.6	-0.4	4.250	0.3	0.4
010	NA			NA			0.618	1.0	1.3	1.555	-0.2	-0.1	5.508	1.6	1.9
011	NA			ND	-3.1	-2.9	ND	-3.6	-4.3	0.850	-1.9	-1.5	4.100	0.1	0.2
012	0.278	-0.1	-0.1	ND	-3.1	-2.9	0.501	0.1	0.1	0.655	-2.4	-1.8	1.036	-3.0	-3.5
013	0.240	-0.6	-0.5	0.280	1.0	0.9	0.460	-0.2	-0.3	2.120	1.2	0.9	3.460	-0.5	-0.6
014	NA			0.090	-2.4	-2.3	0.550	0.5	0.6	0.420	-3.0	-2.3	4.200	0.2	0.3
015	NA			ND	-3.1	-2.9	0.343	-1.2	-1.4	1.660	0.1	0.1	3.730	-0.2	-0.3
016	NA			ND	-3.1	-2.9	0.498	0.1	0.1	0.877	-1.8	-1.4	3.800	-0.2	-0.2
017	ND	-3.3	-2.5	0.173	-0.9	-0.9	0.363	-1.0	-1.2	0.649	-2.4	-1.8	3.500	-0.5	-0.6
018	0.238	-0.6	-0.5	0.133	-1.6	-1.5	0.402	-0.7	-0.9	1.210	-1.0	-0.8	3.630	-0.3	-0.4
019	0.200	-1.2	-0.9	0.230	0.1	0.1	0.460	-0.2	-0.3	2.200	1.4	1.1	4.400	0.5	0.5
020	0.133	-2.1	-1.6	0.208	-0.3	-0.3	0.488	0.0	0.0	1.860	0.6	0.4	3.670	-0.3	-0.3
021	0.291	0.1	0.1	0.259	0.6	0.6	0.591	0.8	1.0	1.810	0.5	0.3	4.780	0.8	1.0
022	0.142	-2.0	-1.5	0.225	0.0	0.0	0.550	0.5	0.6	1.690	0.2	0.1	4.140	0.2	0.2
023	0.393	1.5	1.1	0.266	0.7	0.7	0.613	1.0	1.2	1.740	0.3	0.2	3.460	-0.5	-0.6
024	ND	-3.3	-2.5	0.290	1.2	1.1	0.497	0.1	0.1	ND	-4.0	-3.0	4.090	0.1	0.2
025	0.275	-0.1	-0.1	0.228	0.1	0.1	0.480	-0.1	-0.1	1.160	-1.1	-0.9	4.100	0.1	0.2
026	0.292	0.1	0.1	0.839	10.9	10.3	0.433	-0.5	-0.6	1.631	0.0	0.0	4.829	0.9	1.1
027	0.293	0.1	0.1	0.251	0.5	0.4	0.626	1.1	1.3	0.951	-1.7	-1.3	5.050	1.1	1.3
028	0.324	0.6	0.4	0.162	-1.1	-1.1	0.465	-0.2	-0.2	1.850	0.6	0.4	4.640	0.7	0.8
029	0.016	-3.8	-2.8	0.265	0.7	0.7	0.655	1.3	1.6	1.930	0.7	0.6	5.240	1.3	1.6
030	0.029	-3.6	-2.7	0.222	-0.1	-0.1	0.560	0.6	0.7	2.230	1.5	1.1	4.460	0.5	0.6
031	0.113	-2.4	-1.8	0.413	3.3	3.1	0.517	0.2	0.3	2.080	1.1	0.9	4.610	0.7	0.8
032	0.075	-2.9	-2.2	0.235	0.2	0.2	0.476	-0.1	-0.1	0.136	-3.7	-2.8	3.610	-0.3	-0.4
033	0.362	1.1	0.8	0.344	2.1	2.0	0.532	0.3	0.4	0.774	-2.1	-1.6	4.820	0.9	1.1
034	0.014	-3.8	-2.8	0.206	-0.3	-0.3	0.371	-1.0	-1.2	0.817	-2.0	-1.5	4.090	0.1	0.2
035	ND	-3.3		0.245	0.4	0.3	0.451	-0.3	-0.4	1.010	-1.5	-1.2	3.650	-0.3	-0.4
036	0.236	-0.7	-0.5	0.086	-2.5	-2.3	0.266	-1.8	-2.2	1.420	-0.5	-0.4	2.680	-1.3	-1.5
037	0.435	2.1	1.6	NA			0.532	0.3	0.4	0.140	-3.7	-2.8	3.920	0.0	0.0
038	0.287	0.0	0.0	0.271	0.8	0.8	0.576	0.7	0.8	0.456	-2.9	-2.2	5.090	1.1	1.4
039	ND	-3.3	-2.5	0.182	-0.8	-0.7	0.252	-1.9	-2.3	1.870	0.6	0.5	8.050	4.1	5.0
040	0.378	1.3	1.0	NA			0.504	0.1	0.1	1.407	-0.5	-0.4	0.043	-4.0	-4.8
041	0.077	-2.9	-2.2	0.312	1.5	1.5	0.925	3.6	4.3	1.450	-0.4	-0.3	5.310	1.4	1.6
042	0.220	-0.9	-0.7	0.260	0.6	0.6	0.490	0.0	0.0	0.950	-1.7	-1.3	5.900	2.0	2.4
043	0.423	2.0	1.5	0.510	5.1	4.8	0.633	1.2	1.4	2.030	1.0	0.8	4.440	0.5	0.6
044	1.220	13.2	9.8	0.198	-0.5	-0.5	0.602	0.9	1.1	2.620	2.4	1.9	3.570	-0.4	-0.5
045	0.318	0.5	0.4	0.236	0.2	0.2	0.581	0.7	0.9	1.860	0.6	0.4	4.930	1.0	1.2
046	0.294	0.1	0.1	0.255	0.5	0.5	0.501	0.1	0.1	2.030	1.0	0.8	4.210	0.3	0.3
047	0.185	-1.4	-1.0	0.202	-0.4	-0.4	0.505	0.1	0.1	1.270	-0.9	-0.7	4.540	0.6	0.7
048	NA			NA			0.445	-0.4	-0.4	1.390	-0.6	-0.4	3.950	0.0	0.0
049	0.311	0.4	0.3	NA			0.493	0.0	0.0	1.760	0.3	0.3	3.570	-0.4	-0.5
050	NA			NA			NA			NA			4.890	0.9	1.1
051	NA			NA			0.533	0.4	0.4	1.260	-0.9	-0.7	3.890	-0.1	-0.1
052	NA			NA			NA			NA			3.450	-0.5	-0.6
053	NA			NA			NA			NA			NA		
054	NA			0.169	-1.0	-0.9	0.484	0.0	-0.1	1.650	0.1	0.0	4.030	0.1	0.1
055	NA			NA			0.504	0.1	0.1	2.540	2.3	1.7	4.620	0.7	0.8
056	NA			0.220	-0.1	-0.1	0.510	0.2	0.2	2.010	0.9	0.7	4.910	1.0	1.2
057	0.253	-0.4	-0.3	0.240	0.3	0.3	0.366	-1.0	-1.2	1.500	-0.3	-0.2	4.200	0.2	0.3
058	NA			ND	-3.1	-2.9	0.225	-2.2	-2.6	0.757	-2.1	-1.6	1.670	-2.3	-2.8
059	NA			NA			0.280	-1.7	-2.1	0.740	-2.2	-1.7	2.100	-1.9	-2.3
060	NA			NA			NA			NA			2.900	-1.1	-1.3
061	0.322	0.5	0.4	0.255	0.5	0.5	0.506	0.1	0.2	1.650	0.1	0.0	4.480	0.5	0.6
062	NA			NA			0.421	-0.6	-0.7	0.470	-2.8	-2.2	4.570	0.6	0.7
063	NA			NA			0.361	-1.1	-1.3	0.579	-2.6	-2.0	1.770	-2.2	-2.7
064	NA			0.248	0.4	0.4	0.483	-0.1	-0.1	1.590	-0.1	-0.1	2.560	-1.4	-1.7
065	0.245	-0.5	-0.4	0.179	-0.8	-0.8	0.414	-0.6	-0.7	1.575	-0.1	-0.1	1.558	-2.4	-2.9
066	NA			0.212	-0.2	-0.2	0.313	-1.4	-1.7	1.880	0.6	0.5	2.600	-1.4	-1.6
067	NA			NA			0.269	-1.8	-2.2	1.340	-0.7	-0.5	2.390	-1.6	-1.9
068	0.283	0.0	0.0	NA			0.546	0.5	0.5	1.750	0.3	0.2	4.320	0.4	0.4
069	NA			0.205	-0.4	-0.3	0.480	-0.1	-0.1	1.450	-0.4	-0.3	3.150	-0.8	-1.0
070	NA			0.251	0.5	0.4	0.477	-0.1	-0.1	1.260	-0.9	-0.7	4.020	0.1	0.1
071	0.282	0.0	0.0	0.263	0.7	0.6	0.592	0.8	1.0	1.110	-1.3	-1.0	3.560	-0.4	-0.5

APPENDIX 3. Results (mg/kg) and z-Score for FFP and Q_n

Lab Code MPRL/ Median (mg/kg)	Acrinathrin 0.05 / 0.284	z-Score (FFP 25%)	z-Score (Qn 34%)	Azoxystrobin 0.05 / 0.225	z-Score (FFP 25%)	z-Score (Qn 27%)	Bromopropylate 0.05 / 0.490	z-Score (FFP 25%)	z-Score (Qn 21%)	Chlorothalonil 0.01 / 1.626	z-Score (FFP 25%)	z-Score (Qn 33%)	Diazinon 0.02 / 3.955	z-Score (FFP 25%)	z-Score (Qn 21%)
072	NA			0.194	-0.6	-0.5	0.161	-2.7	-3.2	1.722	0.2	0.2	NA		
073	NA			0.286	1.1	1.0	0.440	-0.4	-0.5	NA			4.060	0.1	0.1
074	No Reported Results														
075	NA			NA			0.650	1.3	1.6	1.250	-0.9	-0.7	4.480	0.5	0.6
076	1.160	12.3	9.2	0.394	3.0	2.8	0.409	-0.7	-0.8	1.690	0.2	0.1	3.820	-0.1	-0.2
077	NA			0.380	2.8	2.6	0.740	2.0	2.5	3.350	4.2	3.2	3.890	-0.1	-0.1
078	0.189	-1.3	-1.0	0.170	-1.0	-0.9	0.430	-0.5	-0.6	1.700	0.2	0.1	5.000	1.1	1.3
079	NA			0.295	1.2	1.2	0.552	0.5	0.6	2.990	3.4	2.6	3.080	-0.9	-1.1
080	No Reported Results														
081	NA			NA			0.590	0.8	1.0	1.680	0.1	0.1	3.960	0.0	0.0
082	0.257	-0.4	-0.3	ND	-3.1	-2.9	0.459	-0.3	-0.3	1.590	-0.1	-0.1	3.570	-0.4	-0.5
083	NA			NA			0.700	1.7	2.1	2.940	3.2	2.5	4.360	0.4	0.5
084	NA			NA			0.383	-0.9	-1.0	0.868	-1.9	-1.4	3.647	-0.3	-0.4
085	0.258	-0.4	-0.3	0.245	0.4	0.3	0.460	-0.2	-0.3	1.930	0.7	0.6	4.320	0.4	0.4
086	0.390	1.5	1.1	0.230	0.1	0.1	0.607	1.0	1.1	2.260	1.6	1.2	6.560	2.6	3.2
087	0.321	0.5	0.4	0.246	0.4	0.4	0.621	1.1	1.3	2.110	1.2	0.9	5.130	1.2	1.4
088	0.033	-3.5	-2.6	NA			0.047	-3.6	-4.3	0.130	-3.7	-2.8	D		
089	0.302	0.3	0.2	NA			NA			1.980	0.9	0.7	3.580	-0.4	-0.5
090	0.190	-1.3	-1.0	0.200	-0.4	-0.4	0.380	-0.9	-1.1	0.910	-1.8	-1.3	2.000	-2.0	-2.4
091	0.264	-0.3	-0.2	NA			0.482	-0.1	-0.1	2.290	1.6	1.2	3.610	-0.3	-0.4
092	0.367	1.2	0.9	0.171	-1.0	-0.9	0.564	0.6	0.7	1.581	-0.1	-0.1	3.990	0.0	0.0
093	NA			NA			0.243	-2.0	-2.4	ND	-4.0	-3.0	0.330	-3.7	-4.4
094	0.388	1.5	1.1	NA			0.464	-0.2	-0.3	1.390	-0.6	-0.4	2.890	-1.1	-1.3
095	0.295	0.2	0.1	0.207	-0.3	-0.3	0.439	-0.4	-0.5	2.420	2.0	1.5	4.290	0.3	0.4
096	0.240	-0.6	-0.5	0.225	0.0	0.0	0.398	-0.8	-0.9	1.900	0.7	0.5	4.130	0.2	0.2
097	0.285	0.0	0.0	0.233	0.1	0.1	0.534	0.4	0.4	1.200	-1.0	-0.8	3.790	-0.2	-0.2
098	0.309	0.4	0.3	0.174	-0.9	-0.9	0.604	0.9	1.1	1.690	0.2	0.1	4.280	0.3	0.4
099	NA			0.160	-1.2	-1.1	0.530	0.3	0.4	2.030	1.0	0.8	4.360	0.4	0.5
100	0.281	0.0	0.0	0.184	-0.7	-0.7	0.514	0.2	0.2	1.590	-0.1	-0.1	3.800	-0.2	-0.2
101	0.263	-0.3	-0.2	0.225	0.0	0.0	0.369	-1.0	-1.2	0.938	-1.7	-1.3	3.750	-0.2	-0.2
102	NA			0.208	-0.3	-0.3	0.506	0.1	0.2	1.570	-0.1	-0.1	3.900	-0.1	-0.1
103	NA			0.196	-0.5	-0.5	0.455	-0.3	-0.3	1.990	0.9	0.7	3.880	-0.1	-0.1
104	NA			0.161	-1.1	-1.1	0.472	-0.1	-0.2	4.160	6.2	4.8	4.910	1.0	1.2
105	NA			NA			NA			NA			0.117	-3.9	-4.7
106	0.310	0.4	0.3	0.221	-0.1	-0.1	0.411	-0.6	-0.8	1.950	0.8	0.6	2.950	-1.0	-1.2
107	ND	-3.3	-2.5	0.224	0.0	0.0	0.534	0.4	0.4	1.680	0.1	0.1	4.280	0.3	0.4
108	NA			0.143	-1.5	-1.4	0.551	0.5	0.6	2.140	1.3	1.0	3.520	-0.4	-0.5
109	NA			0.138	-1.5	-1.5	0.499	0.1	0.1	1.900	0.7	0.5	3.450	-0.5	-0.6
110	0.642	5.0	3.8	0.198	-0.5	-0.5	0.525	0.3	0.3	1.410	-0.5	-0.4	3.860	-0.1	-0.1
111	NA			0.272	0.8	0.8	0.456	-0.3	-0.3	1.988	0.9	0.7	3.798	-0.2	-0.2
112	NA			0.154	-1.3	-1.2	0.574	0.7	0.8	1.927	0.7	0.6	6.050	2.1	2.5
113	NA			0.368	2.5	2.4	0.595	0.9	1.0	1.780	0.4	0.3	3.670	-0.3	-0.3
114	NA			0.213	-0.2	-0.2	0.374	-0.9	-1.1	1.810	0.5	0.3	2.370	-1.6	-1.9
115	NA			ND	-3.1	-2.9	0.133	-2.9	-3.5	ND	-4.0	-3.0	0.524	-3.5	-4.2
116	NA			0.210	-0.3	-0.3	0.490	0.0	0.0	NA			3.500	-0.5	-0.6
117	NA			0.190	-0.6	-0.6	0.624	1.1	1.3	NA			4.570	0.6	0.7
118	0.195	-1.3	-0.9	0.201	-0.4	-0.4	0.490	0.0	0.0	1.830	0.5	0.4	3.700	-0.3	-0.3
119	0.256	-0.4	-0.3	0.167	-1.0	-1.0	0.417	-0.6	-0.7	1.580	-0.1	-0.1	3.480	-0.5	-0.6
120	NA			NA			NA			0.750	-2.2	-1.6	3.510	-0.5	-0.5
121	NA			0.130	-1.7	-1.6	0.413	-0.6	-0.8	1.710	0.2	0.2	3.990	0.0	0.0
122	0.306	0.3	0.2	0.362	2.4	2.3	0.488	0.0	0.0	1.620	0.0	0.0	4.200	0.2	0.3
123	0.397	1.6	1.2	0.286	1.1	1.0	0.542	0.4	0.5	1.610	0.0	0.0	3.260	-0.7	-0.8
124	0.344	0.8	0.6	0.304	1.4	1.3	0.413	-0.6	-0.8	1.600	-0.1	0.0	4.350	0.4	0.5
125	0.256	-0.4	-0.3	0.389	2.9	2.7	0.462	-0.2	-0.3	1.670	0.1	0.1	4.240	0.3	0.3
126	No Reported Results														
127	0.208	-1.1	-0.8	0.108	-2.1	-2.0	0.112	-3.1	-3.7	0.811	-2.0	-1.5	0.677	-3.3	-4.0
128	0.318	0.5	0.4	0.236	0.2	0.2	0.521	0.3	0.3	1.650	0.1	0.0	4.230	0.3	0.3
129	0.200	-1.2	-0.9	0.345	2.1	2.0	0.465	-0.2	-0.2	1.070	-1.4	-1.0	3.930	0.0	0.0
130	0.360	1.1	0.8	0.250	0.4	0.4	0.560	0.6	0.7	1.190	-1.1	-0.8	4.640	0.7	0.8

APPENDIX 3. Results (mg/kg) and z-Score for FFP and Q_n

Lab Code MPRL / Median (mg/kg)	Dimethoate 0.02 / 0.132	z-Score (FFP 25%)	z-Score (Qn 9%)	Endosulfan 0.05 / 0.344	z-Score (FFP 25%)	z-Score (Qn 22%)	Imazalil 0.02 / 0.167	z-Score (FFP 25%)	z-Score (Qn 41%)	Imidacloprid 0.05 / 0.232	z-Score (FFP 25%)	z-Score (Qn 17.3%)	Dithiocarbamates (CS2) 0.05 / 0.810	z-Score (FFP 25%)	z-Score (Qn 33%)
001	0.142	0.3	0.3	0.400	0.7	0.7	0.194	0.6	0.4	0.214	-0.3	-0.4	1.180	1.8	1.4
002/3	0.131	0.0	0.0	0.470	1.5	1.7	0.215	1.1	0.7	NA			0.580	-1.1	-0.9
004	0.140	0.2	0.2	0.370	0.3	0.4	0.260	2.2	1.4	0.200	-0.5	-0.8	NA		
005	0.111	-0.6	-0.6	0.363	0.2	0.3	ND	-3.5	-2.1	NA			1.090	1.4	1.1
006	NA			0.264	-0.9	-1.1	0.079	-2.1	-1.3	0.159	-1.3	-1.8	NA		
007	0.120	-0.4	-0.3	0.355	0.1	0.2	0.249	2.0	1.2	0.284	0.9	1.3	NA		
008	0.053	-2.4	-2.1	0.299	-0.5	-0.6	0.390	5.3	3.2	NA			NA		
009	0.112	-0.6	-0.5	0.369	0.3	0.3	0.166	0.0	0.0	0.239	0.1	0.2	0.923	0.6	0.4
010	0.151	0.6	0.5	0.307	-0.4	-0.5	ND			NA			NA		
011	0.220	2.7	2.3	0.210	-1.6	-1.8	NA			NA			NA		
012	0.028	-3.2	-2.8	0.283	-0.7	-0.8	0.184	0.4	0.2	NA			1.040	1.1	0.9
013	0.055	-2.3	-2.0	0.250	-1.1	-1.2	0.155	-0.3	-0.2	0.230	0.0	0.0	0.700	-0.5	-0.4
014	0.050	-2.5	-2.2	0.450	1.2	1.4	0.240	1.7	1.1	NA			0.730	-0.4	-0.3
015	0.169	1.1	1.0	0.199	-1.7	-1.9	0.287	2.9	1.7	NA			0.780	-0.1	-0.1
016	0.113	-0.6	-0.5	0.305	-0.4	-0.5	ND	-3.5	-2.1	ND	-3.1	-4.5	NA		
017	0.084	-1.4	-1.3	0.300	-0.5	-0.6	NA			ND	-3.1	-4.5	0.918	0.5	0.4
018	0.164	1.0	0.8	0.270	-0.9	-1.0	0.131	-0.9	-0.5	0.244	0.2	0.3	0.781	-0.1	-0.1
019	0.130	-0.1	-0.1	0.310	-0.4	-0.4	0.160	-0.2	-0.1	0.230	0.0	0.0	0.860	0.2	0.2
020	0.121	-0.3	-0.3	0.347	0.0	0.0	0.132	-0.8	-0.5	0.244	0.2	0.3	0.997	0.9	0.7
021	0.167	1.1	0.9	0.368	0.3	0.3	0.135	-0.8	-0.5	0.243	0.2	0.3	0.622	-0.9	-0.7
022	0.118	-0.4	-0.4	0.396	0.6	0.7	0.294	3.0	1.8	0.217	-0.3	-0.4	NA		
023	0.139	0.2	0.2	0.354	0.1	0.1	0.195	0.7	0.4	0.285	0.9	1.3	1.040	1.1	0.9
024	ND	-3.4	-3.0	0.340	0.0	0.0	0.043	-3.0	-1.8	0.211	-0.4	-0.5	0.890	0.4	0.3
025	0.122	-0.3	-0.3	0.313	-0.4	-0.4	0.137	-0.7	-0.4	0.240	0.1	0.2	0.984	0.9	0.7
026	0.198	2.0	1.7	0.439	1.1	1.3	0.458	7.0	4.2	NA			NA		
027	0.123	-0.3	-0.2	0.278	-0.8	-0.9	0.237	1.7	1.0	0.265	0.6	0.8	0.648	-0.8	-0.6
028	0.164	1.0	0.8	0.305	-0.4	-0.5	0.115	-1.2	-0.8	0.260	0.5	0.7	0.840	0.1	0.1
029	0.132	0.0	0.0	0.476	1.5	1.8	0.209	1.0	0.6	0.241	0.2	0.2	NA		
030	0.144	0.4	0.3	0.430	1.0	1.1	0.216	1.2	0.7	0.227	-0.1	-0.1	0.950	0.7	0.5
031	0.151	0.6	0.5	0.413	0.8	0.9	0.163	-0.1	-0.1	0.241	0.2	0.2	0.558	-1.2	-1.0
032	0.117	-0.5	-0.4	0.289	-0.6	-0.7	0.115	-1.2	-0.8	0.220	-0.2	-0.3	0.805	0.0	0.0
033	0.198	2.0	1.7	0.370	0.3	0.4	ND	-3.5	-2.1	NA			0.914	0.5	0.4
034	0.114	-0.5	-0.5	0.315	-0.3	-0.4	0.150	-0.4	-0.2	0.240	0.1	0.2	NA		
035	0.120	-0.4	-0.3	0.340	0.0	0.0	0.165	0.0	0.0	0.230	0.0	0.0	NA		
036	0.121	-0.3	-0.3	0.294	-0.6	-0.7	ND	-3.5	-2.1	NA			NA		
037	0.151	0.6	0.5	0.433	1.0	1.2	0.264	2.3	1.4	NA			0.796	-0.1	-0.1
038	0.140	0.2	0.2	0.364	0.2	0.3	0.182	0.4	0.2	0.150	-1.4	-2.0	ND	-3.8	-2.9
039	0.115	-0.5	-0.5	0.345	0.0	0.0	0.121	-1.1	-0.7	0.207	-0.4	-0.6	0.471	-1.7	-1.3
040	0.099	-1.0	-0.9	0.246	-1.1	-1.3	NA			NA			NA		
041	0.110	-0.7	-0.6	0.339	-0.1	-0.1	0.163	-0.1	-0.1	0.393	2.8	4.0	0.875	0.3	0.2
042	0.150	0.5	0.5	0.350	0.1	0.1	0.120	-1.1	-0.7	NA			0.950	0.7	0.5
043	0.233	3.1	2.7	0.390	0.5	0.6	0.242	1.8	1.1	0.468	4.1	5.9	0.266	-2.7	-2.1
044	0.130	-0.1	-0.1	0.373	0.3	0.4	0.095	-1.7	-1.0	0.285	0.9	1.3	0.590	-1.1	-0.8
045	0.178	1.4	1.2	0.336	-0.1	-0.1	0.234	1.6	1.0	0.193	-0.7	-1.0	0.640	-0.8	-0.6
046	0.144	0.4	0.3	0.330	-0.2	-0.2	0.162	-0.1	-0.1	NA			0.900	0.4	0.3
047	0.152	0.6	0.5	0.339	-0.1	-0.1	0.143	-0.6	-0.3	NA			2.070	6.2	4.8
048	0.155	0.7	0.6	0.440	1.1	1.3	NA			NA			NA		
049	0.120	-0.4	-0.3	0.331	-0.1	-0.2	ND			NA			NA		
050	0.090	-1.3	-1.1	NA			NA			NA			NA		
051	0.114	-0.5	-0.5	0.298	-0.5	-0.6	NA			NA			NA		
052	0.101	-0.9	-0.8	NA			NA			NA			NA		
053	NA			NA			NA			NA			NA		
054	0.135	0.1	0.1	0.319	-0.3	-0.3	NA			NA			NA		
055	NA			0.305	-0.4	-0.5	NA			NA			NA		
056	0.130	-0.1	-0.1	0.340	0.0	0.0	NA			NA			NA		
057	0.191	1.8	1.6	0.310	-0.4	-0.4	0.149	-0.4	-0.3	0.238	0.1	0.2	0.601	-1.0	-0.8
058	0.115	-0.5	-0.5	0.854	5.9	6.8	ND	-3.5	-2.1	ND	-3.1	-4.5	NA		
059	ND	-3.4	-3.0	0.230	-1.3	-1.5	NA			NA			ND	-3.8	-2.9
060	NA			NA			ND	-3.5	-2.1	NA			0.780	-0.1	-0.1
061	0.241	3.3	2.9	0.386	0.5	0.6	0.225	1.4	0.8	NA			0.841	0.2	0.1
062	ND	-3.4	-3.0	0.589	2.9	3.2	ND			0.212	-0.3	-4.5	0.490	-1.6	-1.2
063	0.155	0.7	0.6	0.242	-1.2	-1.3	0.118	-1.2	-0.7	NA			NA		
064	0.240	3.3	2.9	0.381	0.4	0.5	0.154	-0.3	-0.2	NA			0.945	0.7	0.5
065	0.139	0.2	0.2	0.272	-0.8	-0.9	0.133	-0.8	-0.5	ND	-3.1	-4.5	0.660	-0.7	-0.6
066	0.112	-0.6	-0.5	0.187	-1.8	-2.1	0.100	-1.6	-1.0	NA			0.650	-0.8	-0.6

APPENDIX 3. Results (mg/kg) and z-Score for FFP and Q_n

Lab Code MPRL / Median (mg/kg)	Dimethoate 0.02 / 0.132	z-Score (FFP 25%)	z-Score (Qn 9%)	Endosulfan 0.05 / 0.344	z-Score (FFP 25%)	z-Score (Qn 22%)	Imazalil 0.02 / 0.167	z-Score (FFP 25%)	z-Score (Qn 41%)	Imidacloprid 0.05 / 0.232	z-Score (FFP 25%)	z-Score (Qn 17.3%)	Dithiocarbamates (CS2) 0.05 / 0.810	z-Score (FFP 25%)	z-Score (Qn 33%)
067	0.452	9.7	8.5	0.274	-0.8	-0.9	0.240	1.7	1.1	NA			0.852	0.2	0.2
068	0.164	1.0	0.8	0.373	0.3	0.4	0.210	1.0	0.6	NA			NA		
069	0.260	3.9	3.4	0.330	-0.2	-0.2	0.130	-0.9	-0.5	NA			1.200	1.9	1.5
070	0.168	1.1	1.0	0.406	0.7	0.8	0.284	2.8	1.7	NA			1.160	1.7	1.3
071	0.165	1.0	0.9	0.421	0.9	1.0	0.155	-0.3	-0.2	0.215	-0.3	-0.4	1.110	1.5	1.1
072	0.132	0.0	0.0	0.272	-0.8	-0.9	0.182	0.4	0.2	NA			1.020	1.0	0.8
073	0.175	1.3	1.1	0.451	1.3	1.4	0.257	2.2	1.3	NA			0.852	0.2	0.2
074	No Reported Results														
075	ND	-3.4	-3.0	0.160	-2.1	-2.4	0.230	1.5	0.9	NA			0.500	-1.5	-1.2
076	0.284	4.6	4.0	0.300	-0.5	-0.6	0.052	-2.8	-1.7	NA			1.260	2.2	1.7
077	0.089	-1.3	-1.1	3.580	37.7	42.8	ND	-3.5	-2.1	NA			NA		
078	0.133	0.0	0.0	0.294	-0.6	-0.7	0.238	1.7	1.0	0.200	-0.5	-0.8	0.741	-0.3	-0.3
079	0.124	-0.2	-0.2	0.357	0.2	0.2	0.091	-1.8	-1.1	NA			0.080	-3.6	-2.8
080	No Reported Results														
081	0.199	2.0	1.8	0.397	0.6	0.7	0.157	-0.2	-0.1	NA			NA		
082	0.180	1.5	1.3	0.418	0.9	1.0	0.221	1.3	0.8	NA			1.080	1.3	1.0
083	0.180	1.5	1.3	0.990	7.5	8.6	NA			NA			NA		
084	0.090	-1.3	-1.1	0.346	0.0	0.0	0.134	-0.8	-0.5	NA			NA		
085	0.089	-1.3	-1.1	0.292	-0.6	-0.7	0.194	0.6	0.4	0.280	0.8	1.2	0.623	-0.9	-0.7
086	0.122	-0.3	-0.3	0.468	1.4	1.6	0.150	-0.4	-0.2	0.209	-0.4	-0.6	1.030	1.1	0.8
087	0.119	-0.4	-0.3	0.404	0.7	0.8	0.208	1.0	0.6	NA			0.950	0.7	0.5
088	D			D			NA			0.237	0.1	0.1	NA		
089	0.141	0.3	0.2	0.353	0.1	0.1	NA			NA			0.426	-1.9	-1.5
090	ND	-3.4	-3.0	0.290	-0.6	-0.7	NA			0.180	-0.9	-1.3	ND	-3.8	-2.9
091	0.117	-0.5	-0.4	0.334	-0.1	-0.1	NA			NA			NA		
092	0.205	2.2	1.9	0.438	1.1	1.3	0.091	-1.8	-1.1	NA			0.590	-1.1	-0.8
093	0.204	2.2	1.9	0.258	-1.0	-1.1	NA			NA			0.130	-3.4	-2.6
094	0.088	-1.3	-1.2	0.268	-0.9	-1.0	0.084	-2.0	-1.2	NA			2.440	8.0	6.2
095	0.126	-0.2	-0.2	0.320	-0.3	-0.3	0.264	2.3	1.4	0.283	0.9	1.3	0.733	-0.4	-0.3
096	0.137	0.2	0.1	0.371	0.3	0.4	0.121	-1.1	-0.7	0.257	0.4	0.6	0.585	-1.1	-0.9
097	0.125	-0.2	-0.2	0.351	0.1	0.1	0.168	0.0	0.0	0.251	0.3	0.5	0.720	-0.4	-0.3
098	0.107	-0.8	-0.7	0.368	0.3	0.3	0.182	0.4	0.2	0.248	0.3	0.4	0.856	0.2	0.2
099	0.150	0.5	0.5	0.370	0.3	0.4	0.110	-1.4	-0.8	NA			0.220	-2.9	-2.2
100	0.119	-0.4	-0.3	0.393	0.6	0.7	0.153	-0.3	-0.2	0.196	-0.6	-0.9	1.120	1.5	1.2
101	0.125	-0.2	-0.2	0.547	2.4	2.7	ND	-3.5	-2.1	NA			NA		
102	0.147	0.5	0.4	0.338	-0.1	-0.1	ND	-3.5	-2.1	NA			NA		
103	0.107	-0.8	-0.7	0.325	-0.2	-0.2	0.127	-1.0	-0.6	NA			NA		
104	0.037	-2.9	-2.5	0.348	0.1	0.1	0.081	-2.1	-1.2	NA			NA		
105	ND	-3.4	-3.0	0.203	-1.6	-1.9	NA			NA			NA		
106	0.130	-0.1	-0.1	ND	-3.4	-3.9	0.161	-0.1	-0.1	NA			0.480	-1.6	-1.2
107	0.124	-0.2	-0.2	0.358	0.2	0.2	0.179	0.3	0.2	0.210	-0.4	-0.5	0.936	0.6	0.5
108	0.139	0.2	0.2	0.342	0.0	0.0	NA			NA			NA		
109	0.156	0.7	0.6	0.280	-0.7	-0.8	NA			NA			NA		
110	0.101	-0.9	-0.8	0.354	0.1	0.1	0.154	-0.3	-0.2	NA			0.710	-0.5	-0.4
111	0.160	0.8	0.7	0.357	0.2	0.2	NA			NA			0.780	-0.1	-0.1
112	0.139	0.2	0.2	0.402	0.7	0.8	NA			NA			0.746	-0.3	-0.2
113	0.178	1.4	1.2	0.369	0.3	0.3	0.308	3.4	2.0	NA			NA		
114	0.115	-0.5	-0.5	0.221	-1.4	-1.6	0.205	0.9	0.6	NA			NA		
115	ND	-3.4	-3.0	ND	-3.4	-3.9	ND	-3.5	-2.1	ND	-3.1	-4.5	NA		
116	0.080	-1.6	-1.4	0.280	-0.7	-0.8	0.220	1.3	0.8	NA			NA		
117	0.086	-1.4	-1.2	NA			ND	-3.5	-2.1	NA			0.893	0.4	0.3
118	0.109	-0.7	-0.6	0.294	-0.6	-0.7	0.131	-0.9	-0.5	NA			NA		
119	0.094	-1.2	-1.0	0.249	-1.1	-1.3	0.138	-0.7	-0.4	0.220	-0.2	-0.3	0.399	-2.0	-1.6
120	ND	-3.4	-3.0	0.120	-2.6	-3.0	NA			NA			NA		
121	0.107	-0.8	-0.7	0.400	0.7	0.7	0.147	-0.5	-0.3	0.248	0.3	0.4	0.242	-2.8	-2.2
122	0.154	0.7	0.6	0.398	0.6	0.7	0.245	1.9	1.1	0.312	1.4	2.0	0.864	0.3	0.2
123	0.174	1.3	1.1	0.455	1.3	1.5	0.305	3.3	2.0	0.186	-0.8	-1.1	0.573	-1.2	-0.9
124	0.140	0.2	0.2	0.309	-0.4	-0.5	0.325	3.8	2.3	0.232	0.0	0.0	1.000	0.9	0.7
125	0.135	0.1	0.1	0.325	-0.2	-0.2	0.197	0.7	0.4	0.177	-0.9	-1.4	0.820	0.0	0.0
126	No Reported Results														
127	0.096	-1.1	-1.0	0.311	-0.4	-0.4	0.273	2.5	1.5	0.231	0.0	0.0	0.495	-1.6	-1.2
128	0.158	0.8	0.7	0.465	1.4	1.6	0.350	4.4	2.7	0.306	1.3	1.9	0.815	0.0	0.0
129	0.130	-0.1	-0.1	0.500	1.8	2.1	0.271	2.5	1.5	0.140	-1.6	-2.3	0.900	0.4	0.3
130	0.190	1.8	1.5	0.470	1.5	1.7	0.280	2.7	1.6	0.200	-0.5	-0.8	0.700	-0.5	-0.4

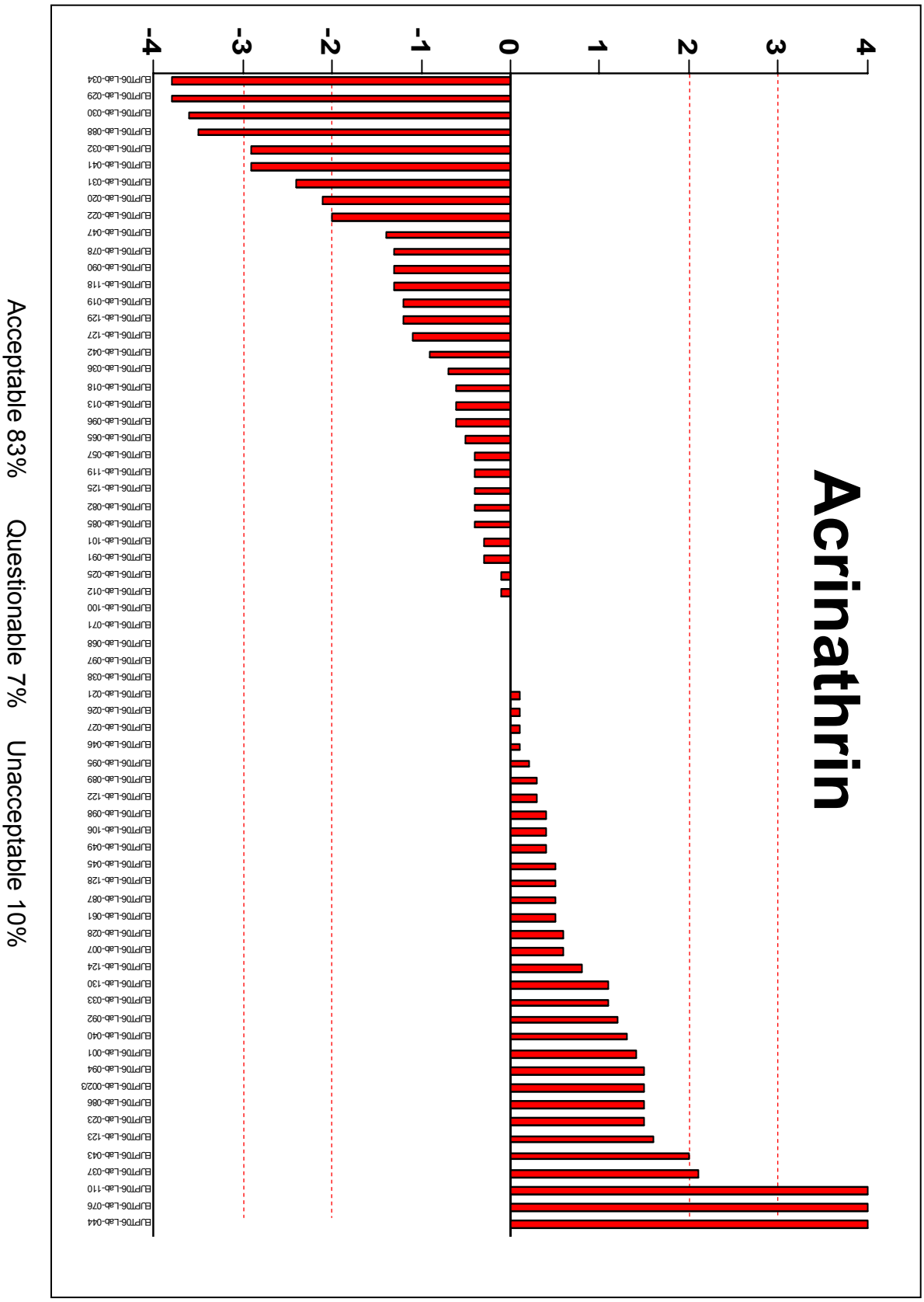
APPENDIX 3. Results (mg/kg) and z-Score for FFP and Q_n

Lab Code MPRL / Median (mg/kg)	Metalaxyl 0.05	Oxydemeton-methyl 0.02 / 0.199	z-Score (FFP 25%)	z-Score (Qn 35%)	Procymidone 0.02 / 0.412	z-Score (FFP 25%)	z-Score (Qn 21%)	Thiabendazole 0.05 / 0.314	z-Score (FFP 25%)	z-Score (Qn 27%)
001	ND	0.202	0.1	0.1	0.444	0.3	0.4	0.404	1.1	1.1
002/3	ND	NA			0.473	0.6	0.7	0.430	1.5	1.4
004	D	0.240	0.8	0.6	0.310	-1.0	-1.2	0.360	0.6	0.5
005	ND	NA			0.467	0.5	0.6	0.313	0.0	0.0
006	<0.05	NA			NA			0.215	-1.3	-1.2
007	0.034	0.137	-1.2	-0.9	0.416	0.0	0.0	0.312	0.0	0.0
008	ND	ND	-3.6	-2.6	0.333	-0.8	-0.9	0.258	-0.7	-0.7
009	ND	0.194	-0.1	-0.1	0.521	1.1	1.3	0.249	-0.8	-0.8
010	ND	NA			0.050	-3.5	-4.2	ND	-3.4	-3.1
011	NA	NA			0.370	-0.4	-0.5	0.292	-0.3	-0.3
012	0.016	NA			0.423	0.1	0.1	0.345	0.4	0.4
013	0.055	NA			0.420	0.1	0.1	0.290	-0.3	-0.3
014	0.035	NA			0.420	0.1	0.1	0.240	-0.9	-0.9
015	ND	NA			0.309	-1.0	-1.2	0.338	0.3	0.3
016	ND	ND	-3.6	-2.6	0.303	-1.1	-1.3	0.285	-0.4	-0.3
017	0.027	ND	-3.6	-2.6	0.327	-0.8	-1.0	0.190	-1.6	-1.5
018	0.044	0.205	0.1	0.1	0.313	-1.0	-1.1	0.217	-1.2	-1.1
019	0.028	0.240	0.8	0.6	0.410	0.0	0.0	0.330	0.2	0.2
020	0.024	0.205	0.1	0.1	0.393	-0.2	-0.2	0.302	-0.2	-0.1
021	0.045	0.233	0.7	0.5	0.448	0.3	0.4	0.313	0.0	0.0
022	0.033	0.191	-0.2	-0.1	0.436	0.2	0.3	0.370	0.7	0.7
023	0.034	0.274	1.5	1.1	0.495	0.8	1.0	0.377	0.8	0.7
024	0.032	0.223	0.5	0.4	0.412	0.0	0.0	0.335	0.3	0.2
025	0.030	0.198	0.0	0.0	0.423	0.1	0.1	0.355	0.5	0.5
026	0.050	NA			0.518	1.0	1.2	NA		
027	0.030	NA			0.423	0.1	0.1	0.471	2.0	1.9
028	0.031	0.190	-0.2	-0.1	0.352	-0.6	-0.7	0.350	0.5	0.4
029	0.037	0.213	0.3	0.2	0.482	0.7	0.8	0.348	0.4	0.4
030	ND	0.299	2.0	1.5	0.516	1.0	1.2	0.430	1.5	1.4
031	0.050	0.088	-2.2	-1.6	0.445	0.3	0.4	0.376	0.8	0.7
032	0.025	0.199	0.0	0.0	0.412	0.0	0.0	0.164	-1.9	-1.8
033	0.048	NA			0.445	0.3	0.4	0.235	-1.0	-0.9
034	0.025	NA			0.395	-0.2	-0.2	0.286	-0.4	-0.3
035	0.040	0.100	-2.0	-1.4	0.406	-0.1	-0.1	0.490	2.2	2.1
036	0.151	NA			0.311	-1.0	-1.2	NA		
037	ND	NA			0.437	0.2	0.3	0.390	1.0	0.9
038	0.038	0.100	-2.0	-1.4	0.474	0.6	0.7	0.193	-1.5	-1.4
039	ND	0.231	0.7	0.5	0.395	-0.2	-0.2	0.297	-0.2	-0.2
040	ND	ND	-3.6	-2.6	0.525	1.1	1.3	NA		
041	0.037	0.423	4.5	3.3	0.507	0.9	1.1	0.467	1.9	1.8
042	0.030	0.200	0.0	0.0	0.490	0.8	0.9	0.420	1.4	1.3
043	0.092	0.597	8.0	5.8	0.418	0.1	0.1	1.503	15.1	14.1
044	0.034	0.067	-2.6	-1.9	0.398	-0.1	-0.2	0.286	-0.4	-0.3
045	0.040	0.050	-3.0	-2.2	0.462	0.5	0.6	0.357	0.5	0.5
046	ND	0.424	4.5	3.3	0.424	0.1	0.1	0.285	-0.4	-0.3
047	0.053	0.302	2.1	1.5	0.448	0.3	0.4	0.249	-0.8	-0.8
048	NA	ND	-3.6	-2.6	0.507	0.9	1.1	NA		
049	ND	NA			0.408	0.0	0.0	NA		
050	NA	NA			NA			ND	-3.4	-3.1
051	NA	NA			0.362	-0.5	-0.6	NA		
052	NA	NA			NA			NA		
053	NA	NA			NA			NA		
054	ND	NA			0.319	-0.9	-1.1	ND	-3.4	-3.1
055	ND	NA			0.429	0.2	0.2	NA		
056	0.040	NA			0.400	-0.1	-0.1	0.390	1.0	0.9
057	0.051	NA			0.352	-0.6	-0.7	0.258	-0.7	-0.7
058	ND	NA			0.480	0.7	0.8	ND	-3.4	-3.1
059	NA	NA			0.220	-1.9	-2.2	NA		
060	0.060	NA			0.320	-0.9	-1.1	NA		
061	0.058	ND	-3.6	-2.6	0.415	0.0	0.0	0.299	-0.2	-0.2
062	ND	NA			0.760	3.4	4.0	0.218	-1.2	-1.1
063	ND	NA			0.269	-1.4	-1.7	0.338	0.3	0.3
064	0.047	NA			0.451	0.4	0.5	0.218	-1.2	-1.1
065	0.038	ND	-3.6	-2.6	0.342	-0.7	-0.8	0.319	0.1	0.1
066	ND	NA			0.359	-0.5	-0.6	0.140	-2.2	-2.1
067	0.110	NA			0.270	-1.4	-1.6	0.275	-0.5	-0.5
068	0.051	NA			0.452	0.4	0.5	0.368	0.7	0.6
069	ND	NA			0.375	-0.4	-0.4	NA		
070	0.101	NA			0.416	0.0	0.0	0.205	-1.4	-1.3
071	0.050	NA			0.556	1.4	1.7	0.190	-1.6	-1.5
072	ND	NA			0.470	0.6	0.7	0.553	3.0	2.8

APPENDIX 3. Results (mg/kg) and z-Score for FFP and Q_n

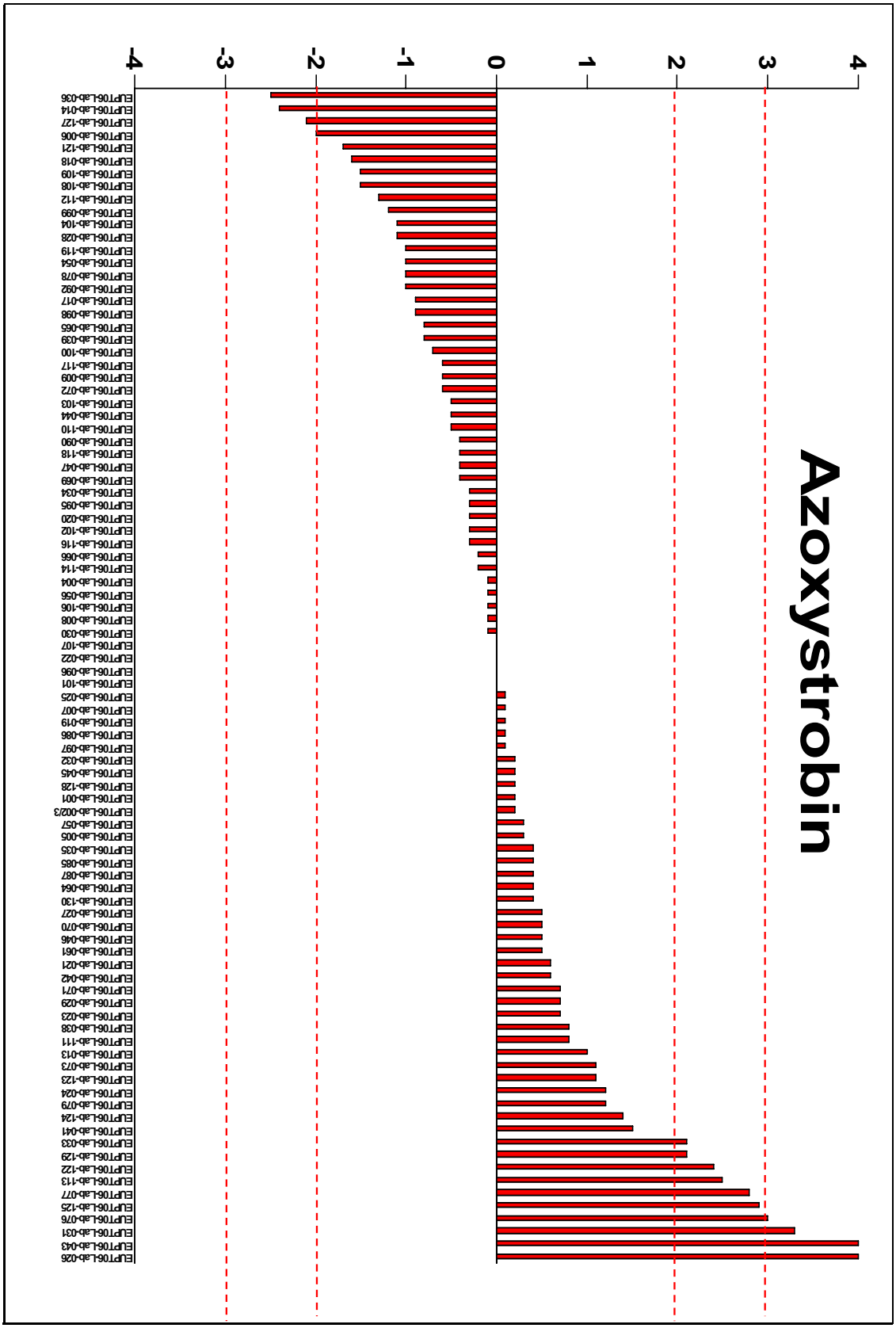
Lab Code MPRL / Median (mg/kg)	Metalaxyl 0.05	Oxydemeton-methyl 0.02 / 0.199	z-Score (FFP 25%)	z-Score (Qn 35%)	Procymidone 0.02 / 0.412	z-Score (FFP 25%)	z-Score (Qn 21%)	Thiabendazole 0.05 / 0.314	z-Score (FFP 25%)	z-Score (Qn 27%)
073	0.087	NA			0.372	-0.4	-0.5	NA		
074	No Reported Results									
075	ND	NA			0.710	2.9	3.4	0.400	1.1	1.0
076	0.051	ND	-3.6	-2.6	0.341	-0.7	-0.8	0.980	8.5	7.9
077	0.060	ND	-3.6	-2.6	0.420	0.1	0.1	0.360	0.6	0.5
078	ND	0.112	-1.7	-1.3	0.338	-0.7	-0.9	0.264	-0.6	-0.6
079	ND	NA			0.339	-0.7	-0.8	NA		
080	No Reported Results									
081	0.041	NA			0.543	1.3	1.5	NA		
082	0.214	NA			0.266	-1.4	-1.7	NA		
083	0.023	NA			0.400	-0.1	-0.1	NA		
084	0.030	NA			0.286	-1.2	-1.5	NA		
085	0.031	0.083	-2.3	-1.7	0.315	-0.9	-1.1	0.291	-0.3	-0.3
086	0.038	0.073	-2.5	-1.8	0.574	1.6	1.9	0.365	0.6	0.6
087	0.036	0.094	-2.1	-1.5	0.539	1.2	1.5	0.271	-0.5	-0.5
088	D	NA			0.035	-3.7	-4.4	NA		
089	NA	NA			0.553	1.4	1.6	NA		
090	NA	ND	-3.6	-2.6	0.350	-0.6	-0.7	0.230	-1.1	-1.0
091	ND	NA			0.622	2.0	2.4	NA		
092	0.050	NA			0.466	0.5	0.6	NA		
093	NA	NA			0.174	-2.3	-2.8	0.315	0.0	0.0
094	NA	NA			0.244	-1.6	-1.9	NA		
095	ND	0.211	0.3	0.2	0.369	-0.4	-0.5	0.404	1.1	1.1
096	0.031	0.159	-0.8	-0.6	0.332	-0.8	-0.9	0.341	0.3	0.3
097	0.031	0.190	-0.2	-0.1	0.416	0.0	0.0	0.300	-0.2	-0.2
098	0.031	0.249	1.0	0.7	0.470	0.6	0.7	0.356	0.5	0.5
099	0.040	0.160	-0.8	-0.6	0.390	-0.2	-0.3	0.340	0.3	0.3
100	ND	0.165	-0.7	-0.5	0.392	-0.2	-0.2	0.277	-0.5	-0.4
101	ND	NA			0.405	-0.1	-0.1	ND	-3.4	-3.1
102	0.031	NA			0.396	-0.2	-0.2	NA		
103	0.029	ND	-3.6	-2.6	0.456	0.4	0.5	0.275	-0.5	-0.5
104	0.026	NA			0.474	0.6	0.7	0.029	-3.6	-3.4
105	NA	NA			NA			NA		
106	ND	NA			0.250	-1.6	-1.9	0.449	1.7	1.6
107	ND	NA			0.433	0.2	0.2	0.292	-0.3	-0.3
108	ND	NA			0.351	-0.6	-0.7	NA		
109	ND	NA			0.341	-0.7	-0.8	NA		
110	ND	NA			0.421	0.1	0.1	NA		
111	ND	NA			0.285	-1.2	-1.5	NA		
112	ND	NA			0.526	1.1	1.3	NA		
113	0.038	NA			0.392	-0.2	-0.2	0.300	-0.2	-0.2
114	ND	NA			0.247	-1.6	-1.9	0.263	-0.6	-0.6
115	ND	NA			D			ND	-3.4	-3.1
116	0.030	NA			0.410	0.0	0.0	0.230	-1.1	-1.0
117	0.027	NA			0.535	1.2	1.4	ND	-3.4	-3.1
118	0.025	NA			0.403	-0.1	-0.1	0.351	0.5	0.4
119	0.028	NA			0.347	-0.6	-0.8	0.379	0.8	0.8
120	NA	NA			NA			NA		
121	0.031	NA			0.358	-0.5	-0.6	0.398	1.1	1.0
122	ND	NA			0.414	0.0	0.0	0.335	0.3	0.2
123	ND	0.205	0.1	0.1	0.471	0.6	0.7	0.422	1.4	1.3
124	0.050	0.188	-0.2	-0.2	0.406	-0.1	-0.1	0.310	-0.1	0.0
125	0.073	0.196	-0.1	0.0	0.431	0.2	0.2	0.349	0.4	0.4
126	No Reported Results									
127	0.050	NA			0.483	0.7	0.8	0.298	-0.2	-0.2
128	0.067	0.202	0.1	0.1	0.471	0.6	0.7	0.355	0.5	0.5
129	0.050	NA			0.320	-0.9	-1.1	0.300	-0.2	-0.2
130	0.050	0.120	-1.6	-1.1	0.420	0.1	0.1	0.390	1.0	0.9

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

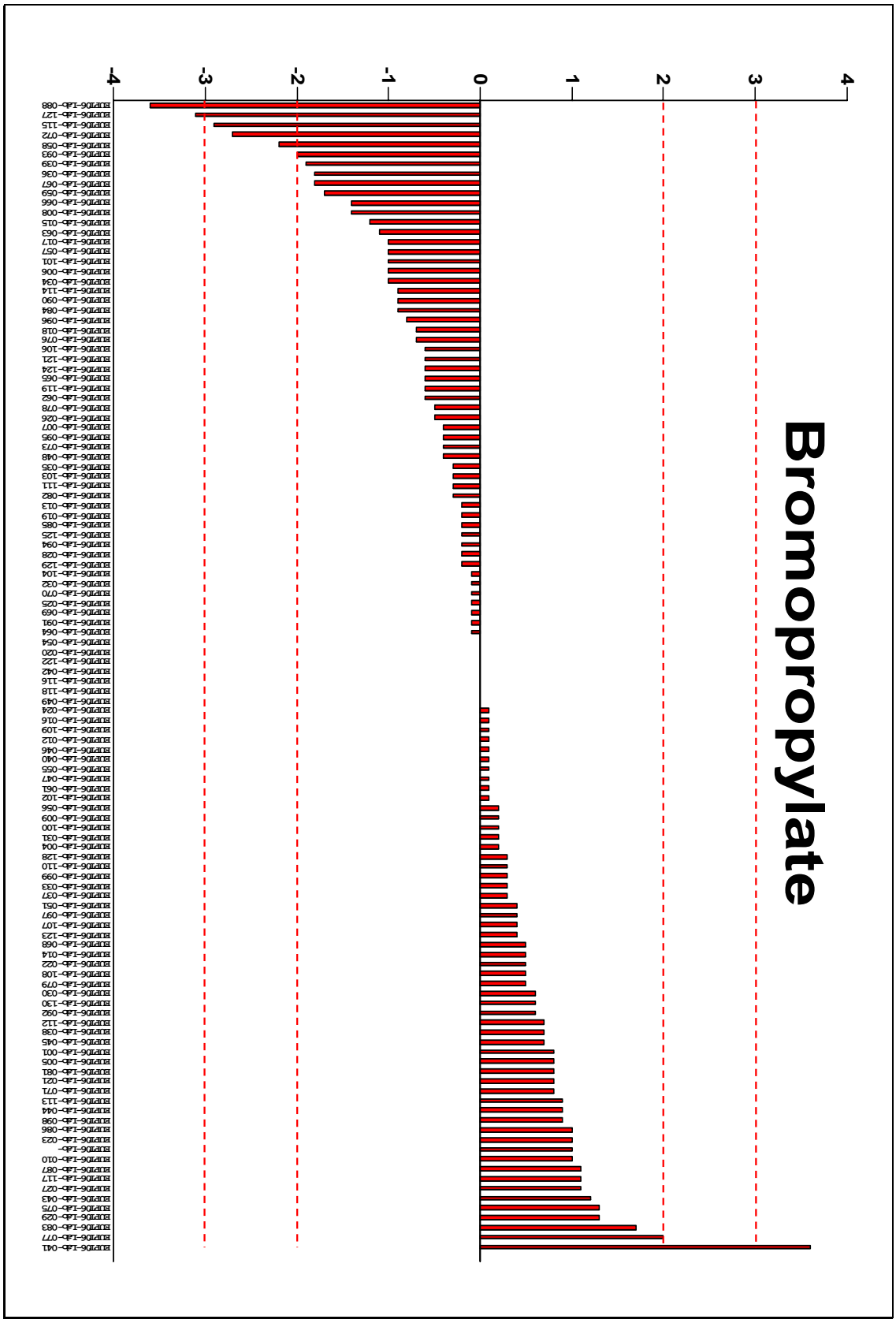


Acceptable 83% Questionable 7% Unacceptable 10%

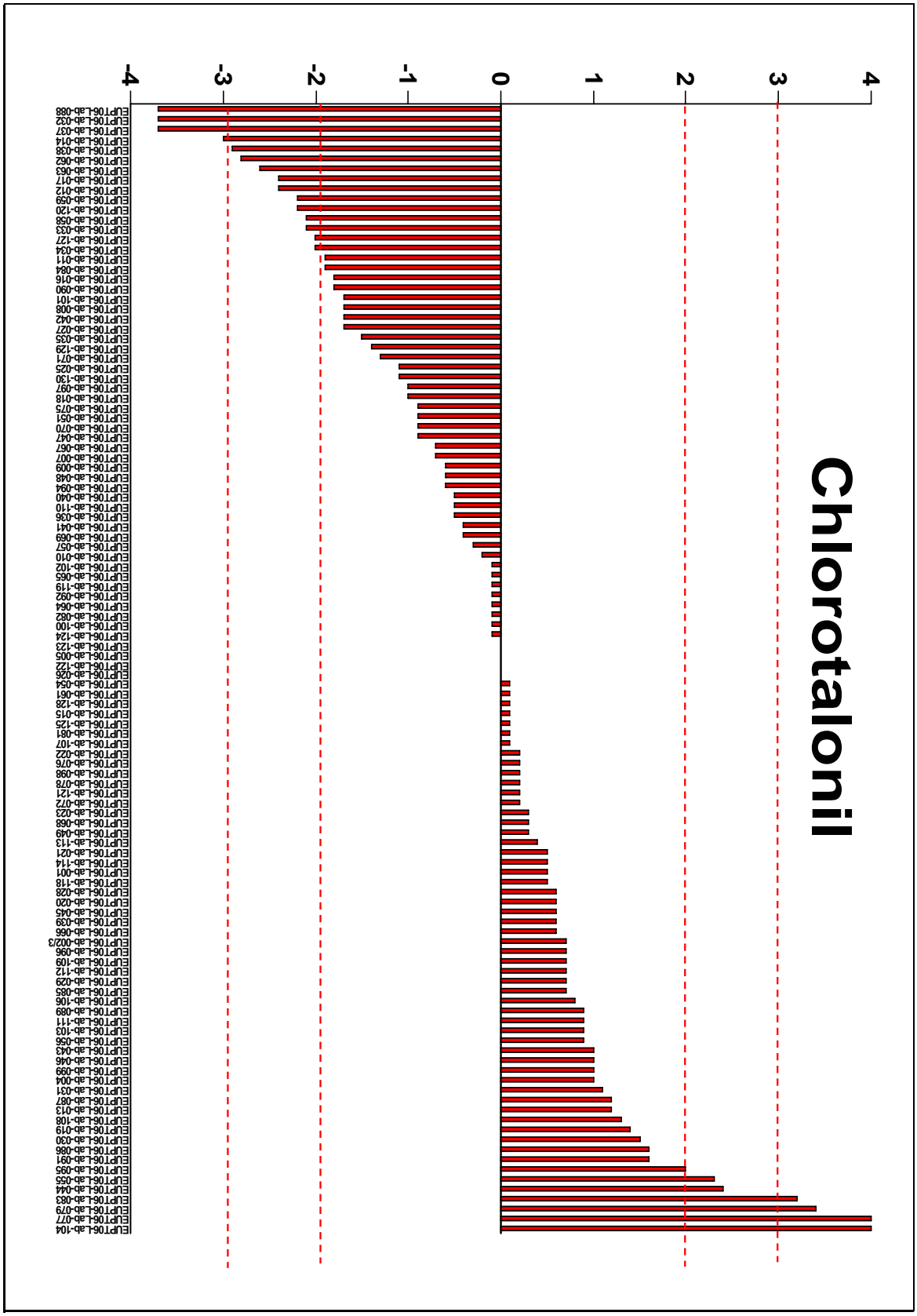
APPENDIX 4.- Graphical representation of z-Scores for FFP (25%).



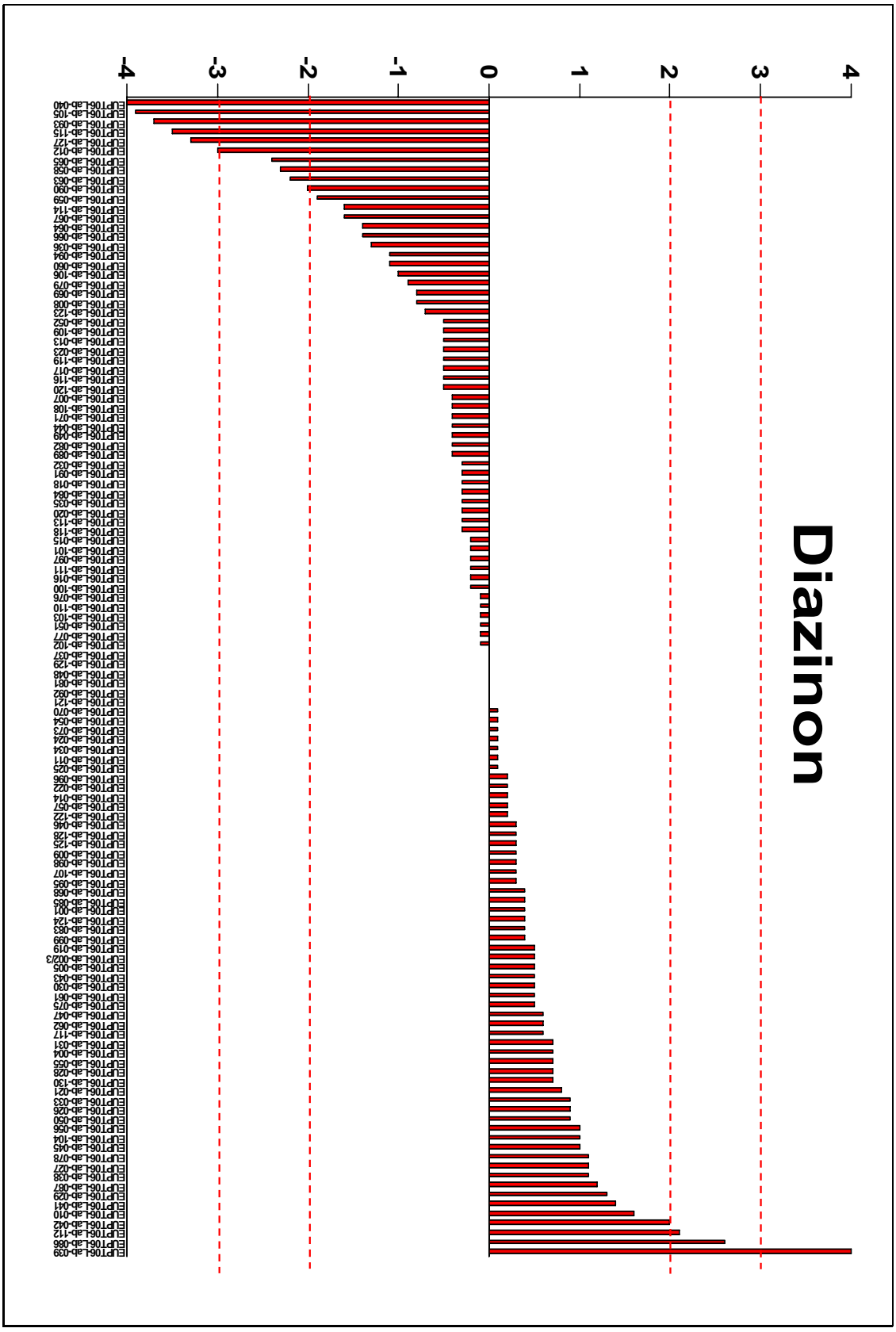
APPENDIX 4.- Graphical representation of z-Scores for FFP (25%).



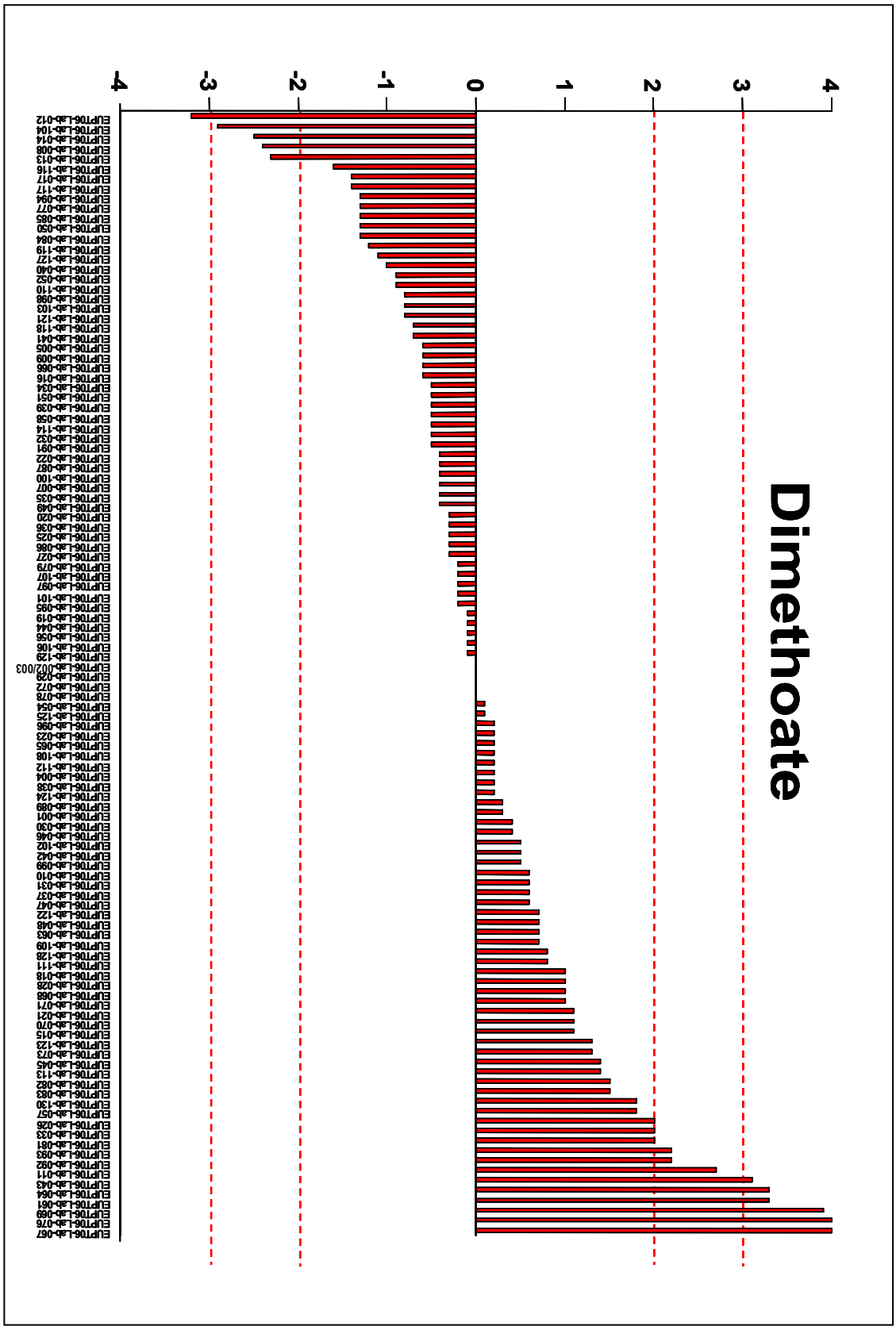
APPENDIX 4.- Graphical representation of z-Scores for FFP (25%).



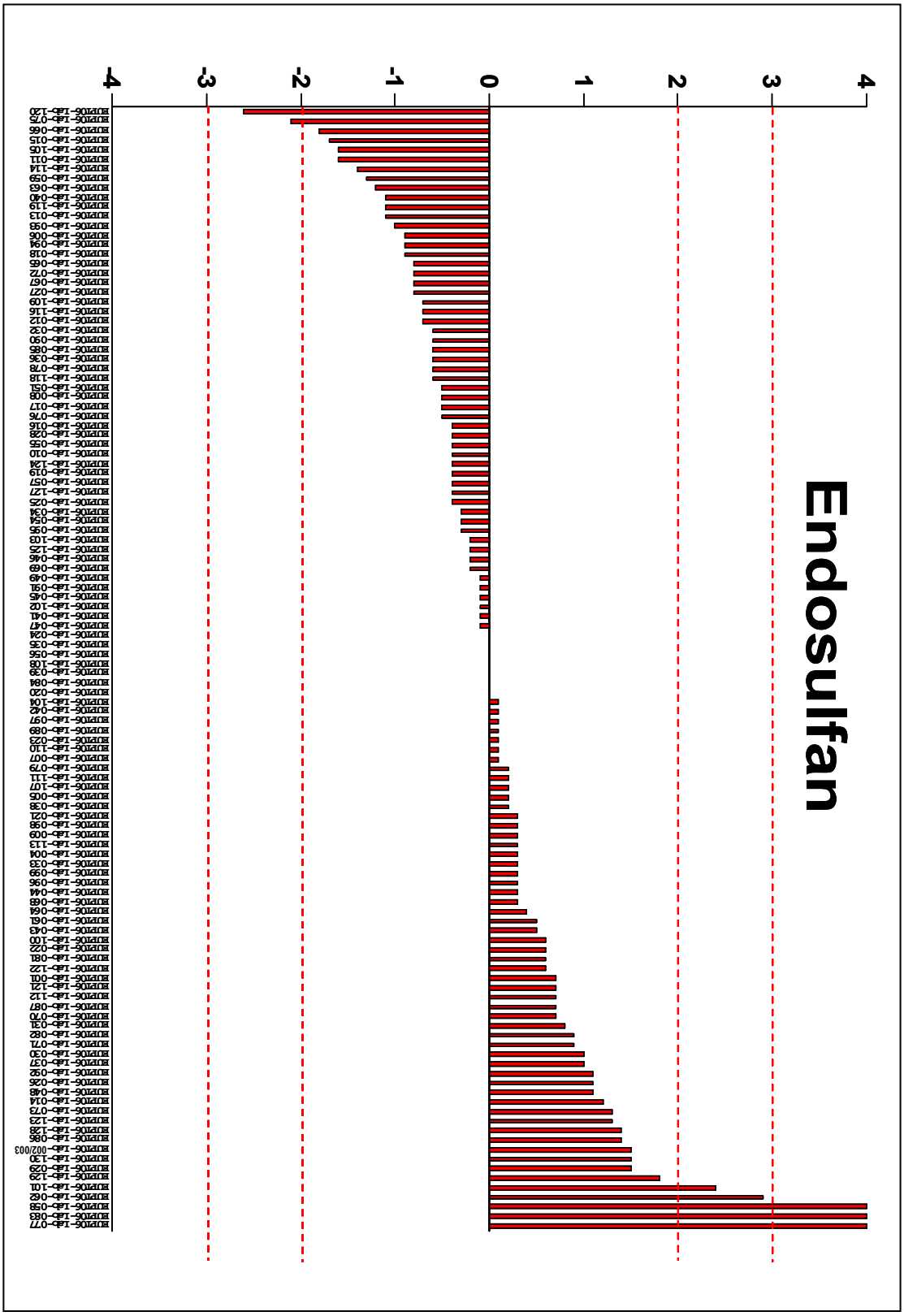
APPENDIX 4.- Graphical representation of z-Scores for FFP (25%).



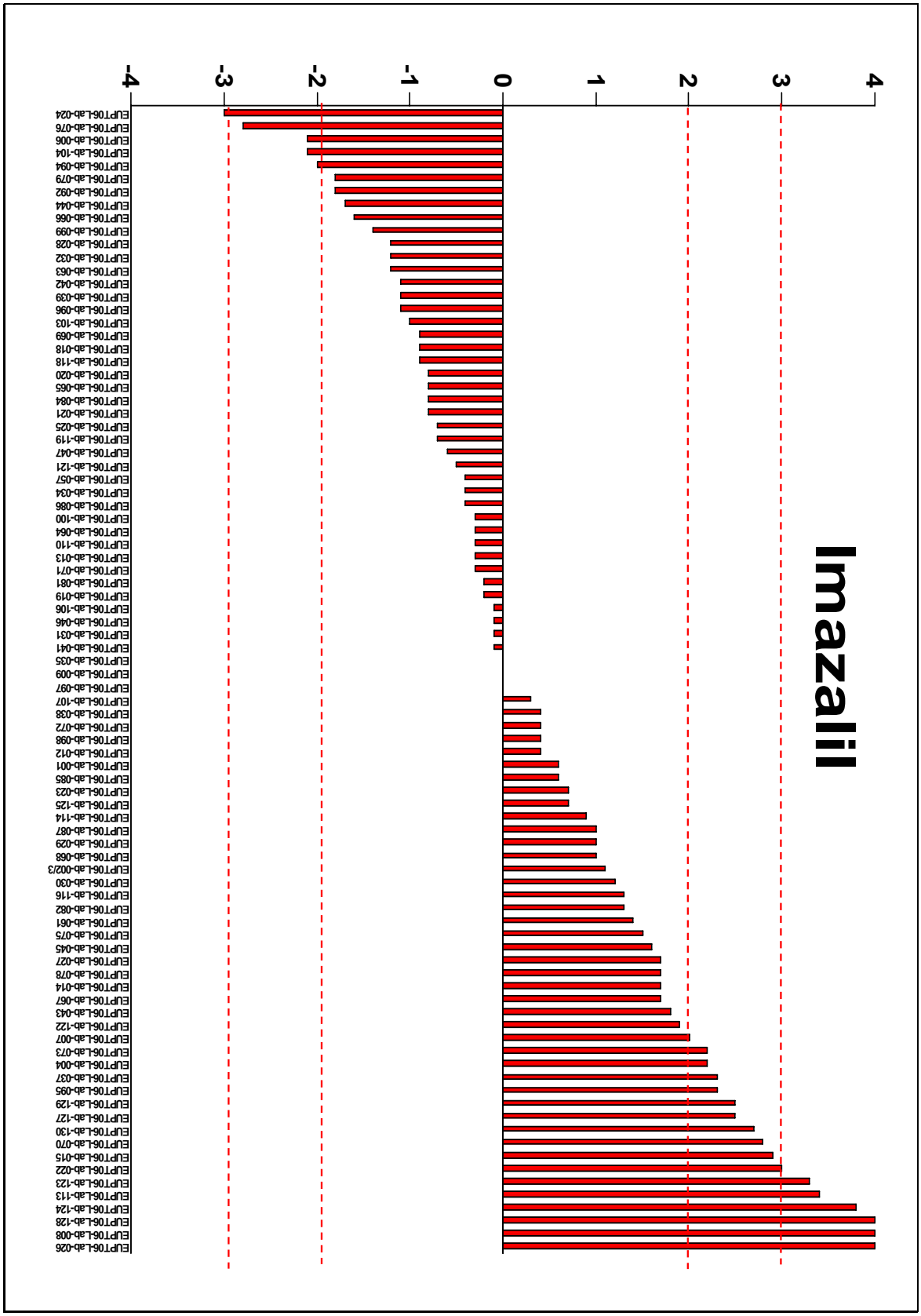
APPENDIX 4.- Graphical representation of z-Scores for FFP (25%).



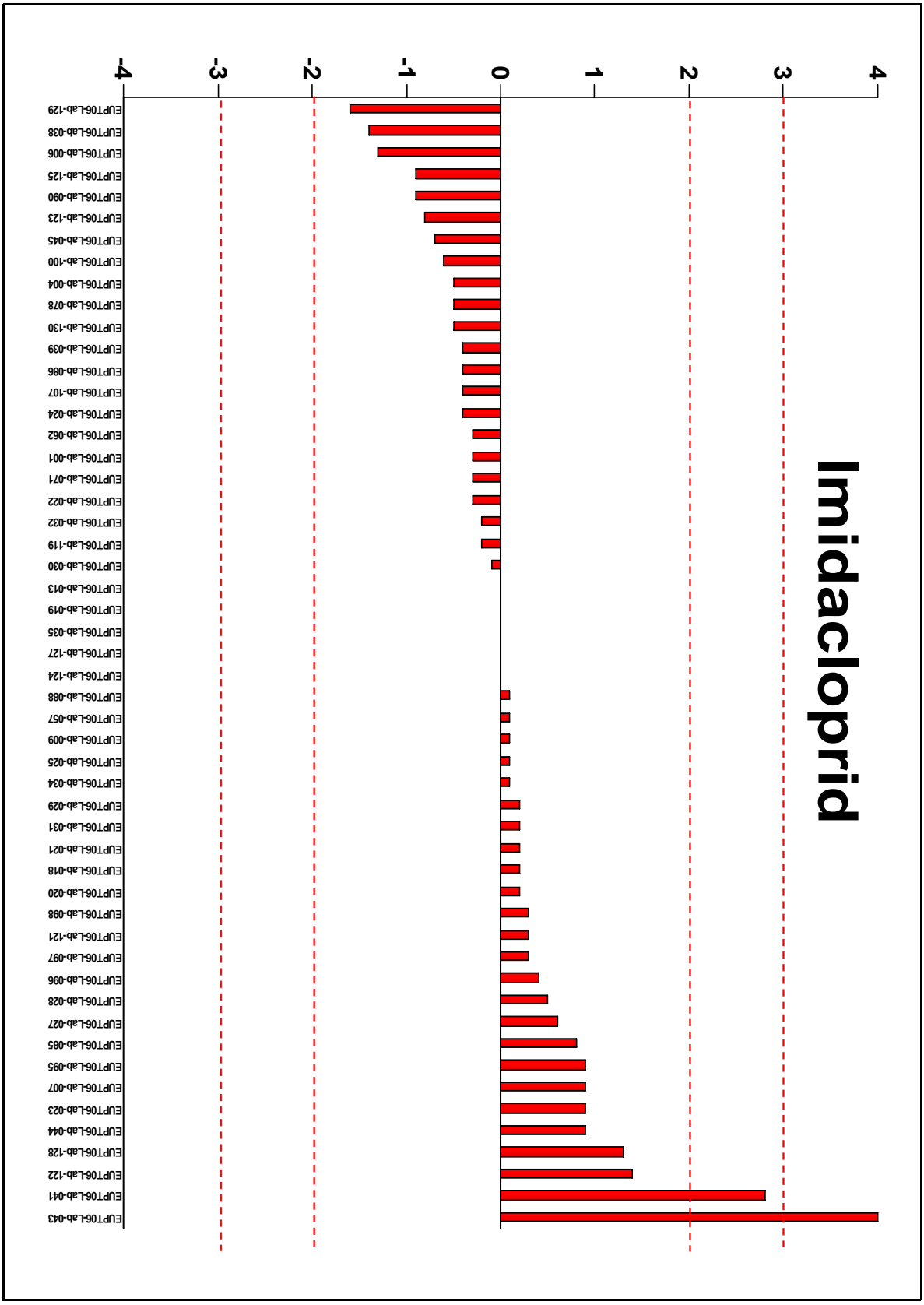
APPENDIX 4.- Graphical representation of z-Scores for FFP (25%).



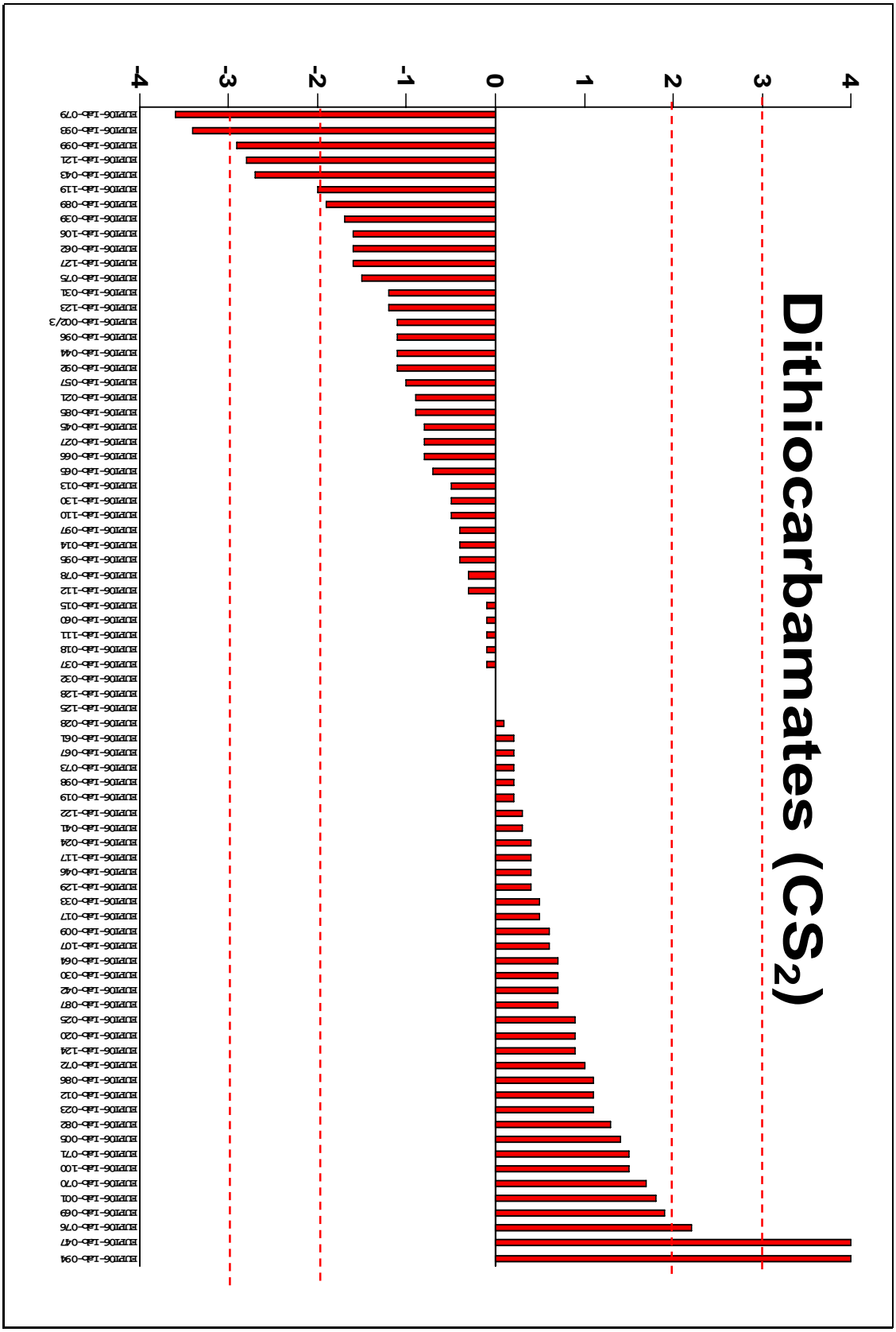
APPENDIX 4.- Graphical representation of z-Scores for FFP (25%).



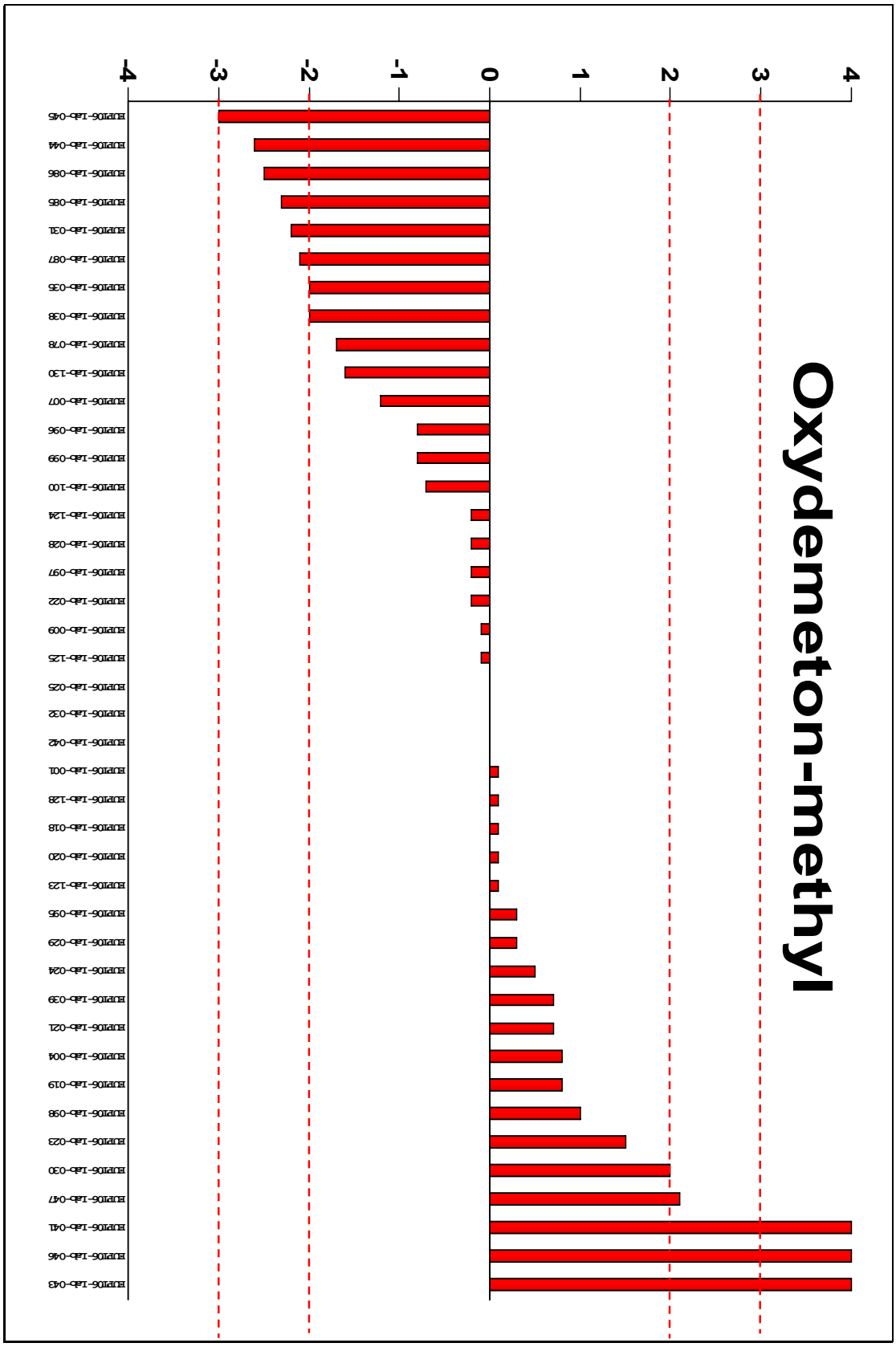
APPENDIX 4.- Graphical representation of z-Scores for FFP (25%).



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

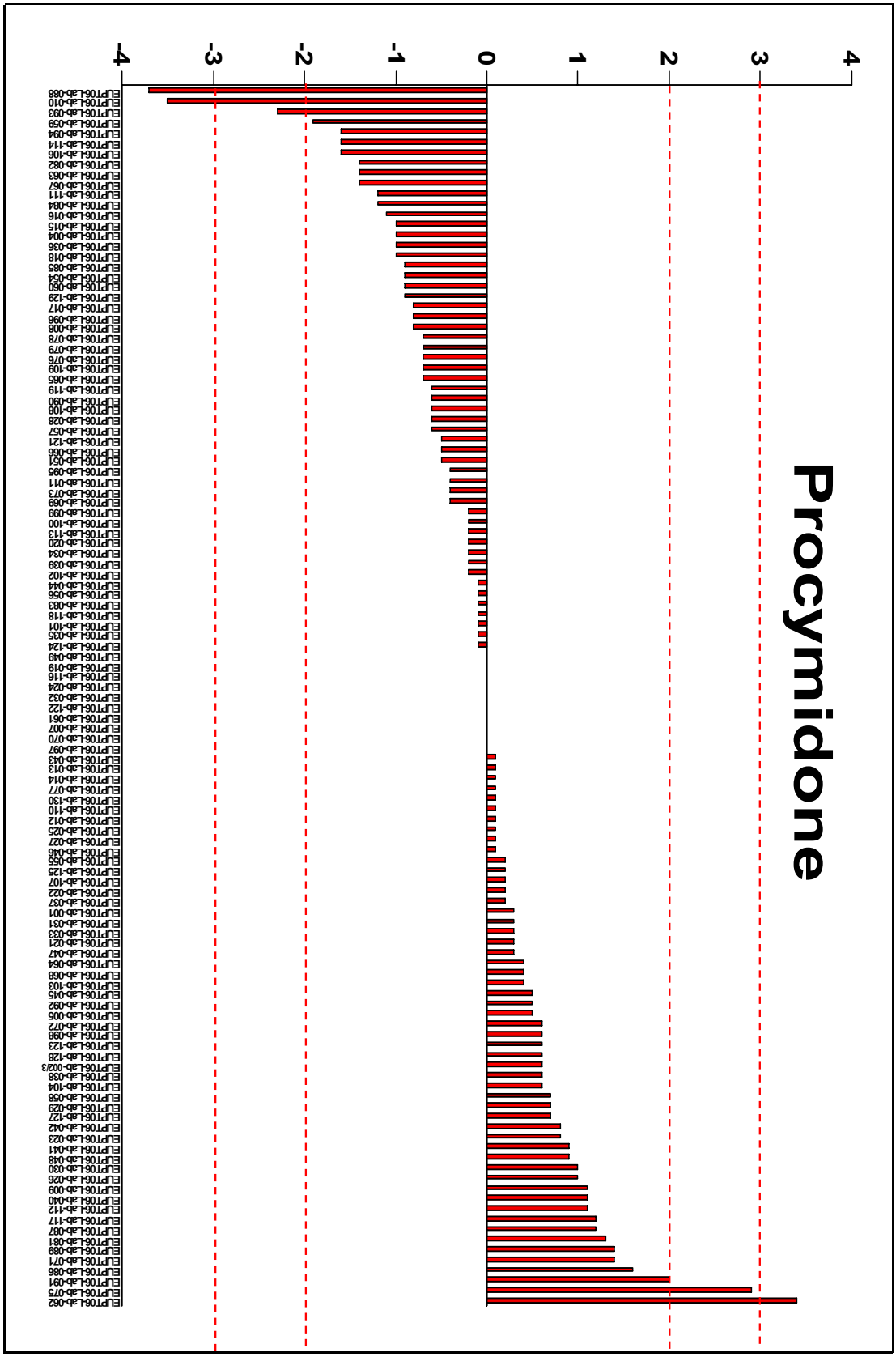


APPENDIX 4.- Graphical representation of z-Scores for FFP (25%).

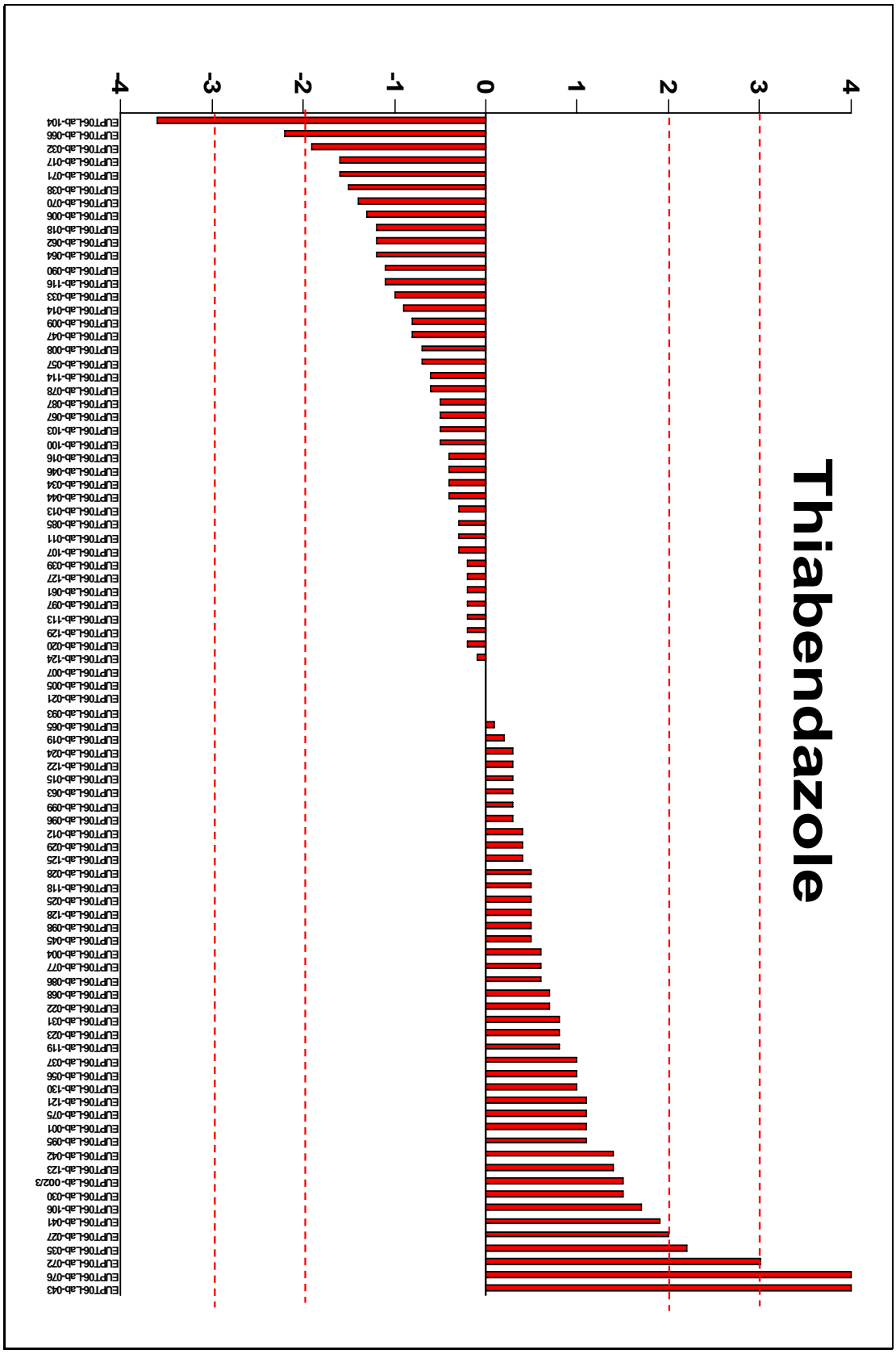


Acceptable 76% Questionable 17% Unacceptable 7%

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



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



APPENDIX 5. Combined scores RSZ and SSZ for FFP (25%)

Lab Code	n	SSZ	RSZ
Lab-001	13	8.73	2.19
Lab-002/3	11	11.28	2.23
Lab-004	11	9.00	1.36
Lab-005	10	15.82	-0.15
Lab-006	6	13.44	-3.48
Lab-007	12	7.53	0.15
Lab-008	10	53.83	-2.06
Lab-009	12	3.36	-0.05
Lab-010	6	16.45	-0.38
Lab-011	8	36.01	-2.84
Lab-012	11	36.10	-3.09
Lab-013	12	10.24	-1.06
Lab-014	10	26.68	-1.70
Lab-015	10	24.57	-0.94
Lab-016	11	49.64	-5.33
Lab-017	12	47.18	-5.38
Lab-018	13	9.72	-1.97
Lab-019	13	4.66	0.32
Lab-020	13	6.82	-0.65
Lab-021	13	5.26	1.03
Lab-022	12	14.76	0.75
Lab-023	13	10.49	2.56
Lab-024	13	49.23	-3.21
Lab-025	13	3.14	-0.25
Lab-026	9	175.04	7.52
Lab-027	12	13.90	1.06
Lab-028	13	5.93	0.03
Lab-029	12	22.97	1.28
Lab-030	13	26.02	1.83
Lab-031	13	26.97	0.56
Lab-032	13	28.12	-3.15
Lab-033	11	28.68	0.29
Lab-034	11	20.25	-2.60
Lab-035	12	22.61	-1.55
Lab-036	9	25.48	-4.05
Lab-037	10	25.82	1.22
Lab-038	13	34.11	-2.07
Lab-039	13	37.73	-1.30
Lab-040	8	34.16	-2.72
Lab-041	13	59.03	3.55
Lab-042	12	12.28	0.68
Lab-043	13	362.81	11.01
Lab-044	13	193.30	3.03
Lab-045	13	17.29	0.67
Lab-046	12	22.54	1.97
Lab-047	12	47.82	1.69
Lab-048	7	16.03	-0.68
Lab-049	7	0.56	-0.08
Lab-050	3	14.07	-2.15
Lab-051	6	1.75	-0.89
Lab-052	2	1.14	-1.03
Lab-053	0		
Lab-054	8	13.47	-1.91
Lab-055	5	5.76	1.23
Lab-056	8	2.82	0.97
Lab-057	12	6.90	-0.72
Lab-058	10	93.66	-4.31
Lab-059	7	42.43	-6.11
Lab-060	4	14.21	-2.80
Lab-061	12	26.98	0.97
Lab-062	9	44.04	-1.03
Lab-063	8	17.91	-3.03
Lab-064	10	15.25	0.66
Lab-065	13	32.23	-3.89
Lab-066	10	16.48	-3.15
Lab-067	9	106.19	1.63
Lab-068	9	3.18	1.51
Lab-069	9	20.68	0.91

APPENDIX 5. Combined scores RSZ and SSZ for FFP (25%)

Lab Code	n	SSZ	RSZ
Lab-070	10	15.53	1.43
Lab-071	12	11.54	0.70
Lab-072	9	19.06	0.39
Lab-073	8	9.46	1.88
Lab-074	No results		
Lab-075	9	33.16	-0.22
Lab-076	12	281.15	6.49
Lab-077	10	1477.45	12.31
Lab-078	13	11.73	-1.22
Lab-079	9	30.76	-0.67
Lab-080	No results		
Lab-081	7	6.87	1.75
Lab-082	10	18.31	-0.21
Lab-083	6	72.38	5.81
Lab-084	7	8.08	-2.38
Lab-085	13	11.44	-1.12
Lab-086	13	25.51	2.18
Lab-087	12	12.74	1.42
Lab-088	5	52.52	-6.44
Lab-089	7	6.53	0.23
Lab-090	11	38.45	-5.06
Lab-091	7	7.25	0.91
Lab-092	10	13.54	0.53
Lab-093	8	55.87	-5.00
Lab-094	9	77.64	0.60
Lab-095	13	12.23	1.41
Lab-096	13	5.56	-0.85
Lab-097	13	1.70	-0.34
Lab-098	13	4.50	0.94
Lab-099	11	14.10	-1.06
Lab-100	13	4.64	-0.39
Lab-101	10	33.44	-2.53
Lab-102	8	12.61	-1.28
Lab-103	10	16.09	-1.76
Lab-104	9	67.22	-0.67
Lab-105	3	29.30	-5.15
Lab-106	11	21.90	-1.70
Lab-107	12	11.96	-0.61
Lab-108	7	4.57	-0.20
Lab-109	7	4.67	-0.76
Lab-110	10	27.27	0.85
Lab-111	8	3.88	0.32
Lab-112	8	8.94	1.40
Lab-113	9	20.93	2.73
Lab-114	9	9.84	-1.86
Lab-115	9	102.68	-10.09
Lab-116	8	6.07	-1.01
Lab-117	8	29.32	-1.98
Lab-118	10	3.86	-1.01
Lab-119	12	10.08	-2.19
Lab-120	4	23.18	-4.30
Lab-121	11	13.90	-1.40
Lab-122	12	12.51	2.33
Lab-123	13	22.84	2.32
Lab-124	13	18.72	1.72
Lab-125	13	10.50	0.82
Lab-126	No results		
Lab-127	12	40.72	-3.34
Lab-128	13	24.51	2.86
Lab-129	12	20.92	0.40
Lab-130	13	19.92	1.67

APPENDIX 6. z-Score, 'Weighted Sum of z-Score' and Graphical Representation for laboratories classified in Category A

z-Score

Lab Code	Acrinathrin	Azoxystrobin	Bromopropylate	Chlorothalonil	Diazinon	Dimethoate	Endosulfan	Imazalil	Imidacloprid	Dithiocarbamates (CS_2)	Oxydemeton-methyl	Procymidone	Thiabendazole
001	1.4	0.2	0.8	0.5	0.4	0.3	0.7	0.6	0.3	1.8	0.1	0.3	1,1
002/3	1.5	0.2	1.0	0.7	0.5	0.0	1.5	1.1		1.1		0.6	1,5
004		0.1	0.2	1.0	0.7	0.2	0.3	2.2	0.5		0.8	1.0	0,6
007	0.6	0.1	0.4	0.7	0.4	0.4	0.1	2.0	0.9		1.2	0.0	0,0
009		0.6	0.2	0.6	0.3	0.6	0.3	0.0	0.1	0.6	0.1	1.1	0,8
012	0.1	3.1	0.1	2.4	3.0	3.2	0.7	0.4		1.1		0.1	0,4
013	0.6	1.0	0.2	1.2	0.5	2.3	1.1	0.3	0.0	0.5		0.1	0,3
016		3.1	0.1	1.8	0.2	0.6	0.4	3.5	3.1		3.6	1.1	0,4
017	3.3	0.9	1.0	2.4	0.5	1.4	0.5		3.1	0.5	3.6	0.8	1,6
018	0.6	1.6	0.7	1.0	0.3	1.0	0.9	0.9	0.2	0.1	0.1	1.0	1,2
019	1.2	0.1	0.2	1.4	0.5	0.1	0.4	0.2	0.0	0.2	0.8	0.0	0,2
020	2.1	0.3	0.0	0.6	0.3	0.3	0.0	0.8	0.2	0.9	0.1	0.2	0,2
021	0.1	0.6	0.8	0.5	0.8	1.1	0.3	0.8	0.2	0.9	0.7	0.3	0,0
022	2.0	0.0	0.5	0.2	0.2	0.4	0.6	3.0	0.3		0.2	0.2	0,7
023	1.5	0.7	1.0	0.3	0.5	0.2	0.1	0.7	0.9	1.1	1.5	0.8	0,8
024	3.3	1.2	0.1	4.0	0.1	3.4	0.0	3.0	0.4	0.4	0.5	0.0	0,3
025	0.1	0.1	0.1	1.1	0.1	0.3	0.4	0.7	0.1	0.9	0.0	0.1	0,5
027	0.1	0.5	1.1	1.7	1.1	0.3	0.8	1.7	0.6	0.8		0.1	2,0
028	0.6	1.1	0.2	0.6	0.7	1.0	0.4	1.2	0.5	0.1	0.2	0.6	0,5
029	3.8	0.7	1.3	0.7	1.3	0.0	1.5	1.0	0.2		0.3	0.7	0,4
030	3.6	0.1	0.6	1.5	0.5	0.4	1.0	1.2	0.1	0.7	2.0	1.0	1,5
031	2.4	3.3	0.2	1.1	0.7	0.6	0.8	0.1	0.2	1.2	2.2	0.3	0,8
032	2.9	0.2	0.1	3.7	0.3	0.5	0.6	1.2	0.2	0.0	0.0	0.0	1,9
033	1.1	2.1	0.3	2.1	0.9	2.0	0.3	3.5		0.5		0.3	1,0
034	3.8	0.3	1.0	2.0	0.1	0.5	0.3	0.4	0.1			0.2	0,4
035	3.3	0.4	0.3	1.5	0.3	0.4	0.0	0.0	0.0		2.0	0.1	2,2
038	0.0	0.8	0.7	2.9	1.1	0.2	0.2	0.4	1.4	3.8	2.0	0.6	1,5
039	3.3	0.8	1.9	0.6	4.1	0.5	0.0	1.1	0.4	1.7	0.7	0.2	0,2
041	2.9	1.5	3.6	0.4	1.4	0.7	0.1	0.1	2.8	0.3	4.5	0.9	1,9
042	0.9	0.6	0.0	1.7	2.0	0.5	0.1	1.1		0.7	0.0	0.8	1,4
043	2.0	5.1	1.2	1.0	0.5	3.1	0.5	1.8	4.1	2.7	8.0	0.1	15,1
044	13.2	0.5	0.9	2.4	0.4	0.1	0.3	1.7	0.9	1.1	2.6	0.1	0,4
045	0.5	0.2	0.7	0.6	1.0	1.4	0.1	1.6	0.7	0.8	3.0	0.5	0,5
046	0.1	0.5	0.1	1.0	0.3	0.4	0.2	0.1		0.4	4.5	0.1	0,4
047	1.4	0.4	0.1	0.9	0.6	0.6	0.1	0.6		6.2	2.1	0.3	0,8
057	0.4	0.3	1.0	0.3	0.2	1.8	0.4	0.4	0.1	1.0		0.6	0,7
065	0.5	0.8	0.6	0.1	2.4	0.2	0.8	0.8	3.1	0.7	3.6	0.7	0,1
071	0.0	0.7	0.8	1.3	0.4	1.0	0.9	0.3	0.3	1.5		1.4	1,6
076	12.3	3.0	0.7	0.2	0.1	4.6	0.5	2.8		2.2	3.6	0.7	8,5
078	1.3	1.0	0.5	0.2	1.1	0.0	0.6	1.7	0.5	0.3	1.7	0.7	0,6
085	0.4	0.4	0.2	0.7	0.4	1.3	0.6	0.6	0.8	0.9	2.3	0.9	0,3
086	1.5	0.1	1.0	1.6	2.6	0.3	1.4	0.4	0.4	1.1	2.5	1.6	0,6
087	0.5	0.4	1.1	1.2	1.2	0.4	0.7	1.0		0.7	2.1	1.2	0,5
095	0.2	0.3	0.4	2.0	0.3	0.2	0.3	2.3	0.9	0.4	0.3	0.4	1,1
096	0.6	0.0	0.8	0.7	0.2	0.2	0.3	1.1	0.4	1.1	0.8	0.8	0,3
097	0.0	0.1	0.4	1.0	0.2	0.2	0.1	0.0	0.3	0.4	0.2	0.0	0,2
098	0.4	0.9	0.9	0.2	0.3	0.8	0.3	0.4	0.3	0.2	1.0	0.6	0,5
099		1.2	0.3	1.0	0.4	0.5	0.3	1.4		2.9	0.8	0.2	0,3
100	0.0	0.7	0.2	0.1	0.2	0.4	0.6	0.3	0.6	1.5	0.7	0.2	0,5
106	0.4	0.1	0.6	0.8	1.0	0.1	3.4	0.1		1.6		1.6	1,7
107	3.3	0.0	0.4	0.1	0.3	0.2	0.2	0.3	0.4	0.6		0.2	0,3
121		1.7	0.6	0.2	0.0	0.8	0.7	0.5	0.3	2.8		0.5	1,1
122	0.3	2.4	0.0	0.0	0.2	0.7	0.6	1.9	1.4	0.3		0.0	0,3
123	1.6	1.1	0.4	0.0	0.7	1.3	1.3	3.3	0.8	1.2	0.1	0.6	1,4
124	0.8	1.4	0.6	0.1	0.4	0.2	0.4	3.8	0.0	0.9	0.2	0.1	0,1
125	0.4	2.9	0.2	0.1	0.3	0.1	0.2	0.7	0.9	0.0	0.1	0.2	0,4
127	1.1	2.1	3.1	2.0	3.3	1.1	0.4	2.5	0.0	1.6		0.7	0,2
128	0.5	0.2	0.3	0.1	0.3	0.8	1.4	4.4	1.3	0.0	0.1	0.6	0,5
129	1.2	2.1	0.2	1.4	0.0	0.1	1.8	2.5	1.6	0.4		0.9	0,2
130	1.1	0.4	0.6	1.1	0.7	1.8	1.5	2.7	0.5	0.5	1.6	0.1	1,0

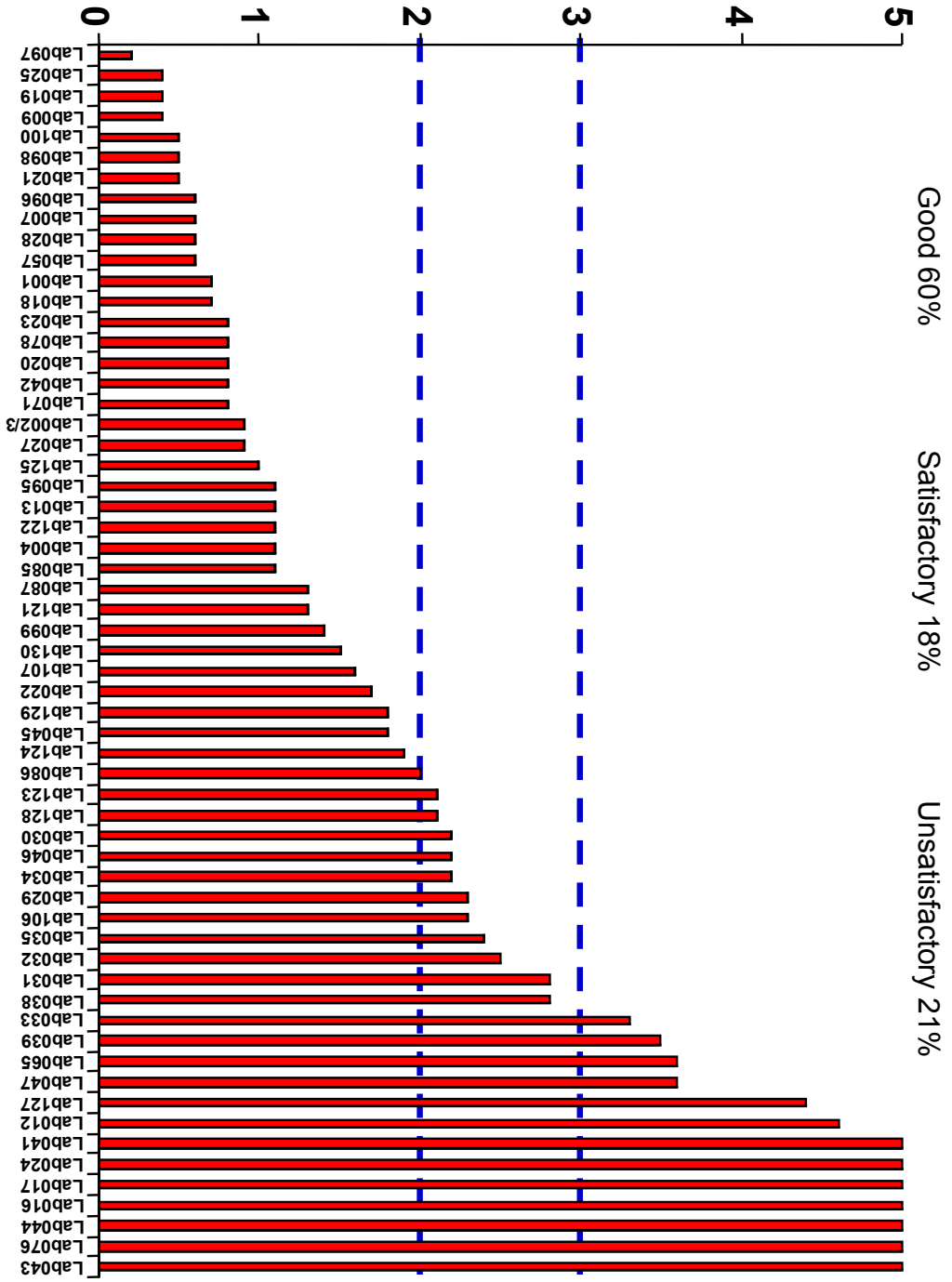
APPENDIX 6. z-Score, 'Weighted Sum of z-Score' and Graphical Representation for laboratories classified in Category A

'Weighted Sum of z-Score'

Lab Code	n	Weighted Sum
Lab001	13	0.7
Lab002/3	11	0.9
Lab004	11	1.1
Lab007	12	0.6
Lab009	12	0.4
Lab012	11	4.6
Lab013	12	1.1
Lab016	11	6.5
Lab017	12	5.4
Lab018	13	0.7
Lab019	13	0.4
Lab020	13	0.8
Lab021	13	0.5
Lab022	12	1.7
Lab023	13	0.8
Lab024	13	5.0
Lab025	13	0.4
Lab027	12	0.9
Lab028	13	0.6
Lab029	12	2.3
Lab030	13	2.2
Lab031	13	2.8
Lab032	13	2.5
Lab033	11	3.3
Lab034	11	2.2
Lab035	12	2.4
Lab038	13	2.8
Lab039	13	3.5
Lab041	13	5.0
Lab042	12	0.8
Lab043	13	14.8
Lab044	13	6.7
Lab045	13	1.8
Lab046	12	2.2
Lab047	12	3.6
Lab057	12	0.6
Lab065	13	3.6
Lab071	12	0.8
Lab076	12	14.3
Lab078	13	0.8
Lab085	13	1.1
Lab086	13	2.0
Lab087	12	1.3
Lab095	13	1.1
Lab096	13	0.6
Lab097	13	0.2
Lab098	13	0.5
Lab099	11	1.4
Lab100	13	0.5
Lab106	11	2.3
Lab107	12	1.6
Lab121	11	1.3
Lab122	12	1.1
Lab123	13	2.1
Lab124	13	1.9
Lab125	13	1.0
Lab127	12	4.4
Lab128	13	2.1
Lab129	12	1.8
Lab130	13	1.5

APPENDIX 6. z-Score, 'Weighted Sum of z-Score' and Graphical Representation for laboratories classified in Category A

Graphical Representation



APPENDIX 7. Methods used by participants for determining pesticides

ACRINATHRIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
001	D	S	GC-MS	0.02	110	15	4					Yes	3-4	DB5 DB 1701		ECD NPD MS
002/3	D	M	GC-MS	0.01	102	15	4			PCB97		Yes	3	60x0.25x0.1 60x0.25x0.15	DB5 DB1701	GC-ECD
004	NA															
005	NA															
006	D	M	GC-MS	0.02	94	10	1		O			Yes	5	DB 5MS	MS	GC-MS
007	D	M	GC-ECD	0.03	87	25	2		GPC	Dithalimphos		Yes	5	J&W 0.32/0.25mmID	DB5. DB1701	GC-ECD. GC-NPD. GC-ITD
008	NA															
009	NA															
010	NA															
011	NA															
012	D	M	GC-MS	0.01	70-110	50	3					Yes	8	HP5MS		GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

ACRINATHRIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
013	D	S	GC-ECD	0.01	85	25	Ethyl Acetate Dichloromethane		SPE							GC-ECD/ELCD
014	NA															
015	NA															
016	NA															
017	ND															
018	D	S	GC-MS	0.01		100	2		GPC	Yes		Yes	5	DB-5/1/1701		GC-ECD/NPD/FPD
019	D	M	GC-TOF	0.02	102	10	5			PCB 138		Yes	4	DB5		GC-MS
020	D	M	GC-MS	0.010		25	2		GPC				3	FSOT	HP 5-MS	GC-MS
021	D	S	GC-MS	0.01	98.1	50	2		GPC	Trans-HCEO	Yes			BD1/5/35/1301. HP50/1701/5MS		GC-ECD
022	D	S		0.01	47	50	6; Acetone	Ciclohexane Ethyl acetate	GPC					Capillary	DB5/210	GC-ECD
023	D	M	GC-MS	0.05		50	2		GPC			Yes	5	30mx0.25mm	HP5MS	GC-MS
024	ND			0.05												

APPENDIX 7. Methods used by participants for determining pesticides

ACRINATHRIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
025	D	M	GC-MS	0.02		50	3		GPC			Yes	3	Capillary-GC	DB1701 (HPG-MS)	GC-ECD/PND/FPD
026	D	S	GC-MS	0.05		100	2		GPC			Yes	3	Capillary	Varian VF-5MS	GC-ECD GC-NPD GC-MS
027	D	M	GC-MS	0.02		100	2		GPC	EPSILON-HCH		Yes		30mx0.25x0.25	DB-5. Factor four	GC-ECD
028	D	M	GC-MSD	0.05	97.4	10	5		others	Triphenyl-phosphat		Yes	7	KS	HP5MS	GC-MS
029	D	M	GC-MS	0.01		100	2	1	GPC SPE			Yes	3-5	GC	DB5 HP5-MS DB17	GC-ECD GC-NPD GC-MS (single-quad)
030	D	M	GC-ECD	0.02		50	6		GPC	Bromophos-ethyl	Yes	Yes		Capillary-GC	DB1	GC-ECD
031	D	S	GC-MS	0.01		10	5		SPE			Yes	2	Capillary-LC	HP5 RP18	GC-ECD HPLC-DAD/HPLC-FL
032	D	M	GC-MS	0.01	70.3	30	Ethyl acetate Ciclohexane (2:1)		GPC			Yes	4	DB5		GC-ECD. GC-NPD. GC-MS
033	D	M	GC-NPD	0.02		100	2		GPC			Yes	3	25m x 0.32mmx0.52µm	Ultra2	GC-ECD/NPD
034	D	M	GC-MS	0.01		100	2			PCB 153		Yes	2	30mx0.3mmx0.25µm	DB5 OU1701	GC-ECD
035	ND			0.05		50	3		GPC			Yes	4	HP-5MS		GC-MS/ECD/FPD

APPENDIX 7. Methods used by participants for determing pesticides

ACRINATHRIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
036	D	S	GC-MS	0.05		101	3		GPC		Yes					GC-ECD/NPD/MS
037	D	M	GC-MS	0.03		100	2		GPC	TPP		Yes	4	HP5		GC-MS
038	D	M	GC-MS	0.01	92	20	2			Triphenyl-phosphat		Yes	3	Capillary-GC	Optima5. DB17-MS	GC-ECD. GC-NPD. GC-MS
039	ND	S		0.01		45	3	LL	GPC	Aldrin		Yes	3	Restek 30x0.25x0.25	RTX-CLPesticide I+II	GC-ECD
040	D	S	GC-ECD	0.05		340	2		O+GPC	Parathion	Yes			Capillary		GC-ECD
041	D	S	GC-MS	0.02	20	75	Acetone+ Cyclohexan+ Ethyl Acetate		GPC			Yes	3	HP5		GC-ECD
042	D	M	GC-MS	0.02		100	2		GPC	EPN		Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	S	GC-MS	0.08		50	3		LL		Yes			Capillary	DB5	GC-ECD
044	D	M		0.02		100	2		GPC			Yes	5		DB5. DB1701	GC-MS
045	D	M	GC-ECD. GC-NPD. GC-MS	0.02		100	2		GPC			Yes	5			GC-ECD. GC-NPD.GC-MS
046	D	M	GC-ECD	0.01	100	10	5		O(PSA)	MIREX	Yes			Capillary	DB17. HP5	GC-ECD

APPENDIX 7. Methods used by participants for determining pesticides

ACRINATHRIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
047	D	M	GC-ECD	0.01		100	3					Yes	4	Capillary	DB5. DB1701	GC-ECD. GC-NPD
048	NA															
049	D	M	GC-MS	0.02	92.4	15	4						2		DB5MS	GC-ECD.GC-IT
050	NA															
051	NA															
052	NA															
053	NA															
054	NA															
055	NA															
056	NA															
057	D	S	GC-MS	0.05		20	6		GPC-SPE	Yes		Yes	3	DB5	Me Polisiloxan	GC-MS
058	NA															
059	NA															
060	NA															
061	D	M	GC-MS	0.02	87.2	15	6 (Dichloromethane)					Yes	5	DB5	5%Phenyl 95%Dimethyl-Polysiloxane	GC-ECD/NPD/MS

APPENDIX 7. Methods used by participants for determing pesticides

ACRINATHRIN

Lab Code	062	063	064	065	066	067	068	069	070	071	072
Quantification Method	NA	NA	NA	D	NA	NA	D	NA	NA	D	NA
Quantification using Standards in solvents or matrix				S			M			M	
Confirmation method				GC-MS			GC-MS			GC-MS	
RL (mg/kg)				0.02			0.05			0.01	
Recovery				84.3			82.8				
Sample Weight (g)				10			5			15	
Extraction Solvent				Dichloromethane			6			6	
Partion Step (if any)							1				
Clean up step										GPC	
Internal Standard (if any)							TFF				
Single level calibration				Yes							
Multi-level calibration							Yes			Yes	
Nº of points							5			2	
Column type				HP5			CIP SIL 8CB				
Stationary phase				Polysiloxane			FUSED SILICA			SE54. OV1701	
Determination				GC-ECD			GC-MS/HPLC-FL			GC-ECD	

APPENDIX 7. Methods used by participants for determining pesticides

ACRINATHRIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
073	NA															
074	NO RESULTS															
075	NA															
076	D	M	GC-MS	0.02		10	5	Yes	O			Yes	3	HP-5MS		GC-MS
077	NA															
078	D	M	GC-MS	0.05	66	50	1		GPC			Yes	4	Narrowbore	DB5	GC-ECD
079	NA															
080	NO RESULTS															
081	NA															
082	D	M	GC-MS	0.05		15	4				Yes			Capillary	HP-5MS	GC-ECD
083	NA															
084	NA															
085	D	M	GC-MS	0.02	98	15	4					Yes	4	Capillary	PhMSil 5%	
086	D	M	GC-MS/MS	0.02	82	15	4					Yes	4	30x25x25	DB-5.DB-17	GC/FPD/ECD/MS

APPENDIX 7. Methods used by participants for determing pesticides

ACRINATHRIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
087	D	M	GC-MS	0.02		10	4					Yes	3	HP-5		GC/ECD/NPD/FPD/MS
088	D	S	MS	0.03		15	4					Yes	5	NarrowBore	HP5-MS	GC-MS
089	D	M	GC-MS/MS	0.02		15						Yes	4	Capillary	BP5	GC-MS/MS
090	D	M	GC-MS/MS	0.02	92.10	15	1			TPP(QC)		Yes	3	Capillary	DB-5ms	GC-MS/MS
091	D	M	GC-MS/MS	0.02		15	1			TTP. Anthracene		Yes	3	HP-5MS		GC-ITD
092	D	M	GC-MS/MS	0.05		5.2	4					Yes	6	Factor Four		GC-MS/MS-ECD
093	NA															
094	D	M	MS/MS			15	4					Yes	4	30mx0.25x0.2	CPSIL8	GC-ECD.GC-NPD.GC-PFPD
095	D	M	GC-MS	0.05	86	75	1		GPC	Yes		Yes	3	CP-SIL 5CB.CPSIL19CB.CPSIL 8CB		GC-ECD.GC-FPD.GC-ITD
096	D	M	GC-ITD	0.05	108	15	4					Yes	4	Capillary. 25mx0.22mmID	VF-5MS.0.25µm (Varian)	GC-ITD
097	D	M	GC-MS	0.02	95	30	1		GPC	Triphenyl-phosphate		Yes	5	Capillary	DB-5	GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

ACRINATHRIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
098	D	M	GC-MS	0.05		10	1		SPE	Yes		Yes	4	CP-SIL 13CB		GC-MS
099	NA															
100	D	M	GC-MS	0.02	88	10	1		GPC			Yes	3		DB5	GC-MS
101	D	M	GC-MS	0.05	90	50	5		SPE		Yes			HP 5/HP 50	See column type	GC-ECD,GC-NPD
102	NA															
103	NA															
104	NA															
105	NA															
106	D	M	GC-MS			7.5	1			Ethyl-parathion	Yes			DB-1	0.25mm	GC-ECD/MS
107	ND			0.02		20	4					Yes	4	Capillary 30 m	HP-5	GC-ECD/NPD
108	NA															
109	NA															
110	D	M	GC-MS	0.02	88.80	20	3		SPE			Yes	5	DB-5		GC-ECD,GC-NPD
111	NA															
112	NA															
113	NA															

APPENDIX 7. Methods used by participants for determing pesticides

ACRINATHRIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
114	NA															
115	NA															
116	NA															
117	NA															
118	D	M	GC-MS	0.02	105	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	GC-MS	0.05		10	1		NO		Yes			Capillary	DB-5MS	GC-MS
120	NA															
121	NA															
122	D	S	GC-MS	0.05	97.80	30	1		NO			Yes	3	Chromopack 50mx0.25mmx0.25mm	CPSIL-8CB	GC-ECD
123	D	S	GC-MS	0.05		30	1		GPC		Yes			30mx0.32mm	CP-Sil 8 CB	GC-ECD
124	D	S		0.05		30	1		GPC			Yes	3	Supelco	3% SE-30	GC-ECD

APPENDIX 7. Methods used by participants for determining pesticides

ACRINATHRIN

Lab Code	125	126	127	128	129	130
Quantification Method	D	NO RESULTS	D	D	D	D
Quantification using Standards in solvents or matrix	S			S	S	M
Confirmation method	GC-MS					
RL (mg/kg)	0.05		0.002	0.05	0.05	0.05
Recovery	91			95		
Sample Weight (g)	25		30	30	30	30
Extraction Solvent	1		1	1	1	1
Partion Step (if any)						
Clean up step	GPC		GPC		GPC	GPC
Internal Standard (if any)						
Single level calibration						
Multi-level calibration	Yes		Yes	Yes	Yes	Yes
Nº of points	5		3	3	3	3
Column type	Capillary		50mx0.32mmx0.25um	30mx0.25mmx0.25um	Restek	Restek
Stationary phase	RTX 17025		CP-Sil 8 CB	RTX-CLP	Stx-CI-Pest.	RTX-5MS
Determination	GC-ECD		GC-ECD	GC-NPD	GC-ECD	GC-ECD

APPENDIX 7. Methods used by participants for determing pesticides

AZOXYSTROBIN

Lab Code	001	002 003	004	005	006	007	008	009	010	011
Quantification Method	D	D	D	D	D	D	D	D	NA	ND
Quantification using Standards in solvents or matrix	S	M	S	M	M	M	M	M		S
Confirmation method	GC-MS	GC-MS	GC-MS/LC-MS	GC-MS	LC-MS-MS	GC-ECD		GC-MS		GC-MS
RL (mg/kg)	0.05	0.05	0.05	0.15	0.05	0.01	0.01	0.03		0.05
Recovery	103	99	118	100	94	83	63	112.0		
Sample Weight (g)	15	15	20	50	10	25	25	50		25
Extraction Solvent	4	4	6	6	5	2	2	4		1
Partion Step (if any)								Yes		
Clean up step				O+LL		GPC	GPC	LL		SPE
Internal Standard (if any)		PCB97	Nitrofen+ Mirex			Dithalimphos		Aldrin Ditalimphos		
Single level calibration								Yes		
Multi-level calibration	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Nº of points	3-4	3	5	3	5	5	5			4
Column type	DB5 DB 1701	60x0.25x0.1 60x0.25x0.15	CAP	15x0.32x0.25	R-P	J&W 0.32/0.25mmID	DB	Capillary		30mx0.53mmx1.5µm
Stationary phase		DB5 DB1701	Restele CLP	DB170	C18	DB5. DB1701	1701/05/01/35	HP-5 DB-1701P		DB5. DB608
Determination	ECD NPD MS	GC-ECD	GC-ECD	GC-ECD GC-NPD	LC-MS-MS	GC-ECD. GC-NPD. GC-ITD	GC-ECD/NPD/ITD	NPD ECD		GC-ECD. GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

AZOXYSTROBIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
012	ND	M	GC-MS	0.05	60-70	50	3					Yes	8	HP5MS		GC-MS
013	D	S	LC-MS-MS	0.01	76	15	4									LC-MS
014	D	S	GC-MS	0.05		40	3		LL			Yes	3	GC-Capillary	DB5	GC-ECD-NPD-MS
015	ND			0.1		50	1/DCM (80/20)		SPE Florisil			Yes	3	Capillary 0.32	DB5. DB35	GC-ECD
016	ND	S		0.02		50	3	Yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD/ MS
017	D	S	GC-MS	0.01		40	2		GPC			Yes	5	DB5/DB1701		GC-ECD/PND
018	D	S	GC-MS	0.013		100	2		GPC	Yes		Yes	5	DB-5/1/1701		GC-ECD/NPD/FPD
019	D	M	GC-TOF	0.005	94	10	5			Triphenyl-phosphat		Yes	4	ZORBAX	C18	LC-MS/MS
020	D	M	GC-MS	0.010		25	2		GPC			Yes	3	FSOT	HP 5-MS	GC-MS
021	D	S	GC-MS	0.03	132.6	50	2		GPC		Yes			BD1/5/35/1301. HP50/1701/5MS		GC-NPD
022	D	M		0.01	92	10	6;(Methanol)		CEM ELUT			Yes	7	2.1x125mm; 3µm	RP-C18	LC-MS/MS
023	D	M	LC-MS/MS	0.01		10	Methanol					Yes	5	2.1x100mm	Atlantis C18	LC-MS/MS

APPENDIX 7. Methods used by participants for determing pesticides

AZOXYSTROBIN

Lab Code	024	025	026	027	028	029	030	031	032	033
Quantification Method	D	D	D	D	D	D	D	D	D	D
Quantification using Standards in solvents or matrix	M	M	S	M	M	M	M	S	M	M
Confirmation method	GC-MS/ECD	LC-MS/MS	GC-ECD	GC-MS	GC-MSD	GC-MS	GC-NPD	GC-MS	GC-MS	GC-ECD
RL (mg/kg)	0.01	0.006	0.05		0.02	0.02	0.03	0.02	0.01	0.03
Recovery					120				95.8	
Sample Weight (g)	10	20	100	100	10	100	50	50	30	100
Extraction Solvent	Acetonitril	6	2	2	5	2	6	2	Ethyl Acetate/ Ciclohexane (2:1)	2
Partion Step (if any)						1				
Clean up step			GPC	GPC	Others	GPC SPE	GPC	GPC	GPC	GPC
Internal Standard (if any)	PCB 209			EPSILON-HCH	Triphenyl-phosphat		Bromophos-ethyl			
Single level calibration							Yes			
Multi-level calibration	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Nº of points	9	2x4	3		7	3-5		2	4	3
Column type	ZP 5	HPLC(RP)	Capillary	30mx0.25x0.25	KS	GC	Capillary-GC	Capillary	DB5	25m x 0.32mmx0.52µm
Stationary phase	Dimethyl-polysiloxan	RP(C18)	Varian VF-5MS	DB-5. Factor four	HPSMS	DB5 HP5-MS DB17	ZB5	HP 5		Ultra2
Determination	GC-MS/ECD	LC-MS/MS	GC-ECD GC-NPD GC-MS	GC-ECD	GC-MS	GC-ECD GC-NPD GC-MS (single-quad)	GC-NPD	GC-ECD GC-NPD GC-MS	GC-ECD. GC-NPD. GC-MS	GC-ECD/NPD

APPENDIX 7. Methods used by participants for determining pesticides

AZOXYSTROBIN

Lab Code	034	035	036	037	038	039	040	041	042	043
Quantification Method	D	D	D	NA	D	D	NA	D	D	D
Quantification using Standards in solvents or matrix	M	M	M		M	S		S	M	M
Confirmation method	GC-MS	LC-MS/MS	GC-MS		LC-MS/MS	GC-MS		GC-MS	GC-MS	LC-MS/MS
RL (mg/kg)	0.01	0.01	0.05		0.05	0.05		0.05	0.02	0.006
Recovery					88			101		
Sample Weight (g)	100	10	101		20	45		75	100	10
Extraction Solvent	2	5	3		2	3		Acetone Followed By Cyclohexan And Ethyl Acetate	2	6 (Methanol)
Partion Step (if any)						LL				
Clean up step		O	GPC			GPC		GPC	GPC	SPE
Internal Standard (if any)	PCB 153				Triphenyl-phosphat	Aldrin			EPN	
Single level calibration			Yes							
Multi-level calibration	Yes	Yes			Yes	Yes		Yes	Yes	Yes
Nº of points	2	5			3	3		3	3	2
Column type	30mx0.3mmx0.25µm	Aqua5µ. 50x2mm			Capillary-GC	Restek 30x0.25x0.25		HP5	Capillary	
Stationary phase	DB5 OU1701	RP18			Optima5. Optima 17. DB17-MS. C18. Aqua5µ	RTX-CLPesticide I+II		C18	DB5. DB1701. DB35	C18
Determination	GC-ECD	LC-MS/MS	GC-ECD/NPD/MS		GC-ECD. GC-NPD. GC-MS. LC-MS/MS	GC-ECD		GC-ECD	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)	LC-MS/MS

APPENDIX 7. Methods used by participants for determing pesticides

AZOXYSTROBIN

Lab Code	044	045	046	047	048	049	050	051	052	053	054	055	056	057
Quantification Method	D	D	D	D	NA	NA	NA	NA	NA	NA	D	NA	D	D
Quantification using Standards in solvents or matrix	M	M	M	M							M		M	S
Confirmation method		GC-ECD. GC-NPD. GC-MS	GC-ECD	GC-ECD							GC-ECD			GC-MS
RL (mg/kg)	0.01	0.03	0.01	0.01							0.03		0.02	0.05
Recovery			109								90.5		90.35	
Sample Weight (g)	100	100	50	100							25		15	20
Extraction Solvent	2	2	3	2							6		4	6
Partion Step (if any)											Yes			
Clean up step		GPC	GPC	GPC							O		GPC	GPC-SPE
Internal Standard (if any)														Yes
Single level calibration			Yes											
Multi-level calibration	Yes	Yes		Yes							Yes		Yes	
Nº of points	4	5		3 . 5							3		5	3
Column type			Capillary	Capillary							HP5MS		DB5	
Stationary phase	RP8	DB5. DB1701	DB17. HP5	DB5. DB1701							5% Phenyl		GC-MS	Me Polisiloxan
Determination	LC-MS/MS	GC-ECD. GC-NPD. GC-MS	GC	GC-ECD. GC-NPD. GC-FPD							GC-ECD			GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

AZOXYSTROBIN

Lab Code	058	059	060	061	062	063	064	065	066	067	068
Quantification Method	ND	NA	NA	D	NA	NA	D	D	D	NA	NA
Quantification using Standards in solvents or matrix	M			M			S	S	S		
Confirmation method	GC-MS			GC-MS			GC-MS	GC-MS	GC-MS		
RL (mg/kg)	0.1			0.05				0.03	0.05		
Recovery				75.1			111.3	75	95		
Sample Weight (g)	15			15			10	10	25		
Extraction Solvent	1			6-Dichloro-methane			6	Dichloro-methane	5		
Partion Step (if any)									Yes		
Clean up step	GPC						O		SPE		
Internal Standard (if any)	Yes						Yes		Yes		
Single level calibration							Yes	Yes			
Multi-level calibration	Yes			Yes					Yes		
Nº of points	3			5					2		
Column type	HP5MS			DB5			Capillary	HP5	Capillary		
Stationary phase	5%PHSi			5%Phenyl 95%Dimethy-Lpolysiloxane			HP-5	POLYSILOXANE	5%PbSil		
Determination	GC-MS			GC-ECD/NPD/MS			GC-ECD	GC-ECD	GC-ECD/NPD		

APPENDIX 7. Methods used by participants for determing pesticides

AZOXYSTROBIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
069	D	S	GC-MS		81	5	1	ASE (Dionex)	GPC	Ronnel+Azobencene+ Triphenyl Phosphate	Yes			MDN-5S	5%PHENYL SILICONE	GC-ECD/NPD/FPD
070	D	S	GC-ECD	0.01		15	6		GPC	M-series	Yes			25m ID 0.32 mm 0.25um	SE 54; OV1701	GC-ECD/NPD
071	D	M	GC-MS	0.01		15	6		GPC			Yes	2		SE54. OV1701	GC-ECD
072	D	S		0.01	73	10	1		GPC	Dichlo-fenthion	Yes			HP1. HP5		GC-ECD/NPD
073	D	S	GC-ECD	0.02		10	Dichloro-methane					Yes	3	Capillary	SE30/SE54	GC-ECD/NPD
074	NO RESULTS															
075	NA															
076	D	M	GC-MS	0.05		10	5	Yes	O			Yes	3	HP-5MS		GC-MS
077	D	S	GC-MS	0.05	43	25	2		GPC			Yes	4	HP-5MS	5%Phenyl-Methyl siloxane	GC-MS
078	D	M	GC-MS	0.05	64	50	1		GPC			Yes	4	Narrowbore	DB 5	GC-ECD
079	D	M	GC-ECD	0.05		15	4				Yes		1	HP-1		GC-ECD
080	NO RESULTS															

APPENDIX 7. Methods used by participants for determining pesticides

AZOXYSTROBIN

Lab Code	081	082	083	084	085	086	087	088	089	090	091	092
Quantification Method	NA	ND	NA	NA	D	D	D	NA	NA	D	NA	D
Quantification using Standards in solvents or matrix					M	M	M			M		M
Confirmation method					GC-MS	LC-MS/MS	GC-MS			LC-MS/MS		GC-ECD
RL (mg/kg)					0.02	0.02	0.05			0.05		0.05
Recovery					92	84				86		
Sample Weight (g)					15	5	10			15		5.2
Extraction Solvent					4	5	4			1		4
Partion Step (if any)												
Clean up step												
Internal Standard (if any)										TPP(QC)		
Single level calibration												
Multi-level calibration					Yes	Yes	Yes			Yes		Yes
Nº of points					4	4	3			4		6
Column type					Capillary	Luna(Phenom)	HP-5			3 um		Factor Four
Stationary phase					PhMSil 5%	C-18				C-18		
Determination						LC-MS/MS	GC-ECD/NPD/FPD/MS			LC-MS/MS		GC-MS/MS-ECD

APPENDIX 7. Methods used by participants for determing pesticides

AZOXYSTROBIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
093	NA															
094	NA															
095	D	M	GC-MS	0.1	81	75	1		GPC	Yes		Yes	3	CP-SIL 5CB.CPSIL19CB.CPSIL 8CB		GC-ECD.GC-FPD. GC-ITD
096	D	S	GC-ITD	0.01	103	7.5	4(+Na_2SO_4)					Yes	4	150x3.2mmID	Alltima C18.5mm	LC-MS/MS
097	D	M	GC-MS	0.02	86	30	1		GPC	Triphenyl Phosphate		Yes	5	Capillary	DB-5	GC-MS
098	D	M	LC-MS/MS	0.05		10	1		LL	Yes		Yes	4	RP-HPLC	C-18	LC-MS/MS
099	D	M	GC-MS	0.01	80	30	1		O			Yes	4	ZB5	30%Phenyl	GC-MS
100	D	M	LC-MS/MS	0.05	93	10	1					Yes	4	C-18		LC-MS/MS
101	D	M	GC-MS	0.05	90	50	5		SPE		Yes			HP 5/HP 50	See column type	GC-ECD.GC-NPD
102	D	M	GC-ITD	0.05	85	50	1		GPC		Yes			At-1701	Attm-1701	GC-FPD
103	D	S	GC-MS	0.02	83	20	3		LL			Yes	2	HP-5		GC-ECD/NPD
104	D	M	GC-MS	0.02	88	75	1	1/20	GPC	Aldrin		Yes	5	Narrowbore	AT-5MS	GC-MS
105	NA															
106	D	M	GC-MS	0.05		7.5	1			Ethyl-parathion	Yes			DB-1	0.25mm	GC-ECD/MS

APPENDIX 7. Methods used by participants for determining pesticides

AZOXYSTROBIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
107	D	M	GC-MS	0.05	117	20	4					Yes	3	Capillary 60 m	HP-5	GC-MS
108	D	S	GC-ECD	0.05	93	5	3					Yes	3	HP-5	5% Phenyl Methyl Siloxane	GC-ECD
109	D	S	GC-EC	0	91	100	3					Yes	3	HP-1	Me-SiOH	GC-ECD
110	D	M	GC-MS	0.02	92.80	20	3		SPE			Yes	5	DB-5		GC-ECD.GC-NPD
111	D	S		0.05	98.90	10	4		SPE (Silica)			Yes	5	HP-5MS	5%Phenyl	GC-ECD/NPD
112	D	S	GC-NPD	0.05	95	100	3		O		Yes			HP1	MeSilicone	GC-ECD
113	D	M	GC-ITD	0.026	103	15	4		NO	Hexachloro-benzene		Yes	5	DB-5MS		GC-ITD
114	D	S	GC-ECD	0.09		18	1		GPC			Yes	4	Capillary	HP5	GC-ECD
115	ND		GC/MS	0.05		50	4	Dichloromethane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	D	S	GC/MS	0.01	92	50	2		SPE		Yes			HP5-MS		GC/MS
117	D	M	GC-MS	0.05	102.20	20	4	Yes	GPC			Yes	5	HP-5MS		GC-MS
118	D	M	GC-MS	0.02	101	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	GC-MS	0.05		10	1		NO		Yes			Capillary	DB-5MS	GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

AZOXYSTROBIN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
120	NA															
121	D	M	GC-MS	0.03		25	1		GPC			Yes	5	Capillary	DB-5MS	GC-MS(single quad).ECD. NPD
122	D	S	GC-ECD	0.05	106	30	1		GPC			Yes	4	Agilent Technologies	Zorbax SB 18	HPLC-UV
123	D	S	HPLC	0.05		30	1		GPC		Yes			30mx0.32mm	CP-Sil 8 CB	GC-ECD
124	D	S	TLC	0.05		30	1		GPC			Yes	3	Supelco	3% SE-30	GC-ECD
125	D	S	GC-MS	0.05	87	25	1		GPC			Yes	5	Capillary	CPSyl 8CB	GC-NPD
126	NO RESULTS															
127	D	S		0.03	101.5	30	1		O			Yes	4	Nucleosil 100	C-18	HPLC-UV
128	D	S	GC-ECD	0.05	104	30	1		GPC			Yes	3	30mx0.25mm x0.25um	RTX-CLP	GC-NPD
129	D	S	HPLC-UV	0.05		30	1		GPC			Yes	3	Restek	Stx-Ci-Pest.	GC-ECD
130	D	M	GC-ECD	0.05		30	1		GPC			Yes	3	Waters	Nova-Pack C-18	HPLC-UV

APPENDIX 7. Methods used by participants for determining pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
001	D	S	GC-ECD	0.01	101	15	4					Yes	3-4	DB5 DB 1701		ECD NPD MS
002/3	D	M	GC-MS	0.02	107	15	4			PCB97		Yes	3	60x0.25x0.1 60x0.25x0.15	DB5 DB1701	GC-ECD
004	D	M	GC-MS/LC-MS	0.05	92	5	Acetone/ EtOAc/ Hexane			Dialdrin		Yes	4	Capillary	DB-5MS	GC-MS
005	D	M	GC-MS	0.06	95	50	6		O+LL			Yes	3	15x0.32x0.25	DB170	GC-ECD GC-NPD
006	D	M	GC-MS		92	10	1		O			Yes	5	DB 5MS	MS	GC-MS
007	D	M	GC-ITD	0.02	119	25	2		GPC	Dithalimphos		Yes	5	J&W 0.32/0.25mmID	DB5. DB1701	GC-ECD. GC-NPD. GC-ITD
008	D	M		0.25	77	25	2		GPC			Yes	5	DB	1701/05/01/35	GC-ECD/NPD/ITD
009	D	M	GC-MS	0.02	117	50	4	yes	LL	Aldrin Ditalimphos	Yes			Capillary	HP-5 DB-1701P	NPD ECD
010	D	M	GC-EC	0.02		100	3	LL	no	Aldrin		Yes	3	Capillary	DB 5 DB1701	GC-ECD GC-NPD
011	ND	S	GC-MS	0.02		25	1		SPE			Yes	4	30mx0.53mmx1.5µm	DB5. DB608	GC-ECD. GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
012	D	M	GC-MS	0.01	70-110	50	3					Yes	8	HP5MS		GC-MS
013	D	S	GC-ELCD	0.01	82	25	Ethyl Acetate-Dichloromethane		SPE							GC-ECD/ELCD
014	D	S	GC-MS	0.05		40	3		LL			Yes	3	GC-Capillary	DB5	GC-ECD-NPD-MS
015	D	S	GC-MS	0.01		50	1/DCM (80/20)		SPE Florisil			Yes	3	Capillary 0.32	DB5. DB35	GC-ECD
016	D	S		0.02		50	3	Yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD /MS
017	D	S	GC-MS	0.01		40	2		GPC			Yes	5	DB5/DB1701		GC-ECD/PND
018	D	S	GC-MS	0.005		100	2		GPC	Yes		Yes	5	DB-5/1/1701		GC-ECD/NPD/FPD
019	D	M	GC-TOF	0.01	97	10	5			PCB 138		Yes	4	DB5		GC-MS
020	D	M	GC-MS	0.010		25	2		GPC			Yes	3	FSOT	HP 5-MS	GC-MS
021	D	S	GC-MS	0.01	112.1	50	2		GPC		Yes			BD1/5/35/1301. HP50/1701/5MS		GC-ECD
022	D	S		0.01	101	50	6; Acetone	Ciclohexane/Ethyl acetate	GPC	Trans-HCEO	Yes			Capillary	DB5/210	GC-ECD

APPENDIX 7. Methods used by participants for determining pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
023	D	M	GC-MS	0.05		50	2		GPC			Yes	5	30mx0.25mm	HP5MS	GC-MS
024	D	M	GC-MS/ECD	0.02		10	Acetonitril			PCB 209		yes	9	ZP 5	Dimethyl-polysiloxan	GC-MS/ECD
025	D	M	GC-MS	0.01		50	3		GPC			Yes	3	Capillar-GC	DB1701 (HPG-MS)	GC-ECD/PND/FPD
026	D	S	GC-MS	0.01		10	5		SPE			Yes	3	Capillary	Varian VF-5MS	GC-ECD GC-NPD GC-MS
027	D	M	GC-MS			100	2		GPC	EPSILON-HCH				30mx0.25x0.25	DB-5. Factor four	GC-ECD
028	D	M	GC-MSD	0.01	103	10	5		others	Triphenyl-phosphat		Yes	7	KS	HPSMS	GC-MS
029	D	M	GC-MS	0.005		100	2	1	GPC SPE			Yes	3-5	GC	DB5 HP5-MS DB17	GC-ECD GC-NPD GC-MS (single-quad)
030	D	M	GC-ECD	0.02		50	6		GPC	Bromophos-ethyl	Yes			Capillary-GC	DB1	GC-ECD
031	D	S	GC-MS	0.02		50	2		GPC			Yes	2	Capillary	HP 5	GC-ECD GC-NPD GC-MS
032	D	M	GC-MS	0.01	95.9	30	Ethyl acetate/ Ciclohexane (2:1)		GPC			Yes	4	DB5		GC-ECD. GC-NPD. GC-MS
033	D	M	GC-ECD	0.02		100	2		GPC			Yes	3	25m x 0.32mmx0.52µm	Ultra2	GC-ECD/NPD

APPENDIX 7. Methods used by participants for determing pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
034	D	M	GC-MS	0.01		100	2			PCB 153		Yes	2	30mx0.3mmx0.25µm	DB5 OU1701	GC-ECD
035	D	M	GC-MS	0.02		50	3		GPC			Yes	4	HP-5MS		GC-MS/ECD/FPD
036	D	S	GC-MS	0.05		101	3		GPC		Yes					GC-ECD/NPD/MS
037	D	M	GC-MS	0.05		100	2		GPC	TPP/Nitrofen		Yes	4	HP5/DB1701		GC-MS/ECD
038	D	M	GC-MS	0.01	90	20	2			Triphenyl-phosphat		Yes	3	Capillary-GC	Optima5. DB17-MS	GC-ECD. GC-NPD. GC-MS
039	D	S	GC-MS	0.05		45	3	LL	GPC	Aldrin		Yes	3	Restek 30x0.25x0.25	RTX-CLPesticide I+II	GC-ECD
040	D	S	GC-ECD	0.05		340	2		O+GPC	Parathion	Yes			Capillary		GC-ECD
041	D	S	GC-MS	0.05	128	75	Acetone Followed By Cyclohexan And Ethyl Acetate		GPC			Yes	3	HP5		GC-ECD
042	D	M	GC-MS	0.01		100	2		GPC	EPN		Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	S	GC-MS	0.01		50	3		LL		Yes			Capillary	DB5	GC-ECD

APPENDIX 7. Methods used by participants for determining pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
044	D	M		0.01		100	2		GPC			Yes	5		DB5	GC-MS
045	D	M	GC-ECD. GC-MS	0.02		100	2		GPC			Yes	5		DB5. DB1701	GC-ECD. GC-NPD.GC-MS
046	D	M	GC-ECD	0.005	93	50	3		GPC		Yes			Capillary	DB17. HP5	GC
047	D	M	GC-ECD	0.01		100	2		GPC			Yes	3 . 5	Capillary	DB5. DB1701	GC-ECD. GC-NPD.GC-FPD
048	D	S	GC-ECD. MS	0.01		7	4	Yes				Yes	3	Capillary	DB5	GC-ECD. GC-MS
049	D	M	GC-MS	0.05	99.5	15	4						2		DB5MS	GC-ECD.GC-IT
050	NA															
051	D	M	GC-ECD	0.01	104	25	6					Yes	5		HP608	GC-ECD
052	NA															
053	NA															
054	D	M	GC-ECD	0.02	110	25	6	Yes	O			Yes	3	HP5MS	5%phenyl	GC-ECD
055	D	M	GC-ECD	0.02	121	15	4					Yes	5	HP1701	Me Siloxane	GC-ECD
056	D	M	GC-MS	0.04	93.88	15	4		GPC			Yes	3	DB5/1701		GC-ECD
057	D	S	GC-MS	0.02		20	6		GPC-SPE	Yes		Yes	3	DB5	Me Polisiloxan	GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
058	D	M	GC-MS	0.05		15	1		GPC	Yes		Yes	3	HP5MS	5%PHSi	GC-MS
059	D	S	GC-MS	0.05		5	1		SPE			Yes	2	Capillary	ZB5	GC-ECD
060	NA															
061	D	M	GC-MS	0.02	93.7	15	6(Dichloro-methane)					Yes	5	DB5	5%Phenyl 95%Dimethyl-Polysiloxane	GC-ECD/NPD/MS
062	D	S	GC-ECD	0.005	88.2	50	Acetone+ Methanol (1:1)		EMPORE DISK C8	Fenclorfos		Yes	3			GC-ECD/NPD
063	D	S	GC-ECD	0.01	89	25	3	EXTRELUT 20			Yes			Capillary	DB-608. SPB1	GC-ECD
064	D	S	GC-MS		113.8	10	6		O	Yes	Yes			Capillary	HP-5	GC-ECD
065	D	S	GC-MS	0.01	93.2	10	Dichloro-methane				Yes			HP5	POLYSILOXANE	GC-ECD
066	D	S	GC-MS	0.05	100	25	5	Yes	SPE	Yes		Yes	2	Capillary	5%PbSil	GC-ECD/NPD
067	D	M	GC-MS			10	1	EXTRELUT	GPC	Yes		Yes	4			GC-MS
068	D	M	GC-MS	0.05	91	5	6	1		TFF		Yes	5	CIP SIL 8CB	FUSED SILICA	GC-MS/HPLC-FL

APPENDIX 7. Methods used by participants for determining pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
069	D	S	GC-MS		83	5	1	ASE (Dionex)	GPC	Ronnel+ Azobencene+ Triphenyl phosphate	Yes			MDN-5S	5%Phenyl Silicone	GC-ECD/NPD/FPD
070	D	S	GC-ECD	0.01		15	6		GPC	M-series	Yes			25m ID 0.32 mm 0.25um	SE 54; OV1701	GC-ECD/NPD
071	D	M	GC-MS	0.01		15	6		GPC			Yes	2		SE54. OV1701	GC-ECD
072	D	S		0.01	70	10	1		GPC	Diclofention	Yes			HP1. HP5		GC-ECD/NPD
073	D	S	GC-ECD	0.01		10	Dichloro-methane					Yes	3	Capillary	SE30/SE54	GC-ECD/NPD
074	NO RESULTS															
075	D	S	GC-MS	0.085		10	3		SPE	Fenchlorphos	Yes				DB5	GC-ECD. GC-NPD. GC-MS (SINGLE-QUAD)
076	D	M	GC-MS	0.01		10	5	Yes	O			Yes	3	HP-5MS		GC-MS
077	D	S	GC-MS	0.02	90	25	2		GPC			Yes	4	HP-5MS	5%Phenyl-MethylSiloxane	GC-MS
078	D	M	GC-MS	0.05	89	50	1		GPC			Yes	4	Narrowbore	DB 5	GC-ECD
079	D	M	GC-MS	0.05		15	4				Yes		1	HP-1		GC-ECD
080	NO RESULTS															

APPENDIX 7. Methods used by participants for determing pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
081	D	M	GC-MS	0.01		20	1					Yes	3-6	HP-5MS	5% Ph. Me S	GC-ECD/FPD/TD
082	D	M	GC-MS	0.05		15	4				Y			Capillary	HP-5MS	GC-ECD
083	D	M	GC-MS	0.01		15	4	LL phase separation				Y	4	Varian CP 3800	Low bleed fused silica	GC-MS
084	D	M	GC-MS/MS	0.01		10	1					Y	4	CP-Sil 8		GC-MS/MS
085	D	M	GC-MS	0.02	102	15	4					Y	4	Capillary	PhMSil 5%	
086	D	M	GC-MS/MS	0.05	84	15	4					Y	4	30x25x25	DB-5.DB-17	GC/FPD/ECD/MS
087	D	M	GC-MS	0.03		10	4					Yes	3	HP-5		GC-ECD/NPD/FPD/MS
088	D	S	MS	0.03		15	4					Yes	5	NarrowBore	HP5-MS	GC-MS
089	NA															
090	D	M	GC-MS/MS	0.05	82.20	15	1			TPP(QC)		Yes	3	Capillary	DB-5ms	GC-MS/MS
091	D	M	GC-MS/MS	0.05		15	1			TTP. Anthracene		Yes	3	HP-5MS		GC-ITD
092	D	M	GC-MS/MS	0.05		5.2	4				Yes			Factor Four		GC-MS/MS-ECD

APPENDIX 7. Methods used by participants for determining pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
093	D	S	GC-MS	0.05		15	4					Yes	4	30m/25x25	CPSIL8CB	GC-MS
094	D	M	MS/MS			15	4					Yes	4	30mx0.25x0.2	CPSIL8	GC-ECD.GC-NPD.GC-PFPD
095	D	M	GC-MS	0.1	86	75	1		GPC	Yes		Yes	3	CP-SIL 5CB.CPSIL19CB.CPSIL 8CB		GC-ECD.GC-FPD.GC-ITD
096	D	M	GC-ITD	0.05	110	15	4					Yes	4	Capillary. 25mx0.22mmID	VF-5MS.0.25µm (Varian)	GC-ITD
097	D	M	GC-MS	0.02	96	30	1		GPC	Triphenyl Phosphate		Yes	5	Capillary	DB-5	GC-MS
098	D	M	GC-MS	0.05		10	1		SPE	Yes		Yes	4	CP-SIL13CB		GC-MS
099	D	M	GC-MS	0.01	88	30	1		O			Yes	4	ZB5	30%Phenyl	GC-MS
100	D	M	GC-MS	0.05	89	10	1		GPC			Yes	3		DB5	GC-MS
101	D	M	GC-MS	0.01	86	50	5		SPE		Yes			HP 5/HP 50	See column type	GC-ECD.GC-NPD
102	D	M	GC-ITD	0.01	95	50	1		GPC		Yes			At-1701	Attm-1701	GC-FPD
103	D	S	GC-MS	0.02	91	20	3		LL			Yes	2	HP-5		GC-ECD/NPD
104	D	M	GC-MS	0.03	119	75	1	1/20	GPC	Aldrin		Yes	5	Narrowbore	AT-5MS	GC-MS
105	NA															
106	D	M	GC-MS	0.05		7.5	1			Ethyl-parathion	Yes			DB-1	0.25mm	GC-ECD/MS

APPENDIX 7. Methods used by participants for determing pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
107	D	M	GC-MS	0.05	90.30	20	4					Yes	4	Capillary 30 m	HP-5	GC-ECD/NPD
108	D	S	GC-ECD	0.05	92	5	3					Yes	3	HP-5	5% Phenyl Methyl Siloxane	GC-ECD
109	D	S	GC-EC	0	89	100	3					Yes	3	HP-1	Me-SiOH	GC-ECD
110	D	M	GC-MS	0.02	89.60	20	3		SPE			Yes	5	DB-5		GC-ECD.GC-NPD
111	D	S		0.05	82.90	10	4		SPE(Silica)			Yes	5	HP-5MS	5%Phenyl	GC-ECD/NPD
112	D	S		0.05	102	100	3		O		Yes			HP1	MeSilicone	GC-ECD
113	D	M	GC-ITD	0.05	88	15	4		NO	Hexachloro-benzene		Yes	5	DB-5MS		GC-ITD
114	D	S	GC-ECD	0.03		18	1		GPC			Yes	4	Capillary	HP5	GC-ECD
115	D	S	GC/MS	0.05		50	4	Dichloromethane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	D	S	GC/MS	0.01	99	50	2		SPE		Yes			HP5-MS		GC/MS
117	D	M	GC-MS	0.05	108	20	4	Yes	GPC			Yes	5	HP-5MS		GC-MS
118	D	M	GC-MS	0.02	93	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	GC-MS	0.01		10	1		NO		Yes			Capillary	DB-5MS	GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

BROMOPROPYLATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
120	NA															
121	D	M	GC-MS	0.005		25	1		GPC			Yes	5	Capillary	DB-5MS	GC-MS(single quad).ECD. NPD
122	D	S	GC-MS	0.01	83.40	30	1		GPC			Yes	3	Chrompack 50mx0.25mm x0.25mm	CPSIL-8CB	GC-ECD
123	D	S	GC-MS	0.1		30	1		GPC		Yes			30mx0.32mm	CP-Sil 8 CB	GC-ECD
124	D	S		0.05		30	1		GPC			Yes	3	Restek	STX-CLP	GC-ECD
125	D	S	GC-MS	0.05	84	25	1		GPC			Yes	5	Capillary	RTX 17025	GC-ECD
126	NO RESULTS															
127	D	S	GC-MS	0.001		30	1		GPC			Yes	3	50mx0.32mmx0.25um	CP-Sil 8 CB	GC-ECD
128	D	S	GC-ECD	0.02	116	30	1		GPC			Yes	3	Purosphere RP18. 250/4mm 5um		HPLC-DAD
129	D	S		0.05		30	1		GPC			Yes	3	Restek	Stx-CI-Pest.	GC-ECD
130	D	M		0.05		30	1		GPC			Yes	3	Restek	RTX-5MS	GC-ECD

APPENDIX 7. Methods used by participants for determing pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
001	D	S	GC-MS	0.01	90	15	4					Yes	3-4	DB5 DB 1701		ECD NPD MS
002/3	D	M	GC-MS	0.01	105	15	4			PCB97		Yes	3	60x0.25x0.1 60x0.25x0.15	DB5 DB1701	GC-ECD
004	D	S	GC-MS	0.05	100	20	6			Nitrofen +Mirex		Yes	5	CAP	Restele CLP	GC-ECD
005	D	M	GC-MS	0.03	100	50	6		O+LL			Yes	3	15x0.32x0.25	DB170	GC-ECD GC-NPD
006	NA															
007	D	M	GC-ITD	0.02	107	25	2		GPC	Dithalimphos		Yes	5	J&W 0.32/0.25mmID	DB5. DB1701	GC-ECD. GC-NPD. GC-ITD
008	D	M		0.01	65	25	2		GPC			Yes	5	DB	1701/05/01/35	GC-ECD/NPD/ITD
009	D	M	GC-MS	0.02	93.0	50	4	Yes	LL	Aldrin Ditalimphos	yes			Capillary	HP-5 DB-1701P	NPD ECD
010	D	M	GC-EC	0.02		100	3	LL	no	Aldrin		Yes	3	Capillary	DB 5 DB1701	GC-ECD GC-NPD
011	D	S	GC-MS	0.01	60	25	1		SPE			Yes	4	30mx0.53mmx1.5µM	DB5. DB608	GC-ECD. GC-MS
012	D	M	GC-MS	0.02	70-110	50	3					Yes	8	HP5MS		GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
013	D	S	GC-ELCD	0.01	80	25	ethyl acetate-dichloromethane		SPE							GC-ECD/ELCD
014	D	S	GC-MS	0.02		40	3		LL			Yes	3	GC-Capillary	DB5	GC-ECD-NPD-MS
015	D	S	GC-MS	0.01		50	1/DCM (80/20)		SPE Florisil			Yes	3	Capillary 0.32	DB5. DB35	GC-ECD
016	D	S		0.02		50	3	Yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD/MS
017	D	S	GC-MS	0.01		40	2		GPC			Yes	5	DB5/DB1701		GC-ECD/PND
018	D	S	GC-MS	0.002		100	2		GPC	Yes		Yes	5	DB-5/1/1701		GC-ECD/NPD/FPD
019	D	M	GC-TOF	0.02	70	10	5			PCB138		Yes	5	DB5		GC-MS
020	D	M	GC-MS	0.010		25	2		GPC			Yes	3	FSOT	HP 5-MS	GC-MS
021	D	S	GC-MS	0.01	97.5	50	2		GPC		Yes			BD1/5/35/1301. HP50/1701/5MS		GC-ECD
022	D	S		0.01	98	50	6; Acetone	Ciclohexane/Ethyl acetate	GPC	Trans-HCEO	Yes			Capillary	DB5/210	GC-ECD
023	D	S	GC-MS	0.01		50	2		GPC			Yes	5	30mx0.25mm	HP5MS	GC-MS
024	ND			0.01												

APPENDIX 7. Methods used by participants for determing pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
025	D	M	GC-MS	0.01		50	3		GPC			yes	3	Capillary-GC	DB1701 (HPG-MS)	GC-ECD/PND/FPD
026	D	S	GC-MS	0.05		100	2		GPC			yes	3	Capillary	Varian VF-5MS	GC-ECD GC-NPD GC-MS
027	D	M	GC-MS			100	2		GPC	EPSILON-HCH				30mx0.25x0.25	DB-5. Factor four	GC-ECD
028	D	M	GC-ECD	0.01	65.6	10	5		others	Triphenyl-phosphat		yes	7	KS	HP5MS	GC-MS
029	D	M	GC-MS	0.005		100	2	1	GPC SPE			yes	3-5	GC	DB5 HP5-MS DB17	GC-ECD GC-NPD GC-MS (single-quad)
030	D	M	GC-ECD	0.01		50	6		GPC	Bromophos-ethyl	Yes			Capillary-GC	DB1	GC-ECD
031	D	S	GC-MS	0.01		50	2		GPC			yes	2	Capillary	HP 5	GC-ECD GC-NPD GC-MS
032	D	M	GC-MS	0.01	90.4	30	Ethyl acetate/ Ciclohexane (2:1)		GPC			Yes	4	DB5		GC-ECD. GC-NPD. GC-MS
033	D	M	GC-ECD	0.01		100	2		GPC			Yes	3	25m x 0.32mmx0.52µm	Ultra2	GC-ECD/NPD
034	D	M	GC-MS	0.01		100	2		GPC	Parathion-methyl	Yes			30mx0.3mmx0.5µm	DB5 DB17	GC-PND
035	D	M	GC-MS	0.01		50	3		GPC				4	HP-5MS		GC-MS/ECD/FPD

APPENDIX 7. Methods used by participants for determining pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
036	D	S	GC-MS	0.01		101	3		GPC		Yes					GC-ECD/NPD/MS
037	D	M	GC-MS	0.01		100	2		GPC	TPP		Yes	4	HP5		GC-MS
038	D	M	GC-MS	0.01	84	20	2			Triphenyl-Phosphat		Yes	3	Capillary-GC	Optima5. Optima 17. DB17-MS	GC-ECD. GC-NPD. GC-MS
039	D	S	GC-MS	0.01		45	3	LL	GPC	Aldrin		yes	3	Restek 30x0.25x0.25	RTX-CLPesticide I+II	GC-ECD
040	D	S	GC-ECD	0.01		340	2		O+GPC	Parathion	Yes			Capillary		GC-ECD
041	D	S	GC-MS	0.01	75	75	Acetone Followed by Cyclohexan and Ethyl Acetate		GPC			Yes	3	HP5		GC-ECD
042	D	M	GC-MS	0.01		100	2		GPC	EPN		Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	S	GC-MS	0.004		50	3		LL		Yes			Capillary	DB5	GC-ECD
044	D	M		0.03		100	2		GPC			Yes	5		DB5	GC-MS
045	D	M	GC-ECD. GC-NPD. GC-MS	0.01		100	2		GPC			Yes	5		DB5. DB1701	GC-ECD. GC-NPD.GC-MS
046	D	M	GC-ECD	0.005	101	50	3		GPC		Yes			Capillary	DB17. HP5	GC

APPENDIX 7. Methods used by participants for determing pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
047	D	M	GC-ECD	0.005		100	3		GPC			Yes	4	Capillary	DB5. DB1701	GC-ECD. GC-NPD
048	D	S	GC-ECD. MS	0.01		7	4	Yes				Yes	3	Capillary	DB5	GC-ECD. GC-MS
049	D	M	GC-MS	0.01	96	15	4						2		DB5MS	GC-ECD.GC-IT
050	NA															
051	D	M	GC-ECD	0.01	64	25	6					Yes	5		HP608	GC-ECD
052	NA															
053	NA															
054	D	M	GC-ECD	0.02	25	25	6	Yes	O			Yes	3	HP5MS	5%phenyl	GC-ECD
055	D	M	GC-ECD	0.2	132	15	4					Yes	5	HP1701	Me Siloxane	GC-ECD
056	D	M	GC-MS	0.02	103.82	15	4		GPC			Yes	3	DB5/1701		GC-ECD
057	D	S	GC-MS	0.02		20	6		GPC-SPE	Yes		Yes	3	DB5	Me Polisiloxan	GC-MS
058	D	M	GC-MS	0.03		15	1		GPC	Yes		Yes	3	HP5MS	5%PHSi	GC-MS
059	D	S	GC-MS	0.01		5	1		SPE			Yes	2	Capillary	ZB5	GC-ECD
060	NA															
061	D	M	GC-MS	0.02	98.8	15	6(Dichloro-methane)					Yes	5	DB5	5%Phenyl 95%Dimethyl-Polysiloxane	GC-ECD/NPD/MS

APPENDIX 7. Methods used by participants for determining pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
062	D	S	GC-ECD	0.005	72	50	Acetone+ Methanol (1:1)		Empore Disk C8	Fenclorfos		Yes	3			GC-ECD/NPD
063	D	S	GC-ECD	0.01	95	25	3	EXTRELUT 20			Yes			Capillary	DB-608. SPB1	GC-ECD
064	D	S	GC-MS		105.2	10	6		O	Yes	Yes			Capillary	HP-5	GC-ECD
065	D	S	GC-MS	0.005	98.6	10	Dichloromethane				Yes			HP5	POLYSILOXANE	GC-ECD
066	D	S	GC-MS	0.2	60	25	5	Yes	SPE	Yes		Yes	2	Capillary	5%PbSil	GC-ECD/NPD
067	D	M	GC-MS			10	1	EXTRELUT	GPC	Yes		Yes	4			GC-MS
068	D	M	GC-MS	0.02	89.2	5	6	1		TFF		Yes	5	CIP SIL 8CB	FUSED SILICA	GC-MS/HPLC-FL
069	D	S	GC-MS		80	5	1	ASE(Dionex)	GPC	Ronnel+ Azobencene+ Triphenyl phosphate	Yes			MDN-5S	5%PHENYL SILICONE	GC-ECD/NPD/FPD
070	D	S	GC-ECD	0.01		15	6		GPC	M-series	Yes			25m ID 0.32 mm 0.25um	SE 54; OV1701	GC-ECD/NPD
071	D	M	GC-MS	0.01		15	6		GPC			Yes	2		SE54. OV1701	GC-ECD
072	D	S		0.01	75	10	1		GPC	Diclofention	Yes			HP1. HP5		GC-ECD/NPD

APPENDIX 7. Methods used by participants for determing pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
073	NA															
074	NO RESULTS															
075	D	S	GC-MS	0.01		10	3		SPE	Fenchlorphos	Yes				DB5	GC-ECD. GC-NPD. GC-MS (SINGLE-QUAD)
076	D	M	GC-MS	0.01		10	5	Yes	O			Yes	3	HP-5MS		GC-MS
077	D	S	GC-MS	0.01	59	25 25	2 2		GPC GPC			Yes Yes	4 4	HP-5MS Silica HP Ultra2	5%Phenyl-MethylSiloxane 5%Phenyl-MethylSilicone	GC-MS GC-ECD
078	D	M	GC-MS	0.01	93	50	1		GPC			Yes	4	Narrowbore	HP50	GC-NPD
079	D	M	GC-MS	0.05		15	4				Yes		1	HP-1		GC-ECD
080	NO RESULTS															
081	D	M	GC-MS	0.01		20	1					Yes	3-6	HP-5MS	5% Ph. Me S	GC-ECD/FPD/TD
082	D	M	GC-MS	0.01		15	4				Yes			Capillary	HP-5MS	GC-ECD
083	D	M	GC-MS	0.05		15	4	LL phase separation				Yes	4	Varian CP 3800	Low bleed fused silica	GC-MS
084	D	M	GC-MS/MS	0.01		10	1					Yes	4	CP-Sil 8		GC-MS/MS
085	D	M	GC-MS	0.02	80%	15	4					Yes	4	Capillary	PhMSil 5%	

APPENDIX 7. Methods used by participants for determining pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
086	D	M	GC-MS/MS	0.01	72	15	4					Yes	4	30x25x25	DB-5.DB-17	GC/FPD/ECD/MS
087	D	M	GC-MS	0.01		10	4					Yes	3	HP-5		GC-ECD/NPD/FPD/MS
088	D	S	MS	0.03		15	4					Yes	5	NarrowBore	HP5-MS	GC-MS
089	D	M	GC-MS	0.05		15						Yes	4	Capillary	BP5	GC-MS/MS
090	D	M	GC-MS	0.01	75	15	1			TPP(QC)	Yes		1	Capillary	DB-5ms/DB-1701	GC-ECD/PFPD
091	D	M	GC-MS/MS	0.05		15	1			TTP. Anthracene		Yes	3	HP-5MS		GC-ITD
092	D	M	GC-MS/MS	0.01		5.2	4				Yes			Factor Four		GC-MS/MS-ECD
093	ND	S	GC-MS	0.01		15	4					Yes	4	30m/25x25	CPSIL8CB	GC-MS
094	D	M	MS/MS			15	4					Yes	4	30mx0.25x0.2	CPSIL8	GC-ECD.GC-NPD.GC-PFPD
095	D	M	GC-ECD	0.02	85	75	1		GPC	Yes		Yes	3	CP-SIL 5CB.CPSIL19CB.CPSI L8CB		GC-ECD.GC-FPD.GC-ITD
096	D	S	GC-ITD	0.01	109	15	4			Aldrin (Injection only)			5	Capillary:25mx0.22mm ID	BPX-5.0.25mm(SGE)	GC-ECD

APPENDIX 7. Methods used by participants for determing pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
097	D	M	GC-MS	0.01	69	30	1		GPC	Triphenyl Phosphate		Yes	5	Capillary	DB-5	GC-MS
098	D	M	GC-MS	0.01		10	1		SPE	Yes		Yes	4	CP-SIL13CB		GC-MS
099	D	M	GC-MS	0.01	81	30	1		O			Yes	4	ZB5	30%Phenyl	GC-MS
100	D	M	GC-MS	0.01	106	10	1		GPC			Yes	3		DB5	GC-MS
101	D	M	GC-MS	0.01	89	50	5		SPE		Yes			HP 5/HP 50	See column type	GC-ECD.GC-NPD
102	D	M	GC-ITD	0.01	94	50	1		GPC		Yes			At-1701	Attm-1701	GC-FPD
103	D	S	GC-MS	0.02	107	20	3		LL			Yes	2	HP-5		GC-ECD/NPD
104	D	M	GC-MS	0.02	137	75	1	1/20	GPC	Aldrin		Yes	5	Narrowbore	AT-5MS	GC-MS
105	NA															
106	D	M	GC-MS	0.01		7.5	1			Ethyl-Parathion	Yes			DB-1	0.25mm	GC-ECD/MS
107	D	M	GC-MS	0.01	80.30	20	4					Yes	4	Capillary 30 m	HP-5	GC-ECD/NPD
108	D	S	GC-ECD	0.01	102	5	3					Yes	3	HP-5	5% Phenyl Methyl Siloxane	GC-ECD
109	D	S	GC-EC	0	112%	100	3					Yes	3	HP-1	Me-SiOH	GC-ECD
110	D	M	GC-MS	0.01	100.80	20	3		SPE			Yes	5	DB-5		GC-ECD.GC-NPD
111	D	M		0.02	94.80	10	4		SPE (Silica)			Yes	5	HP-5MS	5%Phenyl	GC-ECD/NPD
112	D	S	GC-NPD	0.01	90	100	3		O		Yes			HP1	MeSilicone	GC-ECD
113	D	M	GC-ITD	0.01	91	15	4		NO	Hexachloro-benzene		Yes	5	DB-5MS		GC-ITD

APPENDIX 7. Methods used by participants for determining pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
114	D	S	GC-ECD	0.02		18	1		GPC			Yes	4	Capillary	HP5	GC-ECD
115	ND		GC/MS	0.01		50	4	Dichloromethane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	NA															
117	NA															
118	D	M	GC-MS	0.02	100	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	GC-MS	0.005		10	1		NO		Yes			Capillary	DB-5MS	GC-MS
120	D	M		0.01		50	1		GPC			Yes	2	30mx0.26mm	DB-5MS	GC-ITD
121	D	M	GC-MS	0.005		25	1		GPC			Yes	5	Capillary	DB-5MS	GC-MS(single quad).ECD. NPD
122	D	S	GC-MS	0.01	94.60	30	1		GPC			Yes	3	Chrompack 50mx0.25mm x0.25mm	CPSIL-8CB	GC-ECD
123	D	S	HPLC	0.01		30	1		GPC		Yes			30mx0.32mm	CP-Sil 8 CB	GC-ECD
124	D	S		0.01		30	1		GPC			Yes	3	Supelco	3% SE-30	GC-ECD
125	D	S	GC-MS	0.01	91	25	1		GPC			Yes	5	Capillary	RTX 17025	GC-ECD

APPENDIX 7. Methods used by participants for determing pesticides

CHLOROTHALONIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
126	NO RESULTS															
127	D	S		0.005		30	1		GPC		Yes			30mx0.25mm x0.25um	RTX-5SIl MS/Integra Guard	GC-ECD
128	D	S	GC-ECD	0.05	110	30	1					Yes	3	30mx0.25mm x0.25um	RTX-CLP	GC-NPD
129	D	S		0.01		30	1		GPC			Yes	3	Restek	Stx-Cl-Pest.	GC-ECD
130	D	M	GC-MS	0.01		30	1		GPC			Yes	3	Restek	RTX-5MS	GC-ECD

APPENDIX 7. Methods used by participants for determining pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
001	D	S	GC-ECD	0.01	86	15	4					Yes	3-4	DB5 DB 1701		ECD NPD MS
002/003	D	M	GC-MS	0.02	91	25	4			Tributhyl-phosphat		Yes	3	30x0.32x0.25	DB1301	GC-FPD
004	D	M	GC-PFPD	0.02	119	5	Acetone. EtOAc. Hex (1:1:1)			Dialdrin mirex		Yes	3-4	Capillary	DB-5MS	GC-MS
005	D	M	GC-MS	0.01	90	50	6		O+LL			Yes	3	15x0.32x0.25	DB170	GC-ECD GC-NPD
006	D	M	GC-MS			10	1		O			Yes	5	DB 5MS	MS	GC-MS
007	D	M	GC-ITD	0.02	102	25	2		GPC	Dithalimphos		Yes	5	J&W 0.32/0.25mmID	DB5. DB1701	GC-ECD. GC-NPD. GC-ITD
008	D	M		0.01	114	25	2		GPC			Yes	5	DB	1701/05/01/35	GC-ECD/NPD/ITD
009	D	M	GC-MS	0.01	95.0	50	4	Yes	LL	Aldrin Ditalimphos	Yes			Capillary	HP-5 DB-1701P	NPD ECD
010	D	M	GC-NPD	0.03		100	3	LL	no	Aldrin		Yes	3	Capillary	DB 5 DB1701	GC-ECD GC-NPD
011	D	S	GC-MS	0.02	120	25	1					Yes	5	30mx0.53mmx1.5µm	DB5. DB608	GC-NPD. GC-FPD. GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
012	D	M	GC-MS	0.01	70-110	50	3					Yes	8	HP5MS		GC-MS
013	D	S	GC-PFPD	0.01	88	25	Ethyl Acetate-Dichloromethane									GC-FPD/NPD GC-MS
014	D	S	GC-MS	0.02		40	3		LL			Yes	3	GC-Capillary	DB5	GC-ECD-NPD-MS
015	D	S	GC-MS	0.01		50	1/DCM (80/20)			Yes	Yes			Capillary	DB5. DB35. DB200	GC-FPD. GC-TSD
016	D	S		0.02		50	3	Yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD/ MS
017	D	S	GC-MS	0.01		40	2		GPC			Yes	5	DB5/DB1701		GC-ECD/PND
018	D	S	GC-MS	0.013		100	2		GPC	Yes		Yes	5	DB-5/1/1701		GC-ECD/NPD/FPD
019	D	M	GC-TOF	0.01	100	10	5			PCB 138		Yes	04-may	DB5		GC-MS
020	D	M	GC-MS	0.010		25	2		GPC			Yes	3	FSOT	HP 5-MS	GC-MS
021	D	S	GC-MS	0.02	97.6	50	2		GPC		Yes			BD1/5/35/1301. HP50/1701/5MS		GC-NPD
022	D	S		0.01	101	50	6; Acetone	Cyclohexane/ Ethyl acetate	GPC	Trans-HCEO	Yes			Capillary	DB5/210	GC-ECD
023	D	M	GC-MS	0.02		50	2		GPC			Yes	5	30mx0.25mm	HP5MS	GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
024	D	M	GC-MS/ECD	0.04		10	Acetonitril			PCB 209		Yes	9	ZP 5	Dimethyl-polysiloxan	GC-MS/ECD
025	D	M	GC/MS	0.02		50	3		GPC			Yes	3	Capillar-GC	DB1701 (HPG-MS)	GC-ECD/PND/FPD
026	D	S	GC-MS	0.01		10	5		SPE			Yes	3	Capillary	Varian VF-5MS	GC-ECD GC-NPD GC-MS
027	D	M	GC-MS	0.02		100	2		GPC	EPSILON-HCH				30mx0.25x0.25	DB-5. Factor four	GC-ECD
028	D	M	GC-MSD	0.01	102	10	5		others	Triphenyl-phosphat		Yes	7	KS	HPSMS	GC-MS
029	D	M	GC-MS	0.005		100	2	1	GPC SPE			Yes	3-5	GC	DB5 HP5-MS DB17	GC-ECD GC-NPD GC-MS (single-quad)
030	D	M	GC-NPD	0.02		50	6		GPC	Bromophos-ethyl	Yes			Capillary-GC	ZB5	GC-NPD
031	D	S	GC-MS	0.01		50	2		GPC			Yes	2	Capillary	HP 5	GC-ECD GC-NPD GC-MS
032	D	M	GC-MS	0.01	105.9	30	Ethyl acetate/ Ciclohexane (2:1)		GPC			Yes	4	DB5		GC-ECD. GC-NPD. GC-MS
033	D	M	GC-ECD	0.01		100	2		GPC			Yes	3	25m x 0.32mmx0.52µm	Ultra2	GC-ECD/NPD

APPENDIX 7. Methods used by participants for determing pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
034	D	M	GC-MS	0.01		100	2		GPC	Parathion-methyl	Yes			30mx0.3mmx0.5µm	DB5 DB17	GC-PND
035	D	M	GC-MS	0.01		50	3		GPC			Yes	4	HP-5MS		GC-MS/ECD/FPD
036	D	S	GC-MS	0.02		101	3		GPC		Yes					GC-ECD/NPD/MS
037	D	M	GC-MS	0.02		100	2		GPC	TPP		Yes	4	HP5/HP1	HP1(Me Siloxan)	GC-MS/FPD
038	D	M	GC-MS	0.02	88	20	2			Triphenyl-phosphat		Yes	3	Capillary-GC	Optima5. DB17-MS	GC-ECD. GC-NPD. GC-MS
039	D	S	GC-MS	0.02		45	3	LL	GPC	Parathion		Yes	3	Restex 30x0.25x0.25	Rtx-CLPesticides I+II	GC-NPD
040	D	S	GC-ECD	0.02		340	2		O+GPC	Parathion	Yes			Capillary		GC-ECD
041	D	S	GC-MS	0.02	103	75	Acetone Followed by Cyclohexan and Ethyl Acetate		GPC	EPN		Yes	3	HP5		GC-ECD. GC-NPD
042	D	M	GC-MS	0.01		100	2		GPC			Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	S	GC-MS	0.02		50	3		LL		Yes			Capillary	DB5	GC-ECD

APPENDIX 7. Methods used by participants for determining pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
044	D	M	GC-MS	0.01		100	2		GPC			Yes	5		OV17. DB6	GC-NPD
045	D	M	GC-ECD. GC-NPD. GC-MS	0.01		100	2		GPC			Yes	5		DB5. DB1701	GC-ECD. GC-NPD.GC-MS
046	D	M	GC-ECD	0.02	101	50	3		GPC		Yes			Capillary	DB17. HP5	GC
047	D	M	GC-FPD	0.01		100	2		GPC			Yes	3 . 5	Capillary	DB5. DB1701	GC-ECD. GC-NPD.GC-FPD
048	D	S	GC-FPD.MS	0.01		50	1					Yes	3	Capillary	DB1701	GC-FPD. GC-MS
049	D	M	GC-MS	0.02	83.3	15	4						2		DB5MS	GC-ECD.GC-IT
050	D	M	GC-NPD	0.02	120	15	4					Yes	6	Capillary	DB1701	GC-NPD
051	D	M	GC-ECD	0.01	103	25	6					Yes	5		HP608	GC-ECD
052	D	M	GC-TSD-VA17	0.02	87.1	50	1					Yes	5	Capillary	HP5MS	GC-NPD
053	NA															
054	D	M	GC-NPD	0.02	90.3	25	1					Yes	3	DB1701	14%Cyanopropyl Phenyl	GC-NPD
055	D	M	GC-ECD	0.02	101	15	4					Yes	5	HP1701	Me Siloxane	GC-ECD
056	D	M	GC-MS	0.05	99.05	15	4		GPC			Yes	3	DB5/1701		GC-FPD
057	D	S	GC-MS	0.02		20	6		GPC-SPE	Yes		Yes	3	DB5	Me Polisiloxan	GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
058	D	M	GC-MS	0.05		15	1		GPC	Yes		Yes	3	HP5MS	5%PHSi	GC-MS
059	D	S	GC-MS	0.02		5	1		SPE			Yes	2	Capillary	ZB5	GC-NPD
060	D	S	GC-NPD	0.03	87.2	10	6(Dichloro-methane)					Yes	03/04/2007	30mx0.32mmx0.25µm	AT5.ZB-35	GC-NPD
061	D	M	GC-MS	0.02	105	15	6(Dichloro-methane)					Yes	5	DB5	5%Phenyl 95%Dimethyl-Polysiloxane	GC-ECD/NPD/MS
062	D	S	GC-NPD	0.005	75	50	Acetone+ Methanol (1:1)		Empore Disk C8	Fenclorfos		Yes	3			GC-ECD/NPD
063	D	S	GC-ECD	0.01	95	25	3	EXTRELUT 20			Yes			Capillary	DB-608. SPB1	GC-ECD
064	D	S	GC-MS		80.8	10	6		O	Yes	Yes			Capillary	HP-5	GC-NPD
065	D	S	GC-MS	0.005	89.7	10	Dichloromethane				Yes			HP5	POLYSILOXANE	GC-NPD
066	D	S	GC-MS	0.05	95	25	5	Yes	SPE	Yes		Yes	2	Capillary	5%PbSil	GC-ECD/NPD
067	D	M	GC-MS			10	1	EXTRELUT	GPC	Yes		Yes	4			GC-MS
068	D	M	GC-MS	0.02	89.2	5	6	1		TFF		Yes	5	CIP SIL 8CB	FUSED SILICA	GC-MS/HPLC-FL

APPENDIX 7. Methods used by participants for determining pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
069	D	S	GC-MS		83	5	1	ASE(Dionex)	GPC	Ronnel+Azobenzene+Triphenyl phosphate	Yes			MDN-5S	5%PHENYL SILICONE	GC-ECD/NPD/FPD
070	D	S	GC-NPD	0.01		15	6		GPC	M-series	Yes			25m ID 0.32 mm 0.25um	SE 54; OV1701	GC-ECD/NPD
071	D	M	GC-MS	0.01		15	6		GPC						SE54. OV1701	GC-NPD/FPD
072	NA															
073	D	S	GC-ECD	0.01		10	Dichloromethane					Yes	3	Capillary	SE30/SE54	GC-ECD/NPD
074	NO RESULTS															
075	D	S	GC-MS	0.02		10	3		SPE	Fenchlorphos	Yes				DB5	GC-ECD. GC-NPD. GC-MS (SINGLE-QUAD)
076	D	M	GC-MS	0.01		10	5	Yes	O			Yes	3	HP-5MS		GC-MS
077	D	S	GC-MS	0.02	92	25	2		GPC			Yes	4	Fused Silica HP-50+	50%Phenyl-Methylsilicone	GC-FPD
078	D	M	GC-MS	0.02	99	50	1		GPC			Yes	4	Narrowbore	DB 5	GC-PFPD
079	D	M	GC-MS	0.02		15	4				Yes		1	SPB 1701		GC-NPD
080	NO RESULTS															

APPENDIX 7. Methods used by participants for determing pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
081	D	M	GC-MS	0.01		20	1					Yes	3-6	HP-5MS	5% Ph. Me S	GC-ECD/FPD/TD
082	D	M	GC-MS	0.02		15	4				Yes			Capillary	HP-5MS	GC-FPD
083	D	M	GC-MS	0.01		15	4	LL phase separation				Yes	4	Varian CP 3800	Low bleed fused silica	GC-MS
084	D	M	GC-MS/MS	0.01		10	1					Yes	4	CP-Sil 8		GC-MS/MS
085	D	M	GC-MS	0.02	95	15	4					Yes	4	Capillary	PhMSil 5%	
086	D	M	GC-MS/MS	0.01	79	15	4					Yes	4	30x25x25	DB-5.DB-17	GC/FPD/ECD/MS
087	D	M	GC-MS	0.01		10	4					Yes	3	HP-5		GC-ECD/NPD/FPD/MS
088	D		MS			15	4					Yes	5	NarrowBore	HP5-MS	GC-MS
089	D	M	GC-MS/MS	0.05		15						Yes	4	Capillary	BP5	GC-MS/MS
090	D	M	GC-MS/MS	0.02	89.30	15	1			TTP(QC)		Yes	3	Capillary	DB-5ms	GC-MS/MS
091	D	M	GC-MS/MS	0.05		15	1			TTP. Anthracene		Yes	3	HP-5MS		GC-ITD
092	D	M	GC-MS/MS	0.02		5.2	4				Yes			Factor Four		GC-MS/MS-ECD

APPENDIX 7. Methods used by participants for determining pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
093	D	S	GC-MS	0.02		15	4					Yes	4	30m/25x25	CPSIL8CB	GC-MS
094	D	M	MS/MS			15	4					Yes	4	30mx0.25x0.2	CPSIL8	GC-ECD.GC-NPD.GC-PFPD
095	D	M	GC-FPD	0.02	88	75	1		GPC	Yes		Yes	3	CP-SIL 5CB.CPSIL19CB.CPSIL 8CB		GC-ECD.GC-FPD.GC-ITD
096	D	M	GC-ITD	0.025	97	15	4					Yes	4	Capillary.25mx0.22mmID	VF-5MS.0.25µm (Varian)	GC-ITD
097	D	M	GC-MS	0.02	92	25	1		O	Triphenyl Ethylene		Yes	6	Capillary	DB-5	GC-MS
098	D	M	GC-MS	0.02		10	1		SPE	Yes		Yes	4	CP-SIL13CB		GC-MS
099	D	M	GC-MS	0.01	91	30	1		O			Yes	4	ZB5	30%Phenyl	GC-MS
100	D	M	GC-MS	0.02	84	10	1		GPC			Yes	3		DB5	GC-MS
101	D	M	GC-MS	0.02	87	50	5		SPE		Yes			HP 5/HP 50	See column type	GC-ECD.GC-NPD
102	D	M	GC-ITD	0.01	93	50	1		GPC		Yes			At-1701	Attm-1701	GC-FPD
103	D	S	GC-MS	0.02	90	20	3		LL			Yes	2	HP-5		GC-ECD/NPD
104	D	M	GC-MS	0.02	111	75	1	1/20	GPC	Aldrin		Yes	5	Narrowbore	AT-5MS	GC-MS
105	D	M	GC-FTD	0.02		25.033	6	2	LL	Dithalimphos		Yes	5	NB-54		GC-FTD
106	D	M	GC-MS	0.02		7.5	1			Ethyl-parathion	Yes			DB-1	0.25mm	GC-ECD/MS

APPENDIX 7. Methods used by participants for determing pesticides

DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
107	D	M	GC-MS	0.02	89.10	20	4					Yes	4	Capillary 30 m	HP-5	GC-ECD/NPD
108	D	S	GC-ECD	0.02	100	5	3					Yes	3	HP-5	5% Phenyl Methyl Siloxane	GC-ECD
109	D	S	GC-EC	0	89	100	3					Yes	3	HP-1	Me-SiOH	GC-ECD
110	D	M	GC-MS	0.01	87	20	3		SPE			Yes	5	DB-5		GC-ECD.GC-NPD
111	D	S		0.02	92.80	10	4		SPE (Silica)			Yes	5	HP-5MS	5%Phenyl	GC-ECD/NPD
112	D	S	GC-ECD	0.02	95	100	3		O		Yes			HP17	50%PhMe Silicone	GC-NPD
113	D	M	GC-ITD	0.01	91	15	4			Hexachloro-benzene		Yes	5	DB-5MS		GC-ITD
114	D	M	GC-FPD	0.02		18	1		GPC		Yes			Capillary	HP5	GC-FPD
115	D	S	GC/MS	0.02		50	4	Dichloromethane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	D	S	GC/MS	0.01	124	50	2		SPE		Yes			HP5-MS		GC/MS
117	D	M	GC-MS	0.02	105.20	20	4	Yes	GPC			Yes	5	HP-5MS		GC-MS
118	D	M	GC-MS	0.02	96	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	GC-MS	0.02		10	1		NO		Yes			Capillary	DB-5MS	GC-MS

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DIAZINON

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
120	D	M	GC-FPD	0.01		50	1		GPC			Yes	2	30mx0.26mm	DB-5MS	GC-ITD
121	D	M	GC-MS	0.03		25	1		GPC			Yes	5	Capillary	DB-5MS	GC-MS(single quad).ECD. NPD
122	D	S	GC-MS	0.02	87.70	30	1		GPC			Yes	3	Chrompack 30mx0.25mm x0.25mm	CPSIL-8CB	GC-NPD
123	D	S	GC-MS	0.02		30	1		GPC		Yes			30mx0.53mm	CP-Sil 8 CB	GC-NPD
124	D	S		0.02		30	1					Yes	3	SGE	BPX-5	GC-NPD
125	D	S	GC-MS	0.02	108	25	1		GPC			Yes	5	Capillary	CPSyl 8CB	GC-NPD
126	NO RESULTS															
127	D	S	GC-MS	0.001		30	1		GPC			Yes	3	50mx0.32mm x0.25um	CP-Sil 8 CB	GC-ECD
128	D	S	HPLC-DAD	0.02	93	30	1		GPC			Yes	3	30mx0.25mm x0.25um	RTX-CLP	GC-NPD
129	D	S		0.02		30	1		GPC			Yes	3	Varian	Factor Four Vf5	GC-NPD
130	D	M	GC-MS	0.02		30	1					Yes	3	Varian	CPSil 8CB	GC-NPD

APPENDIX 7. Methods used by participants for determing pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
001	D	M	LC-MS-MS	0.01	106	15	4					Yes	3-4	DB5 DB 1701		ECD NPD MS
002/003	D	M	GC-MS	0.02	85	25	4			Tributhyl-phosphat		Yes	3	30x0.32x0.25	DB1301	GC-FPD
004	D	S	GC-PFPD	0.02	102	25	Acetone. Petrolumether. Dichloromethane					Yes	6	100x2.1	C18	LC-MS/MS
005	D	M	GC-MS	0.009	85	20	1		SPE			Yes	5	90x0.83x0.5	RTX-WAA	GC-NPD
006	NA															
007	D	M	GC-NPD	0.01	106	25	2		GPC	Dithalimphos		Yes	5	J&W 0.32/0.25mmID	DB5. DB1701	GC-ECD. GC-NPD. GC-ITD
008	D	M		0.01	80	25	2		GPC			Yes	5	DB	1701/05/01/35	GC-ECD/NPD/ITD
009	D	M	GC-MS	0.01	108.0	50	4	Yes	LL	Aldrin Ditalimphos	Yes			Capillary	HP-5 DB-1701P	NPD ECD
010	D	M	GC-EC	0.05		100	3	LL	no	Aldrin		Yes	3	Capillary	DB 5 DB1701	GC-ECD GC-NPD
011	D	S	GC-MS	0.02	113	25	1					Yes	5	30mx0.53mmx1.5µm	DB5. DB608	GC-NPD. GC-FPD. GC-MS
012	D	M	GC-MS	0.02	60-70	50	3					Yes	8	HP5MS		GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
013	D	S	GC-PFPD	0.01	80	25	Ethyl Acetate-Dichloromethane									GC-FPD/NPD GC-MS
014	D	S	GC-MS	0.02		40	3		LL			Yes	3	GC-Capillary	DB5	GC-ECD-NPD-MS
015	D	S	GC-MS	0.02		50	1/Dcm (80/20)			Yes	Yes			Capillary	DB5. DB35. DB200	GC-FPD. GC-TSD
016	D	S		0.02		50	3	Yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD/ MS
017	D	S	GC-MS	0.01		40	2		GPC			Yes	5	DB5/DB1701		GC-ECD/PND
018	D	M	GC-ECD	0.01		10	5		SPE	Yes		Yes	5	AtlantisDc18		LC-MS/MS
019	D	M	5 Transitions	0.005	90	10	5			Triphenyl-phosphat		Yes	4	ZORBAX	C18	LC-MS/MS
020	D	M	GC-MS	0.010		25	2		GPC			Yes	3	FSOT	HP 5-MS	GC-MS
021	D	S	GC-MS	0.02	123.8	50	2		GPC		Yes			BD1/5/35/1301. HP50/1701/5MS		GC-NPD
022	D	M		0.01	104	10	6;(Methanol)		CEM ELUT			Yes	7	2.1x125mm; 3µm	RP-C18	LC-MS/MS
023	D	M	LC-MS/MS	0.01		10	Methanol					Yes	5	2.1x100mm	Atlantis C18	LC-MS/MS
024	ND			0.1												

APPENDIX 7. Methods used by participants for determing pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
025	D	M	LC-MS/MS	0.01		20	6					Yes	2x4	HPLC(RP)	RP(C18)	LC-MS/MS
026	D	S	GC-MS	0.01		100	2		GPC			Yes	3	Capillary	Varian VF-5MS	GC-ECD GC-NPD GC-MS
027	D	M	GC-MS	0.05		100	2		GPC	EPSILON-HCH				30mx0.25x0.25	DB-5. Factor four	GC-ECD
028	D	M	GC-MSD	0.01	90.3	10	5		Others	Triphenyl-phosphat		Yes	7	KS	HPSMS	GC-MS
029	D	M	GC-MS	0.005		100	2	1	GPC SPE			Yes	3-5	GC	DB5 HP5-MS DB17	GC-ECD GC-NPD GC-MS (single-quad)
030	D	M	GC-NPD	0.02		50	6		GPC	Bromophos-ethyl	Yes			Capillary-GC	ZB5	GC-NPD
031	D	S	GC-MS	0.01		50	2		GPC			Yes	2	Capillary	HP 5	GC-ECD GC-NPD GC-MS
032	D	M	LC-MS/MS	0.01	81.3	10	6(Methanol)	1:4.	SPE			Yes	5	Aqua5µ	C18	LC-MS/MS
033	D	M	GC-ECD	0.02		100	2		GPC			Yes	3	25m x 0.32mmx0.52µm	Ultra2	GC-ECD/NPD
034	D	M	GC-MS	0.01		100	2		GPC	Parathion-methyl	Yes			30mx0.3mmx0.5µm	DB5 DB17	GC-PND
035	D	M	GC-MS	0.02		50	3		GPC				4	HP-5MS		GC-MS/ECD/FPD

APPENDIX 7. Methods used by participants for determining pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
036	D	S	GC-MS	0.02		101	3		GPC		Yes					GC-ECD/NPD/MS
037	D	M	GC-MS	0.02		100	2		GPC	TPP		Yes	4	HP5/HP1	HP1(Me Siloxan)	GC-MS/FPD
038	D	M	LC-MS/MS	0.01	92	20	2			Triphenyl-phosphat		Yes	3	Capillary-GC	Optima5. Optima 17. DB17-MS. C18. Aqua5µ	GC-ECD. GC-NPD. GC-MS. LC-MS/MS
039	D	S		0.01		10	5	LL	PSA	Methoxi-fenozide		Yes	6	Aqua (phenomex)	C18	LC-MS/MS
040	D	S	GC-ECD	0.02		340	2		O+GPC	Parathion	Yes			Capillary		GC-ECD
041	D	M	LC-MS. GC-MS	0.02	80	10. 75	Methanol. Acetone Followed by Cyclohexan and Ethyl Acetate					Yes	7. 3	Atlantis. HP5	dc18	LC-MS/MS. GC-NPD
042	D	M	GC-MS	0.01		100	2		GPC	EPN		Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	M	LC-MS/MS	0.006		10	6 (Methanol)		SPE			Yes	2		C18	LC-MS/MS
044	D	M		0.02		100	2					Yes	4		RP8	LC-MS/MS
045	D	M	GC-ECD. GC-NPD. GC-MS	0.02		100	2		GPC			Yes	5		DB5. DB1701	GC-ECD. GC-NPD.GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
046	D	M	GC-ECD	0.01	102	50	3		GPC		Yes			Capillary	DB17. HP5	GC-ECD. GC-NPD.GC-FPD
047	D	M	GC-FPD	0.005		100	2		GPC			Yes	3 . 5	Capillary	DB5. DB1701	
048	D	S	GC-FPD.MS	0.02		50	1					Yes	3	Capillary	DB1701	GC-FPD. GC-MS
049	D	M	GC-MS	0.02	92	15	4						2		DB5MS	GC-ECD.GC-IT
050	D	M	GC-NPD	0.02	140	15	4					Yes	6	Capillary	DB1701	GC-NPD
051	D	M	GC-TSD	0.02	103	25	1					Yes	5	DB-17	50% Methylsiloxane	GC-ECD
052	D	M	GC-TSD-VA17	0.02	104	50	1					Yes	5	Capillary	HP5MS	GC-NPD
053	NA															
054	D	M	GC-NPD	0.02	94.5	25	1					Yes	3	DB1701	14%Cyanopropyl Phenyl	GC-NPD
055	NA															
056	D	M	GC-NPD	0.04	92.32	15	4		GPC				5	HP5MS	Gc-Ms	
057	D	S	GC-MS	0.05		20	6		GPC-SPE	Yes		Yes	3	DB5	Me Polisiloxan	GC-MS
058	D	M	GC-MS	0.05		15	1		GPC	Yes		Yes	3	HP5MS	5%Phsi	GC-MS
059	ND			0.02												
060	NA															

APPENDIX 7. Methods used by participants for determining pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
061	D	M	GC-MS	0.02		15	6(Dichloro-methane)					Yes	5	DB5	5% Phenyl 95% Dimethyl-Polysiloxane	GC-ECD/NPD/MS
062	ND	S	GC-NPD	0.01		50	Acetone+ Methanol (1:1)		Empore Disk C8	Fenclorfos		Yes	3			GC-ECD/NPD
063	D	S	GC-FPD	0.05	87	25	3	EXTRELUT 20			Yes			Capillary	SPB5	GC-FPD
064	D	S	GC-MS		109.9	10	6		O	Yes	Yes			Capillary	HP-5	GC-NPD
065	D	S	GC-MS	0.01	79.1	10	Dichloromethane				Yes			HP5	POLYSILOXANE	GC-ECD
066	D	S	GC-MS	0.05	90	25	5	Yes	SPE	Yes		Yes	2	Capillary	5%PbSil	GC-ECD/NPD
067	D	M	GC-MS			10	1	EXTRELUT	GPC	Yes		Yes	4			GC-MS
068	D	M	GC-MS	0.02	98.5	5	6	1		TFF		Yes	5	CIP SIL 8CB	FUSED SILICA	GC-MS/HPLC-FL
069	D	S	GC-MS		79	5	1	ASE(Dionex)	GPC	Ronnel+ Azobencene+ Triphenyl phosphate M-series	Yes			MDN-5S	5%PHENYL SILICONE	GC-ECD/NPD/FPD
070	D	S	GC-NPD	0.01		15	6		GPC					25m ID 0.32 mm 0.25um	SE 54; OV1701	GC-ECD/NPD
071	D	M	GC-MS	0.01		15	6		GPC						SE54. OV1701	GC-NPD/FPD

APPENDIX 7. Methods used by participants for determing pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
072	D	S		0.01	110	10	1		GPC	Diclofention	Yes		3	HP1. HP5		GC-ECD/NPD
073	D	S	GC-NPD80	0.01		10	Dichloromethane					Yes	3	Capillary	SE30/SE54	GC-ECD/NPD
074	NO RESULTS															
075	D	S	GC-MS	0.05		10	3		SPE	Fenchlorphos	Yes					GC-ECD. GC-NPD. GC-MS (SINGLE-QUAD)
076	D	M	GC-MS	0.02		10	5	Yes	O					HP-5MS		GC-MS
077	D	S	GC-MS	0.05	91	25 25	2 2		GPC GPC			Yes Yes	4 4	HP-5MS Fused Silica HP-50+	5%Phenyl-MethylSiloxane 50%Phenyl-Methylsilicone	GC-MS GC-FPD
078	D	M	GC-MS	0.02	82	50	1		GPC			Yes	4	Narrowbore	DB 5	GC-PFPD
079	D	M	GC-NPD	0.02		15	4				Yes		1	SPB 1701		GC-NPD
080	NO RESULTS															
081	D	M	GC-MS	0.01		20	1					Yes	3-6	HP-5MS	5%Ph Me S	GC-ECD/FPD/TD
082	D	M	GC-MS	0.02		15	4				Yes			Capillary	HP-5MS	GC-ECD
083	D	M	GC-MS	0.03		15	4	LL phase separation					4	Varian CP 3800	Low bleed fused silica	GC-MS
084	D	M	GC-MS/MS	0.01		10	1					Yes	4	CP-Sil 8		GC-MS/MS

APPENDIX 7. Methods used by participants for determining pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
085	D	M	GC-MS	0.02	84	15	4					Yes	4	Capillary	PhMSil 5%	
086	D	M	GC-MS/MS	0.01	75	15	4					Yes	4	30x25x25	DB-5.DB-17	GC/FPD/ECD/MS
087	D	M	GC-MS	0.02		10	4					Yes	3	HP-5		GC-ECD/NPD/FPD/MS
088	D		MS			15	4					Yes	5	NarrowBore	HP5-MS	GC-MS
089	D	M	GC-MS/MS	0.05		15						Yes	4	Capillary	BP5	GC-MS/MS
090	ND	M	GC-MS	0.05	83.2	15	1			TTP(QC)	Yes		1	Capillary	DB-5-ms/DB-1701	GC-ECD/PFPD
091	D	M	GC-MS/MS	0.05		15	1			TTP. Anthracene		Yes	3	HP-5MS		GC-ITD
092	D	M	GC-MS/MS	0.02		5.2	4					Yes	6	Factor Four		GC-MS/MS-ECD
093	D	S	GC-MS	0.02		15	4					Yes	4	30m/25x25	CPSIL8CB	GC-MS
094	D	M	MS/MS			15	4					Yes	4	30mx0.25x0.2	CPSIL8	GC-ECD.GC-NPD.GC-PFPD
095	D	M	GC-FPD	0.02	105	75	1		GPC	Yes		Yes	3	CP-SIL 5CB.CPSIL19CB.CPSIL 8CB		GC-ECD.GC-FPD.GC-ITD

APPENDIX 7. Methods used by participants for determing pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
096	D	S	GC-ITD	0.01	102	7.5	4(+Na_2SO_4)					Yes	4	150x3.2mmID	Altima C18.5mm	LC-MS/MS
097	D	M	GC-FPD.GC-MS	0.02	89	25 30	1 1		O GPC	Triphenyl Ethylene Triphenyl Phosphate		Yes Yes	6 5	Capillary Capillary	DB-5 DB-5	GC-MS GC-FPD
098	D	M	GC-MS	0.02		10	1		SPE	Yes		Yes	4	CP-SIL13CB		GC-MS
099	D	M	GC-MS	0.01	118	30	1		O			Yes	4	ZB5	30%Phenyl	GC-MS
100	D	M	GC-MS	0.02	93	10	1		GPC			Yes	3		DB1301	GC-FPD
101	D	M	GC-MS	0.02	92	50	5		SPE		Yes			HP 5/HP 50	See column type	GC-ECD.GC-NPD
102	D	M	GC-ITD	0.01	87	50	1		GPC		Yes			At-1701	Attm-1701	GC-FPD
103	D	S	GC-MS	0.02	85	20	3		LL			Yes	2	HP-5		GC-ECD/NPD
104	D	M	GC-MS	0.02	96	75	1	1/20	GPC	Aldrin		Yes	5	Narrowbore	AT-5MS	GC-MS
105	ND			0.02												
106	D	M	GC-MS	0.02		7.5	1			Ethyl-parathion	Yes			DB-1	0.25mm	GC-ECD/MS
107	D	M	GC-MS	0.02	112.5	20	4					Yes	4	Capillary 30 m	HP-5	GC-ECD/NPD
108	D	S	GC-ECD	0.02	102	5	3					Yes	3	HP-5	5% Phenyl Methyl Siloxane	GC-ECD
109	D	S	GC-EC	0	116	100	3					Yes	3	HP-1	Me-SiOH	GC-ECD
110	D	M	GC-MS	0.01	93.10	20	3		SPE			Yes	5	DB-5		GC-ECD.GC-NPD
111	D	M		0.01	82.60	10	4		SPE (Silica)			Yes	5	HP-5MS	5%Phenyl	GC-ECD/NPD

APPENDIX 7. Methods used by participants for determining pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
112	D	S	GC-ECD	0.02	92	100	3		O		Yes			HP17	50%PhMe Silicone	GC-NPD
113	D	M	GC-ITD	0.025	90	15	4		NO	Hexachloro-benzene		Yes	5	DB-5MS		GC-ITD
114	D	M	GC-FPD	0.04		18	1		GPC		Yes			Capillary	HP5	GC-FPD
115	ND		GC/MS	0.02		50	4	Dichloromethane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	D	S	GC/MS	0.02	91	50	2		SPE		Yes			HP5-MS		GC/MS
117	D	M	GC-MS	0.02	108	20	4	Yes	GPC			Yes	5	HP-5MS		GC-MS
118	D	M	GC-MS	0.02	95	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	GC-MS	0.02		10	1		NO		Yes			Capillary	DB-5MS	GC-MS
120	ND	M	GC-FPD	0.01		50	1		GPC			Yes	2	30mx0.26mm	DB-5MS	GC-ITD
121	D	M	GC-MS	0.03		25	1		GPC			Yes	5	Capillary	DB-5MS	GC-MS(single quad).ECD. NPD
122	D	S	GC-MS	0.02	102.	30	1		NO			Yes	3	Chromopack 30mx0.32mm x0.25mm	CPSIL-8CB	GC-NPD
123	D	S	GC-MS	0.02		30	1		GPC		Yes			30mx0.53mm	CP-Sil 8 CB	GC-NPD

APPENDIX 7. Methods used by participants for determing pesticides

DIMETHOATE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
124	D	S		0.02		30	1					Yes	3	SGE	BPX-5	GC-NPD
125	D	S	GC-MS	0.02	106	25	1		GPC			Yes	5	Capillary	CPSyl 8CB	GC-NPD
126	NO RESULTS															
127	D	S	GC-MS	0.005		30	1		GPC			Yes	3	30mx0.53mmx0.5um	RTX OPP2	GC-FPD
128	D	S	GC-ECD	0.05	104	30	1		GPC			Yes	3	30mx0.25mm x0.25um	RTX-CLP	GC-NPD
129	D	S		0.02		30	1		GPC			Yes	3	Varian	Factor Four Vf5	GC-NPD
130	D	M	GC-MS	0.02		30	1					Yes	3	Varian	CPSil 8CB	GC-NPD

APPENDIX 7. Methods used by participants for determining pesticides

ENDOSULFAN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
001	D	S	GC-MS	0.01	96	15	4					Yes	3-4	DB5 DB 1701 60x0.25x0.1 60x0.25x0.15		ECD NPD MS
002/ 003	D	M	GC-MS	0.01	107	15	4			PCB97		Yes	3		DB5 DB1701	GC-ECD
004	D		GC-MS	0.05	102	20	6			Nitrofen+ Mirex		Yes	5	CAP	Restele CLP	GC-ECD
005	D	M	GC-MS	0.005	95	20	1		SPE			Yes	5	90x0.83x0.5	RTX-WAA	GC-NPD
006	D	M	GC-MS		100	10	1		O			Yes	5	DB 5MS	MS	GC-MS
007	D	M	GC-ECD	0.01	82	25	2		GPC	Dithalimphos		Yes	5	J&W 0.32/0.25mmID	DB5. DB1701	GC-ECD. GC-NPD. GC-ITD
008	D	M		0.01	71	25	2		GPC			Yes	5	DB	1701/05/01/35	GC-ECD/NPD/ITD
009	D	M	GC-MS	0.01	107.0	50	4	Yes	LL	aldrin ditalimphos	Yes			Capillary	HP-5 DB-1701P	NPD ECD
010	D	M	GC-EC	0.03		100	3	LL	no	aldrin		Yes	3	Capillary	DB 5 DB1701	GC-ECD GC-NPD
011	D	S	GC-MS	0.01	75	25	1		SPE			Yes	4	30mx0.53mmx1.5µm	DB5. DB608	GC-ECD. GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

ENDOSULFAN

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
012	D	M	GC-MS	0.01	70-110	50	3					Yes	8	HP5MS		GC-MS
013	D	S	GC-ELCD	0.01	80	25	Ethyl Acetate-Dichloromethane		SPE							GC-ECD/ELCD
014	D	S	GC-MS	0.05		40	3		LL			Yes	3	GC-Capillary	DB5	GC-ECD-NPD-MS
015	D	S	GC-MS	0.01		50	1/DCM (80/20)		SPE Florisil			Yes	3	Capillary 0.32	DB5. DB35	GC-ECD
016	D	S		0.02		50	3	yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD/MS
017	D	S	GC-MS	0.01		40	2		GPC			Yes	5	DB5/DB1701		GC-ECD/PND
018	D	S	GC-MS	0.003		100	2		GPC	YES		Yes	5	DB-5/1/1701		GC-ECD/NPD/FPD
019	D	M	GC-TOF	0.01	96	10	5			PCB 138		Yes	1	DB5		GC-MS
020	D	M	GC-MS	0.010		25	2		GPC			In Matrix	3	FSOT	HP 5-MS	GC-MS
021	D	S	GC-MS	0.005	91.7	50	2		GPC		Yes			BD1/5/35/1301. HP50/1701/5MS		GC-ECD
022	D	S		0.01	100	50	6; ACETONE	Ciclohexane Ethyl acetate	GPC	Trans-HCEO	Yes			Capillary	DB5/210	GC-ECD
023	D	M	GC-MS	0.05		50	2		GPC			Yes	5	30mx0.25mm	HP5MS	GC-MS

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
024	D	M	GC-MS/ECD	0.01		10	Acetonitril			PCB 209		Yes	9	ZP 5	Dimethyl-Polysiloxan	GC-MS/ECD
025	D	M	GC/MS	0.01		50	3		GPC			Yes	3	Capillar-GC	DB1701 (HPG-MS)	GC-ECD/PND/FPD
026	D	S	GC-ECD	0.01		10	5		SPE			Yes	3	Capillary	Varian VF-5MS	GC-ECD GC-NPD GC-MS
027	D	M	GC-MS	0.05		100	2		GPC	EPSILON-HCH				30mx0.25x0.25	DB-5. Factor Four	GC-ECD
028	D	M	GC-ECD	0.01	98.7	10	5		others	Triphenyl-Phosphat		Yes	7	KS	HPSMS	GC-MS
029	D	M	GC-MS	0.005		100	2	1	GPC SPE			Yes	3-5	GC	DB5 HP5-MS DB17	GC-ECD GC-NPD GC-MS (single-quad)
030	D	M	GC-ECD	0.005		50	6		GPC	Bromophos-Ethyl	Yes			Capillary-GC	DB1	GC-ECD
031	D	S	GC-MS	0.01		50	2		GPC			Yes	2	Capillary	HP 5	GC-ECD GC-NPD GC-MS
032	D	M	GC-MS	0.01	90.2	30	Ethyl acetate/ Ciclohexane (2:1)		GPC			Yes	4	DB5		GC-ECD. GC-NPD. GC-MS
033	D	M	GC-ECD	0.01		100	2		GPC			Yes	3	25m x 0.32mmx0.52µm	Ultra2	GC-ECD/NPD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
034	D	M	GC-MS	0.01		100	2			PCB 153		Yes	2	30mx0.3mmx0.25µm	DB5 OU1701	GC-ECD
035	D	M	GC-MS	0.02		50	3		GPC			Yes	4	HP-5MS		GC-MS/ECD/FPD
036	D	S	GC-MS	0.05		101	3		GPC		Yes					GC-ECD/NPD/MS
037	D	M	GC-MS	0.02		100	2		GPC	TPP		Yes	4	HP5		GC-MS
038	D	M	GC-MS	0.02	101	20	2			Triphenyl-Phosphat		Yes	3	Capillary-GC	Optima5. Optima 17. DB17-MS	GC-ECD. GC-NPD. GC-MS
039	D	S	GC-MS	0.02		45	3	LL	GPC	Aldrin		Yes	3	Restek 30x0.25x0.25	RTX-CLPesticide I+II	GC-ECD
040	D	S	GC-ECD	0.05		340	2		O+GPC	Parathion	Yes			Capillary		GC-ECD
041	D	S	GC-MS	0.05	78	75	Acetone Followed by Cyclohexan and Ethyl Acetate		GPC			Yes	3	HP5		GC-ECD
042	D	M	GC-MS	0.01		100	2		GPC	EPN		Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	S	GC-MS	0.006		50	3		LL		Yes			Capillary	DB5	GC-ECD
044	D	M	GC-MS	0.01		100	2		GPC			Yes	5		ZB35.DB5	GC-ECD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
045	D	M	GC-ECD. GC-MS	0.01		100	2		GPC			Yes	5		DB5. DB1701	GC-ECD. GC-NPD.GC-MS
046	D	M	GC-ECD	0.005	107	50	3		GPC		Yes			Capillary	DB17. HP5	GC
047	D	M	GC-ECD	0.005		100	2		GPC			Yes	3 . 5	Capillary	DB5. DB1701	GC-ECD. GC-NPD.GC-FPD
048	D	S	GC-ECD. MS	0.01		7	4	Yes				Yes	3	Capillary	DB5	GC-ECD. GC-MS
049	D	M	GC-MS	0.05	101	15	4						2		DB5MS	GC-ECD.GC-IT
050	NA															
051	D	M	GC-ECD	0.01	81	25	6					Yes	5	DB-5MS	95%Dymethyl-Polysiloxane	GC-ECD
052	NA															
053	NA															
054	D	M	GC-ECD	0.02	96	25	6	Yes	O			Yes	3	HP5MS	5%Phenyl	GC-ECD
055	D	M	GC-ECD	>0.02	99	15	4					Yes	5	HP1701	Me Siloxane	GC-ECD
056	D	M	GC-ECD	0.02	94.08	15	4		GPC			Yes	5	HP5MS	GC-MS	
057	D	S	GC-MS	0.02		20	6		GPC-SPE	Yes		Yes	3	DB5	Me Polisiloxan	GC-MS
058	D	M	GC-MS	0.05		15	1		GPC	Yes		Yes	3	HP5MS	5%PHSi	GC-MS

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
059	D	S	GC-MS	0.05		5	1		SPE			Yes	2	Capillary	ZB5	GC-ECD
060	NA															
061	D	M	GC-MS	0.02	85.5	15	6(Dichloromethane)					Yes	5	DB5	5%Phenyl 95%Dimethyl-Polysiloxane	GC-ECD/NPD/MS
062	D	S	GC-ECD	0.005	89	50	Acetone+ Methanol (1:1)		Empore Disk C8	Fenclorfos		Yes	3			GC-ECD/NPD
063	D	S	GC-ECD	0.02	90	25	3	EXTRELUT 20			Yes			Capillary	DB-608. SPB1	GC-ECD
064	D	S	GC-MS		116.1	10	6		O	YES	Yes			Capillary	HP-5	GC-ECD
065	D	S	GC-MS	0.005	98.8	10	Dichloromethane				Yes			HP5	POLYSILOXANE	GC-ECD
066	D	S	GC-MS	0.05	110	25	5	Yes	SPE	YES		Yes	2	Capillary	5%PbSil	GC-ECD/NPD
067	D	M	GC-MS			10	1	EXTRELUT	GPC	YES		Yes	4			GC-MS
068	D	M	GC-MS	0.05	90.1	5	6	1		TFF		Yes	5	CIP SIL 8CB	FUSED SILICA	GC-MS/HPLC-FL
069	D	S	GC-MS		85	5	1	ASE(Dionex)	GPC	Ronnel+ Azobencene+ Triphenyl Phosphate	Yes			MDN-5S	5%PHENYL SILICONE	GC-ECD/NPD/FPD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
070	D	S	GC-ECD	0.01		15	6		GPC	M-series	Yes			25m ID 0.32 mm 0.25um	SE 54; OV1701	GC-ECD/NPD
071	D	M	GC-MS	0.01		15	6		GPC			Yes	2		SE54. OV1701	GC-ECD
072	D	S		0.01	55	10	1		GPC	Diclofention	Yes			HP1. HP5		GC-ECD/NPD
073	D	S	GC-ECD	0.01		10	Dichloromethane					Yes	3	Capillary	SE30/SE54	GC-ECD/NPD
074	NO RESULTS															
075	D	S	GC-MS	0.05		10	3		SPE	Fenchlorphos	Yes				DB5	GC-ECD. GC-NPD. GC-MS (Single-Quad)
076	D	M	GC-MS	0.05		10	5	YES	O			Yes	3	HP-5MS		GC-MS
077	D	S	GC-MS	0.05	76	25	2		GPC			Yes	4	HP-5MS	5%Phenyl-Methyl Siloxane	GC-MS
078	D	M	GC-MS	0.05	68	50	1		GPC			Yes	4	Narrowbore	DB 5	GC-ECD
079	D	M	GC-MS	0.05		15	4				Yes		1	HP-1		GC-ECD
080	NO RESULTS															
081	D	M	GC-MS	0.02		20	1					Yes	3-6	HP-5MS	5% Ph. Me S	GC-ECD/FPD/TD
082	D	M	GC-MS	0.02		15	4				Yes			Capillary	HP-5MS	GC-ECD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
083	D	M	GC-MS	0.02		15	4	LL Phase Separation				Yes	4	Varian CP 3800	Low Bleed Fused Silica	GC-MS
084	D	M	GC-MS/MS	0.01		10	1					Yes	4	CP-Sil 8		GC-MS/MS
085	D	M	GC-MS	0.02	79	15	4					Yes	4	Capillary	PhMSil 5%	
086	D	M	GC-MS/MS	0.05	84	15	4					Yes	4	30x25x25	DB-5.DB-17	GC/FPD/ECD/MS
087	D	M	GC-MS	0.03		10	4					Yes	3	HP-5		GC-ECD/NPD/FPD/MS
088	D		MS			15	4					Yes	5	NarrowBore	HP5-MS	GC-MS
089	D	M	GC-MS/MS	0.05		15						Yes	4	Capillary	BP5	GC-MS/MS
090	D	M	GC-MS/MS	0.05	90	15	1			TTP(QC)		Yes	3	Capillary	DB-5ms	GC-MS/MS
091	D	M	GC-MS/MS	0.05		15	1			TTP. Anthracene		Yes	3	HP-5MS		GC-ITD
092	D	M	GC-MS/MS	0.05		5.2	4					Yes	6	Factor Four		GC-MS/MS-ECD
093	D	S	GC-MS	0.05		15	4					Yes	4	30m/25x25	CPSIL8CB	GC-MS
094	D	M	MS/MS			15	4					Yes	4	30mx0.25x0.2	CPSIL8	GC-ECD.GC-NPD.GC-PFPD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
095	D	M	GC-ECD	0.01	74	75	1		GPC	Yes		Yes	3	CP-SIL 5CB.CPSIL19CB.CPSIL 8CB		GC-ECD.GC-FPD.GC-ITD
096	D	M	GC-ITD	0.01	97	15	4			Aldrin (Injection Only)		Yes	5	Capillary.25mx0.22mmID	BPX-5.0.25mm(SGE)	GC-ECD
097	D	M	GC-MS	0.05	106	30	1		GPC	Triphenyl Phosphate		Yes	5	Capillary	DB-5	GC-MS
098	D	M	GC-MS	0.05		10	1		SPE	Yes		Yes	4	CP-SIL13CB		GC-MS
099	D	M	GC-MS	0.02	79	30	1		O			Yes	4	ZB5	30%Phenyl	GC-MS
100	D	M	GC-MS	0.05	84	10	1		GPC			Yes	3		DB5	GC-MS
101	D	M	GC-MS	0.01	93	50	5		SPE		Yes			HP 5/HP 50	See Column Type	GC-ECD.GC-NPD
102	D	M	GC-ITD	0.05	90	50	1		GPC		Yes			At-1701	Attm-1701	GC-FPD
103	D	S	GC-MS	0.01	87	20	3		LL			Yes	2	HP-5		GC-ECD/NPD
104	D	M	GC-MS	0.02	108	75	1	1/20	GPC	ALDRIN		Yes	5	Narrowbore	AT-5MS	GC-MS
105	D	M	GC-ECD	0.05		20.067	6	2		Dithalimphos	1	1	5	NB-1701		GC-ECD
106	ND	M	GC-MS	0.05		7.5	1			Ethyl-Parathion	Yes			DB-1	0.25mm	GC-ECD/MS
107	D	M	GC-MS	0.05	87.00	20	4					Yes	4	Capillary 30 m	HP-5	GC-ECD/NPD
108	D	S	GC-ECD	0.05	98	5	3					Yes	3	HP-5	5% Phenyl Methyl Siloxane	GC-ECD
109	D	S	GC-EC	0	93	100	3					Yes	3	HP-1	Me-SiOH	GC-ECD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
110	D	M	GC-MS	0.01	95.30	20	3		SPE			Yes	5	DB-5		GC-ECD.GC-NPD
111	D	S		0.03	95.90	10	4		SPE (Silica)			Yes	5	HP-5MS	5%Phenyl	GC-ECD/NPD
112	D	S		0.05	100	100	3		O		Yes			HP1	MeSilicone	GC-ECD
113	D	M	GC-ITD	0.026	81	15	4		NO	Hexachloro-Benzene		Yes	5	DB-5MS		GC-ITD
114	D	S	GC-ECD	0.01		18	1		GPC			Yes	4	Capillary	HP5	GC-ECD
115	ND	S	GC/MS	0.05		50	4	Dicloro-methane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	D	S	GC/MS	0.05	103	50	2		SPE		Yes			HP5-MS		GC/MS
117	NA															
118	D	M	GC-MS	0.02	95	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	GC-MS	0.02		10	1		NO		Yes			Capillary	DB-5MS	GC-MS
120	D	M	GC-FPD	0.01		50	1		GPC			Yes	2	30mx0.26mm	DB-5MS	GC-ITD
121	D	M	GC-MS	0.008		25	1		GPC			Yes	5	Capillary	DB-5MS	GC-MS (Single Quad).ECD. NPD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
122	D	S	GC-MS	0.01	109.3	30	1		GPC			Yes	3	Chrompack 50mx0.25mm x0.25mm	CPSIL-8CB	GC-ECD
123	D	S	GC-MS	0.02		30	1		GPC		Yes			30mx0.32mm	CP-Sil 8 CB	GC-ECD
124	D	S		0.05		30	1		GPC			Yes	3	Restek	STX-CLP	GC-ECD
125	D	S	GC-MS	0.05		25	1		GPC			Yes	5	Capillary	RTX 17025	GC-ECD
126	NO RESULTS															
127	D	S	GC-MS	0.001		30	1		GPC			Yes	3	50mx0.32mm x0.25um	CP-Sil 8 CB	GC-ECD
128	D	S	GC-ECD	0.05	114	30	1		GPC			Yes	3	30mx0.25mm x0.25um	RTX-CLP	GC-ECD
129	D	S		0.05		30	1		GPC			Yes	3	Restek	Stx-Cl-Pest.	GC-ECD
130	D	M	GC-MS	0.05		30	1		GPC			Yes	3	Restek	RTX-5MS	GC-ECD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
001	D	M	LC-MS-MS	0.05	85	15	4					Yes	3-4	DB5 DB 1701		ECD NPD MS
002/ 003	D	M	GC-MS	0.1	130	15	4			PCB97		Yes	3	60x0.25x0.1 60x0.25x0.15	DB5 DB1701	GC-ECD
004	D	S	LC-MS	0.02	96	25	Acetone. Petrolumether. Dichloromethane					Yes	6	100x2.1	C18	LC-MS/MS
005	ND			0.06		50	6		O+LL			Yes	4	30x0.53x0.5	RTX-WAR	GC-NPD
006	D	M		0.02	90	10	5					Yes	5	R-P	C18	LC-MS-MS
007	D	M	LC-MS/MS	0.01	83	10	Methanol Ammonia Acetate (95%:5%) 20mM Acetic Acid			$^{13}C_6$-Carbaryl		Yes	3	4u.10cm.3mm ID	C18	LC-MS/MS
008	D	S		0.05	124	25	6					Yes	4	DB	1701/01	GC-ECD
009	D	S	LC-MS/MS	0.01	75.0	50	4	Yes	LL			Yes	3	3mmx25mm	C18	LC-MS/MS
010	ND			0.5		100	3	LL	No	Aldrin		Yes	3	Capillary	DB 5 DB1701	GC-ECD GC-NPD
011	NA															

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
012	D	M	GC-MS	0.01	70-110	50	3					Yes	8	HP5MS		GC-MS
013	D	S	GC-NPD	0.02	81	25	Ethyl Acetate-Dichloromethane									GC-FPD/NPD GC-MS
014	D	S	GC-MS	0.05		40	3		LL			Yes	3	GC-Capillary	DB5	GC-ECD-NPD-MS
015	D	S	GC-MS	0.15		50	1/DCM (80/20)			Yes		Yes	2	Capillary 0.32	DB5. DB200	GC-NPD
016	D	S		0.05		50	3	Yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD/ MS
017	NA															
018	D	M	GC-MS	0.01		10	5		SPE	Yes		Yes	5	AtlantisDc18		LC-MS/MS
019	D	M	GC-TOF	0.005	89	10	5			Triphenyl-phosphat		Yes	4	ZORBAX	C18	LC-MS/MS
020	D	M	LC-MS/MS	0.010		10	6		SPE			Yes	3	Aqua 3	C18	LC-MS/MS
021	D	S	GC-MS	0.05	79	50	2		GPC		Yes			BD1/5/35/1301. HP50/1701/5MS		GC-NPD
022	D	M		0.01	133	10	6;(Methanol)		CEM ELUT			Yes	7	2.1x125mm; 3µm	RP-C18	LC-MS/MS
023	D	M	LC-MS/MS	0.01		10	Methanol					Yes	5	2.1x100mm	Atlantis C18	LC-MS/MS

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
024	D	M	LC-MS/MS	0.005		10	Acetonitril					Yes	5	Aqua	C18	LC-MS/MS
025	D	M	LC-MS/MS	0.01		20	6					Yes	2x4	HPLC(RP)	RP(C18)	LC-MS/MS
026	D	S	GC-MS	0.05		10	5		SPE			Yes	3	Capillary	Varian VF-5MS	GC-ECD GC-NPD GC-MS
027	D	M	GC-MS	0.02		100	2		GPC	Azobenzene	Yes			30mx0.25x0.25	Factor Four	GC-NPD
028	D	M	GC-MSD	0.02	102	10	5		Others	Triphenyl-Phosphat		Yes	7	KS	HPSMS	GC-MS
029	D	M	GC-MS	0.04		100	2	1	GPC SPE			Yes	3-5	GC	DB5 HP5-MS DB17	GC-ECD GC-NPD GC-MS (single-quad)
030	D	M	LC-MS	0.02		10	Methanol			Isoproturon D6		Yes	3	Synergi-polar RP		LC-MS
031	D	S	GC-MS	0.02		10	5		SPE			Yes	2	Capillary-LC	HP5 RP18	GC-ECD HPLC-DAD/HPLC-FL
032	D	M	LC-MS/MS	0.01	83	10	6(Methanol)	1:4.	SPE			Yes	5	Aqua5µ	C18	LC-MS/MS
033	D	M		0.02		100	2		GPC			Yes	3	25m x 0.32mmx0.52µm	Ultra2	GC-ECD/NPD

APPENDIX 7. Methods used by participants for determining pesticides

IMAZALIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
034	D	M	GC-MS	0.03		100	2		GPC	Parathion-Methyl	Yes			30mx0.3mmx0.5µm	DB5 DB17	GC-PND
035	D	M	LC-MS/MS	0.01		10	5		O			Yes	5	Aqua5µ. 50x2mm	RP18	LC-MS/MS
036	D	S	GC-MS	0.02		101	3		GPC		Yes					GC-ECD/NPD/MS
037	D	M	GC-MS	0.02		100	2		GPC	TPP		Yes	4	HP5		GC-MS
038	D	M	LC-MS/MS	0.01	73	20	2			Triphenyl-Phosphat		Yes	3	Capillary-GC	Optima5. DB17-MS	GC-ECD. GC-NPD. GC-MS
039	D	S		0.01		10	5	LL	PSA	Methoxi-Fenozide		Yes	6	Aqua(phenomex)	C18	LC-MS/MS
040	ND	S	GC-ECD	0.01		340	2		O+GPC	Parathion	Yes			Capillary		GC-ECD
041	D	M	LC-MS	0.02	108	10	Methanol					Yes	7	Atlantis	dc18	LC-MS/MS
042	D	M	GC-MS	0.02		100	2		GPC	EPN		Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	M	LC-MS/MS	0.006		10	6 (Methanol)		SPE			Yes	2		C18	LC-MS/MS
044	D	M		0.01		100	2					Yes	4		RP8	LC-MS/MS

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IMAZALIL

Lab Code	045	046	047	048	049	050	051	052	053	054	055	056	057	058
Quantification Method	D	D	D	NA	ND	NA	NA	NA	NA	NA	NA	NA	D	ND
Quantification using Standards in solvents or matrix	M	M	M		M								S	M
Confirmation method	LC-MS/MS	GC-PND	GC-NPD		GC-MS								HPLC-UV	GC-MS
RL (mg/kg)	0.02	0.02	0.01		0.5								0.05	0.03
Recovery		82												
Sample Weight (g)	10	50	100		15								20	15
Extraction Solvent	5	3	2		4								1	1
Partion Step (if any)														
Clean up step	SPE	GPC	GPC										LL	GPC
Internal Standard (if any)														Yes
Single Level Calibration		Yes												
Multi-Level Calibration	Yes		Yes										Yes	Yes
Nº of points	3		3 . 5		2								3	3
Column type	Luna	Capillary	Capillary										HP5MS	HP5MS
Stationary phase	C18	DB17. HP5	DB5. DB1701		DB5MS								HPLC-UV	5%PHSi
Determination	LC-MS/MS	GC	GC-ECD. GC-NPD.GC-FPD		GC-ECD.GC-IT									GC-MS

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
059	NA															
060	ND			0.1		10	6(Dichloromethane)					Yes	3, 4, 7	30mx0.32mm x0.25µm	AT5.ZB-35	GC-NPD
061	D	M	GC-MS	0.02	99.1	15	6(Dichloromethane)					Yes	5	DB5	5%phenyl 95%dimethyl-polysiloxane	GC-ECD/NPD/MS
062	ND	S	HPLC-DAD	0.25		10	Dichloromethane		$LC\text{-}NH_2$ Columns			Yes	3	LUNA 2	LC 18	HPLC-DAD
063	D	S	GC-ECD	0.05	84	25	3	EXTRELUT 20			Yes			Capillary	DB-608. SPB1	GC-ECD
064	D	S	GC-MS		72.1	10	6		O	Yes	Yes			Capillary	HP-5	GC-ECD
065	D	S	GC-MS	0.005	81.2	10	Dichloromethane				Yes			HP5	POLYSILOXANE	GC-NPD
066	D	S	GC-MS	0.05	92	25	5	Yes	SPE	Yes		Yes	2	Capillary	5%PbSil	GC-ECD/NPD
067	D	M	GC-MS			10	1	EXTRELUT	GPC	Yes		Yes	4			GC-MS
068	D	M	GC-MS	0.05	77.5	5	6	1		TFF		Yes	5	CIP SIL 8CB	FUSED SILICA	GC-MS/HPLC-FL
069	D	S	GC-MS		79	5	1	ASE(Dionex)	GPC	Ronnel+ Azobencene+ Triphenyl phosphate	Yes			MDN-5S	5%PHENYL SILICONE	GC-ECD/NPD/FPD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
070	D	S	GC-ECD	0.02		15	6		GPC	M-series	Yes			25m ID 0.32 mm 0.25um	SE 54; OV1701	GC-ECD/NPD
071	D	M	GC-MS	0.02		15	6		GPC			Yes	2		SE54. OV1701	GC-ECD
072	D	S		0.02	90	10	1		GPC	Diclofention	Yes			HP1. HP5		GC-ECD/NPD
073	D	S	GC-ECD	0.01		10	Dichloromethane					Yes	3	Capillary	SE30/SE54	GC-ECD/NPD
074	NO RESULTS															
075	D	S	GC-MS	0.02		10	3		SPE	Fenchlorphos	Yes				DB5	GC-ECD. GC-NPD. GC-MS (SINGLE-QUAD)
076	D	M	GC-MS	0.01		10	5	Yes	O			Yes	3	HP-5MS		GC-MS
077	ND			0.02												
078	D	M	GC-MS	0.05	79	50	1		GPC			Yes	4	Narrowbore	HP 50	GC-NPD
079	D	M	GC-MS	0.02		15	4				Yes		1	SPB 1701		GC-NPD
080	NO RESULTS															
081	D	M	GC-MS	0.01		20	1					Yes	3-6	HP-5MS	5%Ph. Me S	GC-ECD/FPD/TD
082	D	M	GC-MS	0.05		15	4				Yes			Capillary	HP-5MS	GC-NPD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
083	NA															
084	D	M	GC-MS/MS	0.01		10	1					Yes	4	CP-Sil 8		GC-MS/MS
085	D	M	GC-MS	0.02	95	15	4					Yes	4	Capillary	PhMSil 5%	
086	D	M	LC-MS/MS	0.05	69	5	5					Yes	4	Luna(Phenom)	C-18	LC-MS/MS
087	D	M	GC-Ms	0.02		10	4					Yes	4	HP-5		GC-ECD/NPD/FPD/MS
088	NA															
089	NA															
090	NA															
091	NA															
092	D	M	GC-MS/MS	0.02		5.2	4					Yes	6	Factor Four		GC-MS/MS-ECD
093	NA															
094	D	M	MS/MS			15	4					Yes	4	30mx0.25x0.2	CPSIL8	GC-ECD,GC-NPD,GC-PFPD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
095	D	M	LC-MS/MS	0.01	109	75	1			Yes	Yes					LC-MS/MS
096	D	S	LC-MS/MS	0.01	90	7.5	4(+Na_2SO_4)					Yes	4	150x3.2mmID	Altima C18.5mm	LC-MS/MS
097	D	M	LC-MS/MS	0.02	95	10	5					Yes	5	Narrow Bore	C18	LC-MS/MS
098	D	M	LC-MS/MS	0.02		10	1		LL	Yes		Yes	4	RP-HPLC	C-18	LC-MS/MS
099	D	M	GC-MS	0.01	62	30	1		O			Yes	4	ZB5	30%Phenyl	GC-MS
100	D	M	LC-MS/MS	0.02	88	10	1					Yes	4	C-18		LC-MS/MS
101	ND	M	GC-MS	0.02		50	5		SPE		Yes			HP 5/HP 50	See Column Type	GC-ECD.GC-NPD
102	ND			0.02		50	1		GPC		Yes			At-1701	Attm-1701	GC-FPD
103	D	S	GC-MS	0.02	102	20	3		LL			Yes	2	HP-5		GC-ECD/NPD
104	D	M	GC-MS	0.01	115	75	1	1/20	GPC	Aldrin		Yes	5	Narrowbore	AT-5MS	GC-MS
105	NA															
106	D	M	LC-MS/MS	0.02		7.5	1				Yes			C-18		LC-MS/MS
107	D	S	LC-MS	0.02	103.5	20	4					Yes	6	X-terra 100 mm	C-18	LC-MS
108	NA															
109	NA															

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IMAZALIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
110	D	M	GC-MS	0.02	107.2	20	3					Yes	3	DB-5		GC-ECD.GC-NPD
111	NA															
112	NA															
113	D	M	GC-ITD	0.05	105	15	4		NO	Hexachloro-Benzene		Yes	5	DB-5MS		GC-ITD
114	D	S	GC-ECD	0.05		37	6		GPC			Yes	4	Capillary	HP5	GC-ECD
115	ND		GC/MS	0.02		50	4	Dicloro-methane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	D	S	GC/MS	0.02	108	50	2		SPE		Yes			HP5-MS		GC/MS
117	ND	M	GC-MS	0.02	120.4	20	4	Yes	GPC			Yes	5	HP-5MS		GC-MS
118	D	M	GC-MS	0.02	84	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	LC-MS/MS	0.01		10	5	Yes	LL			Yes	4	15x2.1cm.5um	C-18	LC-MS/MS
120	NA															
121	D	M	LC-MS	0.001		12.5	5		No			Yes	7	HPLC	C-18	LC-MS/MS

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IMAZALIL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
122	D	S	GC-MS	0.02	97.50	30	1		No			Yes	3	Chrompack 30mx0.32mm x0.25mm	CPSIL-8CB	GC-NPD
123	D	S	GC-MS	0.1		30	1		GPC		Yes			30mx0.53mm	CP-Sil 8 CB	GC-NPD
124	D	S		0.02		30	1					Yes	3	SGE	BPX-5	GC-NPD
125	D	S	GC-MS	0.05		25	1		GPC			Yes	5	Capillary	RTX 17025	GC-ECD
126	NO RESULTS															
127	D	S		0.02		30	1		GPC			Yes	3	50mx0.53mmx0.5um	RTX OPP2	GC-NPD
128	D	S	GC-NPD	0.05	113	30	1		GPC			Yes	3	Purosphere RP18. 250/4mm 5um		HPLC-DAD
129	D	S		0.02		30	1		GPC			Yes	3	Varian	Factor Four Vf5	GC-NPD
130	D	M	HPLC-UV	0.02		30	1					Yes	3	Varian	CPSil 8CB	GC-NPD

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IMIDACLOPRID

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
001	D	M	LC-MS-MS	0.01	97	10	6					Yes	4	Phenomenex Aqua	RP	MS/MS
002/ 003	NA															
004	D	S	LC-MS	0.05	81	50	Methanol. Water		LL. O			Yes	4	250x4.6	C18	HPLC-DAD
005	NA															
006	D	M	LC-MS-MS	0.05	85	10	5					Yes	5	R-P	C18	LC-MS-MS
007	D	M	LC-MS/MS	0.01	85	10	Methanol Ammonia Acetate (95%:5%) 20mm Acetic Acid			$^{13}C_6$-carbaryl		Yes	3	4µ. 10cm.3mm ID	C18	LC-MS/MS
008	NA															
009	D	M	LC-MS/MS	0.01	112.0	50	4	Yes	LL			Yes	3	3mmx25mm	C18	LC-MS/MS
010	NA															
011	NA															

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IMIDACLOPRID

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
012	NA															
013	D	S	LC-MS-MS	0.02	77	15	4									LC-MS
014	NA															
015	NA															
016	ND	S		0.05		50	3	Yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD/MS
017	ND	S	GC-MS	0.01		40	2		GPC			Yes	5	DB5/DB1701		GC-ECD/PND
018	D	M		0.02		10	5		SPE	Yes		Yes	5	AtlantisDc18		LC-MS/MS
019	D	M	2 Transitions	0.005	96	10	5			Triphenyl-Phosphat		Yes	4	ZORBAX	C18	LC-MS/MS
020	D	M	LC-MS/MS	0.010		10	6		SPE			Yes	3	Aqua 3	C18	LC-MS/MS
021	D	S	LC-MS/MS	0.05	98.2	50	6		SPE			Yes	6	LICROSPHER 100RP8		HPLC-DAD
022	D	M		0.01	99	10	6;(Methanol)		CEM ELUT			Yes	7	2.1x125mm; 3µm	RP-C18	LC-MS/MS
023	D	M	LC-MS/MS	0.01		10	Methanol					Yes	5	2.1x100mm	Atlantis C18	LC-MS/MS

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IMIDACLOPRID

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
024	D	M	LC-MS/MS	0.005		10	Acetonitril					Yes	5	Aqua	C18	LC-MS/MS
025	D	M	LC-MS/MS	0.01		20	6					Yes	2x4	HPLC(RP)	RP(C18)	LC-MS/MS
026	NA															
027	D	M	GC-MS	0.02		10	5		O		Yes			50x2mm	PR18	LC-MS(singelquad)
028	D	S	HPLC-UV	0.05	78	10	1		LL			Yes	7	HPLC	Hypersil C18	HPLC-DAD HPLC-FL
029	D	M	LC-MS/MS	0.01		10	6	1	LL			Yes	3-5	HPLC	Phenomex Aqua	LC-MS/MS
030	D	M	LC-MS	0.04		10	Methanol			Isoproturon D6		Yes	3	Synergi-polar RP		LC-MS
031	D	S	HPLC-DAD	0.05		10	5		SPE			Yes	2	Capillary-LC	HP5 RP18	GC-ECD HPLC-DAD/HPLC-FL
032	D	M	LC-MS/MS	0.01	83.3	10	6(Methanol)	1:4.	SPE			Yes	5	Aqua5µ	C18	LC-MS/MS
033	NA															
034	D			0.05		100	2		GPC LL		Yes			250x4x5	RP8	HPLC-UV

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
035	D	M	LC-MS/MS	0.005		10	5		O			Yes	5	Aqua5µ. 50x2mm	RP18	LC-MS/MS
036	NA															
037	NA															
038	D	M	LC-MS/MS	0.005	62	20	2			Triphenyl-Phosphat		Yes	3	RP18 LC	C18. Aqua5µ	LC-MS/MS
039	D	S		0.01		10	5	LL	PSA	Methoxi-Fenozide		Yes	6	Aqua(phenomex)	C18	LC-MS/MS
040	NA															
041	D	M	LC-MS	0.05	123	10	Methanol					Yes	7	Atlantis	dc18	LC-MS/MS
042	NA															
043	D	M	LC-MS/MS	0.006		10	6 (Methanol)		SPE			Yes	2		C18	LC-MS/MS
044	D	M		0.01		100	2					Yes	4		RP8	LC-MS/MS
045	D	M	LC-MS/MS	0.05		10	5		SPE			Yes	3	Luna	C18	LC-MS/MS

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Lab Code	046	047	048	049	050	051	052	053	054	055	056	057	058	059	060
Quantification Method	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	D	ND	NA	NA
Quantification using Standards in solvents or matrix												S	M		
Confirmation method												LC-MS/MS	GC-MS		
RL (mg/kg)												0.05	0.03		
Recovery															
Sample Weight (g)												20	15		
Extraction Solvent												6	1		
Partion Step (if any)															
Clean up step												GPC	GPC		
Internal Standard (if any)													Yes		
Single Level Calibration															
Multi-Level Calibration												Yes	Yes		
Nº of points												3	3		
Column type												REVERSED PHASE	HP5MS		
Stationary phase												C18	5%PHSi		
Determination												LC-MS/MS	GC-MS		

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Lab Code	061	062	063	064	065	066	067	068	069	070	071
Quantification Method	NA	D	NA	NA	ND	NA	NA	NA	NA	NA	D
Quantification using Standards in solvents or matrix		S									M
Confirmation method		HPLC-DAD									
RL (mg/kg)		0.05			0.02						0.05
Recovery		100.2									
Sample Weight (g)		10									15
Extraction Solvent		Dichloromethane									6
Partion Step (if any)											
Clean up step		LC-NH_2 Columns									GPC
Internal Standard (if any)											
Single Level Calibration											
Multi-Level Calibration		Yes									
Nº of points		3									
Column type		LUNA 2									
Stationary phase		LC 18									C18 Octadecil
Determination		HPLC-DAD									HPLC-DAD

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
072	NA															
073	NA															
074	NO RESULTS															
075	NA															
076	NA															
077	NA															
078	D	S		0.05	84	50	1		GPC			Yes	4	Zorbax TMS	C 18	HPLC-DAD
079	NA															
080	NO RESULTS															
081	NA															
082	NA															
083	NA															
084	NA															

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Lab Code	085	086	087	088	089	090	091	092	093	094	095
Quantification Method	D	D	NA	D	NA	D	NA	NA	NA	NA	D
Quantification using Standards in solvents or matrix	M	M				M					M
Confirmation method	GC-MS	LC-MS/MS				LC-MS/MS					LC-MS/MS
RL (mg/kg)	0.05	0.02		0.02		0.05					0.01
Recovery	85	96				70					89
Sample Weight (g)	15	5		15		15					75
Extraction Solvent	4	5		Dichloromethane		1					1
Partion Step (if any)											
Clean up step				GPC							
Internal Standard (if any)						TTP(QC)					
Single Level Calibration											Yes
Multi-Level Calibration	Yes	Yes		Yes		Yes					
Nº of points	4	4		5		4					
Column type	Capillary	Luna(Phenom)		C-8		3 µm					
Stationary phase	PhMSil 5%	C-18				C-18					
Determination		LC-MS/MS		HPLC-DAD		LC-MS/MS					LC-MS/MS

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
096	D	S	LC-MS/MS	0.01	92	7.5	4(+Na_2SO_4)					Yes	4	150x3.2mmID	Altima C18.5mm	LC-MS/MS
097	D	M	LC-MS/MS	0.02	114	10	5					Yes	5	Narrow Bore	C18	LC-MS/MS
098	D	M	LC-MS/MS	0.05		10	1		LL	Yes		Yes	4	RP-HPLC	C-18	LC-MS/MS
099	NA															
100	D	M	LC-MS/MS	0.05	95	10	1					Yes	4	C-18		LC-MS/MS
101	NA															
102	NA															
103	NA															
104	NA															
105	NA															
106	NA															
107	D	S	LC-MS	0.05	112.5	20	4					Yes	6	X-terra 100 mm	C-18	LC-MS
108	NA															
109	NA															
110	NA															

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Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
111	NA															
112	NA															
113	NA															
114	NA															
115	ND		GC/MS	0.05		50	4	Dichloro methane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	NA															
117	NA															
118	NA															
119	D	M	LC-MS/MS	0.01		10	5	Yes	LL			Yes	4	15x2.1cm.5um	C-18	LC-MS/MS
120	NA															
121	D	M	LC-MS	0.005		12.5	5		NO			Yes	7	HPLC	C-18	LC-MS/MS
122	D	S	GC-MS	0.05	102.9	30	1		GPC			Yes	4	Agilent Technologies	Zorbax SB 18	HPLC-UV

APPENDIX 7. Methods used by participants for determining pesticides

IMIDACLOPRID

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
123	D	S	GC-ECD	0.05		30	1		GPC		Yes			250mx4mm	C-18	HPLC-UV
124	D	S	HPLC	0.05		30	1					Yes	3	SGE	BPX-5	GC-NPD
125	D	M	GC-MS	0.05		25	6		O			Yes	5	Capillary	RTX 200	GC-MS
126	NO RESULTS															
127	D	S		0.05		30	1		O			Yes	4	Nucleosil 100	C-18	HPLC-UV
128	D	S	HPLC-DAD	0.05	98	30	1		GPC			Yes	3	Purosphere RP18. 250/4mm 5um		HPLC-DAD
129	D	S		0.05		30	1		GPC			Yes	3	Supelcosil	LC-18	HPLC-UV
130	D	M		0.05		30	1		GPC			Yes	3	Waters	Nova-Pack C-18	HPLC-UV

APPENDIX 7. Methods used by participants for determing pesticides

DITHIOCARBAMATES

Lab Code	001	002/003	004	005	006	007	008	009	010	011
Quantification Method	D	D	NA	D	NA	NA	NA	D	NA	NA
Quantification using Standards in solvents or matrix	S	S		S						
Confirmation method				GC-ECD				UV		
RL (mg/kg)	0.3	0.02		0.05				0.2		
Recovery	91	100		85				93.8		
Sample Weight (g)	50	50		25				100		
Extraction Solvent				6				6		
Partion Step (if any)		Head-Space								
Clean up step										
Internal Standard (if any)		Dichloro methane								
Single Level Calibration				Yes						
Multi-Level Calibration	Yes	Yes						Yes		
Nº of points	5	3						8		
Column type		30x0.32		60m						
Stationary phase		GS-GASPro		DBS						
Determination	Photometry	GC-MSD		GC-ECD (Headspace)				UV		

APPENDIX 7. Methods used by participants for determining pesticides

DITHIOCARBAMATES

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
012	D	S	UV SCAN		70-110	50	Distilation					Yes	6			UV
013	D	S	UV	0.4	80	50										UV
014	D	S	UV	0.2		100						Yes	3			UV
015	D		UV	0.2		100										
016	NA															
017	D	S		0.01		5						Yes	5	DB624		GC-ECD
018	D	S		0.019		15						Yes	8			UV
019	D	S		0.05		50	Distilation					Yes	6			Photometry
020	D	S	UV	0.010		25						Yes	8			UV
021	D	S		0.08	82.3	25	6		SPE. LL			Yes	7	LICHROSPHER 100RP8	150mmx4.6mm. 5um	HPLC-FL
022	NA															
023	D	S		0.05		10						Yes	8			Photometry

APPENDIX 7. Methods used by participants for determing pesticides

DITHIOCARBAMATES

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
024	D		Photometry	0.01		25						No				Photometry
025	D			0.1		100	6					Yes	5			
026	NA															
027	D	M	GC-MS	0.02		10						Yes	6	30mx0.25x0.25	FACTOR FOUR	GC-MS
028	D	S	Photometry	0.05	86	100						Yes	7			UV
029	NA															
030	D	S	Photometry	0.05		50						Yes	8			Photometry 272.302.332 nm
031	D	S		0.01		40						Yes	8			UV
032	D	S	Photometry	0.02		45						Yes	10			Spectrophotometric
033	D		UV	0.02		40						Yes	5			UV
034	NA															

APPENDIX 7. Methods used by participants for determining pesticides

DITHIOCARBAMATES

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
035	NA															
036	NA															
037	D	M	GC-MS	0.05		3	Headspace/SnCl2		O			Yes	4 (with Thiram)			GC-MS
038	ND	M		0.03		200						Yes	5			CS2-photometric
039	D			0.05		50						Yes	5			UV-Spectraphotometrie
040	NA															
041	D	S		0.05		70						Yes	8			UV-vis
042	D	S		0.05									8			
043	D	S	UV	0.01		100						Yes	8			UV
044	D	S		0.1		50	6									Photometry
045	D	S	Photometry	0.05		100						Yes	6			Photometry

APPENDIX 7. Methods used by participants for determing pesticides

DITHIOCARBAMATES

Lab Code	046	047	048	049	050	051	052	053	054	055	056	057	058	059	060
Quantification Method	D	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	D	NA	ND	D
Quantification using Standards in solvents or matrix	S	S										S			S
Confirmation method	UV	UV													
RL (mg/kg)	0.01	0.01										0.25		0.5	0.2
Recovery	106														90
Sample Weight (g)	20	10													45
Extraction Solvent		6													
Partion Step (if any)															
Clean up step															
Internal Standard (if any)															
Single Level Calibration															
Multi-Level Calibration	Yes	Yes													Yes
Nº of points	8	8													7
Column type															
Stationary phase															
Determination	UV-Spectraphotometrie	UV-VIS													UV 435nm

APPENDIX 7. Methods used by participants for determining pesticides

DITHIOCARBAMATES

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
061	D		UV	0.5	83.2	50						Yes	5			UV
062	D	S	GC-ECD	0.01	85	50	Acetone+ Methanol (1:1)		Empore Disk C8	Fenclorfos		Yes	3			GC-ECD/NPD
063	NA															
064	D	S				50						Yes	8			Spectrophotometric
065	D	S		0.05	72.5											
066	D			0.4		50						Yes	3			CS2-COLORIMETRIC
067	D	S				50						Yes	5			UV-VIS
068	NA															
069	D	S			77	50					Yes					UV-VIS
070	D	S		0.3		50	6					Yes	8			Spectrophotometer UV-VIS
071	D	S		0.3		100	6					Yes	8			Spectrophotometer UV-VIS

APPENDIX 7. Methods used by participants for determing pesticides

DITHIOCARBAMATES

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
072	D	S		0.4		50						Yes	8			UV-VIS
073	D	S		0.5		50						Yes	8			Spectrophotometer Method
074	NO RESULTS															
075	D	S		0.5												
076	D	M	GC-ECD	0.05		1		HEAD-SPACE				Yes	3	HP-5MS	GC-ECD	Internal
077	NA															
078	D	S		0.1	87	100	Acid Hydrolysis					Yes	4			MAS
079	D	M		0.05		50	6	Y				Yes	3	SPB-1		GC-MS
080	NO RESULTS															
081	NA															
082	D	S		0.05		100	6					Yes	5			UV
083	NA															
084	NA															

APPENDIX 7. Methods used by participants for determining pesticides

DITHIOCARBAMATES

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
085	D	S	GC-MS	0.02	81	25	6					Yes	5	Capillary	Porapak	GC-FSD-MS
086	D	M	GC/FPD	0.2	99	5	6					Yes	4	30x0.25x5	DB-5	Dithiocarbamates
087	D	S	GC/MS	0.04		4	5					Y	4	SPB-1 Sulphur		GC-FPD(HS)
088	NA															
089	D	S		0.05		50						Y	4			UV
090	ND	S		0.2		50	6					Y	9			Espec. UV-Visible
091	NA															
092	D	D	UV	0.05		5	6					Y	5			UV
093	D	S	UV	0.05		15	4					Y	4	30m/25x25	CPSIL8CB	GC-MS
094	D	M				20	6					Y	4	30mx0.53x0.25	BP5	GC-FPD
095	D	M	GC-FPD	0.025	80	50	6					Y	2	RTX-502.2(30m.0.53mmID.3µmdf	Crossbond Phenylmethyl Polysiloxane	GC-FPD

APPENDIX 7. Methods used by participants for determing pesticides

DITHIOCARBAMATES

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
096	D	S	GC-ITD	0.05	79	50	6(iso-octane)					Y	4	Capillary:50mx0.32mmID	CP-SIL8 CB 1.2mm(Varian)	GC-FPD
097	D	M	GC-FPD	0.02	84	25	6					Y	6	Wide bore	CP Sil5	GC-FPD
098	D	M	GC-MS	0.05		25	6			Yes		Yes	3	DB-5MS		GC-MS
099	D	S	GC-MS	0.05	86	50	6					Yes	4	ZB5	30%Phenyl	GC-MS
100	D	S	GC-MS	0.05	95	50		LL				Yes	3		CPSIL-SCB	GC-MS
101	NA															GC-ECD
102	NA															
103	NA															
104	NA															
105	NA															
106	D			0.05		50					Yes			Capillary	DB17	
107	D	S	UV	0.05	90.00	200						Yes	5			
108	NA															
109	NA															
110	D	S		0.05	96.70	50	6					Yes	6			Spectrophotometry

APPENDIX 7. Methods used by participants for determining pesticides

DITHIOCARBAMATES

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
111	D			0.05	84.00	10	4		SPE (Silica)			Yes	5	HP-5MS	5%Phenyl	GC-ECD/NPD
112	D	S		0.05	80	40						Yes	3			Spectrophotometric Method
113	NA															
114	NA															
115	NA															
116	NA															
117	D	S	GC-MS	0.05	100.8	50	6		No			Yes	6	HP-5MS		GC-MS
118	NA															
119	D	M	GC-MS	0.05		30	6	Yes	No			Yes	3	Capillary	DB-5MS	GC-MS
120	NA															
121	D	M	GC-MS	0.001		5			No			Yes	6	Capillary	HP-VOC	GC-ITD
122	D	S	GC-FPD	0.1	73.5	50	6		No			Yes	4			Spectrophotometry

APPENDIX 7. Methods used by participants for determing pesticides

DITHIOCARBAMATES

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
123	D	S		0.05		25		Liquid/Gas (Headspace)		Thiophen		Yes	4	0.9mx2mm	10%SE-30	GC-FPD
124	D			0.05		100	6		O			Yes	6			Spectrophotometry
125	D	S		0.05	82	50	6		O			Yes	5	Packed	SE30	GC-FPD
126	NO RESULTS															
127	D	S		0.02		50	6					Yes	4	25mx0.53mmx1.0um	CP-Sil 8 CB	GC-FPD (S-model)
128	D	M		0.05	96	50						Yes	3	30mx0.53mmx1.5um	DB1	GC-FPD
129	D	M		0.05		25	6					Yes	4	Chrompack	Tenax	GC-FPD
130	D	M		0.1		30	6					Yes	4	Chrompack	CPSil 8CBD	GC-FPD

APPENDIX 7. Methods used by participants for determining pesticides

OXYDEMETON-METHYL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
001	D	M	LC-MS/MS	0.01	97	10	6					Yes	4	Phenomenex Aqua	RP	MS/MS
002/003	NA															
004	D	S	LCMS	0.02	100	25	Acetone. Petrolumether. Dichloromethane					Yes	6	100x2.1	C18	LC-MS/MS
005	NA															
006	NA															
007	D	M	GC-NPD	0.07	86	25	2		GPC	Dithalimphos		Yes	5	J&W 0.32/0.25mmID	DB5. DB1701	GC-ECD. GC-NPD. GC-ITD
008	ND	M		0.1		25	2		GPC			Yes	5	DB	1701/05/01/35	GC-ECD/NPD/ITD
009	D	M	LC-MS/MS	0.01	90.0	50	4	Yes	LL			Yes	3	3mmx25mm	C18	LC-MS/MS
010	NA															
011	NA															

APPENDIX 7. Methods used by participants for determing pesticides

OXYDEMETON-METHYL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
012	NA															
013	NA															
014	NA															
015	NA															
016	ND	S		0.02		50	3	Yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD/MS
017	ND	S	GC-MS	0.01		40	2		GPC			Yes	5	DB5/DB1701		GC-ECD/PND
018	D	M		0.02		10	5		SPE	Yes		Yes	5	AtlantisDc18		LC-MS/MS
019	D	M	6 Transitions	0.005	95	10	5			Triphenyl-Phosphat		Yes	4	ZORBAX	C18	LC-MS/MS
020	D	M		0.010		10	6		SPE			Yes	3	Aqua 3	C18	LC-MS/MS
021	D	M	LC-MS/MS	0.02	116.2	50	6 (Methanol)		SPE			Yes	7	Synergi 4u Hydro RP80A		LC-MS/MS
022	D	M		0.01	93	10	6;(Methanol)		CEM ELUT			Yes	7	2.1x125mm; 3µm	RP-C18	LC-MS/MS
023	D	M	LC-MS/MS	0.01		10	Methanol					Yes	5	2.1x100mm	Atlantis C18	LC-MS/MS

APPENDIX 7. Methods used by participants for determining pesticides

OXYDEMETON-METHYL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
024	D	M	LC-MS/MS	0.005		10	Acetonitril					Yes	5	Aqua	C18	LC-MS/MS
025	D	M	LC-MS/MS	0.008		20	6					Yes	2x4	HPLC(RP)	RP(C18)	LC-MS/MS
026	NA															
027	NA															
028	D	M	GC-NPD	0.05	<70%	10	5		Others	Triphenyl-Phosphat		Yes	7	KS	HPSMS	GC-MS
029	D	M	LC-MS/MS	0.01		10	6	1	LL			Yes	3-5	HPLC	Phenomex Aqua	LC-MS/MS
030	D	M	LC-MS	0.02		10	Methanol			Isoproturon D6		Yes	3	Synergi-polar RP		LC-MS
031	D	S	GC-MS	0.02		10	5		SPE			Yes	2	Capillary-LC	HP5 RP18	GC-ECD HPLC-DAD/ HPLC-FL
032	D	M	LC-MS/MS	0.01	88.7	10	6(Methanol)	1:4.	SPE			Yes	5	Aqua5µ	C18	LC-MS/MS
033	NA															
034	NA															

APPENDIX 7. Methods used by participants for determing pesticides

OXYDEMETON-METHYL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
035	D	M	GC-MS	0.02		50	3		GPC			Yes	4	HP-5MS		GC-MS/ECD/FPD
036	NA															
037	NA															
038	D	M	LC-MS/MS	0.01	90	20	2			Triphenyl-phosphat		Yes	3	RP18 LC	C18. Aqua5µ	LC-MS/MS
039	D	S		0.01		10	5	LL	PSA	Methoxi-fenozide		Yes	6	Aqua (phenomex)	C18	LC-MS/MS
040	ND	S	GC-ECD	0.01		340	2		O+GPC	Parathion	Yes			Capillary		GC-ECD
041	D	M	LC-MS	0.02	90	10	Methanol					Yes	7	Atlantis	dc18	LC-MS/MS
042	D	M	GC-MS	0.05		100	2		GPC	EPN		Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	M	LC-MS/MS	0.006		10	6 (Methanol)		SPE			Yes	2		C18	LC-MS/MS
044	D	M	GC-MS	0.02		100	2		GPC			Yes	5		OV17. DB6	GC-NPD
045	D	M	GC-NPD. GC-MS	0.02		100	2		GPC			Yes	5		DB5. DB1701	GC-ECD. GC-NPD.GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

OXYDEMETON-METHYL

Lab Code	046	047	048	049	050	051	052	053	054	055	056	057	058	059	060
Quantification Method	D	D	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Quantification using Standards in solvents or matrix	M	M	S												
Confirmation method	GC-FPD	GC-NPD	GC-FPD.MS												
RL (mg/kg)	0.1	0.02	0.02												
Recovery	102														
Sample Weight (g)	50	100	50												
Extraction Solvent	3	3	1												
Partion Step (if any)															
Clean up step	GPC	GPC													
Internal Standard (if any)															
Single Level Calibration	Yes														
Multi-Level Calibration		Yes	Yes												
Nº of points		4	3												
Column type	Capillary	Capillary	Capillary												
Stationary phase	DB17. HP5	DB5. DB1701	DB1701												
Determination	GC	GC-ECD. GC-NPD	GC-FPD. GC-MS												

APPENDIX 7. Methods used by participants for determing pesticides

Lab Code	061	062	063	064	065	066	067	068	069	070	071
Quantification Method	ND	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Quantification using Standards in solvents or matrix											
Confirmation method											
RL (mg/kg)	0.05				0.01						
Recovery											
Sample Weight (g)											
Extraction Solvent											
Partion Step (if any)											
Clean up step											
Internal Standard (if any)											
Single Level Calibration											
Multi-Level Calibration											
Nº of points											
Column type											
Stationary phase											
Determination											

OXYDEMETON-METHYL

APPENDIX 7. Methods used by participants for determining pesticides

OXYDEMETON-METHYL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
072	NA															
073	NA															
074	NO RESULTS															
075	NA															
076	D	M	GC-MS	0.02		10	5	Yes	O			Yes	3	HP-5MS		GC-MS
077	ND			0.05												
078	D	M	GC-MS	0.05	60	50	1		GPC			Yes	4	Narrowbore	DB 5	GC-PFPD
079	NA															
080	NO RESULTS															
081	NA															
082	NA															
083	NA															
084	NA															

APPENDIX 7. Methods used by participants for determing pesticides

OXYDEMETON-METHYL

Lab Code	085	086	087	088	089	090	091	092	093	094	095
Quantification Method	D	D	D	NA	NA	ND	NA	NA	NA	NA	D
Quantification using Standards in solvents or matrix	M	M	M			M					M
Confirmation method	GC-MS		GC-MS		M	LC-MS/MS			S		LC-MS/MS
RL (mg/kg)	0.02	0.05	0.05			0.2					0.01
Recovery	79	72				79					88
Sample Weight (g)	15	15	10			15					75
Extraction Solvent	4	4	4			1					1
Partion Step (if any)											
Clean up step											
Internal Standard (if any)						TTP(QC)					
Single Level Calibration											Yes
Multi-Level Calibration	Yes	Yes	Yes			Yes					
Nº of points	4	4	3			4					
Column type	Capillary	30x25x25	HP-5			3 um					
Stationary phase	PhMSil 5%	DB-5.DB-17				C-18					
Determination		GC/FPD/ECD/MS	GC-ECD/NPD/FPD/MS			LC-MS/MS					LC-MS/MS

APPENDIX 7. Methods used by participants for determining pesticides

OXYDEMETON-METHYL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
096	D	S	GC-FPD	0.01	101	7.5	4(+Na_2SO_4)					Yes	4	150x3.2mmID	Altima C18.5mm	LC-MS/MS
097	D	M	LC-MS/MS	0.02	95	10	5					Yes	5	Narrow Bore	C18	LC-MS/MS
098	D	M	LC-MS/MS	0.02		10	1		LL	Yes		Yes	4	RP-HPLC	C-18	LC-MS/MS
099	D	S	LC-MS	0.02	92	30	6					Yes	4	Spheresorb	ODS-2	LC-MS/MS
100	D	M		0.02	102	10	1					Yes	4	C-18		LC-MS/MS
101	NA															
102	NA															
103	ND			0.02		20	3		LL			Yes	2	HP-5		GC-ECD/NPD
104	NA															
105	NA															
106	NA															
107	NA															
108	NA															
109	NA															
110	NA															

APPENDIX 7. Methods used by participants for determing pesticides

OXYDEMETON-METHYL

Lab Code	111	112	113	114	115	116	117	118	119	120	121	122
Quantification Method	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Quantification using Standards in solvents or matrix												
Confirmation method				M								
RL (mg/kg)												
Recovery												
Sample Weight (g)												
Extraction Solvent												
Partion Step (if any)												
Clean up step												
Internal Standard (if any)												
Single Level Calibration												
Multi-Level Calibration												
Nº of points												
Column type												
Stationary phase												
Determination												

APPENDIX 7. Methods used by participants for determining pesticides

OXYDEMETON-METHYL

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column type	Stationary phase	Determination
123	D	S		0.1		30	1		GPC		Yes			30mx0.53mm	CP-Sil 8 CB	GC-NPD
124	D	S		0.02		30	1					Yes	3	SGE	BPX-5	GC-NPD
125	D	S	GC-MS	0.02	110	25	1		GPC			Yes	5	Capillary	CPSyl 8CB	GC-NPD
126	NO RESULTS															
127	NA															
128	D	S	GC-ECD	0.05	90	30	1		GPC			Yes	3	30mx0.25mm x0.25um	RTX-CLP	GC-NPD
129	NA															
130	D	M		0.02		30	1						3	Varian	CPSil 8CB	GC-NPD

APPENDIX 7. Methods used by participants for determing pesticides

PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
001	D	S	GC-MS	0.01	97	15	4					Yes	3-4	DB5 DB 1701		ECD NPD MS
002/003	D	M	GC-MS	0.05	93	15	4			PCB97		Yes	3	60x0.25x0.1 60x0.25x0.15	DB5 DB1701	GC-ECD
004	D		GC-MS	0.02	31	20	6			Nitrofen+ Mirex		Yes	5	CAP	Restele CLP	GC-ECD
005	D	M	GC-MS	0.1	85	20	1		SPE			Yes	5	90x0.83x0.5	RTX-WAA	GC-NPD
006	NA															
007	D	M	GC-ECD	0.01	90	25	2		GPC	Dithalimphos		Yes	5	J&W 0.32/0.25mmID	DB5. DB1701	GC-ECD. GC-NPD. GC-ITD
008	D	M		0.01	79	25	2		GPC			Yes	5	DB	1701/05/01/35	GC-ECD/NPD/ITD
009	D	M	GC-MS	0.02	113.0	50	4	Yes	LL	Aldrin Ditalimphos	Yes			Capillary	HP-5 DB-1701P	NPD ECD
010	D	M	GC-EC	0.05		100	3	LL	no	Aldrin		Yes	3	Capillary	DB 5 DB1701	GC-ECD GC-NPD
011	D	S	GC-MS	0.01	62	25	1		SPE			Yes	4	30mx0.53mmx1.5µm	DB5. DB608	GC-ECD. GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
012	D	M	GC-MS	0.01	70-110	50	3					Yes	8	HP5MS		GC-MS
013	D	S	GC-ELCD	0.01	78	25	Ethyl Acetate-Dichloromethane		SPE							GC-ECD/ELCD
014	D	S	GC-MS	0.02		40	3		LL			Yes	3	GC-Capillary	DB5	GC-ECD-NPD-MS
015	D	S	GC-MS	0.01		50	1/DCM (80/20)		SPE Florisil			Yes	3	Capillary 0.32	DB5. DB35	GC-ECD
016	D	S		0.02		50	3	Yes	SPE			Yes	4	AT1701/AT1/DB05-MS		GC-ECD/PFPD/NPD/MS
017	D	S	GC-MS	0.01		40	2		GPC			Yes	5	DB5/DB1701		GC-ECD/PND
018	D	S	GC-MS	0.015		100	2		GPC	Yes		Yes	5	DB-5/1/1701		GC-ECD/NPD/FPD
019	D	M	GC-TOF	0.01	99	10	5			PCB 138		Yes	1	DB5		GC-MS
020	D	M	GC-MS	0.010		25	2		GPC			Yes	3	FSOT	HP 5-MS	GC-MS
021	D	S	GC-MS	0.01	98.2	50	2		GPC		Yes			BD1/5/35/1301. HP50/1701/5MS		GC-ECD/NPD
022	D	S		0.02	97	50	6; Acetone	Ciclohexane/ Ethyl Acetate	GPC	Trans-HCEO	Yes			Capillary	DB5/210	GC-ECD
023	D	M	GC-MS	0.02		50	2		GPC			Yes	5	30mx0.25mm	HP5MS	GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
024	D	M	GC-MS/ECD	0.03		10	Acetonitril			PCB 209		Yes	9	ZP 5	Dimethyl-Polysiloxan	GC-MS/ECD
025	D	M	GC/MS	0.01		50	3		GPC			Yes	3	Capillary-GC	DB1701 (HPG-MS)	GC-ECD/PND/FPD
026	D	S	GC-MS	0.02		10	5		SPE			Yes	3	Capillary	Varian VF-5MS	GC-ECD GC-NPD GC-MS
027	D	M	GC-MS	0.02		100	2		GPC	EPSILON-HCH				30mx0.25x0.25	DB-5. Factor Four	GC-ECD
028	D	M	GC-MSD	0.01	104	10	5		Others	Triphenyl-Phosphat		Yes	7	KS	HPSMS	GC-MS
029	D	M	GC-MS	0.005		100	2	1	GPC SPE			Yes	3-5	GC	DB5 HP5-MS DB17	GC-ECD GC-NPD GC-MS (single-quad)
030	D	M	GC-ECD	0.01		50	6		GPC	Bromophos-Ethyl	Yes			Capillary-GC	DB1	GC-ECD
031	D	S	GC-MS	0.01		50	2		GPC			Yes	2	Capillary	HP 5	GC-ECD GC-NPD GC-MS
032	D	M	GC-MS	0.01	94.1	30	Ethyl Acetate/ Ciclohexane (2:1)		GPC			Yes	4	DB5		GC-ECD. GC-NPD. GC-MS
033	D	M	GC-ECD	0.01		100	2		GPC			Yes	3	25m x 0.32mmx0.52µm	Ultra2	GC-ECD/NPD

APPENDIX 7. Methods used by participants for determining pesticides

PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
034	D	M	GC-MS	0.01		100	2			PCB 153		Yes	2	30mx0.3mmx0.25µm	DB5 OU1701	GC-ECD
035	D	M	GC-MS	0.01		50	3		GPC			Yes	4	HP-5MS		GC-MS/ECD/FPD
036	D	S	GC-MS	0.02		101	3		GPC		Yes					GC-ECD/NPD/MS
037	D	M	GC-MS	0.02		100	2		GPC	TPP		Yes	4	HP5		GC-MS
038	D	M	GC-MS	0.01	89	20	2			Triphenyl-Phosphat		Yes	3	Capillary-GC	DB17-MS	GC-MS
039	D	S	GC-MS	0.02		45	3	LL	GPC	Parathion		Yes	3	Restex 30x0.25x0.25	Rtx-CLPesticides I+II	GC-NPD
040	D	S	GC-ECD	0.02		340	2		O+GPC	Parathion	Yes			Capillary		GC-ECD
041	D	S	GC-MS	0.02	86	75	Acetone Followed by Cyclohexan and Ethyl Acetate		GPC	EPN		Yes	3	HP5		GC-ECD. GC-NPD
042	D	M	GC-MS	0.01		100	2		GPC			Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	S	GC-MS	0.01		50	3		LL		Yes			Capillary	DB5	GC-ECD
044	D	M		0.01		100	2		GPC			Yes	5		DB5	GC-MS

APPENDIX 7. Methods used by participants for determing pesticides

PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
045	D	M	GC-ECD. GC-NPD. GC-MS	0.02		100	2		GPC			Yes	5		DB5. DB1701	GC-ECD. GC-NPD.GC-MS
046	D	M	GC-ECD	0.007	101	50	3		GPC		Yes			Capillary	DB17. HP5	GC
047	D	M	GC-ECD	0.005		100	2		GPC			Yes	3 . 5	Capillary	DB5. DB1701	GC-ECD. GC-NPD.GC-FPD
048	D	S	GC-ECD. MS	0.01		7	4	Yes				Yes	3	Capillary	DB5	GC-ECD. GC-MS
049	D	M	GC-MS	0.05	79.7	15	4						2		DB5MS	GC-ECD.GC-IT
050	NA															
051	D	M	GC-ECD	0.01	104	25	6					Yes	5	DB-5MS	95% Dymethyl-Polysiloxane	GC-ECD
052	NA															
053	NA															
054	D	M	GC-ECD	0.02	90	25	6	Yes	O			Yes	3	HP5MS	5%Phenyl	GC-ECD
055	D	M	GC-ECD	0.02	113	15	4					Yes	5	HP1701	Me Siloxane	GC-ECD
056	D	M	GC-ECD	0.1	93.75	15	4		GPC			Yes	5	HP5MS	GC-MS	
057	D	S	GC-MS	0.02		20	6		GPC-SPE	Yes		Yes	3	DB5	Me Polisiloxan	GC-MS
058	D	M	GC-MS	0.03		15	1		GPC	Yes		Yes	3	HP5MS	5%PHSi	GC-MS

APPENDIX 7. Methods used by participants for determining pesticides

PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
059	D	S	GC-MS	0.02		5	1		SPE			Yes	2	Capillary	ZB5	GC-ECD
060	D	S	GC-NPD	0.05	101.1	10	6(Dichloromethane)					Yes	1	30mx0.32mmx0.25µm	AT5.ZB-35	GC-NPD
061	D	M	GC-MS	0.02	81.7	15	6(Dichloromethane)					Yes	5	DB5	5% Phenyl 95% Dimethyl-Polysiloxane	GC-ECD/NPD/MS
062	D	S	GC-ECD	0.01	110.2	50	Acetone+Methanol (1:1)		Empore Disk C8	Fenclorfos		Yes	3			GC-ECD/NPD
063	D	S	GC-ECD	0.01	92	25	3	EXTRELUT 20			Yes			Capillary	DB-608. SPB1	GC-ECD
064	D	S	GC-MS		111.3	10	6		O	Yes	Yes			Capillary	HP-5	GC-ECD
065	D	S	GC-MS	0.005	103.5	10	Dichloromethane				Yes			HP5	Polysiloxane	GC-ECD
066	D	S	GC-MS	0.05	104	25	5	Yes	SPE	Yes		Yes	2	Capillary	5%PbSil	GC-ECD/NPD
067	D	M	GC-MS			10	1	EXTRELUT	GPC	Yes		Yes	4			GC-MS
068	D	M	GC-MS	0.05	95.5	5	6	1		TFF		Yes	5	CIP SIL 8CB	Fused Silica	GC-MS/HPLC-FL
069	D	S	GC-MS		81	5	1	ASE(Dionex)	GPC	Ronnel+Azo Bencene+ Triphenyl Phosphate	Yes			MDN-5S	5% Phenyl Silicone	GC-ECD/NPD/FPD

APPENDIX 7. Methods used by participants for determing pesticides

PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
070	D	S	GC-ECD	0.01		15	6		GPC	M-series	Yes			25m ID 0.32 mm 0.25um	SE 54; OV1701	GC-ECD/NPD
071	D	M	GC-MS	0.01		15	6		GPC			Yes	2		SE54. OV1701	GC-ECD
072	D	S		0.01	100	10	1		GPC	Diclofention	Yes			HP1. HP5		GC-ECD/NPD
073	D	S	GC-NPD80	0.01		10	Dichloromethane					Yes	3	Capillary	SE30/SE54	GC-ECD/NPD
074	NO RESULTS															
075	D	S	GC-MS	0.02		10	3		SPE	Fenchlorphos	Yes				DB5	GC-ECD. GC-NPD. GC-MS (Single-Quad)
076	D	M	GC-MS	0.01		10	5	Yes	O			Yes	3	HP-5MS		GC-MS
077	D	S	GC-MS	0.02	61	25	2		GPC			Yes	4	HP-5MS	5%Phenyl-Methyl Siloxane	GC-MS
078	D	M	GC-MS	0.02	94	50	1		GPC			Yes	4	Narrowbore	DB 5	GC-ECD
079	D	M	GC-MS	0.02		15	4				Yes		1	HP-1		GC-ECD
080	NO RESULTS															
081	D	M	GC-MS	0.01		20	1					Yes	3-6	HP-5MS	5% Ph. Me S	GC-ECD/FPD/TD
082	D	M	GC-MS	0.05		15	4				Yes			Capillary	HP-5MS	GC-ECD

APPENDIX 7. Methods used by participants for determining pesticides

PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
083	D	M	GC-MS	0.005		15	4	LL Phase Separation				Yes	4	Varian CP 3800	Low Bleed Fused Silica	GC-MS
084	D	M	GC-MS/MS	0.01		10	1					Yes	4	CP-Sil 8		GC-MS/MS
085	D	M	GC-MS	0.02	98	15	4					Yes	4	Capillary	PhMSil 5%	
086	D	M	GC-MS/MS	0.02	86	15	4					Yes	4	30x25x25	DB-5.DB-17	GC/FPD/ECD/MS
087	D	M	GC-MS	0.02		10	4					Yes	3	HP-5		GC-ECD/NPD/FPD/MS
088	D		MS	0.03		15	4					Yes	5	NarrowBore	HP5-MS	GC-MS
089	D	M	GC-MS/MS	0.02		15						Yes	4	Capillary	BP5	GC-MS/MS
090	D	M	GC-MS/MS	0.02	86	15	1			TPP(QC)		Yes	3	Capillary	DB-5 ms	GC-MS/MS
091	D	M	GC-MS/MS	0.05		15	1			TTP. Anthracene		Yes	3	HP-5MS		GC-ITD
092	D	M	GC-MS/MS	0.02		5.2	4					Yes	6	Factor Four		GC-MS/MS-ECD
093	D	S	GC-MS	0.02		15	4					Yes	4	30m/25x25	CPSIL8CB	GC-MS
094	D	M	MS/MS			15	4					Yes	4	30mx0.25x0.2	CPSIL8	GC-ECD.GC-NPD.GC-PFPD

APPENDIX 7. Methods used by participants for determing pesticides

PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
095	D	M	GC-MS	0.02	85	75	1		GPC	Yes		Yes	3	CP-SIL 5CB.CPSIL19CB.CPSIL 8CB		GC-ECD.GC-FPD.GC-ITD
096	D	M	GC-ITD	0.05	108	15	4					Yes	4	Capillary.25mx0.22mmID	VF-5MS.0.25µm (Varian)	GC-ITD
097	D	M	GC-MS	0.02	98	30	1		GPC	Triphenyl Phosphate		Yes	5	Capillary	DB-5	GC-MS
098	D	M	GC-MS	0.02		10	1		SPE	Yes		Yes	4	CP-SIL13CB		GC-MS
099	D	M	GC-MS	0.01	81	30	1		O			Yes	4	ZB5	30%Phenyl	GC-MS
100	D	M	GC-MS	0.02	87	10	1		GPC			Yes	3		DB5	GC-MS
101	D	M	GC-MS	0.02	96	50	5		SPE		Yes			HP 5/HP 50	See Column Type	GC-ECD.GC-NPD
102	D	M	GC-ITD	0.01	95	50	1		GPC		Yes			At-1701	ATtm-1701	GC-FPD
103	D	S	GC-MS	0.02	91	20	3		LL			Yes	2	HP-5		GC-ECD/NPD
104	D	M	GC-MS	0.01	109	75	1	1/20	GPC	ALDRIN		Yes	5	Narrowbore	AT-5MS	GC-MS
105	NA															
106	D	M	GC-MS	0.02		7.5	1			Ethyl-Parathion	Yes			DB-1	0.25mm	GC-ECD/MS
107	D	M	GC-MS	0.02	90.60	20	4					Yes	4	Capillary 30 m	HP-5	GC-ECD/NPD
108	D	S	GC-ECD	0.02	95	5	3					Yes	3	HP-5	5% Phenyl Methyl Siloxane	GC-ECD
109	D	S	GC-EC	0	91	100	3					Yes	3	HP-1	Me-SiOH	GC-ECD

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PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
110	D	M	GC-MS	0.01	86.80	20	3		SPE			Yes	5	DB-5		GC-ECD.GC-NPD
111	D	S		0.05	85.50	10	4		SPE (Silica)			Yes	5	HP-5MS	5%Phenyl	GC-ECD/NPD
112	D	S	GC-NPD	0.02	95	100	3		O		Yes			HP1	MeSilicone	GC-ECD
113	D	M	GC-ITD	0.025	84	15	4		NO	Hexachloro-Benzene		Yes	5	DB-5MS		GC-ITD
114	D	S	GC-ECD	0.02		18	1		GPC			Yes	4	Capillary	HP5	GC-ECD
115	D		GC/MS	0.02		50	4	Dichloro methane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	D	S	GC/MS	0.01	114	50	2		SPE		Yes			HP5-MS		GC/MS
117	D	M	GC-MS	0.02	108.1	20	4	Yes	GPC			Yes	5	HP-5MS		GC-MS
118	D	M	GC-MS	0.02	95	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	GC-MS	0.01		10	1		NO		Yes			Capillary	DB-5MS	GC-MS
120	NA															
121	D	M	GC-MS	0.01		25	1		GPC			Yes	5	Capillary	DB-5MS	GC-MS (single quad). ECD. NPD

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PROCYMIDONE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single Level Calibration	Multi-Level Calibration	Nº of points	Column ype	Stationary phase	Determination
122	D	S	GC-MS	0.02	85.40	30	1		GPC			Yes	3	Chromopack 50mx0.25mm x0.25mm	CPSIL-8CB	GC-ECD
123	D	S	GC-MS	0.02		30	1		GPC		Yes			30mx0.32mm	CP-Sil 8 CB	GC-ECD
124	D	S		0.02		30	1		GPC			Yes	3	Restek	STX-CLP	GC-ECD
125	D	S	GC-MS	0.02	94	25	1		GPC			Yes	5	Capillary	RTX 17025	GC-ECD
126	NO RESULTS															
127	D	S	GC-MS	0.01		30	1		GPC			Yes	3	50mx0.32mm x0.25um	CP-Sil 8 CB	GC-ECD
128	D	S	GC-ECD	0.02	106	30	1		GPC			Yes	3	30mx0.25mm x0.25um	RTX-CLP	GC-NPD
129	D	S		0.02		30	1		GPC			Yes	3	Restek	Stx-Cl-Pest.	GC-ECD
130	D	M	GC-MS	0.05		30	1		GPC			Yes	3	Restek	RTX-5MS	GC-ECD

APPENDIX 7. Methods used by participants for determining pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
001	D	M	LC-MS/MS	0.05	97	15	4					Yes	3-4	DB5 DB 1701		ECD NPD MS
002/003	D	S	HPLC-DAD	0.1	122	15	4		SPE Diol	Benzimidazol	Yes			150mmx6mm	RSp DE613	HPLC-DAD/FL
004	D		LCMS	0.1	100	50	Ethylacetoate		LLE			Yes	4	250x4.6	C18	HPLC-DAD
005	D	S		0.04	90	50	1	Yes	LL			Yes	3	C18 (25x4.6 ID)		HPLC-DAD
006	0.22	M	LC-MS/MS	0.05	80	10	5					Yes	5	RP C18	C18	LC-MS/MS
007	D	M	LC-MS/MS	0.01	86	10	Methanol Ammonia Acetate (95%:5%) 20mM Acetic Acid			$^{13}C_6$-Carbaryl		Yes	3	4u.10cm.3mm ID	C18	LC-MS/MS
008	D	S		0.05	90	25	1		SPE			Yes	4	Nucleosil	C18	HPLC-UV
009	D	M	LC-MS/MS	0.01	97.0	50	4	Yes	LL			Yes	3	3mmx25mm	C18	LC-MS/MS
010	ND			0.5		100	3	LL	No	Aldrin		Yes	3	Capillary	DB 5 DB1701	GC-ECD GC-NPD
011	D	S	GC-MS	0.01	70	77	1	Yes				Yes	5	150mmx0.46mmx5µm	C18	HPLC-FL

APPENDIX 7. Methods used by participants for determing pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
012	D	S	UVSCAN	0.01	70-110	50	1					Yes	6	Waters Symetry	C18	HPLC-DAD
013	D	S	HPLC-DAD	0.02	90	25	1									HPLC-DAD
014	D	S	HPLC-UV	0.05		75	1		LL		Yes				C18	HPLC-DAD
015	D	S		0.04		25	4 (1/1/1)		SPE Diol	Yes		Yes	2	150x6x6µm	DE613 Shodex	HPLC-DAD
016	D	S		0.02		10	4		SPE			Yes	4	SHODEX DF-613	Polyalkyl Metacrylate	HPLC-UV
017	D	S	GC-MS	0.01		100	2		LL			Yes	5	250mmx4mm	RP-18	HPLC-DAD
018	D	M	GC-MS	0.01		10	5		SPE	Yes		Yes	5	AtlantisDc18		LC-MS/MS
019	D	M	2 Transitions	0.005	93	10	5			Triphenyl-Phosphat		Yes	4	ZORBAX	C18	LC-MS/MS
020	D	M	LC-MS/MS	0.010		10	6		SPE			Yes	3	Aqua 3	C18	LC-MS/MS
021	d	s	LC-DAD	0.02	79.3	25	6		SPE.LL			Yes	7	LICHROSPHER 100RP8	150mmx4.6mm. 5µm	HPLC-FL
022	D	M		0.01	93	10	6;(Methanol)		CEM ELUT			Yes	7	2.1x125mm; 3µm	RP-C18	LC-MS/MS
023	D	M	LC-MS/MS	0.01		10	Methanol					Yes	5	2.1x100mm	Atlantis C18	LC-MS/MS

APPENDIX 7. Methods used by participants for determining pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
024	D	M	LC-MS/MS	0.005		10	Acetonitril					Yes	5	Aqua	C18	LC-MS/MS
025	D	M	LC-MS/MS	0.006		20	6					Yes	2x4	HPLC(RP)	RP(C18)	LC-MS/MS
026	NA															
027	D	M	GC-MS	0.05		100	2		GPC	Epsilon-HCH				30mx0.25x0.25	DB-5. Factor Four	GC-ECD
028	D	S	HPLC-FL	0.05	92.4	10	1		LL			Yes	7	HPLC	Hypersil C18	HPLC-DAD HPLC-FL
029	D	M	GC-MS	0.02		100	2	1	GPC SPE			Yes	3-5	GC	DB5 HP5-MS DB17	GC-ECD GC-NPD GC-MS (single-quad)
030	D	M	GC-MS	0.02		20	Acetone			Bromophos-Ethyl		Yes	4	Capillary	DB-SMS	GC-MS
031	D	S	GC-MS	0.05		30	4					Yes	3	LC	RP18	HPLC-DAD HPLC-FL
032	D	M	LC-MS/MS	0.01	94.2	10	6(Methanol)	1:4.	SPE			Yes	5	Aqua 5µ	C18	LC-MS/MS
033	D	S	HPLC-UV	0.03		100	2		LL			Yes	3	RP	Li Chro CART 250-4; LiChrosper 60RP-SelectB, 5µm	HPLC-UV/FL

APPENDIX 7. Methods used by participants for determing pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
034	D	S	HPLC-F	0.05		100	2		GPC LL		Yes			250x4x5	RP8	HPLC-UV
035	D	M	LC-MS/MS	0.01		10	5		O			Yes	5	Aqua 5µ. 50x2mm	RP18	LC-MS/MS
036	NA															
037	D	S	GC-MS	0.05		100	2		GPC	TPP		Yes	4	HP5		GC-MS
038	D	M	LC-MS/MS	0.01	73	20	2			Triphenyl-Phosphat		Yes	3	RP18 LC	C18. Aqua5µ	LC-MS/MS
039	D	S		0.01		10	5	LL	PSA	Methoxi-Fenozide		Yes	6	Aqua (phenomex)	C18	LC-MS/MS
040	NA															
041	D	M	LC-MS	0.05	125	10	Methanol					Yes	7	Atlantis	dc18	LC-MS/MS
042	D	M	GC-MS	0.05		100	2		GPC	EPN		Yes	3	Capillary	DB5. DB1701. DB35	GC-ECD. GC-NPD. GC-FPD. GC-MS (single-quad)
043	D	M	LC-MS/MS	0.006		10	6 (Methanol)		SPE			Yes	2		C18	LC-MS/MS
044	D	M		0.01		100	2					Yes	4		RP8	LC-MS/MS

APPENDIX 7. Methods used by participants for determining pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
045	D	M	LC-MS/MS	0.05		10	5		SPE			Yes	3	Luna	C18	LC-MS/MS
046	D	M	GC-PND	0.05	105	50	3		GPC		Yes			Capillary	DB17. HP5	GC
047	D	S	HPLC-DAD	0.02		50	2		LL			Yes	5	Steel Column	RP18-5µ	HPLC-DAD
048	NA															
049	NA															
050	ND			0.1	95	25	1					Yes	5			UV
051	NA															
052	NA															
053	NA															
054	ND			0.1		25	1.6		O			Yes	4			UV
055	NA															
056	D	S	HPLC-DAD	0.05	103.7	15	4		SPE			Yes	6	Shodexdel131	PMA Gel	HPLC-DAD
057	D	S	HPLC-UV	0.04		20	1		LL			Yes	3		HPLC-UV	
058	ND	M	GC-MS	0.03		15	1		GPC	Yes		Yes	3	HP5MS	5%PHSi	GC-MS

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
059	NA															
060	NA															
061	D	M	GC-MS	0.05	72.6	15	6(Dichloromethane)					Yes	5	DB5	5% Phenyl 95% Dimethyl-Polysiloxane	GC-ECD/NPD/MS
062	ND	S	HPLC-DAD	0.05	71.2	10	Dichloromethane		$LC-NH_2$ Columns			Yes	3	LUNA 2	LC 18	HPLC-DAD
063	D	S	GC-NPD	0.05	85	50	1		L-L (Acid-Base Partition)		Yes					
064	D	S	GC-MS		76	50	1	Yes	LL			Yes	5	HPLC	RP8	HPLC-UV
065	D	S	GC-MS	0.02	85.4	10	Dichloromethane				Yes			HP5	POLYSILOXANE	GC-NPD
066	D	S		0.02	75	25	5	Yes	SPE		Yes					HPLC-UV-FL
067	D	M	HPLC-DAD			10	1	EXTRELUT	GPC	Yes		Yes	4			HPLC-DAD
068	D	M	GC-MS	0.05	100	5	6	1		TFF		Yes	5	CIP SIL 8CB	FUSED SILICA	GC-MS/HPLC-FL
069	NA															

APPENDIX 7. Methods used by participants for determining pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
070	D	S		0.01		50	1		LL			Yes	5	250mmx4.6. 5um	Spherisorb Ods	HPLC-UV
071	D	M	HPLC-FL	0.01		50	1		LL			Yes	6	150mmx4.6. 5um	PLRP-S	HPLC-UV
072	D	S		0.02	110	10	1		GPC	Diclofention	Yes			HP1. HP5		GC-ECD/NPD
073	NA															
074	NO RESULTS															
075	D	S	GC-MS	0.05		10	3		SPE	Fenchlorphos	Yes				DB5	GC-ECD. GC-NPD. GC-MS (SINGLE-QUAD)
076	D	M	GC-MS	0.1		10	5	Yes	O			Yes	3	HP-5MS		GC-MS
077	D	S	GC-MS	0.5	10	25	2		GPC			Yes	4	HP-5MS	5%Phenyl-Methyl Siloxane	GC-MS
078	D	M	GC-MS	0.1	50	50	1		GPC			Yes	4	Narrowbore	HP 50	GC-NPD
079	NA															
080	NO RESULTS															
081	NA															
082	NA															

APPENDIX 7. Methods used by participants for determing pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
083	NA															
084	NA															
085	D	M	GC-MS	0.04	79	15	4					Yes	4	Capillary	PhMSil 5%	LC-MS/MS
086	D	M	LC-MS/MS	0.05	95	15	4					Yes	4	30x25x25	DB-5.DB-17	GC/FPD/ECD/MS
087	D	S	HPLC-DAD	0.03		10	1		pH Changes			Yes	3	C-18		HPLC-DAD
088	NA															
089	NA															
090	D	M	LC-MS/MS	0.05	92	15	1			TTP(QC)		Yes	4	3 um	C-18	LC-MS/MS
091	NA															
092	NA															
093	D	S	HPLC-UV	0.05		15	4					Yes	4	30m/25x25	CPSIL8CB	GC-MS
094	NA															

APPENDIX 7. Methods used by participants for determining pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
095	D	M	LC-MS/MS	0.01	108	75	1			Yes	Yes					LC-MS/MS
096	D	S	GC-ITD	0.01	97	7.5	4(+Na_2SO_4)					Yes	4	150x3.2mmID	Altima C18.5mm	LC-MS/MS
097	D	M	LC-MS/MS	0.02	89	10	5					Yes	5	Narrow Bore	C18	LC-MS/MS
098	D	M	LC-MS/MS	0.05		10	1		LL	Yes		Yes	4	RP-HPLC	C-18	LC-MS/MS
099	D	M	GC-MS	0.05	65	30	1		O			Yes	4	ZB5	30%Phenyl	GC-MS
100	D	M	LC-MS/MS	0.05	87	10	1					Yes	4	C-18		LC-MS/MS
101	ND	M	GC-MS	0.1		50	5		SPE		Yes			HP 5/HP 50	See Column Type	GC-ECD.GC-NPD
102	NA															
103	D	S	HPLC/DAD	0.05	89	50	1		SPE			Yes	3	C-18	ODS2	HPLC/DAD
104	D	M	GC-MS	0.01	77	75	1	1/20	GPC	ALDRIN		Yes	5	Narrowbore	AT-5MS	GC-MS
105	NA															
106	D	M	LC-MS/MS	0.05		7.5	1				Yes			C-18		LC-MS/MS
107	D	S	LC-MS	0.05	85.50	20	4					Yes	6	X-terra 100 mm	C-18	LC-MS
108	NA															
109	NA															

APPENDIX 7. Methods used by participants for determing pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
110	NA															
111	NA															
112	NA															
113	D	M	GC-ITD	0.026	97	15	4		NO	Hexachloro-Benzene		Yes	5	DB-5MS		GC-ITD
114	D	S	HPLC-FL	0.05		37	6		GPC			Yes	4		C-18	HPLC-FL
115	ND		GC/MS	0.05		50	4	Dichloro methane	LL		Yes			HP(30x0.25x0.25)	5MS	GC/MS
116	D	S	GC/MS	0.02	87	50	2		SPE		Yes			HP5-MS		GC/MS
117	ND	M	GC-MS	0.05	112.3	20	4	Yes	GPC			Yes	5	HP-5MS		GC-MS
118	D	M	GC-MS	0.02	92	10	6		SPE	Yes		Yes	3	DB-35MS	35%Phenyl	GC-MS
119	D	M	LC-MS/MS	0.01		10	5	Yes	LL			Yes	4	15x2.1cm.5um	C-18	LC-MS/MS
120	NA															
121	D	M	LC-MS	0.001		12.5	5		NO			Yes	7	HPLC	C-18	LC-MS/MS

APPENDIX 7. Methods used by participants for determining pesticides

THIABENDAZOLE

Lab Code	Quantification Method	Quantification using Standards in solvents or matrix	Confirmation method	RL (mg/kg)	Recovery	Sample Weight (g)	Extraction Solvent	Partion Step (if any)	Clean up step	Internal Standard (if any)	Single level calibration	Multi-level calibration	Nº of points	Column type	Stationary phase	Determination
122	D	S	GC-MS	0.05	108.9	30	1		NO			Yes	3	Chrompack 30mx0.32mm x0.25mm	CPSIL-8CB	GC-NPD
123	D	S	GC-MS	0.1		30	1		GPC		Yes			30mx0.53mm	CP-Sil 8 CB	GC-NPD
124	D	S		0.05		30	1					Yes	3	SGE	BPX-5	GC-NPD
125	D	S	GC-MS	0.05	113	25	1		GPC			Yes	5	Capillary	CPSyl 8CB	GC-NPD
126	NO RESULTS															
127	D	S		0.05	102.5	30	1		O			Yes	4	Zorbax SB	C-18	HPLC-UV
128	D	S	GC-NPD	0.05	103	30	1		GPC			Yes	3	Purosphere RP18. 250/4mm 5um		HPLC-DAD
129	D	S	GC-NPD	0.05		30	1		GPC			Yes	3	Supelcosil	LC-18	HPLC-UV
130	D	M	HPLC-UV	0.05		30	1					Yes	3	Varian	CPSil 8CB	GC-NPD

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

Protocol for the European Proficiency Test 06

http://www.ual.es/GruposInv/EUPT6

Instructions

To be able to participate in the European Proficiency Test 6 it is essential that you have returned via fax or e-mail the application form. The Organisation will **ONLY** send samples to laboratories that have completed and returned their application forms.

Once the completed application form has been received, the Organisation will send a unique **LABORATORY CODE** to each participant via e-mail. This code must be used by the laboratories when returning results and when communicating with members of the Organising Team. This code will only be known by the participant, the Organising Team and the Commission.

Together with this code, the protocol will be sent and 3 forms **(Form 1, 2 and 3)**. The participant laboratories will need these forms during the course of the proficiency test.

Each one has a reporting deadline; please ensure you adhere strictly to these deadline. The reporting forms must be sent directly to the Organiser. The official language used in this Proficiency Test will be English.

Communications between participating laboratories during the test are forbidden unless they report combined official data.

A list of all the possible pesticides that could be present in the test material is enclosed with this protocol. The MPRLs given in this list, refer to the “lower limit of analytical determination” given in the European Commission’s Directive for MRLs. For pesticides with a residue definition that includes metabolites/degradation products, there is only one MPRL in the list, the one for the parent compound.

General Characteristics

Objectives

The objective of the proficiency test is to obtain information of the quality, accuracy and comparability of the pesticide residue data sent to the Commission. Participating laboratories will be provided with an assessment of their analytical performance and the reliability of their data compared to other laboratories.

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

Steps to Follow

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

1. Preparation of the test materials. Homogeneity and stability testing performed by the Organisation.
2. Return of the application forms by the participating laboratories.
3. Production of a detailed Protocol for the test by the Organisers.
4. Distribution of a code to each participant to allow them access to the protocol and the forms.
5. Shipment of the test material, together with the blank.
6. The participant laboratories are responsible for reporting their data to the Organiser using the forms supplied by the stipulated deadline.
7. The Organiser will evaluate the results at the end, once the deadline as passed.
8. The Organiser will send a Final Report to each participant laboratory. This report will include information regarding the design of the test, the homogeneity and stability test results, a record of the shipped samples, a statistical evaluation of the participant's results, graphical displays of the results and conclusions. Any other relevant information considered of interest will also be included.

Evaluation of the Results

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

The results could be:

- ***False Positives***

These are the results that show the presence of pesticides that were not actually present in the test material. However if a number of laboratories detect the same additional pesticide or if the concentrations are close to the reporting levels, decisions will be take on a case-by-case basis.

- ***False Negatives***

These are results for pesticides that were not reported but have been shown by the majority of laboratories to be present in the test material, and were present at level higher than the Reporting Limit (RL) reported by the laboratory.

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

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

The true concentration in all cases will be determined by the median of the results (evaluated as valid, following application of a test for outliers). Therefore there will be a median value for every pesticide present.

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

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

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

An assigned value will be established based on the Fit-For-Purpose (FFP) Standard Deviation model. An average fixed value of 25% will be chosen. The Organizer may increase this value for certain difficult pesticide-crop-concentration combinations, after consultation with the committee of experts and based on the experience of passed Proficiency Tests results.

Other tests, to calculate a target standard deviation, such as Horwitz and robust statistics (Qn method), will also be used in parallel for comparison.

- ***z-Scores***

This parameter is calculated using this formula:

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

where x_i is the value reported by the laboratories, μ_i the assigned value and δ_i the standard deviation of the concentration, for each pesticide.

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

$$|z| \leq 2 \text{ acceptable}$$
$$2 < |z| \leq 3 \text{ questionable}$$
$$|z| > 3 \text{ unacceptable}$$

The values considered as false negative results will be assigned a value equal to the Reporting Limit given by the laboratory, resulting a z-Score value not greater than 3.5. A z-Score will not be assigned to false positive results. The organizer will consider whether these values should appear in the graphs or not.

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

In order to evaluate each laboratory's performance, taking into account all the pesticides analysed, two ways will be used to combine the z-Scores obtained: the re-scaled sum of z-Scores (RSZ) and the sum of squared z-Scores (SSZ).

Laboratories may be excluded from calculation of these parameters depending on their minimum number of pesticide sought and/or reported.

The equations are:

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

These summed z-Score results are considered to be less important than the individual z-Scores. Therefore the organizer retains the right to not use them if he feels they are not helpful.
Besides, a descriptive performance evaluation will be worked out, based on scope of analysis, number of false positives and false negatives and number of too high Reporting Limit.

Organisation Address

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

Universidad de Almería
Edificio Químicas CITE I
Ctra. Sacramento s/n
04120 Almería - Spain

Phone Number: 00 34 950015034/ 0034950015645 **Fax Number: 00 34 950015645**
E-mail: pmedina@ual.es or amadeo@ual.es

On-Line News

The latest information will currently be updated and found on the web address:
www.ual.es/GruposInv/EUPT6/

European Proficiency Test 06

Introduction

This proficiency test is based on pesticides residues analysis in tomatoes. The tomatoes were grown in Almería.

The pesticide treatments were carried out with formulated aerosols. An additional spiking in the laboratory following harvest of the crop was required for some pesticides.

The samples were chopped, frozen (using liquid nitrogen), groud, mixed thoroughly and sub-sampled into polyethylene bottles.

For the homogeneity test, 11 of these bottles, now containing the test material, will be randomly chosen and analysed by an independent laboratory to check for homogeneity.

The material, will be store frozen (–20ºC) prior to shipment to participants.

Two bottles, again randomly chosen, will be analysed in over a time period to confirm the stability of the pesticides in the test material (firstly when the test materials are shipped, and then a few days after the deadline for receipt of results from the participants). These results will not be included in the statistical analysis of the test.

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

Calendar

The following table shows the program for this EUPT 06

Activity	Date
- Selection of pesticides/crop combinations to be tested. - Protocol. Selection of characteristics of the web page.	1st March 2004
- Selection of participating laboratories and contact points in each country.	16th April 2004
- Growing crop and field treatment.	1st May 2004
- Spiking (if needed), homogenisation, and storage stability testing.	10th May 2004

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

Activity	Date
- Distribution of the protocol.	11th May 2004
- Sample distribution.	17th-18thMay 2004
- Deadline for receiving results by the organizers.	7th July 2004
- Preliminary Report.	13th September 2004
- Final Report.	12th October 2004

Participant Laboratories

It is up to the contact points of each country to choose the laboratories that should participate, although it is a requirement that a laboratory should contribute results to the national monitoring program of a EU Member State. It is up to those participants to fill in and return the application form so the organiser has all their details before the deadline. The Organisation will not be responsible if a laboratory does not get notification of the web page address and the protocol necessary to take part in the test.

Amount of Sample

About 400g of tomato test material will be shipped together with 400g of 'blank' tomato packed in boxes surrounded with dry ice. The courier costs are charged to the participants. In case of the receipt of a spoiled test material, it will be possible to request a replacement. However, again, the courier cost will still be charged to participants. Form 1 should be used to request additional test material and an explanation for the reasons for the request must be given. There will only be a limited amount of test sample and laboratories should not ask for more than they need.

Application Form (using the EUPT06 web page)

Using the web page (www.ual.es/GruposInv/EUPT6/), the participating laboratories should fully complete the application form and send it via fax or mail.

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

Shipping of Samples

The shipment of samples will follow an e-mail message to participants warning that the test material is about to be dispatched (or fax if no mail has been given). This could vary depending on the country and the use, or not, of delivery points in some specific countries. The time to reach each laboratory will vary according to the location of the country and the town (from 2-5 days).

Form 1

Once the laboratory has received the test materials they must complete Form 1, filling in the date of reception, and any other observation that they consider important about the adverse condition of the sample. Form 1 must then be sent by fax or e-mail within two days of recept of the test materials otherwise, the organizer will assume that the shipment and the reception was satisfactory. Please note that you must include the laboratory code assigned to you on this form.

Analyses And Results Forms (Form 2)

Significant Decimals

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

- concentrations <0.100 mg/kg, to be expressed with two significant figures (three decimals, i.e. 0.058 mg/kg).

- concentrations > 0.100 mg/kg, to be expressed with three significant figures, i.e. 0.156, 1.64, 10.3 mg/kg.

In cases where a pesticide has not been detected, its concentration should be expressed as < x mg/kg, where x is the Reporting Limit, RL, (of the laboratory), expressed to one significant figure.

Correction of Results

The results should **not** be corrected using recovery factors. If the laboratory usually corrects the results for the recoveries, they must provide the correction factor used for each pesticide. This information must be sent together with the results in Form 2.

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

Samples Material for Analysis (Form 2)

The test material contains a certain number of pesticides form the List of Pesticides. It should not be assumed that only pesticides registered for use on tomatoes are present.

Each laboratory must undertake only **ONE** analysis for each pesticide and only report **ONE** result for the pesticides in the sample material, using their normal routine analytical procedures. This do not exclude that more than one method has to be used to cover all compounds present.

The analytical procedure used must be reported using Form 2. The results, expressed as concentration levels in mg/kg, (whether it has been used calculated from a standard in pure solvent or in a matrix extract) must also be reported together with the limits of quantification for each pesticide.

This form must be sent to the Organiser before 7th of July. Results received after this date will not be included in the statistical treatment, or in the final report.

Analytical Procedures Used (Form 3)

A brief summary of the analytical procedures used is required from each laboratory on Form 3.
If more than one method has been used, please mark them with different letters or codes in Form 2 and use as many copies of Form 3 as are needed (one for each method).

The organizer must receive Form 3 by mail or by fax before 7th July 2.004.

Sample Manipulation Advises

The test material should remain frozen until it is analysed.
- Allow the test material to defrost in the refrigerator the afternoon before the analysis.
- Once defrosted, be sure to mix the content in the bottle thoroughly, to ensure homogeneity of the contents, before taking the analytical portion.

Annexes

- Form 1
- Form 2
- Form 3
- List of Pesticides

FORM 1

Laboratory Code: Test material code: *(check the bottle for the blank and the test material)* Date of reception:

EUPT06-Lab-

EUPT06-blank-	EUPT06-sample-

Observation about the condition of the sample (either the test material or the blank):

Loses: YES NO

Frozen: YES NO

Please, fill in this form and send it back by fax (0034950015645) or e-mail (pmedina@ual.es) once you have received the test material.

Date:

Signature:

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

FORM 2 (RESULTS)

Laboratory Code: Date:

Test material code:

Pesticide	Quantification Method(1)	Analytical Procedure(2)	Conc. (mg/kg)(3)	Quantification Using Standards in solvents or matrix (4)	Confirmation method (5)	RL (mg/kg) (6)	Recovery (7)
Acephate							
Acrinathrin							
Aldicarb							
Azinphos-Methyl							
Azoxystrobin							
Bifenthrin							
Bromopropylate							
Captan + Folpet							
Carbendazim							
Carbofuran							
Chlorothalonil							
Chlorpyrifos							
Chlorpyrifos-methyl							
Cypermethrin							
Cyprodinil							
Deltamethrin							
Diazinon							
Dichlofluanid							
Dicofol							
Dimethoate							
Diphenylamine							
Endosulfan							
Esfenvalerate							
Fenvalerate							

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

Pesticide	Quantification Method(1)	Analytical Procedure(2)	Conc. (mg/kg)(3)	Quantification Using Standards in solvents or matrix (4)	Confirmation method (5)	RL (mg/kg) (6)	Recovery (7)
Fenhexamid							
Imazalil							
Imidacloprid							
Iprodione							
Kresoxim-methyl							
Lambda-cyhalothrin							
Lindane							
Malathion							
Dithiocarbamates (expressed as CS_2)							
Mecarbam							
Metalaxyl							
Methamidophos							
Methidathion							
Methiocarb							
Methomyl							
Mevinphos							
Myclobutanil							
Oxydemeton-methyl							
Parathion							
Penconazole							
Permethrin							
Phorate							
Phosalone							
Pirimicarb							
Pirimiphos-methyl							
Procymidone							
Propyzamide							
Spiroxamine							
Thiabendazole							
Tolyfluanid							
Triadimefon							
Triazophos							
Vinclozolin							

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

(1) If the substance is not included in your analysis, fill **NA**
If the substance is detected, fill **D**
If the substance is NOT detected, fill **ND**

(2) Write the same code as you use in Form 3 for the analytical method used, e.g. A, B, C…

(3) Concentration of **ONE** analysis **ONE** result **(NO DUPLICATES)**
Record the levels for all compounds according to the residue definition given in the table

(4) Standards: **S** = standard/calibration in pure solvent, **M** = standard/calibration in matrix extract

(5) Give the determination technique used e.g. **GC-FPD**, **HPLC-UV, GC-MS, LC-MS, LC-MS/MS**

(6) **RL** Reporting Limit, must be given for all pesticides
For pesticides with metabolites/degradation products included in the MRL definition, give the "Reporting Limit" for the global compound (see definition in the pesticide list).

(7) The results reported should not be corrected using recovery factors. If the laboratory usually corrects the results for the recoveries, they must express the correction factor used for each pesticide.

Please send this Form before the 7th July 2004

Signature:

FORM 3 (ANALYTICAL PROCEDURES USED)

Laboratory Code: Date:

Fill in one of this forms for every different analytical procedure used

Analytical Procedure **(2)**:

Weight sample (g): Extraction solvent/s **(7)**:

Partition step (if any): Cleanup step **(8)**:

Internal standard (if any): Single level calibration:

Multi-level calibration: Number of points:

Column type: Stationary phase: Determination **(9)**:

Reference Method:

Signature:

Please send this Form before the 7th July 2004

(7) Denoted as **1** = ethyl acetate, **2** = acetone followed by cyclohexane and ethyl acetone, **3** = acetone followed by dichloromethane, **4** = acetone followed by dichloromethane and petroleum ether, **5** = acetonitrile, 6 = others.

(8) Clean-up: **GPC** = gel permeation chromatography, **SPE** = solid phase extraction, **LL** = liquid-liquid partition, **NO** = no clean-up, **O** = other clean-up method

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

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

European Proficiency Test 06
Pesticide LOD´s

http://www.ual.es/GruposInv/EUPT6

Pesticides, which could be present in the test material, with the "limit of analytical determination" (MPRL) given in the MRL residue definition.

Name	LOD's (mg/kg) Tomato
Acephate	0.02
Acrinathrin	0.05
Aldicarb (Aldicarb+ Aldicarb Sulfone+ Aldicarb Sulfoxide)	0.05
Azinphos-Methyl	0.05
Azoxystrobin	0.05
Bifenthrin	0.05
Bromopropylate	0.05
Captan + Folpet	0.1
Carbendazim (Benomyl + Carbendazim + Thiophanate-methyl)	0.1
Carbofuran (Carbofuran + 3-Hydroxy-Carbofuran)	0.1
Chlorothalonil	0.01
Chlorpyrifos	0.05
Chlorpyrifos-methyl	0.05
Cypermethrin	0.05
Cyprodinil	0.05

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

Name	LOD's (mg/kg) Tomato
Deltamethrin	0.05
Diazinon	0.02
Dichlofluanid	0.05
Dicofol	0.02
Dimethoate (Dimethoate + Omethoate) Expressed as **Dimethoate**	0.02
Diphenylamine	0.05
Endosulfan (α+β Endosulfan + Endosulfan Sulfate) Expressed as **Endosulfan**	0.05
Esfenvalerate	0.02
Fenvalerate	0.02
Fenhexamid	0.05
Imazalil	0.02
Imidacloprid	0.05
Iprodione	0.02
Kresoxim-methyl	0.05
Lambda-cyhalothrin	0.02
Lindane	0.01
Malathion (Malathion + Malaoxon) Expressed as **Malathion**	0.05
Maneb Group (Maneb + Mancozeb + Metiram + Propineb + Zineb) Expressed as Dithicarbamate (**CS_2**)	0.05
Mecarbam	0.05

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

Name	LOD's (mg/kg) Tomato
Metalaxyl	0.05
Methamidophos	0.02
Methidathion	0.02
Methiocarb (Methiocarb + Methiocarb sulfone + Methiocarb sulfoxide) Expressed as **Methiocarb**	0.05
Methomyl (Methomyl + Thiodicarb) Expressed as **Methomyl**	0.05
Mevinphos	0.01
Myclobutanil	0.02
Oxydemeton-methyl (Oxydemeton-methyl + Demeton-S-Methylsulfon) Expressed as **Oxydemeton-methyl**	0.02
Parathion	0.05
Penconazole	0.05
Permethrin	0.05
Phorate (Phorate + Oxygenated Analogue + Sulfones + Sulfoxides) Expressed as **Phorate**	0.05
Phosalone	0.05
Pirimicarb	0.05
Pirimiphos-methyl	0.05
Procymidone	0.02
Propyzamide	0.02
Spiroxamine	0.05
Thiabendazole	0.05

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

Name	LOD's (mg/kg) Tomato
Tolyfluanid	0.05
Triadimefon (Triadimefon + Triadimenol)	0.1
Triazophos	0.02
Vinclozolin	0.05

[1] The MPRLs refer to the "limit of analytical determination" given in the European Commission´s Directives for the MRLs of the parent compounds. If no MPRL is listed in these Directives default value of 0.05 has been used.

ANNEX 2. List of laboratories invited to participate in PT6.

COUNTRY	City	Laboratory Name	Reported Results
AUSTRIA	**Innsbruck**	**AGES Competence Centre for Pesticide Residues Innsbruck**	**yes**
AUSTRIA	**Vienna**	**Competence Centre Residue-Analysis- AGES**	**yes**
AUSTRIA	**Vienna**	**Austrian Agency for Health and Food Safety (ILUM-VIENNA)**	**yes**
BELGIUM	**Zwijnaarde**	**FYTOLAB**	**yes**
BELGIUM	**Bruxelles**	**IPH (Scientific Institute of Public Health)**	**yes**
BELGIUM	**Marloie**	**Laboratory of Hormonology**	**yes**
CYPRUS	**Nicosia**	**Pesticide Residue Laboratory. Department of Agriculture**	**yes**
CYPRUS	**Nicosia**	**State General Laboratory**	**yes**
CZECH REPUBLIC	**Praha 5**	**Czech Agriculture and Food Inspectorate**	**yes**
CZECH REPUBLIC	**Prague 10**	**National Institute of Public Health**	**yes**
CZECH REPUBLIC	**Prague 6**	**Institute of Chemical Technology**	**yes**
DENMARK	**Soeborg**	**Danish Institute for Food and Veterinary Research**	**yes**
DENMARK	**Copenhagen V**	**Fodevareregion Kobenhavn**	**yes**
ESTONIA	**Saku (Harjumaa)**	**Agricultural Research Centre, Lab for Residues and Contaminants**	**yes**
ESTONIA	**Tartu**	**Health Protection Inspectorate**	**yes**
FINLAND	**Espoo**	**Finnish Customs Laboratory**	**yes**
FINLAND	**Helsinki**	**Enviroment Centre of Helsinki**	**yes**
FRANCE	**Talence**	**Laboratoire Interrég. de la Répression des Fraudes**	**yes**
FRANCE	**Illkirch-Graffenstaden**	**DGCCRF-Laboratoire de Strasbourg**	**yes**
FRANCE	**Montpellier Cedex 5**	**Laboratoire de la DGCCRF**	**yes**
FRANCE	**Villeneuve d'Ascq**	**D.G.C.C.R.F.- L59**	**yes**

ANNEX 2. List of laboratories invited to participate in PT6.

COUNTRY	City	Laboratory Name	Reported Results
FRANCE	**Rennes**	**Laboratoire DGCCRF**	**yes**
FRANCE	**Massy Cedex**	**DGCCRF-Laboratoire Interrégional de Paris-Massy**	**yes**
GERMANY	**Wuppertal**	**Chemisches Untersuchungsinstitut Bergisches Land**	**yes**
GERMANY	**Recklinghausen**	**Gemeinsames Chemisches und Lebensmitteluntersuchungsamt des Kreises Recklinghausen und der Stadt Gelsenkirchen; CEL**	**yes**
GERMANY	**Fellbach**	**CVUA Stuttgart**	**yes**
GERMANY	**Erlangen**	**Bayer. Landesamt für Gesundheit und Lebensmittelsicherheit**	**yes**
GERMANY	**Berlin**	**BBGes-ILAT, FB 26**	**yes**
GERMANY	**Hamburg**	**Institut Fur Hygiene und Umujelt**	**yes**
GERMANY	**Kassel**	**Staatliches Untersuchungsamt Hessen-Standort Kassel-**	**yes**
GERMANY	**Braunschweig**	**Lebensmittelinstitut Braunschweig**	**yes**
GERMANY	**Hagen**	**Chemisches Untersuchungsamt der Stadt Hagen**	**yes**
GERMANY	**Aachen**	**Chemisches und Lebensmitteluntersuchungsamt Stadt Aachen**	**yes**
GERMANY	**Bielefeld**	**Chemisches Untersuchungsamt Bielefeld**	**yes**
GERMANY	**Dortmund**	**Chem. und Lebensmitteluntersuchungsamt**	**yes**
GERMANY	**Rostock**	**Landesveterinär- und Lebensmitteluntersuch Amt M-V**	**yes**
GERMANY	**Speyer**	**Landesuntersuchungsamt, Institut fur Lebensmittelchemie**	**yes**
GERMANY	**Trier**	**Landesuntersuchungsamt-Institut für Lebensmittelchemie**	**yes**
GERMANY	**Oldenburg**	**LAVES Lebensmittelinstitut Oldenburg**	**yes**
GERMANY	**Leipzig**	**Landesuntersuchungsanstalt Sachsen Standort Leipzig**	**yes**
GERMANY	**Kiel**	**Landeslabor Schleswig-Holstein Aubenstelle Kiel 1**	**yes**

ANNEX 2. List of laboratories invited to participate in PT6.

COUNTRY	City	Laboratory Name	Reported Results
GERMANY	**Essen**	**CGI Essen/Oberhausen**	**yes**
GERMANY	**Dusseldorf**	**Amt für Verbrauchers.-Abt.Chem.- und Lebensmittelunters.**	**yes**
GERMANY	**Saarbrücken**	**LVGA**	**yes**
GERMANY	**Sigmaringen**	**Chemisches und Veterinäruntersuchungsamt Sigmaringen**	**yes**
GERMANY	**Potsdam**	**Landeslabor Brandenburg, Fachbereich L5**	**yes**
GERMANY	**Bremen**	**Landesuntersuch.für Chemie**	**yes**
GERMANY	**Erfurt**	**TLLV**	**yes**
GERMANY	**Chemnitz**	**LUA Chemnitz FG Pestizide**	**yes**
GERMANY	**Wiesbaden**	**Staatliches Untersuchungsamt Hessen, Standort Wiesbaden**	**yes**
GERMANY	**Münster**	**Chemisches Landes- und Staatliches Veterinäruntersuchungsamt**	**yes**
GERMANY	**Dresden**	**LUA Sachsen, Dresden**	**yes**
GERMANY	**Bonn**	**Amt fur Umweltschutz und Verbraucherschutz und Lokale Agenda**	**yes**
GERMANY	**Halle**	**Landesamt fur Verbraucherschutz, FB 3**	**yes**
GREECE	**Athens**	**General Chemical State Laboratory**	**yes**
GREECE	**Kifissia, Athens**	**Pesticide Residues Laboratory, Benaki Phytopathological Institute**	**yes**
GREECE	**Patras**	**Regional Center of Plant Protection and Quality Control of Patras**	**yes**
GREECE	**Thessaloniki**	**Regional Center of Plant Protection and Quality Control**	**yes**
GREECE	**Iraklion, Crete**	**Regional Centre of Plant Protection**	**yes**
GREECE	**Ioannina**	**Regional Centre of Plant Protection and Quality Control**	**yes**
GREECE	**Lycovrissi, Athens**	**Pesticide Residue Laboratory of Lycovrissi**	**yes**

ANNEX 2. List of laboratories invited to participate in PT6.

COUNTRY	City	Laboratory Name	Reported Results
GREECE	**Kavala**	**Ministry Rural Development and Food, Peripheral Center**	**yes**
HUNGARY	**Velence**	**Plant Protection and Soil Conservation Service of Féjer County**	**yes**
HUNGARY	**Hódmezovásárhely**	**Plant Protection and Soil Conservation Service of Csongrad County**	**yes**
HUNGARY	**Szolnok**	**Plant Protection and Soil Conservation Service**	**yes**
HUNGARY	**Kaposvár**	**Plant Protection and Soil Conservation Service of Somogy County**	**yes**
HUNGARY	**Békéscsaba**	**BIO-CHEM LABOR BT.**	**no**
HUNGARY	**Miskolc**	**Pesticide Residue Laboratory PPSCS-BAZ**	**yes**
HUNGARY	**Fácánkert**	**Plant Protection and Soil Conservation Station of Tolna County**	**yes**
HUNGARY	**Tanakajd**	**Pesticide Residue Analytical Laboratory**	**yes**
HUNGARY	**Nyiregyháza**	**Plant Protection and Soil Conservation Service**	**yes**
IRELAND	**Dublin**	**Pesticide Control Service**	**yes**
ITALY	**La Loggia (Torino)**	**A.R.P.A Piemonte - Polo Chimico Regionale Alimenti**	**yes**
ITALY	**Pordenone**	**ARPA - Friuli Venezia Giulia Pordenone**	**yes**
ITALY	**Gorizia**	**ARPA-Dipartimento Provinciale di Gorizia**	**yes**
ITALY	**Palermo**	**ARPA Sicilia Dipartamento di Palermo**	**yes**
ITALY	**Ragusa**	**AUSL N7 DAP RAGUSA ARPA SICILIA L.I.P SEZ CHEMICA**	**yes**
ITALY	**Sondrio**	**ARPA-Dip. Sondrio-UnitaÓrganizzativa Laboratorio**	**yes**
ITALY	**Roma**	**Instituto Superiore di Sanità-Dip. Ambiente e Connessa Prevenzione Primaria-Reparto antiparassitari**	**yes**
ITALY	**Trento**	**A.P.P.A. Settore Lab. e Controlli**	**yes**
ITALY	**Bolzano**	**Agenzia Ambiente Bolzano**	**yes**

ANNEX 2. List of laboratories invited to participate in PT6.

COUNTRY	City	Laboratory Name	Reported Results
ITALY	**Vicenza**	**A.R.P.A. Veneto - Dip. di Vicenza**	**yes**
ITALY	**Florence**	**A.R.P.A.T. Dip. Provinciale di Firenze**	**yes**
ITALY	**Cagliari**	**P.M.P. Area Chimica Farmacologica**	**yes**
ITALY	**Bari**	**ARPA Puglia - Dipartimento di Bari**	**yes**
ITALY	**Ferrara**	**ARPA Sezione di Ferrara**	**yes**
ITALY	**Chiesuol del Fosso (Ferrara)**	**ARPA Sezione di Ferrara**	**yes**
ITALY	**Arezzo**	**ARPAT DIP Arezzo**	**yes**
ITALY	**Verona**	**APRAV-Verona**	**yes**
ITALY	**Nuoro**	**P.M.P. Area Chimica**	**no**
ITALY	**Catania**	**ARPA Sicilia-DAP Catania**	**yes**
ITALY	**La Spezia**	**A.R.P.A.L. Laboratorio**	**yes**
LATVIA	**Riga**	**State Agency "Public Health Agency"**	**yes**
LATVIA	**Riga**	**State Veterinary Medicine Diagnostic Centre (SVMDC)**	**yes**
LUXEMBOURG	**Luxembourg**	**Laboratoire du Côntrole des Denrées Alimentaries, LNS**	**yes**
NORWAY	**Ås**	**The Norwegian Crop Research Institute, Pesticide Laboratory**	**yes**
POLAND	**Trzebnica**	**Pesticide Residue Laboratory**	**yes**
POLAND	**Sosnicowice**	**Plant Protection Institute**	**yes**
POLAND	**Poznan**	**Plant Protection Institute, Department of Pesticide Residue Research**	**yes**
POLAND	**Bialystok**	**Plant Protection Institute, Experimental Field Station in Blalystok**	**yes**
POLAND	**Rzeszów**	**Plant Protection Institute**	**yes**

ANNEX 2. List of laboratories invited to participate in PT6.

COUNTRY	City	Laboratory Name	Reported Results
PORTUGAL	**Oeiras**	**Direcção-Geral de Protecção das Culturas**	**yes**
PORTUGAL	**Camacha**	**Laboratório Agrícola Da Madeira**	**yes**
ROMANIA	**Bucharest**	**Laboratorui Central pentru Controlui Reziduurillor de Pesticide din Plante si Produse Vegetale**	**yes**
SLOVAKIA	**Bratislava**	**State Veterinary and Food Institute**	**yes**
SLOVAKIA	**Bratislava 42**	**Central Agricultural Control & Testing Institute**	**yes**
SLOVENIA	**Ljubljana**	**Institute of Public Health**	**yes**
SLOVENIA	**Ljubljana**	**Agricultural Insitute of Slovenia, Central Laboratories**	**yes**
SLOVENIA	**Maribor**	**Public Health Institute, Environmental Protection Institute**	**yes**
SPAIN	**Villava Navarra**	**Gobierno de Navarra - Negociado de Análisis Instrumental**	**no**
SPAIN	**Cabrils**	**Laboratori Agroalimentri Generalitat de Catalunya**	**yes**
SPAIN	**Murcia**	**Laboratorio Agrario y de Medio Ambiente**	**yes**
SPAIN	**A Coruña**	**Laboratorio Agrario y Fitopatológico de Galicia**	**yes**
SPAIN	**Logroño**	**Consejería de Agricultura. Laboratorio Regional de la Grajera**	**yes**
SPAIN	**Aravaca (Madrid)**	**Laboratorio Arbitral Agroalimentario**	**yes**
SPAIN	**Burjassot (Valencia)**	**Agroalimentario Generalitat Valenciana**	**yes**
SPAIN	**Majadahonda (Madrid)**	**Centro Nacional de Alimentacion**	**yes**
SPAIN	**Zizurkil-Gipúzcoa**	**Laboratorio Agrario Diputación Foral de Gipuzkoa**	**yes**
SPAIN	**Sevilla**	**Laboratorio del Catice (SOIVRE) de Sevilla**	**yes**
SPAIN	**La Mojonera, Almeria**	**Laboratorio de Sanidad Vegetal de Almería**	**yes**
SPAIN	**Almeria**	**Laboratorio del Catice (SOIVRE) de Almería**	**yes**

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COUNTRY	City	Laboratory Name	Reported Results
SPAIN	**Murcia**	**S.O.I.V.R.E. Murcia**	**yes**
SPAIN	**Burgos**	**Laboratorio Agrario Regional. Dir. Gen. De Producción Agropecuaria**	**yes**
SPAIN	**Jaén**	**Laboratorio de Sanidad Vegetal. CAPJA**	**yes**
SWEDEN	**LIDKÖPING**	**AnalyCen Nordic AB**	**yes**
THE NETHERLANDS	**Amsterdam**	**VWA-KVW (Food and Consumer Product Safety Authority)**	**yes**
UNITED KINGDOM	**York**	**Central Science Laboratory (CSL)**	**yes**
UNITED KINGDOM	**Teddington, Middlesex**	**Laboratory of the Government Chemist Limited**	**yes**
UNITED KINGDOM	**Wolverhampton**	**Direct Laboratories**	**yes**
UNITED KINGDOM	**Edinburgh, Scotland**	**Scottish Agricultural Science Agency**	**yes**