



EU PROFICIENCY TEST

EUPT-SRM19, 2024

Residues of Pesticides Requiring Single Residue Methods Test Item: Grape Homogenate

Preliminary Report

Michelangelo Anastassiades

Pat Schreiter

General Remarks

- All assigned values (AVs), relative robust standard deviations (CV*s) and z scores presented in the following are preliminary. These figures may slightly, and in exceptional cases considerably, differ from those in the EUPT-SRM19 final report, which will be drafted following an evaluation by the EUPT-Scientific Committee and the joint EURL/NRL-Workshop.
- All labs are kindly requested to check their results carefully and to **report any errors**. However, **only transcription errors by the organizers well as principal objections concerning the evaluation can be considered at this stage**.
- **In case of poor performance**, i.e. questionable or unacceptable scores (abs. z score > 2 incl. false negatives) or false positive results, participants are provided with an additional **excel-file attached to this e-mail. Please use this file and the dropdown options to report your feedback on poor performance to the organizers by 31 May, 2024**. Therein you can briefly state the follow-up actions undertaken, the (possible) reasons for the poor performance, and any new results generated if the PT-material was re-analysed, e.g. by another (improved) procedure. In case technical advice is needed, please don't hesitate to contact the EURL-SRM.

Preparation and shipment of the EUPT-SRM19 Test Item

The proficiency test EUPT-SRM19 was conducted using grape homogenate as commodity for the test item. To prepare the test item, deeply frozen seedless grapes were purchased, milled in the laboratory in semi-frozen condition and kept in the freezer for several hours to keep it cool. The cold, grape homogenate was spiked at sub-zero temperatures but still in a liquid state with a range of selected pesticides and mixed for 60 min using a powerful rod mixer. An overview of the pesticides spiked to the test material are shown in **Table 1**. After spiking and homogenization, the mixture was portioned into pressure-lock plastic bags and frozen at -20 °C in thin plates for several days. The frozen grape "plates" were cryogenically milled using dry ice and portioned into bottles in a snow-like state. Approximately 400 g portions of the grape "snow" were weighed-out into labelled and leak-proof screw-capped polyethylene plastic bottles, sealed, and stored in a freezer at about -20 °C until the shipment day. In the morning of the 5th of February, 2024, the day of shipment, the bottles containing the deeply frozen test item were packed into insulated boxes (one bottle in each box) together with 2 kg dry ice. The boxes were stored in the freezer until they were picked up by DHL in the afternoon.

Table 1: Analytes present in the SRM19 test material

Analytes	M: Mandatory O: Optional E: Extra	Incurred	Spiked in Lab	Compounds applied in lab
Abamectin B1a	M	No	Yes	Abamectin*
Clopyralid	M	No	Yes	Clopyralid
Copper	M	partly	Yes	Copper sulphate pentahydrate
Dithianon	M	No	Yes	Dithianon
DTC (expr. as CS ₂)	M	No	Yes	Metiram (CELAFLOR)
Etephon	M	No	Yes	Etephon
Folpet	M	No	Yes	Folpet
MPP (=aka MPPA)	M	No	Yes	MPP (=aka MPPA)
N-Acetyl glufosinate	M	No	Yes	N-Acetyl glufosinate
Phthalimide	M	No	Yes	Phthalimide
2,4-DNOP (free phenol)	O	No	Yes	2,4-DNOP (free phenol)
Meptyldinocap	O	No	Yes	Meptyldinocap
Difluoroacetic acid	E	No	Yes	Difluoroacetic acid
Gamma Cyhalothrin	E	No	Yes	Gamma Cyhalothrin
Lambda Cyhalothrin	(E)	No	Yes	Lambda Cyhalothrin

* according to the manufacturer composed of 97,85% avermectin B1a and 2,15% avermectin B1b

Testing of EUPT-SRM19 Test Item

10 bottles of the test item were selected randomly and tested for homogeneity prior to shipment. The stability of the pesticides within the test material was investigated during a period encompassing the EUPT duration. Additional tests were conducted to study the degradation behaviour of pesticides when the sample is left to defrost and stored in this state prior to analysis.

Participation, Collection and Evaluation of Results

In total, 123 OfLs (incl. NRLs) from EU and EFTA countries, 4 laboratories from one EU candidate country and 8 laboratories from 6 different third countries (AU, CR, IN, VN, UK, PE) have analysed at least one compound and submitted their result. Using an online tool, the participants were able to submit their results by the 12th of March, 2024. The requested method information in the case of tentatively false negative results had to be submitted by the 21st of March, 2024.

For the calculation of the **preliminary assigned values** only the results submitted by the 123 OfLs from EU member states and EFTA countries were considered.

A summary of the preliminary assigned values and CV* is shown in **Table 2**.

Notes to Mandatoy Compounds

Dithianon

The distribution of the entire population of the results for dithianon was quite broad (CV* = 54.6 %). Dithianon is sensitive to oxidation and its levels drop rapidly when samples are defrosted. Keeping temperatures low and acidifying during extraction protect dithianon from degradation, but the latter aspect was of secondary importance in this case, as grapes are acidic by nature, thus providing some protection to dithianon.

Analyte	Dithianon	
Population for Robust Mean (RM)	entire population	only results generated under strong protection
No. of numerical results	77	40
therein Outliers	0	0
No. results for RM	77	40
No. of FNs	4	2
RM [mg/kg]	0.181	0.236
CV*	54.6%	38.1%

Despite the clear advice to keep the sample frozen till analysis, many labs have left their samples to defrost before portioning or after portioning them. A correlation between this practice of defrosting and the reporting of lower dithianon levels could be noticed in the data. Stability experiments by the EURL-SRM have confirmed the decomposition of dithianon in the grape test item when defrosted. Decomposition rates increase the longer the analyte is exposed to the defrosted matrix and the higher the temperature of the homogenate is.

Having the above information about the degradation behaviour of dithianon in mind, it was decided to calculate the **preliminary assigned value** for dithianon using a subpopulation of 40 results, that, according to the submitted method information, were generated by laboratories having kept the PT item frozen till analysis. Evaluating the results based on the robust mean of the entire population would have been unfair towards laboratories having protected their samples prior to analysis and would trigger the wrong laboratories to start investigations for identifying error sources and undertaking corrective actions.

Dithiocarbamates (DTCs, expressed as CS₂)

The distribution of DTC results of the EUPT-SRM19 exercise was quite broad (CV* = 46.7%), but still the uncertainty of the robust mean was just within the accepted limits to qualify as an assigned value according to the “consensus approach”. It

was however noticed, that the data reported are quite heterogeneous, and that the robust mean values of different types of methods used by the participants deviate significantly. There is furthermore a recognizable trend towards higher reported levels by laboratories having employed stronger reaction conditions. Experiments run by the EURL-SRM under differently strong reaction conditions have confirmed this trend. It was furthermore noted that employing the recently published EURL-SRM approach for the analysis DTCs as CS₂ ([SRM-14\(V3\)](#)) leads to significantly higher results compared to the previous method.

Overall, the experiments have shown that the robust mean value of the entire population of results (0.0677 mg/kg) is considerably lower than the actual concentration of DTCs in the EUPT-SRM19 test item.

Based on a large number of experiments conducted by the EURL-SRM, and taking into account results submitted by participants employing strong reaction conditions, **the EURL-SRM estimates that the actual concentration of DTCs in the test item (expressed as CS₂) is around 0.10 mg/kg**. This value was therefore taken as the preliminary reference value and the preliminary z-scores in this report were calculated based on this value.

Laboratories having been allocated abs. z scores > 2 for this analyte within this report are requested to seek for the sources of errors and to undertake corrective actions. This information is to be reported in the Poor Performance Survey of the organizer (see page 6).

The decision about the final assigned value, and on whether an official scoring will be allocated to the labs, will be taken following consultations with the EUPT advisory group.

It is furthermore highlighted that the EURL-SRM will shortly run a short survey among the laboratories to ask for more details about the procedure used, with emphasis on ratio between reagent and sample and the reagent composition. Within this context laboratories will be given the opportunity to report any new results generated for the EUPT-SRM-19 material by methods entailing stronger reaction conditions.

Folpet and Phthalimide

As underlined in the EUPT-SRM17 and EUPT-SRM12, as well as in various EURL-SRM documents (e.g. [SRM-07](#) (using GC-MS/MS), [SRM-42](#) (APCI or ESI LC-MS/MS to cover parents+degradants); and [SRM-49](#) (LC-MS/MS in the ESI-pos. mode to analyse THPI and PI)), folpet undergoes decomposition to phthalimide in the GC-injector, which may result in an overestimation of the phthalimide results if this aspect is not taken into account. This aspect has been communicated several times in various workshops and trainings. Folpet itself can be analysed accurately by GC-based methods if matrix effects are addressed, but phthalimide is better analysed by LC-MS/MS where the result is not overestimated due to the extra phthalimide generated from Folpet decomposition in the hot injector. The same applies to captan and tetrahydrophthalimide.

A separate, purely GC-based approach, involving deduction of the phthalimide amount formed in the GC-injector was also published by the EURL-SRM ([SRM-07-ExtCal](#) and [SRM-07-StdAdd](#)).

Among the 80 numerical results reported by the participants for **folpet**, 66 (83.5%) were generated by GC methods. Although the distribution of all 80 numerical results for folpet was not really high (26.8%), the histogram and kernel density revealed a slight hint of bimodality, with the 14 results generated by LC-based methods forming a narrowly distributed sub-population (CV* 14.5%). The robust mean of this sub-population at 0.247 mg/kg (N=14), is roughly 10 % higher than the overall robust mean of 0.225 mg/kg (N=80) and roughly 13 % higher than the robust mean of the GC-based results of 0.218 mg/kg, (N=63). This shift may be partly due to the inadequate consideration of matrix effects or losses prior or during sample preparation by a certain share of the labs using GC. As the distance between the LC and the GC population was small, and as GC is not per se inadequate for accurately analysing folpet, **the robust mean of the entire population was used as the preliminary assigned value** and the preliminary z scores in this report are based on this value.

In the case of **phthalimide**, despite the numerous appeals by the EURL-SRM to consider the risk of overestimating the levels when using GC-based methods, 69 of the 85 numerical results (81%) were generated by laboratories employing GC-based methods. In fact, only 16 numerical results were generated by LC-based methods. The overall distribution of the 85 numerical results was quite broad (CV* 38.3 %) and again a certain bimodality was noticed, due to the LC-results forming a slightly shifted population with a robust mean value of 0.082 mg/kg (N=14 after elimination of two outliers). This value is roughly

23% lower than the robust mean of the total population at 0.106 mg/kg (N=82 after elimination of 3 outliers) and roughly 27% lower than the robust mean of the GC-based results of 0.112 mg/kh (N=69). This trend was expected for the reasons explained above. Unexpectedly, the LC population was rather broadly distributed (CV* 32.4 %), which increases the uncertainty of the robust mean. Still, considering that one of the main purposes of this preliminary report is to give labs the opportunity to timely localize and eliminate sources of errors, and taking into account the spiking levels, but also considering the results of numerous EURL-SRM experiments, the **robust mean of the LC-results at 0.082 mg/kg was used as a the preliminary assigned value for calculating the preliminary z scores in this report**. This value is close to mean value of the EURL-SRM homogeneity test (0.0785 mg/kg), which was also derived using LC-MS/MS measurement. Evaluating the results based on the robust mean of the entire population would be unfair towards laboratories having avoided practices leading to overestimated results for phthalimide.

The different evaluations for folpet and phthalimid based on the determination technique are summarized in the following table:

Analyte	Folpet			Phthalimid		
Population for Robust Mean (RM)	entire population	GC based	LC based	entire population	GC based	LC based
No. of numerical results	80	66	14	85	69	16
therein Outliers	3	3	0	3	1	2
No. results for RM	77	63	14	82	68	14
No. of FNs	8	8	0	2	1	1
Prelim. Assigned Value [mg/kg]	0.225	0.218	0.247	0.106	0.112	0.082
CV*	26.8%	30.6%	14.5%	38.3%	38.1%	32.4%
AV Uncertainty	0.0086	0.01050	0.012	0.0056	0.00649	0.0089
AV Tolerance	0.0169	0.0164	0.0185	0.008	0.0084	0.0062
	passed	passed	passed	passed	passed	failed

Notes to Optional Compounds

2,4-DNOP (free phenol), Meptyldinocap, Meptyldinocap (sum, calc.) and Meptyldinocap (sum, following hydrolysis)

Meptyldinocap is entailed in the SANTE working document giving guidance to EU-Member States for the design of multiannual National Monitoring Programs (MANCPs). Grapes are specifically mentioned as a relevant commodity for checking meptyldinocap residues. Still, only a very small number of laboratories have reported results for meptyldinocap (N=18), its metabolite 2,4-DNOP (N=12), the calculated sum of meptyldinocap (N=13) as well as the meptyldinocap sum following hydrolysis (N=18). The small population of results compromises the reliability of evaluations based on robust statistics. The preliminary z scores presented here are for orientation, but should still trigger corrective actions in case of a strong bias. Following consultations with the EUPT advisory group, it will be decided which of those analytes will be officially evaluated and which will only be evaluated for informative purposes.

Notes to Extra Compounds

Difluoroacetic acid (DFA)

Only 9 participating laboratories reported numerical results for DFA. The robust mean of the entire population was used as the preliminary assigned value for calculating the preliminary z scores. With a population of just 9 results the uncertainty of the assigned value is considered too high, irrespective on how narrowly the values are dispersed. Whether or not alternative evaluation approaches can be used to calculate z scores, and whether these z scores will be for information only, will be decided following consultations with the EUPT advisory group.

Gamma Cyhalothrin

In order to quantify γ -cyhalothrin, chiral chromatography needs to be applied. According to an extra survey, among the 22

laboratories having submitted results for this analyte (15 EU-/EFTA OfLs and 7 based in 3rd countries) only one laboratory (Lab Code 25) used chiral chromatography for this analysis. This means that the results essentially refer to cyhalothrin (sum). Although cyhalothrin (sum) was not a target analyte it was decided, for informative purposes only, to calculate the robust mean of these results (excluding the result of the laboratory that used chiral chromatography) and to use it for calculating informative z scores. Following consultations with the EUPT advisory group it will be decided if and how this compound will be evaluated within the final report.

False positives (FPs) and False reporting (FR)

Among the results received from EU/EFTA-OfLs, 7 results submitted by 5 laboratories (2 cases for captan and one each for amitrole, captan (sum), chlormequat-Cl, glufosinate and mepiquat-Cl) were **preliminarily judged as FPs**. In addition, one each for captan (sum) and 2,4-D (free acid) was judged not as FP but FR (false reporting) since the reported value was lower than the MRRL and even lower than lab's reporting limit for that analyte. Except amitrole (optional compound), all other FP cases concerned mandatory compounds. No results reported for the two extra analytes difluoroacetic acid and gamma cyhalothrin were judged as FP. All these FPs are listed in **Table 4**.

In the current PT no results reported by the country laboratories were judged as FPs.

False negatives (FNs)

Considering mandatory and optional analytes only, 31 EU/EFTA-OfLs reported in 39 cases results that were **preliminarily judged as FN**s. These concerned compounds that were present in the test item at relevant levels and were analysed but not detected by the labs. Following to the valid General protocol (Ed. 10th) the z scores for these FN were set at -4.

In 34 of these cases with FN-judgement, the laboratories' RLs were lower than the preliminary assigned values of the respective analytes. These FN results concerned the following analytes: Folpet (8x), dithianon (4x), ethephon (3x), N-acetyl glufosinate (3x), abamectin B1a (2x), DTCs as CS₂ (2x), Folpet, sum (2x), MPP (2x), phthalimide (2x), 2,4-DNOP (2x), as well as clopyralid (1x), meptyldinocap (1x), meptyldinocap, calculated sum (1x) and meptyldinocap sum following hydrolysis (1x).

The remaining five FN concerned cases where the laboratories had targeted the analytes, but not reported any results for them as their corresponding RLs were too high for the purpose. These cases concerned the following three analytes: DTCs as CS₂ (3x), N-acetyl-glufosinate (1x) and clopyralid (1x). Not reporting results below the lab-own RL is technically correct, however, according to the EUPT General Protocol these non-reports are to be judged as FN. They are marked with an asterisk and a note. The FN judgement in such cases aims to give an incentive to the labs to lower their RLs to a level that is fit for the purpose. The labs affected are encouraged to improve analytical sensitivity and lower the LOQs for these compounds.

Furthermore, two labs reported two FN among the two extra analytes, one each for difluoroacetic acid and gamma cyhalothrin.

Among the participating labs outside EU-/EFTA countries, 4 laboratories reported in 11 cases results preliminarily judged as FN for mandatory or optional compounds as follows: Ethephon (2x), folpet (2x) and MPP (2x), Folpet, sum (1x), N-acetyl glufosinate (1x), phthalimide (1x), meptyldinocap (1x), and meptyldinocap, calculated sum (1x).

All submitted results of pesticides are shown in **Table 3**. This table also contains results reported by the **participating laboratories settled outside the EU/EFTA-countries**. In all these cases the z scores were calculated using the same assigned values as for the EU/EFTA-OfLs.

IMPORTANT: Please Give Feedback on Poor Performance!

Laboratories having obtained poor results (i.e. abs. z-scores >2, incl. false negatives, or false positives), are urged to initiate actions for tracing back the sources of errors.

A brief summary of these actions and of any identified sources for the poor performance, should be reported to the EUR-SRM by 31 May, 2024. Please use the Excel-file attached to the E-mail with the preliminary protocol.

Table 2: Preliminary evaluation of EUPT-SRM19 results in summary

Mandatory Compounds:

Analyte	Abamectin B1a	Clopyralid	Copper	Dithianon	DTCs	Ethephon	Folpet	Folpet (sum)	MPP	N-Acetyl glufosinate	Phthalimid
Population for AV	entire population	entire population	entire population	only results generated under strong protection	(Pl. see text, p. 2)	entire population	only LC based results				
No. of numerical results	97	75	75	40	87	93	80	81	73	75	16
therein Outliers	1	1	1	0	—	2	3	3	2	1	2
No. results for AV	96	74	74	40	—	91	77	78	71	74	14
No. of FNs	2	2	0	2	5	3	8	2	2	4	1
Prelim. Assigned Value [mg/kg]	0.0711	0.192	29.9	0.236	0.1	0.0582	0.225	0.421	0.0819	0.0773	0.0820
CV*	24.6%	23.4%	7.7%	38.1%	—	14.7%	26.8%	18.4%	22.8%	21.9%	32.4%

Optional Compounds:

Analyte	2,4-DNOP (free phenol)	Meptyldinocap	Meptyldinocap (sum, calculated)	Meptyldinocap (sum, follow. hydr.)	Extra Compounds		
					Difluoroacetic acid	Cyhalothrin (sum)	only results generated WITHOUT applying chiral chromatograph
Population for AV	entire population	entire population	entire population	entire population	entire population	14	only results generated WITHOUT applying chiral chromatograph
No. of numerical results	12	18	13	18	9	14	
therein Outliers	1	5	3	3	0	0	
No. results for AV	11	13	10	15	9	14	
No. of FNs	2	1	1	1	1	1	
Prelim. Assigned Value [mg/kg]	0.0647	0.086	0.150	0.188	0.146	0.0754	
CV*	46.9%	29.6%	23.4%	30.9%	21.7%	23.3%	

Table 3: Results reported by the participants in EUPT-SRM19, sorted according to labcode.

Participating laboratories based in countries outside the EU/EFTA zone are listed at the bottom of the table.

Table Legend:

- Compulsory analytes are written in blue, optional analytes in green, extra analytes in purple**
Analytes **present** in the test material are written in **bold**, and those *absent* from the test material are shown in *italic*.
- FN: Result was preliminarily judged as a false negative (i.e. the analyte was present in the test sample at a relevant concentration with no quantitative result being reported by the lab)
- FN*: the same as FN, but with the lab's RL being higher than the AV
- FP: Result was preliminarily judged as false positive, i.e. the analyte was not present in the material, but the lab reported a numerical value
- FR: The lab's result was below its own reporting limit for this analyte. The results may simultaneously also be a FP.
- ^(o): Preliminary outliers (not included in the establishment of prAVs).
- Prel. AAZ: preliminary average of absolute z-scores of mandatory analytes, calculated for 5 or more results. Prel. AAZ-values >1.2 are highlighted in bold as they indicate that the average absolute bias is > 30 %.
- Cat.: Categorization of labs based on scope. Cat A was assigned to labs that have analysed and correctly found at least 10 out of the 11 compulsory analytes present in the sample, have analysed at least 17 out of the 19 compulsory analytes listed in the Target Pesticides List, and have not reported any false positive results within the compulsory analytes.

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ	Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
1	A	Abamectin B1a	0.0711	24.6%	0.088	1.0	1.3	6	A	Abamectin B1a	0.0711	24.6%	0.029	-2.4	2.4
		Clopyralid	0.192	23.4%	0.25	1.2	Clopyralid			0.192	23.4%	0.144	-1.0		
		Dithianon	0.236	38.1%	0.041	-3.3	Copper			29.9	7.7%	25.03	-0.7		
		DTCs (expr. as CS₂)	0.1	—	0.072	-1.1	Dithianon			0.236	38.1%	0.049	-3.2		
		Ethephon	0.0582	14.7%	0.069	0.7	DTCs (expr. as CS₂)			0.1	—	0.024	-3.0		
		Folpet	0.225	26.8%	0.149	-1.4	Ethephon			0.0582	14.7%	0.072	0.9		
		Folpet (sum)	0.421	18.4%	0.349	-0.7	Folpet			0.225	26.8%	0.088	-2.4		
		MPP (=aka MPPA)	0.0819	22.8%	0.052	-1.5	Folpet (sum)			0.421	18.4%	1.08 ^(o)	6.3		
		N-Acetyl glucosinate	0.0773	21.9%	0.047	-1.6	MPP (=aka MPPA)			0.0819	22.8%	0.056	-1.3		
		Phthalimide	0.0820	32.4%	0.1	0.9	N-Acetyl glucosinate			0.0773	21.9%	0.057	-1.1		
2	A	Abamectin B1a	0.0711	24.6%	0.0627	-0.5	0.8	7	A	Abamectin B1a	0.0711	24.6%	0.059	-0.7	0.8
		Clopyralid	0.192	23.4%	0.188	-0.1	Clopyralid			0.192	23.4%	0.231	0.8		
		Copper	29.9	7.7%	30.6	0.1	Copper			29.9	7.7%	28.0	-0.3		
		Dithianon	0.236	38.1%	0.364	2.2	Dithianon			0.236	38.1%	0.430	3.3		
		DTCs (expr. as CS₂)	0.1	—	FN*	-4.0	DTCs (expr. as CS₂)			0.1	—	0.103	0.1		
		Ethephon	0.0582	14.7%	0.0510	-0.5	Ethephon			0.0582	14.7%	0.057	-0.1		
		Folpet	0.225	26.8%	0.226	0.0	Folpet			0.225	26.8%	0.255	0.5		
		Folpet (sum)	0.421	18.4%	0.408	-0.1	Folpet (sum)			0.421	18.4%	0.37	-0.5		
		MPP (=aka MPPA)	0.0819	22.8%	0.0790	-0.1	MPP (=aka MPPA)			0.0819	22.8%	0.069	-0.6		
		N-Acetyl glucosinate	0.0773	21.9%	0.0659	-0.6	N-Acetyl glucosinate			0.0773	21.9%	0.070	-0.4		
3	B	Abamectin B1a	0.0711	24.6%	0.082	0.6	n.c.			Phthalimide	0.0820	32.4%	0.057	-1.2	
		Folpet	0.225	26.8%	0.305	1.4				2,4-DNP (free)	0.0647	46.9%	0.062	-0.2	
		Folpet (sum)	0.421	18.4%	0.728	2.9				Meptyldinocap	0.0860	29.6%	0.072	-0.7	
		Phthalimide	0.0820	32.4%	0.210	6.2				Meptyldinocap (sum, calculated)	0.150	23.4%	0.128	-0.6	
4	A	Abamectin B1a	0.0711	24.6%	0.0675	-0.2	0.8			Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.128	-1.3	
		Clopyralid	0.192	23.4%	0.197	0.1									
		Copper	29.9	7.7%	30.45	0.1									
		Dithianon	0.236	38.1%	0.280	0.7									
		DTCs (expr. as CS₂)	0.1	—	0.213	4.5									
		Ethephon	0.0582	14.7%	0.0522	-0.4									
		Folpet	0.225	26.8%	0.294	1.2									
		Folpet (sum)	0.421	18.4%	0.432	0.1									
		MPP (=aka MPPA)	0.0819	22.8%	0.0725	-0.5									
		N-Acetyl glucosinate	0.0773	21.9%	0.0730	-0.2									
5	B	Phthalimide	0.0820	32.4%	0.0684	-0.7									
		Difluoroacetic acid	0.146	21.7%	0.128	-0.5									
		Copper	29.9	7.7%	32	0.3	n.c.								
8	A	DTCs (expr. as CS₂)	0.1	—	0.081	-0.8									
		Abamectin B1a	0.0711	24.6%	0.077	0.3	0.8								
		Clopyralid	0.192	23.4%	0.177	-0.3									
		Copper	29.9	7.7%	26.6	-0.4									
		Dithianon	0.236	38.1%	0.150	-1.5									
		DTCs (expr. as CS₂)	0.1	—	0.054	-1.8									
		Ethephon	0.0582	14.7%	0.059	0.1									
		Folpet	0.225	26.8%	0.200	-0.4									
		Folpet (sum)	0.421	18.4%	0.420	0.0									
		MPP (=aka MPPA)	0.0819	22.8%	0.113	1.5									
		N-Acetyl glucosinate	0.0773	21.9%	0.103	1.3									
		Phthalimide	0.0820	32.4%	0.110	1.4									

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
9	A	Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	1.018 ^(o)	17.7	
		Cyhalothrin (sum)	0.0754	23.3%	0.065	-0.6	
9	A	Abamectin B1a	0.0711	24.6%	0.0752	0.2	0.8
		Clopyralid	0.192	23.4%	0.214	0.5	
		Copper	29.9	7.7%	30.3	0.1	
		Dithianon	0.236	38.1%	0.224	-0.2	
		DTCs (expr. as CS ₂)	0.1	—	0.013	-3.5	
		Ethephon	0.0582	14.7%	0.0657	0.5	
		Folpet	0.225	26.8%	0.268	0.8	
		Folpet (sum)	0.421	18.4%	0.50	0.8	
		MPP (=aka MPPA)	0.0819	22.8%	0.0852	0.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.0806	0.2	
		Phthalimide	0.0820	32.4%	0.114	1.6	
		2,4-DNOP (free)	0.0647	46.9%	0.0408	-1.5	
		Meptyldinocap	0.0860	29.6%	0.07779	-0.4	
11	B	Meptyldinocap (sum, calculated)	0.150	23.4%	0.128	-0.6	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.137	-1.1	
11	B	Abamectin B1a	0.0711	24.6%	0.080	0.5	0.7
		Clopyralid	0.192	23.4%	0.224	0.7	
		Copper	29.9	7.7%	28.8	-0.1	
		DTCs (expr. as CS ₂)	0.1	—	0.0530	-1.9	
		Ethephon	0.0582	14.7%	0.0722	1.0	
		Folpet	0.225	26.8%	0.278	0.9	
		Folpet (sum)	0.421	18.4%	0.437	0.2	
		Phthalimide	0.0820	32.4%	0.0791	-0.1	
12	B	Abamectin B1a	0.0711	24.6%	0.0568	-0.8	n.c.
		Clopyralid	0.192	23.4%	0.218	0.5	
		Dithianon	0.236	38.1%	0.197	-0.7	
13	A	Abamectin B1a	0.0711	24.6%	0.065	-0.3	1.3
		Clopyralid	0.192	23.4%	0.180	-0.3	
		Copper	29.9	7.7%	30.41	0.1	
		Dithianon	0.236	38.1%	0.155	-1.4	
		DTCs (expr. as CS ₂)	0.1	—	0.030	-2.8	
		Ethephon	0.0582	14.7%	0.055	-0.2	
		Folpet	0.225	26.8%	FN	-4.0	
		Folpet (sum)	0.421	18.4%	0.36	-0.6	
		MPP (=aka MPPA)	0.0819	22.8%	0.080	-0.1	
		N-Acetyl glucosinate	0.0773	21.9%	0.078	0.0	
		Phthalimide	0.0820	32.4%	0.180	4.8	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.33	3.0	
14	A	Abamectin B1a	0.0711	24.6%	0.085	0.8	0.7
		Clopyralid	0.192	23.4%	0.236	0.9	
		Copper	29.9	7.7%	26.98	-0.4	
		Dithianon	0.236	38.1%	0.231	-0.1	
		DTCs (expr. as CS ₂)	0.1	—	0.050	-2.0	
		Ethephon	0.0582	14.7%	0.058	0.0	
		Folpet	0.225	26.8%	0.230	0.1	
		Folpet (sum)	0.421	18.4%	0.436	0.1	
		MPP (=aka MPPA)	0.0819	22.8%	0.111	1.4	
		N-Acetyl glucosinate	0.0773	21.9%	0.094	0.9	
		Phthalimide	0.0820	32.4%	0.102	1.0	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.236	1.0	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
15	B	Difluoroacetic acid	0.146	21.7%	0.132	-0.4	
		Abamectin B1a	0.0711	24.6%	0.060	-0.6	1.6
		Clopyralid	0.192	23.4%	0.164	-0.6	
		Copper	29.9	7.7%	30.2	0.0	
		Dithianon	0.236	38.1%	0.203	-0.6	
		DTCs (expr. as CS ₂)	0.1	—	0.057	-1.7	
		Ethephon	0.0582	14.7%	0.052	-0.4	
		Folpet	0.225	26.8%	0.985 ^(o)	13.5	
		Folpet (sum)	0.421	18.4%	FN	-4.0	
		MPP (=aka MPPA)	0.0819	22.8%	0.076	-0.3	
16	A	N-Acetyl glucosinate	0.0773	21.9%	0.079	0.1	
		Phthalimide	0.0820	32.4%	FN	-4.0	
		Abamectin B1a	0.0711	24.6%	0.055	-0.9	0.6
		Copper	29.9	7.7%	30.0	0.0	
		Dithianon	0.236	38.1%	0.120	-2.0	
		DTCs (expr. as CS ₂)	0.1	—	0.099	0.0	
		Ethephon	0.0582	14.7%	0.060	0.1	
17	B	Folpet	0.225	26.8%	0.260	0.6	
		Folpet (sum)	0.421	18.4%	0.462	0.4	
		MPP (=aka MPPA)	0.0819	22.8%	0.078	-0.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.066	-0.6	
		Phthalimide	0.0820	32.4%	0.100	0.9	
		Abamectin B1a	0.0711	24.6%	0.0821	0.6	0.7
		Clopyralid	0.192	23.4%	0.151	-0.9	
18	B	Copper	29.9	7.7%	30	0.0	
		Dithianon	0.236	38.1%	0.132	-1.8	
		DTCs (expr. as CS ₂)	0.1	—	0.075	-1.0	
		Ethephon	0.0582	14.7%	0.0595	0.1	
		Folpet	0.225	26.8%	0.183	-0.7	
20	A	Folpet (sum)	0.421	18.4%	0.371	-0.5	
		Phthalimide	0.0820	32.4%	0.0933	0.6	
		Folpet	0.225	26.8%	0.203	-0.4	n.c.
		Folpet (sum)	0.421	18.4%	0.366	-0.5	
		N-Acetyl glucosinate	0.0773	21.9%	0.0631	-0.7	
		Phthalimide	0.0820	32.4%	0.0808	-0.1	
		Abamectin B1a	0.0711	24.6%	0.0731	0.1	0.5
		Clopyralid	0.192	23.4%	0.192	0.0	
		Copper	29.9	7.7%	32.1	0.3	
		Dithianon	0.236	38.1%	0.253	0.3	
		DTCs (expr. as CS ₂)	0.1	—	0.0932	-0.3	
		Ethephon	0.0582	14.7%	0.0623	0.3	
21	A	Folpet (sum)	0.421	18.4%	0.515	0.9	
		MPP (=aka MPPA)	0.0819	22.8%	0.0897	0.4	
		N-Acetyl glucosinate	0.0773	21.9%	0.0783	0.1	
		Phthalimide	0.0820	32.4%	0.141	2.9	
		2,4-DNOP (free)	0.0647	46.9%	0.0473	-1.1	
		Meptyldinocap	0.0860	29.6%	0.0869	0.0	
22	B	Meptyldinocap (sum, calculated)	0.150	23.4%	0.145	-0.1	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.142	-1.0	
		DTCs (expr. as CS ₂)	0.1	—	0.0309	-2.8	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
22	A	Ethepron	0.0582	14.7%	0.0501	-0.6	
		Folpet	0.225	26.8%	0.255	0.5	
		Folpet (sum)	0.421	18.4%	0.455	0.3	
		MPP (=aka MPPA)	0.0819	22.8%	0.0691	-0.6	
		N-Acetyl glucosinate	0.0773	21.9%	0.0732	-0.2	
		Phthalimide	0.0820	32.4%	0.0988	0.8	
		Abamectin B1a	0.0711	24.6%	0.0743	0.2	1.1
		Clopyralid	0.192	23.4%	0.207	0.3	
		Copper	29.9	7.7%	30.5	0.1	
		Dithianon	0.236	38.1%	0.148	-1.5	
		DTCs (expr. as CS ₂)	0.1	—	0.0259	-3.0	
		Ethepron	0.0582	14.7%	0.0542	-0.3	
		Folpet	0.225	26.8%	0.164	-1.1	
		Folpet (sum)	0.421	18.4%	0.342	-0.8	
		MPP (=aka MPPA)	0.0819	22.8%	0.117	1.7	
		N-Acetyl glucosinate	0.0773	21.9%	0.133	2.9	
		Phthalimide	0.0820	32.4%	0.0879	0.3	
		Abamectin B1a	0.0711	24.6%	0.062	-0.5	1.0
		Clopyralid	0.192	23.4%	0.178	-0.3	
		Copper	29.9	7.7%	31	0.1	
		Dithianon	0.236	38.1%	0.17	-1.1	
		DTCs (expr. as CS ₂)	0.1	—	0.056	-1.8	
		Ethepron	0.0582	14.7%	0.080	1.5	
		Folpet	0.225	26.8%	0.23	0.1	
		Folpet (sum)	0.421	18.4%	0.34	-0.8	
		MPP (=aka MPPA)	0.0819	22.8%	0.131	2.4	
		N-Acetyl glucosinate	0.0773	21.9%	0.107	1.5	
		Phthalimide	0.0820	32.4%	0.055	-1.3	
		2,4-DNOP (free)	0.0647	46.9%	0.119	3.4	
		Meptyldinocap	0.0860	29.6%	0.013	-3.4	
		Meptyldinocap (sum, calculated)	0.150	23.4%	0.159	0.2	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.493 ^(o)	6.5	
		Difluoroacetic acid	0.146	21.7%	0.141	-0.1	
		Abamectin B1a	0.0711	24.6%	0.0521	-1.1	0.7
		Clopyralid	0.192	23.4%	0.166	-0.5	
		Copper	29.9	7.7%	30.9	0.1	
		Dithianon	0.236	38.1%	0.375	2.4	
		DTCs (expr. as CS ₂)	0.1	—	0.115	0.6	
		Ethepron	0.0582	14.7%	0.0586	0.0	
		Folpet	0.225	26.8%	0.287	1.1	
		Folpet (sum)	0.421	18.4%	0.452	0.3	
		N-Acetyl glucosinate	0.0773	21.9%	0.0879	0.5	
		Phthalimide	0.0820	32.4%	0.0821	0.0	
		Abamectin B1a	0.0711	24.6%	0.0781	0.4	0.4
		Clopyralid	0.192	23.4%	0.172	-0.4	
		Copper	29.9	7.7%	28.46	-0.2	
		Dithianon	0.236	38.1%	0.234	0.0	
		DTCs (expr. as CS ₂)	0.1	—	0.0680	-1.3	
		Ethepron	0.0582	14.7%	0.0546	-0.2	
		Folpet	0.225	26.8%	0.261	0.6	
		Folpet (sum)	0.421	18.4%	0.438	0.2	
		MPP (=aka MPPA)	0.0819	22.8%	0.0680	-0.7	
		N-Acetyl glucosinate	0.0773	21.9%	0.0697	-0.4	
		Phthalimide	0.0820	32.4%	0.0879	0.3	
		2,4-DNOP (free)	0.0647	46.9%	0.0543	-0.6	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
26	B	Meptyldinocap	0.0860	29.6%	0.0931	0.3	
		Meptyldinocap (sum, calculated)	0.150	23.4%	0.160	0.3	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.162	-0.6	
		Cyhalothrin (sum)	0.0754	23.3%	0.0618 ^{chiral}	-0.7	
		Abamectin B1a	0.0711	24.6%	0.085	0.8	0.4
		Copper	29.9	7.7%	30.9	0.1	
		Ethepron	0.0582	14.7%	0.069	0.7	
		MPP (=aka MPPA)	0.0819	22.8%	0.082	0.0	
		N-Acetyl glucosinate	0.0773	21.9%	0.070	-0.4	
		Abamectin B1a	0.0711	24.6%	0.084	0.7	1.2
		Clopyralid	0.192	23.4%	0.212	0.4	
		Copper	29.9	7.7%	34	0.5	
		Dithianon	0.236	38.1%	0.115	-2.1	
		DTCs (expr. as CS ₂)	0.1	—	FN*	-4.0	
		Ethepron	0.0582	14.7%	0.061	0.2	
		Folpet	0.225	26.8%	0.261	0.6	
		Folpet (sum)	0.421	18.4%	0.493	0.7	
		Phthalimide	0.0820	32.4%	0.115	1.6	
		Abamectin B1a	0.0711	24.6%	0.061	-0.6	1.1
		Clopyralid	0.192	23.4%	0.208	0.3	
		Dithianon	0.236	38.1%	0.236	0.0	
		DTCs (expr. as CS ₂)	0.1	—	0.020	-3.2	
		Ethepron	0.0582	14.7%	0.060	0.1	
		Folpet	0.225	26.8%	0.163	-1.1	
		Folpet (sum)	0.421	18.4%	0.480	0.6	
		MPP (=aka MPPA)	0.0819	22.8%	0.063	-0.9	
		N-Acetyl glucosinate	0.0773	21.9%	0.066	-0.6	
		Phthalimide	0.0820	32.4%	0.157	3.7	
		Meptyldinocap	0.0860	29.6%	0.082	-0.2	
		Abamectin B1a	0.0711	24.6%	0.33 ^(o)	14.6	1.0
		Copper	29.9	7.7%	29	-0.1	
		Dithianon	0.236	38.1%	0.23	-0.1	
		DTCs (expr. as CS ₂)	0.1	—	0.078	-0.9	
		Ethepron	0.0582	14.7%	0.054	-0.3	
		Folpet	0.225	26.8%	0.29	1.2	
		Folpet (sum)	0.421	18.4%	0.424	0.0	
		MPP (=aka MPPA)	0.0819	22.8%	0.071	-0.5	
		N-Acetyl glucosinate	0.0773	21.9%	0.068	-0.5	
		Phthalimide	0.0820	32.4%	0.064	-0.9	
		Abamectin B1a	0.0711	24.6%	0.093	1.2	1.2
		Clopyralid	0.192	23.4%	0.188	-0.1	
		Dithianon	0.236	38.1%	0.337	1.7	
		DTCs (expr. as CS ₂)	0.1	—	0.054	-1.8	
		Ethepron	0.0582	14.7%	0.059	0.1	
		Folpet	0.225	26.8%	0.183	-0.7	
		Folpet (sum)	0.421	18.4%	0.516	0.9	
		MPP (=aka MPPA)	0.0819	22.8%	0.067	-0.7	
		N-Acetyl glucosinate	0.0773	21.9%	0.063	-0.7	
		Phthalimide	0.0820	32.4%	0.165	4.0	
		Abamectin B1a	0.0711	24.6%	0.0500	-1.2	1.9
		Clopyralid	0.192	23.4%	0.182	-0.2	
		Copper	29.9	7.7%	29.8	0.0	
		Dithianon	0.236	38.1%	0.210	-0.4	
		DTCs (expr. as CS ₂)	0.1	—	0.185	3.4	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
32	B	Ethephon	0.0582	14.7%	0.145 ^(o)	6.0	
		Phthalimide	0.0820	32.4%	0.141	2.9	
33	B	Copper	29.9	7.7%	29.1	-0.1	n.c.
34	B	Abamectin B1a	0.0711	24.6%	0.044	-1.5	1.0
		Copper	29.9	7.7%	30	0.0	
		Dithianon	0.236	38.1%	0.16	-1.3	
		DTCs (expr. as CS ₂)	0.1	—	0.10	0.0	
		Folpet	0.225	26.8%	0.36	2.4	
		Folpet (sum)	0.421	18.4%	0.49	0.7	
		Phthalimide	0.0820	32.4%	0.062	-1.0	
35	A	Abamectin B1a	0.0711	24.6%	0.076	0.3	1.9
		Dithianon	0.236	38.1%	0.028	-3.5	
		DTCs (expr. as CS ₂)	0.1	—	0.064	-1.4	
		Ethephon	0.0582	14.7%	0.068	0.7	
		Folpet (sum)	0.421	18.4%	0.36	-0.6	
		Phthalimide	0.0820	32.4%	0.18	4.8	
		N-Acetyl glucosinate	0.0773	21.9%	0.069	-0.4	
36	B	Clopyralid	0.192	23.4%	0.265	1.5	
		Copper	29.9	7.7%	31.8	0.3	
		Dithianon	0.236	38.1%	0.300	1.1	
		DTCs (expr. as CS ₂)	0.1	—	0.072	-1.1	
		Ethephon	0.0582	14.7%	0.055	-0.2	
		Folpet	0.225	26.8%	0.146	-1.4	
		Folpet (sum)	0.421	18.4%	0.368	-0.5	
		MPP (=aka MPPA)	0.0819	22.8%	0.092	0.5	
		N-Acetyl glucosinate	0.0773	21.9%	0.073	-0.2	
		Phthalimide	0.0820	32.4%	0.11	1.4	
		2,4-DNOP (free)	0.0647	46.9%	0.073	0.5	
		Meptyldinocap	0.0860	29.6%	0.078	-0.4	
37	B	Meptyldinocap (sum, calculated)	0.150	23.4%	0.167	0.5	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.215	0.6	
		Clopyralid	0.192	23.4%	0.228	0.8	n.c.
		Copper	29.9	7.7%	26.54	-0.4	
		Dithianon	0.236	38.1%	0.120	-2.0	
		Ethephon	0.0582	14.7%	0.065	0.5	
		N-Acetyl glucosinate	0.0773	21.9%	0.087	0.5	
38	B	Abamectin B1a	0.0711	24.6%	0.065	-0.3	n.c.
39	B	Abamectin B1a	0.0711	24.6%	0.065	-0.3	2.3
		Copper	29.9	7.7%	24.4	-0.7	
		Dithianon	0.236	38.1%	0.12	-2.0	
		DTCs (expr. as CS ₂)	0.1	—	0.20	4.0	
		Ethephon	0.0582	14.7%	0.059	0.1	
		Folpet	0.225	26.8%	0.42	3.5	
		Folpet (sum)	0.421	18.4%	0.70	2.7	
		MPP (=aka MPPA)	0.0819	22.8%	0.11	1.4	
		N-Acetyl glucosinate	0.0773	21.9%	0.18	5.3	
		Phthalimide	0.0820	32.4%	0.140	2.8	
		Captan		0.0276		FP	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
		Captan (sum)				0.0276	FR
40	A	Abamectin B1a	0.0711	24.6%	0.052	-1.1	0.3
		Clopyralid	0.192	23.4%	0.218	0.5	
		Copper	29.9	7.7%	31	0.1	
		Dithianon	0.236	38.1%	0.200	-0.6	
		DTCs (expr. as CS ₂)	0.1	—	0.101	0.0	
		Ethephon	0.0582	14.7%	0.058	0.0	
		Folpet	0.225	26.8%	0.250	0.4	
		Folpet (sum)	0.421	18.4%	0.419	0.0	
		MPP (=aka MPPA)	0.0819	22.8%	0.085	0.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.069	-0.4	
41	A	Abamectin B1a	0.0711	24.6%	0.0631	-0.5	0.6
		Clopyralid	0.192	23.4%	0.168	-0.5	
		Copper	29.9	7.7%	28.0	-0.3	
		Dithianon	0.236	38.1%	0.113	-2.1	
		DTCs (expr. as CS ₂)	0.1	—	0.0901	-0.4	
		Ethephon	0.0582	14.7%	0.0610	0.2	
		Folpet	0.225	26.8%	0.278	0.9	
		Folpet (sum)	0.421	18.4%	0.475	0.5	
		MPP (=aka MPPA)	0.0819	22.8%	0.0777	-0.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.0691	-0.4	
42	A	Abamectin B1a	0.0711	24.6%	0.037	-1.9	0.8
		Clopyralid	0.192	23.4%	0.127	-1.4	
		Copper	29.9	7.7%	28.155	-0.2	
		Dithianon	0.236	38.1%	0.166	-1.2	
		DTCs (expr. as CS ₂)	0.1	—	0.078	-0.9	
		Ethephon	0.0582	14.7%	0.049	-0.6	
		Folpet	0.225	26.8%	0.240	0.3	
		Folpet (sum)	0.421	18.4%	0.462	0.4	
		MPP (=aka MPPA)	0.0819	22.8%	0.069	-0.6	
		N-Acetyl glucosinate	0.0773	21.9%	0.074	-0.2	
43	A	Abamectin B1a	0.0711	24.6%	0.0790	0.4	0.9
		Clopyralid	0.192	23.4%	0.0220	-3.5	
		Copper	29.9	7.7%	30.2	0.0	
		Dithianon	0.236	38.1%	0.386	2.5	
		DTCs (expr. as CS ₂)	0.1	—	0.0667	-1.3	
		Ethephon	0.0582	14.7%	0.0639	0.4	
		Folpet	0.225	26.8%	0.244	0.3	
		Folpet (sum)	0.421	18.4%	0.364	-0.5	
		MPP (=aka MPPA)	0.0819	22.8%	0.0825	0.0	
		N-Acetyl glucosinate	0.0773	21.9%	0.0768	0.0	
44	B	Abamectin B1a	0.0711	24.6%	0.0589	-0.7	1.4
		Dithianon	0.236	38.1%	0.045	-3.2	
		DTCs (expr. as CS ₂)	0.1	—	0.460	14.4	
		Ethephon	0.0582	14.7%	0.062	0.3	
		Folpet	0.225	26.8%	0.223	0.0	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
45	B	Folpet (sum)	0.421	18.4%	0.362	-0.6	
		N-Acetyl glucosinate	0.0773	21.9%	0.080	0.1	
45	B	Abamectin B1a	0.0711	24.6%	0.096	1.4	0.9
		Clopyralid	0.192	23.4%	0.15	-0.9	
		Copper	29.9	7.7%	32.4	0.3	
		Dithianon	0.236	38.1%	0.15	-1.5	
		DTCs (expr. as CS ₂)	0.1	—	0.115	0.6	
		Ethepron	0.0582	14.7%	0.059	0.1	
		MPP (=aka MPPA)	0.0819	22.8%	0.085	0.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.084	0.3	
		Phthalimide	0.0820	32.4%	0.135	2.6	
46	B	Abamectin B1a	0.0711	24.6%	0.10	1.6	1.9
		Dithianon	0.236	38.1%	FN	-4.0	
		DTCs (expr. as CS ₂)	0.1	—	0.011	-3.6	
		Ethepron	0.0582	14.7%	0.066	0.5	
		Folpet	0.225	26.8%	0.17	-1.0	
		Folpet (sum)	0.421	18.4%	0.43	0.1	
		Phthalimide	0.0820	32.4%	0.13	2.3	
		Meptyldinocap	0.0860	29.6%	1.1 ^(o)	47.2	
		Meptyldinocap (sum, calculated)	0.150	23.4%	1.1 ^(o)	25.3	
47	B	Abamectin B1a	0.0711	24.6%	0.0758	0.3	1.0
		Clopyralid	0.192	23.4%	0.167	-0.5	
		DTCs (expr. as CS ₂)	0.1	—	0.0501	-2.0	
		Folpet	0.225	26.8%	0.222	-0.1	
		Phthalimide	0.0820	32.4%	0.125	2.1	
48	A	Abamectin B1a	0.0711	24.6%	0.041	-1.7	0.7
		Clopyralid	0.192	23.4%	0.215	0.5	
		Copper	29.9	7.7%	30.2	0.0	
		Dithianon	0.236	38.1%	0.360	2.1	
		DTCs (expr. as CS ₂)	0.1	—	0.095	-0.2	
		Ethepron	0.0582	14.7%	0.058	0.0	
		Folpet	0.225	26.8%	0.297	1.3	
		Folpet (sum)	0.421	18.4%	0.483	0.6	
		MPP (=aka MPPA)	0.0819	22.8%	0.070	-0.6	
		N-Acetyl glucosinate	0.0773	21.9%	0.074	-0.2	
49	B	Abamectin B1a	0.0711	24.6%	0.083	0.7	0.6
		Clopyralid	0.192	23.4%	0.138	-1.1	
		DTCs (expr. as CS ₂)	0.1	—	0.122	0.9	
		Ethepron	0.0582	14.7%	0.058	0.0	
		Folpet	0.225	26.8%	0.251	0.5	
		Folpet (sum)	0.421	18.4%	0.47	0.5	
		MPP (=aka MPPA)	0.0819	22.8%	0.069	-0.6	
		N-Acetyl glucosinate	0.0773	21.9%	0.072	-0.3	
50	B	Phthalimide	0.0820	32.4%	0.107	1.2	
		Copper	29.9	7.7%	31.4	0.2	1.8
		DTCs (expr. as CS ₂)	0.1	—	0.012	-3.5	
		Folpet	0.225	26.8%	0.286	1.1	
		Folpet (sum)	0.421	18.4%	0.569	1.4	
51	A	Phthalimide	0.0820	32.4%	0.140	2.8	
		Abamectin B1a	0.0711	24.6%	0.0997	1.6	0.8
		Clopyralid	0.192	23.4%	0.155	-0.8	
		Copper	29.9	7.7%	33.95	0.5	
		Dithianon	0.236	38.1%	0.0473	-3.2	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
52	B	DTCs (expr. as CS ₂)	0.1	—	0.0720	-1.1	
		Ethepron	0.0582	14.7%	0.0572	-0.1	
		Folpet	0.225	26.8%	0.215	-0.2	
		Folpet (sum)	0.421	18.4%	0.396	-0.2	
		MPP (=aka MPPA)	0.0819	22.8%	0.0968	0.7	
		N-Acetyl glucosinate	0.0773	21.9%	0.0788	0.1	
		Phthalimide	0.0820	32.4%	0.0897	0.4	
53	A	N-Acetyl glucosinate	0.0773	21.9%	FN	-4.0	n.c.
		Abamectin B1a	0.0711	24.6%	0.068	-0.2	1.0
		Clopyralid	0.192	23.4%	0.153	-0.8	
		Copper	29.9	7.7%	32.05	0.3	
		Dithianon	0.236	38.1%	0.216	-0.3	
		DTCs (expr. as CS ₂)	0.1	—	FN	-4.0	
		Ethepron	0.0582	14.7%	0.055	-0.2	
54	A	Folpet	0.225	26.8%	0.278	0.9	
		Folpet (sum)	0.421	18.4%	0.512	0.9	
		MPP (=aka MPPA)	0.0819	22.8%	0.098	0.8	
		N-Acetyl glucosinate	0.0773	21.9%	0.064	-0.7	
		Phthalimide	0.0820	32.4%	0.116	1.7	
		Meptyldinocap	0.0860	29.6%	0.091	0.2	
		Abamectin B1a	0.0711	24.6%	0.033	-2.1	1.7
55	B	Clopyralid	0.192	23.4%	0.225	0.7	
		Copper	29.9	7.7%	2.71 ^(o)	-3.6	
		Dithianon	0.236	38.1%	FN	-4.0	
		DTCs (expr. as CS ₂)	0.1	—	0.032	-2.7	
		Ethepron	0.0582	14.7%	0.048	-0.7	
		Folpet	0.225	26.8%	0.132	-1.7	
		Folpet (sum)	0.421	18.4%	0.321	-1.0	
56	B	MPP (=aka MPPA)	0.0819	22.8%	0.052	-1.5	
		N-Acetyl glucosinate	0.0773	21.9%	0.069	-0.4	
		Phthalimide	0.0820	32.4%	0.094	0.6	
		Abamectin B1a	0.0711	24.6%	0.0677	-0.2	0.6
		Clopyralid	0.192	23.4%	0.227	0.7	
57	A	Dithianon	0.236	38.1%	0.293	1.0	
		Ethepron	0.0582	14.7%	0.0637	0.4	
		Folpet	0.225	26.8%	0.231	0.1	
		Folpet (sum)	0.421	18.4%	0.354	-0.6	
		MPP (=aka MPPA)	0.0819	22.8%	0.0837	0.1	
		N-Acetyl glucosinate	0.0773	21.9%	0.0574	-1.0	
		Phthalimide	0.0820	32.4%	0.0608	-1.0	
58	B	Abamectin B1a	0.0711	24.6%	0.091	1.1	n.c.
		Clopyralid	0.192	23.4%	0.084	-2.3	
		Ethepron	0.0582	14.7%	0.064	0.4	
		Abamectin B1a	0.0711	24.6%	0.066	-0.3	1.0
		Clopyralid	0.192	23.4%	0.192	0.0	
		Copper	29.9	7.7%	26	-0.5	
		Dithianon	0.236	38.1%	0.149	-1.5	
		DTCs (expr. as CS ₂)	0.1	—	0.066	-1.4	
		Ethepron	0.0582	14.7%	0.062	0.3	
		Folpet	0.225	26.8%	0.218	-0.1	
59	A	Folpet (sum)	0.421	18.4%	0.567	1.4	
		MPP (=aka MPPA)	0.0819	22.8%	0.078	-0.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.072	-0.3	
		Phthalimide	0.0820	32.4%	0.467 ^(o)	18.8	
		Meptyldinocap (sum, calculated)	0.150	23.4%	0.127	-0.6	
		Abamectin B1a	0.0711	24.6%	0.0997	1.6	0.8
		Clopyralid	0.192	23.4%	0.155	-0.8	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
58	B	Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.272	1.8	
		Cyhalothrin (sum)	0.0754	23.3%	0.097	1.1	
58	B	Abamectin B1a	0.0711	24.6%	0.075	0.2	2.5
		Clopyralid	0.192	23.4%	0.257	1.4	
		Dithianon	0.236	38.1%	0.106	-2.2	
		DTCs (expr. as CS ₂)	0.1	—	0.03	-2.8	
		Ethepron	0.0582	14.7%	0.056	-0.2	
		Folpet	0.225	26.8%	FN	-4.0	
		Folpet (sum)	0.421	18.4%	FN	-4.0	
		Phthalimide	0.0820	32.4%	0.225	7.0	
59	A	Abamectin B1a	0.0711	24.6%	0.060	-0.6	0.9
		Clopyralid	0.192	23.4%	0.182	-0.2	
		Dithianon	0.236	38.1%	0.144	-1.6	
		DTCs (expr. as CS ₂)	0.1	—	0.050	-2.0	
		Ethepron	0.0582	14.7%	0.055	-0.2	
		Folpet	0.225	26.8%	0.200	-0.4	
		Folpet (sum)	0.421	18.4%	0.330	-0.9	
		MPP (=aka MPPA)	0.0819	22.8%	0.090	0.4	
		N-Acetyl glucosinate	0.0773	21.9%	0.090	0.7	
		Phthalimide	0.0820	32.4%	0.130	2.3	
		2,4-DNOP (free)	0.0647	46.9%	FN	-4.0	
		Meptyldinocap	0.0860	29.6%	1.300 ^(o)	56.5	
		Meptyldinocap (sum, calculated)	0.150	23.4%	FN	-4.0	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	FN	-4.0	
		Cyhalothrin (sum)	0.0754	23.3%	0.070	-0.3	
60	B	Abamectin B1a	0.0711	24.6%	0.100	1.6	1.2
		Clopyralid	0.192	23.4%	0.200	0.2	
		Dithianon	0.236	38.1%	0.330	1.6	
		Ethepron	0.0582	14.7%	0.064	0.4	
		Folpet	0.225	26.8%	0.200	-0.4	
		Folpet (sum)	0.421	18.4%	0.337	-0.8	
		MPP (=aka MPPA)	0.0819	22.8%	FN	-4.0	
		Phthalimide	0.0820	32.4%	0.068	-0.7	
61	B	Abamectin B1a	0.0711	24.6%	0.072	0.1	n.c.
		Copper	29.9	7.7%	32.14	0.3	
		Dithianon	0.236	38.1%	0.243	0.1	
62	B	Abamectin B1a	0.0711	24.6%	0.056	-0.8	n.c.
		Folpet	0.225	26.8%	0.232	0.1	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.197	0.2	
63	A	Abamectin B1a	0.0711	24.6%	0.066	-0.3	0.6
		Clopyralid	0.192	23.4%	0.174	-0.4	
		Copper	29.9	7.7%	25	-0.7	
		Dithianon	0.236	38.1%	0.216	-0.3	
		DTCs (expr. as CS ₂)	0.1	—	0.032	-2.7	
		Ethepron	0.0582	14.7%	0.064	0.4	
		Folpet	0.225	26.8%	0.280	1.0	
		Folpet (sum)	0.421	18.4%	0.449	0.3	
		MPP (=aka MPPA)	0.0819	22.8%	0.075	-0.3	
		N-Acetyl glucosinate	0.0773	21.9%	0.072	-0.3	
		Phthalimide	0.0820	32.4%	0.084	0.1	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.192	0.1	
64	B	Copper	29.9	7.7%	33.27	0.5	0.8

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
65	B	DTCs (expr. as CS ₂)	0.1	—	0.054	-1.8	
		Ethepron	0.0582	14.7%	0.053	-0.4	
		Folpet	0.225	26.8%	0.240	0.3	
		Folpet (sum)	0.421	18.4%	0.363	-0.6	
		Phthalimide	0.0820	32.4%	0.061	-1.0	
65	B	Abamectin B1a	0.0711	24.6%	0.076	0.3	1.9
		Clopyralid	0.192	23.4%	0.187	-0.1	
		DTCs (expr. as CS ₂)	0.1	—	0.058	-1.7	
		Ethepron	0.0582	14.7%	0.044	-1.0	
		Folpet	0.225	26.8%	0.570 ^(o)	6.1	
		MPP (=aka MPPA)	0.0819	22.8%	0.163	4.0	
		N-Acetyl glucosinate	0.0773	21.9%	0.104	1.4	
		Cyhalothrin (sum)	0.0754	23.3%	0.061	-0.8	
66	B	Abamectin B1a	0.0711	24.6%	0.0587	-0.7	0.7
		Copper	29.9	7.7%	26.7	-0.4	
		DTCs (expr. as CS ₂)	0.1	—	0.014	-3.4	
		Ethepron	0.0582	14.7%	0.0546	-0.2	
		Folpet	0.225	26.8%	0.267	0.7	
		Folpet (sum)	0.421	18.4%	0.431	0.1	
		MPP (=aka MPPA)	0.0819	22.8%	0.0719	-0.5	
		N-Acetyl glucosinate	0.0773	21.9%	0.0708	-0.3	
67	B	Copper	29.9	7.7%	29.7	0.0	0.9
		Ethepron	0.0582	14.7%	FN	-4.0	
		Folpet	0.225	26.8%	0.283	1.0	
		Folpet (sum)	0.421	18.4%	0.459	0.4	
		MPP (=aka MPPA)	0.0819	22.8%	0.0721	-0.5	
		N-Acetyl glucosinate	0.0773	21.9%	0.0809	0.2	
		Phthalimide	0.0820	32.4%	0.0884	0.3	
		Cyhalothrin (sum)	0.0754	23.3%	0.061	-0.8	
69	B	Abamectin B1a	0.0711	24.6%	0.064	-0.4	0.9
		Clopyralid	0.192	23.4%	0.28	1.8	
		Copper	29.9	7.7%	30	0.0	
		Dithianon	0.236	38.1%	0.11	-2.1	
		DTCs (expr. as CS ₂)	0.1	—	0.06	-1.6	
		Ethepron	0.0582	14.7%	0.059	0.1	
		Folpet (sum)	0.421	18.4%	0.39	-0.3	
70	B	Abamectin B1a	0.0711	24.6%	0.0678	-0.2	1.0
		Clopyralid	0.192	23.4%	0.196	0.1	
		Dithianon	0.236	38.1%	0.0873	-2.5	
		Ethepron	0.0582	14.7%	0.0556	-0.2	
		Folpet	0.225	26.8%	0.156	-1.2	
		Folpet (sum)	0.421	18.4%	0.266	-1.5	
		Phthalimide	0.0820	32.4%	0.110	1.4	
71	B	Clopyralid	0.192	23.4%	FN	-4.0	n.c.
		Abamectin B1a	0.0711	24.6%	0.058	-0.7	1.7
72	B	Clopyralid	0.192	23.4%	0.13	-1.3	
		Copper	29.9	7.7%	35.2	0.7	
		Dithianon	0.236	38.1%	0.13	-1.8	
		DTCs (expr. as CS ₂)	0.1	—	0.055	-1.8	
		Ethepron	0.0582	14.7%	0.049	-0.6	
		Folpet	0.225	26.8%	FN	-4.0	
		Folpet (sum)	0.421	18.4%	0.53	1.0	
		MPP (=aka MPPA)	0.0819	22.8%	0.099	0.8	
		N-Acetyl glucosinate	0.0773	21.9%	0.038	-2.0	
		Phthalimide	0.0820	32.4%	FN	-4.0	
		Difluoroacetic acid	0.146	21.7%	0.13	-0.4	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
<i>Glufosinate</i>			0.014		FP		
73	A	Abamectin B1a	0.0711	24.6%	0.0793	0.5	1.1
		Clopyralid	0.192	23.4%	0.274	1.7	
		Copper	29.9	7.7%	33.7	0.5	
		Dithianon	0.236	38.1%	0.152	-1.4	
		DTCs (expr. as CS₂)	0.1	—	0.0531	-1.9	
		Ethephon	0.0582	14.7%	0.0473	-0.7	
		Folpet	0.225	26.8%	0.253	0.5	
		Folpet (sum)	0.421	18.4%	0.360	-0.6	
		MPP (=aka MPPA)	0.0819	22.8%	0.129	2.3	
		N-Acetyl glufosinate	0.0773	21.9%	0.0721	-0.3	
Phthalimide			0.0820	32.4%	0.0530	-1.4	
75	B	Abamectin B1a	0.0711	24.6%	FN	-4.0	n.c.
76	B	2,4-D (free acid)		0.007	FR		
77	B	Abamectin B1a	0.0711	24.6%	0.058	-0.7	0.4
		Copper	29.9	7.7%	30.1	0.0	
		Dithianon	0.236	38.1%	0.219	-0.3	
		DTCs (expr. as CS₂)	0.1	—	0.075	-1.0	
		Ethephon	0.0582	14.7%	0.057	-0.1	
		MPP (=aka MPPA)	0.0819	22.8%	0.084	0.1	
N-Acetyl glufosinate			0.0773	21.9%	0.084	0.3	
78	A	Abamectin B1a	0.0711	24.6%	0.083	0.7	1.0
		Clopyralid	0.192	23.4%	0.232	0.8	
		Copper	29.9	7.7%	32	0.3	
		Dithianon	0.236	38.1%	0.212	-0.4	
		DTCs (expr. as CS₂)	0.1	—	0.111	0.4	
		Ethephon	0.0582	14.7%	0.049	-0.6	
		Folpet	0.225	26.8%	0.271	0.8	
		Folpet (sum)	0.421	18.4%	0.372	-0.5	
		MPP (=aka MPPA)	0.0819	22.8%	0.057	-1.2	
		N-Acetyl glufosinate	0.0773	21.9%	FN	-4.0	
		Phthalimide	0.0820	32.4%	0.05	-1.6	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.181	-0.1	
Difluoroacetic acid			0.146	21.7%	0.16	0.4	
79	A	Abamectin B1a	0.0711	24.6%	0.0803	0.5	1.1
Clopyralid			0.192	23.4%	0.152	-0.8	
Copper			29.9	7.7%	33.0	0.4	
DTCs (expr. as CS₂)			0.1	—	0.0427	-2.3	
Ethephon			0.0582	14.7%	0.0474	-0.7	
Folpet			0.225	26.8%	0.210	-0.3	
Folpet (sum)			0.421	18.4%	0.496	0.7	
MPP (=aka MPPA)			0.0819	22.8%	0.0783	-0.2	
N-Acetyl glufosinate			0.0773	21.9%	0.0422	-1.8	
Phthalimide			0.0820	32.4%	0.142	2.9	
80	B	Abamectin B1a	0.0711	24.6%	0.07	-0.1	2.1
Clopyralid			0.192	23.4%	0.2590	1.4	
Copper			29.9	7.7%	27.40	-0.3	
Dithianon			0.236	38.1%	0.0866	-2.5	
DTCs (expr. as CS₂)			0.1	—	0.0226	-3.1	
Ethephon			0.0582	14.7%	0.0654	0.5	
Folpet			0.225	26.8%	FN	-4.0	
Folpet (sum)			0.421	18.4%	0.588	1.6	
Phthalimide			0.0820	32.4%	0.292	10.2	
Meptyldinocap			0.0860	29.6%	2.94 ^(o)	132.7	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ	
Meptyldinocap (sum, calculated)			0.150	23.4%	1.79 ^(o)	43.7		
81	B	DTCs (expr. as CS₂)	0.1	—	0.086	-0.6	n.c.	
		Ethephon	0.0582	14.7%	0.079	1.4		
		MPP (=aka MPPA)	0.0819	22.8%	0.080	-0.1		
		N-Acetyl glufosinate	0.0773	21.9%	0.074	-0.2		
82	B	Copper	29.9	7.7%	28.8	-0.1	n.c.	
		DTCs (expr. as CS₂)	0.1	—	0.0513	-1.9		
83	B	DTCs (expr. as CS₂)	0.1	—	0.0210	-3.2	n.c.	
84	B	Abamectin B1a	0.0711	24.6%	0.114	2.4	n.c.	
		Ethephon	0.0582	14.7%	FN	-4.0		
85	B	Abamectin B1a	0.0711	24.6%	0.0825	0.6	n.c.	
		DTCs (expr. as CS₂)	0.1	—	0.134	1.4		
87	B	Dithianon	0.236	38.1%	FN	-4.0	n.c.	
		Ethephon	0.0582	14.7%	0.067	0.6		
		MPP (=aka MPPA)	0.0819	22.8%	0.088	0.3		
		N-Acetyl glufosinate	0.0773	21.9%	0.106	1.5		
88	B	Abamectin B1a	0.0711	24.6%	0.045	-1.5	0.9	
		Clopyralid	0.192	23.4%	0.19	0.0		
		Dithianon	0.236	38.1%	0.039	-3.3		
		DTCs (expr. as CS₂)	0.1	—	0.099	0.0		
		Ethephon	0.0582	14.7%	0.055	-0.2		
		MPP (=aka MPPA)	0.0819	22.8%	0.103	1.0		
N-Acetyl glufosinate			0.0773	21.9%	0.08	0.1		
89	B	Clopyralid	0.192	23.4%	0.169	-0.5	1.2	
		Copper	29.9	7.7%	26.8	-0.4		
		Ethephon	0.0582	14.7%	0.024	-2.4		
		Folpet	0.225	26.8%	0.369	2.6		
		Folpet (sum)	0.421	18.4%	0.421	0.0		
		Phthalimide	0.0820	32.4%	0.052	-1.5		
		Cyhalothrin (sum)	0.0754	23.3%	FN	-4.0		
		Captan			0.033	FP		
		Captan (sum)			0.033	FP		
		Abamectin B1a	0.0711	24.6%	0.160	5.0	1.0	
90	A	Clopyralid	0.192	23.4%	0.144	-1.0		
		Copper	29.9	7.7%	25.9	-0.5		
		Dithianon	0.236	38.1%	0.0913	-2.5		
		DTCs (expr. as CS₂)	0.1	—	0.112	0.5		
		Ethephon	0.0582	14.7%	0.0560	-0.2		
		Folpet	0.225	26.8%	0.212	-0.2		
		Folpet (sum)	0.421	18.4%	0.383	-0.4		
		MPP (=aka MPPA)	0.0819	22.8%	0.0693	-0.6		
		N-Acetyl glufosinate	0.0773	21.9%	0.0781	0.0		
		Phthalimide	0.0820	32.4%	0.0846	0.1		
91	A	Abamectin B1a	0.0711	24.6%	0.0605	-0.6	0.5	
		Clopyralid	0.192	23.4%	0.228	0.8		
		Dithianon	0.236	38.1%	0.221	-0.3		
		DTCs (expr. as CS₂)	0.1	—	0.087	-0.5		
		Ethephon	0.0582	14.7%	0.0607	0.2		
		Folpet	0.225	26.8%	0.309	1.5		
		Folpet (sum)	0.421	18.4%	0.465	0.4		
		MPP (=aka MPPA)	0.0819	22.8%	0.0962	0.7		
		N-Acetyl glufosinate	0.0773	21.9%	0.0762	-0.1		
		Phthalimide	0.0820	32.4%	0.0770	-0.2		
2,4-DNOP (free)			0.0647	46.9%	0.0746	0.6		
Meptyldinocap			0.0860	29.6%	0.118	1.5		

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
92	A	Meptyldinocap (sum, calculated)	0.150	23.4%	0.210	1.6	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.228	0.9	
		Difluoroacetic acid	0.146	21.7%	0.196	1.4	
		Abamectin B1a	0.0711	24.6%	0.076	0.3	1.6
		Clopyralid	0.192	23.4%	0.153	-0.8	
		Copper	29.9	7.7%	34	0.5	
		Dithianon	0.236	38.1%	0.171	-1.1	
		DTCs (expr. as CS ₂)	0.1	—	0.045	-2.2	
		Ethepron	0.0582	14.7%	0.072	0.9	
		Folpet	0.225	26.8%	0.164	-1.1	
		Folpet (sum)	0.421	18.4%	0.476	0.5	
		MPP (=aka MPPA)	0.0819	22.8%	0.2	5.8	
		N-Acetyl glucosinate	0.0773	21.9%	0.115	2.0	
		Phthalimide	0.0820	32.4%	0.154	3.5	
		Abamectin B1a	0.0711	24.6%	0.11	2.2	0.7
		Clopyralid	0.192	23.4%	0.225	0.7	
		Dithianon	0.236	38.1%	0.14	-1.6	
		DTCs (expr. as CS ₂)	0.1	—	0.085	-0.6	
		Ethepron	0.0582	14.7%	0.066	0.5	
		Folpet	0.225	26.8%	0.21	-0.3	
		Folpet (sum)	0.421	18.4%	0.36	-0.6	
		MPP (=aka MPPA)	0.0819	22.8%	0.082	0.0	
		N-Acetyl glucosinate	0.0773	21.9%	0.066	-0.6	
		Phthalimide	0.0820	32.4%	0.076	-0.3	
		Difluoroacetic acid	0.146	21.7%	0.115	-0.8	
		Cyhalothrin (sum)	0.0754	23.3%	0.068	-0.4	
	B	Abamectin B1a	0.0711	24.6%	FN	-4.0	2.7
		Ethepron	0.0582	14.7%	0.029	-2.0	
		Folpet	0.225	26.8%	0.038	-3.3	
		Folpet (sum)	0.421	18.4%	0.080 ^(o)	-3.2	
		MPP (=aka MPPA)	0.0819	22.8%	0.048	-1.7	
		N-Acetyl glucosinate	0.0773	21.9%	0.040	-1.9	
		Phthalimide	0.0820	32.4%	0.021	-3.0	
		Cyhalothrin (sum)	0.0754	23.3%	0.013	-3.3	
	A	Abamectin B1a	0.0711	24.6%	0.070	-0.1	0.5
		Copper	29.9	7.7%	31	0.1	
		Dithianon	0.236	38.1%	0.238	0.0	
		DTCs (expr. as CS ₂)	0.1	—	0.118	0.7	
		Ethepron	0.0582	14.7%	0.0561	-0.1	
		Folpet	0.225	26.8%	0.200	-0.4	
		Folpet (sum)	0.421	18.4%	0.465	0.4	
		MPP (=aka MPPA)	0.0819	22.8%	0.0647	-0.8	
		N-Acetyl glucosinate	0.0773	21.9%	0.080	0.1	
		Phthalimide	0.0820	32.4%	0.131	2.4	
	B	Copper	29.9	7.7%	29.1	-0.1	1.2
		DTCs (expr. as CS ₂)	0.1	—	0.0861	-0.6	
		Ethepron	0.0582	14.7%	0.0482	-0.7	
		Folpet	0.225	26.8%	0.0371	-3.3	
		Folpet (sum)	0.421	18.4%	0.196	-2.1	
		Phthalimide	0.0820	32.4%	0.0788	-0.2	
		2,4-DNOP (free)	0.0647	46.9%	FN	-4.0	
	A	Abamectin B1a	0.0711	24.6%	0.0699	-0.1	1.6
		Clopyralid	0.192	23.4%	0.246	1.1	
		Dithianon	0.236	38.1%	0.307	1.2	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
98	A	Ethepron	0.0582	14.7%	0.0766	1.3	
		Folpet	0.225	26.8%	0.140	-1.5	
		Folpet (sum)	0.421	18.4%	0.373	-0.5	
		MPP (=aka MPPA)	0.0819	22.8%	0.802 ^(o)	35.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.115	2.0	
		Phthalimide	0.0820	32.4%	0.116	1.7	
		2,4-DNOP (free)	0.0647	46.9%	0.244 ^(o)	11.1	
		Meptyldinocap	0.0860	29.6%	0.0999	0.6	
		Meptyldinocap (sum, calculated)	0.150	23.4%	0.400 ^(o)	6.7	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.842 ^(o)	13.9	
		Abamectin B1a	0.0711	24.6%	0.111	2.2	0.7
		Clopyralid	0.192	23.4%	0.216	0.5	
		Copper	29.9	7.7%	28.3	-0.2	
		Dithianon	0.236	38.1%	0.169	-1.1	
		DTCs (expr. as CS ₂)	0.1	—	0.0820	-0.7	
		Ethepron	0.0582	14.7%	0.0646	0.4	
		Folpet	0.225	26.8%	0.259	0.6	
		Folpet (sum)	0.421	18.4%	0.44	0.2	
		MPP (=aka MPPA)	0.0819	22.8%	0.0617	-1.0	
		N-Acetyl glucosinate	0.0773	21.9%	0.0631	-0.7	
		Phthalimide	0.0820	32.4%	0.090	0.4	
		Cyhalothrin (sum)	0.0754	23.3%	0.0713	-0.2	
	A	Abamectin B1a	0.0711	24.6%	0.066	-0.3	0.8
		Clopyralid	0.192	23.4%	0.165	-0.6	
		Copper	29.9	7.7%	29.0	-0.1	
		Dithianon	0.236	38.1%	0.214	-0.4	
		DTCs (expr. as CS ₂)	0.1	—	0.053	-1.9	
		Ethepron	0.0582	14.7%	0.063	0.3	
		Folpet	0.225	26.8%	0.209	-0.3	
		Folpet (sum)	0.421	18.4%	0.312	-1.0	
		MPP (=aka MPPA)	0.0819	22.8%	0.086	0.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.099	1.1	
		Phthalimide	0.0820	32.4%	0.144	3.0	
	B	Abamectin B1a	0.0711	24.6%	0.081	0.6	1.4
		Clopyralid	0.192	23.4%	0.254	1.3	
		Copper	29.9	7.7%	31.1	0.2	
		Dithianon	0.236	38.1%	0.291	0.9	
		DTCs (expr. as CS ₂)	0.1	—	0.096	-0.2	
		Ethepron	0.0582	14.7%	0.039	-1.3	
		Folpet	0.225	26.8%	0.261	0.6	
		Folpet (sum)	0.421	18.4%	0.395	-0.2	
		MPP (=aka MPPA)	0.0819	22.8%	0.220	6.7	
		N-Acetyl glucosinate	0.0773	21.9%	0.152	3.9	
		Phthalimide	0.0820	32.4%	0.067	-0.7	
	B	Copper	29.9	7.7%	29.8	0.0	n.c.
		MPP (=aka MPPA)	0.0819	22.8%	0.063	-0.9	
		N-Acetyl glucosinate	0.0773	21.9%	0.070	-0.4	
	A	Abamectin B1a	0.0711	24.6%	0.057	-0.8	0.8
		Clopyralid	0.192	23.4%	0.197	0.1	
		Copper	29.9	7.7%	30.53	0.1	
		Dithianon	0.236	38.1%	0.132	-1.8	
		DTCs (expr. as CS ₂)	0.1	—	0.092	-0.3	
		Ethepron	0.0582	14.7%	0.051	-0.5	
		Folpet	0.225	26.8%	0.254	0.5	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
103	A	Folpet (sum)	0.421	18.4%	0.530	1.0	
		MPP (=aka MPPA)	0.0819	22.8%	0.085	0.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.063	-0.7	
		Phthalimide	0.0820	32.4%	0.137	2.7	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.105	-1.8	
		Difluoroacetic acid	0.146	21.7%	0.186	1.1	
		Cyhalothrin (sum)	0.0754	23.3%	0.07	-0.3	
		Abamectin B1a	0.0711	24.6%	0.080	0.5	0.6
		Clopyralid	0.192	23.4%	0.160	-0.7	
		Copper	29.9	7.7%	27.5	-0.3	
		DTCs (expr. as CS ₂)	0.1	—	0.077	-0.9	
		Ethepron	0.0582	14.7%	0.056	-0.2	
		Folpet	0.225	26.8%	0.233	0.1	
		Folpet (sum)	0.421	18.4%	0.463	0.4	
		MPP (=aka MPPA)	0.0819	22.8%	0.070	-0.6	
		N-Acetyl glucosinate	0.0773	21.9%	0.067	-0.5	
		Phthalimide	0.0820	32.4%	0.114	1.6	
		2,4-DNOP (free)	0.0647	46.9%	0.065	0.0	
		Meptyldinocap	0.0860	29.6%	0.103	0.8	
		Meptyldinocap (sum, calculated)	0.150	23.4%	0.183	0.9	
104	A	Abamectin B1a	0.0711	24.6%	0.078	0.4	0.9
		Clopyralid	0.192	23.4%	0.113	-1.6	
		Copper	29.9	7.7%	27.0	-0.4	
		Dithianon	0.236	38.1%	0.111	-2.1	
		DTCs (expr. as CS ₂)	0.1	—	FN*	-4.0	
		Ethepron	0.0582	14.7%	0.061	0.2	
		Folpet	0.225	26.8%	0.215	-0.2	
		Folpet (sum)	0.421	18.4%	0.395	-0.2	
		MPP (=aka MPPA)	0.0819	22.8%	0.093	0.5	
		N-Acetyl glucosinate	0.0773	21.9%	0.080	0.1	
		Phthalimide	0.0820	32.4%	0.089	0.3	
105	B	Abamectin B1a	0.0711	24.6%	0.064	-0.4	n.c.
		Copper	29.9	7.7%	31.1	0.2	
		Dithianon	0.236	38.1%	0.107	-2.2	
106	B	DTCs (expr. as CS ₂)	0.1	—	0.131	1.2	n.c.
107	B	Abamectin B1a	0.0711	24.6%	0.0729	0.1	n.c.
		DTCs (expr. as CS ₂)	0.1	—	0.071	-1.2	
		Ethepron	0.0582	14.7%	0.0925	2.4	
		Folpet	0.225	26.8%	0.0738	-2.7	
108	B	Abamectin B1a	0.0711	24.6%	0.10	1.6	1.3
		Clopyralid	0.192	23.4%	0.16	-0.7	
		Dithianon	0.236	38.1%	0.072	-2.8	
		DTCs (expr. as CS ₂)	0.1	—	FN	-4.0	
		Ethepron	0.0582	14.7%	0.050	-0.6	
		Folpet	0.225	26.8%	0.24	0.3	
		Folpet (sum)	0.421	18.4%	0.46	0.4	
		MPP (=aka MPPA)	0.0819	22.8%	0.065	-0.8	
		N-Acetyl glucosinate	0.0773	21.9%	0.073	-0.2	
		Phthalimide	0.0820	32.4%	0.11	1.4	
109	A	Abamectin B1a	0.0711	24.6%	0.070	-0.1	0.5
		Clopyralid	0.192	23.4%	0.241	1.0	
		Copper	29.9	7.7%	29.1	-0.1	
		Dithianon	0.236	38.1%	0.303	1.1	
		DTCs (expr. as CS ₂)	0.1	—	0.081	-0.8	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
111	B	Ethepron	0.0582	14.7%	0.058	0.0	
		Folpet	0.225	26.8%	0.221	-0.1	
		Folpet (sum)	0.421	18.4%	0.447	0.2	
		MPP (=aka MPPA)	0.0819	22.8%	0.075	-0.3	
		N-Acetyl glucosinate	0.0773	21.9%	0.072	-0.3	
		Phthalimide	0.0820	32.4%	0.113	1.5	
		Abamectin B1a	0.0711	24.6%	0.081	0.6	1.6
		Clopyralid	0.192	23.4%	0.191	0.0	
		Dithianon	0.236	38.1%	0.037	-3.4	
		DTCs (expr. as CS ₂)	0.1	—	0.072	-1.1	
		Ethepron	0.0582	14.7%	0.042	-1.1	
		Folpet	0.225	26.8%	FN	-4.0	
		Folpet (sum)	0.421	18.4%	0.348	-0.7	
		MPP (=aka MPPA)	0.0819	22.8%	0.08	-0.1	
		N-Acetyl glucosinate	0.0773	21.9%	0.087	0.5	
		Phthalimide	0.0820	32.4%	0.173	4.4	
113	B	Abamectin B1a	0.0711	24.6%	0.025	-2.6	1.4
		Clopyralid	0.192	23.4%	0.154	-0.8	
		Dithianon	0.236	38.1%	0.21	-0.4	
		DTCs (expr. as CS ₂)	0.1	—	0.06	-1.6	
		Ethepron	0.0582	14.7%	0.042	-1.1	
		Folpet	0.225	26.8%	0.11	-2.0	
		Folpet (sum)	0.421	18.4%	0.37	-0.5	
		Phthalimide	0.0820	32.4%	0.13	2.3	
114	B	Abamectin B1a	0.0711	24.6%	0.015	-3.2	3.5
		Clopyralid	0.192	23.4%	0.613 ^(o)	8.8	
		Dithianon	0.236	38.1%	0.281	0.8	
		DTCs (expr. as CS ₂)	0.1	—	0.039	-2.4	
		Ethepron	0.0582	14.7%	FN	-4.0	
		Folpet	0.225	26.8%	FN	-4.0	
		Phthalimide	0.0820	32.4%	0.201	5.8	
		Chlormequat-Cl			0.054	FP	
		Mepiquat-Cl			0.119	FP	
115	B	Abamectin B1a	0.0711	24.6%	0.050	-1.2	2.6
		Clopyralid	0.192	23.4%	0.173	-0.4	
		Dithianon	0.236	38.1%	0.250	0.2	
		Ethepron	0.0582	14.7%	0.075	1.2	
		Folpet	0.225	26.8%	0.620 ^(o)	7.0	
		Folpet (sum)	0.421	18.4%	1.031 ^(o)	5.8	
		Phthalimide	0.0820	32.4%	0.204	6.0	
		Meptyldinocap	0.0860	29.6%	0.121	1.6	
117	B	Abamectin B1a	0.0711	24.6%	0.065	-0.3	3.5
		Dithianon	0.236	38.1%	0.031	-3.5	
		Ethepron	0.0582	14.7%	0.700 ^(o)	44.1	
		Folpet	0.225	26.8%	0.105	-2.1	
		MPP (=aka MPPA)	0.0819	22.8%	0.741 ^(o)	32.2	
		N-Acetyl glucosinate	0.0773	21.9%	1.228 ^(o)	59.5	
118	B	DTCs (expr. as CS ₂)	0.1	—	0.049	-2.0	n.c.
119	B	Abamectin B1a	0.0711	24.6%	0.045	-1.5	n.c.
		Cyhalothrin (sum)	0.0754	23.3%	0.092	0.9	
121	B	Ethepron	0.0582	14.7%	0.0449	-0.9	n.c.
		MPP (=aka MPPA)	0.0819	22.8%	0.0683	-0.7	
		N-Acetyl glucosinate	0.0773	21.9%	0.0475	-1.5	
122	B	Copper	29.9	7.7%	27.6	-0.3	n.c.
		Folpet	0.225	26.8%	0.167	-1.0	
		Phthalimide	0.0820	32.4%	0.098	0.8	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
		Cyhalothrin (sum)	0.0754	23.3%	0.083	0.4	
124	B	DTCs (expr. as CS₂)	0.1	—	0.06	-1.6	n.c.
		N-Acetyl glucosinate	0.0773	21.9%	FN	-4.0	
125	B	Abamectin B1a	0.0711	24.6%	0.12	2.8	2.5
		Clopyralid	0.192	23.4%	0.16	-0.7	
		Dithianon	0.236	38.1%	FN	-4.0	
		DTCs (expr. as CS₂)	0.1	—	0.27	6.8	
		Ethephon	0.0582	14.7%	0.068	0.7	
		Folpet	0.225	26.8%	FN	-4.0	
		Folpet (sum)	0.421	18.4%	0.11	-3.0	
		MPP (=aka MPPA)	0.0819	22.8%	0.14	2.8	
		N-Acetyl glucosinate	0.0773	21.9%	0.063	-0.7	
		Phthalimide	0.0820	32.4%	0.055	-1.3	
		Meptyldinocap	0.0860	29.6%	FN	-4.0	
		Cyhalothrin (sum)	0.0754	23.3%	0.093	0.9	
		Amitrole			0.10	FP	
126	B	Copper	29.9	7.7%	30.8	0.1	n.c.
127	B	Abamectin B1a	0.0711	24.6%	0.03	-2.3	1.4
		Clopyralid	0.192	23.4%	0.16	-0.7	
		Dithianon	0.236	38.1%	0.247	0.2	
		DTCs (expr. as CS₂)	0.1	—	0.063	-1.5	
		Ethephon	0.0582	14.7%	0.046	-0.8	
		Folpet	0.225	26.8%	0.153	-1.3	
		Folpet (sum)	0.421	18.4%	0.384	-0.4	
		MPP (=aka MPPA)	0.0819	22.8%	FN	-4.0	
		N-Acetyl glucosinate	0.0773	21.9%	0.099	1.1	
		Phthalimide	0.0820	32.4%	0.115	1.6	
		Cyhalothrin (sum)	0.0754	23.3%	0.063	-0.7	
128	A	Abamectin B1a	0.0711	24.6%	0.068	-0.2	0.5
		Clopyralid	0.192	23.4%	0.189	-0.1	
		Copper	29.9	7.7%	29.7	0.0	
		Dithianon	0.236	38.1%	0.090	-2.5	
		DTCs (expr. as CS₂)	0.1	—	0.085	-0.6	
		Ethephon	0.0582	14.7%	0.060	0.1	
		Folpet	0.225	26.8%	0.251	0.5	
		Folpet (sum)	0.421	18.4%	0.444	0.2	
		MPP (=aka MPPA)	0.0819	22.8%	0.082	0.0	
		N-Acetyl glucosinate	0.0773	21.9%	0.067	-0.5	
		Phthalimide	0.0820	32.4%	0.096	0.7	
129	B	Copper	29.9	7.7%	30.6	0.1	n.c.
		DTCs (expr. as CS₂)	0.1	—	0.072	-1.1	
130	B	Abamectin B1a	0.0711	24.6%	0.084	0.7	1.5
		Copper	29.9	7.7%	31.8	0.3	
		DTCs (expr. as CS₂)	0.1	—	0.111	0.4	
		Ethephon	0.0582	14.7%	0.054	-0.3	
		MPP (=aka MPPA)	0.0819	22.8%	0.123	2.0	
		N-Acetyl glucosinate	0.0773	21.9%	0.111	1.7	
		Phthalimide	0.0820	32.4%	0.195	5.5	
132	A	Abamectin B1a	0.0711	24.6%	0.11	2.2	1.7
		Clopyralid	0.192	23.4%	0.01	-3.8	
		Copper	29.9	7.7%	32	0.3	
		Dithianon	0.236	38.1%	0.07	-2.8	
		DTCs (expr. as CS₂)	0.1	—	0.07	-1.2	
		Ethephon	0.0582	14.7%	0.06	0.1	
		Folpet	0.225	26.8%	0.12	-1.9	
		Folpet (sum)	0.421	18.4%	0.24	-1.7	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
		MPP (=aka MPPA)	0.0819	22.8%	0.08	-0.1	
		N-Acetyl glucosinate	0.0773	21.9%	FN*	-4.0	
		Phthalimide	0.0820	32.4%	0.06	-1.1	
		2,4-DNOP (free)	0.0647	46.9%	0.12	3.4	
		Meptyldinocap (sum, follow. hydr.)	0.188	30.9%	0.15	-0.8	
134	A	Abamectin B1a	0.0711	24.6%	0.082	0.6	1.5
		Clopyralid	0.192	23.4%	FN*	-4.0	
		Copper	29.9	7.7%	31.7	0.2	
		Dithianon	0.236	38.1%	0.135	-1.7	
		DTCs (expr. as CS₂)	0.1	—	0.058	-1.7	
		Ethephon	0.0582	14.7%	0.049	-0.6	
		Folpet	0.225	26.8%	0.258	0.6	
		Folpet (sum)	0.421	18.4%	0.597	1.7	
		MPP (=aka MPPA)	0.0819	22.8%	0.088	0.3	
		N-Acetyl glucosinate	0.0773	21.9%	0.102	1.3	
137	A	Abamectin B1a	0.0711	24.6%	0.084	0.7	2.0
		Clopyralid	0.192	23.4%	0.4	4.3	
		Copper	29.9	7.7%	30	0.0	
		Dithianon	0.236	38.1%	0.3	1.1	
		DTCs (expr. as CS₂)	0.1	—	0.06	-1.6	
		Ethephon	0.0582	14.7%	0.06	0.1	
		Folpet	0.225	26.8%	FN	-4.0	
		Folpet (sum)	0.421	18.4%	0.34	-0.8	
		MPP (=aka MPPA)	0.0819	22.8%	0.03	-2.5	
		N-Acetyl glucosinate	0.0773	21.9%	0.12	2.2	
10	A	Abamectin B1a	0.0711	24.6%	0.075	0.2	0.9
		Clopyralid	0.192	23.4%	0.22	0.6	
		Copper	29.9	7.7%	30.61	0.1	
		Dithianon	0.236	38.1%	0.136	-1.7	
		DTCs (expr. as CS₂)	0.1	—	0.04	-2.4	
		Ethephon	0.0582	14.7%	0.052	-0.4	
		Folpet	0.225	26.8%	0.18	-0.8	
		Folpet (sum)	0.421	18.4%	0.46	0.4	
		MPP (=aka MPPA)	0.0819	22.8%	0.074	-0.4	
		N-Acetyl glucosinate	0.0773	21.9%	0.07	-0.4	
19	A	Abamectin B1a	0.0711	24.6%	0.0725	0.1	0.6
		Clopyralid	0.192	23.4%	0.169	-0.5	
		Dithianon	0.236	38.1%	0.224	-0.2	
		DTCs (expr. as CS₂)	0.1	—	0.0977	-0.1	
		Ethephon	0.0582	14.7%	0.0419	-1.1	
		Folpet	0.225	26.8%	0.140	-1.5	
		Folpet (sum)	0.421	18.4%	0.293	-1.2	
		MPP (=aka MPPA)	0.0819	22.8%	0.0665	-0.8	
		N-Acetyl glucosinate	0.0773	21.9%	0.0749	-0.1	
		Phthalimide	0.0820	32.4%	0.0757	-0.3	
68	A	Abamectin B1a	0.0711	24.6%	0.0454	-1.4	1.3

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
86	B	Clopyralid	0.192	23.4%	0.228	0.8	
		Copper	29.9	7.7%	28.4	-0.2	
		Dithianon	0.236	38.1%	0.0706	-2.8	
		DTCs (expr. as CS ₂)	0.1	—	0.106	0.2	
		Ethepron	0.0582	14.7%	0.0530	-0.4	
		Folpet	0.225	26.8%	0.183	-0.7	
		Folpet (sum)	0.421	18.4%	0.577	1.5	
		MPP (=aka MPPA)	0.0819	22.8%	0.0604	-1.1	
		N-Acetyl glucosinate	0.0773	21.9%	0.0641	-0.7	
		Phthalimide	0.0820	32.4%	0.195	5.5	
110	B	Abamectin B1a	0.0711	24.6%	0.0656	-0.3	1.0
112	B	Clopyralid	0.192	23.4%	0.120	-1.5	
		Copper	29.9	7.7%	27.3	-0.3	
		Dithianon	0.236	38.1%	0.0591	-3.0	
		Ethepron	0.0582	14.7%	0.0627	0.3	
		Folpet (sum)	0.421	18.4%	0.449	0.3	
		MPP (=aka MPPA)	0.0819	22.8%	0.0639	-0.9	
		N-Acetyl glucosinate	0.0773	21.9%	0.111	1.7	
		Cyhalothrin (sum)	0.0754	23.3%	0.0765	0.1	
		Abamectin B1a	0.0711	24.6%	0.075	0.2	2.1
		Clopyralid	0.192	23.4%	0.25	1.2	
116	B	Copper	29.9	7.7%	29.4	-0.1	n.c.
		DTCs (expr. as CS ₂)	0.1	—	0.075	-1.0	
		Dithianon	0.236	38.1%	0.15	-1.5	
		DTCs (expr. as CS ₂)	0.1	—	0.049	-2.0	
		Ethepron	0.0582	14.7%	0.082	1.6	
		Folpet	0.225	26.8%	0.23	0.1	
		Folpet (sum)	0.421	18.4%	FN	-4.0	
		MPP (=aka MPPA)	0.0819	22.8%	FN	-4.0	
		N-Acetyl glucosinate	0.0773	21.9%	FN	-4.0	
		Phthalimide	0.0820	32.4%	FN	-4.0	
120	B	Cyhalothrin (sum)	0.0754	23.3%	0.068	-0.4	
		Abamectin B1a	0.0711	24.6%	0.030	-2.3	2.3
		Clopyralid	0.192	23.4%	0.060	-2.8	
		Copper	29.9	7.7%	30.35	0.1	
		DTCs (expr. as CS ₂)	0.1	—	0.018	-3.3	

Lab code	Cat	Analyte	pr. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
123	B	Ethepron	0.0582	14.7%	0.074	1.1	
		Folpet	0.225	26.8%	0.222	-0.1	
		Folpet (sum)	0.421	18.4%	0.424	0.0	
		Phthalimide	0.0820	32.4%	0.100	0.9	
131	B	Abamectin B1a	0.0711	24.6%	0.065	-0.3	1.7
		Copper	29.9	7.7%	30.096	0.0	
		Dithianon	0.236	38.1%	0.012	-3.8	
		DTCs (expr. as CS ₂)	0.1	—	0.102	0.1	
		Ethepron	0.0582	14.7%	FN	-4.0	
		Folpet	0.225	26.8%	FN	-4.0	
		MPP (=aka MPPA)	0.0819	22.8%	0.078	-0.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.100	1.2	
		Meptyldinocap	0.0860	29.6%	0.058	-1.3	
135	B	DTCs (expr. as CS ₂)	0.1	—	0.0850	-0.6	1.4
		Ethepron	0.0582	14.7%	FN	-4.0	
		Folpet	0.225	26.8%	0.221	-0.1	
		Folpet (sum)	0.421	18.4%	0.324	-0.9	
		Phthalimide	0.0820	32.4%	0.0507	-1.5	
		Abamectin B1a	0.0711	24.6%	0.059	-0.7	1.0
		Copper	29.9	7.7%	33	0.4	
		Dithianon	0.236	38.1%	0.060	-3.0	
		DTCs (expr. as CS ₂)	0.1	—	0.086	-0.6	
139	B	Ethepron	0.0582	14.7%	0.064	0.4	
		Folpet (sum)	0.421	18.4%	0.26	-1.5	
		MPP (=aka MPPA)	0.0819	22.8%	0.058	-1.2	
		N-Acetyl glucosinate	0.0773	21.9%	0.072	-0.3	
		Difluoroacetic acid	0.146	21.7%	0.101	-1.2	
		Cyhalothrin (sum)	0.0754	23.3%	0.078	0.1	
		Abamectin B1a	0.0711	24.6%	0.053	-1.0	2.0
		Clopyralid	0.192	23.4%	0.11	-1.7	
		Copper	29.9	7.7%	31.90	0.3	
		Ethepron	0.0582	14.7%	0.054	-0.3	

Table 4: False positive results in the EUPT-SRM19*Compulsory analytes* not present in the test material are written in *blue italic*, *optional analytes* in *green italic*.

Compounds	Lab Code	Analysed	Detected	Conc [mg/kg]	MRRL	RL [mg/kg]	Judgement (preliminary)
<i>2,4-D (free acid)</i>	76	Yes	Yes	0.007	0.01	0.025	FR (result < RL)
<i>Captan</i>	39	Yes	Yes	0.0276	0.01	0.01	FP
	89	Yes	Yes	0.033	0.01	0.01	FP
<i>Captan (sum)</i>	39	Yes	Yes	0.0276	0.03	0.03	FR (result < RL)
	89	Yes	Yes	0.033	0.03	0.03	FP
<i>Chlormequat-Cl</i>	114	Yes	Yes	0.054	0.01	0.01	FP
<i>Glufosinate</i>	72	Yes	Yes	0.014	0.01	0.01	FP
<i>Mepiquat-Cl</i>	114	Yes	Yes	0.119	0.01	0.01	FP
<i>Amitrole</i>	125	Yes	Yes	0.10	0.01	0.005	FP

Table 5: Target Pesticide List for the EUPT-SRM19 2024 (Grape homogenate), update on 05.02.2024

Target Pesticides List
for the EUPT-SRM19 (2024), Grape Homogenate
(updated on 05.02.2024)

Analytes are sorted alphabetically in the same order as in the Webtool.
For grouping into **Mandatory** and **Optional** (incl. **Extra**): See sheet "Grouped into Mandatory-Optional"

Only mandatory (=compulsory) analytes will be considered in the scope-based classification, optional (=voluntary) and extra analytes not.
Please also refer to the EUPT General Protocol.

M: Mandatory O: Optional E: Extra	Analytes	Notes	Listed in	MRRL [mg/kg]	Update
M	2,4-D (free acid)	No hydrolysis required	MACP-Reg. (grapes explicitly named)	0.01	
O	2,4 DNOP (Meptyldinocap metabolite)	Free phenol (expressed as such!) (Note: You may skip the analysis of free 2,4-DNOP if you only quantify this compound following chemical conversion of meptyldinocap to 2,4-DNOP)	WD (grapes explicitly named)	0.01	MRRL changed (20.11.2023)
M	Abamectin B1a	Only B1a component	MACP-Reg.	0.01	
O	Amitrole		WD (need data on cummul. risk assessment)	0.01	
M	Captan		MACP-Reg.	0.01	
M	Captan (sum)	Sum of captan and THPI expessed as captan	MACP-Reg.	0.03	
M	Chlormequat-chloride	Expressed as chloride salt!	MACP-Reg. (grapes explicitly named)	0.01	
M	Clopyralid	No hydrolysis required	MACP-Reg. (grapes explicitly named)	0.01	
M	Copper		MACP-Reg.	0.2	
M	DTC (expr. as CS ₂)	Expressed as CS ₂	MACP-Reg.	0.01	
E	Diffluoroacetic acid (DFA, extra analyte)		WD 2024	0.02	the same order as in the webtool! (05.02.2024)
M	Dithianon		MACP-Reg. (grapes explicitly named)	0.01	
M	Emamectin B1a	Only B1a component	MACP-Reg.	0.01	
M	Ethephon		MACP-Reg. (grapes explicitly named)	0.01	
M	Folpet		MACP-Reg.	0.01	
M	Folpet (sum)	Sum of folpet and phthalimide expessed as folpet	MACP-Reg.	0.03	MRRL changed (20.11.2023)
E	Gamma Cyhalothrin (extra analyte)	Only SR enantiomer	MACP/WD	0.01	
M	Glufosinate		MACP-Reg.	0.01	
O	MCPP (free acid)	No hydrolysis required	WD (grapes explicitly named)	0.01	
M	MPP (aka MPPA) (Glufosinate metabolite)		MACP-Reg.	0.01	the same order as in the webtool! (05.02.2024)
M	Mepiquat chloride	Expressed as chloride salt!	MACP-Reg.	0.01	
O	Meptyldinocap	Note: You may skip the analysis of meptyldinocap as such if you cover the sum only following chemical conversion of meptyldinocap to 2,4-DNOP	WD (grapes explicitly named)	0.01	MRRL changed (20.11.2023)
O	Meptyldinocap (sum, calculated)	Sum of meptyldinocap and 2,4 DNOP expressed as meptyldinocap (calculated sum)	WD (grapes explicitly named)	0.02	
O	Meptyldinocap (sum following hydrolysis)	Sum of meptyldinocap and 2,4 DNOP expressed as meptyldinocap, following hydrolysis and determined as 2,4-DNOP. Note: If you cover meptyldinocap (sum) only following chemical conversion to 2,4-DNOP, you may skip the analysis of the two individual components.	WD (grapes explicitly named)	0.01	Based on how the sum result was obtained, Meptyldinocap (sum) was splitted in two lines with different MRRLs. (20.11.2023)
M	N-Acetyl glufosinate (Glufosinate metabolite)		MACP-Reg.	0.01	
M	Phthalimide (Folpet metabolite)	Expressed as such!	MACP-Reg.	0.01	
M	THPI (Captan metabolite)	Expressed as such!	MACP-Reg.	0.01	
O	Triclopyr (free acid)	No hydrolysis required	WD (grapes explicitly named)	0.01	
O	Trimethylsulfonium cation		WD (grapes explicitly named)	0.01	

MACP-Reg.: Multiannual Control Program Regulation.

Link: REGULATION (EU) 2023/731 of 03 April 2023; <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R0731>.WD: Working document on pesticides to be considered in national control programs to ensure compliance with MRRLs of pesticides residues in food; SANCO/12745/2013; 21-22 November 2022 rev. 14(5); https://www.eurl-pesticides.eu/userfiles/file/WD/SANCO_12745_2013_rev_14_5.pdf (Note: The link to the latest update will be published as soon as it becomes available)