

PROFICIENCY TEST 7, 2005

Pesticide Residues in Grape Homogenate

Final Report

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EUROPEAN COMMISSION'S PROFICIENCY TEST 7
ON PESTICIDE RESIDUES IN FRUIT AND VEGETABLES
2005

The 7th European Commission's Proficiency Test was performed in 2005 using a grape homogenate. The grapes were grown in the south of Spain, in Almeria, and were treated with a post harvest treatment where commercial formulations were applied using a microspray technique. Sixteen pesticides were used for the treatments. Participating laboratories were provided with a 'blank' grape homogenate as well as the treated test material.

One hundred and twenty eight laboratories agreed to participate in this proficiency test.

The median values of the analytical data submitted were used to obtain the assigned (true) concentrations for each of the sixteen residue pesticides present. A fit-for-purpose (FFP) target standard deviation of 25%, based on the experience of the Advisory Group, was chosen to calculate the target standard deviations (σ) as well as the z-scores of each of the 16 compounds present.

For the assessment of the overall laboratory performance the criteria Weight Sum of z-Score (WSZ) used in the last proficiency test has been applied. Only laboratories that fulfilled the criteria of detecting at least fourteen of the sixteen pesticides (~90%) with no false positives reported, have been classified as having 'sufficient scope', and have therefore been placed in Category A. Within this category, the laboratories have been classified as 'good', 'satisfactory' or 'unsatisfactory'.

All the other laboratories have been placed in Category B, and classified as having 'insufficient scope'. For laboratories in Category B, individual z-scores were calculated, but their overall performance has not been assessed, although this year they have been ordered by the number of pesticides reported and the number of acceptable z-scores achieved.

Furthermore, classical procedures for summing z-scores (SSZ and RSZ) were employed using the individual z-scores of the participating laboratories.

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 official 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, as in 2004, the University of Almeria, Spain, organized the European Proficiency Test. Participation in this 7th European 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, laboratories from Iceland, Norway and Romania were included by invitation.

A total of one hundred and twenty eight laboratories agreed to participate in the 7th Proficiency Test. The test material, 300 g of grape homogenate containing pesticide residues, together with 300 g of blank grape homogenate, were shipped to participants on the 5th, 6th and 11th of April, 2005. The deadline for submission of results to the organiser was the 20th of May 2005. The participants were provided with a list of sixty-five pesticides (Annex 1), which might be present in the test material and they were asked to determine the levels of all the pesticide residues they detected. Participants were also asked to analyse the blank test material and report residues of any pesticide they found which was included in the list. This blank material was intended for use in performing recovery experiments with the pesticides found in the test material, and if necessary, for the preparation of matrix-matched calibration standards.

2. TEST MATERIALS

2.1 Analytical methods

Two analytical methods, described briefly below, as well as other procedures, were used by the Organisers for the homogeneity and stability tests performed 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.

Acetamiprid, carbaryl, imidacloprid, methomyl and thiabendazole were determined using the LC-MS/MS method. All other pesticides, were analysed using the GC method. For confirmation purposes, MS/MS spectra were used.

2.2 Preparation of the treated test material

Before preparing the test material, the pesticides and suitable residue levels for the study were selected following recommendations made by the Advisory Group, which had been specifically appointed for Proficiency Test 7. The grapes were grown in the south of Spain, in Almeria. One hundred and fifty kilograms of grapes were sampled and treated post-harvest with a commercial formulation dissolved in water and applied to the grapes using a microspray. Different formulations were applied for each of the pesticides allowing one hour to elapse between applications. A portion was taken and analysed to check the residue levels present in the material. When the grapes contained residue levels close to those recommended 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 by the organiser, until a homogeneous material was obtained. Portions of 300 g, of the well-mixed homogenate, were weighed out into screw-capped polyethylene plastic bottles, sealed, and stored in a freezer at about - 20 °C prior to distribution to participants.

2.3 Preparation of the 'blank' test material

The grapes to be used for the production of the blank test material were organically grown in the same area as the test material, in Almeria, in the south of Spain. A homogenate was prepared in the same way as the treated test material described above. Some very low level traces of pesticides were found in the blank: carbendazim, carbaryl, dimethoate, chlorpyrifos-methyl, pyridaben and bifenthrin. Bifenthrin was not included in the Pesticide List provided by the Organizer. All were found at concentrations below 0.01 mg/Kg.

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 constructed from matrix-matched standards. One standard mixture was used, for both GC and LC.

The statistical evaluation was performed according to the International Harmonized Protocol published by IUPAC, ISO and AOAC [3]. The individual residue data from the homogeneity tests are given in the Appendix 1. The results of the statistical analyses are given in Tables 1 A-B. The acceptance criteria for the test material to be sufficiently homogenous for the proficiency test were that $F_{critical} > F$ for ($p = 0.05$), and that the between sampling standard deviation S_s was lower than the analytical S_a , for all pesticides.

Table 1 A. Statistical evaluation of the homogeneity test data (n=20 analyses)

	Acetamiprid	Carbaryl	Cyprodinil	Diazinon	Dimethoate	Fenhexamid	Fludioxonil	Imidacloprid
Mean (mg/Kg)	0.346	1.65	0.443	0.288	0.164	0.671	0.229	0.562
S _a (mg/Kg)	0.0206	0.0208	0.0208	0.00267	0.0239	0.113	0.0232	0.0284
F critical	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02
F	2.48	2.00	2.89	2.79	1.45	1.37	2.06	1.87
S _s (mg/Kg)	0.0177	0.0147	0.0202	0.00252	0.0113	0.0481	0.0169	0.0188
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

S_s: Between Sampling Standard Deviation
S_a: Analytical Standard Deviation

Table 1 B. Statistical evaluation of the homogeneity test data (n=20 analyses)

	Iprodione	Kresoxim-methyl	Methomyl	Monocrotophos	Procymidone	Pyrimethanil	Tetraconazole	Thiabendazole
Mean (mg/Kg)	0.522	0.432	0.160	0.658	2.18	0.138	0.059	0.638
Sa. (mg/Kg)	0.0262	0.0803	0.0250	0.0278	0.221	0.0107	0.00698	0.0107
F critical	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02
F	1.99	1.08	1.18	1.58	1.97	2.63	1.74	2.63
Ss. (mg/Kg)	0.0185	0.0159	0.00742	0.0150	0.154	0.00966	0.00425	0.00966
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Ss: Between Sampling Standard Deviation
 Sa: Analytical Standard Deviation

2.5 Stability tests

The two analytical methods described briefly above (in section 2.1) were also used for the stability tests.

The tests were performed on two occasions. On each occasion, a single bottle stored in the freezer at -20°C was chosen randomly and duplicate analyses were performed.

The two occasions were:

- Day 1: coinciding with the first sample shipment, which took place 5th/6th of April 2005.
- Day 2: shortly after the deadline for reporting results, 20th May 2005.

The individual results are given in Tables 2 A-B. In general, these tests did not show any significant decrease in the levels of the pesticides and demonstrated that the pesticide residues present in the test material remained stable for the duration of the proficiency test.

Table 2 A. Statistical test for analytical precision and to demonstrate stability

	Acetamiprid	Carbaryl	Cyprodinil	Diazinon	Dimethoate	Fenhexamid	Fludioxonil	Imidacloprid
Day 1 (mg/Kg) (1 st sample)	0.320	1.63	0.440	0.285	0.137	0.700	0.240	0.550
Day 1 (mg/Kg) (2 nd sample)	0.312	1.63	0.435	0.298	0.140	0.710	0.235	0.553
Mean 1 (mg/Kg)	0.316	1.63	0.438	0.292	0.139	0.705	0.238	0.552
Day 2 (mg/Kg) (1 st sample)	0.316	1.62	0.434	0.283	0.134	0.699	0.238	0.542
Day 2 (mg/Kg) (2 nd sample)	0.310	1.63	0.430	0.295	0.137	0.698	0.232	0.551
Mean 2 (mg/Kg)	0.313	1.63	0.432	0.289	0.136	0.699	0.235	0.547
(M1-M2)/M1	0.009	0.002	0.013	0.009	0.022	0.009	0.011	0.009
%	0.95	0.21	1.26	0.86	2.17	0.92	1.05	0.91

Table 2 B. Statistical test for analytical precision and to demonstrate stability

	Iprodione	Kresoxim-methyl	Methomyl	Monocrotophos	Procymidone	Pyrimethanil	Tetraconazole	Thiabendazole
Day 1 (mg/Kg) (1 st sample)	0.528	0.464	0.168	0.647	1.91	0.150	0.063	0.654
Day 1 (mg/Kg) (2 nd sample)	0.520	0.450	0.149	0.640	1.90	0.155	0.065	0.658
Mean 1 (mg/Kg)	0.524	0.457	0.159	0.644	1.91	0.153	0.064	0.656
Day 2 (mg/Kg) (1 st sample)	0.521	0.46	0.164	0.640	1.91	0.148	0.060	0.653
Day 2 (mg/Kg) (2 nd sample)	0.517	0.441	0.142	0.635	1.89	0.150	0.061	0.655
Mean 2 (mg/Kg)	0.519	0.451	0.153	0.638	1.90	0.149	0.061	0.654
(M1-M2)/M1	0.010	0.014	0.035	0.009	0.003	0.023	0.055	0.003
%	0.95	1.42	3.47	0.93	0.29	2.30	5.47	0.30

2.6 Distribution of test material and protocol to participants

One bottle of incurred test sample and one bottle of 'blank' material were shipped to each participant in boxes containing dry ice. The samples were sent on the 5th, 6th and 11th of April 2005.

Before sample shipment, 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 were uploaded onto the EUPT 7 web page constructed especially for this Proficiency Test. A password was required to enter a restricted zone where the Protocol and the Pesticide List with the Minimum Required Performance Level (MRPL) established by the Organizer could be found. This information was notified by e-mail to all participant laboratories at the same time as they were informed that their application form for participation had been accepted. This ensured that confidentiality was maintained throughout the entire Proficiency Test 7.

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 previous proficiency tests for the assessment of the laboratory performances for individual pesticides.

The sums of scores, the RSZ (the re-scaled sum of z-scores), SSZ (the squared sum of z-scores) and RLP (relative laboratory performance) were 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 target standard deviations (σ) were calculated using the FFP (fit-for-purpose) value, which was assigned as 25%. Furthermore the Qn-method was also used to calculate standard deviations.

Sum of z-Scores: the RSZ and SSZ were also used but an additional new criterion was introduced for PT6 with the agreement of the Advisory Group as well as DG Sanco. This was used as the basis for separating the labs into two categories, A and B. To be classified as Category A, sufficient scope had to have been demonstrated. This scope was that 11 or more results (from the 13 pesticides present in the treated test material) must have been submitted with no false positives. All labs reporting less than 11 results, or having reported a false positive were classified as Category B.

3.1.3 Proficiency Test 7

In this proficiency test, the median has also been used, together with a FFP SD of 25%.

The Weighted Sum of z-Scores (each z-score was multiplied by a weighted function – see 3.6.3) was used to classify laboratories as Category A or Category B depending on the number of pesticide residues reported.

3.2 False positives and negatives

3.2.1 False positives

In principle, reported results that show the presence of pesticides that were included in the pesticide list, and which were (i) not used in the preparation of the test material, (ii) and not detected by the organizer, even following a repeat analysis, were treated as false positives, if they were reported at concentrations at or above the MRPL stipulated by the Organizer. Results reported that were lower than 0.01 mg/Kg have been ignored by the Organiser and have not therefore been considered as false positives. No z-score value has been calculated for these results.

3.2.2 False negatives

Results for pesticides that were not reported by the laboratories, although they were used by the Organiser to treat the test material and were subsequently detected at, or above, the MRPL by the Organiser (and the majority of participating laboratories) have been considered to be false negatives. z-Scores have been calculated for all pesticides detected at levels exceeding the MRPL.

3.3 Estimation of the assigned values

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

3.4 Estimation of the target standard deviation

To assign the target standard deviations (σ) for each individual compound a fixed relative standard deviation (fit-for-purpose, FFP), based on individual experience and as recommended by the Advisory Group, was used. The target standard deviation was calculated by multiplying these FFP SDs by the assigned value.

3.4.1 Fixed target standard deviations (fit-for-purpose)

The target relative standard deviation (RSD) was considered to be 25%, as recommended by the Advisory Group, and also as a conclusion from the discussion session on proficiency testing at EPRW 2004 in Stockholm, Sweden. The same target RSD has thus been applied to all the pesticides.

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

Any z-score values of $|z| > 5$ has been reported as '+5', or '-5'.

No calculation of z-score has been performed for any false positive result. For false negatives, the MRPL has been used to calculate the z-score.

3.6 Combined z-scores

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

3.6.1 RSZ

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

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

Where n is the number of z-scores

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

3.6.2 SSZ

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

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

Where n is the number of z-scores.

3.6.3 Weighted sum of z-scores

This function was only applied to labs with sufficient scope (those in Category A), i.e. those labs that have reported 14 or more results with no false positives. The weighted function ω is defined as follows:

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

Therefore, the 'Weighted sum of z-scores' $|z|$ formula is:

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

So for each lab the formula will have three terms:

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

The sum is then divided by the number of reported results (n) from each lab.

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

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

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

This evaluation has not been applied to those participants with insufficient scope, in Category B, which is for the laboratories reporting less than 14 results, or with any false positives.

4. RESULTS

4.1 Summary of reported results

One hundred and twenty-eight laboratories agreed to participate in this proficiency test and one hundred and twenty-five submitted results.

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

A summary of the results reported can be seen below in Table 3.

Table 3. Summary of Reported Results

Pesticides	N° of Results Reported	N° of NA Reported	N° of ND Reported (false neg.)	% of the Total Results *
Acetamiprid	56	67	2	46.4
Carbaryl	101	24	0	80.8
Cyprodinil	99	24	2	80.8
Diazinon	123	2	0	98.4
Dimethoate	119	2	4	98.4
Fenhexamid	89	36	0	71.2
Fludioxonil	85	36	4	71.2
Imidacloprid	64	60	1	52.0
Iprodione	113	8	4	93.6
Kresoxim-methyl	104	20	1	84.0
Methomyl	71	45	9	64.0
Monocrotophos	89	31	5	75.2
Procymidone	121	4	0	96.8
Pyrimethanil	98	25	2	80.0
Tetraconazole	70	49	6	60.8
Thiabendazole	104	18	3	85.6

* The % of the total results has been calculated using only labs that actually reported results for these compounds.

NA = Not analysed

ND = Not detected

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

4.1.1 False positives

Some laboratories reported additional pesticides to those applied to the test material. These pesticides and their residue levels reported are presented in Table 4 A and 4 B.

When the reported concentration of the erroneously detected pesticide was higher than the assigned MRPL value the result was considered to be a false positive (see table 4 A).

No laboratory was classified as Category B solely because it reported a false positive result.

Table 4 A. Laboratories that reported false positives in the treated test material

Pesticide	Lab Code	Concentration (mg/kg)	RL (mg/Kg)	MRPL (mg/Kg)
Dichlofluanid	EUPT 7- 122	0.103	0.006	0.05
Endosulfan	EUPT 7- 125	0.106	0.0034	0.05
Methidathion	EUPT 7- 126	0.176		0.02
Myclobutanil	EUPT 7- 049	0.26	0.01	0.02

If the concentration was below the MRPLs, or if the pesticides did not appear in the pesticide list included in the EUPT 7 (Annex I), then these results were not considered to be false positives. However, these laboratories should have taken more care in reporting their results as the concentrations reported were not only lower than the MRPL but in most cases even lower to their own reporting limit. These can be seen in Table 4 B:

Table 4 B. Laboratories that should take more care in reporting their results

Pesticide	Lab Code	Concentration (mg/kg)	RL (mg/Kg)	MRPL (mg/Kg)
Chlorpyrifos	EUPT 7- 116	0.0016	0.01	0.05
Dichlofluanid	EUPT 7- 097	0.013	0.05	0.05
Myclobutanil	EUPT 7- 125	0.005	0.0006	0.02
Vinclozolin	EUPT 7- 097	0.022	0.05	0.05

4.1.2 False negatives

Pesticides actually present in the test material but reported as not detected (ND), were considered to be false negatives. Table 3 summarizes how many ND results for each pesticide were reported.

4.1.3 Distribution of data

The distributions of the concentration of the sixteen pesticide residues reported by the laboratories have been plotted as histograms. See Appendix 2. A few results fell outside the concentration scale.

4.2 Assigned values and target standard deviations

To establish the assigned values, the medians of all the reported results were used, excluding those values that were very distant from the median. The median did not change even when these outliers were included.

The target standard deviation was obtained using a FFP value of 25%.

The assigned values are given in Appendix 3.

4.3 Assessment of the laboratory performance

4.3.1 z-Scores

z-Scores were calculated using the FFP RSD given. The criteria for defining the acceptability of the z-scores are:

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

In Appendix 3, the individual z-scores are presented, together with the median for each laboratory and pesticide.

z-Scores for false negatives results have been calculated using the MRPL value.

In Appendix 4, the graphical representations of the z-scores are presented excluding z-scores from false negatives

4.3.2 Combined z-Scores

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

Appendix 6 shows a table with the values of individual z-scores for each pesticide and the new combined 'Weighted sum of z-scores' (WSZ) for those labs in Category A. In this category are the laboratories that reported 14 or more results, and also did not report any false positives. A graphical representation of the results for these laboratories can also be found.

Sixty-four from the one hundred and twenty-five laboratories have been put into Category A (51.2%), from which 75% were classified as 'good', 4.7% as 'satisfactory' and 20.3% as 'unsatisfactory' (Table 5).

Sixty-one of the one hundred and twenty-five laboratories reported results for less than fourteen pesticides. Several of these labs could also have been classified as 'good', but they failed to report results for the required 14 compounds. Twenty-two of the sixty-one laboratories detected twelve or thirteen pesticides. For Category B, Table 6 gives the number of pesticides reported by each laboratory and the number of results, for which their z-score was acceptable.

Table 5 Laboratories in Category A:
Those with sufficient scope, having reported 14 to 16 results, and classified as good, satisfactory or unsatisfactory.

Lab Code	Num of Pesticides	WSZ	Classification
1	16	0.4	Good
2	16	0.8	Good
4	16	0.5	Good
5	16	1.6	Good
9	16	1.7	Good
15	16	1.0	Good
19	16	0.9	Good
22	16	0.8	Good
24	16	0.4	Good
25	16	0.5	Good
29	16	0.9	Good
37	16	0.6	Good
43	16	0.3	Good
44	16	0.7	Good
45	16	1.2	Good
48	16	0.4	Good
50	16	0.5	Good
55	16	0.9	Good
56	16	1.3	Good
58	16	0.9	Good
59	16	1.1	Good
63	16	0.7	Good
68	16	0.4	Good
73	16	0.3	Good
75	16	1.3	Good
79	16	1.2	Good
80	16	0.5	Good
83	16	0.4	Good
89	16	0.6	Good
90	16	0.3	Good
92	16	0.4	Good
93	16	0.7	Good
98	16	0.6	Good
102	16	0.5	Good
104	16	1.4	Good
107	16	2.0	Good
111	16	0.5	Good
113	16	0.3	Good
23	16	2.2	Satisfactory
42	16	2.3	Satisfactory
67	16	2.5	Satisfactory
11	16	3.7	Unsatisfactory
28	16	4.5	Unsatisfactory
36	16	3.2	Unsatisfactory
39	16	5.2	Unsatisfactory

Lab Code	Num of Pesticides	WSZ	Classification
61	16	3.2	Unsatisfactory
91	16	4.6	Unsatisfactory
27	15	0.5	Good
35	15	1.3	Good
106	15	0.7	Good
47	15	7.3	Unsatisfactory
53	15	6.1	Unsatisfactory
74	15	4.3	Unsatisfactory
110	15	5.6	Unsatisfactory
26	14	0.7	Good
52	14	0.6	Good
60	14	0.7	Good
88	14	1.6	Good
95	14	1.6	Good
109	14	0.8	Good
115	14	1.9	Good
69	14	8.0	Unsatisfactory
76	14	6.4	Unsatisfactory
114	14	3.1	Unsatisfactory

Table 6 Number of acceptable z-scores for laboratories in Category B

Lab Code	Num of Pesticides	Num of acceptable z-scores
12	13	13
38	13	13
40	13	13
54	13	13
57	13	13
86	13	13
8	13	12
87	13	12
31	13	11
82	13	11
116	13	10
18	13	9
84	13	9
78	13	6
6	12	12
94	12	12
20	12	11
65	12	11
103	12	11
16	12	10
72	12	10
49	12	4
41	11	11

Lab Code	Num of Pesticides	Num of acceptable z-scores
118	11	11
13	11	10
101	11	8
32	11	5
30	11	3
10	10	10
64	10	10
105	10	9
7	9	9
66	9	9
71	9	9
99	9	8
3	8	8
34	8	7
21	8	1
33	7	7
62	7	6
96	7	5
112	7	5
117	7	5
70	7	1
100	6	6
128	6	6
14	6	5
85	6	5
120	6	5
122	6	5
46	5	5
125	5	5
119	5	4
126	5	4
121	5	2
17	5	1
124	4	4
51	2	2
108	2	2
123	2	2
97	0	0
77		No Results
81		No Results
127		No Results

5. CONCLUSIONS

A large number of the invited laboratories submitted results for the analysis of the pesticides present in the grape homogenate test material (125 of 128). For each laboratory/pesticide combination, z-scores based on FFP were calculated. For the FFP, a graphic representation has been prepared. A classification was made using the simple descriptive terms 'acceptable, questionable and unacceptable'.

'The Weighted Sum of z-Scores' (WSZ), a criterion first introduced in last year's proficiency test report, was used to demonstrate the overall performance of the laboratories. Those laboratories reporting fourteen or more results, and not having submitted any false positive results, were classified as having sufficient scope and were therefore placed in Category A. Those laboratories that reported less than fourteen results were considered to have insufficient scope and were placed in Category B. Laboratories in Category A were also classified as 'good', 'satisfactory' or 'unsatisfactory', depending on the values obtained after combining each reported z-score. For the remainder of the labs (the ones belonging to Category B) no combined weighted sum of z-scores was calculated. However, the number of satisfactory z-scores is shown.

The median value of each pesticide, after elimination of outliers, was used to obtain the assigned or "true" concentration, which was also used to calculate the z-scores..

Applying the factors for recovery correction did not improve the overall precision and accuracy of the results.

The presence of some very low level residues in the blank grape homogenate supplied did not affect the results obtained from the treated test material.

Three of the sixteen pesticides used to treat the test material were not included in the monitoring priority list. Acetamiprid and Tetraconazole were considered to be important because of their wide usage in agriculture and the frequent occurrence of MRL-violations. Monocrotophos, was chosen because of its high toxicity.

The decrease in the numbers of false positive and false negative results seen in PT6 was even more apparent in PT7. However, this continued improvement may have been, at least in part, due to some labs that performed poorly in PT6 did not participate in PT7.

Another reason for the improvement could have been that more participants used mass spectrometry, particularly MS/MS.

Participation in this year 7th European Proficiency Test involved 24 EU member states, the EU-candidate country Romania, and also Iceland and Norway that regularly participate in the EU-monitoring programmes. This year some laboratories participated for the first time in this Proficiency Test.

6. SUGGESTIONS FOR FUTURE WORK

The Scientific Committee and Advisory Group of the EU Proficiency Test 7 decided to maintain the use of the 25% FFP standard deviation, so that the results from the PTs are more comparable. After this 7th EU Proficiency Test, we believe that it is time for a recapitulation. Recalculating previous PT results using the 25% FFP standard deviation would help to obtain more comparable data and clear information about the trends in the performances of the laboratories throughout all the PTs. This would also help to present a picture of the overall progress in achieving better analytical quality and harmonization within the EU.

7. REFERENCES

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8. ACKNOWLEDGEMENTS

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The Organiser wishes to thank the members of the Advisory Group and the Scientific Committee for their valuable and knowledgeable advice. Many thanks also to the Statistical Group for their cooperation and statistical calculations and evaluations.

The Organiser wishes to give a special thank-you to the University of Almeria and a special mention to Coexphal laboratory for their invaluable work.

APPENDIX 1. Homogeneity Data

Acetamiprid		Carbaryl		Cyprodinil		Diazinon	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.300	0.358	1.660	1.658	0.460	0.458	0.283	0.285
0.350	0.350	1.650	1.650	0.450	0.450	0.290	0.293
0.381	0.352	1.681	1.652	0.481	0.452	0.289	0.285
0.388	0.390	1.688	1.690	0.388	0.390	0.288	0.280
0.332	0.340	1.632	1.640	0.432	0.440	0.291	0.290
0.372	0.380	1.672	1.680	0.472	0.480	0.295	0.290
0.300	0.362	1.600	1.662	0.400	0.462	0.284	0.286
0.330	0.337	1.630	1.637	0.430	0.437	0.287	0.290
0.320	0.334	1.620	1.634	0.420	0.434	0.287	0.284
0.328	0.324	1.628	1.688	0.428	0.488	0.289	0.290

Dimethoate		Fenhexamid		Fludioxonil		Imidacloprid	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.137	0.134	0.737	0.734	0.269	0.226	0.608	0.626
0.155	0.154	0.755	0.754	0.240	0.208	0.530	0.548
0.184	0.149	0.684	0.649	0.230	0.253	0.540	0.553
0.184	0.193	0.684	0.693	0.230	0.235	0.530	0.535
0.188	0.122	0.688	0.622	0.285	0.200	0.585	0.599
0.143	0.199	0.693	0.699	0.207	0.197	0.507	0.597
0.170	0.175	0.670	0.175	0.230	0.233	0.530	0.533
0.148	0.198	0.648	0.698	0.273	0.270	0.573	0.570
0.126	0.132	0.726	0.732	0.200	0.199	0.540	0.599
0.188	0.193	0.688	0.693	0.200	0.199	0.540	0.599

Iprodione		Kresoxim-methyl		Methomyl		Iprodione	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
0.511	0.521	0.506	0.364	0.166	0.164	0.712	0.678
0.518	0.632	0.487	0.440	0.187	0.140	0.682	0.614
0.513	0.514	0.538	0.461	0.138	0.161	0.706	0.670
0.506	0.507	0.387	0.335	0.187	0.135	0.609	0.672
0.491	0.497	0.348	0.386	0.148	0.186	0.685	0.630
0.500	0.499	0.374	0.425	0.174	0.125	0.637	0.637
0.521	0.544	0.400	0.559	0.200	0.159	0.607	0.620
0.557	0.547	0.447	0.617	0.147	0.117	0.671	0.655
0.529	0.530	0.344	0.433	0.144	0.133	0.663	0.692
0.497	0.496	0.308	0.486	0.208	0.186	0.663	0.650

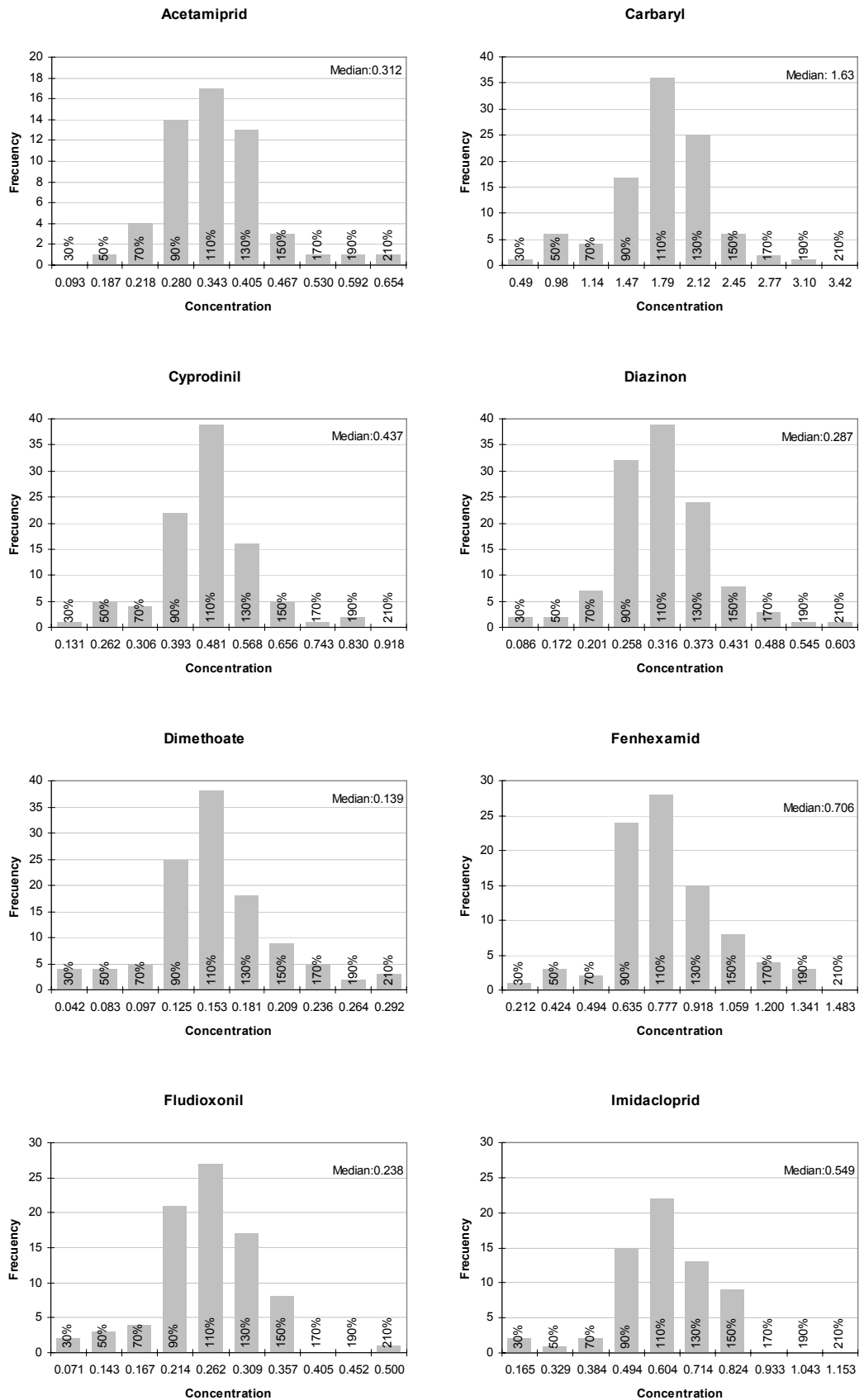
APPENDIX 1. Homogeneity Data

Procymidone		Pyrimethanil		Tetraconazole		Thiabendazole	
Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2	Sample 1	Sample 2
2.612	2.178	0.123	0.154	0.063	0.050	0.623	0.654
2.082	2.214	0.128	0.156	0.068	0.056	0.628	0.656
2.606	2.270	0.150	0.129	0.050	0.069	0.650	0.629
2.009	1.872	0.147	0.148	0.067	0.068	0.647	0.648
1.885	2.030	0.130	0.135	0.055	0.065	0.630	0.635
2.037	2.037	0.119	0.119	0.060	0.069	0.619	0.619
2.007	2.620	0.120	0.114	0.060	0.064	0.620	0.614
2.371	2.655	0.159	0.153	0.059	0.050	0.659	0.653
1.863	1.992	0.144	0.147	0.064	0.060	0.644	0.647
1.963	2.350	0.143	0.145	0.043	0.045	0.643	0.645

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

Results presented as histograms (except those results considered to be outliers).

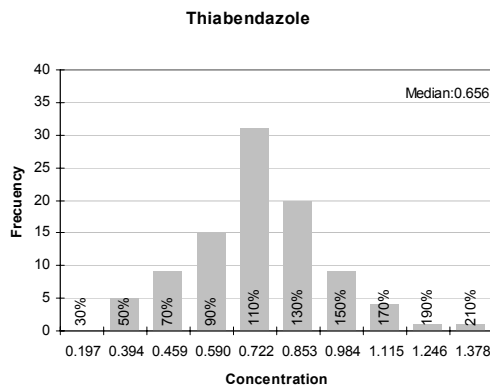
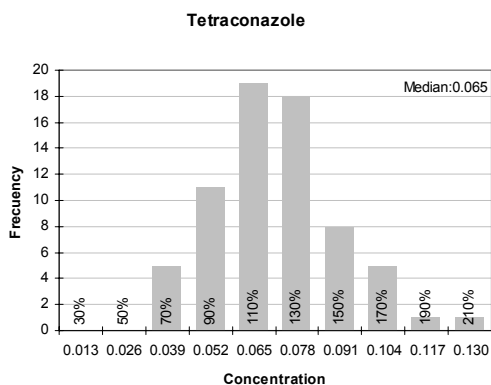
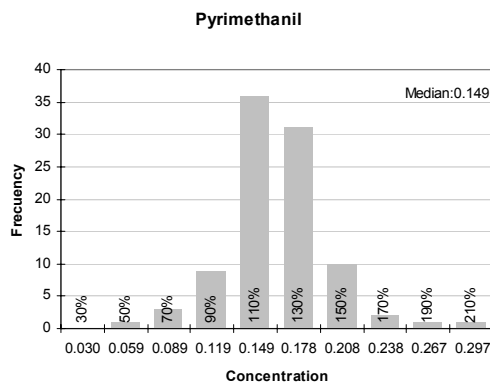
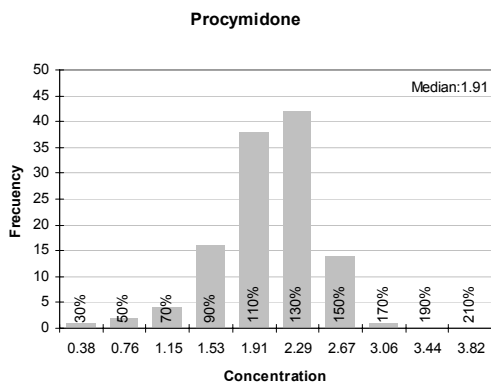
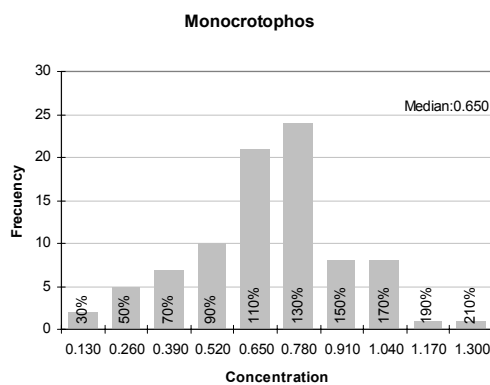
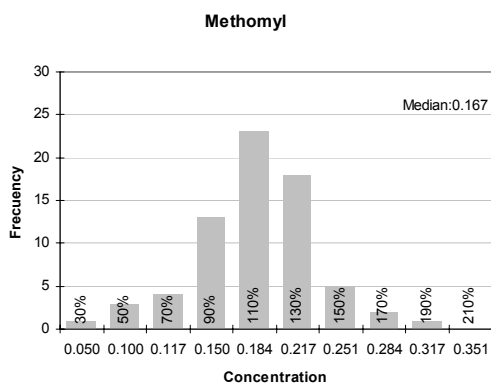
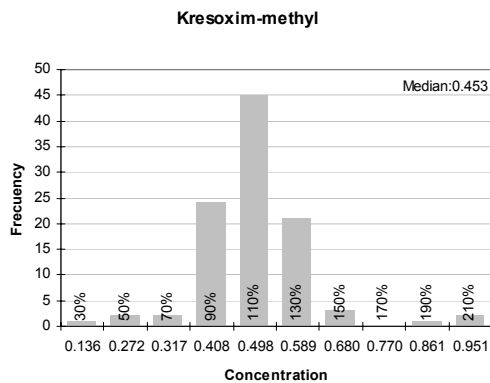
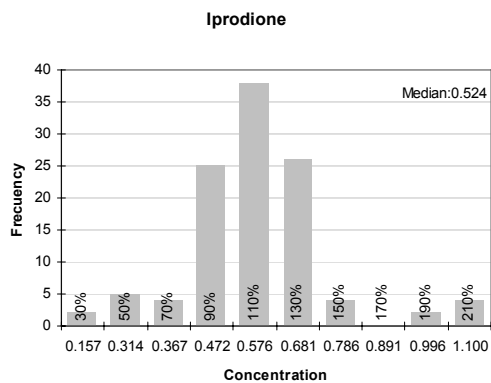
The percentages shown are relative to the median value.



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

Results presented as histograms (except those results considered to be outliers).

The percentages shown are relative to the median value.



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

Lab Code	Acetamidiprid		Carbaryl		Cyprodinil		Diazinon	
MRPL	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.02	z-Score (FFP 25%)
Median (mg/kg)	0.312		1.62		0.437		0.287	
1	0.285	-0.3	1.63	0.0	0.385	-0.5	0.287	0.0
2	0.316	0.1	1.56	-0.2	0.519	0.8	0.316	0.4
3	NA		NA		0.330	-1.0	0.267	-0.3
4	0.338	0.3	1.58	-0.1	0.415	-0.2	0.255	-0.4
5	0.312	0.0	1.12	-1.2	0.126	-2.8	0.242	-0.6
6	NA		1.76	0.3	0.470	0.3	0.320	0.5
7	NA		1.50	-0.3	0.566	1.2	0.232	-0.8
8	NA		1.84	0.5	0.620	1.7	0.350	0.9
9	0.344	0.4	1.86	0.6	0.544	1.0	0.339	0.7
10	NA		1.10	-1.3	0.449	0.1	0.232	-0.8
11	0.275	-0.5	1.45	-0.4	0.775	3.1	0.235	-0.7
12	0.172	-1.8	1.49	-0.3	NA		0.246	-0.6
13	0.220	-1.2	NA		NA		0.230	-0.8
14	NA		NA		NA		0.406	1.7
15	0.398	1.1	1.86	0.6	0.537	0.9	0.299	0.2
16	NA		1.60	0.0	0.362	-0.7	0.225	-0.9
17	NA		NA		NA		0.600	4.4
18	NA		0.946	-1.7	0.516	0.7	0.309	0.3
19	0.270	-0.5	1.50	-0.3	0.308	-1.2	0.200	-1.2
20	NA		1.93	0.8	0.437	0.0	0.305	0.3
21	NA		3.98	5.8	1.03	5.4	0.970	9.5
22	0.238	-0.9	1.20	-1.0	0.435	0.0	0.360	1.0
23	0.327	0.2	1.84	0.5	0.457	0.2	0.312	0.3
24	0.293	-0.2	1.56	-0.1	0.473	0.3	0.259	-0.4
25	0.230	-1.0	1.25	-0.9	0.415	-0.2	0.245	-0.6
26	NA		1.79	0.4	0.452	0.1	0.177	-1.5
27	0.300	-0.1	1.50	-0.3	0.420	-0.2	0.250	-0.5
28	0.390	1.0	1.82	0.5	0.471	0.3	0.400	1.6
29	0.391	1.0	0.816	-2.0	0.289	-1.4	0.269	-0.3
30	NA		6.64	12.4	0.573	1.2	0.412	1.7
31	NA		1.96	0.8	0.298	-1.3	0.255	-0.4
32	NA		2.18	1.4	0.460	0.2	0.650	5.1
33	NA		NA		0.525	0.8	0.315	0.4
34	NA		NA		0.398	-0.4	0.354	0.9
35	0.191	-1.5	1.50	-0.3	0.365	-0.7	0.210	-1.1
36	0.343	0.4	1.36	-0.6	0.458	0.2	0.340	0.7
37	0.360	0.6	1.44	-0.4	0.410	-0.2	0.400	1.6
38	NA		1.89	0.7	0.510	0.7	0.348	0.9
39	0.360	0.6	1.86	0.6	ND (0,01)	-3.5	0.190	-1.4
40	NA		1.66	0.1	0.440	0.0	0.223	-0.9
41	0.208	-1.3	1.49	-0.3	0.391	-0.4	0.253	-0.5
42	0.347	0.5	1.81	0.5	0.490	0.5	0.313	0.4
43	0.324	0.2	1.68	0.1	0.472	0.3	0.318	0.4
44	0.376	0.8	2.02	1.0	0.418	-0.2	0.361	1.0
45	0.215	-1.2	1.17	-1.1	0.364	-0.7	0.481	2.7
46	NA		NA		NA		0.379	1.3
47	ND (0,50)	-3.4	1.74	0.3	0.450	0.1	0.290	0.0
48	0.304	-0.1	1.61	0.0	0.476	0.4	0.319	0.4

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

Lab Code	Acetamiprid		Carbaryl		Cyprodinil		Diazinon	
MRPL	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.02	z-Score (FFP 25%)
Median (mg/kg)	0.312		1.62		0.437		0.287	
49	NA		2.64	2.5	1.03	5.4	0.200	-1.2
50	0.311	0.0	1.72	0.2	0.301	-1.2	0.237	-0.7
51	NA		0.810	-2.0	NA		NA	
52	NA		1.55	-0.2	0.483	0.4	0.400	1.6
53	0.850	6.9	1.93	0.8	0.645	1.9	0.346	0.8
54	NA		2.03	1.0	0.347	-0.8	0.272	-0.2
55	0.365	0.7	1.68	0.1	0.618	1.7	0.390	1.4
56	0.206	-1.4	1.72	0.2	0.690	2.3	0.228	-0.8
57	NA		1.52	-0.2	0.400	-0.3	0.278	-0.1
58	0.429	1.5	2.09	1.2	0.533	0.9	0.242	-0.6
59	0.348	0.5	1.96	0.8	0.510	0.7	0.402	1.6
60	NA		1.30	-0.8	0.360	-0.7	0.360	1.0
61	0.505	2.5	1.60	0.0	0.515	0.7	0.361	1.0
62	NA		NA		0.420	-0.2	0.250	-0.5
63	0.360	0.6	1.94	0.8	0.375	-0.6	0.279	-0.1
64	NA		2.20	1.4	NA		0.302	0.2
65	NA		1.71	0.2	0.420	-0.2	0.331	0.6
66	NA		1.25	-0.9	NA		0.192	-1.3
67	0.258	-0.7	3.03	3.5	0.387	-0.5	0.289	0.0
68	0.239	-0.9	1.27	-0.9	0.467	0.3	0.289	0.0
69	NA		2.71	2.7	0.780	3.1	0.442	2.2
70	NA		0.670	-2.3	NA		0.060	-3.2
71	NA		NA		0.438	0.0	0.346	0.8
72	NA		NA		0.323	-1.0	0.245	-0.6
73	0.271	-0.5	1.42	-0.5	0.430	-0.1	0.293	0.1
74	0.226	-1.1	1.39	-0.6	2.06	14.9	0.241	-0.6
75	0.376	0.8	2.09	1.2	0.392	-0.4	0.337	0.7
76	0.605	3.8	1.86	0.6	0.413	-0.2	0.202	-1.2
77	NO RESULTS							
78	NA		1.85	0.6	ND (0,05)	-3.5	0.770	6.7
79	0.413	1.3	1.44	-0.4	0.473	0.3	0.255	-0.4
80	0.340	0.4	1.38	-0.6	0.260	-1.6	0.290	0.0
81	NO RESULTS							
82	NA		2.02	1.0	0.431	-0.1	0.315	0.4
83	0.269	-0.5	1.50	-0.3	0.395	-0.4	0.260	-0.4
84	NA		0.64	-2.4	0.380	-0.5	0.280	-0.1
85	NA		NA		NA		0.323	0.5
86	NA		1.48	-0.3	0.385	-0.5	0.262	-0.3
87	NA		1.43	-0.5	0.358	-0.7	0.236	-0.7
88	ND (0,01)	-3.4	1.54	-0.2	0.227	-1.9	0.308	0.3
89	0.270	-0.5	1.05	-1.4	0.420	-0.2	0.250	-0.5
90	0.330	0.2	1.74	0.3	0.500	0.6	0.320	0.5
91	0.530	2.8	2.43	2.0	0.252	-1.7	0.357	1.0
92	0.291	-0.3	1.91	0.7	0.518	0.7	0.309	0.3
93	0.266	-0.6	1.20	-1.0	0.334	-0.9	0.268	-0.3
94	NA		1.86	0.6	0.450	0.1	0.300	0.2
95	NA		1.72	0.2	0.383	-0.5	0.261	-0.4
96	NA		NA		NA		0.348	0.9
97	NA		NA		NA		NA	
98	0.235	-1.0	1.61	0.0	0.388	-0.4	0.198	-1.2

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

Lab Code	Acetamiprid		Carbaryl		Cyprodinil		Diazinon	
MRPL	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.02	z-Score (FFP 25%)
Median (mg/kg)	0.312		1.62		0.437		0.287	
99	NA		1.49	-0.3	0.410	-0.2	0.282	-0.1
100	NA		NA		NA		0.230	-0.8
101	NA		1.28	-0.8	0.240	-1.8	0.300	0.2
102	0.266	-0.6	1.60	0.0	0.456	0.2	0.348	0.9
103	NA		2.42	2.0	0.375	-0.6	0.210	-1.1
104	0.294	-0.2	1.55	-0.2	0.471	0.3	0.221	-0.9
105	NA		1.86	0.6	0.362	-0.7	0.316	0.4
106	NA		1.38	-0.6	0.450	0.1	0.310	0.3
107	0.290	-0.3	2.10	1.2	0.490	0.5	0.480	2.7
108	NA		NA		NA		0.240	-0.7
109	NA		1.06	-1.4	0.438	0.0	0.303	0.2
110	0.414	1.3	NA		1.22	7.2	0.502	3.0
111	0.328	0.2	1.84	0.5	0.575	1.3	0.278	-0.1
112	NA		1.63	0.0	NA		0.298	0.2
113	0.310	0.0	1.65	0.1	0.462	0.2	0.265	-0.3
114	NA		0.378	-3.1	0.273	-1.5	0.153	-1.9
115	NA		0.862	-1.9	0.262	-1.6	0.279	-0.1
116	NA		2.30	1.7	0.430	-0.1	0.310	0.3
117	NA		2.22	1.5	0.530	0.9	0.330	0.6
118	NA		NA		0.380	-0.5	0.240	-0.7
119	NA		1.71	0.2	NA		0.262	-0.3
120	NA		NA		NA		0.235	-0.7
121	NA		NA		NA		0.077	-2.9
122	NA		NA		NA		0.185	-1.4
123	NA		NA		NA		0.262	-0.3
124	NA		NA		NA		0.170	-1.6
125	NA		NA		NA		0.255	-0.4
126	NA		NA		NA		0.201	-1.2
127	NO RESULTS							
128	NA		1.20	-1.0	NA		0.275	-0.2

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

Lab Code	DIMETHOATE		Fenhexamid		Fludioxonil		Imidacloprid	
MRPL	0.02	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)
Median (mg/kg)	0.139		0.706		0.238		0.549	
1	0.142	0.1	0.734	0.2	0.271	0.6	0.413	-1.0
2	0.156	0.5	0.735	0.2	0.273	0.6	0.595	0.3
3	0.109	-0.9	NA		0.216	-0.4	NA	
4	0.156	0.5	0.669	-0.2	0.215	-0.4	0.766	1.6
5	0.122	-0.5	0.506	-1.1	0.139	-1.7	0.508	-0.3
6	0.130	-0.3	0.710	0.0	0.250	0.2	NA	
7	0.139	0.0	0.516	-1.1	NA		NA	
8	0.190	1.5	2.24	8.7	NA		0.768	1.6
9	0.179	1.2	0.857	0.9	0.237	0.0	0.626	0.6
10	0.079	-1.7	NA		0.280	0.7	NA	
11	0.127	-0.3	0.793	0.5	0.483	4.1	0.495	-0.4
12	0.121	-0.5	0.486	-1.2	NA		0.383	-1.2
13	0.100	-1.1	NA		NA		0.290	-1.9
14	0.116	-0.7	NA		NA		NA	
15	0.170	0.9	0.775	0.4	0.243	0.1	0.771	1.6
16	0.111	-0.8	NA		0.183	-0.9	NA	
17	0.280	4.1	NA		NA		NA	
18	ND (0,02)	-3.4	0.423	-1.6	0.137	-1.7	NA	
19	0.113	-0.7	0.573	-0.8	0.155	-1.4	0.480	-0.5
20	0.121	-0.5	0.580	-0.7	NA		NA	
21	0.490	10.1	NA		NA		NA	
22	0.149	0.3	0.441	-1.5	0.153	-1.4	0.490	-0.4
23	0.094	-1.3	0.754	0.3	0.298	1.0	0.653	0.8
24	0.149	0.3	0.614	-0.5	0.229	-0.2	0.503	-0.3
25	0.123	-0.5	0.822	0.7	0.192	-0.8	0.466	-0.6
26	0.096	-1.2	0.645	-0.3	0.338	1.7	0.570	0.2
27	0.140	0.0	0.710	0.0	0.200	-0.6	0.480	-0.5
28	0.278	4.0	1.17	2.6	0.055	-3.1	0.610	0.4
29	0.084	-1.6	0.959	1.4	0.250	0.2	0.743	1.4
30	0.412	7.9	1.08	2.1	ND (0,05)	-3.2	NA	
31	0.140	0.0	0.940	1.3	0.086	-2.6	NA	
32	0.350	6.1	1.25	3.1	0.220	-0.3	NA	
33	0.091	-1.4	NA		0.204	-0.6	NA	
34	0.071	-2.0	NA		0.208	-0.5	NA	
35	0.125	-0.4	0.598	-0.6	0.191	-0.8	NA	
36	0.275	3.9	0.846	0.8	0.244	0.1	0.751	1.5
37	0.140	0.0	0.570	-0.8	0.180	-1.0	0.540	-0.1
38	0.187	1.4	0.610	-0.5	0.298	1.0	NA	
39	0.245	3.1	0.681	-0.1	0.245	0.1	0.674	0.9
40	0.142	0.1	0.715	0.1	0.231	-0.1	NA	
41	0.120	-0.5	0.588	-0.7	NA		NA	
42	0.165	0.7	0.751	0.3	0.294	0.9	0.682	1.0
43	0.144	0.1	0.772	0.4	0.242	0.1	0.598	0.4
44	0.180	1.2	0.797	0.5	0.271	0.6	0.650	0.7
45	0.131	-0.2	0.646	-0.3	0.172	-1.1	0.342	-1.5
46	0.139	0.0	NA		NA		NA	
47	0.400	7.5	0.560	-0.8	0.280	0.7	NA	
48	0.153	0.4	0.801	0.5	0.267	0.5	0.565	0.1

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

Lab Code	DIMETHOATE		Fenhexamid		Fludioxonil		Imidacloprid	
MRPL	0.02	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)
Median (mg/kg)	0.139		0.706		0.238		0.549	
49	0.100	-1.1	NA		NA		0.160	-2.8
50	0.131	-0.2	0.581	-0.7	0.203	-0.6	0.502	-0.3
51	NA		NA		NA		NA	
52	0.126	-0.4	0.574	-0.7	0.201	-0.6	NA	
53	0.257	3.4	1.30	3.4	0.525	4.8	0.640	0.7
54	0.175	1.0	0.757	0.3	0.225	-0.2	0.675	0.9
55	0.133	-0.2	0.893	1.1	0.265	0.5	0.807	1.9
56	0.112	-0.8	0.693	-0.1	0.159	-1.3	0.454	-0.7
57	0.142	0.1	0.733	0.2	NA		0.620	0.5
58	0.150	0.3	1.04	1.9	0.298	1.0	0.781	1.7
59	0.220	2.3	0.860	0.9	0.320	1.4	0.587	0.3
60	0.120	-0.5	1.00	1.7	0.250	0.2	0.430	-0.9
61	0.209	2.0	0.956	1.4	0.194	-0.7	0.753	1.5
62	0.130	-0.3	NA		NA		NA	
63	0.170	0.9	0.662	-0.2	0.169	-1.2	0.612	0.5
64	0.171	0.9	NA		NA		NA	
65	0.150	0.3	0.923	1.2	0.143	-1.6	NA	
66	0.138	0.0	NA		NA		NA	
67	0.129	-0.3	0.547	-0.9	0.340	1.7	0.407	-1.0
68	0.122	-0.5	0.670	-0.2	0.189	-0.8	0.508	-0.3
69	0.179	1.2	1.32	3.5	0.800	9.4	NA	
70	0.030	-3.1	NA		NA		NA	
71	0.156	0.5	0.567	-0.8	NA		NA	
72	0.166	0.8	0.522	-1.0	NA		NA	
73	0.133	-0.2	0.582	-0.7	0.219	-0.3	0.512	-0.3
74	0.105	-1.0	0.706	0.0	0.238	0.0	NA	
75	0.179	1.2	1.09	2.1	0.274	0.6	0.696	1.1
76	0.195	1.6	0.739	0.2	0.318	1.3	NA	
77								
78	0.150	0.3	NA		ND (0,05)	-3.2	ND (0,05)	-3.6
79	0.210	2.0	1.02	1.8	0.256	0.3	0.613	0.5
80	0.150	0.3	0.850	0.8	0.180	-1.0	0.570	0.2
81								
82	0.216	2.2	0.771	0.4	0.313	1.3	NA	
83	0.132	-0.2	0.602	-0.6	0.257	0.3	0.472	-0.6
84	0.040	-2.8	0.530	-1.0	ND (0,05)	-3.2	NA	
85	0.100	-1.1	NA		NA		NA	
86	0.154	0.4	NA		0.324	1.4	0.488	-0.4
87	0.185	1.3	0.814	0.6	0.310	1.2	0.548	0.0
88	0.128	-0.3	0.598	-0.6	0.240	0.0	0.458	-0.7
89	0.110	-0.8	0.640	-0.4	0.220	-0.3	0.540	-0.1
90	0.139	0.0	0.656	-0.3	0.201	-0.6	0.570	0.2
91	0.110	-0.8	0.150	-3.2	ND (0,02)	-3.2	0.150	-2.9
92	0.143	0.1	0.644	-0.4	0.280	0.7	0.521	-0.2
93	0.152	0.4	0.915	1.2	0.182	-0.9	0.415	-1.0
94	0.135	-0.1	0.680	-0.1	NA		NA	
95	0.115	-0.7	0.640	-0.4	0.226	-0.2	NA	
96	0.027	-3.2	0.681	-0.1	0.273	0.6	NA	
97	NA		NA		NA		NA	
98	0.129	-0.3	0.549	-0.9	0.184	-0.9	0.396	-1.1

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

Lab Code	DIMETHOATE		Fenhexamid		Fludioxonil		Imidacloprid	
MRPL	0.02	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)	0.05	z-Score (FFP 25%)
Median (mg/kg)	0.139		0.706		0.238		0.549	
99	0.127	-0.3	NA		0.193	-0.8	NA	
100	0.160	0.6	NA		NA		NA	
101	0.380	6.9	NA		0.170	-1.1	NA	
102	0.180	1.2	0.631	-0.4	0.245	0.1	0.558	0.1
103	0.130	-0.3	0.805	0.6	0.250	0.2	NA	
104	0.109	-0.9	0.605	-0.6	0.241	0.1	0.576	0.2
105	0.134	-0.1	NA		0.276	0.6	NA	
106	0.110	-0.8	0.525	-1.0	0.225	-0.2	0.490	-0.4
107	0.220	2.3	1.07	2.1	0.270	0.5	0.390	-1.2
108	0.190	1.5	NA		NA		NA	
109	0.204	1.9	0.793	0.5	0.194	-0.7	NA	
110	0.110	-0.8	0.404	-1.7	0.071	-2.8	0.769	1.6
111	0.154	0.4	0.781	0.4	0.248	0.2	0.605	0.4
112	ND (0,01)	-3.4	NA		NA		0.545	0.0
113	0.145	0.2	0.642	-0.4	0.235	-0.1	0.547	0.0
114	0.040	-2.8	0.355	-2.0	0.183	-0.9	0.550	0.0
115	0.131	-0.2	0.823	0.7	0.270	0.5	NA	
116	ND (0,01)	-3.4	0.930	1.3	0.350	1.9	NA	
117	ND (0,03)	-3.4	NA		NA		NA	
118	0.140	0.0	0.550	-0.9	NA		NA	
119	0.197	1.7	NA		NA		NA	
120	0.071	-2.0	NA		NA		NA	
121	0.107	-0.9	NA		NA		NA	
122	0.090	-1.4	NA		NA		NA	
123	0.189	1.4	NA		NA		NA	
124	0.105	-1.0	NA		NA		NA	
125	0.182	1.2	NA		NA		NA	
126	0.075	-1.8	NA		NA		NA	
127								
128	0.130	-0.3	NA		NA		NA	

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

Lab Code	Iprodione	z-Score (FFP 25%)	Kresoxim-methyl	z-Score (FFP 25%)	Methomyl	z-Score (FFP 25%)	Monocrotophos	z-Score (FFP 25%)
MRPL	0.02		0.05		0.05		0.03	
Median (mg/kg)	0.524		0.453		0.167		0.643	
1	0.703	1.4	0.498	0.4	0.203	0.9	0.758	0.7
2	0.632	0.8	0.464	0.1	0.160	-0.2	0.552	-0.6
3	0.533	0.1	0.351	-0.9	NA		0.361	-1.8
4	0.577	0.4	0.440	-0.1	0.169	0.1	0.790	0.9
5	0.442	-0.6	0.454	0.0	0.161	-0.1	0.540	-0.6
6	0.560	0.3	0.450	0.0	NA		0.660	0.1
7	0.302	-1.7	0.341	-1.0	NA		NA	
8	0.655	1.0	0.574	1.1	0.225	1.4	0.720	0.5
9	0.559	0.3	0.554	0.9	0.185	0.4	0.938	1.8
10	0.499	-0.2	0.429	-0.2	NA		NA	
11	0.407	-0.9	0.612	1.4	0.295	3.1	0.963	2.0
12	0.378	-1.1	0.346	-0.9	0.143	-0.6	0.551	-0.6
13	0.390	-1.0	0.390	-0.6	0.110	-1.4	0.250	-2.4
14	0.442	-0.6	NA		NA		0.196	-2.8
15	0.555	0.2	0.414	-0.3	0.257	2.2	0.951	1.9
16	0.582	0.4	0.396	-0.5	NA		0.389	-1.6
17	1.42	6.8	NA		NA		0.710	0.4
18	0.512	-0.1	0.945	4.3	ND (0,05)	-2.8	ND (0,02)	-3.8
19	0.348	-1.3	0.300	-1.4	0.168	0.0	0.449	-1.2
20	0.535	0.1	0.471	0.2	NA		0.214	-2.7
21	1.40	6.7	1.35	7.9	NA		NA	
22	0.660	1.0	0.487	0.3	0.163	-0.1	0.918	1.7
23	0.480	-0.3	0.501	0.4	ND (0,1)	-2.8	ND (0,05)	-3.8
24	0.527	0.0	0.462	0.1	0.186	0.5	0.498	-0.9
25	0.442	-0.6	0.395	-0.5	0.149	-0.4	0.545	-0.6
26	0.478	-0.4	0.489	0.3	0.129	-0.9	0.465	-1.1
27	0.390	-1.0	0.500	0.4	0.190	0.6	NA	
28	0.674	1.1	0.630	1.6	0.200	0.8	1.21	3.5
29	0.643	0.9	0.446	-0.1	0.126	-1.0	0.431	-1.3
30	0.897	2.8	NA		NA		ND (0,05)	-3.8
31	0.587	0.5	0.341	-1.0	NA		0.694	0.3
32	1.01	3.7	0.630	1.6	NA		NA	
33	0.627	0.8	NA		NA		NA	
34	0.170	-2.7	0.366	-0.8	NA		NA	
35	0.350	-1.3	0.335	-1.0	ND (0,05)	-2.8	0.635	0.0
36	0.626	0.8	0.335	-1.0	0.147	-0.5	0.762	0.7
37	0.420	-0.8	0.450	0.0	0.210	1.0	0.850	1.3
38	0.448	-0.6	0.456	0.0	NA		0.610	-0.2
39	0.978	3.5	0.342	-1.0	0.629	11.1	0.700	0.4
40	0.482	-0.3	0.410	-0.4	NA		0.530	-0.7
41	0.472	-0.4	0.414	-0.3	NA		NA	
42	0.634	0.8	0.541	0.8	0.188	0.5	0.935	1.8
43	0.538	0.1	0.502	0.4	0.153	-0.3	0.761	0.7
44	0.699	1.3	0.477	0.2	0.215	1.2	0.666	0.1
45	0.480	-0.3	0.451	0.0	0.112	-1.3	0.588	-0.3
46	0.491	-0.3	NA		NA		NA	
47	1.09	4.3	0.530	0.7	ND (0,05)	-2.8	0.800	1.0

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

Lab Code	Iprodione	z-Score (FFP 25%)	Kresoxim-methyl	z-Score (FFP 25%)	Methomyl	z-Score (FFP 25%)	Monocrotophos	z-Score (FFP 25%)
MRPL	0.02		0.05		0.05		0.03	
Median (mg/kg)	0.524	0.453	0.167	0.643				
48	0.600	0.6	0.543	0.8	0.166	0.0	0.620	-0.1
49	0.110	-3.2	2.26	16.0	0.040	-3.0	0.670	0.2
50	0.505	-0.1	0.375	-0.7	0.205	0.9	0.592	-0.3
51	NA		NA		0.130	-0.9	NA	
52	0.534	0.1	0.465	0.1	0.161	-0.1	0.334	-1.9
53	0.625	0.8	0.469	0.1	NA		0.743	0.6
54	0.413	-0.8	0.494	0.4	0.170	0.1	NA	
55	0.670	1.1	0.549	0.8	0.193	0.6	0.715	0.5
56	0.356	-1.3	0.532	0.7	0.233	1.6	0.845	1.3
57	0.502	-0.2	0.452	0.0	0.153	-0.3	0.600	-0.3
58	0.610	0.7	0.466	0.1	0.153	-0.3	0.607	-0.2
59	0.510	-0.1	0.530	0.7	0.210	1.0	0.520	-0.8
60	NA		0.500	0.4	0.180	0.3	0.610	-0.2
61	0.559	0.3	0.550	0.9	0.175	0.2	0.992	2.2
62	0.560	0.3	NA		NA		0.650	0.0
63	0.514	-0.1	0.478	0.2	0.174	0.2	0.375	-1.7
64	0.454	-0.5	NA		0.190	0.6	0.733	0.6
65	0.646	0.9	0.421	-0.3	NA		0.490	-0.9
66	0.536	0.1	0.254	-1.8	0.138	-0.7	0.569	-0.5
67	0.580	0.4	0.796	3.0	0.162	-0.1	1.00	2.2
68	0.567	0.3	0.474	0.2	0.128	-0.9	0.576	-0.4
69	0.673	1.1	0.588	1.2	ND (0,05)	-2.8	0.981	2.1
70	0.175	-2.7	0.126	-2.9	0.190	0.6	NA	
71	0.443	-0.6	0.517	0.6	NA		0.525	-0.7
72	0.394	-1.0	0.412	-0.4	ND	-2.8	1.13	3.0
73	0.464	-0.5	0.411	-0.4	0.148	-0.4	0.584	-0.4
74	0.479	-0.3	0.374	-0.7	ND (0,01)	-2.8	3.26	16.3
75	0.723	1.5	0.559	0.9	0.214	1.1	0.801	1.0
76	1.04	3.9	0.415	-0.3	NA		1.78	7.1
77								
78	0.550	0.2	ND (0,05)	-3.6	NA		0.080	-3.5
79	0.550	0.2	0.367	-0.8	0.222	1.3	0.880	1.5
80	0.440	-0.6	0.380	-0.6	0.170	0.1	0.710	0.4
81								
82	0.629	0.8	0.530	0.7	NA		0.689	0.3
83	0.463	-0.5	0.436	-0.2	0.155	-0.3	0.657	0.1
84	0.440	-0.6	0.350	-0.9	NA		ND (0,1)	-3.8
85	0.354	-1.3	0.413	-0.4	NA		NA	
86	0.453	-0.5	0.335	-1.0	0.160	-0.2	0.750	0.7
87	0.586	0.5	0.443	-0.1	0.111	-1.3	NA	
88	0.505	-0.1	0.470	0.2	NA		0.595	-0.3
89	0.440	-0.6	0.390	-0.6	0.110	-1.4	0.510	-0.8
90	0.524	0.0	0.477	0.2	0.180	0.3	0.750	0.7
91	0.665	1.1	0.409	-0.4	0.210	1.0	0.297	-2.2
92	0.507	-0.1	0.457	0.0	0.204	0.9	0.700	0.4
93	0.498	-0.2	0.429	-0.2	0.134	-0.8	0.597	-0.3
94	0.520	0.0	0.460	0.1	NA		0.380	-1.6
95	0.424	-0.8	0.403	-0.4	0.138	-0.7	0.254	-2.4

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

Lab Code	Iprodione	z-Score (FFP 25%)	Kresoxim-methyl	z-Score (FFP 25%)	Methomyl	z-Score (FFP 25%)	Monocrotophos	z-Score (FFP 25%)
MRPL	0.02		0.05		0.05		0.03	
Median (mg/kg)	0.524		0.453		0.167		0.643	
96	0.530	0.0	0.900	3.9	NA		NA	
97	NA		NA		NA		NA	
98	0.438	-0.7	0.353	-0.9	0.163	-0.1	0.670	0.2
99	0.476	-0.4	0.396	-0.5	NA		NA	
100	0.370	-1.2	0.450	0.0	NA		0.760	0.7
101	1.05	4.0	NA		0.070	-2.3	NA	
102	0.586	0.5	0.517	0.6	0.158	-0.2	0.402	-1.5
103	0.120	-3.1	0.335	-1.0	0.150	-0.4	NA	
104	0.557	0.3	0.463	0.1	0.167	0.0	0.737	0.6
105	0.444	-0.6	NA		NA		0.413	-1.4
106	0.475	-0.4	0.320	-1.2	0.090	-1.8	0.330	-1.9
107	0.680	1.2	0.480	0.2	0.230	1.5	0.820	1.1
108	NA		NA		NA		NA	
109	0.432	-0.7	0.484	0.3	0.092	-1.8	0.836	1.2
110	0.575	0.4	0.545	0.8	0.280	2.7	0.105	-3.3
111	0.607	0.6	0.537	0.7	0.185	0.4	0.778	0.8
112	ND (0,05)	-3.8	NA		NA		NA	
113	0.545	0.2	0.570	1.0	0.209	1.0	0.500	-0.9
114	0.281	-1.9	0.200	-2.2	0.160	-0.2	0.770	0.8
115	0.577	0.4	0.409	-0.4	ND (0,01)	-2.8	0.187	-2.8
116	0.600	0.6	0.440	-0.1	0.240	1.8	ND (0,03)	-3.8
117	ND (0,03)	-3.8	NA		NA		NA	
118	0.370	-1.2	0.410	-0.4	NA		0.550	-0.6
119	ND (0,02)	-3.8	NA		NA		D (no standard)	
120	0.759	1.8	NA		ND (0,006)	-2.8	NA	
121	0.165	-2.7	NA		NA		NA	
122	NA		0.400	-0.5	0.147	-0.5	NA	
123	NA		NA		NA		NA	
124	NA		NA		NA		NA	
125	NA		0.314	-1.2	NA		NA	
126	ND (0,010)	-3.8	NA		NA		NA	
127								
128	0.480	-0.3	0.510	0.5	NA		NA	

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

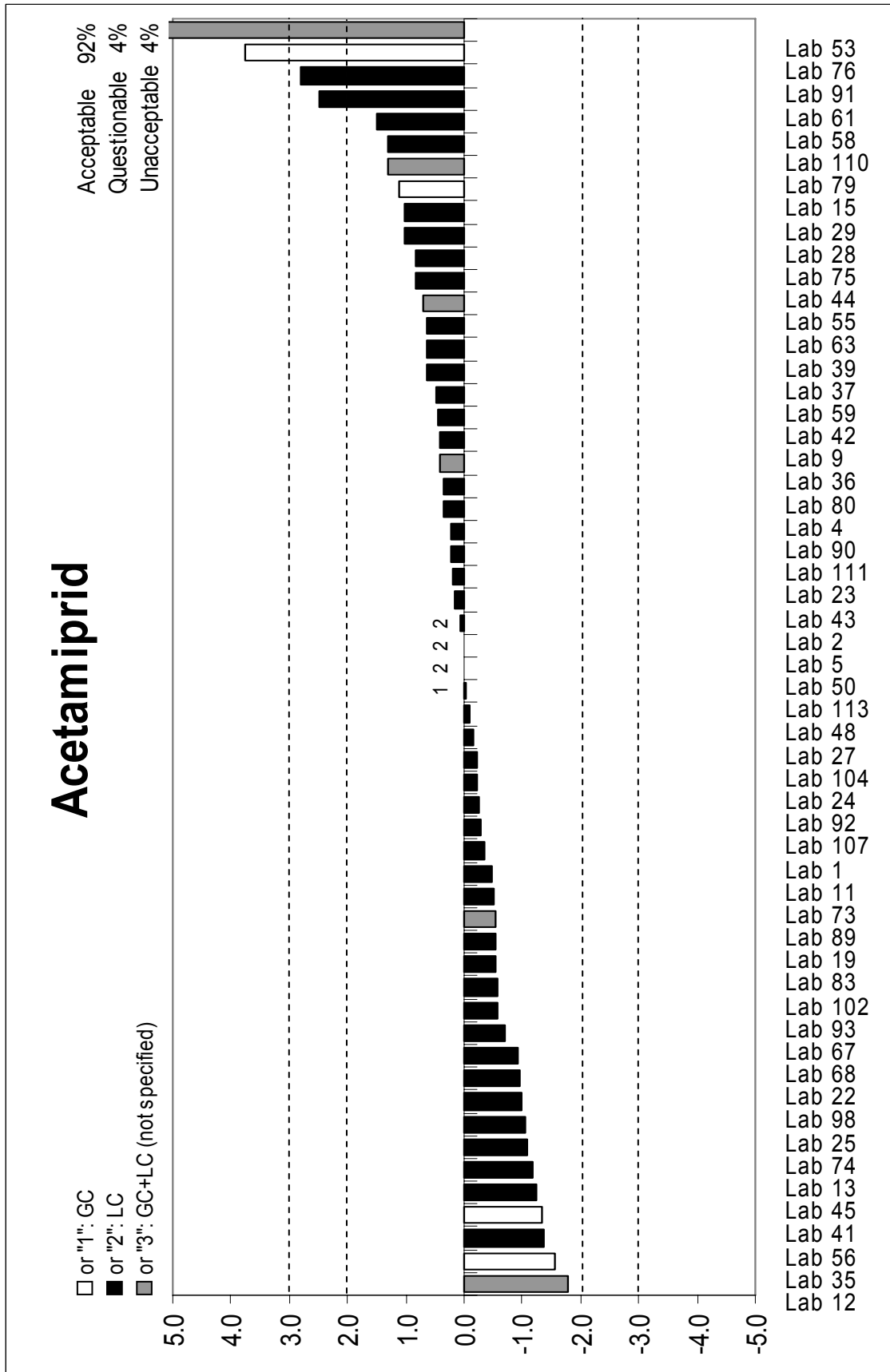
Lab Code	Procymidone	z-Score (FFP 25%)	Pyrimethanil	z-Score (FFP 25%)	Tetraconazole	z-Score (FFP 25%)	Thiabendazole	z-Score (FFP 25%)
MRPL	0.02		0.05		0.05		0.05	
Median (mg/kg)	1.90		0.149		0.064		0.656	
1	1.90	0.0	0.148	0.0	0.071	0.4	0.679	0.1
2	1.92	0.0	0.172	0.6	0.080	1.0	0.997	2.1
3	1.40	-1.1	NA		NA		NA	
4	1.86	-0.1	0.136	-0.3	0.053	-0.7	0.867	1.3
5	2.12	0.5	0.050	-2.7	0.051	-0.8	0.686	0.2
6	2.14	0.5	0.160	0.3	NA		0.830	1.1
7	1.51	-0.8	NA		NA		0.568	-0.5
8	2.60	1.5	0.183	0.9	NA		0.900	1.5
9	2.07	0.4	0.185	1.0	0.117	3.3	0.862	1.3
10	1.94	0.1	0.139	-0.3	NA		0.502	-0.9
11	2.02	0.3	0.122	-0.7	0.067	0.2	0.645	-0.1
12	1.60	-0.6	0.124	-0.7	Na		0.395	-1.6
13	1.45	-0.9	0.080	-1.8	NA		0.420	-1.4
14	1.32	-1.2	NA		NA		0.630	-0.2
15	2.17	0.6	0.149	0.0	0.064	0.0	0.895	1.5
16	1.66	-0.5	0.245	2.6	0.557	30.8	0.596	-0.4
17	7.73	12.3	NA		NA		NA	
18	2.37	1.0	0.173	0.7	NA		0.596	-0.4
19	1.34	-1.2	0.105	-1.2	0.049	-0.9	0.626	-0.2
20	1.72	-0.4	0.140	-0.2	0.064	0.0	0.331	-2.0
21	5.74	8.1	0.110	-1.0	NA		NA	
22	2.53	1.3	0.146	-0.1	ND (0,05)	-0.9	0.630	-0.2
23	2.22	0.7	0.115	-0.9	0.060	-0.3	0.770	0.7
24	2.11	0.4	0.167	0.5	0.059	-0.3	0.753	0.6
25	1.73	-0.4	0.137	-0.3	0.062	-0.1	0.603	-0.3
26	1.52	-0.8	0.126	-0.6	NA		0.681	0.2
27	2.09	0.4	0.080	-1.8	0.068	0.3	0.650	0.0
28	1.94	0.1	0.213	1.7	0.077	0.8	0.514	-0.9
29	1.45	-0.9	0.143	-0.1	0.048	-1.0	0.732	0.5
30	1.74	-0.3	0.319	4.6	NA		2.03	8.4
31	1.75	-0.3	0.190	1.1	0.104	2.5	0.440	-1.3
32	1.94	0.1	0.430	7.6	NA		ND (0,5)	-3.7
33	2.72	1.7	0.202	1.4	NA		NA	
34	2.05	0.3	0.160	0.3	NA		NA	
35	1.52	-0.8	0.110	-1.0	0.040	-1.5	0.610	-0.3
36	2.38	1.0	0.304	4.2	ND (0,05)	-0.9	0.488	-1.0
37	2.04	0.3	0.180	0.8	0.060	-0.3	0.720	0.4
38	2.44	1.1	0.167	0.5	0.072	0.5	0.762	0.6
39	1.59	-0.7	0.149	0.0	0.087	1.4	0.873	1.3
40	1.70	-0.4	0.125	-0.6	0.076	0.8	0.465	-1.2
41	1.72	-0.4	0.130	-0.5	0.054	-0.6	NA	
42	2.43	1.1	0.165	0.4	0.040	-1.5	1.50	5.1
43	1.98	0.2	0.148	0.0	0.076	0.8	0.745	0.5
44	1.96	0.1	0.175	0.7	0.086	1.4	0.750	0.6
45	1.75	-0.3	0.143	-0.1	0.049	-0.9	0.546	-0.7
46	2.06	0.3	NA		NA		0.629	-0.2

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

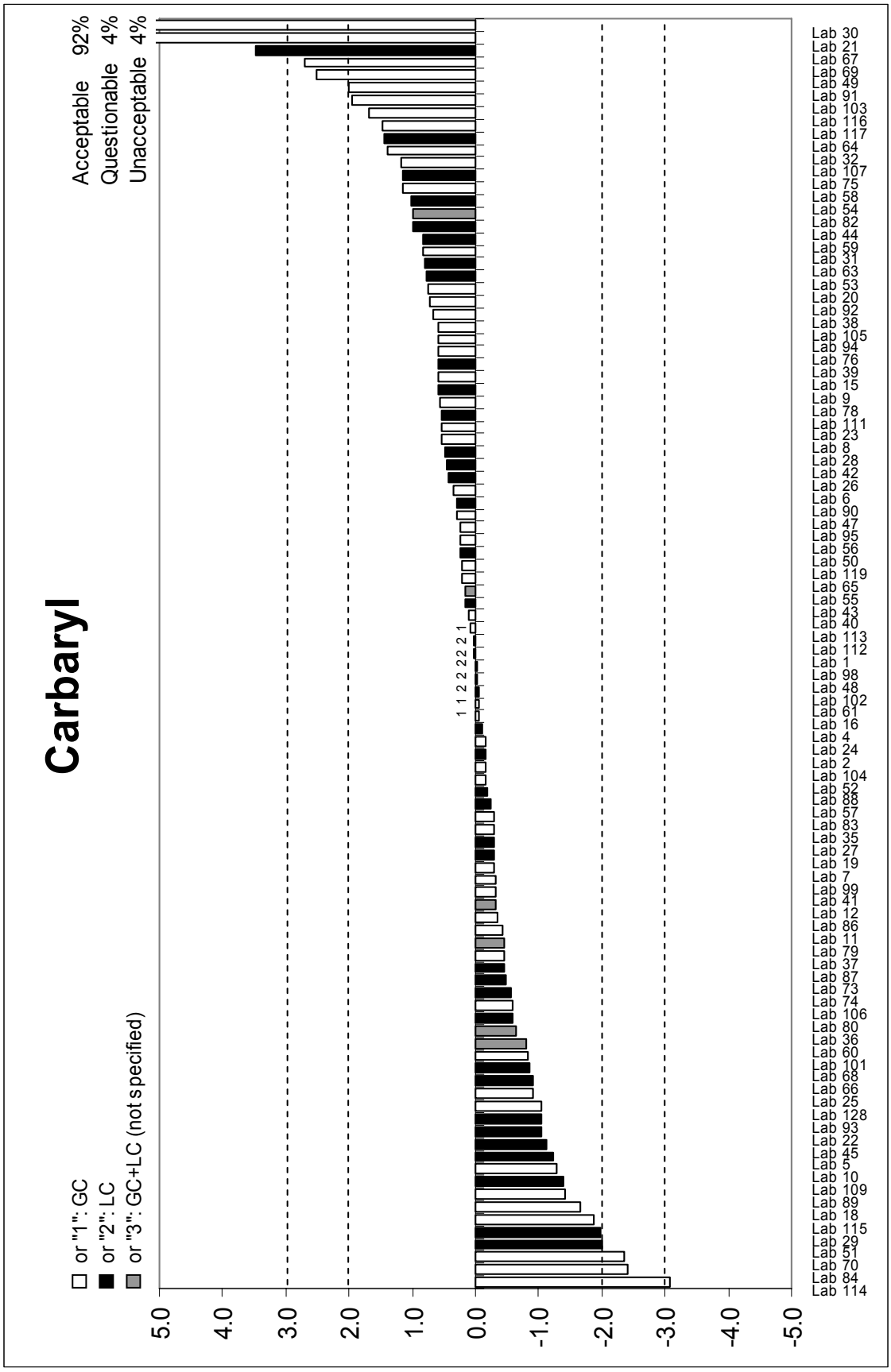
Lab Code	Procymidone	z-Score (FFP 25%)	Pyrimethanil	z-Score (FFP 25%)	Tetraconazole	z-Score (FFP 25%)	Thiabendazole	z-Score (FFP 25%)
MRPL	0.02		0.05		0.05		0.05	
Median (mg/kg)	1.90		0.149		0.064		0.656	
47	2.12	0.5	0.160	0.3	0.080	1.0	1.30	3.9
48	2.32	0.9	0.164	0.4	0.066	0.1	0.735	0.5
49	1.19	-1.5	0.070	-2.1	NA		0.280	-2.3
50	1.75	-0.3	0.109	-1.1	0.067	0.2	0.654	0.0
51	NA		NA		NA		NA	
52	1.95	0.1	0.155	0.2	0.058	-0.4	0.340	-1.9
53	2.16	0.5	0.211	1.7	0.081	1.1	0.653	0.0
54	1.93	0.1	0.146	-0.1	NA		0.928	1.7
55	2.24	0.7	0.173	0.7	0.087	1.4	0.508	-0.9
56	1.65	-0.5	0.175	0.7	0.036	-1.8	0.474	-1.1
57	1.78	-0.3	0.165	0.4	NA		0.750	0.6
58	2.12	0.5	0.194	1.2	0.073	0.6	0.895	1.5
59	2.06	0.3	0.130	-0.5	0.061	-0.2	0.736	0.5
60	2.18	0.6	0.110	-1.0	ND (0,05)	-0.9	0.740	0.5
61	2.33	0.9	0.192	1.2	0.152	5.5	0.991	2.0
62	1.78	-0.3	NA		NA		1.40	4.5
63	2.17	0.6	0.106	-1.1	0.039	-1.6	0.727	0.4
64	1.74	-0.3	0.176	0.7	0.084	1.3	0.826	1.0
65	1.49	-0.9	0.172	0.6	0.028	-2.3	NA	
66	1.23	-1.4	0.130	-0.5	NA		NA	
67	2.60	1.5	0.148	0.0	0.078	0.9	0.668	0.1
68	1.96	0.1	0.142	-0.2	0.073	0.6	0.665	0.1
69	2.16	0.5	0.271	3.3	0.092	1.8	1.03	2.3
70	0.564	-2.8	NA		NA		NA	
71	2.16	0.5	0.174	0.7	NA		NA	
72	1.50	-0.8	0.134	-0.4	0.042	-1.4	0.501	-0.9
73	1.95	0.1	0.132	-0.4	0.058	-0.4	0.655	0.0
74	1.80	-0.2	0.147	0.0	0.051	-0.8	0.605	-0.3
75	2.42	1.1	0.180	0.8	0.077	0.8	0.778	0.7
76	1.11	-1.7	0.150	0.0	ND	-0.9	1.23	3.5
77								
78	1.91	0.0	0.140	-0.2	ND (0,05)	-0.9	ND (0,05)	-3.7
79	1.73	-0.4	0.191	1.1	0.100	2.3	0.712	0.3
80	1.80	-0.2	0.160	0.3	0.055	-0.6	0.620	-0.2
81						-4.0		-4.0
82	2.15	0.5	0.185	1.0	0.104	2.5	0.707	0.3
83	1.80	-0.2	0.141	-0.2	0.059	-0.3	0.547	-0.7
84	2.31	0.9	0.130	-0.5	0.050	-0.9	0.631	-0.1
85	1.70	-0.4	NA		NA		0.207	-2.7
86	2.13	0.5	0.177	0.8	NA		0.653	0.0
87	2.63	1.5	0.145	-0.1	NA		1.27	3.7
88	1.79	-0.2	0.119	-0.8	NA		0.656	0.0
89	1.66	-0.5	0.150	0.0	0.060	-0.3	0.390	-1.6
90	1.99	0.2	0.151	0.1	0.074	0.6	0.760	0.6
91	2.25	0.7	ND (0,01)	-2.7	0.033	-1.9	0.400	-1.6
92	2.22	0.7	0.143	-0.1	0.074	0.6	0.584	-0.4
93	1.82	-0.2	0.174	0.7	0.079	0.9	0.408	-1.5
94	1.86	-0.1	0.156	0.2	0.060	-0.3	0.690	0.2
95	1.61	-0.6	0.125	-0.6	0.097	2.1	0.250	-2.5

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

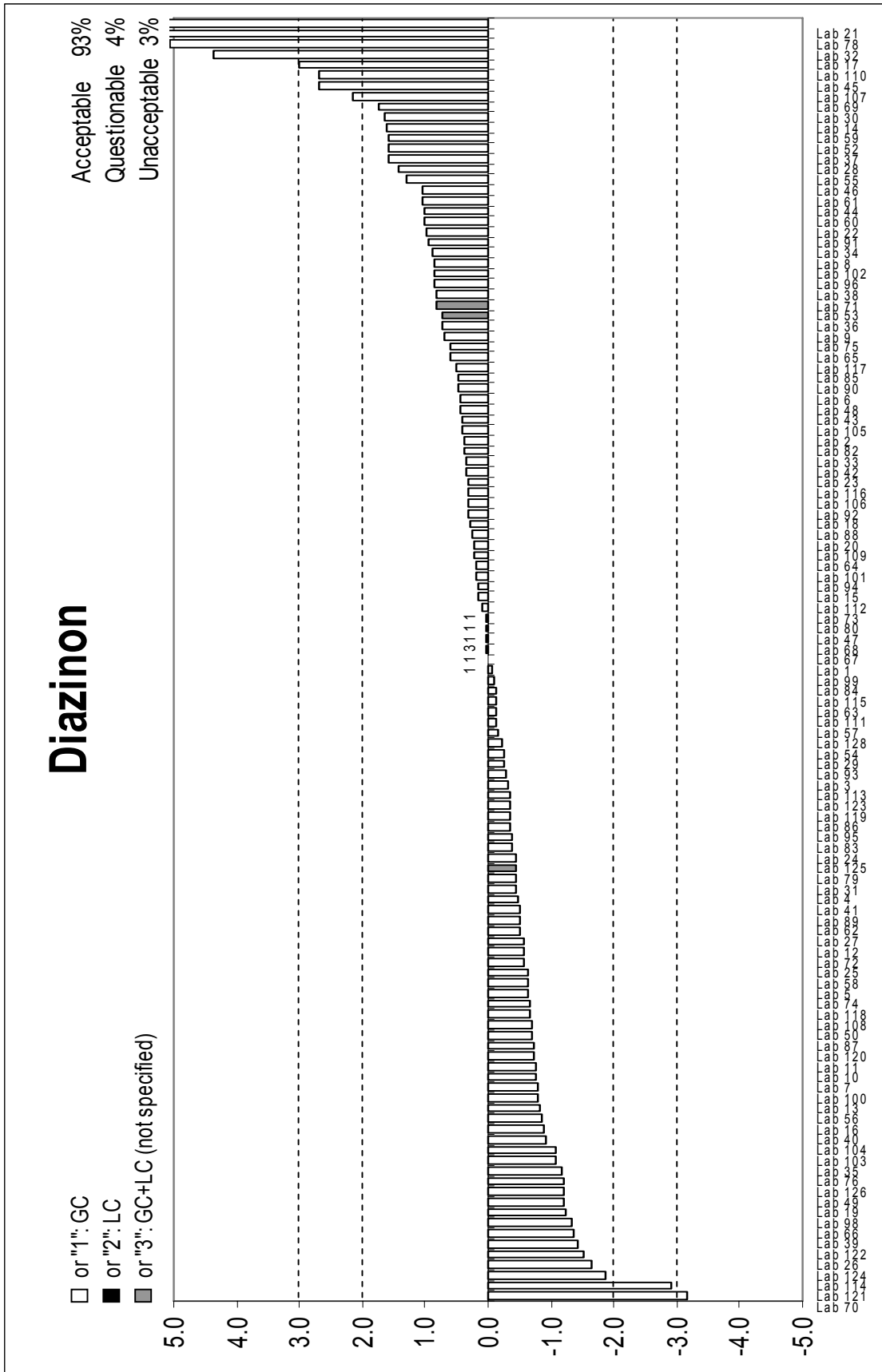
Lab Code	Procymidone	z-Score (FFP 25%)	Pyrimethanil	z-Score (FFP 25%)	Tetraconazole	z-Score (FFP 25%)	Thiabendazole	z-Score (FFP 25%)
MRPL	0.02		0.05		0.05		0.05	
Median (mg/kg)	1.90		0.149		0.064		0.656	
96	1.75	-0.3	NA		NA		NA	
97	NA		NA		NA		NA	
98	1.63	-0.6	0.123	-0.7	0.059	-0.3	0.618	-0.2
99	1.83	-0.1	NA		NA		1.01	2.2
100	1.64	-0.5	NA		NA		NA	
101	1.22	-1.4	0.120	-0.8	0.050	-0.9	0.560	-0.6
102	2.26	0.8	0.148	0.0	0.063	-0.1	0.623	-0.2
103	1.76	-0.3	0.120	-0.8	NA		0.450	-1.3
104	1.86	-0.1	0.121	-0.7	0.119	3.4	0.743	0.5
105	2.17	0.6	0.127	-0.6	NA		ND (0,5)	-3.7
106	1.68	-0.5	0.155	0.2	ND (0,01)	-0.9	0.730	0.5
107	1.50	-0.8	0.170	0.6	0.070	0.4	0.860	1.2
108	NA		NA		NA		NA	
109	1.67	-0.5	0.151	0.1	0.062	-0.1	0.434	-1.4
110	2.14	0.5	ND (0,02)	-2.7	0.068	0.3	0.894	1.5
111	2.18	0.6	0.159	0.3	0.078	0.9	0.711	0.3
112	2.04	0.3	NA		NA		0.660	0.0
113	2.10	0.4	0.149	0.0	0.062	-0.1	0.595	-0.4
114	1.04	-1.8	0.095	-1.4	NA		0.755	0.6
115	2.34	0.9	0.108	-1.1	0.032	-2.0	0.730	0.5
116	2.21	0.7	0.390	6.5	NA		0.600	-0.3
117	2.45	1.2	NA		NA		0.550	-0.6
118	1.80	-0.2	0.140	-0.2	0.040	-1.5	0.420	-1.4
119	1.50	-0.8	NA		NA		D (no standard)	
120	1.18	-1.5	NA		NA		0.460	-1.2
121	0.638	-2.7	NA		NA		0.825	1.0
122	0.029	-3.9	NA		NA		0.486	-1.0
123	NA		NA		NA		NA	
124	1.62	-0.6	NA		NA		0.660	0.0
125	1.13	-1.6	NA		NA		0.514	-0.9
126	1.02	-1.9	NA		NA		0.410	-1.5
127								
128	1.93	0.1	NA		NA		NA	



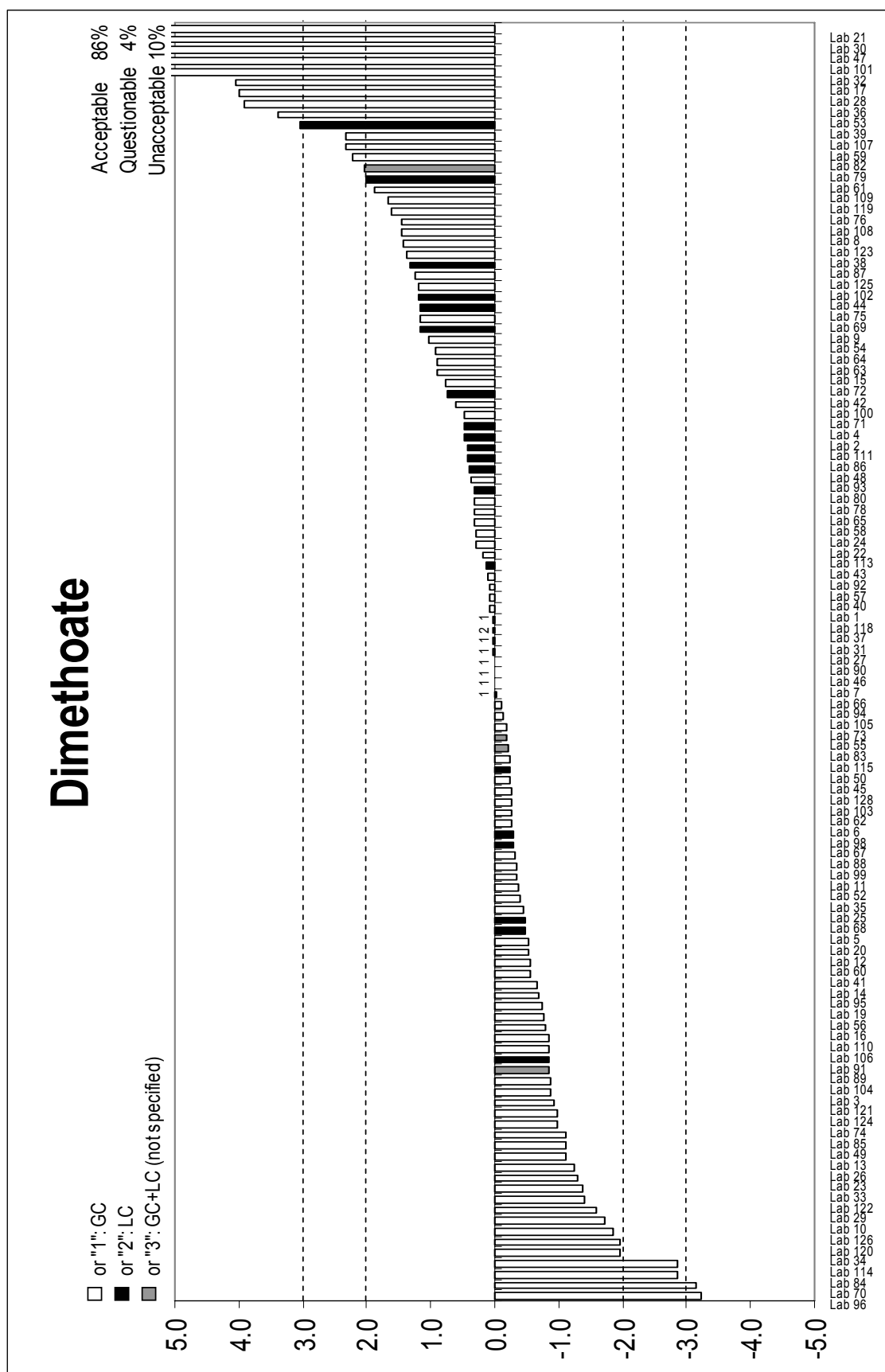
APPENDIX 4. Graphical Representation of z-scores for FFP (25%)



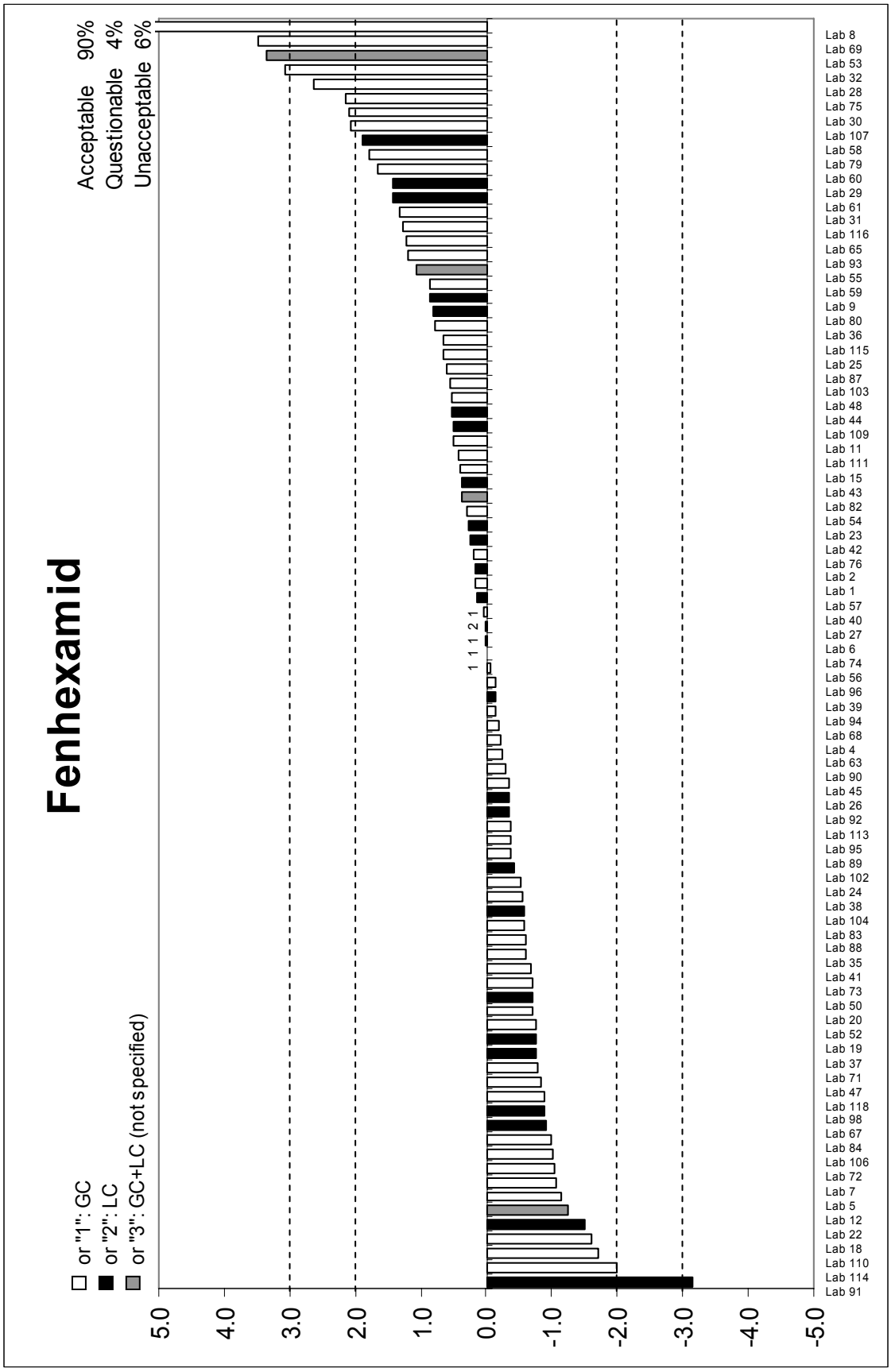
APPENDIX 4. Graphical Representation of z-scores for FFP (25%)



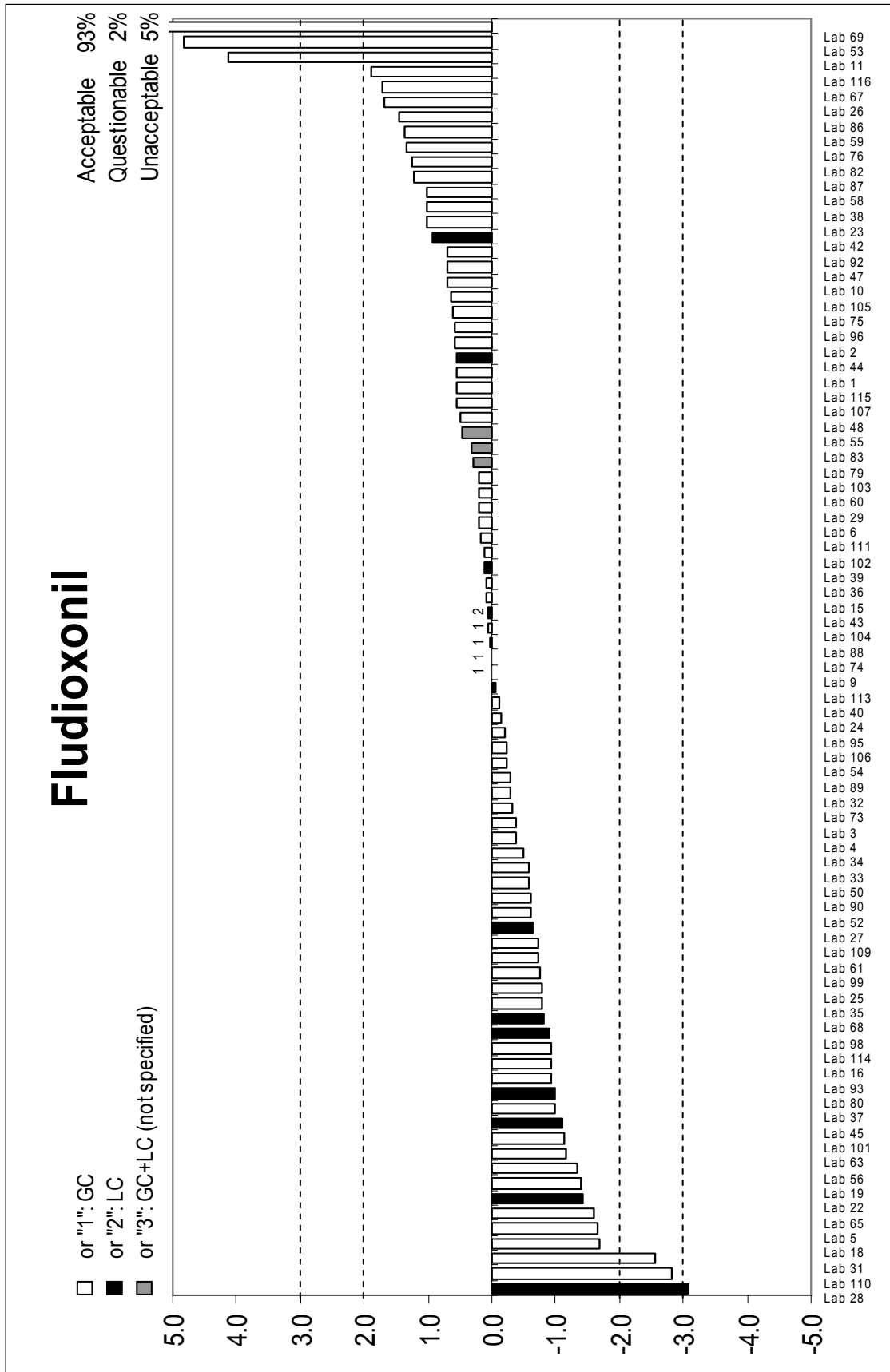
APPENDIX 4. Graphical Representation of z-scores using FFP (25%)



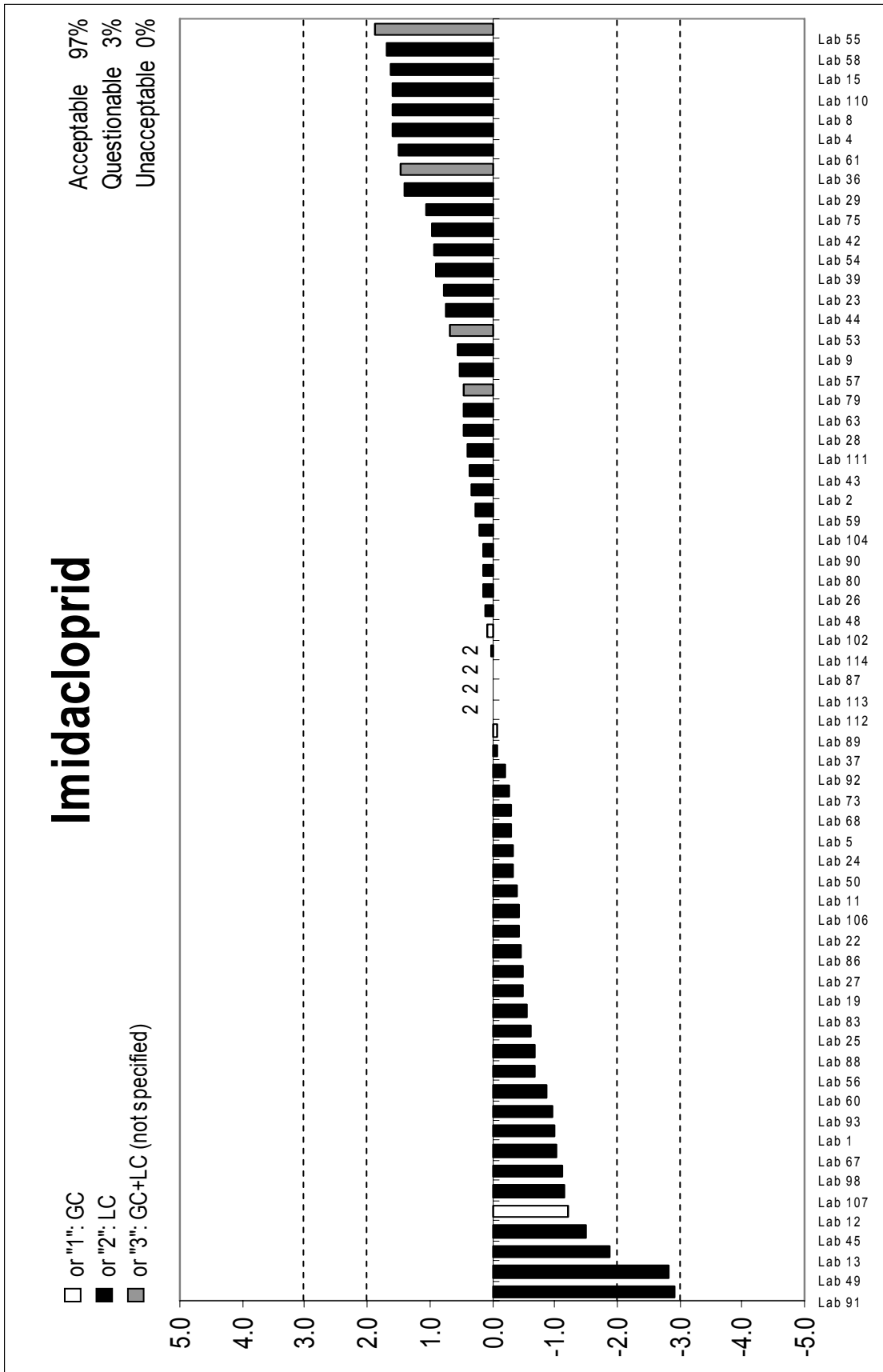
APPENDIX 4. Graphical Representation of z-scores for FFP (25%)



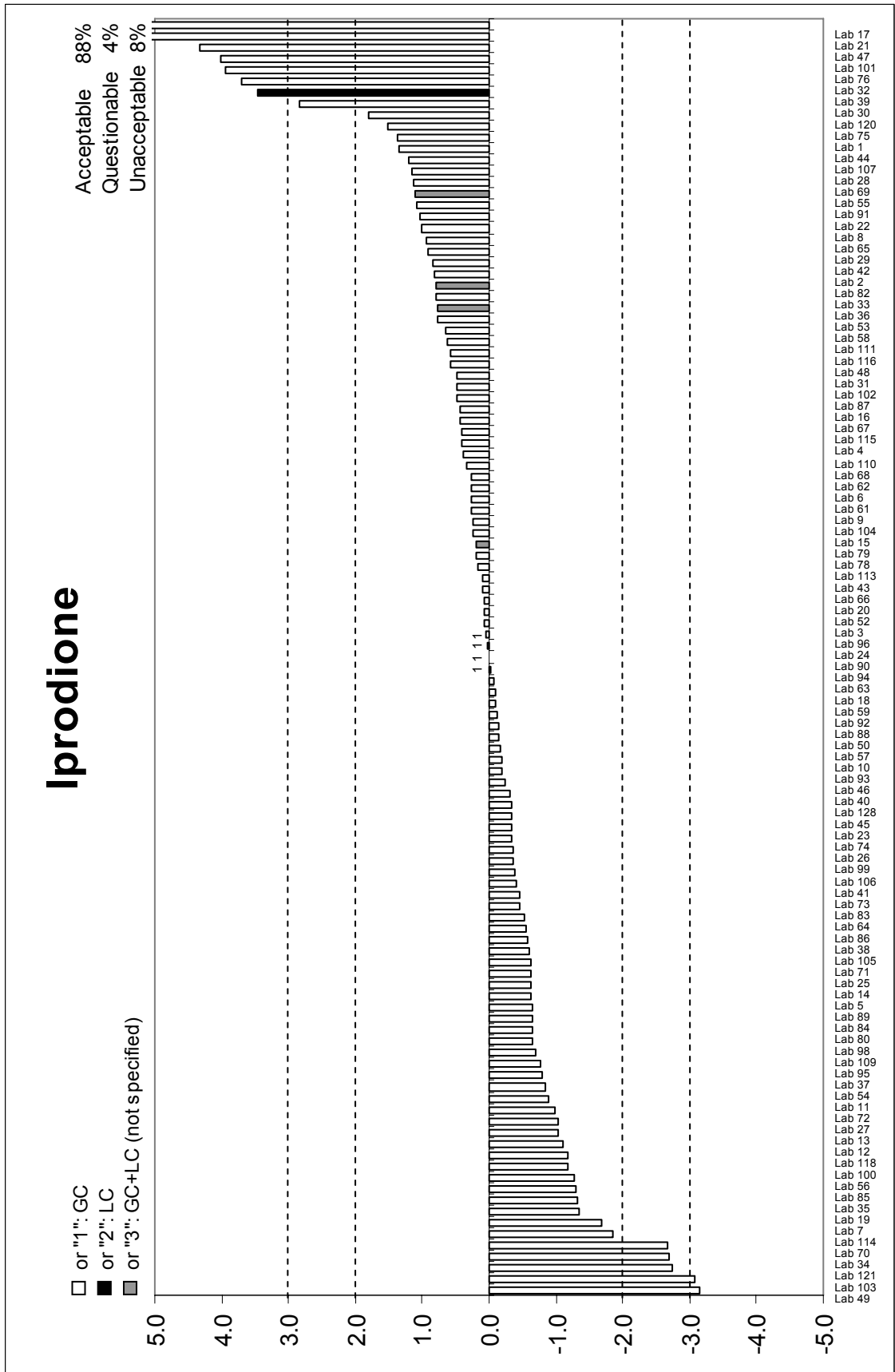
APPENDIX 4. Graphical Representation of z-scores using FFP (25%)



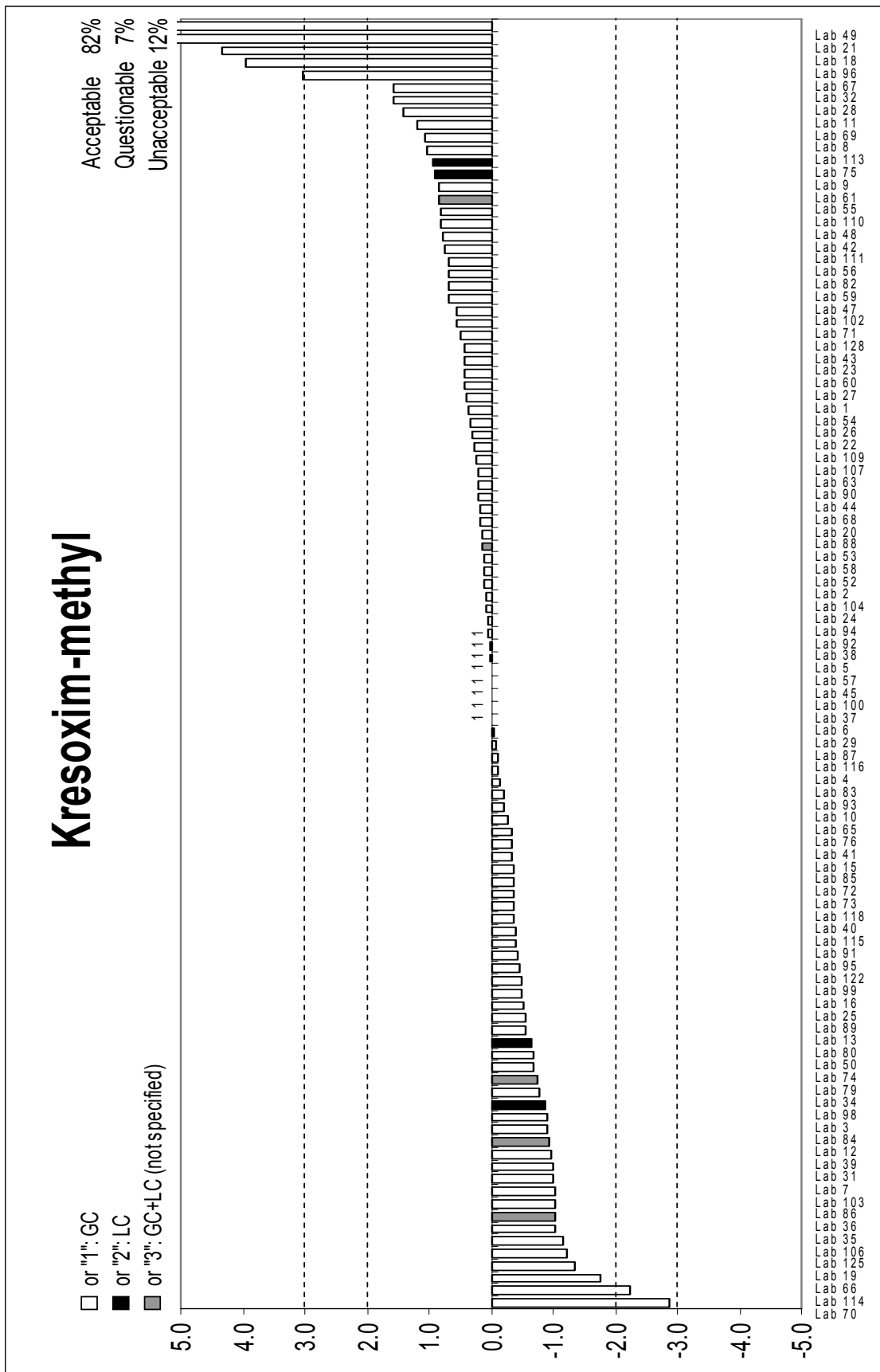
APPENDIX 4. Graphical Representation of z-scores for FFP (25%)



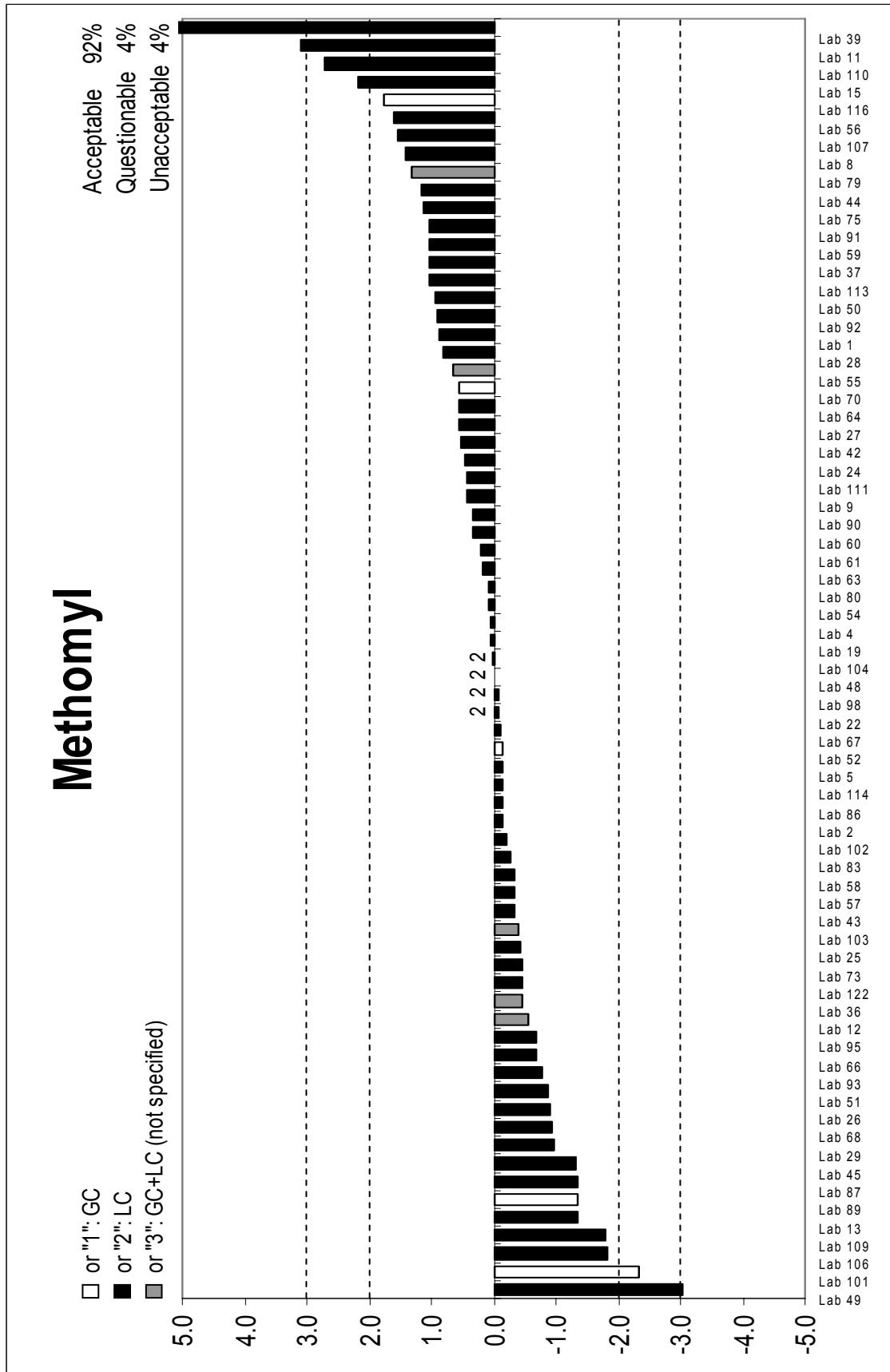
APPENDIX 4. Graphical Representation of z-scores using FFP (25%)



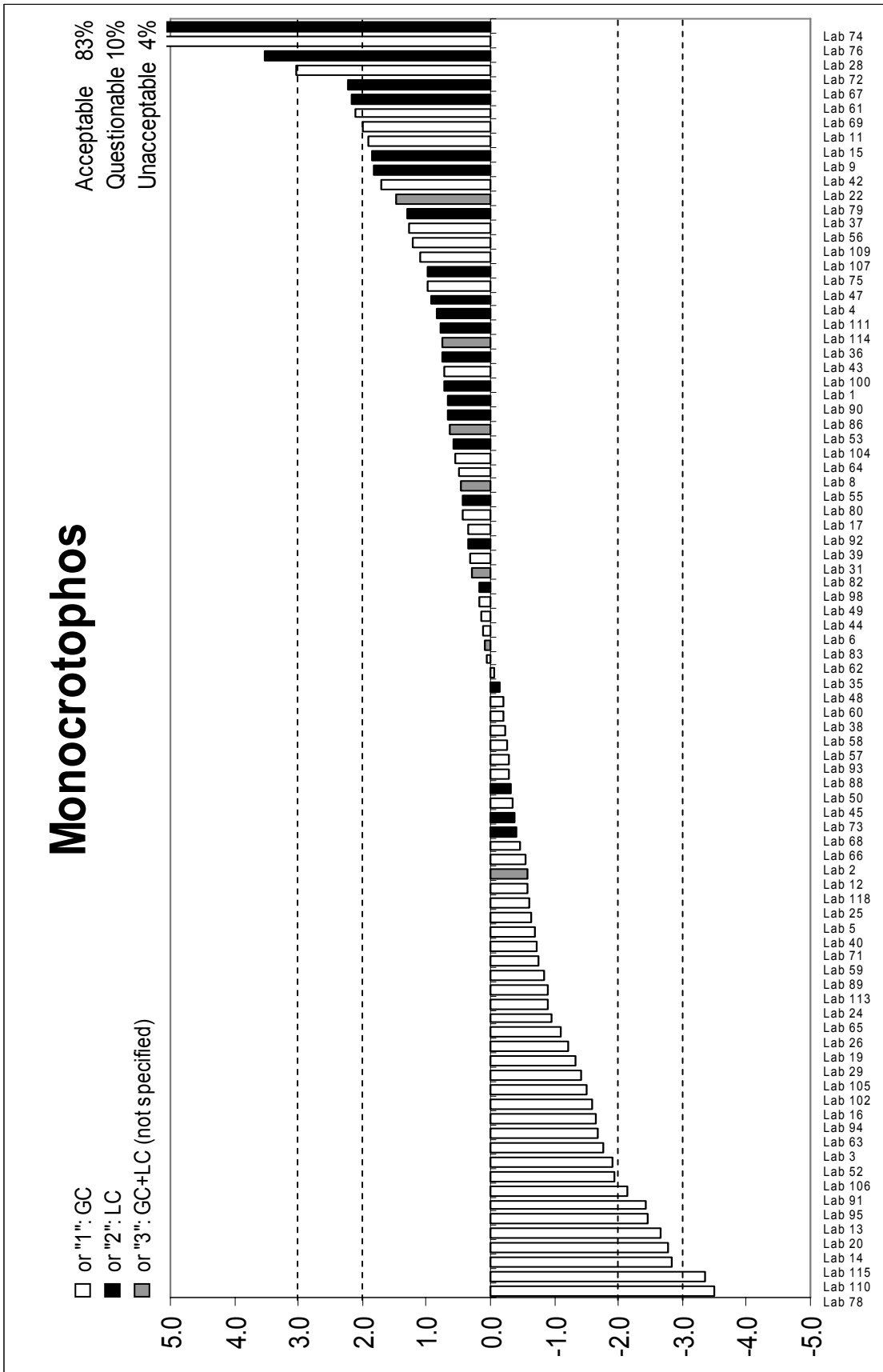
APPENDIX 4. Graphical Representation of z-scores for FFP (25%)



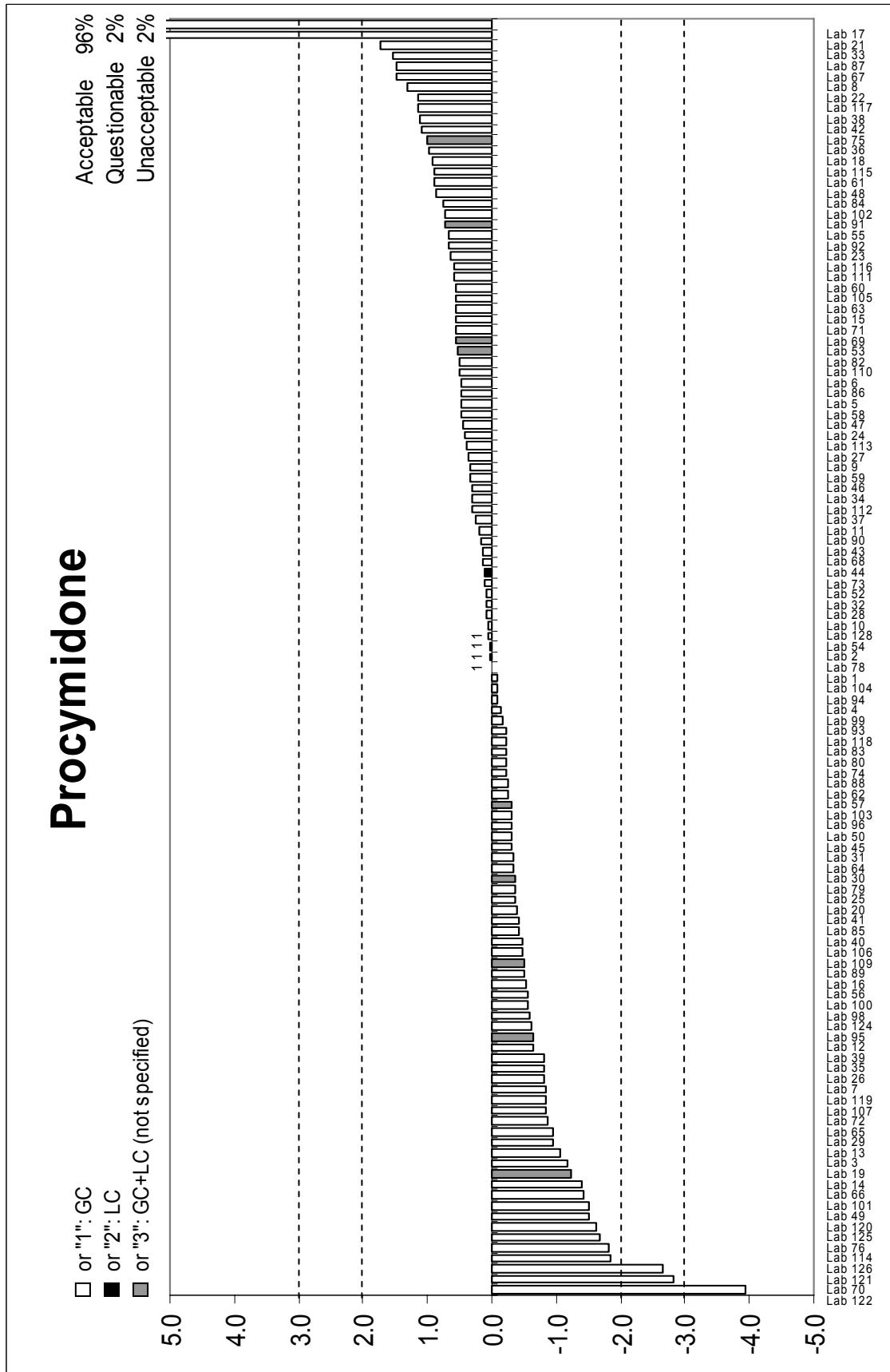
APPENDIX 4. Graphical Representation of z-scores using FFP (25%)



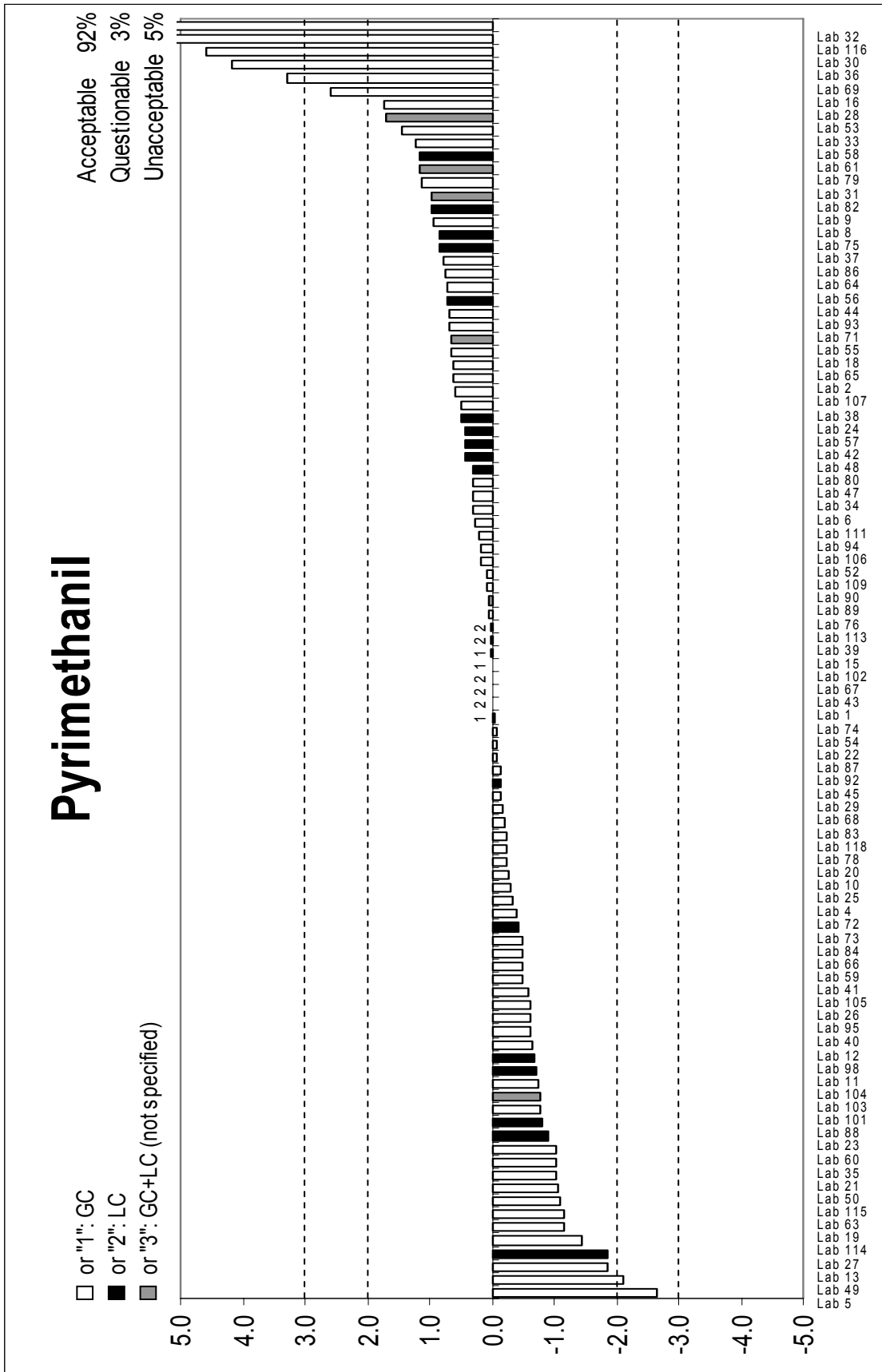
APPENDIX 4. Graphical Representation of z-scores for FFP (25%)

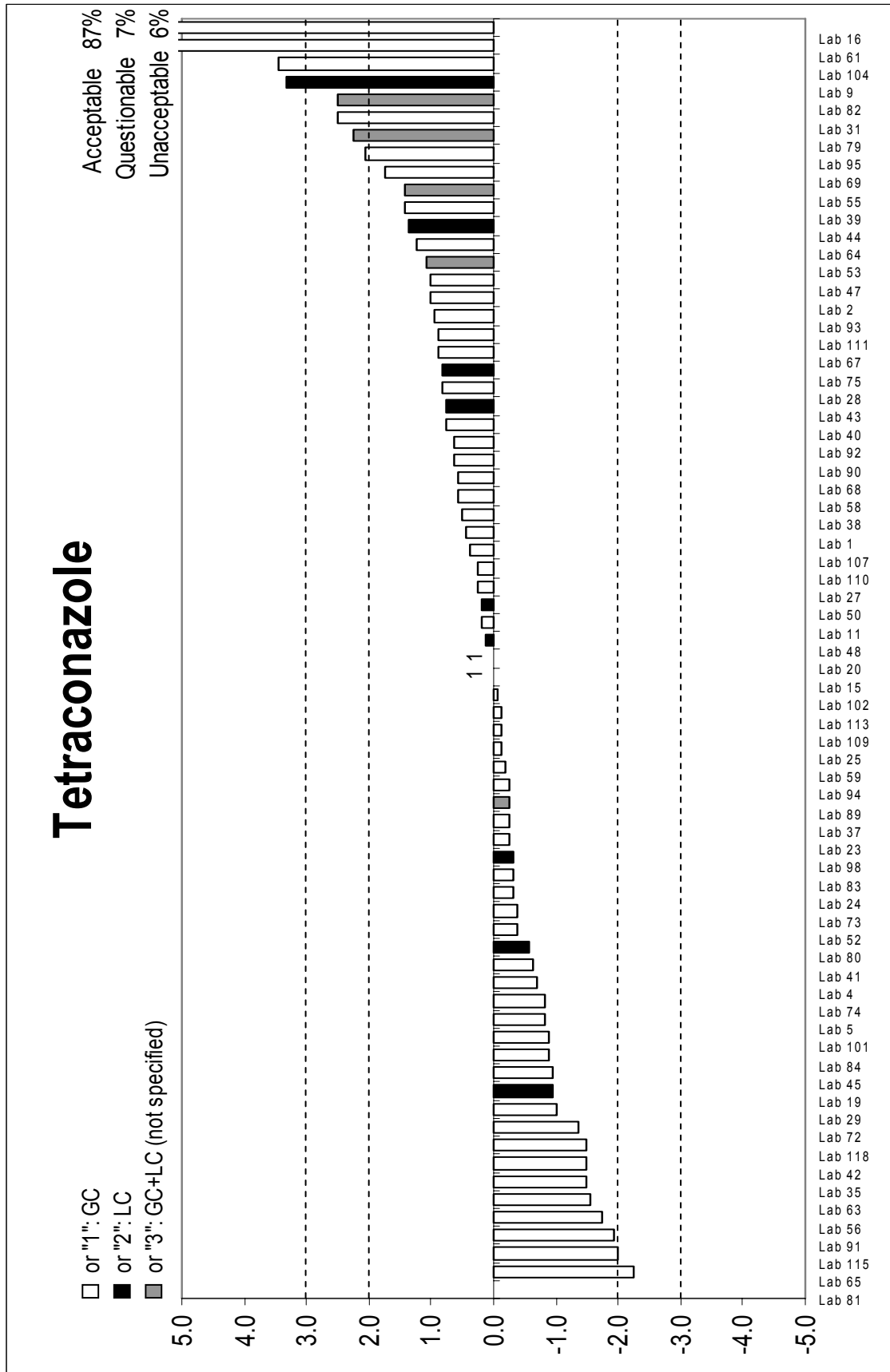


APPENDIX 4. Graphical Representation of z-scores using FFP (25%)

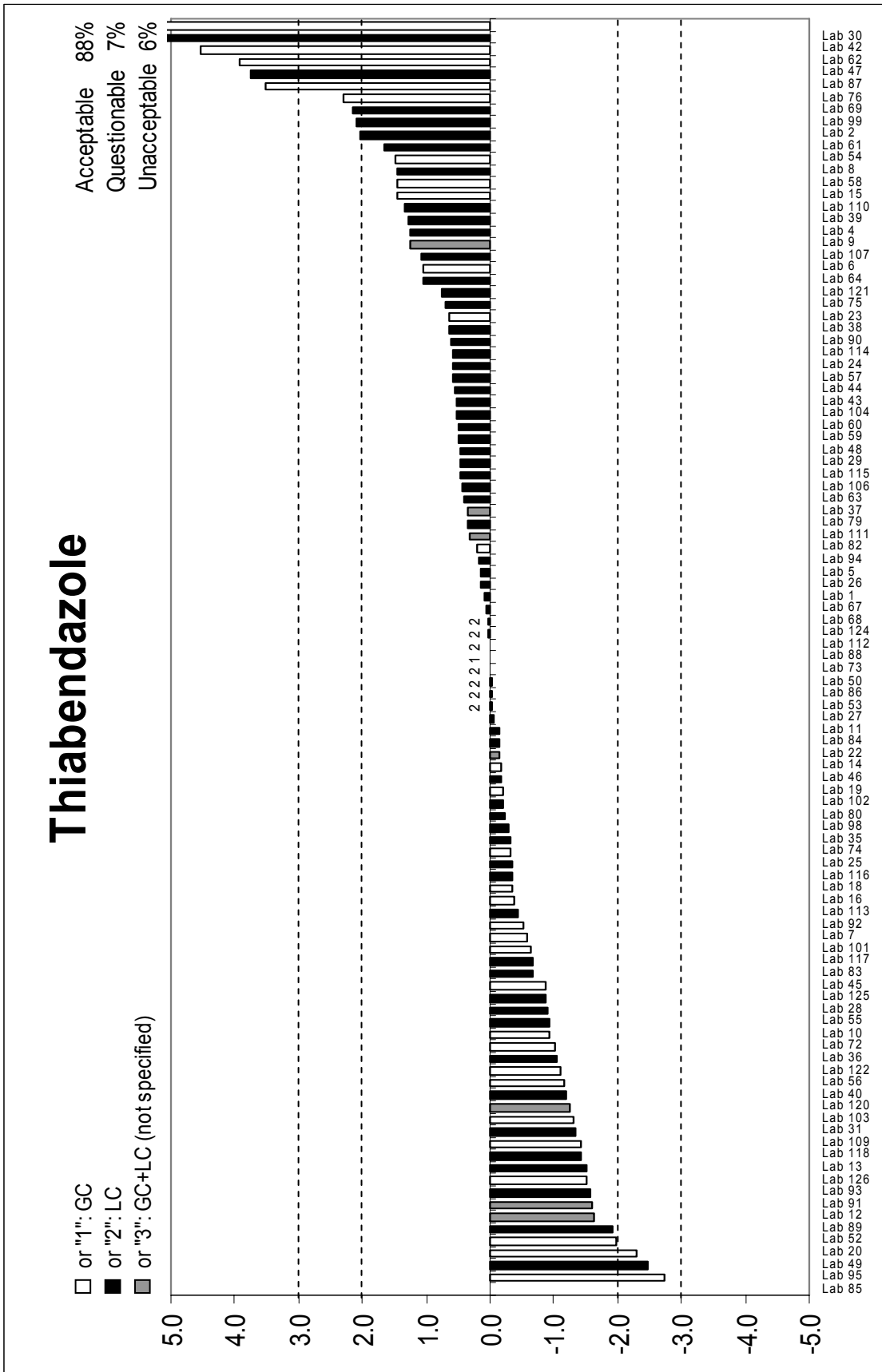


APPENDIX 4. Graphical Representation of z-scores for FFP (25%)





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



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

Lab Code	n	RSZ	SSZ
1	16	0.7	5.0
2	16	1.6	8.2
3	8	-2.2	7.0
4	16	0.6	6.6
5	16	-3.2	23.3
6	12	0.9	2.1
7	9	-1.7	8.1
8	13	6.3	93.8
9	16	3.6	21.4
10	10	-1.4	6.8
11	16	2.6	44.4
12	13	-3.3	13.2
13	11	-4.4	22.5
14	6	-1.6	12.9
15	16	2.9	16.7
16	12	7.9	961.6
17	5	12.5	233.7
18	13	-2.4	63.4
19	16	-3.5	15.5
20	12	-1.5	12.7
21	8	18.6	429.5
22	16	-0.3	14.1
23	16	-1.1	28.3
24	16	-0.1	2.8
25	16	-1.8	5.6
26	14	-1.1	10.4
27	15	-0.9	6.2
28	16	4.0	56.9
29	16	-1.1	19.3
30	11	10.2	348.7
31	13	-0.1	20.9
32	11	7.4	161.3
33	7	1.2	8.6
34	8	-1.7	13.2
35	15	-3.7	20.1
36	16	2.5	42.1
37	16	0.6	8.9
38	13	1.6	7.3
39	16	4.0	165.6
40	13	-1.0	4.0
41	11	-1.8	4.2
42	16	3.4	38.0
43	16	1.1	2.2
44	16	2.8	10.9
45	16	-1.9	17.8
46	5	0.5	1.8
47	15	3.4	113.4
48	16	1.3	3.2
49	12	1.9	332.2
50	16	-1.3	5.8
51	2	-2.0	4.8
52	14	-1.1	11.5

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

Lab Code	n	RSZ	SSZ
53	15	7.0	104.2
54	13	0.9	7.4
55	16	3.0	16.2
56	16	-0.8	22.1
57	13	0.0	1.3
58	16	2.9	17.0
59	16	2.3	14.9
60	14	-0.1	8.9
61	16	5.3	56.8
62	7	1.4	21.1
63	16	-0.6	11.0
64	10	1.8	6.8
65	12	-0.7	12.9
66	9	-2.4	8.7
67	16	2.4	34.1
68	16	-0.9	4.3
69	14	8.4	158.1
70	7	-6.2	49.1
71	9	0.3	3.6
72	12	-1.9	24.6
73	16	-1.2	2.4
74	15	5.8	498.7
75	16	3.8	18.3
76	14	4.7	100.3
77	No results		
78	13	-4.0	121.0
79	16	2.7	20.4
80	16	-0.8	6.4
81	No results		
82	13	3.1	15.9
83	16	-1.2	2.5
84	13	-4.5	42.9
85	6	-2.2	11.0
86	13	0.1	5.5
87	13	1.5	23.2
88	14	-2.2	17.2
89	16	-2.5	9.9
90	16	0.8	2.4
91	16	-3.0	65.6
92	16	0.9	3.7
93	16	-1.2	10.1
94	12	-0.3	3.4
95	14	-2.1	19.1
96	7	0.7	27.2
97	0		
98	16	-2.3	7.9
99	9	-0.2	6.0
100	6	-0.5	3.2
101	11	0.4	78.8
102	16	0.2	6.2
103	12	-1.8	18.6
104	16	0.4	14.4

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

Lab Code	n	RSZ	SSZ
105	10	-1.6	18.2
106	15	-2.3	12.6
107	16	3.3	27.8
108	2	0.6	2.6
109	14	-0.7	13.5
110	15	2.0	105.0
111	16	2.0	5.4
112	7	-2.6	26.6
113	16	0.2	3.6
114	14	-4.9	42.9
115	14	-2.7	29.5
116	13	1.9	80.5
117	7	-1.5	31.4
118	11	-2.3	7.9
119	5	-1.4	18.5
120	6	-2.6	19.2
121	5	-3.7	25.1
122	6	-3.6	21.0
123	2	0.8	2.2
124	4	-1.6	4.0
125	5	-1.3	6.7
126	5	-4.6	25.3
127	No results		
128	6	-0.5	1.6

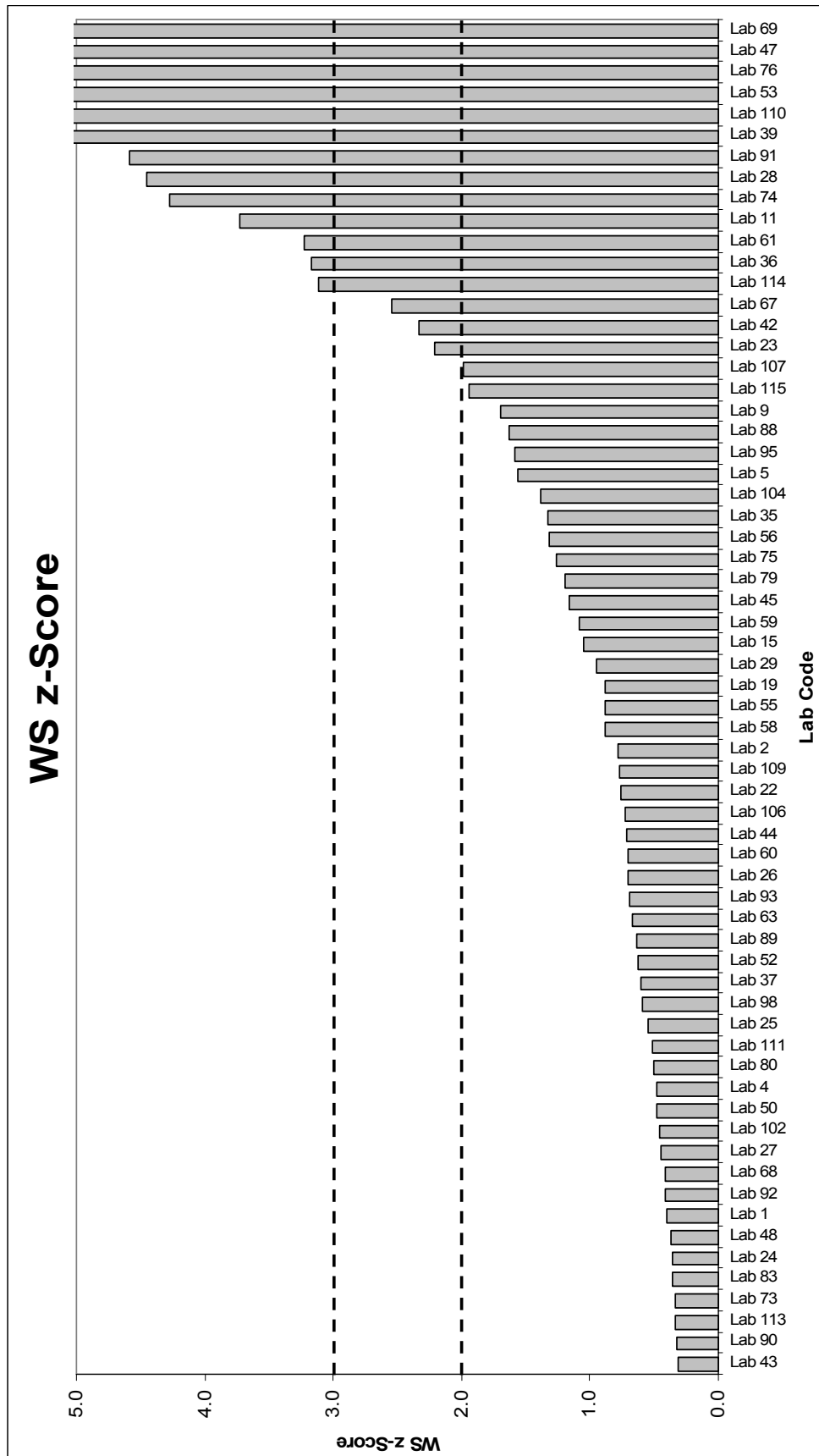
APPENDIX 6. 'Weighted Sum of z-score' and graphical representation for laboratories in Category A.

Lab Code	Acetamiprid	Carbaryl	Cyprodinil	Diazinon	DIMETHOATEe	Fenhexamid	Fludioxonil	Imidacloprid	Iprodione	Kresoxim-methyl	Methomyl	Monocrotophos	Procymidone	Pyrimethanil	Tetraconazole	N of Pesticides	WSZ
1	0.3	0.0	0.5	0.0	0.1	0.2	0.6	1.0	1.4	0.4	0.9	0.7	0.0	0.0	0.4	16	0.4
2	0.1	0.2	0.8	0.4	0.5	0.2	0.6	0.3	0.8	0.1	0.2	0.6	0.0	0.6	0.9	16	0.8
4	0.3	0.1	0.2	0.4	0.5	0.2	0.4	1.6	0.4	0.1	0.0	0.9	0.1	0.3	0.7	16	0.5
5	0.0	1.3	2.8	0.6	0.5	1.1	1.7	0.3	0.6	0.0	0.1	0.7	0.4	2.7	0.9	16	1.6
9	0.4	0.6	1.0	0.7	1.2	0.9	0.0	0.6	0.3	0.9	0.4	1.8	0.3	1.0	3.2	16	1.7
11	0.5	0.4	3.1	0.7	0.3	0.5	4.1	0.4	0.9	1.4	3.1	1.9	0.2	0.7	0.1	16	3.7
15	1.1	0.6	0.9	0.2	0.9	0.4	0.1	1.6	0.2	0.3	2.2	1.9	0.5	0.0	0.1	16	1.0
19	0.5	0.3	1.2	1.2	0.7	0.8	1.4	0.5	1.3	1.4	0.0	1.2	1.2	1.2	1.0	16	0.9
22	0.9	1.1	0.0	1.0	0.3	1.5	1.4	0.4	1.0	0.3	0.1	1.6	1.3	0.1	0.9	16	0.8
23	0.2	0.5	0.2	0.3	1.3	0.3	1.0	0.8	0.3	0.4	2.8	3.8	0.6	0.9	0.3	16	2.2
24	0.2	0.2	0.3	0.4	0.3	0.5	0.2	0.3	0.0	0.1	0.5	0.9	0.4	0.5	0.4	16	0.4
25	1.0	0.9	0.2	0.6	0.5	0.7	0.8	0.6	0.6	0.5	0.4	0.6	0.4	0.3	0.2	16	0.5
26		0.4	0.1	1.5	1.2	0.3	1.7	0.2	0.4	0.3	0.9	1.1	0.8	0.6		14	0.7
27	0.1	0.3	0.2	0.5	0.0	0.0	0.6	0.5	1.0	0.4	0.6		0.4	1.8	0.2	15	0.5
28	1.0	0.5	0.3	1.6	4.0	2.6	3.1	0.4	1.1	1.6	0.8	3.4	0.1	1.7	0.7	16	4.5
29	1.0	2.0	1.4	0.3	1.6	1.4	0.2	1.4	0.9	0.1	1.0	1.3	1.0	0.1	1.0	16	0.9
35	1.5	0.3	0.7	1.1	0.4	0.6	0.8		1.3	1.0	2.8	0.1	0.8	1.0	1.5	15	1.3
36	0.4	0.7	0.2	0.7	3.9	0.8	0.1	1.5	0.8	1.0	0.5	0.7	1.0	4.2	0.9	16	3.2
37	0.6	0.5	0.2	1.6	0.0	0.8	1.0	0.1	0.8	0.0	1.0	1.2	0.3	0.8	0.3	16	0.6
39	0.6	0.6	3.5	1.4	3.1	0.1	0.1	0.9	3.5	1.0	5.0	0.3	0.7	0.0	1.4	16	5.2
42	0.5	0.4	0.5	0.4	0.7	0.3	0.9	1.0	0.8	0.8	0.5	1.8	1.1	0.4	1.5	16	2.3
43	0.2	0.1	0.3	0.4	0.1	0.4	0.1	0.4	0.1	0.4	0.3	0.7	0.1	0.0	0.7	16	0.3
44	0.8	1.0	0.2	1.0	1.2	0.5	0.6	0.7	1.3	0.2	1.1	0.1	0.1	0.7	1.3	16	0.7
45	1.2	1.1	0.7	2.7	0.2	0.3	1.1	1.5	0.3	0.0	1.3	0.4	0.3	0.1	1.0	16	1.2
47	3.4	0.3	0.1	0.0	7.5	0.8	0.7		4.3	0.7	2.8	0.9	0.4	0.3	0.9	15	7.3
48	0.1	0.0	0.4	0.4	0.4	0.5	0.5	0.1	0.6	0.8	0.0	0.2	0.9	0.4	0.1	16	0.4
50	0.0	0.2	1.2	0.7	0.2	0.7	0.6	0.3	0.1	0.7	0.9	0.4	0.3	1.1	0.1	16	0.5
52		0.2	0.4	1.6	0.4	0.7	0.6		0.1	0.1	0.1	1.9	0.1	0.2	0.4	14	0.6
53	5.0	0.7	1.9	0.8	3.4	3.4	4.8	0.7	0.8	0.1		0.6	0.5	1.7	1.0	15	6.1
55	0.7	0.1	1.7	1.4	0.2	1.1	0.5	1.9	1.1	0.8	0.6	0.4	0.7	0.7	1.4	16	0.9
56	1.4	0.2	2.3	0.8	0.8	0.1	1.3	0.7	1.3	0.7	1.6	1.2	0.5	0.7	1.8	16	1.3
58	1.5	1.1	0.9	0.6	0.3	1.9	1.0	1.7	0.7	0.1	0.3	0.3	0.4	1.2	0.5	16	0.9
59	0.5	0.8	0.7	1.6	2.3	0.9	1.4	0.3	0.1	0.7	1.0	0.8	0.3	0.5	0.2	16	1.1
60		0.8	0.7	1.0	0.5	1.7	0.2	0.9		0.4	0.3	0.2	0.6	1.0	0.9	14	0.7
61	2.5	0.1	0.7	1.0	2.0	1.4	0.7	1.5	0.3	0.9	0.2	2.1	0.9	1.2	5.0	16	3.2
63	0.6	0.8	0.6	0.1	0.9	0.2	1.2	0.5	0.1	0.2	0.2	1.7	0.5	1.1	1.6	16	0.7
67	0.7	3.4	0.5	0.0	0.3	0.9	1.7	1.0	0.4	3.0	0.1	2.2	1.4	0.0	0.8	16	2.5
68	0.9	0.9	0.3	0.0	0.5	0.2	0.8	0.3	0.3	0.2	0.9	0.5	0.1	0.2	0.5	16	0.4

APPENDIX 6. 'Weighted Sum of z-score' and graphical representation for laboratories in Category A.

Lab Code	Acetamiprid	Carbaryl	Cyprodinil	Diazinon	DIMETHOATE	Fenhexamid	Fludioxonil	Imidacloprid	Iprodione	Kresoxim-methyl	Methomyl	Monocrotophos	Procymidone	Pyrimethanil	Tetraconazole	N of Pesticides	WSZ
69		2.7	3.1	2.2	1.2	3.5	5.0		1.1	1.2	2.8	2.0	0.5	3.3	1.7	14	8.0
73	0.5	0.5	0.1	0.1	0.2	0.7	0.3	0.3	0.5	0.4	0.5	0.4	0.1	0.4	0.4	16	0.3
74	1.1	0.6	5.0	0.6	1.0	0.0	0.0		0.3	0.7	2.8	5.0	0.2	0.0	0.9	15	4.3
75	0.8	1.1	0.4	0.7	1.2	2.1	0.6	1.1	1.5	0.9	1.1	0.9	1.1	0.8	0.7	16	1.3
76	3.8	0.6	0.2	1.2	1.6	0.2	1.3		3.9	0.3		5.0	1.7	0.0	0.9	14	6.4
79	1.3	0.5	0.3	0.4	2.0	1.8	0.3	0.5	0.2	0.8	1.3	1.4	0.4	1.1	2.2	16	1.2
80	0.4	0.6	1.6	0.0	0.3	0.8	1.0	0.2	0.6	0.6	0.1	0.4	0.2	0.3	0.6	16	0.5
83	0.5	0.3	0.4	0.4	0.2	0.6	0.3	0.6	0.5	0.2	0.3	0.0	0.2	0.2	0.4	16	0.4
88	3.4	0.2	1.9	0.3	0.3	0.6	0.0	0.7	0.1	0.2		0.3	0.3	0.8		14	1.6
89	0.5	1.4	0.2	0.5	0.8	0.4	0.3	0.1	0.6	0.6	1.4	0.9	0.5	0.0	0.3	16	0.6
90	0.2	0.3	0.6	0.5	0.0	0.3	0.6	0.2	0.0	0.2	0.3	0.6	0.2	0.1	0.6	16	0.3
91	2.8	2.0	1.7	1.0	0.8	3.2	3.2	2.9	1.1	0.4	1.0	2.2	0.7	2.7	2.0	16	4.6
92	0.3	0.7	0.7	0.3	0.1	0.4	0.7	0.2	0.1	0.0	0.9	0.3	0.6	0.1	0.6	16	0.4
93	0.6	1.1	0.9	0.3	0.4	1.2	0.9	1.0	0.2	0.2	0.8	0.3	0.2	0.7	0.9	16	0.7
95		0.2	0.5	0.4	0.7	0.4	0.2		0.8	0.4	0.7	2.4	0.6	0.6	2.0	14	1.6
98	1.0	0.0	0.4	1.2	0.3	0.9	0.9	1.1	0.7	0.9	0.1	0.1	0.6	0.7	0.4	16	0.6
102	0.6	0.1	0.2	0.9	1.2	0.4	0.1	0.1	0.5	0.6	0.2	1.5	0.7	0.0	0.1	16	0.5
104	0.2	0.2	0.3	0.9	0.9	0.6	0.1	0.2	0.3	0.1	0.0	0.5	0.1	0.7	3.3	16	1.4
106		0.6	0.1	0.3	0.8	1.0	0.2	0.4	0.4	1.2	1.8	2.0	0.5	0.2	0.9	15	0.7
107	0.3	1.2	0.5	2.7	2.3	2.1	0.5	1.2	1.2	0.2	1.5	1.0	0.9	0.6	0.3	16	2.0
109		1.4	0.0	0.2	1.9	0.5	0.7		0.7	0.3	1.8	1.1	0.5	0.1	0.2	14	0.8
110	1.3		5.0	3.0	0.8	1.7	2.8	1.6	0.4	0.8	2.7	3.4	0.5	2.7	0.2	15	5.6
111	0.2	0.5	1.3	0.1	0.4	0.4	0.2	0.4	0.6	0.7	0.4	0.8	0.6	0.3	0.8	16	0.5
113	0.0	0.0	0.2	0.3	0.2	0.4	0.1	0.0	0.2	1.0	1.0	0.9	0.4	0.0	0.2	16	0.3
114		3.1	1.5	1.9	2.8	2.0	0.9	0.0	1.9	2.2	0.2	0.7	1.8	1.4		14	3.1
115		1.9	1.6	0.1	0.2	0.7	0.5		0.4	0.4	2.8	2.8	0.9	1.1	2.0	14	1.9

APPENDIX 6. 'Weighted Sum of z-score' and graphical representation for laboratories in Category A.



APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	LC-MS/MS	0.05		10	1	LLE	YES	20	NOT APPLY (N/A)	LC-MS/MS	IN HOUSE
2	D	M	LC-MS/MS	0.010	98	10	6			5		LC-MS/MS	KLEIN, J., ALDER, L. (2003): APPLICABILITY OF GRADIENT LIQUID CHROMATOGRAPHY WITH TANDEM MASS SPECTROMETRY TO THE SIMULTANEOUS SCREENING FOR ABOUT 100 PESTICIDES IN CROPS. J. AOAC INT. 86 (5): 1015-1037
3	NA												
4	D	M		0.001		10	5	SPE		10		LC-MS/MS	QUECHERS ANASTASSIADES
5	D	M	LC-MS/MS	0.002		10	5	SPE		20		LC-MS/MS	M.ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)
6	NA												
7	NA												
8	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
9	D	S	LC-MS/MS	0.01	87	15	4	ELLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN HOUSE SOP
10	NA												
11	D	S		0.05	85	30	1	O		20		HPLC-UV	
12	D	M	LC-MS	0.02	63	50	1	GPC		1, 2, 5	SPLITLESS	MS-(ITD), LC-MS, GC- FPD, GC-ECD	
13	D	M	LC-MS/MS	0.01	108.4	15	1		TPP (QC)	10		LC-MS/MS	
14	NA												
15	D	S	GC-MS	0.05	128	25	1	GPC		2	SPLIT/ SPLITLESS	GC-ECD	LOCAL SOP NO. MIRA05012
16	NA												
17	NA												
18	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
19	D	M	LC-MS/MS	0.01	101	75				5		LC-MS/MS	
20	NA												
21	NA												
22	D	M	LC-MS/MS	0.05	89.3	10	METHANOL			5		LC-MS/MS	
23	D	M	HPLC-DAD	0.01		5		SPE FLORISIL		20	AUTOSAMPLER	HPLC-DAD	INTERNAL METHOD
24	D	S	GC-ECD	0.05		30				1 mg SAMPLE	AUTOSAMPLER	LC-MS/MS	SOP NO.: MR 405012 M1
25	D	M	LC-MS/MS	<0.01	88	5				10		LC-MS/MS	
26	NA												
27	D	S	GC-ECD	0.05		30		GPC			RHEODYNE INJECTOR	HPLC-UV	HUNGARIAN CENTRAL SOP NO.: 405012 M1

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
28	D	S	LC-MS/MS	0.04	80	20	3	GPC		20		LC-MS/MS	
29	D	M	LC-MS/MS	0.05	110	15	5			50		LC-MS/MS	QUECHERS
30	NA												
31	NA												
32	NA												
33	NA												
34	NA												
35	D	M	GC-MS	0.02	97.5	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S	LC-MS	0.05	88	25	3	SPE		1	SPLIT/SPLITLESS	GC-FPD GC-ECD GC-MS (SINGLE-QUAD) LC-MS HPLC-MS HPLC-PICKERING	
37	D	M	LC-MS/MS	0.005		10	5	O	DIMETHOATE D6	20		LC-MS/MS (TRIPLE-QUAD)	ANASTASSIADES, JOURNAL OF AOAC INT. VOL1 86 NO 2, 2003

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
38	NA												
39	D	M	LC/MS/MS	0.01		10	6 (METHANOL/WATER)	SPE		20		LC/MS/MS	LC/MS/MS (BFR)
40	NA												
41	D	M	GC-NPD	0.05	74.8	20				4	SPLITLESS	GC-ECD, GC-NPD	
42	D	M	LC-MS/MS	0.01	105	10		LL		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	GC-MS	0.01	94	10		SPE	TRIPHENYLPHOSPHATE (TPP)	4		LC-MS/MS (ESI+)	ANASTASSIADES ET AL. JAOAC INT. 86 62003) 412-431, MODIFIED
44	D			0.01		50		LL		5		LC-MS/MS	HOUSE METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
45	D	S	GC-MS	0.04	94	25	1 (IN PRESENCE OF NaOH)	GFC		10	RHEODYNE	HPLC - DAD	CLEAN UP AS IN EN 12393 P METHOD
46	NA												
47	ND			0.5									
48	D	M	LC-MS/MS	0.01		10	6	SPE		20		LC-MS/MS	KLEIN, J.; ALDER, L. JOURNAL OF AOAC INT. 2003, 86, 1015-1037
49	NA												
50	D	S	LC/MS	0.05	106	10	4			5		LC-MS/MS	
51	NA												
52	NA												
53	D	S	GC-MS	0.05		15	6	GFC		1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FL, HPLC-UV	INTERNAL METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
54	NA												
55	D	M	LC-MS/MS	0.01	102	100	2	GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	-	0.206	88.9	30	1	GPC		20	LOOP	HPLC-UV	
57	NA												
58	D	M	LC-MS/MS	0.05	113	10	6	LLE ON CHEM ELUT		100		LC-MS/MS	APPL. OF LC-MS/MS (J. KLEIN, L. ALDERS)
59	D	M	HPLC-UV	0.05	83.5	50	5	O	3	2	SPLITLESS	HPLC FLD OR DAD	METODENVORSCHLAG EG-PROFICIENCY TEST 1996/97
60	NA												
61	D	M	LC-MS/MS	0.05		20	METHANOL			10		LC-MS/MS	
62	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
63	D	M	LC-MS/MS	0.05	75	10	METHANOL			20		LC-MS/MS	MULTI RESIDUE METHOD DRAFT BFR
64	NA												
65	NA												
66	NA												
67	D	M		0.02	80	10		LLE + SPE	TRIPHENYLPHOSPHAT	10		LC-MS/MS	ANASTASSIADES, M ET AL., J. AOAC INT., 86 (2003), 412 – 431 QUECHERS - METHOD
68	D	S	LC-MS/MS	0.01	78.1	10				5	LOOP	LC-MS/MS	MINILUKE EXTRACTION
69	NA												
70	NA												
71	NA												
72	NA												
73	D	S	GC-NPD	0.05	78	30		GPC; O		10	RHEODYNE	HPLC-UV	LOCAL SOP

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
74	D	M	HPLC-DAD	0.01	70.9	25		SPE		50		HPLC – DAD	
75	D	M		0.01	116	10	METHANOL	LLE (CHEMELUT)		20	LC-MS/MS	JAOAC INTERN., 86, 1015FF (2003)	
76	D	S	GC-MS	0.05	89	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	NA												
79	D	M	LC-MS	0.05	89	15		SPE		2	SPLITLESS	GC-ECD; GC-NPD; GC-MS; LC-MS/MS; HPLC-FL	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10		O		20		LC-MS/MS	KLEIN,J., ALDERL (2003) JAOAC INT. 86, 1015-103
81	NO RESULTS												
82	NA												
83	D	M	LC-MS/MS	0.05	112	10				7	PARTIAL	LC-MS/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
84	NA												
85	NA												
86	NA												
87	NA												
88	ND			0.01	89	5		LL		10		LC-MS/MS	IN-HOUSE
89	D	M	HPLC-DAD	0.03	80	15				1	SPLIT/SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	
90	D	S	LC-MS/MS	0.05		50		LLE		OCT-25		HPLC-DAD	
91	D	M	LC-MS/MS	0.01		10	METHANOL	SPE		20		LC-MS/MS	DRAFT § 35 LMBG-METHOD
92	D	M	LC-MS/MS	0.01				LLE			LOOP	LC-MS/MS	LC-MULTIRESIDUE

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
93	D	M	LC-MS/MS	0.01		10	METHANOL	LLE		20	SAMPLE-LOOP	LC-MS/MS	MULTI-METHOD
94	NA												
95	NA												
96	NA												
97	NA												
98	D	M	LC-MS/MS	0.05	89	10	1		CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	NA												
100	NA												
101	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
102	D	S	GC-ECD	0.05	89	30		GPC		50	AUTOSAMPLER	HPLC-UV	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	NA												
104	D	S	LC-MS/MS	0.005		10	METHANOL	DIATOMACEOUS EARTH		25		LC-MS/MS	APPLICATION NOTE BY WATERS
105	NA												
106	NA												
107	D	M	LC-MS	0.01	91	10		O		1	AUTOSAMPLER	HPLC-MS (SINGLE-QUAD)	QUECHERS ANASTASSIADES
108	NA												
109	NA												
110	D	S	LC-MS	-		10	METHANOL	O		20		HPLC-MS	MULTI-RESIDUE-METHOD HPLC

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
111	D	S	LC-MS/MS	0.05	99.7	50	METHANOL	SPE		25		LC-MS/MS	VALIDATED IN HOUSE METHOD NACH MULTI-METHOD, KLEIN UND ALDER - DFG WORKSHOP PRESENTED
112	NA												
113	D	S	GC-NPD	0.05	90	30	1			1	SPLITLESS	GC-NPD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE
114	NA												
115	NA												
116	NA												
117	NA												
118	NA												
119	NA												
120	NA												
121	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

ACETAMIPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
122	NA												
123	NA												
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	LC-MS/MS	0.05		10	1	SPE	YES	20	N/A	LC-MS/MS	IN HOUSE
2	D	S	GC-MS	0.010	99	10	6			5		LC-MS/MS	KLEIN, J., ALDER, L. (2003): APPLICABILITY OF GRADIENT LIQUID CHROMATOGRAPHY WITH TANDEM MASS SPECTROMETRY TO THE SIMULTANEOUS SCREENING FOR ABOUT 100 PESTICIDES IN CROPS, J. AOAC INT. 86 (5): 1015-1037
3	NA												
4	D	M	GC-MS	0.001		10	5	SPE		10		LC-MS/MS	QUECHERS; ANASTASSIADES
5	D	M	LC-MS/MS	0.001		10	5	SPE		20		LC-MS/MS	MANASTASSIADES ET AL, J AOAC 86, 412-431 (2003)
6	D	M	GC-MS	0.02	99.5	15	4	GPC		2	SPLITLESS	GC-MS	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
7	D	S	GC-NPD (80)	0.02		10	6 (DICHLOROMETHANE)			4	SPLITLESS	GC-ECD; GC-NPD (80)	RAPPORTI ISTISAN 97/23
8	D	M	GC-MS	0.01	116	30	1	O		2	SPLITLESS	GC-MS	
9	D	S	GC-MS(ITD)	0.01	91	15	4	LLI ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN-HOUSE SOP
10	D	M		0.006	76	25	2	GFC		2	SSL/PTV	GC-ECD, GC-NPD, GC-MS(ITD)	
11	D	M		0.05	78,5	30	1			1	SPLIT/ SPLITLESS	GC-MS (ION TRAP)	
12	D	M	MS-ITD	0.02	81	50	1	GFC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	
13	NA												
14	NA												
15	D	S	GC-MS	0.05	118	25	1			2	SPLIT/ SPLITLESS	GC-NPD	LOCAL SOP NO. MIR405012

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
16	D	M	GC-MS/MS	0.05		15				10	LVI SPLITLESS	GC-MS/MS	
17	NA												
18	D	S	GC-MS	0.03	118	75		GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	LC-MS/MS	0.01	97	75				5		LC-MS/MS	
20	D	S		0.05	102	100		O		2	MANUAL	GC-NPD	
21	D	M	GC-MS/MS	0.01		10				10	LVI	GC-MS/MS	
22	D	M	LC-MS/MS	0.05	86.3	10	METHANOL			5		LC-MS/MS	
23	D	M	GC-MS	0.05		5			FENCHLORPHOS	50	AUTOMATIC TDS SAMPLER	TDS-IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	INTERNAL METHOD
24	D	M	GC-MS	0.05	88.7	30		GPC		1	TPOCI	GC-NPD	SOP NO.: MR 405012 M1: 308 M2
25	D	M	GC-MS	<0.02	92	10		SPE	YES	2	SPLITLESS	GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
26	D	M	LC-MS/MS	0.01	95	10	6 METHANOL 95%-AMMONIACETATE 5%, 20 mM ACETIC ACID		CARBARYL C13	10	SPLITLESS	LC-MS/MS	
27	D	S		0.05		30		GPC		20	RHEODYNE INJECTOR	HPLC-UV	HUNGARIAN CENTRAL SOP NO.: 405012.M1
28	D	S	GC-MS	0.02	87	20		GPC		20		HPLC-FL	
29	D	S	LC-FL	0.05	87	15		SPE (NH ₂)		400		HPLC-FL	MINI LUKE
30	D	S	DIFFERENT COLUMN	0.02		10		GPC	DICHLORFENTHION	1	SPLITLESS	GC-ECD GC-NPD	RAPP ISTISAN 97/23
31	D	S	MS	0.05	105	10		O		1	SPLITLESS	GC-ECD GC-NPD	ISTISAN 97/23
32	D	S	GC-MS	0.1	104	25		GPC		1	SPLITLESS	GC-MSD	\$35 LMBG 00.00-34

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
33	NA												
34	NA												
35	D	M	GC-MS	0.02	120	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S	GC-MS	0.05	92	25	3	SPE		1	SPLIT/SPLITLESS	GC-FPD GC-ECD GC-MS (SINGLE-QUAD.) LC-MS HPLC-MS HPLC-PICKERING	
37	D	M	GC-MS	0.02		10	5	O	TPP	1	SPLIT/SPLITLESS	GC-MS (SINGLE QUAD)	ANASTASSIADES ET AL. JAOAC INT. VOLT 86 NO. 2, 2003
38	D	M	GC-MS	0.05		10	5	O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	D	M	LCMS/MS	0.01	117	10	6 (METHANOL/WATER)	SPE		20		LCMS/MS	LCMS/MS (BFR)
40	D	M	GC-MS	0.10		15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1986. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
41	D	M	GC-MS	0.05	92,1	20				4	SPLITLESS	GC-ECD, GC-NPD	
42	D	M	LC-MS/MS	0.01	103	10	5	LLE		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	GC-MS	0.01	95	10	5	SPE	TRIPHENYLPHOSPHATE (TPP)	4		LC-MS/MS (ESI+)	ANASTASSIADES ET AL. JAOAC INT. 86 82003 412-431, MODIFIED
44	D	M		0.01		50	2	LLE		5		LC-MS/MS	HOUSE METHOD
45	D	S	GC-MS	0.01	86	25	1	GPC	TRIMETHACARB	200	RHEODYNE	HPLC - ON LINE DERIVATIZATION - FD	EXTRACTION AND CLEAN UP AS IN EN 12393 P METHOD
46	NA												
47	D	S	GC-NPD	0.05		10	5	SPE		4	SPLIT-SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAINBAHER, F. J. SCHENCK; J. AOAC INT. 86 (2003) 412-431
48	D	M	LC-MS/MS	0.01		10	6	SPE		20		LC-MS/MS	KLEIN, J.; ALDER, L. JOURNAL OF AOAC INT. 2003, 86, 1015- 1037

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
49	D	S	GC-NPD	0.05		50		LLE		2	SPLITLESS	GC-FPD, GC-NPD, GC- MS(ITD)/MS	METHOD R' EN 12393- 2:1999
50	D	S	LMS	0.05	103	50				50		HPLC-FLD	
51	D	S	HPLC-FLD	0.01	84	50		SPE		10		HPLC-FLD	EPA 531.1
52	D	M	GC-MS	0.05		10		O		1.5	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.05		100		LLE		10	RHEODYNE - HPLC	POST COLUMN DERIVATIZATION HPLC-FL	INTERNAL METHOD
54	D	M	HPLC-DAD	0.01	67	37.5		GPC		20		HPLC-DAD, FLD	EN 12393-1,2,3
55	D	M	HPLC-UV	0.01	64,1	100		GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	GC-MS	1.72	118,4	30				1	SPLITLESS	GC-MS(ITD)	
57	D	M	LC-MS/MS	0.01		25				5			

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
58	D	M	GC-ECD/NPD	0.1	105	15	4		PCB119 (ECD) TRIFLURALIN (GC-NPD)	1	SPLIT/SPLITLESS	GC-ECD/NPD	ANAL.METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
59	D	M	GC/MSD	0.05	110	10	5	O		20		HPLC FLD WITH ND	\$ 35 L 2900-6
60	D	M	LC-MS/MS	0.05		15 5	1 1	GPC	ISODRIN	1 20	SPLIT, SPLITLESS	GC-ECD/NPD/MS LC-MS/MS	
61	D	M	GC-MS	0.1		50	3	GPC		2	PTV	GC-MS	DFG S19 (ASU \$35 LMBG L 00.00-34)
62	NA												
63	D	M	LC-MS/MS	0.05	71	10	METHANOL			20		LC-MS/MS	MULTI RESIDUE METHOD DRAFT BR
64	D	S	GC-MS	0.01	100	5	6			10		HPLC - FLD DERIVATIZED POST-COLUMN	MULTIRESIDUE WITH EXTRELU
65	D	M	GC-MS	0.05	91	5	1	GPC	AZOBENZENE+RONNEL+ TRIPHENYLPHOSPHATE	2	ON-COLUMN	GC-(ECD/FPD/NPD)	INTERNAL METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
66	D	S	LC-MS/MS	0.05	115	15		SPE		20		LC-MS/MS	
67	D	M		0.02	80	10		LLE + SPE	TRIPHENYLPHOSPHATE	10		LC-MS/MS	ANASTASSIADES, M. ET AL., J. AOAC INT., 86 (2003), 412 – 431 QUECHERS - METHOD
68	D	S	LC-MS/MS	0.01	77.8	20				5	LOOP	LC-MS/MS	MINI-LUKE EXTRACTION
69	D	M	GC-MS	0.05	105	25		GPC		1,0-2,0µL	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1, ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	D	M	GC-MS/MS	0.05		15		O		10	LVI	GC-ECD/TSD/PFPD GC-MS/MS	QUECHERS
71	NA												
72	NA												
73	D	S	GC-MS	0.05	86	30		GPC; O		10	RHEODYNE	HPLC-UV	LOCAL SOP

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
74	D	M	GC-MS	0.01	84,8	25		SPE		50		HPLC-DAD	
75	D	M		0.01	116	10	6 METHANOL	LLE (CHEMELUT)		20	LC-MS/MS	J.AOAC INTERN., 86, 1015FF (2003)	
76	D	S	GC/MS	0.05	136	10	DICHLOROMETHANE			1	SPLITLESS	GC/MS	
77	NO RESULTS												
78	D	M	GC-MS		80	15		GPC		1	SPLITLESS	GC/MS (SINGLE-QUAD)	INTERNAL METHOD
79	D	M	GC/MS	0.05	110	15		SPE		2	SPLITLESS	GC/ECD; GC/NPD; GC/MS; LC/MS/MS; HPLC/FL	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10	6	O		20		LC-MS/MS	KLEIN J., ALDER L (2003) J.AOAC INT. 86, 1015-103
81	NO RESULTS												
82	D	M	GC-ECD	0.03	80	10	5	O (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FL, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBÄHNER, F. J. SCHENK; J. AOAC INT., 86 (2003) 412-431

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
83	D	M	GC-MS	0.05	90	30	1	SPE	TRIPHENYLETHENE	3	SPLITLESS	GC-MS	
84	D	M	GC-MS	0.02	80	50	2			1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	NA												
86	D	M	GC-MS(ITD)	0.025	92	15	4		HCB	1	SPLIT/ SPLITLESS	GC-MS(ITD)	
87	D	M			91	10	6 METHANOL	LL		20		LC-MS/MS	JAOAC 86, 5, 1015-1037
88	D	M		0.008	105	5	5	LL		10		LC-MS/MS	IN-HOUSE
89	D	M	HPLC-FLD	0.03	95	15	6			1	SPLIT/ SPLITLESS	GC-ECD FPD MS HPLC-FLD DAD	
90	D	S	GC-MS	0.01	50	3		LL		10-25		HPLC-DAD	

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
91	D	S	GC-MS	0.02		50		LLE	YES	1	SPLITLESS	GC-NPD	DFG-S8
92	D	M	GC-MS	0.02	107	50		LLE	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990) 15TH ED., 985.22, AOAC ARLINGTON VA
93	D	M	LC-MS/MS	0.02		10	6, METHANOL	LLE		20	SAMPLE-LOOP	LC-MS/MS	MULTI- METHOD
94	D	M	GC-NPD	0.05	100,6	10		SPE		2	SPLITLESS	GC-ECD	
95	D	S	GC-MS	0.2	89	25		SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OF AOAC INTERNATIONAL 78-5- 1995
96	NA												
97	NA												
98	D	M	LC-MS/MS	0.05	127	10			CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
99	D	M	GC-MS	0.05		20		GPC		1	PULSED SPLITLESS	GC-MS	
100	NA												
101	D	M	GC-MS	0.05	90	10	2	SPE		1	SPLIT/ SPLITLESS PTV	GC-ECD,NPD,MS	
102	D	S	HPLC-DAD	0.05	101	30	1	GPC		50	AUTOSAMPLER	HPLC-UV	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE, SOP 308M2, CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S	GC-MS	0.020	80	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LS-MS	ANN.FALS.EXP.CH IM. SEPT-OCT 1974-67 N721-722 PP513-524
104	D	S	GC-MS	0.005		100	2	GPC	TRIPHENYLPHOSPHATE	5	PTV	GC-MS	LMBG \$35 L-00.00.-34
105	D		GC-NPD									GC-NPD, GC-ECD	MULTIRESIDUE METHOD: AOAC 985.22/90 MODIFIED

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
106	D	S	GC-NPD	0.02	81	25	6 ETHYLACETATE/DICHLOROMETHANE			1		GC-PFPD GC-NPD GC-MS	
107	D	M	GC/MS	0.02		100	2	GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19-DFG
108	NA												
109	D	S	LC-MS/MS	0.01		10	1			25		LC-MS/MS	
110	NA												
111	D	S	LC-MS/MS	0.05	99,3	50	6 METHANOL	SPE		25		LC-MS/MS	VALIDATED IN HOUSE METHOD NACH MULTI- METHOD, KLEIN UND ALDER - DFG WORKSHOP PRESENTED
112	D	S	GC/MS	0.05	90	10	6	SPE		10		HPLC/DAD	ISTISAN 97/23

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
113	D	S	GC-NPD	0.05	95	30	1			1	SPLITLESS	GC-NPD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE
114	D	S	GC-MS	0.01	71,1	50	6	SPE		1	SPLITLESS	GC-MS	
115	D	S	GC-MS	0.01		50	3	SPE		1	ON COLUMN	GC-ECD/ GC-PFPD GC-MS	NFEN12393
116	D	S	GC-MS	0.01	57	15	6	GPC	YES	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	RAPPORTO ISTISAN 97/23
117	D	M	GC-MS	0.03		40	1			1	SPLITLESS	GC-MS	
118	NA												
119	D	S	GC-MS	0.03	83.8	10	3	O		1	AUTO	GC-ECD GC-MS	ISS B6
120	NA												
121	NA												
122	NA												
123	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

CARBARYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	D	M	GC-MS	0.05		20 / 5	1			2	SPLITLESS	GC-ECD, GC-FPD, GC-MSD, GC-MS(ITD)	MODIFIED LUKE

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	LC-MS/MS	0.05		10	1	SPE	YES	20	N/A	LC-MS/MS	IN HOUSE
2	D	M	GC-MS	0.010	92	15	4			1	SPLITLESS	GC-NPD	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): IMPROVED MULTIRESIDUE GAS CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS, ORGANONITROGEN, AND ORGANOHALOGEN PESTICIDES IN PRODUCE, USING FLAME PHOTOMETRIC AND ELECTROLYTIC CONDUCTIVITY DETECTORS, J. ASSOC. OFF. ANAL. CHEM. 64(5): 1187-1195
3	D	M	GC-MS/MS	0.02	85.0	15	1	NO	TRIPHENYL PHOSPHATE ANTHRACENE	10	SPLIT	GC-MS/MS	
4	D	M		0.021		10	5	SPE		2	SPLIT/ SPLITLESS	GC-MS	QUECHERS; ANASTASSIADES
5	D	M	GC-MS					SPE	(MIREX)/TPP	1	SPLIT/ SPLITLESS	GC-MS	M.ANASTASSIADES ET AL. J AOAC 86, 412- 431 (2003)

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
6	D	M	GC-MS	0.02	116,8	15		GPC		2	SPLITLESS	GC-MS	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED
7	D	S	GC-NPD(80)	0.01		10	6 (DICHLOROMETHANE)			4	SPLITLESS	GC-ECD; GC-NPD(80)	RAPPORT IJSTISAN 97/23
8	D	M	GC-MS	0.01	103	30		O		2	SPLITLESS	GC-MS	
9	D	S	GC-MS(ITD)	0.01	98	15		LL ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN-HOUSE SOP
10	D	M		0.005	88	25		GPC		2	SSL/PTV	GC-ECD, GC-NPD, GC-MS(ITD)	
11	D	S		0.05	129	30				1	SPLITT/ SPLITLESS	GC-MS (ITD)	
12	NA												
13	NA												
14	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
15	D	S	GC-MS	0.05	105	25	1			2	SPLIT/ SPLITLESS	GC-NPD	LOCAL SOP NO. MR405012
16	D	M	GC-MS/MS	0.02		15	4			10	LVI SPLITLESS	GC-MS/MS	
17	NA												
18	D	S	GC-MS	0.03	92	75	1	GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	GC-MS(ITD)	0.02	77	75	1	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD	
20	D	S	GC-NPD	0.05	92	100	3	O		2	MANUAL	GC-NPD	
21	D	M	GC-MS/MS	0.01		10	1			10	LVI	GC-MS/MS	
22	D	M	GC-MS	0.06	79.8	50	6	LLE (TOLUENE)		1,5	SPLITLESS	GC-NPD	
23	D	M	GC-MS	0.05		5			FENCHLORPHOS	50	AUTOMATIC TDS SAMPLER	TDS-IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	INTERNAL METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
24	D	M	GC-MS	0.05	92,1	30	1	GPC		1	TPOCI	GC-NPD	SOP NO.: MR 405012 M1; 308 M2
25	D	M	GC-MS	<0.02	94	10	6	SPE	YES	2	SPLITLESS	GC-MS	
26	D	M	GC-MS(ITD)	0.14	63	25	2	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	
27	D	S		0.05		30	1	GPC		20	RHEODYNE INJECTOR	HPLC-UV	HUNGARIAN CENTRAL SOP NO.: 405012 M1
28	D	S	GC-MS	0.05	85	50	6	SPE	YES	1	ON-COLUMN	GC-MS(ITD)	
29	D	M	GCMS/MS	0.05	93	15	4			10		GC-MS/MS	MINILUKE
30	D	S	DIFFERENT COLUMN	0.01		10	1	GPC	DICHLOFENTHION	1	SPLITLESS	GC-ECD GC-NPD	RAPP ISTISAN 97/23
31	D	S	MS	0.05	80	10	6			1	SPLITLESS	GC-ECD GC-NPD	ISTISAN 97/23

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
32	D	S	GC-MS	0.05	35	25	2	GPC		1	SPLITLESS	GC-MS	\$35 LMBG 00.00-34
33	D	M	GC-MS/MS	0.01		15	1			10	LVI	GC-MS/MS (ION TRAP)	
34	D	M	GC-MS/MS	0.05		5	4			10	AUTO	GC-MS/MS	PESTICIDES MS/MS (EI-CI)
35	D	M	GC-MS	0.02	99.8	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S	GC-MS	0.05	88	50	1			1	SPLIT/ SPLITLESS	GC-NPD GC-FPD GC-MS (SINGLE-QUAD.)	
37	D	M	LC-MS/MS	0.005		10	5	O	DIMETHOATEE D6	20		LC-MS/MS (TRIPLE-QUAD)	ANASTASSIADES, JOURNAL OF AOAC INT. VOLT 86 NO 2, 2003
38	D	M	GC-MS	0.05		10	5	O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	ND			0.01		100	2	GPC, SPE		1	SPLIT	GC-ECD	DFGS 19, L 00.00-34 (\$ 35 LMBG)

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
40	D	M	GC-MS	0.1		15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
41	D	M	GC-MS	0.03	95,1	20	3			4	SPLITLESS	GC-ECD, GC-NPD	
42	D	M	LC-MS/MS	0.01	106	10	5	LL		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	GC-MS	0.01	94	10	5	SPE	TRIPHENYLPHOSPHATE (TPP)	4		LC/MS-MS ESI (+)	ANASTASSIADES ET AL. JAOAC INT. 86 82003) 412-431, MODIFIED
44	D	M		0.01		50	2	LL		5		LC-MS/MS	HOUSE METHOD
45	D	S	GC-MS	0.04	98	25	1 (IN PRESENCE OF NaOH)	GPC		10	RHEODYNE	HPLC - DAD	CLEAN UP AS IN EN 12393 P METHOD
46	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
47	D	S	GC-NPD	0.05		10		SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHER, F. J. SCHENCK : J. AOAC INT. 86 (2003) 412-431
48	D	M	GC-MS	0.01		25		GPC		3	PTV	GC-MS	DFG S.19
49	D	S	GC-MS(ITD)	0.01		50		LLE		2	SPLITLESS	GC-FPD, GC-NPD, GC-MS(ITD)/MS	METHOD R'EN 12393-2:1999
50	D	S	GC-MS	0.05	82	20			DICLOBENIL	2	ON COLUMN	GC-NPD	
51	NA												
52	D	M	GC-MS	0.05		10		O		1,5	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.05		15		GPC		1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	D							GPC					EN 12393-1,2,3

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
55	D	M	GC-NPD	0.015	91,3	100	2	GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	GC-MS	0.69	91,3	30	1			1	DIRECT	GC-NPD	
57	D	M	GC-MS	0.01		25	1	GPC		1	PULSED SPLITLESS	GC-ECD/NPD	GC-MSD
58	D	M	GC-ECD-NPD	0.1	94	15	4		PCB119 (ECD) TRIFLURALIN (GC-NPD)	1	SPLIT/SPLITLESS	GC-ECD/NPD	ANAL.METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
59	D	M	GC/MSD	0.02	108	10	5	O		2	SPLITLESS	GC-MS	\$35 L 000034
60	D	M	GC-MS	0.05		15	1	GPC	ISODRIN	1	SPLIT/SPLITLESS	GC-ECD/NPD/MS	
61	D	M	LC-MS/MS	0.02		20				10		LC-MS/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
62	D	M	GC-MS	0.02		10			TPP	2		GC-MS	
63	D	M	GC-MS	0.05	74	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	\$ 35 LMBG L.00.00-34
64	D	M	GC-MS	0.02	82	5			TPP	0,5	SPLITLESS	GC-MS	MULTIRESIDUE WITH EXTRELU
65	D	M	GC-MS	0.02	86	5		GPC	AZOBENZENE+RONNEL+TRIPHENYLPHOSPHATE	2	ON-COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD
66	NA												
67	D	M		0.02	80	10		LLE + SPE	TRIPHENYLPHOSPHATE	10		LC-MS/MS	ANASTASSIADES, M. ET AL., J. AOAC INT., 86 (2003), 412 - 431.QUECHERS - METHOD
68	D		GC-MS		97,6	20				2	SPLITLESS	GC-ECD/NPD	MINI-LUKE EXTRACTION

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
69	D	M	GC-MS	0.05	79	25	6, METHANOL	SPE		1.0-2.0ML	SPLITLESS	GC-NPD	IN-HOUSE METHOD
70	NA												
71	D	M	GC-TSD	0.05	99	25	1	O		5	SPLITLESS	GC-TSD	MULTIRESIDUE METHOD FOR ANALYSIS OF PESTICIDES IN FOODSTUFFS P.A. GREVE ED. 1988. MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIR, RIJSWICK NETHERLANDS
72	D	S	GC-NP	0.02	98	100	3			1	SPLITLESS	GC-EC, GC-NP	
73	D	M	GC-MS	0.05	79	30	1			1	WIDE BORE	GC-NPD	LOCAL SOP
74	D	M	GC-MS	0.005	103	25	3	HEXABROMOBENZENE		1		GC-MS	
75	D	M		0.01	92	10	6 METHANOL	LLE(CHEMELUT)		20	LC-MS/MS	J.AOAC INTERN., 86, 1015FF (2003)	

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
76	D	S	GC/MS	0.05	87	10	DICHLOROMETHANE			1	SPLITLESS	GC/MS	
77	NO RESULTS												
78	ND	M	GC-MS			15		GPC		1	SPLITLESS	GC/MS (SINGLE-QUAD)	
79	D	M	GC/MS	0.05	90	15		SPE		2	SPLITLESS	GC-ECD; GC-NPD; GC-MS; LC-MS/MS; HPLC-FLD	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10		O		20		LC-MS/MS	KLEIN, J., ALDER, I. (2003) JAOAC INT. 86, 1015-103
81	NO RESULTS												
82	D	M	GC-NPD	0.02	79	10		O (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHNER, F. J. SCHENK: J. AOAC INT., 86 (2003) 412-431
83	D	M	GC-MS	0.05	107	30		GPC	TRIPHENYL ETHYLENE	3	SPLITLESS	GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
84	D	M	GC-MS	0.01	80	50				1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12383
85	NA												
86	D	M	GC-MS(ITD)	0.05	88	15			HCB	1	SSL	GC-MS(ITD)	
87	D	S	LC-MS/MS			50	6 ETHYLACETATE/DICHLOROMETHANE (80/20)		TRICHLORONAT	1	ON-COLUMN	GC-TSD	ACCORDING TO EN 12396-1: 1999
88	D	M		0.005	95	5		LLE		10		LC-MS/MS	IN-HOUSE
89	D	M	GC-MS	0.02	89	15				1	SPLIT-SPLITLESS	GC-ECD, FPD, MS, HPLC-F-DAD	
90	D	M	GC-MS	0.04		50		GPC		1	SPLITLESS	GC-NPD	

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
91	D	S	GC-MS	0.01		50		LLE	YES	1	SPLITLESS	GC-NPD	DFG-S8
92	D	M	GC-MS	0.01	92	50		LLE	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990) 15TH ED., 985.22; AOAC, ARLINGTON VA
93	D	M	GC-MS	0.01		80		GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD OR GC-NPD	GC-MS (SINGLE-QUAD)
94	D	M	GC-NPD	0.05	88.9	10		SPE		2	SPLITLESS	GC-ECD	
95	D	S	GC-MS	0.05	89	25		SPE	YES	3	PTV	GC-ECD, GC- NPD, GC-MS	FILLION ET AL. JOURNAL OG AOAC INTERNATIONAL L 78-5-1995
96	NA												
97	NA												
98	D	M	LC-MS/MS	0.05	110	10			CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
99	D	M	GC-MS	0.05		20	4	GPC		1	PULSED SPLITLESS	GC-MS	
100	NA												
101	D	M	GC-MS	0.05	90	10	2	SPE		1	SPLIT-SPLITLESS/PTV	GC-ECD,NPD,MS	
102	D	M	HPLC-DAD	0.05	91	30	1	GPC		1	SPLITLESS	GC-NPD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2. CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S	GC-MS	0.020	80	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LS-MS	ANN.FALS.EXP.CHIM. SEPT-OCT 1974-67 N/721-722 PP513-524
104	D	S	GC-MS	0.005		100	2	GPC	TRIPHENYLPHOSPHAT	5	PTV	GC-MS	LMBG §35 L-00.00.-34
105	D	M	GC-NPD	0.5		100	4		ALDRIN	1		GC-NPD, GC-ECD	MULTIRESIDUE METHOD. AOAC 986.22/90 MODIFIED

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
106	D	S	GC-NPD	0.01	79	25	6 ETHYLACETATE/DICHLOROMETHANE			1		GC-PFPD GC-NPD GC-MS	
107	D	M	GC-MS	0.02		10 100		O GPC		1 1	AUTOSAMPLER SPLITLESS	HPLC-MS (SINGLE-QUAD) GC-ECD-ECD; GC-NPD; GC-MS(SINGLE-QUAD)	QUECHERS ANASTASSIADES S19 - DFG
108	NA												
109	D	M	GC-MS	0.02		10				2		GC-ECD GC-NPD GC-PFPD GC-MS	
110	D	M	GC-NPD	0.05		50		GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE-METHOD DFG S 19
111	D	M	GC-MS	0.05	102.2	50		GPC		1	OC; SS	GC-ECD, GC-NPD	§35 LIMBG; L 00. 00-34, L 00.00-37
112	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
113	D	S	HPLC-UV	0.05	91	30	1	GPC		20 ML/20 MG	MANUAL	HPLC-UV	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2: CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
114	D	S	GC-MS	0.01	107	50	6	SPE		1	SPLITLESS	GC-MS	
115	D	S	GC-MS	0.01		50	3	SPE		1	ON COLUMN	GC-ECD/ GC-PFPD-GC-MS	NFEN12393
116	D	S	GC-MS	0.05		15	6	GPC	YES	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	RAPPORT ISTISAN 97/23
117	D	M	GC-MS	0.03		40	1			1	SPLITLESS	GC-MS	
118	D	S	GC-NPD	0.05	98	5	3			2	SPLITLESS	GC-ECD, GC-NPD	
119	NA												
120	NA												
121	NA												
122	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

CYPRODINIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
123	NA												
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON																		
LAB CODE	1	2	3	4	5	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
D	D	D	D	D	D	D	M	GC-MS	0.02		10		SPE	YES	2	SPLIT/ SPLITLESS	GC-MS	IN HOUSE
M	M	M	M	M	M	M	M	GC-MS	0.010	95	15	4			1	SPLITLESS	GC-NPD	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): IMPROVED MULTIRESIDUE GAS CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS, ORGANONITROGEN, AND ORGANOHALOGEN PESTICIDES IN PRODUCE, USING FLAME PHOTOMETRIC AND ELECTROLYTIC CONDUCTIVITY DETECTORS, J. ASSOC. OFF. ANAL. CHEM. 64(6): 1187-1195
GC-MS	GC-MS/MS	GC-MS/MS	GC-FPD/NPD	GC-MS	GC-MS	GC-MS	M	GC-MS/MS	0.02	83.9	15	1	NO	TRIPHENYL PHOSPHATE ANTHRACENE	10	SPLIT	GC-MS/MS	
0.02	0.013	0.013	0.013	0.013	0.013	0.013	M	GC-FPD/NPD	0.013		10	5	SPE		2	SPLIT/ SPLITLESS	GC-MS	QUECHERS, ANASTASSIADES
10	10	10	10	10	10	10	M	GC-FPD/NPD			10	5	SPE		2	SPLIT/ SPLITLESS	GC-MS	M.ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)
5	5	5	5	5	5	5	M	GC-FPD/NPD			10	5	SPE		2	SPLIT/ SPLITLESS	GC-MS	M.ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)
SPE	SPE	SPE	SPE	SPE	SPE	SPE	M	GC-FPD/NPD			10	5	SPE		2	SPLIT/ SPLITLESS	GC-MS	M.ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)
MIREX/TPP							M	GC-FPD/NPD			10	5	SPE		2	SPLIT/ SPLITLESS	GC-MS	M.ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
6	D	M	GC-MS	0.02	94.1	15		GPC		2	SPLITLESS	GC-MS	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED
7	D	S	GC-ECD	0.01		10	6 (DICHLOROMETHANE)			4	SPLITLESS	GC-ECD; GC-NPD (80)	RAPPORT I ISTISAN 97/23
8	D	M	GC-MS	0.01	89	30		O		2	SPLITLESS	GC-MS	
9	D	M	GC-MS(ITD)	0.025	95	15		LLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		2	PTV	GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS (1996), MINISTRY OF HEALTH, WELFARE AND SPORTS, THE HAGUE (RJSWIJK), THE NETHERLANDS
10	D	M		0.01	84	25		GPC		2	SSL/PTV	GC-ECD, GC-NPD, GC-MS(ITD)	
11	D	S	GC-MS	0.02	100.5	30				1	ON COLUMN	GC-FFD	
12	D	M	MS(ITD), GC-FFD	0.01	94	50		GPC		1, 2, 5	SPLITLESS	MS(ITD), LC-MS, GC-FFD, GC-ECD	

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
13	D	M	GC-MS/MS	0.02	76,9	15	1		TPP (GC)	10		GC-MS(ITD)	
14	D	S	GC-MS	0.02		15	4			2		GC-ECD GC-TSD GC-MS HPLC-UV	MULTIRESIDUES
15	D	S	GC-MS	0.02	97	25	1			2	SPLITT/ SPLITLESS	GC-NPD	LOCAL SOP NO. MR405012
16	D	M	GC-MS/MS	0.05		15	4			10	LVI SPLITLESS	GC-MS/MS	
17	D	M	GC/MS	0.01		15	4	LLE		10	LVI AUTOSAMPLER	GC-MS	MINI-LUKE
18	D	S	GC-MS	0.02	108	75	1	GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	GC-MS(ITD)	0.02	80	75	1	GPC	DITALIMPHOS	2	SPLITLESS	GC-TSD/PPPD	
20	D	S	GC-ECD	0.02	98	100	3	O		2	MANUAL	GC-NPD	

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON									
LAB CODE	21	22	23	24	25	26	27	28	
SCOPE OF YOUR METHOD	D	D	D	D	D	D	D	D	
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	M	M	M	M	M	M	S	S	
CONFIRMATION METHOD	GC-MS/MS	GC-MS	GC-MS	GC-NPD	GC-MS	GC-MS(ITD)	GC-MS	GC-MS	
RL (mg/Kg)	0.01	0.05	0.01	0.02	<0.02	0.02	0.02	0.02	
RECOVERY (%)		95.2		101.3	90	74			
SAMPLE WEIGHT (g)	10	50	5	30	10	25	30	50	
EXTRACTION SOLVENT	1	6	5	1	6	2	1	6	
CLEAN-UP STEP		LLE (ISOPROPYL ETHER)		GPC	SPE	GPC	GPC	SPE	
INTERNAL STANDARD			FENCHLORPHOS		YES	DITALIMPHOS		YES	
INJECTION VOLUME (µL)	10	2	50	1 mg SAMPLE	2	2	1	1	
INJECTION TYPE	LVI	SPLITLESS	AUTOMATIC TDS SAMPLER	TPOCI	SPLITLESS	SPLITLESS	SPI	ON-COLUMN	
DETERMINATION	GC-MS/MS	GC-ECD AND GC-NPD	TDS IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	GC-ECD	GC-MS	GC-ECD, GC-NPD, GC-MS(ITD)	GC-ECD	GC-MS(ITD)	
REFERENCE METHOD			INTERNAL METHOD	SOP NO.: MR 405012 M1; 308 M2			HUNGARIAN CENTRAL SOP NO.: 405012 M1		

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
29	D	M	GC-MS/MS	0.02	86	15	4			10		GC-MS/MS	MINI LUKE
30	D	S	DIFFERENT COLUMN	0.01		10	1	GPC	DICHLORFENTHION	1	SPLITLESS	GC-ECD GC-NPD	RAPP ISTISAN 97/23
31	D	S	MS	0.02	79	10	6	O		1	SPLITLESS	GC-ECD GC-NPD	ISTISAN 97/23
32	D	S	GC-MS	0.02	69	25	2	GPC		1	SPLITLESS	GC-MSD GC-FPD	\$35 LMBG 00.00-34
33	D	M	GC-MS/MS	0.01		15	1			10	LVI	GC-MS/MS (ION TRAP)	
34	D	M	GC-MS/MS	0.02		5	4			10	AUTO	GC-MS/MS	PESTICIDES MS/MS E-Cl
35	D	M	GC-MS	0.02	98,2	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
36	D	S	GC-MS	0.02	87	25	3	SPE		1	SPLIT/SPLITLESS	GC-FPD GC-ECD GC-MS (SINGLE-QUAD.) LC-MS HPLC-MS HPLC-PICKERING	
37	D	M	GC-FPD	0.02		10	5	O	TRIPHENYLPHOSPHATE	1	SPLIT/SPLITLESS	GC-FPD	ANASTASSIADES, JOURNAL OF AOAC INT. VOLT 86 NO 2, 2003
38	D	M	GC-ECD, GC-NPD, GC-MS	0.02		10	5	O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	D	S	GC-MS	0.01		100	2	GPC, SPE		1	SPLIT	GC-ECD	DFG S 19, L 00.00-34 (§ 35 LIMBG)
40	D	M	GC-MS	0.02		15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
41	D	M	GC-MS	0.01	96.5	20	3			4	SPLITLESS	GC-ECD, GC-NPD	
42	D	M	GC-MS	0.01		10	5	LLE		1	PTV SOLVENT VENT	GC-ECD, GC-MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	LC-MS/MS	0.01	97	10	5	SPE	PCB 138, TRIPHENYLPHOSPHATE	4	PTV	GC-MS EI	ANASTASSIADES ET AL. JAOAC INT: 86 82003)412-431, MODIFIED
44	D	M		0.01		50	2	GPC		2	PTV	GC-MS (SINGLE QUAD)	\$ 35 LMBS 00.00-34
45	D	M	GC-MS								SPLIT/SPLITLESS (SPLITLESS MODE)	GC-ECD OR GC-NPD OR GC-FPD	EN 12393 P METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
46	D	M	GC-NPD	0.02	87	15	4			3µL / 1µL	(PULSED) SPLITLESS/TRACK OVEN ON-COLUMN	GC-NPD / GC-ECD	MULTI-RESIDUE METHOD/PESTICIDES AMENABLE TO GAS CHROMATOGRAPHY (3.1.2 ACETONE-PARTITION FOR FRUITS, VEGETABLES AND POTATOES) 6TH EDITION MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORT, THE NETHERLANDS
47	D	S	GC-ECD	0.02		10	5	SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHER, F. J. SCHENCK ; J. AOAC INT. 86 (2003) 412-431
48	D	M	GC-MS	0.01		25	2	GPC		3	PTV	GC-MS	DFG S 19
49	D	S	GC-FPD	0.01		50	1	LLE		2	SPLITLESS	GC-FPD, GC-NPD, GC-MS(ITD)/MS	METHOD R'EN 12393-2:1999
50	D	S	GC-MS	0.02	96	20	6		COUMAFOS ETHION	2	ON COLUMN		
51	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
52	D	M	GC-ECD	0.02		10		O		1.5	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.02		15		GPC		1	SPLIT/SPLITLESS	-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	D	M	GC-MS	0.01	91	18		GPC		1	SPLITLESS, ONCOLUMN	GC-ECD, FPD,NPD	EN 12393-1,2,3
55	D	M	GC-NPD	0.001	90,6	100		GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	GC-MS	0.228	75,3	30				1	DIRECT	GC-NPD	
57	D	M	GC-MS	0.01		25		GPC		1	PULSED SPLITLESS	GC-ECD/NPD	
58	D	M	GC-FPD	0.02	92	25			TRIBUTHYLPHOSPHATE	1	SPLIT/SPLITLESS	GC-FPD	ANAL.METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
59	D	M	GC-MS	0.01	102	10		O	3	2	SPLITLESS	GC-MS	\$35 L 000034
60	D	M	GC-MS	0.02		15		GPC	ISODRIN	1	SPLIT/ SPLITLESS	GC-ECD/NPD/MS	
61	D	M	GC-MS	0.02		50		GPC		2	PTV	GC-MS	DFG S19 (ASU \$35 LMBG L 00.00-34)
62	D	M	GC-MS	0.02		10			TPP	2		GC-MS	
63	D	M	GC-MS	0.02	97	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	\$ 35 LMBG L.00.00-34
64	D	M	GC-MS	0.02	82	5			TPP	0,5	SPLITLESS	GC-MS	MULTIRESIDUE WITH EXTRELU
65	D	M	GC-MS	0.01	94	5		GPC	AZOBENZENE+RONNEL+ TPP	2	ON-COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
66	D	M	GC-MS/MS	0.02	100	15		SPE		10		GC-MS(ITD)	QUECHERS (LEOTHAY, S. ET AL J.A.O.A.C. INT. (2005) 88, 615-629
67	D	M		0.02	80	10		LLE + SPE	TRIPHENYLPHOSPHATE	10		LC-MS/MS	ANASTASSIADES, M. ET AL, J. AOAC INT. 86 (2003), 412 - 431 QUECHERS - METHOD
68	D	M	GC-MS	0.02	92,4	20				2	SPLITLESS	GC-ECD/NPD	MINI LUKE EXTRACTION
69	D	M	GC-MS	0.02	90	25		GPC		1,0-2,0	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1, ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	D	M	GC-MS/MS	0.02		15		O		10	LVI	GC-ECD/TSD/PFPD GC-MS/MS	QUECHERS
71	D	M	GC-TSD								SPLITLESS	GC-ECD	MULTIRESIDUE METHOD FOR ANALYSIS OF PESTICIDES IN FOODSTUFFS P.A. GREVE ED, 1988, MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIR, RIJSWICK THE NETHERLANDS

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
72	D	S	GC-NPD	0.02	108	100				1	SPLITLESS	GC-ECD, GC-NPD	
73	D	M	GC-MS	0.01	89	30				1	WIDE BORE	GC-NPD	LOCAL SOP
74	D	M	GC-MS	0.005	72.4	25		HEXABROMOBENZENE		1		GC-MS	
75	D	S	LC-MS/MS	0.01	91	50		GPC	TPP	2	SPLIT/ SPLITLESS	GC-NPD	\$35 LMBG L 00.00-34 (1999)
76	D	S	GC-MS	0.01	94	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	D	M	GC-MS		80	15		GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	
79	D	M	GC-MS	0.02	97	15		SPE		2	SPLITLESS	GC-ECD; GC-NPD; GC-MS; LC-MS/MS; HPLC/FLD	INTERNAL METHOD
80	D	M	GC-MS	0.02		50				5	LVI	GC-MS	L-00.00-34

APPENDIX 7. Methods used by participants for determining pesticides.

LAB CODE		DIAZINON											
SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD	
81	NO RESULTS												
82	D	M	GC-ECD	0.02	96	10	5	0 (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FL, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBÄHNER, F. J. SCHENK, J. AOAC INT., 86 (2003) 412-431
83	D	M	GC-MS	0.02	108	30 30	1 1	SPE GPC	TRIPHENYLETHYLENE TRIPHENYLETHYLENE	3 3	SPLITLESS SPLITLESS	GC-MS GC-MS	
84	D	M	GC-MS	0.01	80	50	2			1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	D	M	GC-MS	0.02		25	4			1	SPLITLESS	GC-NPD	SAR-1-04
86	D	M	GC-MS(ITD)	0.025	97	15	4		HCB	1	SSL	GC-MS(ITD)	
87	D	S	LC-MS/MS	0.01		50	6 ETHYLACETATE/ DICHLOROMETHANE (80/20)		TRICHLORONAT	1	ON-COLUMN	GC-FPD	ACCORDING TO EN 12396-1: 1999

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
88	D	M	GC-MS	0.02	90	25	1	GPC		2	SPLITLESS	GC-NPD	IN-HOUSE
89	D	M	GC-MS	0.02	92	15	4			1	SPLIT/ SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	
90	D	M	GC-MS	0.01		50	2	GPC		1	SPLITLESS	GC-NPD	
91	D	S	GC-MS	0.01		50	3	LLE	YES	1	SPLITLESS	GC-NPD	DFG-S8
92	D	M	GC-MS	0.01	100	50	4	LLE	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990) 15TH ED. 985.22, AOAC ARLINGTON VA
93	D	M	GC-MS	0.005		80	2	GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD OR GC-NPD	GC-MS (SINGLE-QUAD)
94	D	S	GC-ECD	0.02	96.8	10	4	SPE		2	SPLITLESS	GC-ECD	
95	S		GC-MS	0.05	92	25	5	SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OG AOAC INTERNATIONAL 78-5-1995

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
96	D	S	GC-MS	0.02	85	25	2	GPC	ISODRIN, CHINOMETHIONAT	1	SPLIT/SPLITLES	GC-ECD GC-NPD; GC-MD (SINGLE-QUAD)	SOP 5.4.CH.1 (ACCORDING TO EN 12393/1-3; AND 35 LMBG L00.0034
97	NA												
98	D	M	GC-MS	0.02	80	10	1	GPC		1	ON-COLUMN	GC-MS	GC-MS MULTI RESIDUE
99	D	M	GC-MS	0.02		20	4	GPC		1	PULSED SPLITLESS	GC-MS	
100	D	M	GC-NPD	0.02	97	25	1			2	SPLITLESS	GC-NPD	MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIRS, NETHERLANDS. ANALYTICAK METHODS FOR RESIDUES OF PESTICIDES IN FOODSTUFFS. MULTIRESIDUE METHOD 1.3.1.1. 6TH EDITION, 1996
101	D												
	M												
	GC-MS												
	0.02												
	98												
	10												
	2												
	SPE												
	1												
	SPLIT/SPLITLESS PTV												
	GC-ECD,NPD,MS												

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
102	D	M	HPLC-DAD	0.02	102	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S	GC-MS	0.020	90	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LC-MS	ANN.FALS.EXP.CHIM. SEPT-OCT 1974-67 N/721-722 PF513-524
104	D	S	GC-MS	0.005		100	2	GPC	TRIPHENYLPHOSPHATE	5	PTV	GC-MS	LMBG §35 L-00.00.-34
105	D	M	GC-NPD	0.03		100	4		ALDRIN	1		GC-NPD, GC-ECD	MULTIRESIDUE METHOD: AOAC 985.22/90 MODIFIED
106	D	S	GC-PFPD	0.01	88	25	6 ETHYLACETATE/DICHLOROMETHANE			1		GC-PFPD GC-NPD GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
107	D	M	GC-MS	0.01	95	100	2	GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19 - DFG
108	D	M	GC-NPD	0.02	80	50	1			2	ON COLUMN	GC NPD	MULTI RESIDUE METHOD 5, ORGANOPHOSPHOROUS COMPOUNDS, MIN. WELFARE THE NETHERLANDS
109	D	M	GC-MS	0.01		10	2			2		GC-ECD GC-NPD GC-FPD GC-MS	
110	D	M	GC-NPD	0.02		50	6	GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE- METHOD DFG S 19
111	D	M	GC-MS	0.02	101,1	50	2	GPC		1	OC; SS	GC-ECD, GC-NPD	\$35 LMBG; L 00.00-34, L 00.00-37
112	D	S	GC-MS	0.01	85	50	6	SPE	YES	1	SPLITLESS	GC-NPD	ISTISAN 97/23
113	D	S	GC-NPD	0.02	96	30	1			1	SPLITLESS	GC-NPD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON									
LAB CODE	114	115	116	117	118	119	120	121	
SCOPE OF YOUR METHOD	D	D	D	D	D	D	D	D	D
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	S	S	S	M	S	S	S	S	S
CONFIRMATION METHOD	GC-MS	GC-MS GC-PFPD	GC-MS	GC-MS	GC-NPD	GC-MS	GC-MS	GC-ECD	GC-ECD
RL (mg/Kg)	0.01	0.01	0.05	0.03	0.02	0.02	0.002	<0.020	
RECOVERY (%)	97,1				108	79,1		60	
SAMPLE WEIGHT (g)	50	50	15	40	5	10	100	100	
EXTRACTION SOLVENT	6	3	6	1	3	3	3	3	3, 1, CYCLOHEXANE, N-HEXANE, IZO-OCTANE, TOLUENE
CLEAN-UP STEP	SPE	SPE	GPC			O	GPC	GPC, SPE	
INTERNAL STANDARD			YES						
INJECTION VOLUME (µL)	1	1	1	1	2	1	1	2	
INJECTION TYPE	SPLITLESS	ON COLUMN	SPLITLESS	SPLITLESS	SPLITLESS	AUTO	SPLIT	SPLITLESS	
DETERMINATION	GC-MS	GC-ECD GC - PFPD GC-MS	GC-ECD GC-NPD GC-MS(ITD)	GC-MS	GC-ECD GC-NPD	GC-ECD GC-MS	GC-ECD GC-NPD	GC-ECD	
REFERENCE METHOD		NFEN12393	RAPPORTO ISTISAN 97/23			ISS B6	PN-EN 12393-1,2,3	PN-EN 12393-1,2,3:2000	

APPENDIX 7. Methods used by participants for determining pesticides.

DIAZINON													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
122	D	S	GC-NPD	0.06	87	50	3	O		1	SPLIT/SPLITLESS	GC-NPD	GC-MS
123	D	S	GC-NPD	0.001	123	50	1	GFC		1	PTV PULSED SPLITLESS	GC-NPD	GC-MS PN-EN 12393:2000 (A)
124	D	S	GC-NPD	0.0025	59.3	20	6	LLE		10	PTV SOLVENT VENT	GC-ECD	PN-EN 12393
125	D	S		0.0012	62.63	25	3	GPC		2	SPLITLESS	GC-ECD	
126	D	S	GC-ECD	0.001		100	3	LLE		1	AUTOSAMPLER	GC-ECD	PN-EN 12393: 2000
127	NO RESULTS												
128	D	M	GC-MS	0.02		20 / 5	1			2	SPLITLESS	GC-ECD, GC-FPD, GC-MSD, GC-MS(ITD)	MODIFIED LUKE

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	LC-MS/MS	0.02		10		SPE	YES	20	N/A	LC-MS/MS	IN HOUSE
2	D	S	LC-MS/MS	0.010	109	10	6			5		LC-MS/MS	KLEIN, J., ALDER, L. (2003): APPLICABILITY OF GRADIENT LIQUID CHROMATOGRAPHY WITH TANDEM MASS SPECTROMETRY TO THE SIMULTANEOUS SCREENING FOR ABOUT 100 PESTICIDES IN CROPS. J. AOAC INT. 86 (5): 1015-1037
3	D	M	GC-MS/MS	0.02	109.3	15	1	NO	TRIPHENYL PHOSPHATE ANTHRACENE	10	SPLIT	GC-MS/MS	
4	D	M	GC-MS	0.001		10	5	SPE		10		LC-MS/MS	QUECHERS: ANASTASSIADES
5	D	M	LC-MS/MS	0.005		10	5	SPE		20		LC-MS/MS	M.ANASTASSIADES ET AL. JAOAC 86. 412-431 (2003)
6	D		GC-PFPD	0.02		15	4	GPC		1	SPLITLESS	GC-PFPD	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
7	D	S	GC-NPD(80)	0.01		10	6 (DICHLOROMETHANE)			4	SPLITLESS	GC-ECD; GC-NPD(80)	RAPPORTI ISTISAN 97/23
8	D	M	GC-MS	0.01	101	30	1	O		2	SPLITLESS	GC-MS	
9	D	S	GC-MS(ITD)	0.01	101	7.5	4 (+Na ₂ SO ₄)	LLC ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN-HOUSE SOP
10	D	M		0.008	75	25	2	GPC		2	SSL/PTV	GC-ECD, GC-NPD, GC-MS(ITD)	
11	D	S	GC-MS	0.02	115	30	1			1	ON COLUMN	GC-FPD	
12	D	M	MS-ITD, GC-FPD	0.01	99	50	1	GPC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	
13	D	M	GC-MS/MS	0.02	90.2	15	1		TPP (OC)	10		GC-MS(ITD)	
14	D	S	GC-MS	0.02		15	4					GC-ECD GC-TSD GC-MS HPLC-UV	MULTIRESIDUES

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE									
LAB CODE	15	16	17	18	19	20	21	22	
SCOPE OF YOUR METHOD	D	D	D	ND	D	D	D	D	
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	S	M	M	S	M	S	M	M	
CONFIRMATION METHOD	GC-MS	GC-MS/MS	GC/MS	GC-MS	GC-MS(ITD)	GC-ECD	GC-MS/MS	GC-MS	
RL (mg/Kg)	0.02	0.05	0.03	0.02	0.02	0.02	0.01	0.009	
RECOVERY (%)	115				83	95	10	102	
SAMPLE WEIGHT (g)	25	15	15	75	75	100	10	20	
EXTRACTION SOLVENT	1	4	4	1	1	3	1	1	
CLEAN-UP STEP			LL	GPC	GPC	O		SPE	
INTERNAL STANDARD				ALDRIN	DITALIMPHOS				
INJECTION VOLUME (µL)	2	10	10	2	2	2	10	1.5	
INJECTION TYPE	SPLIT/ SPLITLESS	LVI SPLITLESS	LVI AUTOSAMPLER	PULSED SPLITLESS	SPLITLESS	MANUAL	LVI	SPLITLESS	
DETERMINATION	GC-NPD	GC-MS/MS	GC-MS	GC-MS	GC-TSD/PFPD	GC-NPD	GC-MS/MS	GC-NPD	
REFERENCE METHOD	LOCAL SOP NO. MR405012		MINI-LUKE						

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE									
LAB CODE	23	24	25	26	27	28	29	30	
SCOPE OF YOUR METHOD	D	D	D	D	D	D	D	D	D
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	M	M	M	M	S	S	M	S	
CONFIRMATION METHOD	GC-MS	GC-ECD	GC-MS	GC-NPD	GC-NPD	GC-MS	GC-MS/MS	DIFFERENT COLUMN	
RL (mg/Kg)	0.02	0.02	<0.05	0.01	0.02	0.05	0.02	0.01	
RECOVERY (%)		109.3	93	84		91	111	95	
SAMPLE WEIGHT (g)	5	30	10	25	30	50	15	10	
EXTRACTION SOLVENT	5	1	6	2	1	6	4	1	
CLEAN-UP STEP		GPC	SPE	GPC	GPC	SPE		GPC	
INTERNAL STANDARD	FENCHLORPHOS		YES	DITALIMPHOS		YES		DICHLORFENTHION	
INJECTION VOLUME (µL)	50	1	2	2	1	1	10	1	
INJECTION TYPE	AUTOMATIC TDS SAMPLER	TPOCI	SPLITLESS	SPLITLESS	SPI	ON COLUMN		SPLITLESS	
DETERMINATION	TDS-IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	GC-NPD	GC-MS	GC-ECD, GC-NPD, GC-MS(ITD)	GC-ECD	GC-MS(ITD)	GC-MS/MS	GC-ECD GC-NPD	
REFERENCE METHOD	INTERNAL METHOD	SOP NO.: MR 405012 M1: 308 M2			HUNGARIAN CENTRAL SOP NO.: 405012 M1		MINI LUKE	RAPP ISTISAN 97/23	

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
31	D	S	MS	0.02	94	10		O		1	SPLITLESS	GC-ECD GC-NPD	ISTISAN 97/23
32	D	S	GC-MS	0.05	101	25		GPC		1	SPLITLESS	GC-MSD	\$35 LMBG 00,00-34
33	D	M	GC-MS/MS	0.01		15				10	LVI	GC-MS/MS (ION TRAP)	
34	D	M	GC-MS/MS	0.02		5				10	AUTO	GC-MS/MS	PESTICIDES MS/MS EI-CI
35	D	M	GC-MS	0.02	90	20				2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S	GC-MS	0.02	85	50				1	SPLIT/SPLITLESS	GC-NPD GC-PPD GC-MS (SINGLE-QUAD.)	
37	D	M	LC-MS/MS	0.005		10		O	DIMETHOATE D6	20		LC-MS/MS (TRIPLE-QUAD)	ANASTASSIADES, JOURNAL OF AOAC INT. VOLT 86 NO 2, 2003
38	D	M	GC-MS	0.02		10				2	SPLITLESS	GC-ECD GC-NPD GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
39	D	M	LC-MS/MS	0.01	105	10	6 (METHANOL/WATER)	SPE		20		LC-MS/MS	LC-MS/MS (BFR)
40	D	M	GC-MS	0.02		15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
41	D	M	GC-MS	0.02	90.8	20	3			4	SPLITLESS	GC-ECD, GC-NPD	
42	D	M	LC-MS/MS	0.01	110	10	5	LLE		20		LC-MS/MS	M. ANASTASSIADES ET AL., JAOAC INT. 86 (2), 412-431, (2003)
43	D	M	NONE	0.01	93	10	5	SPE	TRIPHENYLPHOSPHATE (TPP)	4		LC-MS/MS (ESI +)	ANASTASSIADES ET AL., JAOAC INT. 86 (2003) 412-431, MODIFIED
44	D	M		0.01		50	2	LLE		5		LC-MS/MS	HOUSE METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
45	D	M	GC-MS	0.02	90	25	1	GPC		1	SPLIT/SPLITLESS (SPLITLESS MODE)	GC-ECD OR GC-NPD OR GC-FPD	EN 12393 P METHOD
46	D	M	GC-NPD	0.02	109	15	4			3µl / 1µl	(PULSED) SPLITLESS/(TRACK OVEN) ON-COLUMN	GC-NPD / GC-ECD	MULTI-RESIDUE METHOD/PESTICIDES AMENABLE TO GAS CHROMATOGRAPHY (3.1.2 ACETONE-PARTITION FOR FRUITS, VEGETABLES AND POTATOES) 6TH EDITION MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORT, THE NETHERLANDS
47	D	S	GC-ECD	0.02		10	5	SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAINBAHER, F. J. SCHENCK ; J. AOAC INT. 86 (2003) 412-431
48	D	M	LC-MS/MS	0.01		10	6	SPE		20		LC-MS/MS	KLEIN, J.; ALDER, L. JOURNAL OF AOAC INT. 2003, 86, 1015-1037
49	D	S	GC-FPD	0.02		50	1	LLE		2	SPLITLESS	GC-FPD, GC-NPD, GC-MS(ITD)	METHOD R' EN 12393-2:1999

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
50	D	S	LC-MS	0.02	96	10	4			5		LC-MS/MS	
51	NA												
52	D	M	GC-ECD	0.02		10	5	O		1.5	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.02		15	6	GPC		1	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FL, HPLC-UV	INTERNAL METHOD
54	D	M	GC-MS/MS	0.02	75	18	1	GPC		1	SPLITLESS, ON COLUMN	GC-ECD,FPD,NPD	EN 12393-1,2,3
55	D	M	GC-NPD	0.005	96.2	100	2	GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	GC-MS	0.112	76.9	30	1			1	DIRECT	GC-NPD	
57	D	M	GC-MS	0.01		25	1	GPC		1	PULSED SPLITLESS	GC-ECD/NPD	

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
58	D	M	GC-PPD	0.02	88	25	4		TRIBUTHYLPHOSPHATE	1	SPLIT/SPLITLESS	GC-PPD	ANAL METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
59	D	M	GC-MS	0.02	90.3	10	5	O		2	SPLITLESS	GC-MS	\$35 L 000034
60	D	M	GC-MS	0.02		15	1	GPC	ISODRIN	1	SPLIT/SPLITLESS	GC-ECD/NPD/MS	
61	D	M	LC-MS/MS	0.01		20	METHANOL			10		LC-MS/MS	
62	D	M	GC-MS	0.02		10	1		TPP	2		GC-MS	
63	D	M	GC-MS	0.02	112	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	\$ 35 LMBG L.00.00-34

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
64	D	M	GC-MS	0.02	96	5	6		TPP	0.5	SPLITLESS	GC-MS	MULTIRESIDUE WITH EXTRELUIT
65	D	M	GC-MS	0.02	97	5	1	GPC	AZOBENZENE+RONNEL + TPP	2	ON COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD
66	D	M	GC-MS/MS	0.02	112	15	5	SPE		10		GC-NPD-ECD-FPD(P)	QUECHERS/LEOTHAY, S. ET AL. J.A.O.A.C. INT. (2005) 88, 615-629
67	D	M		0.02	80	10	5	LLE + SPE	TRIPHENYLPHOSPHATE	10		LC-MS/MS	ANASTASSIADES, M. ET AL., J. AOAC INT., 86 (2003), 412 - 431 QUECHERS - METHOD
68	D	S	LC-MS/MS	0.01	90	20	4			5	LOOP	LC-MS/MS	MINI LUKE EXTRACTION

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
69	D	M	GC-MS	0.02	86	25	1	GFC		1.0-2.0	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1, ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	D	M	GC-MS/MS	0.02		15	5	O		10	LVI	GC-ECD/TSD/PFPD GC-MS/MS	QUECHERS
71	D	M	GC-TSD	0.02	118	25	1	O		5	SPLITLESS	GC-TSD	MULTIRESIDUE METHOD FOR ANALYSIS OF PESTICIDES IN FOODSTUFFS P.A. GREVE ED. 1988, MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIR, RUSWICK NETHERLANDS
72	D	S	GC-NPD	0.02	112	100	3			1	SPLITLESS	GC-ECD, GC-NPD	
73	D	M	GC-MS	0.01	100	30	1			1	WIDE BORE	GC-NPD	LOCAL SOP

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
74	D	M	GC-MS	0.01	78.5	25	3	HEXABROMOBENZENE		1		GC-MS	
75	D	M		0.01	109	10	6 METHANOL	LLE (CHEM ELUT)		20		LC-MS/MS	J.AOAC INTERN., 86, 1015FF (2003)
76	D	S	GC-MS	0.01	112	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	D	M	GC-MS		80	15	1	GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	
79	D	M	GC-MS	0.02	91	15	6	SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
80	D	M	LC-MS/MS	0.05		10	6	O		20		LC-MS/MS	KLEIN, J., ALDER, L. (2003) JAOAC INT., 86, 1015-103
81	NO RESULTS												
82	D	M	GC-ECD	0.01	92	10	5	O (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-PPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHNER, F. J. SCHENK; J. AOAC INT., 86 (2003) 412-431
83	D	M	LC-MS/MS GC-MS	0.02	101	10 30	5 1	SPE	TRIPHENYL ETHYLENE	7 3	PARTIAL SPLITLESS	LC-MS/MS GC-MS	
84	D	M	GC-MS	0.02	80	50	2			1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	D	M	GC-MS	0.02		25	4			1	SPLITLESS	GC-NPD	SAR-1-04

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
86	D	M	LC-MS/MS	0.025	77	7.5				10	FULL LOOP	LC-MS/MS	
87	D	M	GC-FPD (OMETHOATE)		77	10	6 METHANOL	LLE		20		LC-MS/MS	JAOAC 86, 5, 1015-1037
88	D	M	GC-MS	0.08	90	25		GPC		2	SPLITLESS	GC-NPD	IN HOUSE
89	D	M	GC-MS	0.02	90	15				1	SPLIT/ SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	
90	D	M	GC-MS	0.01		50		GPC		1	SPLITLESS	GC-NPD	
91	D	M	LC-MS/MS	0.006		10	6 METHANOL	SPE		20		LC-MS/MS	DRAFT § 35 LMBG-METHOD
92	D	M	GC-MS	0.01	126	50		LLE	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990) 15TH ED., 985.22, AOAC ARLINGTON VA

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
93	D	M	GC-MS	0.005		80		GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD OR GC-NPD	GC-MS (SINGLE-QUAD)
94	D	M	GC-ECD	0.02	100.1	10		SPE		2	SPLITLESS	GC-ECD	
95	D	S	GC-MS	0.05	99	25		SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OF AOAC INTERNATIONAL 78-5-1995
96	D	S	GC-MS	0.1	98	25		GPC	ISODRIN, CHINOMETHIONAT	1	SPLIT/SPLITLES	GC-ECD GC-NPD, GC-MS (SINGLE-QUAD)	SOP 5.4.CH.1 (ACCORDING TO EN 12393/1-3; AND 35 LMBG 100.0034
97	NA												
98	D	M	LC-MS/MS	0.02	129	10			CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
103	D	S	GC-MS	0.020	70	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LC-MS	ANN.FALS.EXP.CHIM. SEPT-OCT 1974-87 N/721-722 PP513-524
102	D	M	GC-NPD	0.02	111	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
101	D	M	GC-MS	0.05	96	10	2	SPE		1	SPLIT/SPLITLESS PTV	GC-ECD,NPD,MS	
100	D	M	GC-NPD	0.05	94	25	1			2	SPLITLESS	GC-NPD	MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIRS, NETHERLANDS. ANALYTICAL METHODS FOR RESIDUES OF PESTICIDES IN FOODSTUFFS. MULTIRESIDUE METHOD 1, 3.1.1., 6TH EDITION, 1996
99	D	M	GC-MS	0.05		20	4	GPC		1	PULSED SPLITLESS	GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
104	D	S	GC-MS	0.005		100		GPC	TRIPHENYLPHOSPHATE	2		GC-FPD	LMBG \$35 L-00.00.-34
105	D	M	GC-NPD	0.05		100			ALDRIN	1		GC-NPD, GC-ECD	MULTIRESIDUE METHOD: AOAC 985.22/90 MODIFIED
106	D	S	GC-PFPD	0.01	80	25	6 ETHYLACETATE/DICHLOROMETHANE			1		GC-PFPD NPD GC-MS	
107	D	M	GC-MS	0.005		100		GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19 - DFG
108	D	M	GC-NPD	0.02	110	50				2	ON COLUMN	GC NPD	MULTI RESIDUE METHOD 5, ORGANOPHOSPHOROUS COMPOUNDS.MIN. WELFARE NETHERLANDS
109	D	M	GC-MS	0.02		10				2		GC-ECD GC-NPD GC-FPD GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
110	D	M	GC-NPD	0.02		50	6	GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE-METHOD DFG S 19
111	D	S	LC-MS/MS	0.02	100.3	50	6 METHANOL	SPE		25		LC-MS/MS	VALIDATED IN HOUSE METHOD NACH MULTIMETHOD, KLEIN UND ALDER - DFG WORKSHOP PRESENTED
112	ND			0.01	86	50	6	SPE	YES	1	SPLITLESS	GC-NPD	ISTISAN 97/23
113	D	S	GC-NPD	0.02	105	30	1			1	SPLITLESS	GC-NPD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE
114	D		GC-MS	0.02	70.5	50	6	SPE		1	SPLITLESS	GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
115	D	S	GC-PFPD	0.01		50	3	SPE		1	ON COLUMN	GC-ECD GC-PFPD GC-MS	NFEN12393
116	D			0.01	120	15	6	GPC	YES	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	RAPPORTO ISTISAN 97/23
117	ND			0.03		40	1			1	SPLITLESS	GC-MS	
118	D	S	GC-ECD	0.02	102	5	3			2	SPLITLESS	GC-ECD, GC-NPD	
119	D	S	GC-MS	0.02	106.5	10	3	O		1	AUTO	GC-ECD GC-MS	ISS B6
120	D	S	GC-MS	0.003		100	3	GPC		1	SPLIT	GC-ECD GC-NPD	PN-EN 12393- 1.2,3
121	D	S	GC-ECD	<0.020	75	100	3, 1, CYCLOHEXANE, N-HEXANE, IZO- OCTANE, TOLUENE	GPC, SPE		2	SPLITLESS	GC-ECD	PN-EN 12393-1,2,3:2000

APPENDIX 7. Methods used by participants for determining pesticides.

DIMETHOATE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
122	D	S	GC-NPD	0.07	89	50	3	O		1	SPLIT/SPLITLESS	GC-NPD	GC-MS
123	D	S	GC-NPD	0.004	144	50	1	GPC		1	PTV- PULSED SPLITLESS	GC-NPD	GC-MS,PN-EN 12393:2000 (A)
124	D	S	GC-ECD	0.0065	49.9	20	6	LL		10	PTV-SOLVENT VENT	GC-NPD	PN-EN 12393
125	D	S		0.0025	68.75	25	3	GPC		2	SPLITLESS	GC-ECD	
126	D	S	GC-NPD	0.001		100	3	LL		2	AUTOSAMPLER	GC-NPD	PN-EN 12393:2000
127	NO RESULTS												
128	D	M	GC-MS	0.02		20 / 5	1			2	SPLITLESS	GC-ECD, GC-FPD, GC-MSD, GC-MS(ITD)	MODIFIED LUKE

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	GC-MS	0.05		10	1	SPE	YES	2	SPLIT/SPLITLESS	GC-MS	IN HOUSE
2	D	M	LC-MS/MS	0.010	98	10	6			5		LC-MS/MS	KLEIN, J., ALDER, L. (2003): APPLICABILITY OF GRADIENT LIQUID CHROMATOGRAPHY WITH TANDEM MASS SPECTROMETRY TO THE SIMULTANEOUS SCREENING FOR ABOUT 100 PESTICIDES IN CROPS. J. AOAC INT. 86 (5): 1015-1037
3	NA												
4	D	M	GC-ECD	0.021		10	5	SPE		2	SPLIT/SPLITLESS	GC-MS	QUECHERS: ANASTASSIADES
5	D	M	GC-MS	0.05		10	5	SPE	MIREX/TPP	2	SPLIT/SPLITLESS	GC-ECD/ GC-NPD	M. ANASTASSIADES ET AL. J. AOAC 86, 412-431 (2003)
6	D	M	GC-MS	0.02		15	4	GPC		2	SPLITLESS	GC-MS	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
7	D	S	GC-ECD	0.02		10	6 (DICHLOROMETHANE)			4	SPLITLESS	GC-ECD; GC-NPD(80)	RAPPORTI ISTISAN 97/23
8	D	M	GC-MS	0.05	101	30	1	O		2	SPLITLESS	GC-MS	
9	D	S	GC-MS(ITD)	0.01	96	15	4	LLC ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN-HOUSE SOP
10	NA												
11	D	S		0.05		30	1			1	SPLIT/SPLITLESS	GC-ECD	
12	D	M	LC-MS	0.02	98	50	1	GFC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	
13	NA												
14	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
15	D	S	GC-MS	0.05	114	25	1	GPC		2	SPLIT/SPLITLESS	GC-ECD	LOCAL SOP NO. MR405012
16	NA												
17	NA												
18	D	S	GC-MS	0.03	98	75	1	GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	LC-MS/MS	0.01	85	75	1			5		LC-MS/MS	
20	D	S	GC-NPD	0.05	82	100	3	O		2	MANUAL	GC-NPD	
21	NA												
22	D	M	LC-MS/MS	0.05	84.9	10	METHANOL			5		LC-MS/MS	
23	D	M	HPLC-DAD	0.05		5		SPE FLORISIL		20	AUTOMATIC	HPLC-DAD	INTERNAL METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
24	D	M	GC-MS	0.05	98.2	30		GPC		1 mg SAMPLE	TPOCI	GC-ECD	SOP NO.: MR 405012 M1; 308 M2
25	D	M	GC-MS	<0.02	97	10		SPE	YES	2	SPLITLESS	GC-MS	
26	D	M	LC-MS/MS	0.01	91	10	6 METHANOL 95%-AMMONIACETATE 5%, 20 mM ACETIC ACID		CARBARYL C13	10	SPLITLESS	LC-MS/MS	
27	D	S		0.05		30		GPC		20	RHEODYNE INJECTOR	HPLC-UV	HUNGARIAN CENTRAL SOP NO.: 405012 M1
28	D	S	GC-MS	0.05	84	50		SPE	YES	1	ON COLUMN	GC-MS(ITD)	
29	D	M	LC-MS/MS	0.05	117	15				50		LC-MS/MS	QUECHERS

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
30	D	S	DIFFERENT COLUMN	0.05		10	1	GPC	DICHLOFENTHION	1	SPLITLESS	GC-ECD, GC-NPD	RAPP ISTISAN 97/23
31	D	S	MS	0.05	107	10	6	O		1	SPLITLESS	GC-ECD GC-NPD	ISTISAN 97/23
32	D	S	GC-MS	0.05	87	25	2	GPC		1	SPLITLESS	GC-MS	\$35 LMBG 00.00-34
33	NA												
34	NA												
35	D	M	GC-MS	0.02	102	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S	GC-MS	0.05	85	50	1			1	SPLIT/SPLITLESS	GC-NPD GC-FPD GC-MS (SINGLE-QUAD.)	

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
37	D	M	LC-MS/MS	0.005		10		O	DIMETHOATE D6	20		LC-MS/MS (TRIPLE-QUAD)	ANASTASSIADES, JOURNAL OF AOAC INT. VOLT 86 NO 2, 2003
38	D	M	GC-MS	0.05		10		O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	D	M	LC-MS/MS	0.01	74	10	6 (METHANOL/WATER)	SPE		20		LC-MS/MS	LC-MS/MS (BFR)
40	D	M	GC-MS	0.05		15				1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
41	D	M	GC-MS	0.02	96.5	20				4	SPLITLESS	GC-ECD, GC-NPD	
42	D	M	LC-MS/MS	0.01	93	10		LL		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
43	D	M	GC-MS	0.01	94	10	5		NICARBAZIN	4		LC-MS/MS (ESI-)	ANASTASSIADES ET AL. JAOAC INT. 86 82003) 412-431, MODIFIED
44	D	M		0.03		50	2	LLE		5		LC-MS/MS	HOUSE METHOD
45	D	M	GC-MS	0.05	66	25	1	GPC		1	SPLIT/SPLITLESS (SPLITLESS MODE)	GC-ECD OR GC-NPD OR GC-FFD	EN 12393 P METHOD
46	NA												
47	D	S	GC-ECD	0.01		10	5	SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHER, F. J. SCHENCK : J. AOAC INT. 86 (2003) 412-431
48	D	M	GC-MS	0.02		25	2	GPC		3	PTV	GC-MS	DFG S 19
49	NA												
50	D	S	LC-MS	0.05	100	10	4			5		LC-MS/MS	
51	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
52	D	M	GC-ECD	0.05		10	5	O		1.5	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.05		15	6	GPC		1	SPLIT/ SPLITLESS	GC-ECD, GC- NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	D	M	GC-MS	0.05	80	18	1	GPC		1	SPLITLESS, ON COLUMN	GC-ECD, FPD,NPD	EN 12393-1,2,3
55	D	M	GC-ECD	0.02	90.1	100	2	GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	GC-MS	0.693	91.6	30	1	GPC		1	SPLIT	GC-ECD	
57	D	M	LC-MS/MS	0.01		25	5			5		LC-MS/MS	
58	D	M	LC-MS/MS	0.05	110	10	6	LLE ON CHEM ELUT		100		LC-MS/MS	APPL OF LC-MS/MS (J. KLEIN, L. ALDERS)
59	D	M	GC-MS	0.02	91.3	10	5	O			SPLITLESS	GC-MS	\$35 L 000034

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
60	D	M	GC-MS	0.05		15	1	GPC	ISODRIN	1	SPLIT/SPLITLESS	GC-ECD/NPD/MS	
61	D	M	LC-MS/MS	0.05		20	METHANOL			10		LC-MS/MS	
62	NA												
63	D	M	GC-MS	0.05	88	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	\$ 35 LMBG L.00.00-34
64	NA												
65	D	M	GC-MS	0.05	83	5	1	GPC	AZO BENZENE+ RONNEL+TRIPHENYLPHOSPHATE	2	ON COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD
66	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
67	D	M		0.02	65	10		LLE + SPE	TRIPHENYLPHOSPHATE	10		LC-MSMS	ANASTASSIADES, M. ET AL., J. AOAC INT., 86 (2003), 412 -431 QUECHERS - METHOD
68	D	M	GC-MS	0.02	98.6	20	4			2	SPLITLESS	GC-ECD/NPD	MINI LUKE EXTRACTION
69	D	M	GC-MS	0.05	113	25	1	GPC		1,0-2,0	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1, ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	NA												
71	D	M	GC-TSD	0.1	77	25	1	O		5	SPLITLESS	GC-TSD	MULTIRESIDUE METHOD FOR ANALYSIS OF PESTICIDES IN FOODSTUFFS P.A. GREVE ED, 1988, MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIR, RIJSWICK NETHERLANDS
72	D	S	GC-ECD	0.02	106	100	3			1	SPLITLESS	GC-ECD, GC-NPD	

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID									
LAB CODE	73	74	75	76	77	78	79	80	
SCOPE OF YOUR METHOD	D	D	D	D	NO RESULTS			D	D
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	M	M	S	S				M	M
CONFIRMATION METHOD	GC-ECD	GC-MS	LC-MS/MS	GC-MS				GC-MS	LC-MS/MS
RL (mg/Kg)	0.05	0.05	0.01	0.01				0.05	0.05
RECOVERY (%)	78	103.8	103	130				98	
SAMPLE WEIGHT (g)	30	25	50	10				15	10
EXTRACTION SOLVENT	1	3	2	DICHLOROMETHANE				6	6
CLEAN-UP STEP	GPC	HEXABROMOBENZENE	GPC					SPE	O
INTERNAL STANDARD			TRANS-HCEO						
INJECTION VOLUME (µL)	1	1	2	1				2	20
INJECTION TYPE	SPLIT/ SPLITLESS		SPLIT/ SPLITLESS	SPLITLESS				SPLITLESS	
DETERMINATION	GC-MS (ION TRAP)	GC-MS	GC-ECD	GC-MS				GC-ECD; GC-NPD; GC-MS; LC-MS/MS; HPLC-FLD	LC-MS/MS
REFERENCE METHOD	LOCAL SOP		§35 LMBS L 00.00-34 (1999)					INTERNAL METHOD	KLEIN, J., ALDER, L. (2003) JAOAC INT. 86, 1015-103

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
81	NO RESULTS												
	D	M	GC-ECD	0.02	108	10				1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY D. STAJNBAHNER, F. J. SCHENK: J. AOAC INT., 86 (2003) 412-431
	D	M	GC-MS	0.05	109	30 30		SPE GPC	TRIPHENYL ETHYLENE TRIPHENYL ETHYLENE	3 3	SPLITLESS SPLITLESS	GC-MS GC-MS	
	D	M	GC-MS	0.05	80	50				1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
	NA												
	NA												
87	D	S	LC-MS/MS			50	6 ETHYLACETATE/DICHLOROMETHANE (80/20)						
													ACCORDING TO EN 12396-1: 1999

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
88	D	M	GC-MS	0.05	86	25	1	GPC		1	SPLITLESS	GC-ECD	IN-HOUSE
89	D	M	GC-MS	0.03	90	15	6			1	SPLIT/SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	
90	D	M	GC-MS	0.01		50	2	GPC		1	SPLITLESS	GC-NPD	
91	D	M	LC-MS/MS	0.006		10	6 METHANOL	SPE		20		LC-MS/MS	DRAFT \$ 35 LMBG-METHOD
92	D	M	LC-MS/MS	0.01	76	50	4	LLE		10	LOOP	LC-MS/MS	LC-MULTIRESIDUE
93	D	M	GC-MS	0.02		80	2	GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD OR GC-NPD	GC-MS (SINGLE-QUAD)
94	D	M	GC-NPD	0.05	108.5	10	6	SPE		2	SPLITLESS	GC-NPD	
95	D	S	GC-MS	0.05	100	25	5	SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OF AOAC INTERNATIO NAL 78-5- 1995

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
96	D	S	GC-MS	0.05	102	25	2	GPC	ISODRIN, CHINOMETHIONAT	1	SPLIT/SPLITLESS	GC-ECD GC-NPD; GC-MD (SINGLE-QUAD)	SOP 5.4.CH.1 (ACCORDING TO EN 12393/1-3; AND 35 LM BG L00.0034
97	NA												
98	D	M	LC-MS/MS	0.05	105	10	1		CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	NA												
100	NA												
101	NA												
102	D	S	HPLC-DAD	0.05	89	30	1	GPC		50	AUTOSAMPLER	HPLC-UV	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT- PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2: CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S	GC-MS	0.020	70	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LC-MS	ANN.FALS.EXP.CHI M. SEPT-OCT.1974- 67.N/721-722 PF513-524

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
104	D	S	LC-MS/MS	0.005		10	6 (METHANOL)	DIATOMACEOUS EARTH		25		LC-MS/MS	APPLICATION NOTE BY WATERS
105	NA												
106	D	S	GC-NPD	0.01	75	25	6 ETHYLACETA TE/DICHLOROMETHANE			1		GC-PFPD GC-NPD GC-MS	
107	D	M	GC-MS	0.01		100	2	GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19 - DFG
108	NA												
109	D	S	LC-MS/MS	0.01		10	1			25		LC-MS/MS	
110	D	M	GC-ECD	0.05		50	6	GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE- METHOD DFG S 19

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
111	D	M	GC-MS	0.05	105.3	50	2	GPC		1	OC; SS	GC-ECD GC-NPD	§35 LMBG; L 00.00-34; L 00.00-37
112	NA												
113	D	S	GC-ECD	0.05	86	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
114	D	S	GC-MS	0.01	94	50	6	SPE		1	SPLITLESS	GC-MS	
115	D	S	GC-MS	0.01		50	3	SPE		1	ON COLUMN	GC-ECD GC-PFPD GC-MS	NFEN12393
116	D	S	GC-MS	0.05		15	6	GPC	YES	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	RAPPORTO ISTISAN 97/23
117	NA												
118	D	S	GC-ECD	0.05	104	5	3			2	SPLITLESS	GC-ECD, GC-NPD	

APPENDIX 7. Methods used by participants for determining pesticides.

FENHEXAMID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
119	NA												
120	NA												
121	NA												
122	NA												
123	NA												
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL																		
LAB CODE	1	2	3	4	5	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
D	D	D	D	D	D	D	M	GC-MS	0.05		10		SPE					
M	M	M	M	M	M	M	M	GC-MS	0.05	76	15	4				SPLIT/ SPLITLESS	GC-MS	
GC-MS	GC-NPD	GC-MS/MS	GC-MS/MS	GC-NPD	GC-MS	GC-MS	M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	
0.05	0.05	0.01	0.01	0.05	0.05	0.05	M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	
10	10	15	15	10	10	10	M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	
5	5	1	1	5	5	5	M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	
SPE	SPE	NO	NO	SPE	SPE	SPE	M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	
(MIREX)/TPP		TRIPHENYL PHOSPHATE ANTHRACENE	TRIPHENYL PHOSPHATE ANTHRACENE				M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	
1	2	10	10	2	1	1	M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	
SPLIT/SPLITLESS	SPLIT/SPLITLESS	SPLIT	SPLIT	SPLIT/SPLITLESS	SPLIT/SPLITLESS	SPLIT/SPLITLESS	M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	
GC-MS	GC-MS	GC-MS/MS	GC-MS/MS	GC-MS	GC-MS	GC-MS	M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	
M. ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)	QUECHERS, ANASTASSIADES	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): IMPROVED MULTIRESIDUE GAS CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS, ORGANONITROGEN, AND ORGANOHALOGEN PESTICIDES IN PRODUCE, USING FLAME PHOTOMETRIC AND ELECTROLYTIC CONDUCTIVITY DETECTORS, J. ASSOC. OFF. ANAL. CHEM. 64(5): 1187-1195					M	GC-MS	0.05	74.0	15	1				SPLIT/ SPLITLESS	GC-MS	IN HOUSE

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
6	D	M	GC-MS	0.02	83.5	15	4	GPC		2	SPLITLESS	GC-MS	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED
7	NA												
8	NA												
9	D	M	LC-MS/MS	0.05	106	15	4	LLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		2	PTV	GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS (1996). MINISTRY OF HEALTH, WELFARE AND SPORTS, THE HAGUE (RIJWSLUK), THE NETHERLANDS
10	D	M	0.025	97		25	2	GPC		2	SPLIT/ SPLITLESS PTV	GC-ECD, GC-NPD, GC-MS(ITD)	
11	D	S	0.05	117		30	1			1	SPLIT/SPLITLESS	GC-MS (ION TRAP)	
12	NA												
13	NA												
14	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
15	D	S	GC-MS	0.05	112	25	1	GPC		2	SPLIT/SPLITLESS	GC-ECD	LOCAL SOP NO. MR405012
16	D	M	GC-MS/MS	0.05		15	4			10	LVI SPLITLESS	GC-MS/MS	
17	NA												
18	D	S	GC-MS	0.04		75	1	GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	GC-MS(ITD)	0.05	69	75	1	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD	
20	NA												
21	NA												
22	D	M	LC-MS/MS	0.05	81.2	10	METHANOL			5		LC-MS/MS	
23	D		GC-MS	0.01		5			FENCHLORPHOS	50	AUTOMATIC TDS SAMPLER	TDS-IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	INTERNAL METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
24	D	M	GC-MS	0.05	70.4	30	1			1	TPOCI	GC-NPD	SOP NO.: MR 405012 M1
25	D	M	GC-MS	<0.02	94	10	6	SPE	YES	2	SPLITLESS	GC-MS	
26	D	M	GC-MS(ITD)	0.04	83	25	2	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	
27	D	S		0.05		30	1	GPC		20	RHEODYNE INJECTOR	HPLC-UV	HUNGARIAN CENTRAL SOP NO.: 405012 M1
28	D	S	GC-MS	0.03	90	20	3	GPC		20		LC-MS/MS	
29	D	M	GC-MS/MS	0.05	84	15	4			10		GC-MS/MS	MINI LUKE
30	ND	S	DIFFERENT COLUMN	0.05		10	1	GPC	DICHLOFENTHION	1	SPLITLESS	GC-ECD GC-NPD	RAPP ISTISAN 97/23
31	D		MS	0.05	70	10	6				SPLITLESS	GC-ECD GC-NPD	ISTISAN 97/23

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
32	D	S	GC-MS	0.1	48	25	2	GPC		1	SPLITLESS	GC-MS	\$35.LMBG 00,00-34
33	D	M	GC-MS/MS	0.01		15	1			10	LVI	GC-MS/MS (ION TRAP)	
34	D	M	GC-MS/MS	0.05		5	4			10	AUTO	GC-MS/MS	PESTICIDES MS/MS ELCI
35	D	M	GC-MS	0.02	95	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S	GC-MS	0.05	85	50	1			1	SPLIT/ SPLITLESS	GC-NPD GC-FPD GC-MS (SINGLE QUAD.)	
37	D	M	GC-MS	0.05		10	5	O	TRIPHENYLPHOSPHATE	1	SPLIT/SPLITLESS	GC-MS (SINGLE QUAD)	ANASTASSIADES ET AL. JAOAC INT. VOLT 86 NO. 2, 2003
38	D	M	GC-ECD	0.05		10	5	O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
39	D	M	LC-MS/MS	0.01	80	10	6 (METHANOL/WATER)	SPE		20		LC-MS/MS	LC-MS/MS (BFR)
40	D	M	GC-MS	0.05		15	4			1	SPITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
41	NA												
42	D	M	LC-MS/MS	0.01	94	10	5	LLE		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	GC-MS	0.01	94	10	5	SPE	NICARBAZIN	4		LC-MS/MS(ESH)	ANASTASSIADES ET AL. JAOAC INT. 86 820(3) 412-431, MODIFIED
44	D	M		0.01		50		LLE		5		LC-MS/MS	HOUSE METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
45	D	S	GC-MS	0.04	75	25	1 (IN PRESENCE OF NaOH)	GPC		10	RHEODYNE	HPLC - DAD	CLEAN UP AS IN EN 12393 P METHOD
46	NA												
47	D	S	GC-NPD	0.05		10	5	SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHER, F. J. SCHENCK ; J. AOAC INT. 86 (2003) 412-431
48	D	M	GC-MS	0.01		25	2	GPC		3	PTV	GC-MS	DFG S 19
49	NA												
50	D	S	GC-MS	0.05	117	20	6		DICHLORBENIL	2	ON COLUMN	GC-NPD	
51	NA												
52	D	M	GC-ECD	0.05		10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
53	D	S	GC-MS	0.05		15		GPC		1	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	D	M	GC-MS/MS	0.02	96	10		O		5	LVI	GC-MS/MS	QUECHERS
55	D	M	GC-NPD	0.03	96.7	100		GPC		GC 1 µL HPLC 20 µL	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	GC-MS	0.159	104.5	30				1	SPLITLESS	GC-MS(ITD)	
57	NA												
58	D	M	GC-ECD-NPD	0.05	94	15			PCB119 (ECD) TRIFLURALIN (GC-NPD)	1	SPLIT/SPLITLESS	GC-ECD-NPD	ANAL METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
59	D	M	GC-MS	0.02	73.5	10		O		2	SPLITLESS	GC-MS	\$35 L 000034
60	D		GC-MS	0.05		15		GPC		1	SPLIT/SPLITLESS	GC-ECD/NPD/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
61	D	M	GC-MS	0.05		50		GPC		2	PTV	GC-MS	DFG S19 (ASU §35 LMBG L 00.00-34)
62	NA												
63	D	M	LC-MS/MS	0.05	65	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	§ 35 LMBG L.00.00-34
64	NA												
65	D	M	GC-MS	0.03	91	5		GPC	AZOBEZENE+RONNEL+TRIPHENYLPHOSPHATE	2	ON COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD
66	NA												
67	D	M		0.05		90		GPC		1	SPLIT/SPLITLESS	GC - MS (AGILENT MSD)	OFFICIAL METHOD L 00.00-34; § 35 LMBG

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
68	D	S	LC-MS/MS	0.01	83.1	20	4			5	LOOP	LC-MS/MS	MINI LUKE EXTRACTION
69	D	M	GC-MS	0.02	97	25	1	GPC		1,0-2,0	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1, ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	NA												
71	NA												
72	NA												
73	D	M	GC-MS	0.05	84	30	1			1	WIDE BORE	GC-NPD	LOCAL SOP
74	D	M	GC-MS	0.05	98.7	25	3	HEXABROMOBENZENE		1		GC-MS	
75	D	S	LC-MS/MS	0.01	91	50	2	GPC	TPP	2	SPLIT/SPLITLESS	GC-NPD	\$35 LMBG L.00.00-34 (1999)

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
76	D	S	GC-MS	0.01	91	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	ND	M	GC-MS			15		GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	
79	D	M	GC-MS	0.05	88	15		SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10		O		20		LC-MS/MS	KLEIN, J., ALDER, I. (2003) JAOAC INT. 86, 1015-103
81	NO RESULTS												
82	D	M	GC-ECD	0.02	83	10		0 (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAUBAHNER, F. J. SCHENK: J. AOAC INT., 86 (2003) 412-431
						5							

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
83	D	M	LC-MS/MS GC-MS	0.05	103	10 30	5 1	SPE	TRIPHENYL ETHYLENE	7 3	PARTIAL SPLITLESS	LC-MS/MS GC-MS	
84	ND	M	GC-MS	0.05	80	50	2			1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	NA												
86	D	M	GC-MS(ITD)	0.05	85	15	4		HCB	1	SSL	GC-MS(ITD)	
87	D	S	LC-MS/MS			50	6 ETHYLACETATE/DICHLOROMETHANE (80/20)		TRICHLORONATE	1	ON COLUMN	GC-TSD	ACCORDING TO EN 12396-1: 1999
88	D	M	GC-MS	0.05	82	25	1	GPC		1	SPLITLESS	GC-ECD	IN-HOUSE
89	D	M	GC-MS	0.02	91	15	4			1	SPLIT/SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
90	D			0.02		50	2	GPC		1	SPLITLESS	GC-NPD	
91	ND	S		0.02		50	3	LLE	YES	1	SPLITLESS	GC-NPD	DFG-S8
92	D	M	GC-MS	0.05	102	50	4	LLE	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990) 15TH ED. 985.22, AOAC ARLINGTON VA
93	D	M	GC-MS	0.03		80	2	GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD OR GC-NPD	GC-MS (SINGLE-QUAD)
94	NA												
95	D	S	GC-MS	0.15	93	25	5	SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OG AOAC INTERNATIONAL 78-5-1995
96	D	S	GC-MS	0.05		25	2	GPC	ISODRIN, CHINOMETHIONAT	1	SPLIT/SPLITLESS	GC-ECD GC-NPD; GC-MD (SINGLE-QUAD)	SOP 5.4.CH.1 (ACCORDING TO EN 12393/1-3; AND 35 LIMBG L00.0034

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
97	NA												
98	D	M	LC-MS/MS	0.05	63	10	1		CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	D	M	GC-MS	0.05		20	4	GPC		1	PULSED SPLITLESS	GC-MS	
100	NA												
101	D	M	GC-MS	0.05	90	10	2	SPE		1	SPLIT/SPLITLESS PTV	GC-ECD,NPD,MS	
102	D	M	HPLC-DAD	0.05	104	30	1			2	SPLITLESS	GC-NPD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2: CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
103	D	S	GC-MS	0.020	80	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LS-MS	ANN.FALS.EXP.CHIM. SEPT-OCT 1974-67 NJ721-722 PP513-524
104	D	S	GC-MS	0.005		100	2	GPC	TRIPHENYLPHOSPHATE	5	PTV	GC-MS	LMBG §35 L-00.00.-34
105	D	M	GC-NPD	0.5		100	4		ALDRIN	1		GC-NPD, GC-ECD	MULTIRESIDUE METHOD: AOAC 985.22/90 MODIFIED
106	D	S	GC-NPD	0.01	78	25	6 ETHYLACETATE/ DICHLOROMETHANE			1		GC-PFPD NPD GC-MS	
107	D	M	GC-MS	0.02		100	2	GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19 - DFG
108	NA												
109	D	M	GC-MS	0.05		10	2			2		GC-ECD GC-NPD GC-FPD GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
110	D	M	GC-MS	0.05		50	6	GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE-METHOD DFG S 19
111	D	M	GC-MS	0.05	128.2	50	2	GPC		1	OC, SS	GC-ECD, GC-NPD	\$35 LMBG; L 00.00-34; L 00.00-37
112	NA												
113	D	S	HPLC-UV	0.05	102	30	1	GPC		20 mL/20 mg	MANUAL	HPLC-UV	SOP MR 406012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
114	D	S	GC-MS	0.02	98.2	50	6	SPE		1	SPLITLESS	GC-MS	
115	D	S	GC-MS	0.01		50	3	SPE		1	ON COLUMN	GC-ECD GC-NPD GC-MS	NFEN12393
116	D		GC-MS	0.05		15	6	GPC			SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	RAPPORTO ISTISAN 97/23

APPENDIX 7. Methods used by participants for determining pesticides.

FLUDIOXONIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
117	NA												
118	NA												
119	NA												
120	NA												
121	NA												
122	NA												
123	NA												
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	LC-MS/MS	0.05		10	1	LLE	YES	20	N/A	LC-MS/MS	IN HOUSE
2	D	M	LC-MS/MS	0.010	97	10	6			5		LC-MS/MS	KLEIN, J., ALDER, L. (2003): APPLICABILITY OF GRADIENT LIQUID CHROMATOGRAPHY WITH TANDEM MASS SPECTROMETRY TO THE SIMULTANEOUS SCREENING FOR ABOUT 100 PESTICIDES IN CROPS. J. AOAC INT. 86 (5): 1015-1037
3	NA												
4	D	M		0.003		10	5	SPE		10		LC-MS/MS	QUECHERS; ANASTASSIADES
5	D	M	LC-MS/MS	0.005		10	5	SPE		20		LC-MS/MS	M.ANASTASSIADES ET AL. J AOAC 86, 412-431 (2003)
6	NA												
7	NA												
8	D	M	LC-MS/MS	0.01	104	20	6	LLE		10		LC-MS/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
9	D	S	LC-MS/MS	0.01	98	15	4	ELLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN HOUSE SOP
10	NA												
11	D	S		0.05	86	30	1	O		20		HPLC-UV	
12	D	M	LC-MS	0.02	60	50	1	GFC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	
13	D	M	LC-MS/MS	0.05	110.1	15	1		TPP (QC)	10		LC-MS/MS	
14	NA												
15	D	S	HPLC-UV	0.05	80	25	1	O		25		HPLC-DAD	LOCAL SOP NO. MR405012
16	NA												
17	NA												
18	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
26	D	M	LC-MS/MS	0.01	84	10	6 METHANOL 95%-AMMONIACETATE 5%, 20 mM ACETIC ACID			10	SPLITLESS	LC-MS/MS	
25	D	M	LC-MS/MS	<0.01	85	5				10		LC-MS/MS	
24	D	S	LC-MS/MS	0.05	90	30				1 mg SAMPLE	AUTOSAMPLER	LC-MS/MS	SOP NO.: MR 405012 M1
23	D	M	HPLC-DAD	0.02		5		SPE FLORISIL		20	AUTOMATIC	HPLC-DAD	INTERNAL METHOD
22	D	M	LC-MS/MS	0.05	98	10	METHANOL			5		LC-MS/MS	
21	NA												
20	NA												
19	D	M	LC-MS/MS	0.01	92	75				5		LC-MS/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
27	D	S		0.05		30	1	GPC		20	RHEODYNE INJECTOR	HPLC-UV	HUNGARIAN CENTRAL SOP NO.: 405012 M1
28	D	S	LC-MS/MS	0.04	89	20	3	GPC		20		LC-MS/MS	
29	D	M	LC-MS/MS	0.05	122	15	5			50		LC-MS/MS	QUECHERS
30	NA												
31	NA												
32	NA												
33	NA												
34	NA												
35	NA												
36	D	S	LC-MS	0.05	87	25	3	SPE		1	SPLIT/SPLITLESS	GC-EPD GC-ECD GC-MS (SINGLE-QUAD) LC-MS HPLC-MS HPLC-PICKERING	
37	D	M	LC-MS/MS	0.005		10	5	O	DIMETHOATE D6	20		LC-MS/MS (TRIPLE-QUAD)	ANASTASSIADES, JOURNAL OF AOAC INT. VOLT 86 NO 2, 2003

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
38	NA												
39	D	M	LC-MS/MS	0.01	87	10	6 (METHANOL/WATER)	SPE		20		LC-MS/MS	LC-MS/MS (BFR)
40	NA												
41	NA												
42	D	M	LC-MS/MS	0.01	111	10	5	LL		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	NONE	0.01	91	10	5	SPE	TRIPHENYLPHOSPHATE (TPP)	4		LC-MS/MS(ESI+)	ANASTASSIADES ET AL. JAOAC INT. 86 82/003 412-431, MODIFIED
44	D	M		0.01		50	2	LL		5		LC-MS/MS	HOUSE METHOD
45	D	S		0.04	77	25	1 (IN PRESENCE OF NaOH)	GPC		10	RHEODYNE	HPLC - DAD	CLEAN UP AS IN EN 12393 P METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
46	NA												
47	NA												
48	D	M	LC-MS/MS	0.01		10	6	SPE		20		LC-MS/MS	KLEIN, J.; ALDER, L; JOURNAL OF AOAC INT. 2003, 86, 1015- 1037
49	D	S	LC-MS/MS	0.01		10	6	LLE		20	FULL LOOP	LC-MS/MS	J. KLEIN, L'ALDER ' , JOURNAL OF AOAC INTERNATIONAL VOL.86, NO 5, 2003
50	D	S	LC-MS	0.05	95	10	4			5		LC-MS/MS	
51	NA												
52	NA												
53	D	S	HPLC-DAD	0.05		15	6	GPC		1	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	D	S	LC-MS/MS	0.005	118	5	1			5		LC-MS/MS	JOURNAL OF CHROMATOGRAPHY A,1023(2004),93-104

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
55	D	M	LC-MS/MS	0.01	74	100		GPC		GC 1 µL HPLC 20 µL	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHOD E S19
56	D	S	-	0.454	89.2	30		GPC		20	LOOP	HPLC-UV	
57	D	M	LC-MS/MS	0.01		25				5		LC-MS/MS	
58	D	M	LC-MS/MS	0.05	107	10		LLE ON CHEM ELUT		100		LC-MS/MS	APPL OF LC-MS/MS (J. KLEIN, L. ALDERS)
59	D	M	HPLC-UV	0.05	86.9	50		O	3	2	SPLITLESS	HPLC-FLD OR DAD	METODENVORSC HLAG EG- PROFICIENCY TEST 1996/97
60	D	M	GC-MS	0.05		5				20		LC-MS/MS	
61	D	M	LC-MS/MS	0.01		20	METHANOL			10		LC-MS/MS	
62	NA												
63	D	M	LC-MS/MS	0.05	72	10	METHANOL			20		LC-MS/MS	MULTI RESIDUE METHOD DRAFT BFR

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
64	NA												
65	NA												
66	NA												
67	D	M		0.02	80	10	5	LLE + SPE	TRIPHENYLPHOSPHATE	10		LC-MS/MS	ANASTASSIADES, M. ET AL., J. AOAC INT., 86 (2003), 412 - 431 QUECHERS - METHOD
68	D	S	LC-MS/MS	0.01	88.8	20	4			5	LOOP	LC-MS/MS	MINI LUKE EXTRACTION
69	NA												
70	NA												
71	NA												
72	NA												
73	D	S	HPLC-UV	0.05	84	30	1	GPC; O		10	RHEODYNE	HPLC-UV	LOCAL SOP
74	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
75	D	M		0.01	96	10	6 METHANOL	LLE (CHEMELUT)		20	LC-MS/MS	J.AOAC INTERN. 86 1015FF (2003)	
76	NA												
77	NO RESULTS												
78	ND	M	GC-MS			15	1	GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	
79	D	M	LC-MS	0.05	77	15	6	SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10	6	O		20		LC-MS/MS	KLEIN J., ALDER L. (2003) J.AOAC INT. 86, 1015-103
81	NO RESULTS												
82	NA												
83	D	M	LC-MS/MS	0.05	101	10	5			7	PARTIAL	LC-MS/MS	
84	NA												
85	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
86	D	M	LC-MS/MS	0.025	95	7.5				10	FULL LOOP	LC-MS/MS	
87	D	M			93	10	6 METHANOL	LLE		20		LC-MS/MS	JAOAC 86.5, 1015-1037
88	D	M		0.01	116	5		LLE		10		LC-MS/MS	IN-HOUSE
89	D	M	HPLC-DAD	0.04	85	15				1	SPLIT/SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	
90	D	S	LC-MS/MS	0.05		50		LLE		OCT-25		HPLC-DAD	
91	D	M	LC-MS/MS	0.006		10	6 METHANOL	SPE		20		LC-MS/MS	DRAFT §.35 LMBG-METHOD
92	D	M	LC-MS/MS	0.01	87	50		LLE		10	LOOP	LC-MS/MS	LC-MULTIRESIDUE
93	D	M	LC-MS/MS	0.01		10	6, METHANOL	LLE		20	SAMPLE- LOOP	LC-MS/MS	MULTI- METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
94	NA												
95	NA												
96	NA												
97	NA												
98	D	M	LC-MS/MS	0.05	109	10	1		CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	NA												
100	NA												
101	NA												
102	D	S	HPLC-DAD	0.05	99	30	1			2	SPLITLESS	GC-NPD	SOP-MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE
103	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
104	D	S	LC-MS/MS	0.005		10	6 (METHANOL)	DIATOMACEOUS EARTH		25		LC-MS/MS	APPLICATION NOTE BY WATERS
105	NA												
106	D	S	LC-MS/MS	0.02	77	15	4			10		LC-MS/MS	DE KOK
107	D	M	LC-MS	0.02	78	10	5	O		1	AUTOSAMPLER	HPLC-MS (SINGLE-QUAD)	QUECHERS ANASTASSIADES
108	NA												
109	NA												
110	D	S	LC-MS	0.04		10	6 METHANOL	O		20		HPLC-MS	MULTI-RESIDUE-METHOD HPLC
111	D	S	LC-MS/MS	0.05	99.3	50	6 METHANOL	SPE; LLE		50		HPLC-UV	VALIDATED INHOUSE METHOD NACH PFLANZENSCHUTZ NACHRICHTEN BAYER BD. 46, 1993, 2 PLACKE U. WEBER

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
112	D	S		0.05	100	10		SPE		10		HPLC/DAD	ISTISAN 97/23
113	D	S	HPLC-UV	0.05	88	30	1	GPC		20 mL/20 mg	MANUAL	HPLC-UV	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
114	D	S	LC-MS/MS	0.01	94.5	20	6	SPE		30		LC-MS/MS	WATERS A MULTIRESIDUE LC-MS/MS METHOD FOR PESTICIDES
115	NA												
116	NA												
117	NA												
118	NA												
119	NA												
120	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

IMIDACLOPRID													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
121	NA												
122	NA												
123	NA												
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE																		
LAB CODE	1	2	3	4	5	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
D	D	D	D	D	D	D	M	GC-MS	0.02		10		SPE	YES	2	SPLIT/SPLITLESS	GC-MS	IN HOUSE
M	M	M	M	M	M	M	M	GC-MS	0.020	94	15				1	SPLITLESS	GC-NPD	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): IMPROVED MULTIRESIDUE GAS CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS, ORGANONITROGEN, AND ORGANOHALOGEN PESTICIDES IN PRODUCE, USING FLAME PHOTOMETRIC AND ELECTROLYTIC CONDUCTIVITY DETECTORS. J. ASSOC. OFF. ANAL. CHEM. 64(5): 1187-1195
GC-MS	GC-ECD	GC-MS/MS	GC-MS/MS	GC-ECD	GC-MS	GC-MS/MS	M	GC-MS/MS	0.01	74.0	15		NO	TRIPHENYL PHOSPHATE ANTHRACENE	10	SPLIT	GC-MS/MS	
0.02	0.013			0.013			M	GC-ECD	0.013		10		SPE		2	SPLIT/SPLITLESS	GC-MS	QUECHERS; ANASTASSIADES
90.9							M				10							
10							M				10							
5							M				5							
SPE	SPE	SPE	SPE	SPE	SPE	SPE	M				5							
MIREX/TPP							M											
2							M											
SPLIT/SPLITLESS	SPLIT/SPLITLESS	SPLITLESS	SPLIT	SPLIT/SPLITLESS	SPLIT/SPLITLESS	SPLIT/SPLITLESS	M											
GC-ECD GC-NPD	GC-MS	GC-MS/MS	GC-MS/MS	GC-MS	GC-MS	GC-MS/MS	M											

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
6	D	M	GC-MS	0.02		15		GPC		2	SPLITLESS	GC-MS	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED
7	D	S	GC-ECD	0.01		10	6 (DICHLOROMETHANE)			4	SPLITLESS	GC-ECD; GC-NPD (80)	RAPPORTI ISTISAN 97/23
8	D	M	GC-MS	0.01	81	30		O		2	SPLITLESS	GC-MS	
9	D	M	GC-MS(ITD)	0.025	103	15		LLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		2	PTV	GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS (1996), MINISTRY OF HEALTH, WELFARE AND SPORTS, THE HAGUE (RUSWIJK), THE NETHERLANDS
10	D	M		0.02	88	25		GPC		2	SSL/PTV	GC-ECD, GC-NPD, GC-MS(ITD)	
11	D	S	GC-NPD	0.02	80.6	30				1	SPLIT/ SPLITLESS	GC-MS (ION TRAP)	
12	D	M	MS-ITD, GC-ECD	0.01	88	50		GPC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
13	D	M	GC-MS/MS	0.02	83.5	15	1		TPP (GC)	10		GC-MS(ITD)	
14	D	S	GC-MS	0.02		15	4			2		GC-ECD GC-TSD GC-MS HPLC-UV	MULTIRESIDUES
15	D	S	GC-MS	0.02	107	25	1	GPC		2	SPLIT/ SPLITLESS	GC-ECD	LOCAL SOP NO. MR405012
16	D	M	GC-MS/MS	0.02		15	4			10	LVI SPLITLESS	GC-MS/MS	
17	D	M	GC-MS	0.01		15	4	LLE		10	LVI AUTOSAMPLER	GC-MS	MINI LUKE
18	D	S	GC-MS	0.03	94	75	1	GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	GC-MS(ITD)	0.02	73	75	1	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD	

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
20	D	S	GC-NPD	0.02	93	100		O		1	AUTOSAMPLER	GC-ECD	
21	D	M	GC-MS/MS	0.01		10	1			10	LVI	GC-MS/MS	
22	D	M	GC-MS	0.1	101.6	50	6	LLE (ISOPROPYL ETHER)		2	SPLITLESS	GC-ECD AND GC-NPD	
23	D	M	GC-MS	0.03		5	5		FENCHLORPHOS	50	AUTOMATIC TDS SAMPLER	TDS-IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	INTERNAL METHOD
24	D	M	GC-MS	0.05	90.2	30	1	GPC		1 mg SAMPLE	TPOCI	GC-ECD	SOP NO.: MR 405012/M1, 308 M2
25	D	M	GC-MS	<0.02	96	10	6	SPE	YES	2	SPLITLESS	GC-MS	
26	D	M	GC-ECD	0.01	79	25	2	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE									
LAB CODE	27	28	29	30	31	32	33	34	
SCOPE OF YOUR METHOD	D	D	D	D	D	D	D	D	
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	S	S	M	S	S	S	M	M	
CONFIRMATION METHOD		GC-MS	GC-MS/MS	DIFFERENT COLUMN	MS	GC-MS	GC-MS/MS	GC-MS/MS	
RL (mg/Kg)	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.02	
RECOVERY (%)		99	114	95	92	101			
SAMPLE WEIGHT (g)	30	50	15	10	10	25	15	5	
EXTRACTION SOLVENT	1	6	4	1	6	2	1	4	
CLEAN-UP STEP	GPC	SPE		GPC	O	GPC			
INTERNAL STANDARD		YES		DICHLOFENTHION					
INJECTION VOLUME (µL)	1	1	10	1	1	1	10	10	
INJECTION TYPE	SPI	ON COLUMN		SPLITLESS	SPLITLESS	SPLITLESS	LVI	AUTO	
DETERMINATION	GC-ECD	GC-MS(ITD)	GC-MS/MS	GC-ECD GC-NPD	GC-ECD GC-NPD	GC-MS	GC-MS/MS (ION TRAP)	GC-MS/MS	
REFERENCE METHOD	HUNGARIAN CENTRAL SOP NO.: 405012.M1		MINI LUKE	RAPP ISTISAN 97/23	ISTISAN 97/23	\$35 LMBG 00.00-34		PESTICIDES MS/MS EI-CI	

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
35	D	M	GC-MS	0.02	95	20				2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S	GC-MS	0.02	90	25		SPE		1	SPLIT/SPLITLESS	GC-FPD GC-ECD GC-MS (SINGLE-QUAD) LC-MS HPLC-MS HPLC-PICKERING	
37	D	M	GC-MS	0.02		10		O	TRIPHENYLPHOSPHATE	1	SPLIT/SPLITLESS	GC-MS (SINGLE QUAD)	ANASTASSIADES ET AL. JAOAC INT. VOLT 86 NO. 2, 2003
38	D	M	GC-MS	0.02		10		O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	D	M	LC-MS/MS	0.01	82	10	6 (METHANOL/WATER)	SPE		20		LC-MS/MS	LC-MS/MS (BFR)
40	D	M	GC-MS	0.02		15				1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
41	D	M	GC-MS	0.02	95.9	20				4	SPLITLESS	GC-ECD, GC-NPD	
42	D	M	GC-MS	0.01		10		LLE		1	PTV SOLVENT VENT	GC-ECD, GC-MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	LC-MS/MS	0.02	95	10		SPE	PCB 138, TRIPHENYLPHOSPHATE (TPP)	4	PTV	GC-MS EI	ANASTASSIADES ET AL. JAOAC INT. 86 82003) 412-431, MODIFIED
44	D	M		0.01		50		GPC		2	PTV	GC-MS (SINGLE QUAD)	\$ 35 LMBG 00.00-34
45	D	M	GC-MS	0.07	120	25		GPC		1	SPLIT/SPLITLESS (SPLITLESS MODE)	GC-ECD OR GC-NPD OR GC-FPD	EN 12393 P METHOD
46	D	M	GC-NPD							3 / 1	(PULSED) SPLITLESS/(TRACK OVEN) ON COLUMN	GC-NPD / GC-ECD	MULTI-RESIDUE METHOD/PESTICIDES AMENABLE TO GAS CHROMATOGRAPHY (3.1.2 ACETONE-PARTITION FOR FRUITS, VEGETABLES AND POTATOES) 6TH EDITION MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORT. THE NETHERLANDS

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
47	D	S	GC-ECD	0.02		10		SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAINBAHER, F. J. SCHENCK. J. AOAC INT. 86 (2003) 412-431
48	D	M	GC-MS	0.01		25		GPC		3	PTV	GC-MS	DFG S 19
49	D	S	GC-ECD	0.01		50		LLE		2	SPLITLESS	GC-FPD, GC-NPD, GC-MS(ITD)	METHOD R'EN 12393-2:1999
50	D	S	GC-MS	0.1	113	20			NITROFEN	2	ON COLUMN		
51	NA												
52	D	M	GC-ECD	0.02		10		O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.02		15		GPC		1	SPLIT/SPLITLESS	-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FL, HPLC-UV	INTERNAL METHOD
54	D	M	GC-MS	0.03	87	18		GPC		1	SPLITLESS, ON COLUMN	GC-ECD, FPD,NPD	EN 12393-1,2,3

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE									
LAB CODE	55	56	57	58	59	60	61	62	
SCOPE OF YOUR METHOD	D	D	D	D	D	NA	D	D	
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	M	S	M	M	M		M	M	
CONFIRMATION METHOD	GC-ECD	GC-ECD	GC-MS	GC-ECD/NPD	GC-MS		GC-MS	GC-MS	
RL (mg/Kg)	0.01	0.386	0.01	0.02	0.02		0.02	0.1	
RECOVERY (%)	83.8	80	25	113	95.1		50	10	
SAMPLE WEIGHT (g)	100	30	1	15	10		3	1	
EXTRACTION SOLVENT	2	1	1	4	5		3	1	
CLEAN-UP STEP	GPC		GPC		O		GPC		
INTERNAL STANDARD				PCB119 (ECD) TRIFLURALIN (GC-NPD)	3			TPP	
INJECTION VOLUME (µL)	GC 1 µL HPLC 20 µL	1	1	1	2		2	2	
INJECTION TYPE	SPLIT/SPLITLESS	DIRECT	PULSED SPLITLESS	SPLIT/SPLITLESS	SPLITLESS		PTV		
DETERMINATION	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	GC-NPD	GC-ECD/NPD	GC-ECD/NPD	GC-MS		GC-MS	GC-MS	
REFERENCE METHOD	MODULARE MULTIMETHODE S19			ANAL METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)	\$35 L 000034		DFG S19 (ASU \$35 LMBG L 00.00-34)		

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
63	D	S	GC-MS	0.02	92	75 75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC GPC		1 1		GC-NPD GC-ECD	\$ 35 LMBG L.00.00-34 \$ 35 LMBG L.00.00-34
64	D	M	GC-MS	0.02	90	5			TPP	0.5	SPLITLESS	GC-MS	MULTIRESIDUE WITH EXTRELUT
65	D	M	GC-MS	0.02	81	5		GPC	AZOBEZENE+ RONNEL+ TRIPHENYLPHOSPHATE	2	ON COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD
66	D	M	GC-MS/MS	0.02	110	15		SPE		10		GC-MS(ITD)	QUECHERS(LEOTHAY, S. ET AL. J.A.O.A.C. INT. (2005) 88, 615-629
67	D	M	GC-MS	0.02	90	3		GPC	PARATHION	1	SPLIT/SPLITLESS	GC - NPD	OFFICIAL METHOD L 00.00-34; \$ 35 LMBG

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
68	D	M	GC-MS	0.02	94.4	20	4			2	SPLITLESS	GC-ECD/NPD	MINI-LUKE EXTRACTION
69	D	M	GC-MS	0.02	97	25	1	GPC		1.0-2.0	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1, ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	D	M	GC-MS/MS	0.02		15	5	O		10	LVI	GC-ECD/SD/PPFD GC-MS/MS	QUECHERS
71	D	M	GC-ECD	0.02	83	25	6	O		2	SPLITLESS	GC-ECD	MULTIRESIDUE METHOD FOR ANALYSIS OF PESTICIDES IN FOODSTUFFS P.A. GREVE ED, 1988, MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIR, RIJSWICK NETHERLANDS
72	D	S	GC-ECD	0.02	94	100	3			1	SPLITLESS	GC-ECD GC-NPD	
73	D	S	GC-MS	0.05	89	30	1	GPC		1	SPLIT/SPLITLESS	GC-MS (ION TRAP)	LOCAL SOP

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
74	D	M	GC-MS	0.005	90.1	25		HEXABROMOBENZENE		1		GC-MS	
75	D	S	LC-MS/MS	0.01	96	50		GPC	TPP	2	SPLIT/SPLITLESS	GC-NPD	\$35 LMBG L.00.00-34 (1999)
76	D	S	GC-MS	0.05	95	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	D	M	GC-MS		90	15		GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	
79	D	M	GC-MS	0.02	70	15		SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	GC-MS	0.03		50		8		5	LVI	GC-MS	L-00.00-34
81	NO RESULTS												

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
82	D	M	GC-ECD	0.006	115	10		0 (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBÄHNER, F. J. SCHENK: J. AOAC INT., 86 (2003) 412-431
83	D	M	GC-MS	0.02	107	30		SPE	TRIPHENYL ETHYLENE	3	SPLITLESS	GC-MS	
84	D	M	GC-MS	0.04	80	50				1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	D	M	GC-MS	0.05		25				1	SPLITLESS	GC-ECD	SAR-2.040C
86	D	M	GC-MS(ITD)	0.025	78	15			HCB	1	SPLIT/ SPLITLESS	GC-MS(ITD)	
87	D	S	LC-MS/MS			50	6 ETHYLACETATE/DICHLOROMETHANE (80/20)	SPE-FLORISIL		1		GC-ECD	ACCORDING TO EN 12396-1:1999

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
88	D	M		0.05	87	25	1	GPC		1	SPLITLESS	GC-GC-TOF	IN HOUSE
89	D	M	GC-MS	0.02	83	15	4			1	SPLIT/ SPLITLESS	GC-ECD, FPD, MS, HPLC-F-DAD	
90	D	M	GC-MS	0.02		50	2	GPC		1	SPLITLESS	GC-NPD	
91	D	S	GC-MS	0.02		50	3	LLE		1	SPLIT	GC-ECD	DFG-419
92	D	M	GC-MS	0.02	96	50	4	LLE	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990) 15TH ED., 985.22, AOAC ARLINGTON VA
93	D	M	GC-MS	0.005		80	2	GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD OR GC-NPD	GC-MS (SINGLE-QUAD)
94	D	M	GC-NPD	0.05	102.7	10	4	SPE		2	SPLITLESS	GC-ECD	

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
100	D	M	GC-ECD	0.04	82	25	6	O		2	SPLITLESS	GC-ECD	MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIRS, NETHERLANDS. ANALYTICAL METHODS FOR RESIDUES OF PESTICIDES IN FOODSTUFFS. MULTIRESIDUE METHOD 1, SUBMETHOD 1, PART 1-3, 5TH EDITION, 1988
99	D	M	GC-MS	0.02		20	4	GPC		1	PULSED SPLITLESS	GC-MS	
98	D	M	GC-MS	0.02	115	10	1	GPC		1	ON-COLUMN	GC-MS	GC-MS MULTI RESIDUE
97	NA												
96	D	S	GC-MS	0.02	102	25	2	GPC	ISODRIN, CHINOMETHIONAT	1	SPLIT/SPLITLESS	GC-ECD GC-NPD, GC-MD (SINGLE-GUAD)	SOP 5.4.CH.1 (ACCORDING TO EN 12393/1-3; AND 35 LMBG L00.0034
95	D	S	GC-MS	0.05	103	25	5	SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OG AOAC INTERNATIONAL 78-5-1995

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
101	D	M	GC-MS	0.02	95	10	2	SPE		1	SPLIT/SPLITLESS PTV	GC-ECD,NPD,MS	
102	D	M	GC-NPD	0.05	86	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR-406012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S	GC-MS	0.020	70	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LC-MS	ANN.FALS.EXP.CH IM, SEPT-OCT 1974-67 N/721-722 PP513-524
104	D	S	GC-MS	0.005		100	2	GPC	TRIPHENYLPHOSPHATE	5	PTV	GC-MS	LMBG §35 L-00.00.-34
105	D	M	GC-ECD	0.05		100	4		ALDRIN	1		GC-NPD, GC-ECD	MULTIRESIDUE METHOD: AOAC 985.22/90 MODIFIED

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
106	D	S	GC-NPD	0.01	78	25	6 ETHYLACETATE/DICHLOROMETHANE			1		GC-PFPD NPD GC-MS	
107	D	M	GC-MS	0.005		100	2	GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19 - DFG
108	NA												
109	D	M	GC-MS	0.02		10	2			2		GC-ECD GC-NPD GC-FPD GC-MS	
110	D	M	GC-MS	0.02		50	6	GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE-METHOD DFG S 19
111	D	M	GC-MS	0.02	105.5	50	2	GPC		1	OC; SS	GC-ECD, GC-NPD	\$35 LMBG; L 00.00-34, L 00.00-37
112	ND			0.05	95	50	6	SPE		1	SPLITLESS	GC-ECD	ISTISAN 97/23

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
113	D	S	GC-ECD	0.05	86	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2: CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
114	D	S	GC-MS	0.02	93.2	50	6	SPE		1	SPLITLESS	GC-MS	
115	D	S	GC-MS GC-ECD	0.01		50	3	SPE		1	ON COLUMN	GC-ECD GC-PFPD GC-MS	NFEN12393
116	D	S	GC-MS	0.01	64	15	6	GPC	YES	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	RAPPORTO ISTISAN 97/23
117	ND			0.03		40	1			1	SPLITLESS	GC-MS	
118	D	S	GC-ECD	0.02	84	5	3			2	SPLITLESS	GC-ECD, GC-NPD	
119	D	S	GC-MS	0.02	109.6	10	3			1	AUTO	GC-ECD GC-MS	ISS B6

APPENDIX 7. Methods used by participants for determining pesticides.

IPRODIONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
120	D	S	GC-MS	0.002		100		GPC		1	SPLIT	GC-ECD GC-NPD	PN-EN 12393-1,2,3
121	D	S	GC-ECD	<0.020	50	100	3, 1, CYCLOHEXANE, N-HEXANE, IZO-OCTANE, TOLUENE	GPC, SPE		2	SPLITLESS	GC-ECD	PN-EN 12393-1,2,3,2000
122	NA												
123	NA												
124	NA												
125	NA												
126	ND	S	GC-ECD	0.01		100		LLE		1	AUTOSAMPLER	GC-ECD	PN-EN 12393: 2000
127	NO RESULTS												
128	D	M	GC-MS	0.02		20 / 5				2	SPLITLESS	GC-ECD, GC-FPD, GC-MSD, GC-MS(ITD)	MODIFIED LUKE

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL																		
LAB CODE	1	2	3	4	5	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
D	D	D	D	D	D	D	M	GC-MS	0.05		10		SPE		2	SPLIT/ SPLITLESS	GC-MS	
M	M	S	M	M	M	M	M	GC-MS	0.010	92	15				1	SPLITLESS	GC-ECD	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): IMPROVED MULTIRESIDUE GAS CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS, ORGANONITROGEN, AND ORGANOHALOGEN PESTICIDES IN PRODUCE, USING FLAME PHOTOMETRIC AND ELECTROLYTIC CONDUCTIVITY DETECTORS, J. ASSOC. OFF. ANAL. CHEM. 64(5): 1187-1195
GC-MS	GC-MS/MS	GC-NPD	GC-MS/MS	GC-NPD	GC-MS	GC-MS	M	GC-MS/MS	0.05		15		NO	TRIPHENYL PHOSPHATE ANTHRACENE	10	SPLIT	GC-MS/MS	
0.05	0.008	0.008	0.008	0.008	0.008	0.008	M	GC-NPD	0.008		10		SPE		2	SPLIT/SPLITLESS	GC-MS	QUECHERS; ANASTASSIADES
10	10	10	10	10	10	10	M	GC-NPD			5							M-ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)
SPE	SPE	SPE	SPE	SPE	SPE	SPE	M	GC-NPD			5							
MIREX/TPP							M	GC-NPD			5							

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
6	D	M	GC-MS	0.02	86.9	15		GPC		2	SPLITLESS	GC-MS	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED
7	D	S	GC-ECD	0.01		10	6 (DICHLOROMETHANE)			4	SPLITLESS	GC-ECD; GC-NPD(80)	RAPPORTI ISTISAN 97/23
8	D	M	GC-MS	0.01	100	30		O		2	SPLITLESS	GC-MS	
9	D	S	GC-MS(ITD)	0.01		15		LLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN HOUSE SOP
10	D	M		0.007	93	25		GPC		2	SPLIT/ SPLITLESS PTV	GC-ECD, GC-NPD, GC-MS(ITD)	
11	D	S		0.05	122	30				1	SPLIT/SPLITLESS	GC-MS (ION TRAP)	

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
12	D	M	MS-ITD, GC-ECD	0.01	90	50	1	GPC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	
13	D	M	GC-MS/MS	0.05	90.2	15	1		TPP (GC)	10		GC-MS(ITD)	
14	NA												
15	D	S	GC-MS		50	104	1	GPC		2	SPLIT/SPLITLESS	GC-ECD	LOCAL SOP NO. MR405012
16	D	M	GC-MS/MS	0.05		15	4			10	LVI SPLITLESS	GC-MS/MS	
17	NA												
18	D	S	GC-MS	0.02	147	75	1	GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	GC-MS(ITD)	0.02	74	75	1	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD	

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL									
LAB CODE	20	21	22	23	24	25	26	27	
SCOPE OF YOUR METHOD	D	D	D	D	D	D	D	D	D
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	S	M	M	M	M	M	M	M	S
CONFIRMATION METHOD	GC-NPD	GC-MS/MS	GC-MS	GC-MS	GC-MS	GC-MS	GC-MS(TD)		
RL (mg/Kg)	0.05	0.01	0.06	0.05	0.02	<0.02	0.02	0.05	
RECOVERY (%)	97		98.1		106.6	95	67		
SAMPLE WEIGHT (g)	100	10	50	5	30	10	25	30	
EXTRACTION SOLVENT	3	1	6	5	1	6	2	1	
CLEAN-UP STEP	0		LLE (ISOPROPYL ETHER)		GPC	SPE	GPC	GPC	
INTERNAL STANDARD				FENCHLORPHOS		YES	DITALIMPHOS		
INJECTION VOLUME (µL)	1	10	2	50	1 mg SAMPLE	2	2	1	
INJECTION TYPE	AUTOSAMPLER	LVI	SPLITLESS	AUTOMATIC TDS SAMPLER	TPOCI	SPLITLESS	SPLITLESS		
DETERMINATION	GC-ECD	GC-MS/MS	GC-ECD AND GC-NPD	TDS-IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	GC-ECD	GC-MS	GC-ECD, GC-NPD, GC-MS(TD)	GC-NPD	
REFERENCE METHOD				INTERNAL METHOD	SOP NO.: MR 405012.M1; 308 M2			HUNGARIAN CENTRAL SOP NO.: 405012 M1	

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
28	D	S	GC-MS	0.05	88	50	6	SPE	YES	1	ON COLUMN	GC-MS(ITD)	
29	D	M	GCMS2	0.05	100	15	4			10		GC-MS/MS	MINI LUKE
30	NA												
31	D	S	MS	0.05	94	10	6	O		1	SPLITLESS	GC-ECD GC-NPD	ISTISAN 97/23
32	D	S	GC-MS	0.05	98	25	2	GPC		1	SPLITLESS	GC-MSD	\$35 LMBG 00.00-34
33	NA												
34	D	M	GC-MS/MS	0.05		1	4			10	AUTO	GC-MS/MS	PESTICIDES MS/MS EICI
35	D	M	GC-MS	0.02	96	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
36	D	S	GC-MS	0.05	94	25	3	SPE		1	SPLIT/SPLITLESS	GC-ECD GC-ECD GC-MS (SINGLE-QUAD.) LC-MS HPLC-MS HPLC-PICKERING	
37	D	M	GC-MS	0.02		10	5	O	TRIPHENYLPHOSPHATE	1	SPLIT/SPLITLESS	GC-MS (SINGLE QUAD)	ANASTASSIADES ET AL. JAOAC INT. VOLT 86 NO. 2, 2003
38	D	M	GC-ECD	0.05		10	5	O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	D	S	GC/MS	0.01		100	2	GPC, SPE		1	SPLIT	GC-ECD	DFG S 19, L 00.00-34 (§ 35 LMBG)
40	D	M	GC-MS	0.05		15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
41	D		GC-MS	0.02	92.7	20	3			4	SPLITLESS	GC-ECD, GC-NPD	

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
42	D	M	GC-MS	0.01		10	5	LLE		1	PTV SOLVENT VENT	GC-ECD, GC-MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	LC-MS/MS	0.01	96	10	5	SPE	PCB 138, TRIPHENYLPHOSPHATE (TPP)	4	PTV	GC-MS EI	ANASTASSIADES ET AL. JAOAC INT. 86 82003) 412-431, MODIFIED
44	D	M		0.01		50	2	GPC		2	PTV	GC-MS (SINGLE QUAD)	\$ 35 LMBG 00.00-34
45	D	M	GC-MS	0.05	92	25	1	GPC		1	SPLIT/SPLITLESS (SPLITLESS MODE)	GC-ECD OR GC-NPD OR GC-FPD	EN 12393 P METHOD
46	NA												
47	D	S	GC-ECD	0.05		10	5	SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAINBAHER, F. J. SCHENCK ; J. AOAC INT. 86 (2003) 412-431

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
48	D	M	GC-MS	0.01		25		GPC		3	PTV	GC-MS	DFG S 19
49	D	S	GC-MS(ITD)	0.01		50		LL		2	SPLITLESS	GC-FPD, GC-NPD, GC-MS(ITD)/MS	METHOD R' EN 12393-2:1999
50	D	S	GC-MS	0.05	96	20			NITROFEN	2	ON COLUMN		
51	NA												
52	D	S	GC-ECD	0.05		10		O		1.5	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.05		15		GPC		1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	D	M	GC-MS	0.05	90	18		GPC		1	SPLITLESS ON COLUMN	GC-ECD, FPD/NPD	EN 12393-1,2,3
55	D	M	GC-ECD	0.01	83.3	100		GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
56	D	S	GC-MS	0.532	99.1	30	1	GPC		1	SPLIT	GC-ECD	
57	D	M	GC-MS	0.01		25	1	GPC		1	PULSED SPLITLESS	GC-ECD/NPD	
58	D	M	GC-ECD-NPD	0.01	109	15	4		PCB119 (ECD) TRIFLURALIN (GC-NPD)	1	SPLIT/SPLITLESS	GC-ECD-NPD	ANAL.METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
59	D	M	GC-MS	0.02	97.4	10	5	O	3	2	SPLITLESS	GC-MS	\$35 L 000034
60	D	M	GC-MS	0.05		15	1	GPC	ISODRIN	1	SPLIT/SPLITLESS	GC-ECD/NPD/MS	
61	D	M	GC-MS	0.02		50	3	GPC		2	PTV	GC-MS	DFG S19 (ASU \$35 LMBG L 00.00-34)
62	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
63	D	M	GC-MS	0.05	92	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	\$ 35 LMBG L.00.00-34
64	NA												
65	D	M	GC-MS	0.03	104	5		GPC	AZO BENZENE+RONNEL+TRIPHENYLPHOSPHATE	2	ON COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD
66	D	M	GC-MS/MS	0.05	88	15		SPE		10		GC-MS(ITD)	QUECHERS LEOTHAY, S. ET AL. J.A.O.A.C. INT. (2005) 88, 615-629
67	D	S	GC-MS	0.05		90		GPC + SPE	ALDRIN	1	SPLIT/ SPLITLESS	GC - ECD	OFFICIAL METHOD L 00.00-34; \$ 35 LMBG
68	D	M	GC-MS	0.05	94.8	20				2	SPLITLESS	GC-ECD/NPD	MINI LUKE EXTRACTION

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
69	D	M	GC-MS	0.02	99	25	1	GPC		1.0-2.0	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1, ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	D	M	GC-MS/MS	0.05		15	5	O		10	LVI	GC-ECD/TSD/PFPD GC-MS/MS	QUECHERS
71	D	M	GC-ECD	0.02	107	25	6	O		2	SPLITLESS	GC-ECD	MULTIRESIDUE METHOD FOR ANALYSIS OF PESTICIDES IN FOODSTUFFS P.A. GREVE ED, 1988, MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIR, RIJSWICK NETHERLANDS
72	D	S	GC-ECD	0.02	79	100	3			1	SPLITLESS	GC-EC, GC-NPD	
73	D	M	GC-MS	0.01	78	30	1	GPC		0.5	ON COLUMN	GC-ECD	LOCAL SOP
74	D	M	GC-MS	0.005	73.4	25	3	HEXABROMOBENZENE		1		GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
75	D	M		0.01	114	10	6 METHANOL	LLE (CHEM ELUT)		20	LC-MS/MS	J.AOAC INTERN., 86, 1015FF (2003)	
76	D	S	GC-MS	0.01	88	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	ND	M	GC-MS			15	1	GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	
79	D	M	GC-MS	0.05	81	15	6	SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10	6	O		20		LC-MS/MS	KLEIN, J., ALDER, L. (2003) JAOAC INT. 86, 1015-103
81	NO RESULTS												
82	D	M	GC-ECD	0.02	105	10	5	0 (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-PPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHNER, F. J. SCHENK: J. AOAC INT., 86 (2003) 412-431

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
83	D	M	GC-MS	0.05	109	30 30	1 1	SPE GPC	TRIPHENYLETHYLENE TRIPHENYLETHYLENE	3 3	SPLITLESS SPLITLESS	GC-MS GC-MS	
84	D	M	GC-MS	0.01	80	50	2			1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	D	M	GC-MS	0.05		25	4			1	SPLITLESS	GC-ECD	SAR-2-040C
86	D	M	GC-MS(ITD)	0.025	93	15	4		HCB	1	SSL	GC-MS(ITD)	
87	D	S	GC-MS			50	6 ETHYLACETATE/DICHLOROMETHANE (80/20)	SPE-FLORISIL		1		GC-ECD	ACCORDING TO EN 12396-1:1999
88	D	M	GC-MS	0.16	85	25	1	GPC		2	SPLITLESS	GC-NPD	IN HOUSE

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
89	D	M	GC-MS	0.02	89	15	4			1	SPLIT/ SPLITLESS	GC-ECD FPD MS HPLC-F-DAD	
90	D	M	GC-MS	0.01		50	2	GPC		1	SPLITLESS	GC-NPD	
91	D	S	GC-MS	0.02		50	3	LL	YES	1	SPLITLESS	GC-NPD	DFG-S8
92	D	M	GC-MS	0.03	105	50	4	LL	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1980) 15TH ED., 985.22, AOAC ARLINGTON VA
93	D	M	GC-MS	0.005		80	2	GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD OR GC-NPD	GC-MS (SINGLE-QUAD)
94	D	M	GC-NPD	0.03	104	10	6	SPE		2	SPLITLESS	GC-NPD	
95	D	S	GC-MS	0.05	95	25	5	SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OG AOAC INTERNATIONAL 78-5- 1995

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
96	D	S	GC-MS	0.05		25	2	GPC	ISODRIN, CHINOMETHIONAT	1	SPLIT/SPLITLES	GC-ECD GC-NPD; GC-MD (SINGLE-QUAD)	SOP 5.4.CH.1 (ACCORDING TO EN 12393/1-3; AND 35 LMBG L00.0034
97	NA												
98	D	M	LC-MS/MS	0.05	89	10	1		CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	D	M	GC-MS	0.05		20	4	GPC		1	PULSED SPLITLESS	GC-MS	
100	D	M	GC-ECD	0.02	102	25	6	O		2	SPLITLESS	GC-ECD	MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIRS, NETHERLANDS. ANALYTICAL METHODS FOR RESIDUES OF PESTICIDES IN FOODS TUJFS. MULTIRESIDUE METHOD 1. SUBMETHOD 1, PART 1-3, 5TH EDITION, 1988
101	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
102	D	M	HPLC-DAD	0.02	103	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S	GC-MS	0.010	90	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LC-MS	ANN.FALS.EXP.CHIM. SEPT-OCT 1974-67 N)721-722.PP513-524
104	D	S	GC-MS	0.005		100	2	GPC	TRIPHENYLPHOSPHATE	5	PTV	GC-MS	LMBG §35 L-00.00.-34
105	NA												
106	D	S	GC-ECD	0.01	80	25	6 ETHYLACETATE/DICHLOROMETHANE	SPE		1		GC-ECD ELCD	MESTRES

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
107	D	M	GC-MS	0.02		100	2	GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19 - DFG
108	NA												
109	D	M	GC-MS	0.05		10	2			2		GC-ECD GC-NPD GC-FPD GC-MS	
110	D	M	GC-NPD	0.02		50	6	GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE- METHOD DFG S 19
111	D	M	GC-MS	0.05	106	50	2	GPC		1	OC; SS	GC-ECD, GC-NPD	\$35 LMBG; L 00.00-34; L 00.00-37
112	NA												
113	D	S	GC-NPD	0.02	101	30	1			1	SPLITLESS	GC-NPD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT- PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE
114	D		GC-MS	0.01	102	50	6	SPE		1	SPLITLESS	GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
115	D	S	GC-MS	0.01		50	3	SPE		1	ON COLUMN	GC-ECD GC-PFPD GC-MS	NFEN12393
116	D	S	GC-MS	0.05		15	6	GPC	YES	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	RAPPORTO ISTISAN 97/23
117	NA												
118	D	S	GC-ECD	0.05	82	5	3			2	SPLITLESS	GC-ECD, GC-NPD	
119	NA												
120	NA												
121	NA												
122	D	S	GC-NPD	0.06		50	3	O		1	SPLIT/SPLITLESS	GC-NPD	GC-MS
123	NA												
124	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

KRESOXIM-METHYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
125	D	S		0.0006	76.13	25	3	GPC		2	SPLITLESS	GC-ECD	
126	NA												
127	NO RESULTS												
128	D	M	GC-MS	0.05		20 G / 5G	1			2	SPLITLESS	GC-ECD, GC-FPD, GC-MSD, GC-MS(ITD)	MODIFIED LUKE

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	LC-MS/MS	0.05		10	1	LL	YES	20		LC-MS/MS	IN HOUSE
2	D	M	LC-MS/MS	0.010	93	10	6			5		LC-MS/MS	KLEIN, J., ALDER, L. (2003): APPLICABILITY OF GRADIENT LIQUID CHROMATOGRAPHY WITH TANDEM MASS SPECTROMETRY TO THE SIMULTANEOUS SCREENING FOR ABOUT 100 PESTICIDES IN CROPS. J. AOAC INT. 86 (5): 1015-1037
3	NA												
4	D	M		0.005		10	5	SPE		10		LC-MS/MS	QUECHERS; ANASTASSIADES
5	D	M	LC-MS/MS	0.002		10	5	SPE		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC 86, 412-431 (2003)
6	NA												
7	NA												
8	D	M	GC-MS	0.02	105	10	6	SPE		10		LC-MS/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
9	D	S	LC-MS/MS	0.01	97	15	4	ILE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN HOUSE SOP
10	NA												
11	D	S		0.05	80	30	1	O		20		HPLC-UV	
12	D	M	LC-MS	0.02	73	50	1	GPC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	
13	D	M	LC-MS/MS	0.05	93.5	15	1		TPP (QC)	10		LC-MS/MS	
14	NA												
15	D	S	HPLC-UV	0.05	86	25	1	O		25		HPLC-DAD	LOCAL SOP NO. IMR405012
16	NA												
17	NA												
18	ND	S	GC-MS	0.05		75	1	GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
19	D	M	LC-MS/MS	0.01	98	75				5		LC-MS/MS	
20	NA												
21	NA												
22	D	M	LC-MS/MS	0.05	118.5	10	METHANOL			5		LC-MS/MS	
23	ND	M	GC-MS	0.1		5			FENCHLORPHOS	50	AUTOMATIC TDS SAMPLER	TDS-IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	INTERNAL METHOD
24	D	S	LC-MS/MS	0.05	82.0	30				1 mg SAMPLE	AUTOSAMPLER	LC-MS/MS	SOP NO.: MR 405012 M1
25	D	M	LC-MS/MS	<0.05	94	5				10		LC-MS/MS	
26	D		LC-MS/MS	0.01	114	10	6 METHANOL 95%-AMMONIACETATE 5% 20 mM ACETIC ACID		CARBARYL C13	10	SPLITLESS	LC-MS/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
27	D	S		0.05		30	1	GPC		20	RHEODYNE INJECTOR	HPLC-UV	HUNGARIAN CENTRAL SOP NO.: 405012 M1
28	D	S	HPLC-FLD	0.03	90	20	3	GPC		20		HPLC-FLD	
29	D	S	HPLC-FLD	0.05	85	15	4	SPE (NH ₂)		400		HPLC-FLD	MINI LUKE
30	NA												
31	NA												
32	NA												
33	NA												
34	NA												
35	ND	M	GC-MS	0.05		20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S		0.05	90	25	3	SPE		1	SPLIT/SPLITLESS	GC-FPD GC-ECD GC-MS (SINGLE-QUAD) LC-MS HPLC-MS HPLC-PICKERING	

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
37	D	M	LC-MS/MS	0.005		10		O	DIMETHOATE D6	20		LC-MS/MS (TRIPLE-QUAD)	ANASTASSIADES, JOURNAL OF AOAC INT. VOLT 86 NO 2, 2003
38	NA												
39	D	M	LC-MS/MS	0.01	95	10	6 (METHANOL/WATER)	SPE		20		LC-MS/MS	LC-MS/MS (BFR)
40	NA												
41	NA												
42	D	M	LC-MS/MS	0.01	111	10		LL		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	NONE	0.01	85	10		SPE	TRIPHENYLPHOSPHATE (TPP)	4		LC-MS/MS(ESI+)	ANASTASSIADES ET AL. JAOAC INT. 86.82003 412-431, MODIFIED
44	D	M		0.01		50		LLE		5		LC-MS/MS	HOUSE METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
45	D	S		0.01	78	25	1	GPC	TRIMETACARB	200	RHEODYNE	HPLC - ON LINE DERIVATIZATION - FD	EXTRACTION AND CLEAN UP AS IN EN 12393 P METHOD
46	NA												
47	ND			0.05									
48	D	M	LC-MS/MS	0.01		10	6	SPE		20		LC-MS/MS	KLEIN, J.; ALDER, L.; JOURNAL OF AOAC INTERNATIONAL 2003, 86, 1015-1037
49	D	S	LC-MS/MS	0.01		10	6	LLE		20	FULL LOOP	LC-MS/MS	J. KLEIN, L. ALDER, JOURNAL OF AOAC INTERNATIONAL VOL 86, NO 5, 2003
50	D	S	LC-MS	0.05	101	50	4				50	HPLC-FLD	
51	D	S	HPLC-FLD	0.01	99	50	6	SPE		10		HPLC-FLD	EPA 531.1
52	D	M	GC-MS	0.05		10	5	O		1.5	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
60	D	M	LC-MS/MS	0.05		5				20		LC-MS/MS	
59	D	M	HPLC-FLD	0.05	98.5	10		O	1	20		HPLC-FLD WITH ND	\$ 35 L 2900-6
58	D	S	LC-FLD-PC	0.03	93	15		SPE	BENZIMIDAZOLE	100		LC-DAD-FLD	ANAL.METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
57	D	M	LC-MS/MS	0.01		25				5		LC-MS/MS	
56	D	S	-	0.233	47.7	30		GPC		20	LOOP	HPLC-UV	
55	D	M	HPLC-UV	0.01	88.9	100		GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
54	D	S	LC-MS/MS	0.025	104	5				5		LC-MS/MS	JOURNAL OF CHROMATOGRAPHY A, 1023(2004),93-104

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
61	D	M	LC-MS/MS	0.01		20	METHANOL			10		LC-MS/MS	
62	NA												
63	D	M	LC-MS/MS	0.05	79	10	METHANOL			20		LC-MS/MS	MULTIRESIDUE METHOD DRAFT BFR
64	D	S		0.01	100	5	6			10		HPLC - FLD DERIVATIZED POST-COLUMN	MULTIRESIDUE WITH EXTRELUIT
65	NA												
66	D	S	LC-MS/MS	0.05	88	15	5	SPE		20		LC-MS/MS	
67	D	M		0.05	80	10	5	LLE + SPE	TRIPHENYLPHOSPHATE	10		LC-MS/MS	ANASTASSIADES, M. ET AL., J. AOAC INT., 86 (2003), 412 -431 QUECHERS - METHOD
68	D	S	LC-MS/MS	0.01	77.1	10	4			5	LOOP	LC-MS/MS	MINI LUKE EXTRACTION (SODIUM SULPHATE ADDED)

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
69	ND	M	GC-MS	0.05		25	1	SPE		2	SPLITLESS	GC-NPD	METHYL CARBAMATES S25
70	D	M	HPLC-FLD	0.05		15	5	O		10	LVI	GC-ECD/TSD/PFPD GC-MS/MS	QUECHERS
71	NA												
72	ND	S	GC-NPD	0.05			100	3			1	SPLITLESS	GC-EC, GC-NPD
73	D	S	HPLC-UV	0.05	71	30	1	GPC; O		10	RHEODYNE	HPLC-UV	LOCAL SOP
74	ND	M	HPLC-DAD	0.01	99.8	25	3	SPE		50		HPLC-DAD	
75	D	M		0.01	114	10	6 METHANOL	LLE (CHEM ELUT)		20	LC-MS/MS	J.AOAC INTERN., 86, 1015FF (2003)	
76	NA												
77	NO RESULTS												

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
78	NA												
79	D	M	LC-MS	0.05	69	15	6	SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10	6	O		20		LC-MS/MS	KLEIN, J., ALDER, J. (2003) JAOAC INT. 86, 1015-103
81	NO RESULTS												
82	NA												
83	D	M	LC-MS/MS	0.05	97	10	5			7	PARTIAL	LC-MS/MS	
84	NA												
85	NA												
86	D	M	LC-MS/MS	0.025	70	7.5	4			10	FULL LOOP	LC-MS/MS	
87	D	M			87	10	6 METHANOL	LLE		20		LC-MS/MS	JAOAC 86.5, 1015-1037
88	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
89	D	M	HPLC-DAD	0.04	78	15	6			1	SPLIT/SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	
90	D	S	LC-MS/MS	0.05		50	3	LLE		OCT-25		HPLC-DAD	
91	D	M	LC-MS/MS	0.006		10	6 METHANOL	SPE		20		LC-MS/MS	DRAFT § 35 LIMBG-METHOD
92	D	M	LC-MS/MS	0.01	98	50	4	LLE		10	LOOP	LC-MS/MS	LC-MULTIRESIDUE
93	D	M	LC-MS/MS	0.01		10	6, METHANOL	LLE		20	SAMPLE-LOOP	LC-MS/MS	MULTI-METHOD
94	NA												
95	D	S		0.05	110	25	5	SPE	YES	20		HPLC-MS/MS	
96	NA												
97	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
98	D	M	LC-MS/MS	0.05	101	10	1		CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	NA												
100	NA												
101	D	M		0.05	80	10	2	SPE		1	SPLIT/SPLITLESS PTV	GC-ECD,NPD,MS	
102	D	S	HPLC-DAD	0.05	89	30	1	GPC		50	AUTOSAMPLER	HPLC-UV	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S	LC-MS	0.030	50	1		SPE		1	DIRECT	GC-ECD,GC-NPD GC-FPD GC-MS LC-MS	ANN.FALS.EXP.CHIM. SEPT-OCT 1974-67 N/721-722 PP513-524

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
104	D	S	LC-MS/MS	0.005		10	6 (METHANOL)	DIATOMACEOUS EARTH		25		LC-MS/MS	APPLICATION NOTE BY WATERS
105	NA												
106	D	S	LC-MS/MS	0.02	79	15	4			10		LC-MS/MS	DE KOK
107	D	M	LC-MS	0.01		10	5	O		1	AUTOSAMPLER	HPLC – MS (SINGLE-QUAD)	QUECHERS ANASTASSIADES
108	NA												
109	D	S	LC-MS/MS	0.01		10	1			25		LC-MS/MS	
110	D	S	LC-MS	-		10	6 METHANOL	O		20		HPLC-MS	MULTI-RESIDUE-METHOD HPLC
111	D	S	LC-MS/MS	0.05	102.3	50	6 METHANOL	SPE		25		LC-MS/MS	VALIDATED IN HOUSE METHOD NACH MULTI-METHOD. KLEIN UND ALDER - DFG-WORKSHOP PRESENTED

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
112	NA												
113	D	S	HPLC-UV	0.05	87	30	1	GPC		20 mL/20 mg	MANUAL	HPLC-UV	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
114	D	S	LC-MS/MS	0.01	94.7	20	6	SPE		30		LC-MS/MS	WATERS A MULTIRESIDUE LC-MS/MS METHOD FOR PESTICIDES
115	ND	S	GC-MS	0.01		50	3	SPE		1	ON COLUMN	GC-ECD GC-PPPD GC-MS	NFEN12393
116	D	S	GC-MS	0.1		15	6	GPC	YES	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	RAPPORTO ISTISAN 97/23
117	NA												
118	NA												
119	NA												
120	ND	S	GC-MS	0.006		100	3	GPC		1	SPLIT	GC-ECD, GC-NPD	PN-EN.12393-1,2,3

APPENDIX 7. Methods used by participants for determining pesticides.

METHOMYL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
121	NA												
122	D	S	HPLC-FLD	0.009	90	10	4	SPE	1, 2, 3-TRIMETHACARB	100		HPLC-FLD POSTCOLUMN DERIVATISATION	
123	NA												
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	LC-MS/MS	0.03		10	1	SPE	YES	20	N/A	LC-MS/MS	IN HOUSE
2	D	M	GC-MS	0.030	91	15	4			1	SPLITLESS	GC-NPD	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): IMPROVED MULTIRESIDUE GAS CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS, ORGANONITROGEN, AND ORGANOHALOGEN PESTICIDES IN PRODUCE, USING FLAME PHOTOMETRIC AND ELECTROLYTIC CONDUCTIVITY DETECTORS, J. ASSOC. OFF. ANAL. CHEM. 64(5): 1187-1195
3	D	M	GC-MS/MS	0.02	93.4	15	1	NO	TRIPHENYL PHOSPHATE ANTHRACENE	10	SPLIT	GC-MS/MS	
4	D	M	GC-ECD	0.001		10	5	SPE		10		LC-MS/MS	QUECHERS, ANASTASSIADES
5	D	M	GC-MS	0.03		10	5	SPE	MIREX/TPP	2	SPLIT/SPLITLESS	GC-ECD/ GC-NPD	M.ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
6	D	M	GC-MS	0.02	93.6	15	4	GPC		2	SPLITLESS	GC-MS	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED
7	NA												
8	D	M	GC-MS	0.01	83	30	1	O		2	SPLITLESS	GC-MS	
9	D	S	GC-MS(ITD)	0.01	93	7.5	4 (+Na ₂ SO ₄)	LLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN HOUSE SOP
10	NA												
11	D	S	GC-NPD	0.03	116	30	1			1	ON COLUMN	GC-FPD	
12	D	M	GC-FPD, MS-ITD	0.03	92	50	1	GPC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	
13	D	M	GC-MS	0.02	70.2	15	1		TPP (QC)	1		GC-ECD/TSD	

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
14	D	S	GC-MS	0.05		15	4			2		GC-ECD GC-TSD GC-MS HPLC-UV	MULTIRESIDUES
15	D	S	GC-MS	0.02	131	25	1			2	SPLIT/SPLITLESS	GC-NPD	LOCAL SOP NO. MR405012
16	D	M	GC-MS/MS	0.03		15	4			10	LVI SPLITLESS	GC-MS/MS	
17	D	M	GC/MS	0.02		15	4	LL		10	LVI AUTOSAMPLER	GC-MS	MINI LUKE
18	ND	S	GC-MS	0.02		75	1	GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	GC-MS(ITD)	0.03	69	75	1	GPC	DITALIMPHOS	2	SPLITLESS	GC-TSD/PFPD	
20	D	S	GC-NPD	0.03	81	100	3	O		2	MANUAL	GC-NPD	
21	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
22	D	M	GC-MS	0.02	92.7	20	1	SPE		1.5	SPLITLESS	GC-NPD	
23	ND	M	HPLC-DAD	0.05		5	5	SPE FLORISIL		20	AUTOMATIC	HPLC-DAD	INTERNAL METHOD
24	D	M	LC-MS/MS	0.03		30	1	GPC		1	TPOCI	GC-NPD	SOP NO.: MR 405012 M1; 308 M2
25	D	M	GC-MS	<0.02	99	10	6	SPE	YES	2	SPLITLESS	GC-MS	
26	D	M	GC-NPD	0.02	75	25	2	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	
27	NA												
28	D	S	LC-MS/MS	0.03	89	20	3	GPC		20		LC-MS/MS	
29	D	M	GC-MS/MS	0.03	40	15	4			10		GC-MS/MS	MINI LUKE

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
30	ND	S	DIFFERENT COLUMN	0.05		10	1	GPC	DICHLOFENTHION	1	SPLITLESS	GC-ECD GC-NPD	RAPP ISTISAN 97/23
31	D	S	MS	0.05	101	10	6	O		1	SPLITLESS	GC-ECD GC-NPD	ISTISAN 97/23
32	NA												
33	NA												
34	NA												
35	D	M	GC-MS	0.02	100	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S	GC-MS	0.02	90	25	3	SPE		1	SPLIT/SPLITLESS	GC-FPD GC-ECD GC-MS (SINGLE-QUAD) LC-MS, HPLC-MS HPLC-PICKERING	
37	D	M	LC-MS/MS	0.005		10	5	O	DIMETHOATE D6	20		LC-MS/MS (TRIPLE-QUAD)	ANASTASSIADES, JOURNAL OF AOAC INT. VOLT 86 NO 2, 2003

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
43	D	M	GC-MS	0.01	89	10	5	SPE	TRIPHENYLPHOSPHATE (TPP)	4		LC-MS/MS(ESH+)	ANASTASSIADES ET AL. JAOAC INT. 86 82003 412-431. MODIFIED
40	D	M	GC-MS	0.03		15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR PUBLIC PROTECTION, MINISTRY OF HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
39	D	M	LC-MS/MS	0.01	97	10	6 (METHANOL/WATER)	SPE		20		LC-MS/MS	LC-MS/MS (BFR)
38	D	M	GC-ECD	0.03		10	5	O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
42	D	M	LC-MS/MS	0.01	115	10	5	LL		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
41	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
44	D	M		0.01		50	2	GPC		2	PTV	GC-MS (SINGLE QUAD)	\$ 35 LMBG 00.00-34
45	D	M		0.03	78	25	1	GPC		1	SPLIT/SPLITLESS (SPLITLESS MODE)	GC-ECD OR GC-NPD OR GC-FPD	EN 12393 P METHOD
46	NA												
47	D	S	GC-MS	0.03		10	5	SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAINBAHER, F. J. SCHENCK; J. AOAC INT. 86 (2003) 412-431
48	D	M	LC-MS/MS	0.01		10	6	SPE		20		LC-MS/MS	KLEIN, J.; ALDER, L.; JOURNAL OF AOAC INT. 2003, 86, 1015-1037
49	D	S	GC-FPD	0.01		50	1	LL		2	SPLITLESS	GC-FPD, GC-NPD, GC-MS(ITD)	METHOD R'EN 12393-2:1999
50	D	S	LC-MS	0.03	91	10	4			5		LC-MS/MS	
51	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
52	D	M	GC-MS	0.03		10		O		1.5	SPLIT/ SPLITLESS	GC-ECD GC-NPD GC-MS	QUECHERS
53	D	S	GC-MS	0.03		15		GPC		1	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	NA												
55	D	M	GC-FPD	0.01	65.7	100		GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	GC-NPD	0.845	75	30				1	DIRECT	GC-NPD	
57	D	M	GC-MS	0.01		25		GPC		1	PULSED SPLITLESS	GC-ECD/NPD	
58	D	M	GC-FPD	0.02	70	25			TRIBUTHYLPHOSPHATE	1	SPLIT/SPLITLESS	GC-FPD	ANAL METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
59	D	M	GC-MS	0.02	68.2	10		O		2	SPLITLESS	GC-MS	\$35 L 000034
						5							

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
60	D	M	GC-MS	0.03		15		GPC	ISODRIN	1	SPLIT/SPLITLESS	GC-ECD/NPD/MS	
61	D	M	LC-MS/MS	0.01		20	METHANOL			10		LC-MS/MS	
62	D	M	GC-MS	0.02		10			TPP	2		GC-MS	
63	D	M	GC-MS	0.03	73	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	\$ 35 LMBG L.00.00-34
64	D	M	GC-MS	0.03	100	5			TPP	0.5	SPLITLESS	GC-MS	MULTIRESIDUE WITH EXTRELU
65	D	M	GC-MS	0.02	84	5		GPC	AZOBEZENE+RONNEL+TRIPHENYLPHOSPHATE	2	ON COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
66	D	M	GC-MS/MS	0.03	93	15		SPE		10		GC-NPD-ECD-FPD(P)	QUECHERS(LEOTHAY, S. ET AL. J.A.O.A.C. INT. (2005) 88, 615-629
67	D	M		0.02	80	10		LLE + SPE	TRIPHENYLPHOSPHATE	10		LC-MS/MS	ANASTASSIADES, M. ET AL., J. AOAC INT., 86 (2003), 412 – 431 QUECHERS - METHOD
68	D	S	LC-MS/MS	0.01	77.1	10				5	LOOP	LC-MS/MS	MINI-LUKE EXTRACTION
69	D	M	GC-MS	0.02	71	25	6. METHANOL	SPE		1.0-2.0	SPLITLESS	GC-NPD	IN-HOUSE METHOD
70	NA												
71	D	M	GC-TSD	0.02	129	25		O		5	SPLITLESS	GC-TSD	MULTIRESIDUE METHOD FOR ANALYSIS OF PESTICIDES IN FOODSTUFFS P.A. GREVE ED, 1988, MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIR, RUSWICK NETHERLANDS
72	D		GC-NPD	0.03	76	100				1	SPLITLESS	GC-ECD GC-NPD	

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
73	D	S	GC-MS	0.01	75	30		GPC; O		10	RHEODYNE	HPLC-UV	LOCAL SOP
74	D	M	GC-MS	0.02	87.5	25		SPE		50		HPLC – DAD	
75	D	M		0.01	96	10	6 METHANOL	LLE (CHEM ELUT)		20	LC-MS/MS	JAOAC INTERN., 86, 1015FF (2003)	
76	D	S	GC-MS	0.01	119	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	D	M	GC-MS		80	15		GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	
79	D	M	GC-MS	0.03	95	15		SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	LC-MS/MS	0.03		10		O		20		LC-MS/MS	KLEIN, J., ALDER, J. (2003) JAOAC INT. 86, 1015-103

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
81	NO RESULTS												
82	D	M	GC-NPD	0.02	87	10	5	0 (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAUBAHNER, F. J. SCHENK: J. AOAC INT., 86 (2003) 412-431
83	D	M	LC-MS/MS GC-MS	0.03	100	10 30	5 1	SPE	TRIPHENYLETHENE	7 3	PARTIAL SPLITLESS	LC-MS/MS GC-MS	
84	ND	M	GC-MS	0.1	80	50	2			1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	NA												
86	D	M	LC-MS/MS	0.025	78	7.5	4			10	FULL LOOP	LC-MS/MS	
87	NA												
88	D	M	GC-MS	0.1	87	25	1	GPC		2	SPLITLESS	GC-NPD	IN HOUSE

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
89	D	M	GC-MS	0.02	85	15	6			1	SPLIT/SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	
90	D	S	LC-MS/MS	0.01		50	3	LL		OCT-25		HPLC-DAD	
91	D	S	GC-MS	0.02		50	3	LL	YES	1	SPLITLESS	GC-NPD	DFG-S8
92	D	M	GC-MS	0.1	101	50	4	LL	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990), 15TH ED., 985.22, AOAC, ARLINGTON VA
93	D	M	LC-MS/MS	0.005		80	2	GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD ONLY OR GC-NPD ONLY	LC-MS/MS (MULTIMETHOD, 2 COLUMNS)
94	D	M	GC-NPD	0.03	72.4	10	6	SPE		2	SPLITLESS	GC-NPD	
95	D	S	GC-MS	0.1	115	25	5	SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OF AOAC INTERNATIONAL 78- 5-1995

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
96	NA												
97	NA												
98	D	M	LC-MS/MS	0.02	121	10			CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	NA												
100	D	M	GC-NPD	0.1	81	25				2	SPLITLESS	GC-NPD	MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIRS, NETHERLANDS. ANALYTICAL METHODS FOR RESIDUES OF PESTICIDES IN FOODSTUFFS. MULTIRESIDUE METHOD 1, 3.1.1., 6TH EDITION, 1996
101	NA												
102	D	M	GC-NPD	0.05	89	30				2	SPLITLESS	GC-NPD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE, SOP 308M2: CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
104	D	S	LC-MS/MS	0.005		10	6 (METHANOL)	DIATOMACEOUS EARTH		25		LC-MS/MS	APPLICATION NOTE BY WATERS
105	D	M	GC-NPD	0.1		100			ALDRIN	1		GC-NPD GC-ECD	MULTIRESIDUE METHOD: AOAC 985.22/90 MODIFIED
106	D	S	GC-PFPD	0.01	77	25	6 ETHYLACETATE/DICHLOROMETHANE			1		GC-PFPD NPD GC-MS	
107	D	M	GC-MS	0.01		100		GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS(SINGLE-QUAD)	S19 - DFG
108	NA												
109	D	M	GC-MS	0.02		10				2		GC-ECD GC-NPD GC-FPD GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
110	D	M	GC-NPD	0.01		50	6	GFC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE-METHOD DFG S 19
111	D	S	LC-MS/MS	0.03	99.7	50	6 METHANOL	SPE		25		LC-MS/MS	VALIDATED IN HOUSE METHOD NACH MULTI- METHOD, KLEIN UND ALDER -DFG WORKSHOP PRESENTED
112	NA												
113	D	S	GC-NPD	0.05	89	30	1			1	SPLITLESS	GC-NPD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE
114	D	S	LC-MS/MS	0.01	96.5	20	6	SPE		30		LC-MS/MS	WATERS A MULTIRESIDUE LC- MS/MS METHOD FOR PESTICIDES
115	D	S	GC-MS	0.01		50	3	SPE		1	ON COLUMN	GC-ECD GC-PFPD GC-MS	NFEN12393

APPENDIX 7. Methods used by participants for determining pesticides.

MONOCROTOPHOS													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
116	ND			0.03		15	6	GPC	YES	1	SPLITLESS	GC-ECD GC-NPD GC-MS(ITD)	RAPPORTO ISTISAN 97/23
117	NA												
118	D	S	GC-NPD	0.03	78	5	3			2	SPLITLESS	GC-ECD GC-NPD	
119	D	S	GC-MS			10	3	O		1	AUTO	GC-ECD GC-MS	ISS B6
120	NA												
121	NA												
122	NA												
123	NA												
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	GC-MS	0.02		10		SPE	YES	2	SPLIT/SPLITLESS	GC-MS	IN HOUSE
2	D	S	GC-MS	0.010	91	15				1	SPLITLESS	GC-ECD	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): IMPROVED MULTIRESIDUE GAS CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS, ORGANONITROGEN, AND ORGANOHALOGEN PESTICIDES IN PRODUCE, USING FLAME PHOTOMETRIC AND ELECTROLYTIC CONDUCTIVITY DETECTORS. J. ASSOC. OFF. ANAL. CHEM. 64(5): 1187-1196
3	D	M	GC-MS/MS	0.02	84.5	15		NO	TRIPHENYL PHOSPHATE ANTHRACENE	10	SPLIT	GC-MS/MS	
4	D	M	GC-NPD	0.015		10		SPE		2	SPLIT/SPLITLESS	GC-MS	QUECHERS, ANASTASSIADES
5	D	M	GC-MS	0.02		10		SPE	MIREX/TPP	2	SPLIT/SPLITLESS	GC-ECD/ GC-NPD	M.ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
6	D	M	GC-MS	0.02	96.1	15		GPC		2	SPLITLESS	GC-MS	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED
7	D	S	GC-NPD80	0.01		10	6 (DICHLOROMETHANE)			4	SPLITLESS	GC-ECD; GC-NPD(80)	RAPPORT IJSTISAN 97/23
8	D	M	GC-MS	0.01	105	30		O		2	SPLITLESS	GC-MS	
9	D	M	GC-MS(ITD)	0.025	98	15		ILLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		2	PTV	GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS (1996), MINISTRY OF HEALTH, WELFARE AND SPORTS, THE HAGUE (RIJSWIJK), THE NETHERLANDS
10	D	M		0.02	83	25		GPC		2	SPLIT/ SPLITLESS PTV	GC-ECD, GC-NPD, GC-MS(ITD)	
11	D	S	GC-MS	0.01	96	30				1	SPLIT/SPLITLESS	GC-ECD	
12	D	M	MS-ITD, GC-ECD	0.02	77	50		GPC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
13	D	M	GC-MS/MS	0.02	81.9	15	1		TPP (GC)	10		GC-MS(ITD)	
14	D	S	GC-MS	0.02		15	4			2		GC-ECD GC-TSD GC-MS HPLC-UV	MULTIRESIDUES
15	D	S	GC-MS	0.02	117	25	1	GPC		2	SPLIT/ SPLITLESS	GC-ECD	LOCAL SOP NO. MR405012
16	D	M	GC-MS/MS	0.02		15	4			10	LVI SPLITLESS	GC-MS/MS	
17	D	M	GC-MS	0.01		15	4	LL		10	LVI AUTOSAMPLER	GC-MS	MINI LUKE
18	D	S	GC-MS	0.02	123	75	1	GPC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	GC-MS(ITD)	0.02	80	75	1	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD	
20	D	S	GC-NPD	0.02	90	100	3	O		1	AUTOSAMPLER	GC-ECD	

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
21	D	M	GC-MS/MS	0.01		10				10	LVI	GC-MS/MS	
22	D	M	GC-MS	0.28	88.4	50	6	LLE (ISOPROPYL ETHER)		2	SPLITLESS	GC-ECD AND GC-NPD	
23	D	M	GC-MS	0.01		5	5		FENCHLORPHOS	50	AUTOMATIC TDS SAMPLER	TDS-IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	INTERNAL METHOD
24	D	M	GC-NPD	0.02	101.7	30	1	GPC		1 mg SAMPLE	TPOCI	GC-ECD	SOP NO.: MR 405012 M1; 308 M2
25	D	M	GC-MS	<0.02	94	10	6	SPE	YES	2	SPLITLESS	GC-MS	
26	D	M	GC-ECD	0.01	77	25	2	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	
27	D	S		0.02		30	1	GPC		1	SPI	GC-ECD	HUNGARIAN CENTRAL SOP NO.: 405012 M1

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE									
LAB CODE	28	29	30	31	32	33	34	35	
SCOPE OF YOUR METHOD	D	D	D	D	D	D	D	D	
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	S	M	S	S	S	M	M	M	
CONFIRMATION METHOD	GC-MS	GC-MS/MS	DIFFERENT COLUMN	MS	GC-MS	GC-MS/MS	GC-MS/MS	GC-MS	
RL (mg/Kg)	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	
RECOVERY (%)	88	106	98	99	95			95	
SAMPLE WEIGHT (g)	50	15	10	10	25	15	1	20	
EXTRACTION SOLVENT	6	4	1	6	2	1	4	3	
CLEAN-UP STEP	SPE		GPC	O	GPC				
INTERNAL STANDARD	YES		DICHLOFENTHION						
INJECTION VOLUME (µL)	1	10	1	1	1	10	10	2	
INJECTION TYPE	ON COLUMN		SPLITLESS	SPLITLESS	SPLITLESS	LVI	AUTO	SPLITLESS	
DETERMINATION	GC-MS(ITD)	GC-MS/MS	GC-ECD GC-NPD	GC-ECD GC-NPD	GC-MSD	GC-MS/MS (ION TRAP)	GC-MS/MS	GC-ECD, NPD	
REFERENCE METHOD		MINI LUKE	RAPP ISTISAN 97/23	ISTISAN 97/23	\$35 LMBG 00,00-34		PESTICIDES MS/MS EI-CI	EN 12393-1, 2, 3	

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
36	D	S	GC-MS	0.02	91	25	3	SPE		1	SPLIT/SPLITLESS	GC-FPD GC-ECD GC-MS (SINGLE-QUAD) LC-MS HPLC-MS HPLC-PICKERING	
37	D	M	GC-MS	0.02		10	5	O	TRIPHENYLPHOSPHATE	1	SPLIT/SPLITLESS	GC-MS (SINGLE QUAD)	ANASTASSIADES ET AL. JAOAC INT. VOLT 86 NO. 2, 2003
38	D	M	GC-NPD	0.02		10	5	O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	D	S	GC-MS	0.01		100	2	GPC, SPE		1	SPLIT	GC-ECD	DFG S 19, L 00.00-34 (§ 35 LMBG)
40	D	M	GC-MS	0.05		15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996, GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
41	D	M	GC-MS	0.02	95.2	20	3			4	SPLITLESS	GC-ECD, GC-NPD	

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
42	D	M	GC-MS	0.01		10		LLE		1	PTV SOLVENT VENT	GC-ECD GC-MS	M. ANASTASSIADES ET AL., J. AOAC INT., 86 (2), 412-431, (2003)
43	D	M	NONE	0.01	101	10		SPE	PCB 138, TRIPHENYLPHOSPHATE (TPP)	4	PTV	GC-MS EI	ANASTASSIADES ET AL., JAOAC INT. 86 82003)412-431, MODIFIED
44	D	M		0.01		50		GPC		2	PTV	GC-MS (SINGLE QUAD)	§ 35 LMBG 00.00- 34
45	D	M	GC-MS	0.03	97	25		GPC		1	SPLIT/SPLITLESS (SPLITLESS MODE)	GC-ECD OR GC-NPD OR GC-PPD	EN 12393 P METHOD
46	D	M	GC-ECD	0.02	79	15				3 / 1	(PULSED) SPLITLESS/TRACK OVEN) ON- COLUMN	GC-NPD / GC-ECD	MULTI-RESIDUE METHOD/PESTICIDES AMENABLE TO GAS CHROMATOGRAPHY (3.1.2 ACETONE-PARTITION FOR FRUITS, VEGETABLES AND POTATOES) 6TH EDITION MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORT. THE NETHERLANDS

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
47	D	S	GC-ECD	0.02		10	5	SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHER, F. J. SCHENCK : J. AOAC INT. 86 (2003) 412-431
48	D	M	GC-MS	0.01		25	2	GPC		3	PTV	GC-MS	DFG S 19
49	D	S	GC-ECD	0.01		50	1	LL		2	SPLITLESS	GC-FPD, GC-NPD, GC-MS(ITD)	METHOD R'EN 12393.2:1999
50	D	S	GC-MS	0.02	107	20	6		NITROFEN	2	ON COLUMN	GC-ECD	
51	NA												
52	D	S	GC-ECD	0.02		10	5	O		1.5	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.02		15	6	GPC		1	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	D	M	GC-MS	0.02	88	18	1	GPC		1	SPLITLESS, ON COLUMN	GC-ECD, FPD,NPD	EN 12393-1,2,3

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
55	D	M	GC-ECD	0.005	83.8	100	2	GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	GC-ECD GC-MS	1.65	103	30	1			1	DIRECT	GC-NPD	
57	D	M	GC-MS	0.01		25	1	GPC		1	PULSED SPLITLESS	GC-ECD/NPD	
58	D	M	GC-ECD-NPD	0.05	105	15	4		POB119 (ECD) TRIFLURALIN (GC-NPD)	1	SPLIT/SPLITLESS	GC-ECD-NPD	ANAL METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
59	D	M	GC-MS	0.01	104	10	5	O	3	2	SPLITLESS	GC-MS	\$35 L 000034
60	D	M	GC-MS	0.02		15	1	GPC	ISODRIN	1	SPLIT/SPLITLESS	GC-ECD/NPD/MS	
61	D	M	GC-MS	0.01		50	3	GPC		2	PTV	GC-MS	DFG S19 (ASU \$35 LMBG L 00.00-34)

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
62	D	M	GC-MS	0.02		10			TPP	2		GC-MS	
63	D	M	GC-MS	0.02	101	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	\$ 35 LMBG L.00.00-34
64	D	M	GC-MS	0.02	81	5			TPP	0.5	SPLITLESS	GC-MS	MULTIRESIDUE WITH EXTRELUT
65	D	M	GC-MS	0.02	81	5		GPC	AZOBENZENE+RONNEL+TRIPHENYLPHOSPHATE	2	ON COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD
66	D	M	GC-MS/MS	0.05	85	15		SPE		10		GC-MS(ITD)	QUECHERS (LEOTHAY, S. ET AL. J.A.O.A.C. INT. (2005) 88, 615-629
67	D	S	GC-MS	0.02		90		GPC + SPE	ALDRIN	1	SPLIT/SPLITLESS	GC - ECD	OFFICIAL METHOD L 00.00-34; \$ 35 LMBG

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
68	D	M	GC-MS	0.02	92.2	20	4			2	SPLITLESS	GC-ECD/NPD	MINI-LUKE EXTRACTION
69	D	M	GC-MS	0.02	97	25	1	GPC		1.0-2.0	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1. ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	D	M	GC-MS/MS	0.02		15	5	O		10	LVI	GC-ECD/TSD/PPFD GC-MS/MS	QUECHERS
71	D	M	GC-ECD	0.01	103	25	6	O		2	SPLITLESS	GC-ECD	MULTIRESIDUE METHOD FOR ANALYSIS OF PESTICIDES IN FOODSTUFFS P.A. GREVE ED, 1988, MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIR, RUSWICK NETHERLANDS
72	D	S	GC-ECD	0.02	87	100	3			1	SPLITLESS	GC-ECD, GC-NPD	
73	D		GC-MS	0.05	84	30	1	GPC; O		10	RHEODYNE	HPLC-UV	LOCAL SOP

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
74	D	M	GC-MS	0.005	76.4	25		HEXABROMOBENZENE		1		GC-MS	
75	D	S	LC-MS/MS	0.02	107	50		GPC	TRANS-HCEO	2	SPLIT/SPLITLESS	GC-ECD	\$35 LMBG L 00.00-34 (1999)
76	D	S	GC-MS	0.01	82	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	D	M	GC-MS		90	15		GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	
79	D	M	GC-MS	0.02	93	15		SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	GC-MS	0.02		50				5	LVI	GC-MS	L-00.00-34

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
81	NO RESULTS												
82	D	M	GC-ECD	0.007	105	10		O(PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAINBAHNER, F. J. SCHENK, J. AOAC INT., 86 (2003) 412-431
83	D	M	GC-MS	0.02	108	30 30		SPE GPC	TRIPHENYLETHYLENE TRIPHENYLETHYLENE	3 3	SPLITLESS SPLITLESS	GC-MS GC-MS	
84	D	M	GC-MS	0.02	80	50				1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	D	M		0.02		25				1	SPLITLESS	GC-ECD	SAR-2-04OC
86	D	M	GC-MS(ITD)	0.025	96	15			HCB	1	SSL	GC-MS(ITD)	
87	D		GC-MS	0.02		50	6 ETHYLACETATE/ DICHLOROMETHANE (80/20)	SPE-FLORISIL		1		GC-ECD	ACCORDING TO EN 12396- 1:1999

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
88	D	M	GC-MS	0.01	104	25	1	GPC		1	SPLITLESS	GC-ECD	IN-HOUSE
89	D	M	GC-MS	0.02	85	15	4			1	SPLIT-SPLITLESS	GC-ECD, FPD, MS HPLC-F/DAD	
90	D	M	GC-MS	0.01		50	2	GPC		1	SPLITLESS	GC-NPD	
91	D	S	GC-MS	0.02		50	3	LLE	YES	1	SPLITLESS	GC-NPD	DFG-S8
92	D	M	GC-MS	0.01	107	50	4	LLE	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990) 15TH ED., 985.22, AOAC ARLINGTON VA
93	D	M	GC-MS	0.005		80	2	GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD OR GC-NPD	GC-MS (SINGLE-QUAD)
94	D	M	GC-NPD	0.02	96.1	10	4	SPE		2	SPLITLESS	GC-ECD	

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
100	D	M	GC-ECD	0.04	84	25	6	O		2	SPLITLESS	GC-ECD	MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIRS, NETHERLANDS. ANALYTICAL METHODS FOR RESIDUES OF PESTICIDES IN FOODSTUFFS. MULTIRESIDUE METHOD 1. SUBMETHOD 1, PART 1-3, 5TH EDITION, 1988
99	D	M	GC-MS	0.02		20	4	GPC		1	PULSED SPLITLESS	GC-MS	
98	D	M	GC-MS	0.02	95	10	1	GPC		1	ON COLUMN	GC-MS	GC-MS MULTI RESIDUE
97	NA												
96	D	S	GC-MS	0.02	80	25	2	GPC	ISODRIN, CHINOMETHIONAT	1	SPLIT/SPLITLESS	GC-ECD GC-NPD; GC-MS (SINGLE-QUAD)	SOP 5.4.CH.1 (ACCORDING TO EN 12393/1-3; AND 35 LMBG L00.0034
95	D	S	GC-MS	0.02	87	25	5	SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OG AOAC INTERNATIONAL 78-5- 1995

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
101	D	M	GC-MS	0.05	95	10	2	SPE		1	SPLIT/SPLITLESS PTV	GC-ECD,NPD,MS	
102	D	M	HPLC-DAD	0.02	105	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2: CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S	GC-MS	0.010	90	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LS-MS	ANN.FALS.EXP. CHIMI. SEPT- OCT 1974-67 N1721-722 PP513-524
104	D	S	GC-MS	0.005		100	2	GPC	TRIPHENYLPHOSPHATE	5	PTV	GC-MS	LMBG §35 L-00.00.-34
105	D	M	GC-ECD	0.05		100	4		ALDRIN	1		GC-NPD, GC-ECD	MULTIRESIDUE METHOD: AOAC 985.22/90 MODIFIED
106	D	S	GC-ELCD	0.01	80	25	6 ETHYLACETATE/ DICHLOROMETHANE	SPE		1		GC-ECD ELCD	MESTRES

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
107	D	M	GC-MS	0.005	101	100	2	GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19 - DFG
108	NA												
109	D	M	GC-MS	0.02		10	2			2		GC-ECD GC-NPD GC-FPD GC-MS	
110	D	M	GC-ECD	0.01		50	6	GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE- METHOD DFG S 19
111	D	M	GC-MS	0.02	105.6	50	2	GPC		1	OC; SS	GC-ECD, GC-NPD	\$35 LIMBG; L 00.00-34; L 00.00-37
112	D	S	GC-MS	0.01	110	50	6	SPE		1	SPLITLESS	GC/ECD	ISTISAN 97/23
113	D	S	GC-NPD	0.02	101	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
114	D	S	GC-MS	0.01	103	50	6	SPE		1	SPLITLESS	GC-MS	
115	D	S	GC-MS/ GC-ECD	0.01		50	3	SPE		1	ON COLUMN	GC-ECD / GC - PPFD - GC-MS	NFEN12393
116	D	S	GC-MS	0.01	90	15	6	GPC	YES	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS(ITD)	RAPPORTO ISTISAN 97/23
117	D	M	GC-MS	0.03		40	1			1	SPLITLESS	GC-MS	
118	D	S	GC-ECD	0.02	87	5	3			2	SPLITLESS	GC-ECD, GC-NPD	
119	D	S	GC-MS	0.02	103.7	10	3	O		1	AUTO	GC-ECD GC-MS	ISS B6
120	D	S	GC-MS	0.002		100	3	GPC		1	SPLIT	GC-ECD GC-NPD	PN-EN 12393-1,2,3
121	D	S	GC-ECD	<0.020	85	100	3, 1, CYCLOHEXANE, N-HEXANE, IZO-OCTANE, TOLUENE	GPC, SPE		2	SPLITLESS	GC-ECD	PN-EN 12393-1,2,3:2000

APPENDIX 7. Methods used by participants for determining pesticides.

PROCYMIDONE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
122	D	S	GC-ECD	0.02	86	10	6	O		1	ON COLUMN	GC-ECD	GC-MS
123	NA												
124	D	S	GC-ECD	0.0025	87.2	20	6	LLE		10	PTV-SOLVENT VENT	GC-NPD	PN-EN 12393
125	D	S		0.0012	59.08	25	3	GPC		2	SPLITLESS	GC-ECD	
126	D	S	GC-ECD	0.01		100	3	LLE		1	AUTOSAMPLER	GC-ECD	PN-EN 12393: 2000
127	NO RESULTS												
128	D	M	GC-MS	0.02		20 G / 5G	1			2	SPLITLESS	GC-ECD, GC-FPD, GC-MSD, GC-MS(ITD)	MODIFIED LUKE

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL									
LAB CODE	1	2	3	4	5	6	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD
RL (mg/kg)	0.05	0.020		0.01	0.05	0.02	D	M	LC-MS/MS
RECOVERY (%)		91				122.8	D	S	
SAMPLE WEIGHT (g)	10	15		10	10	15	D	M	
EXTRACTION SOLVENT	1	4		5	5	4	NA		
CLEAN-UP STEP	SPE			SPE	SPE	GPC			
INTERNAL STANDARD	YES				(MIREX)/TPP				
INJECTION VOLUME (µL)	20	1		2	1	2			
INJECTION TYPE	N/A	SPLITLESS		SPLIT/SPLITLESS	SPLIT/SPLITLESS	SPLITLESS			
DETERMINATION	LC-MS/MS	GC-NPD		GC-MS	GC-MS	GC-MS			
REFERENCE METHOD	IN HOUSE	LUKE, M.A., FROBERG, J.E., DOOSE, G.M., MASUMOTO, H.T. (1981): IMPROVED MULTIRESIDUE GAS CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS, ORGANONITROGEN, AND ORGANOHALOGEN PESTICIDES IN PRODUCE, USING FLAME PHOTOMETRIC AND ELECTROLYTIC CONDUCTIVITY DETECTORS, J. ASSOC. OFF. ANAL. CHEM. 64(6): 1187-1195		QUECHERS; ANASTASSIADES	M ANASTASSIADES ET AL. JAOAC 86, 412-431 (2003)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED			

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
7	NA												
8	D	M	GC-MS	0.01	86	30		O		2	SPLITLESS	GC-MS	
9	D	S	GC-MS(ITD)	0.01	97	15		LLLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN HOUSE SOP
10	D	M		0.005	84	25		GFC		2	SPLIT/ SPLITLESS PTV	GC-ECD, GC-NPD, GC-MS(ITD)	
11	D	S		0.05	80	30		O		20		HPLC-UV	
12	D	M	MS-ITD	0.05	87	50		GFC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-FPD, GC-ECD	
13	D	M	GC-MS/MS	0.02	77.9	15			TPP (QC)	10		GC-MS(ITD)	
14	NA												
15	D	S	GC-MS	0.05	97	25				2	SPLIT/ SPLITLESS	GC-NPD	LOCAL SOP NO. MR405012

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
16	D	M	GC-MS/MS	0.05		15	4			10	LVI SPLITLESS	GC-MS/MS	
17	NA												
18	D	S	GC-MS	0.03	82	75	1	GFC	ALDRIN	2	PULSED SPLITLESS	GC-MS	
19	D	M	GC-MS(ITD)	0.02	75	75	1	GPC	DITALIMPHOS	2	SPLITLESS	GC-ECD	
20	D	S	GC-NPD	0.05	89	100	3	O		2	MANUAL	GC-NPD	
21	D	M	GC-MS/MS	0.01		10	1			10	LVI	GC-MS/MS	
22	D	M	GC-MS	0.02	71.6	50	6	LLE (TOLUENE)		1.5	SPLITLESS	GC-NPD	
23	D	M	HPLC-DAD	0.01		5	5	SPE FLORISIL		20	AUTOMATIC	HPLC-DAD	INTERNAL METHOD
24	D	S	LC-MS/MS	0.05	120.0	30	1			1 mg SAMPLE	AUTOSAMPLER	LC-MS/MS	SOP NO.: MR 405012.M1

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL										
LAB CODE	25	26	27	28	29	30	31	32		
SCOPE OF YOUR METHOD	D	D	D	D	D	D	D	D	D	D
QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	M	M	S		M	S	S	S	S	
CONFIRMATION METHOD	GC-MS	GC-MS(ITD)		GC-MS	GC-MS/MS	DIFFERENT COLUMN	MS	GC-MS		
RL (mg/Kg)	<0.02	0.01	0.05	0.05	0.05	0.01	0.05	0.1		
RECOVERY (%)	93	82	30	75	97	10	89	58		
SAMPLE WEIGHT (g)	10	25	30	50	15	10	10	25		
EXTRACTION SOLVENT	6	2	1	6	4	1	6	2		
CLEAN-UP STEP	SPE	GPC	GPC	SPE		GPC	O	GPC		
INTERNAL STANDARD	YES	DITALIMPHOS		YES		DICHLOFENTHION				
INJECTION VOLUME (µL)	2	2	20	1	10	1	1	1		
INJECTION TYPE	SPLITLESS	SPLITLESS	RHEODYNE INJECTOR	ON COLUMN		SPLITLESS	SPLITLESS	SPLITLESS		
DETERMINATION	GC-MS	GC-ECD, GC-NPD, GC-MS(ITD)	HPLC-UV	GC-MS(ITD)	GC-MS/MS	GC-ECD GC-NPD	GC-ECD GC-NPD	GC-MS		
REFERENCE METHOD			HUNGARIAN CENTRAL SOP NO.: 405012.M1		MINI LUKE	RAPP ISTISAN 97/23	ISTISAN 97/23	\$35 LMBG 00.00-34		

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
33	D	M	GC-MS/MS	0.01		15	1			10	LVI	GC-MS/MS (ION TRAP)	
34	D	M	GC-MS/MS	0.05		5	4			10	AUTO	GC-MS/MS	PESTICIDES MS/MS EICI
35	D	M	GC-MS	0.02	87	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	D	S	GC-MS	0.05	88	50	1			1	SPLIT/SPLITLESS	GC-NPD GC-FPD GC-MS (SINGLE-QUAD.)	
37	D	M	LC-MS/MS	0.005		10	5	O	DIMETHOATE D6	20		LC-MS/MS (TRIPLE-QUAD)	ANASTASSIADES, JOURNAL OF AOAC INT. VOLT 86 NO 2, 2003
38	D	M	GC-MS	0.05		10	5	O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	D	M	LC-MS/MS	0.01	71	10	6 (METHANOL/WATER)			20		LC-MS/MS	LC-MS/MS (BFR)

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
40	D	M	GC-MS	0.05		15				1	SPITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996.
41	D	M	GC-MS	0.02	92.7	20				4	SPLITLESS	GC-ECD, GC-NPD	GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
42	D	M	LC-MS/MS	0.01	101	10		LL		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)
43	D	M	GC-MS	0.01	93	10		SPE	TRIPHENYLPHOSPHATE (TPP)	4		LC-MS/MS(ESI+)	ANASTASSIADES ET AL., JAOAC INT. 86 82003) 412-431, MODIFIED
44	D	M		0.01		50		LL		5		LC-MS/MS	HOUSE METHOD
45	D	S	GC-MS				1 (IN PRESENCE OF NaOH)				RHEODYNE	HPLC - DAD	CLEAN UP AS IN EN 12393 P METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
46	NA												
47	D	S	GC-NPD	0.05		10		SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHER, F. J. SCHENCK, J. AOAC INT. 86 (2003) 412-431
48	D	M	LC-MS/MS	0.01		10		SPE		20		LC-MS/MS	KLEIN, J.; ALDER, L. JOURNAL OF AOAC INT. 2003, 86, 1015-1037
49	D	S	GC-MS(ITD)	0.02		50		LL		2	SPLITLESS	GC-FPD, GC-NPD, GC-MS(ITD)	METHOD R'EN 12393-2:1999
50	D	S	GC-MS	0.05	84	20			DICHLORBENIL	2	ON COLUMN	GC-NPD	
51	NA												
52	D	M	GC-MS	0.05		10		O		1.5	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.05		15		GPC		1	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	D	M	GC-MS/MS	0.02	100	10				5	LVI	GC-MS/MS	QUECHERS

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
55	D	M	GC-NPD	0.01	102.9	100	2	GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULARE MULTIMETHODE S19
56	D	S	GC-MS	0.175	86.8	30	1			1	DIRECT	GC-NPD	
57	D	M	LC-MS/MS	0.01		25	5			5		LC-MS/MS	
58	D	M	GC-ECD-NPD	0.05	107	15	4		PCB119 (ECD) TRIFLURALIN (GC-NPD)	1	SPLIT/SPLITLESS	GC-ECD-NPD	ANAL.METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
59	D	M	GC-MS	0.02	98.6	10	5	O		2	SPLITLESS	GC-MS	\$35 L.000034
60	D	M	GC-MS	0.05		15	1	GPC	ISODRIN	1	SPLIT/SPLITLESS	GC-ECD/NPD/MS	
61	D	M	LC-MS/MS							10		LC-MS/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
62	NA												
63	D	M	GC-MS	0.05	89	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	\$ 35 LMBG L.00.00-34
64	D	M	GC-MS	0.01	91	5			TPP	0.5	SPLITLESS	GC-MS	MULTIRESIDUE WITH EXTRELUIT
65	D	M	GC-MS	0.05	83	5		GPC	AZOBENZENE+RONNEL+ TPP	2	ON COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD
66	D	M	GC-MS/MS	0.05	96	15		SPE		10		GC-MS(ITD)	QUECHERS(LEOTHAY, S. ET AL., J. AOAC INT., 86 (2003), 412-431 QUECHERS - METHOD
67	D	M		0.02	80	10		LLE + SPE	TRIPHENYLPHOSPHATE	10		GC-MS(ITD)	ANASTASSIADES, M. ET AL., J. AOAC INT., 86 (2003), 412-431 QUECHERS - METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
68	D	M	GC-MS	0.02	95	20				2	SPLITLESS	GC-ECD/NPD	MINI-LUKE EXTRACTION
69	D	M	GC-MS	0.05	90	25	6, METHANOL	SPE		1,0-2,0	SPLITLESS	GC-NPD	IN HOUSE METHOD
70	NA												
71	D	M	GC-TSD	0.05	119	25		O		5	SPLITLESS	GC-TSD	MULTIRESIDUE METHOD FOR ANALYSIS OF PESTICIDES IN FOODSTUFFS P. A. GREVE ED, 1988, MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIR, RIJSWICK NETHERLANDS
72	D	S	GC-NPD	0.02	84	100				1	SPLITLESS	GC-ECD, GC-NPD	
73	D	S	GC-MS	0.05	77	30		GPC; O		10	RHEODYNE	HPLC-UV	LOCAL SOP
74	D	M	GC-MS	0.005	81.2	25		HEXABROMOBENZENE		1		GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
75	D	M		0.01	96	10	6 METHANOL	LLE (CHEM ELUT)		20	LC-MS/MS	JAOAC INTERN., 86, 1015FF (2003)	
76	D	S	GC-MS	0.01	96	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	D	M	GC-MS		90	15	1	GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	
79	D	M	GC-MS	0.05	75	15	6	SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10	6	O		20		LC-MS/MS	KLEIN, J., ALDER, I. (2003) JAOAC INT. 86, 1015-103
81	NO RESULTS												
82	D	M	GC-NPD	0.02	79	10	5	0 (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M., ANASTASSIADES, S. J., LEHOTAY, D., STAJNBÄHNER, F. J., SCHENK, J. AOAC INT., 86 (2003) 412-431

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
83	D	M	GC-MS	0.05	109	30	1	GPC	TRIPHENYL ETHYLENE	3	SPLITLESS	GC-MS	
84	D	M	GC-MS	0.01	80	50	2			1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	NA												
86	D	M	GC-MS(ITD)	0.025	92	15	4		HCB	1	SPLIT/ SPLITLESS	GC-MS(ITD)	
87	D		LC-MS/MS	0.04		50	6 ETHYLACETATE/DICHLOROMETHANE (80/20)		TRICHLORONAT	1	ON COLUMN	GC-TSD	ACCORDING TO EN 12396-1: 1999
88	D	M		0.005	98	5		LLE		10		LC-MS/MS	IN-HOUSE
89	D	M	GC-MS	0.02	85	15	4			1	SPLIT/ SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
90	D	M	GC-MS	0.02		50	2	GPC		1	SPLITLESS	GC-NPD	
91	ND	S	GC-MS	0.01		50	3	LLE	YES	1	SPLITLESS	GC-NPD	DFG-S8
92	D	M	GC-MS	0.01	103	50	4	LLE	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990) 15TH ED., 985.22, AOAC, ARLINGTON VA
93	D	M	GC-MS	0.005		80	2	GPC		5	PTV	GC-MS (SINGLE-QUAD)	MULTIMETHOD GC-MS (SINGLE-QUAD)
94	D	M	GC-NPD	0.03	93.6	10	4	SPE		2	SPLITLESS	GC-ECD	
95	D	S	GC-MS	0.05	87	25	5	SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OF AOAC INTERNATIONAL 78-5-1995
96	NA												
97	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
98	D	M	LC-MS/MS	0.05	92	10	1		CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	NA												
100	NA												
101	D	M	GC-MS	0.05	95	10	2	SPE		1	SPLIT/SPLITLESS PTV	GC-ECD,NPD,MS	
102	D	M	HPLC-DAD	0.05	98	30	1	GPC		1	SPLITLESS	GC-NPD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2: CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S	GC-MS	0.020	80	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LC-MS	ANN.FALS.EXP.CHIM. SEPT- OCT 1974-67 N/721-722 PP513-524

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
104	D	S		0.005		100		GPC	TRIPHENYLPHOSPHATE	2		GC-NPD	LMBG §35 L-00.00.-34
105	D	M	GC-NPD	0.5		100			ALDRIN	1		GC-NPD; GC-ECD	MULTIRESIDUE METHOD: AOAC 985.22/90 MODIFIED
106	D	S	GC-NPD	0.01	82	25	6 ETHYLACETATE/DICHLOROMETHANE			1		GC-PPPD NPD GC-MS	
107	D	M	GC-MS	0.02		100		GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19 - DFG
108	NA												
109	D	M	GC-MS	0.02		10				2		GC-ECD GC-NPD GC-PPD GC-MS	

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
110	ND		GC-NPD	0.02		50	6	GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE-METHOD DFG S 19
111	D	M	GC-MS	0.05	102.2	50	2	GPC		1	OC, SS	GC-ECD, GC-NPD	\$35 LMBG; L 00.00-34; L 00.00-37
112	NA												
113	D	S	HPLC-UV	0.05	98	30	1	GPC		20 mL/20 mg	MANUAL	HPLC-UV	SOP MR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
114	D	S	GC-MS	0.01	109	50	6	SPE		1	SPLITLESS	GC-MS	
115	D	S	GC-MS	0.01		50	3	SPE		1	ON COLUMN	GC-ECD GC-PFPD GC-MS	NFEN12393
116	D	S	GC-MS	0.01		15	6	GPC		1	SPLITLESS	GC-ECD, GC-NPD GC-MS(ITD)	RAPPORTO ISTISAN 97/23

APPENDIX 7. Methods used by participants for determining pesticides.

PYRIMETHANIL													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
117	NA												
118	D	S	GC-NPD	0.05	85	5	3			2	SPLITLESS	GC-ECD, GC-NPD	
119	NA												
120	NA												
121	NA												
122	NA												
123	NA												
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	GC-MS	0.05		10	1	SPE	YES	2	SPLIT/SPLITLESS	GC-MS	IN HOUSE
2	D	S	GC-MS	0.010	104	15	4			1	SPLITLESS	GC-ECD	LUKE, M.A.; FROBERG, J.E.; DOOSE, G.M., MASUMOTO, H.T. (1981): IMPROVED MULTIRESIDUE GAS CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS, ORGANONITROGEN, AND ORGANOHALOGEN PESTICIDES IN PRODUCE, USING FLAME PHOTOMETRIC AND ELECTROLYTIC CONDUCTIVITY DETECTORS. J. ASSOC. OFF. ANAL. CHEM. 64(5): 1187-1195
3	NA												
4	D	M	GC-NPD	0.01		10	5	SPE		2	SPLIT/SPLITLESS	GC-MS	QUECHERS; ANASTASSIADES
5	D	M	GC-MS	0.05		10	5	SPE	MIREX/TPP	2	SPLIT/SPLITLESS	GC-ECD/ GC-NPD	M.ANASTASSIADES ET AL. J AOAC 86, 412-431 (2003)
6	NA												
7	NA												
8	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
9	D	S	GC-MS(ITD)	0.01	101	15		ELLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN-HOUSE SOP
10	NA												
11	D	S		0.05	112	30				1	SPLIT/SPLITLESS	GC-MS (ION TRAP)	
12	NA												
13	NA												
14	NA												
15	D	S	GC-MS	0.05	101	25		GFC		2	SPLIT/SPLITLESS	GC-ECD	LOCAL SOP NO. MR405012
16	D	M	GC-MS/MS	0.05		15	4			10	LV/ SPLITLESS	GC-MS/MS	
17	NA												
18	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
19	D	M	LC-MS/MS	0.01	78	75				5		LC-MS/MS	
20	D	S	GC-NPD	0.05	92	100		O		1	AUTOSAMPLER	GC-ECD	
21	NA												
22	ND			0.05		10	METHANOL			5		LC-MS/MS	
23	D	M	GC-MS	0.05		5			FENCHLORPHOS	50	AUTOMATIC TDS SAMPLER	TDS-IN LINE WITH GC-MS (SINGLE-QUAD) TOTAL ION DETECTION	INTERNAL METHOD
24	D	M	GC-ECD	0.05	92.6	30				1	TPOCI	GC-NPD	SOP NO.: MR 405012 M1
25	D	M	GC-MS	<0.02	98	10		SPE	YES	2	SPLITLESS	GC-MS	
26	NA												
27	D	S		0.05		30		GPC		1	SPI	GC-ECD	HUNGARIAN CENTRAL SOP NO.: 405012 M1

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
28	D	S	GC-MS	0.05	81	50	6	SPE	YES	1	ON COLUMN	GC-MS(ITD)	
29	D	M	GC-MS/MS	0.02	91	15	4			10		GC-MS/MS	MINI LUKE
30	NA												
31	D	S	MS	0.05	83	10	6	O		1	SPLITLESS	GC-ECD GC-NPD	ISTISAN 97/23
32	NA												
33	NA												
34	NA												
35	D	M	GC-MS	0.02	95	20	3			2	SPLITLESS	GC-ECD, NPD	EN 12393-1, 2, 3
36	ND	S	GC-MS	0.05		50	1			1	SPLIT/SPLITLESS	GC-NPD GC-FPD GC-MS (SINGLE-QUAD.)	

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
37	D	M	GC-MS	0.02		10	5	O	TRIPHENYLPHOSPHATE	1	SPLIT/SPLITLESS	GC-MS (SINGLE QUAD)	ANASTASSIADES ET AL. JAOAC INT. VOLT 86 NO. 2, 2003
38	D	M	GC-NPD	0.05		10	5	O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	D	S	GC-MS	0.01		100	2	GPC, SPE		1	SPLIT	GC-ECD	DFG S 19, L 00.00-34 (§ 35 LIMBG)
40	D	M	GC-MS	0.01		15	4			1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
41	D	M	GC-MS	0.02	95.1	20	3			4	SPLITLESS	GC-ECD, GC-NPD	
42	D	M	GC-MS	0.02		10	5	LL		1	PTV SOLVENT VENT	GC-ECD, GC-MS	M. ANASTASSIADES ET AL., J. AOAC INT., 86 (2), 412-431, (2003)
43	D	M	GC-MS	0.01	94	10	5		TRIPHENYLPHOSPHATE (TPP)	4		LC-MS/MS(ESI+)	ANASTASSIADES ET AL. JAOAC INT. 86 82003 412-431, MODIFIED

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
44	D	M		0.01		50	2	LLE		5		LC-MS/MS	HOUSE METHOD
45	D	M	GC-MS	0.05	94	25	1	GFC		1	SPLIT/SPLITLESS (SPLITLESS MODE)	GC-ECD OR GC-NPD OR GC-FPD	EN 12393 P METHOD
46	NA												
47	D	S	GC-ECD	0.05		10	5	SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHER, F. J. SCHENCK : J. AOAC INT. 86 (2003) 412-431
48	D	M	LC-MS/MS	0.01		10	6	SPE		20		LC-MS/MS	KLEIN, J.; ALDER, L. JOURNAL OF AOAC INT. 2003, 86, 1015-1037
49	NA												
50	D	S	LC-MS	0.05	98	10	4			5		LC-MS/MS	
51	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
52	D	M	GC-ECD	0.05		10		O		1.5	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-MS	QUECHERS
53	D	S	GC-MS	0.05		15		GPC		1	SPLIT/ SPLITLESS	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	NA												
55	D	M	GC-NPD	0.005	96.2	100		GPC		GC 1 µL HPLC 20 µL	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-FPD, HPLC-UV, LC-MS/MS	MODULEARE MULTIMETHODE S19
56	D	S	GC-MS	0.036	90	30		GPC		1	SPLIT	GC-ECD	
57	NA												
58	D	M	GC-ECD-NPD	0.01	118	15			PCB119 (ECD) TRIFLURALIN (GC-NPD)	1	SPLIT/SPLITLESS	GC-ECD-NPD	ANAL.METHODS FOR PESTICIDES RESIDUES IN FOODSTUFFS (NL)
59	D		GC-MS	0.05		10					SPLITLESS	GC-MS	\$35 L 000034
						5							

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
60	ND	M	GC-MS	0.05		15	1	GPC	ISODRIN	1	SPLIT/SPLITLESS	GC-ECD/NPD/MS	
61	D	M	GC-MS	0.01		50	3	GPC		2	PTV	GC-MS	DFG S19 (ASU \$35 LMBG L 00.00-34)
62	NA												
63	D	M	GC-MS	0.03	62	75	ACETONE FOLLOWED BY CYCLOHEXANE AND ETHYLACETATE	GPC		1		GC-NPD	\$ 35 LMBG L.00.00-34
64	D	M	GC-MS	0.02	83	5	6		TPP	0.5	SPLITLESS	GC-MS	MULTIRESIDUE WITH EXTRELU
65	D	M	GC-MS	0.01	88	5	1	GPC	AZOBENZENE+RONNEL+ TRIPHENYLPHOSPHATE	2	ON COLUMN	GC-(ECD+FPD+NPD)	INTERNAL METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
66	NA												
67	D	S	GC-MS	0.05		90		GPC + SPE	ALDRIN	1	SPLIT/ SPLITLESS	GC - ECD	OFFICIAL METHOD L 00.00-34- § 35 LMBG
68	D	S	GC-MS	0.05	104	20				2	SPLITLESS	GC-MS (SINGLE-QUAD)	MINI LUKE EXTRACTION
69	D	M	GC-MS	0.05	94	25		GPC		1,0-2,0	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1, ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	NA												
71	NA												
72	D	S	GC-ECD	0.02	72	100				1	SPLITLESS	GC-ECD, GC-NPD	
73	D	M	GC-NPD							0.5	ON COLUMN		LOCAL SOP

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
74	D	M	GC-MS	0.02	89.5	25	3	HEXABROMOBENZENE		1		GC-MS	
75	D	M		0.01	106	10	6 METHANOL	LLE (CHEM ELUT)		20	LC-MS/MS	JAOAC INTERN., 86, 1015FF (2003)	
76	ND												
77	NO RESULTS												
78	ND	M	GC-MS			15	1	GPC		1	SPLITLESS	GC/MS (SINGLE-QUAD)	
79	D	M	GC-MS	0.05	82	15	6	SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10	6	O		20		LC-MS/MS	KLEIN, J., ALDER, I. (2003) JAOAC INT. 86, 1015-103
81	NO RESULTS												

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
82	D	M	GC-ECD	0.05	112	10		0 (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHNER, F. J. SCHENK: J. AOAC INT., 86 (2003) 412-431
83	D	M	LC-MS/MS, GC-MS, GC-MS	0.05	99	10, 30, 30	5, 1, 1	SPE GPC	TRIPHENYLETHYLENE TRIPHENYLETHYLENE	7, 3, 3	PARTIAL, SPLITLESS, SPLITLESS	LC-MS/MS GC-MS GC-MS	
84	D	M	GC-MS	0.05	80	50	2			1	SPLITLESS	GC-MS (SINGLE-QUAD)	EN NF 12393
85	NA												
86	NA												
87	NA												
88	NA												
89	D	M	GC-MS	0.02	80	15	4			1	SPLIT/SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
90	D	M	GC-MS	0.05		50	2	GPC		1	SPLITLESS	GC-NPD	
91	D	S	GC-MS	0.02		50	3	LLE	YES	1	SPLITLESS	GC-NPD	DFG-S8
92	D	M	GC-MS	0.01	105	50	4	LLE	ALDRIN, DITALIMPHOS	1	SPLITLESS	GC-ECD, GC-NPD, GC-MS	OFFICIAL METHOD OF ANALYSIS (1990) 15TH ED., 985.22, AOAC ARLINGTON VA
93	D	M	GC-MS	0.02		80	2	GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD OR GC-NPD	GC-MS (SINGLE-QUAD)
94	D	M	GC-NPD	0.03	94.5	10	4	SPE		2	SPLITLESS	GC-ECD	
95	D	S	GC-MS	0.05	100	25	5	SPE	YES	3	PTV	GC-ECD, GC-NPD, GC-MS	FILLION ET AL. JOURNAL OG AOAC INTERNATIONAL L 78-5-1995
96	NA												
97	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
98	D	M	LC-MS/MS	0.05	96	10	1		CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	NA												
100	NA												
101	D	M	GC-MS	0.05	90	10	2	SPE		1	SPLIT/SPLITLESS PTV	GC-ECD,NPD,MS	
102	D	M	GC-NPD	0.01	81	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2: CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
104	D	S	GC-MS	0.005		100	2	GPC	NITROFEN	2		GC-ECD	LMBG S35 L-00.00-34
105	NA												
106	ND			0.01									
107	D	M	GC-MS	0.02	102	100	2	GPC		1	SPLITLESS	GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	S19 - DFG
108	NA												
109	D	M	GC-MS	0.01		10	2			2		GC-ECD GC-NPD GC-FPD GC-MS	
110	D	M	GC-NPD	0.01		50	6	GPC	BROMOPHOS-ETHYL	2	SPLITLESS	GC-ECD AND GC-NPD	MULTI-RESIDUE-METHOD DFG S 19
111	D	M	GC-MS	0.05	100	50	2	GPC		1	OC; SS	GC-ECD, GC-NPD	S35 LMBG: L 00.00-34, L 00.00-37

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
112	NA												
113	D	S	GC-ECD	0.01	80	30	1	GPC		1	SPLITLESS	GC-ECD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2: CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
114	NA												
115	D	S	GC-MS	0.01		50	3	SPE		1	ON COLUMN	GC-ECD GC-PPPD GC-MS	NFEN12393
116	NA												
117	NA												
118	D	S	GC-NPD	0.05	73	5	3			2	SPLITLESS	GC-ECD, GC-NPD	
119	NA												
120	NA												
121	NA												
122	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

TETRACONAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
123	NA												
124	NA												
125	NA												
126	NA												
127	NO RESULTS												
128	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
1	D	M	LC-MS/MS	0.05		10	1	LL	YES	20		LC-MS/MS	IN HOUSE
2	D	M	LC-MS/MS	0.010	103	10	6			5		LC-MS/MS	KLEIN, J., ALDER, L. (2003): APPLICABILITY OF GRADIENT LIQUID CHROMATOGRAPHY WITH TANDEM MASS SPECTROMETRY TO THE SIMULTANEOUS SCREENING FOR ABOUT 100 PESTICIDES IN CROPS. J. AOAC INT. 86 (5), 1015-1037
3	NA												
4	D	M	GC-MS	0.001		10	5	SPE		10		LC-MS/MS	QUECHERS; ANASTASSIADES
5	D	M	LC-MS/MS	0.005		10	5	SPE		20		LC-MS/MS	M. ANASTASSIADES ET AL. J. AOAC 86. 412-431 (2003)
6	D	S	HPLC-DAD	0.05	95.7	15	4	SPE		100	FULL LOOP	HPLC-DAD	ANALYTICAL METHODS FOR PESTICIDE RESIDUES MINISTRY OF HEALTH NETHERLANDS 6TH ED

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
7	D	S	GC-NPD(80)	0.03		10	6 (DICHLOROMETHANE)			4	SPLITLESS	GC-ECD; GC-NPD(80)	RAPPORTI ISTISAN 97/23
8	D	M	GC-MS	0.05	102	30	1	O		2	SPLITLESS	GC-MS	
9	D	S	GC-MS(ITD)	0.01	91	15	4	LLE ACETONE FOLLOWED BY DICHLOROMETHANE AND PETROLEUM ETHER		5	LOOP	LC-MS/MS	IN HOUSE SOP
10	D	S		0.05	89	25	6	SPE		10		HPLC-UV	
11	D	S		0.05	98	30	1	O		20		HPLC-UV	
12	D	M	MS-ITD, LC-MS	0.2	75	50	1	GPC		1, 2, 5	SPLITLESS	MS-ITD, LC-MS, GC-PPD, GC-ECD	
13	D	M	LC-MS/MS	0.05	96.9	15	1		TPP (QC)	10		LC-MS/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
14						15				2		GC-ECD GC-TSD GC-MS HPLC-UV	MULTIRESIDUES
15	D	S	GC-MS	0.05	106	25				2	SPLIT/SPLITLESS	GC-NPD	LOCAL SOP NO. MR405012
16	D	M	GC-MS/MS	0.05		15				10	LVI SPLITLESS	GC-MS/MS	
17	NA												
18	D	S	GC-MS	0.02		75		GPC		20		HPLC-FLD	
19	D	M	LC-MS/MS	0.01	96	75				5		LC-MS/MS	
20	D	S	GC-NPD	0.05	81	100		O		2	MANUAL	GC-NPD	
21	NA												
22	D	S	LC-DAD	0.05	77.4	50				20		HPLC-DAD	

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
23	D	M	HPLC-DAD	0.01		5		SPE FLORISIL		20	AUTOMATIC	HPLC-DAD	INTERNAL METHOD
24	D	S	LC-MS/MS	0.05	104.0	30				1 mg SAMPLE	AUTOSAMPLER	LC-MS/MS	SOP NO : MR 405012 M1
25	D	M	GC-MS	<0.02	90	10		SPE	YES	2	SPLITLESS	GC-MS	
26	D	M	LC-MS/MS	0.01	83	10	6 METHANOL 95%-AMMONIACETATE 5%, 20 mM ACETIC ACID		CARBARYL C13	10	SPLITLESS	LC-MS/MS	
27	D	S		0.05		30		GPC		20	RHEODYNE INJECTOR	HPLC-UV	HUNGARIAN CENTRAL SOP NO.: 405012 M1
28	D	S	HPLC-UV	0.04	90	20		LLE		20		HPLC-UV	

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
29	D	S	LC-DAD	0.05	88	15	4	SPE (2OH)	BENZIMIDAZOLE	100		HPLC-DAD	MINI LUKE
30	D	S	DIFFERENT COLUMN	0.05		10	1	GPC	DICHOLOFENTHION	1	SPLITLESS	GC-ECD GC-NPD	RAPP ISTISAN 97/23
31	D	S	MS	0.05	78	10	6	O		1	SPLITLESS	GC-MS	ISTISAN 97/23
32	ND			0.5									
33	NA												
34	NA												
35	D	S	HPLC-DAD	0.05	90.0	50	6	SPE		20		HPLC-DAD	DANISH VETERINARY AND FOOD ADMINISTRATION, METHOD FP 018.1, 1996
36	D	S	GC-MS	0.05	80	50	1	LLE (ACID-BASE PARTITION)		1	SPLIT/SPLITLESS	GC-NPD SPECTROPHOTOMETRY -UV/VIS	

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
37	D	M	LC-MS/MS	0.01		10		O		20		LC-MS/MS (TRIPLE-QUAD)	ANASTASSIADES, JOURNAL OF AOAC INT. VOLT 86 NO 2, 2003
38	D	M	HPLC-DAD	0.2		10		O		2	SPLITLESS	GC-ECD GC-NPD GC-MS	
39	D	M	LC-MS/MS	0.01	95	10	6 (METHANOL/WATER)	SPE		20		LC-MS/MS	LC-MS/MS (BFR)
40	D	M	HPLC	0.2		15				1	SPLITLESS	GC-NPD, GC-ECD, GC-MS(ITD)	ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, 6TH ED., 1996. GENERAL INSPECTORATE FOR HEALTH PROTECTION, MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORTS, THE NETHERLANDS
41	NA												
42	D	M	LC-MS/MS	0.01	88	10		LL		20		LC-MS/MS	M. ANASTASSIADES ET AL., J. AOAC INT. 86 (2), 412-431, (2003)

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
43	D	M	NONE	0.01	83	10		SPE	TRIPHENYLPHOSPHATE (TPP)	4		LC-MS/MS(ESI+)	ANASTASSIADES ET AL. JAOAC INT. 86 82003) 412-431, MODIFIED
44	D	M		0.01		50		LLE		5		LC-MS/MS	HOUSE METHOD
45	D	S	GC-NPD	0.1	90	25	1 (IN PRESENCE OF NaOH)	GPC		10	RHEODYNE	HPLC - DAD	CLEAN UP AS IN EN 12393 P METHOD
46	D	M	GC-NPD	0.05	81	15				3 / 1	(PULSED) SPLITLESS/TRACK OVEN ON COLUMN	GC-NPD / GC-ECD	MULTI-RESIDUE METHOD/PESTICIDES AMENABLE TO GAS CHROMATOGRAPHY (3.1.2 ACETONE-PARTITION FOR FRUITS, VEGETABLES AND POTATOES) 6TH EDITION MINISTRY OF PUBLIC HEALTH, WELFARE AND SPORT. THE NETHERLANDS
47	D	S	GC-MS	0.05		10		SPE		4	SPLIT/SPLITLESS	GC-ECD, GC-NPD, GC-MS (SINGLE QUAD)	M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHER, F. J. SCHENCK : J. AOAC INT. 86 (2003) 412-431

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
48	D	M	LC-MS/MS	0.01		10		SPE		20		LC-MS/MS	KLEIN, J.; ALDER, L. JOURNAL OF AOAC INT. 2003, 86, 1015- 1037
49	D	S	GC-NPD	0.02		50		LLE		2	SPLITLESS	GC-FPD, GC-NPD, GC-MS(ITD)/MS	METHOD R'EN 12393-2:1999
50	D	S	LC-MS	0.05	87	10				5		LC-MS/MS	
51	NA												
52	D	S	HPLC-DAD	0.05		30	6 (DICHLOROMETHANE)			20		HPLC-DAD	
53	D	S	HPLC-DAD	0.05		50		LLE		10	RHEODYNE - HPLC	HPLC-FLD, HPLC-UV	INTERNAL METHOD
54	D	M	HPLC-FLD	0.05	101	37.5		GPC		20		HPLC-DAD, FLD	EN 12393-1,2,3
55	D	M	HPLC-DAD	0.02	75.3	50		LLE		20		HPLC-DAD	IN HOUSE METHOD

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
63	D	M	LC-MS/MS	0.05	63	10	METHANOL			20		LC-MS/MS	MULTI RESIDUE METHOD DRAFT BFR
64	D	M	GC-MS	0.05	90	5	6		TPP	0.5	SPLITLESS	GC-MS	MULTIRESIDUE WITH EXTRELUIT
65	NA												
66	NA												
67	D	M		0.02	80	10	5	LLE + SPE	TRIPHENYLPHOSPHATE	10		LC-MS/MS	ANASTASSIADES, M. ET AL., J. AOAC INT., 86 (2003), 412 - 431 QUECHERS - METHOD
68	D	S	LC-MS/MS	0.01	80.5	20	4			5	LOOP	LC-MS/MS	MINI LUKE EXTRACTION
69	D	M	GC-MS	0.05	100	25	1	GPC		1,0-20	SPLITLESS	GC-NPD, GC-ECD	MULTIRESIDUE METHOD 1, ANALYTICAL METHODS FOR PESTICIDE RESIDUES IN FOODSTUFFS, SIXTH EDITION
70	NA												

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
71	NA												
72	D	S	GC-NPD	0.02	74	100	3			1	SPLITLESS	GC-ECD, GC-NPD	
73	D	M	HPLC-UV	0.05	83	30	1			1	WIDE BORE	GC-NPD	LOCAL SOP
74	D	S	HPLC-DAD	0.01	85.5	25	3	BENZIMIDAZOL		50		HPLC-DAD/FLD	
75	D	M		0.01	96	10	6 METHANOL	LLE (CHEM ELUT)		20	LC-MS/MS	J.AOAC INTERN., 86, 1015FF (2003)	
76	D	S	GC-MS	0.05	86	10	DICHLOROMETHANE			1	SPLITLESS	GC-MS	
77	NO RESULTS												
78	ND		GC-MS			15		GPC		1	SPLITLESS	GC-MS (SINGLE-QUAD)	

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
79	D	M	HPLC-FLD	0.05	84	15	6	SPE		2	SPLITLESS	GC-ECD GC-NPD GC-MS LC-MS/MS HPLC-FLD	INTERNAL METHOD
80	D	M	LC-MS/MS	0.05		10	6	O		20		LC-MS/MS	KLEIN J., ALDER L. (2003) JAOAC INT., 86, 1015-103
81	NO RESULTS												
82	D	M	HPLC-FLD	0.05	96	10	5	0 (PSA)		1	SPLITLESS AND ON COLUMN	GC-ECD, GC-NPD, GC-FPD, GC-MS, HPLC-FLD, HPLC-DAD	QUECHERS, M. ANASTASSIADES, S. J. LEHOTAY, D. STAJNBAHNER, F. J. SCHENK: J. AOAC INT., 86 (2003) 412-431
83	D	M	LC-MS/MS	0.05	81	10	5			7	PARTIAL	LC-MS/MS	
84	D	S		0.01	80	75	1	LLE		20	SLOPE	HPLC-DAD	EN NF 14333
85	D			0.1		25	4			1	SPLITLESS	GC-NPD	SAR-1-04
86	D	M	LC-MS/MS	0.025	88	7.5	4			10	FULL LOOP	LC-MS/MS	

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
87	D		GC-TSD	0.05		25	6 ACETONE/DICHLOROMETHANE/ PETROLEUM ETHER (1/1/1)	SPE DIOL	BENZIMIDAZOLE	100	AUTOSAMPLER-FULL LOOP	HPLC-DAD	EN 14333-1: 2004
88	D	M		0.002	98	5		LLE		10		LC-MS/MS	IN-HOUSE
89	D	M	GC-MS	0.03	70	15	6			1	SPLIT/ SPLITLESS	GC-ECD, FPD, MS HPLC-F-DAD	
90	D	S	LC-MS/MS	0.05		50	3	LLE		OCT-25		HPLC-DAD	
91	D	M	LC-MS/MS	0.006		10	6 METHANOL	SPE		20		LC-MS/MS	DRAFT \$ 35 LMBG-METHOD
92	D	M	LC-MS/MS	0.01	67	50	4	LLE		10	LOOP	LC-MS/MS	LC-MULTIRESIDUE
93	D	M	LC-MS/MS	0.02		80	2	GPC		1µL PER COLUMN	SPLITLESS	GC-ECD AND GC-NPD OR GC-ECD ONLY OR GC-NPD ONLY	LC-MS/MS (MULTIMETHOD, 2 COLUMNS)

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
94	D	M	GC-NPD	0.05	74.2	10	6	SPE		2	SPLITLESS	GC-NPD	
95	D	S		0.05	84	25	5	LLE		20		LC-MS/MS	
96	NA												
97	NA												
98	D	M	LC-MS/MS	0.05	105	10	1		CARBENDAZIM D4, METHOMYL D3, PENDIMETHALIN D5	10		LC-MS/MS	LC-MS MULTI RESIDUE
99	D	S	HPLC-FLD	0.05		8	4	SPE	BENZIMIDAZOLE	50		HPLC-FLD	
100	NA												
101	D	M	GC-MS	0.05	85	10	2	SPE		1	SPLIT/SPLITLESS PTV	GC-ECD,NPD,MS	

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
102	D	M	HPLC-DAD	0.05	100	30	1			2	SPLITLESS	GC-NPD	SOP MR 405012: EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE; SOP 308M2; CLEAN UP OF EXTRACTS BY GEL PERMEATION CHROMATOGRAPHY
103	D	S		0.010	80	50	1	SPE		1	DIRECT	GC-ECD GC-NPD GC-FPD GC-MS LS-MS	ANN FALS EXP CHIM. SEPT-OCT 1974-87 N/721-722 PP613-524
104	D	S	LC-MS/MS	0.005		10	6 (METHANOL)	DIATOMACEOUS EARTH		25		LC-MS/MS	APPLICATION NOTE BY WATERS
105	ND	M	GC-NPD	0.5		100	4		ALDRIN	1		GC-NPD, GC-ECD	MULTIRESIDUE METHOD: AOAC 985.22/90 MODIFIED
106	D	S	HPLC-DAD	0.02	85	75	1			40		HPLC-DAD	NF-EN-14333-3

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
107	D	M	GC-MS	0.04	85	10 100		O GPC		1 1	AUTOSAMPLER SPLITLESS	HPLC – MS (SINGLE-QUAD) GC-ECD-ECD; GC-NPD; GC-MS (SINGLE-QUAD)	QUECHERS ANASTASSIADES S19 – DFG
108	NA												
109	D	S	HPLC-DAD	0.03		10		O		20		HPLC-DAD	
110	D	M	GC-MS	0.02		20	6 ACETONE		BROMOPHOS-ETHYL	1	KAS GERSTEL	GC-MS	ANASTASSIADES, DLR, 93,(10), 316-327 (1997)
111	D	S	LC-DAD	0.02	81.8	25	6 (METHANOL)	SPE. LLE		20		HPLC-FLD	VALIDATED INHOUSE METHOD NACH JOURNAL OF AOAC INTERN VOL 79 NO. 2, 1996
112	D	S		0.05	71	10		SPE		10		HPLC-DAD	ISTISAN 97/23
113	D	S	GC-NPD	0.05	98	30				1	SPLITLESS	GC-NPD	SOP MIR 405012; EXTRACTION OF RESIDUES OF PLANT-PROTECTING MATERIAL FROM FRUIT AND VEGETABLE SAMPLES BY ETHYL-ACETATE

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
114	D	S	LC-MS/MS	0.01	87	20	6	SPE		30		LC-MS/MS	WATERS A MULTIRESIDUE LC-MS/MS METHOD FOR PESTICIDES
115	D	S	LC-DAD	0.02		10	6	SPE		100		HPLC-DAD	NFEN14133-1
116	D	S	GC-MS	0.05	70	10	6	SPE		20		HPLC-DAD	INTERNAL METHOD
117	D	M	GC-MS	0.03		40	1			1	SPLITLESS	GC-MS	
118	D	S	GC-NPD	0.05	75	5	3			2	SPLITLESS	GC-ECD, GC-NPD	
119	D	S	GC-MS			10	3	O		1	AUTO	GC-ECD GC-MS	ISS B6
120	D	S	-	0.04		25	1			10	LOOP	HPLC-UV	WYD.METODYCZNE PZH WARSZAWA 2002
121	D	S	HPLC-UV	<0.05	90								

APPENDIX 7. Methods used by participants for determining pesticides.

THIABENDAZOLE													
LAB CODE	SCOPE OF YOUR METHOD	QUANTIFICATION USING STANDARDS IN SOLVENT OR IN MATRIX	CONFIRMATION METHOD	RL (mg/Kg)	RECOVERY (%)	SAMPLE WEIGHT (g)	EXTRACTION SOLVENT	CLEAN-UP STEP	INTERNAL STANDARD	INJECTION VOLUME (µL)	INJECTION TYPE	DETERMINATION	REFERENCE METHOD
122	D	S	HPLC-UV	0.02	95	50	1.6			20	LOOP	HPLC-UV	
123	NA												
124	D	S	HPLC-FLD	0.04	80.0	50	6	LLE		10	MANUAL	HPLC-UV	GILVYDIS DM - WALTERS SM (1990). JAOA CHEM. 73, 753-761
125	D	S		0.0095	87	25	3	GPC		2	SPLITLESS	GC-NPD	
126	D	S	HPLC-DAD	0.01		25	6	O		20	AUTOSAMPLER	HPLC-DAD	WYDAWNICTWO METODYCZNE PZH WARSZAWA 2002: OZNACZANIE POZOSTALOŚCI FUNGICYDOW Z GRUPY BENOMYLI I THIABENDAZOLU
127	NO RESULTS												
128	NA												



Protocol



Instructions

Only laboratories that are involved in providing residue data for their national monitoring programmes, and/or the EU co-ordinated monitoring programme are invited to participate in the 7th European Proficiency Test.

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

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

The **Pesticide List** will also be present at this site without using the security code. This list will include all the possible pesticides that could be present in the test material. This list will specify which compounds to look for. The list will be available from 9th March 2005, so that all participants know in good time before receipt of the test materials which pesticides might be present. Thus, participants will have time enough to buy any standards required and validate their methods. MPRL values (minimum performance reporting levels) for each pesticide will be given. These values are the levels that the laboratories should be able to attain.

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

Communications between participating laboratories during the test are not allowed.

Invoices to cover the cost of transporting the test materials will be available from the start of the test, so that once the shipping begins laboratories will be able to receive the test materials. Only laboratories that have paid the transport costs will receive the test materials. If laboratories need more time to pay, they must send by **fax** a justification to verify that the payment procedure has started.

General Characteristics

Objectives

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

Steps to Follow

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

1. Invitation to the participating laboratories. Also supplying details of the web site & web page where they can download the Application Form.
2. Preparation of the test materials. Homogeneity and stability testing performed by the Organiser.
3. Confirmation of the receipt of the participants Application Form and supplying the Laboratory Codes and security code to access to the Pesticide List, the Forms and this Protocol.
4. Payment in advance for the shipment of the test materials, or receipt of a fax demonstrating that the payment procedure has started.
5. Shipment of the test material, together with the blank.
6. The participant laboratories will be responsible for reporting their data to the Organiser using the Forms supplied by the stipulated deadline.
7. The Organiser will evaluate the results at the end of the proficiency test, once the deadline for receipt of results has passed.
8. The Organiser will send a copy of the Final Report to each participant laboratory. This report will include information regarding the design of the test, the homogeneity and stability test results, a record of the shipped samples, a statistical evaluation of the participant's results, graphical displays of the results and conclusions. Any other relevant information considered of value will also be included.

Evaluation of the Results

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

The results will be grouped into:

- **False Positives**

These are the results that show the presence of pesticides which are listed in the pesticide list and which are (i) not used in the sample treatment, (ii) and not detected by the organizer even in a repeated analysis. However, if a number of laboratories detect the same additional pesticide, or if the concentration is close to the MPRL, then a decision as to whether or not this should be considered to be a false positive result will be made on a case-by-case basis.

Nevertheless, any results reported that are lower than 0.01mg/Kg will be ignored by the Organiser and will not therefore be considered as false positives.

- **False Negatives**

These are results for pesticides that were not reported by the laboratories although they were used by the Organiser to treat the test material and are detected at, or above, the MPRL.

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

The true concentration in all cases will be determined by the median of all the results. Therefore there will be a median value for every pesticide present.

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

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

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

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

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

– z-Scores

This parameter is calculated using this formula:

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

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

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

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

$$|z| \leq 2 \text{ acceptable}$$

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

$$|z| > 3 \text{ unacceptable}$$

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

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

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

– Combined z-Score values

Taking into account all the pesticides analysed, two ways will be used to combine their z-scores: the re-scaled sum of z-scores (RSZ), and the sum of squared z-scores (SSZ).

The equations are:

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

$$SSZ = \Sigma z^2$$

n = number of detected pesticides

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

In order to evaluate each laboratory's performance, only those laboratories that have reported at least 90% of the pesticides present, and have reported no false positive results, will be classified according to the Weighted Sum of z-Scores. A fixed maximum value of 5 will be used as a default z-score using the following formula:

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

n = number of detected pesticides

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

So for each lab,

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

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

Organisation Address

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

Universidad de Almería

Edificio Químicas CITE I

Ctra. Sacramento s/n

04120 Almería - Spain

Phone Numbers: +34 950015034

+34 950015645

Fax Number: +34 950015645

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

On-Line News

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

<http://www.ual.es/GruposInv/EUPT07/>



European Proficiency Test 07



Introduction

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

The pesticide treatments will be carried out as a post harvest treatment using commercial formulation in micro spray solutions. The test material will be frozen (using liquid nitrogen), chopped, homogenized and sub-sampled into polyethylene bottles that have previously been coded.

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

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

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

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

Calendar

The following table shows the programme for this EUPT 07

Activity	Date
- Growing the grapes.	December 2004
- Selection of pesticides and design of the web page and protocol.	4 th February 2005
- Deadline for receiving the Application Form from invited laboratories.	17 th March 2005
- Sample Treatment, Homogenisation, and Storage/Stability Test.	March 2005

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

Activity	Date
- Sample distribution.	4 th -14 th April 2005
- Deadline for receiving Form 1.	15 th April 2005
- Deadline for receiving results: Forms 2 and 3.	20 th May 2005
- Preliminary Report: only results, no statistical treatment.	7 th June 2005
- Final Report.	14 th October 2005

Participant Laboratories

It is up to the contact points/authorities/organisations responsible for the official monitoring of pesticide residues in each country to select the laboratories that should participate, although it is a requirement that a laboratory must be active in contributing results to the national monitoring programme and/or the EU co-ordinated programme. It is up to the participants to fill in and return the Application Form so the Organiser has all their details before the deadline. The Organiser will not be responsible if a laboratory does not receive notice of the web page address necessary to take part in the test.

Amount of Sample

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

Application Form

Using the web page site: <http://www.ual.es/GruposInv/EUPT07/> the participating laboratories must complete the application form and return it by e-mail to the Organiser.

In the Application Form there is also information that must be provided in order to make an official invoice. The Application Form must be sent to the Organiser by 17th March 2005, at the latest.

Shipping of Samples

The shipment of the test materials will be carried out during a two-week period because of the differences in the time that it takes to reach the different participant countries (from 2-5 days). A warning message will be sent out a the week before shipment, and laboratories must make arrangements for the reception of the test materials. They should let the Organiser know of any possible public holidays in their country/city during the delivery time mentioned in the calendar and make every effort to receive the shipment even if the laboratory is closed.

Form 1

Once the laboratory has received the test materials they **must** complete Form 1, filling in the date of receipt, the condition of the test material, and its acceptance. Form 1 has a deadline, so if it is not returned by e-mail latest 15th April 2005, the Organiser will assume the laboratory has received and accepted the test material.

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

Analyses and Results Forms (Form 2)

Significant Figures

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

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

In cases where a pesticide was not detected, it should be recorded as ND. If it was not sought, it should be recorded as NA.

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

Correction of Results (Form 2)

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

Samples Material for Analysis (Form 2)

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

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

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

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

Form 2 must be sent to the Organiser by 20th of May 2005, at the latest. Results received after this date will not be included in the statistical treatment, or in the final report. The laboratories are responsible for reporting their results to the Organiser. The Organiser will acknowledge receipt of the results by e-mail.

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

Analytical Procedures Used (Form 3)

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

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

The organizer must receive Form 3 by mail by 20th May 2005, at the latest.

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

Sample Manipulation Advises

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

- Allow the test material to defrost in the refrigerator the afternoon before the analysis is performed.
- Once defrosted, be sure to mix the contents of the bottle thoroughly, to ensure homogeneity of the test material, before taking the analytical portion(s).



Form 1

Laboratory Code:

EUPT07-Lab-

Test material code:

(check the blank bottle
and the test material)

Date of receipt:

/ /2005

EUPT07-blank-

EUPT07-sample-

Loses:

YES

NO

Frozen:

YES

NO

accept the test material. I do not need more.

Please, fill in this form and send it back by e-mail (pmedina@ual.es) as soon as you have received the test material, latest 15th April 2005.

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

Signature:

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



Form 2 (Results)

Laboratory Code:

Date:

Test material and blank code:

Pesticide	Scope of your Method (1)	Analytical Procedure (2)	Conc. (mg/kg) (3)	Quantification Using Standards in Solvents or Matrix (4)	Confirmation Method (5)	RL (mg/kg) (6)	Recovery (7)
Acephate							
Acetamiprid							
Acrinathrin							
Aldicarb							
Azinphos-methyl							
Azoxystrobin							
Bifenthrin							
Bromopropylate							
Bupirimate							
Captan							
Carbaryl							
Carbendazim							
Chlorothalonil							
Chlorpropham							
Chlorpyrifos							
Chlorpyrifos-methyl							
Cypermethrin							
Cyprodinil							
Deltamethrin							
Diazinon							
Dichlofluanid							
Dicofol							
DIMETHOATEe							
Dimethomorph							
Endosulfan							
Fenhexamid							
Fenitrothion							
Fludioxonil							
Flusilazole							
Imazalil							
Imidacloprid							
Iprodione							
Kresoxim-methyl							
Lambda-cyhalothrin							

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

Pesticide	Scope of your Method (1)	Analytical Procedure (2)	Conc. (mg/kg) (3)	Quantification Using Standards in Solvents or Matrix (4)	Confirmation Method (5)	RL (mg/kg) (6)	Recovery (7)
Malathion							
Metalaxyl							
Methamidophos							
Methidathion							
Methiocarb							
Methomyl							
Monocrotophos							
Myclobutanil							
Oxydemeton-methyl							
Parathion							
Parathion-methyl							
Penconazole							
Phosalone							
Pirimicarb							
Pirimiphos-methyl							
Procymidone							
Propargite							
Pyrimethanil							
Spiroxamine							
Tetraconazole							
Thiabendazole							
Tolclofos-methyl							
Tolyfluanid							
Triadimefon							
Vinclozolin							

- (1) If the pesticide is not included in your analysis, fill **NA**. If the pesticide is detected, fill **D**. If the pesticide 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, report only one result. Record the concentrations for all pesticides according to the residue definition given in the Pesticide List.
- (4) Standards: **S** = standard/calibration in pure solvent, **M** = standard/calibration in matrix extract
- (5) Give the determination technique used e.g. **GC-FPD, HPLC-UV, GC-MS, LC-MS, LC-MS/MS**
- (6) **RL** Your Reporting Level, must be given for all pesticides. For pesticides with metabolites/degradation products included in the MRL definition, give the "Reporting Level" for the global compound (see residue definition in the pesticide list).
- (7) The concentration/results reported in (3) must not be corrected using recovery factors even if the laboratory usually corrects them. Nevertheless, you may give the correction factor for each pesticide as informative data.

I agree to be responsible for completing and returning this form to the Organizer latest 20th May 2005. In case of no e-mail confirmation of reception of this document (in 3 or 4 days), I will contact the Organizer as soon as possible.

Signature:

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



Form 3 (Analytical Procedures Used)

Laboratory Code:

Date:

Complete one of these forms for every different analytical procedure used

Analytical Procedure (2): _____

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

CLEAN-UP step (8): _____ Internal standard (if any): _____

Injection Volume: _____ Injection Type: _____

Determination (9): _____

Reference Method: _____

Signature:

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

Please return this Form latest 20th May, 2005

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

(7) Denoted as 1 = ethyl acetate, 2 = acetone followed by cyclohexane and ethyl 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-MS(ITD), HPLC-FL, HPLC-UV, HPLC-DAD, LC-MS, LC-MS/MS

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



Pesticide List

NAME	MPRL (mg/kg)
Acephate	0.02
Acetamiprid	0.05 #
Acrinathrin	0.05 #
Aldicarb (Aldicarb + Aldicarb Sulphone + Aldicarb Sulphoxide expressed as Aldicarb)	0.05
Azinphos-methyl	0.05 #
Azoxystrobin	0.05
Benomyl (See Carbendazim)	
Bifenthrin	0.05
Bromopropylate	0.05
Bupirimate	0.05 #
Captan (Captan + Folpet expressed as Captan)	0.05 #
Carbaryl	0.05 #
Carbendazim (Benomyl + Carbendazim + Thiophanate-methyl, expressed as Carbendazim)	0.1

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

NAME	MPRL (mg/kg)
Chlorothalonil	0.01
Chlorpropham	0.05 #
Chlorpyrifos	0.05
Chlorpyrifos-methyl	0.05
Cypermethrin	0.05
Cyprodinil	0.05 #
Deltamethrin	0.05
Diazinon	0.02
Dichlofluanid	0.05 #
Dicofol	0.02
DIMETHOATEe (DIMETHOATEe + Omethoate, expressed as DIMETHOATEe)	0.02
Dimethomorph	0.05 #
Endosulfan (α + β Endosulfan + Endosulfan Sulphate, expressed as Endosulfan)	0.05
Fenhexamid	0.05 #
Fenitrothion	0.05 #
Fludioxonil	0.05 #

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

NAME	MPRL (mg/kg)
Flusilazole	0.05 #
Folpet (see Captan)	
Imazalil	0.02
Imidacloprid (only parent compound)	0.05 #
Iprodione	0.02
Kresoxim-methyl	0.05
Lambda-cyhalothrin	0.02
Malathion (Malathion + Malaoxon, expressed as Malathion)	0.05 #
Metalaxyl	0.02
Methamidophos	0.01
Methidathion	0.02
Methiocarb (Methiocarb + Methiocarb sulphone + Methiocarb sulphoxide, expressed as Methiocarb)	0.05 #
Methomyl (Methomyl + Thiodicarb, expressed as Methomyl)	0.05
Monocrotophos	0.03 #
Myclobutanil	0.02
Omethoate (see DIMETHOATEe)	

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

NAME	MPRL (mg/kg)
Oxydemeton-methyl (Oxydemeton-methyl + Demeton-S-Methylsulfon, expressed as Oxydemeton-methyl)	0.02
Parathion	0.05
Parathion-methyl (Parathion-methyl + Paraoxon-methyl expressed as Parathion-methyl)	0.05 #
Penconazole	0.05 #
Phosalone	0.05 #
Pirimicarb	0.05 #
Pirimiphos-methyl	0.05
Procymidone	0.02
Propargite	0.05 #
Pyrimethanil	0.05 #
Spiroxamine	0.05
Tetraconazole	0.05 #
Thiabendazole	0.05
Thiodicarb (see Methomyl)	
Thiophanate-methyl (see Carbendazim)	
Tolclofos-methyl	0.05 #

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

NAME	MPRL (mg/kg)
Tolyfluanid	0.05 #
Triadimefon (Triadimefon + Triadimenol expressed as Triadimefon)	0.1
Triadimenol (see Triadimefon)	
Vinclozolin (only parent compound)	0.05

MPRL (Minimum Performance Reporting Level) is set at the same level as MRL* in the EU Directives ("lower limit of analytical determination"). If no EU-MRL are set at the lower limit of analytical determination or yet fixed, the MPRL is set by the EUPT-7 organizing committee and the figure is followed by #.

ANNEX 2. List of laboratories invited to participate in PT7.

COUNTRY	City	Laboratory Name	Reported Results
AUSTRIA	Innsbruck	Austrian Agency for Health and Food Safety Joint services Competence Centre Plant Protection Products Residues	Yes
AUSTRIA	Vienna	Competence Centre Residue Analysis Vienna	Yes
BELGIUM	Brussels	Scientific Institute of Public Health (IPH)	Yes
BELGIUM	Zwijnaarde	Fytolab	Yes
CYPRUS	Nicosia	State General Laboratory	Yes
CYPRUS	Nicosia	Pesticide Residue Laboratory, Analytical Laboratories Section, Department of Agriculture	Yes
CZECH REPUBLIC	Prague 6	Institute of Chemical Technology (VSCHT Praha)	Yes
CZECH REPUBLIC	Praha 5	Statni zemedelska a potravinarska Inspekce (Czech Agriculture and Food Inspectorate)	Yes
DENMARK	Copenhagen V	Fodevareregion Kobenhavn	Yes
DENMARK	Soeborg	Danish Institute for Food and Veterinary Research	Yes
ESTONIA	Saku (Harjumaa)	Lab for Residues and Contaminants of Agricultural Research Centre	Yes
ESTONIA	Tartu	Health Protection Inspectorate Laboratory	Yes
FINLAND	Espoo	Finnish Customs Laboratory	Yes
FINLAND	Helsinki	Environment Centre of Helsinki	Yes
FRANCE	Illkirch	Laboratoire DGCCRF Strasbourg	Yes
FRANCE	Massy Cedex	DGCCRF-Laboratoire de Paris Massy	Yes
FRANCE	Montpellier Cedex 5	Laboratoire de la DGCCRF	Yes
FRANCE	Rennes	Laboratoire DGCCRF-Rennes	Yes
FRANCE	Talence	DGCCRF Laboratoire de Bordeaux	Yes
FRANCE	Villeneuve d'Ascq	D.G.C.C.R.F. - L59	No
GERMANY	Aachen	Chemisches und Lebensmitteluntersuchungsamt Stadt Aachen	Yes
GERMANY	Berlin	BBGes-ILAT, FB 26	Yes
GERMANY	Bielefeld	Chemisches Untersuchungsamt OWL	Yes
GERMANY	Bonn	Amt für Umwelt, Verbraucherschutz und Lokale Agenda	Yes

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COUNTRY	City	Laboratory Name	Reported Results
GERMANY	Bremen	Landesuntersuchungsamt Bremen für Chemie, Hygiene und Veterinärmedizin	Yes
GERMANY	Dortmund	Chemisches Untersuchungsamt der Stadt Dortmund	Yes
GERMANY	Dusseldorf	Amt für Verbrauchers.-Chem. Lebensmittelunters.	Yes
GERMANY	Erfurt	Thüringer Landesamt für Lebensmittelsicherheit und Verbraucherschutz (TLLV)	Yes
GERMANY	Erlangen	Bayer. Landesamt für Gesundheit und Lebensmittelsicherheit	Yes
GERMANY	Essen	CGI Essen/Oberhausen	Yes
GERMANY	Fellbach	CVUA Stuttgart	Yes
GERMANY	Hagen	Chemisches Untersuchungsamt der Stadt Hagen	Yes
GERMANY	Halle	Landesamt für Verbraucherschutz, Fachbereich 3	Yes
GERMANY	Hamburg	Institut für Hygiene und Umwelt	Yes
GERMANY	Kassel	Hessisches Landeslabor, Standort Kassel	Yes
GERMANY	Münster	Chemisches Landes- und Staatliches Veterinäruntersuchungsamt	Yes
GERMANY	Neumuenster	Landeslabor Schleswig-Holstein	Yes
GERMANY	Oldenburg	LAVES Lebensmittelinstitut Oldenburg	Yes
GERMANY	Potsdam	Landeslabor Brandenburg; Fachbereich L5	Yes
GERMANY	Recklinghausen	Gemeinsames Chemisches und Lebensmitteluntersuchungsamt für den Kreis Recklinghausen und die Stadt Gelsenkirchen (CEL)	Yes
GERMANY	Rostock	Landesveterinär- und Lebensmitteluntersuchungsamt M-V	Yes
GERMANY	Saarbrücken	LVGA Landesamt für Verbraucher-, Gesundheits- und Arbeitsschutz; Abt. G	Yes
GERMANY	Speyer	Landesuntersuchungsamt, Institut für Lebensmittelchemie Speyer	Yes
GERMANY	Trier	Landesuntersuchungsamt-Institut für Lebensmittelchemie Trier	Yes
GERMANY	Wiesbaden	Hessisches Landeslabor	Yes
GERMANY	Wuppertal	Chemisches Untersuchungsinstitut Bergisches Land	Yes

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GREECE	Athens	General Chemical State Laboratory. Division Pesticide Residue	Yes
GREECE	Athens	RCP&QC, Pesticide Residue Laboratory	Yes
GREECE	Ioannina	Regional Centre of Plant Protection and Quality Control	Yes
GREECE	Iraklion, Crete	Regional Centre of Plant Protection and Quality Control of Iraklion	Yes
GREECE	Kavala	Ministry Rural Development and Food, Peripheral Center of Kavala	Yes
GREECE	Kifissia, Athens	Pesticide Residues Laboratory, Benaki Phytopathological Institute	Yes
GREECE	Thessaloniki	Regional Center of Plant Protection and Quality Control	Yes
HUNGARY	Fácánkert	Pesticide Residue Analytical Laboratory of Plant Protection and Soil Conservation Service of Tolna County	Yes
HUNGARY	Hódmezovásárhely	Plant Health and Soil Conservation Service of Csongrad County	Yes
HUNGARY	Kaposvár	Plant Protection and Soil Conservation Service of Somogy County	Yes
HUNGARY	Miskolc	Pesticide Residue Analytical Laboratory PPSCS-BAZ	Yes
HUNGARY	Nyiregyháza	Plant Protection and Soil Conservation Service of Szabolcs-Szatmár-Bereg county	Yes
HUNGARY	Szolnok	Plant Protection and Soil Conservation Service	Yes
HUNGARY	Tanakajd	Pesticide Residue Analytical Laboratory of County Vas	Yes
HUNGARY	Velence	Plant Protection and Soil Conservation Service of Férjér County	Yes
ICELAND	Reykjavík	Environment and Food Agency of Iceland	Yes
IRELAND	Dublin	Pesticide Residue Laboratory. Abbotstown Laboratory Complex	Yes
ITALY	Arezzo	ARPAT DIP. di Arezzo	Yes
ITALY	Bari	ARPA Puglia - Dipartimento di Bari	Yes
ITALY	Bolzano	Agenzia Ambiente Bolzano	Yes
ITALY	Cagliari	Presidio Multizonale di Prevenzione Cagliari - Area Chimica-	Yes
ITALY	Catania	ARPA Sicilia-DAP Catania	Yes

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COUNTRY	City	Laboratory Name	Reported Results
ITALY	Chiesuol del Fosso (Ferrara)	ARPA Sezione di Ferrara	Yes
ITALY	La Loggia (Torino)	A.R.P.A Piemonte - Polo Regionale Alimenti	Yes
ITALY	La Spezia	A.R.P.A.L. Laboratorio "Centro Pesticidi Regionale"	Yes
ITALY	Nuoro	Presidio Multizonale di Prevenzione Area Chimica	Yes
ITALY	Pordenone	ARPA - FVG Dipartimento di Podenone	Yes
ITALY	Ragusa	AUSL n7 Ragusa DAP RAGUSA ARPA SICILIA L.I.P. Sezione Chimica	Yes
ITALY	Roma	Dip. Ambiente e Connessa Prevenzione Primaria-Reparto Antiparassitari	Yes
ITALY	Saint Christophe (Aosta)	ARPA Valle Dáosta	Yes
ITALY	Sondrio	ARPA-Dip. Sondrio-UO Laboratorio	Yes
ITALY	Trento	A.P.P.A. Trento-Settore Lab. e Controlli	Yes
ITALY	Verona	APRAV-Verona	Yes
ITALY	Vicenza	A.R.P.A.V. Dipartimento di Vicenza	Yes
LATVIA	Riga	State Veterinary Medicine Diagnostic Centre	Yes
LATVIA	Riga	State Agency "Public Health Agency". Laboratory of Chemistry	Yes
LITHUANIA	Vilnius	National Veterinary Laboratory	Yes
LUXEMBOURG	Luxembourg	Côntrole des Denrées Alimentaries	Yes
NORWAY	Aas	Norwegian Crop Research Institute, Pesticide Laboratory	Yes
POLAND	Bialystok	Plant Protection Institute, Experimental Field Station in Bialystok	Yes
POLAND	Katowice	Wojewodzka Stacja Sanitarno-Epidemiologiczna	Yes
POLAND	Kielce	Wojewodzka Stacja Sanitarno-Epidemiologiczna	Yes
POLAND	Krakow	Wojewodzka Stacja Sanitarno-Epidemiologiczna	Yes
POLAND	Lodz	Wojewodzka Stacja Sanitarno-Epidemiologiczna	Yes
POLAND	Opole	Wojewodzka Stacja Sanitarno-Epidemiologiczna	Yes
POLAND	Poznan	Plant Protection Institute, Department of Pesticide Residue Research	Yes

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COUNTRY	City	Laboratory Name	Reported Results
POLAND	Poznan	Wojewodzka Stacja Sanitarno-Epidemiologiczna	Yes
POLAND	Rzeszow	Wojewodzka Stacja Sanitarno-Epidemiologiczna	Yes
POLAND	Rzeszów	Plant Protection Institute	Yes
POLAND	Skierniewice	Laboratory of Contamination & Pesticides Residue Analyses. Research institute of Pomology and Floriculture	Yes
POLAND	Sosnicowice	Plant Protection Institute	Yes
POLAND	Trzebnica	Plant Protection Institute	Yes
POLAND	Warsaw	National Institute of Hygiene. Dpto. Environmental Toxicology	No
PORTUGAL	Camacha	Laboratório Agrícola Da Madeira	Yes
PORTUGAL	Oeiras	Direcção-Geral de Protecção das Culturas	Yes
ROMANIA	Bucuresti	Central Laboratory for Pesticide Residues Control	Yes
SLOVAKIA	Bratislava	State Veterinary and Food Institute	Yes
SLOVENIA	Ljubljana	Agricultural Insitute of Slovenia, Central Laboratories	Yes
SLOVENIA	Ljubljana	Institute of Public Health	Yes
SLOVENIA	Maribor	Public Health Institute, Environmental Protection Institute	Yes
SPAIN	Almeria	Laboratorio de la Dirección Territorial del Comercio (SOIVRE de Almería)	Yes
SPAIN	A Coruña	Laboratorio Agrario y Fitopatológico de Galicia	Yes
SPAIN	Alicante	Laboratorio SOIVRE de Alicante	Yes
SPAIN	Aravaca (Madrid)	Laboratorio Arbitral Agroalimentario del MAPA	Yes
SPAIN	Burgos	Laboratorio Agrario Regional. Junta de Castilla y León	Yes
SPAIN	Burjassot (Valencia)	Agroalimentario Generalitat Valenciana	Yes

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COUNTRY	City	Laboratory Name	Reported Results
SPAIN	Cabrils	Laboratori Agroalimentari Generalitat de Catalunya	Yes
SPAIN	El Palmar, Murcia	Laboratorio Agroalimentario y de Sanidad Animal	Yes
SPAIN	Jaén	Laboratorio de Sanidad Vegetal	Yes
SPAIN	La Mojonera, Almeria	Laboratorio de Producción y Sanidad Vegetal de Almería	Yes
SPAIN	Logroño	Laboratorio Regional de la CCAA La Rioja	Yes
SPAIN	Majadahonda (Madrid)	Centro Nacional de Alimentacion	Yes
SPAIN	Murcia	S.O.I.V.R.E. Murcia	Yes
SPAIN	Sevilla	Laboratorio del Catice (SOIVRE) de Sevilla	Yes
SPAIN	Villava Navarra	Gobierno de Navarra - Negociado de Análisis Instrumental	Yes
SPAIN	Zizurkil	Laboratorio Agrario. Diputación Foral de Gipuzkoa	No
SWEDEN	Lidköping	AnalyCen Nordic AB	Yes
THE NETHERLANDS	Amsterdam	VWA-Food and Consumer Product Safety Authority	Yes
UNITED KINGDOM	Edinburgh, Scotland	Scottish Agricultural Science Agency	Yes
UNITED KINGDOM	Teddington, Middlesex	Laboratory of the Government Chemist Limited	Yes
UNITED KINGDOM	Wolverhampton	Direct Laboratories	Yes
UNITED KINGDOM	York	Central Science Laboratory	Yes