EU PROFICIENCY TEST

EUPT-SRM21, 2026

Residues of Pesticides

Requiring Single Residue Methods

Test Item: Cow‘s Milk

Preliminary Report

Michelangelo Anastassiades
Pat Schreiter
Anja Barth

30.04.2026

General Remarks

- All assigned values (AVs), relative robust standard deviations (CV*s), and z scores presented below are *preliminary*. These figures may differ slightly, and in exceptional cases significantly, from those in the EUPT-SRM21 final report, which will be drafted following evaluation by the EUPT-Scientific Committee and the joint EURL/NRL-Workshop.
- All laboratories are kindly requested to carefully check their results and **report any errors**. However, **only transcription errors made by the organizers can be addressed 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 01 June, 2026.** In the Excel-sheet 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 by another (improved) procedure. In case technical advice is needed, please don't hesitate to contact the EURL-SRM.

Background

The test item for the proficiency test EUPT-SRM21 was **frozen cow's milk with a snow-like consistency.** To prepare the test material, organic UHT cow's milk with 3.8% fat was purchased from a local supermarket in Germany. The milk was then spiked in the laboratory with a selection of pesticides (see **Table 1, p. 3**).

Preparation, Testing and shipment of EUPT-SRM21 Material

For spiking, the compounds listed in **Table 1** were dissolved in solvent and combined to three seperate mixtures. One mixture consisting of water, one of acetonitrile and one of 10 % acetonitrile in water. The mixtures were evenly distributed among 50 L precooled, liquid cow's milk. The spiked material was thoroughly homogenized. The material was portioned into pressure-lock plastic bags and frozen at −20 °C in thin plates for several days. The frozen milk "plates" were cryogenically milled using dry ice and portioned into bottles in a snow-like state. Approximately 250 g portions of the milk "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 second of March, 2026, the day of shipment, the bottles containing the deeply frozen test material 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. The participants received a link with which they could follow the whereabouts of their parcel and were also able to acknowledge its receipt and report about the sample condition using an online submission tool.

10 bottles of the test material were selected randomly and tested for homogeneity. Furthermore, the stability of the pesticides within the test material was checked during a period encompassing the EUPT duration.

Result Evaluation

Using the same tool for sample acknowledgement the participants were also able to submit their results by 31 March, 2026. The requested methodology information for tentatively false negative results had to be submitted by 9 April, 2026. In total, 80 OfLs (incl. NRLs) from EU and EFTA countries as well as 1 laboratory from one EU candidate country (RS) and 3 laboratories from 2 other third countries (UK, VN) registered for the participation in the EUPT-SRM21. One of EU OfLs was not able to submit any results due to the defected GC-MS/MS. For the calculation of the preliminary assigned values

Table 1. Analytes present in the SRM21 test material

Target Analytes	Category	Incurred	Spiked in Lab	Compounds applied in lab and other notes
Alpha-Cypermethrin (aka alphamethrin)	Extra	No	Yes	Alpha-Cypermethrin solutions were exposed to a full natural wavelength-emitting light source at 40 °C for many hours to promote isomerization and a suitable mixture thereof was employed for spiking.
Bromide (anion)	Optional	Yes	No	not spiked, at natural level
Carbofuran-3-OH	Extra	No	Yes	Carbofuran-3-hydroxy
Chlorate (anion)	Mandatory	Traces	Yes	Sodium chlorate
Chlormequat chloride	Mandatory	No	Yes	Chlormequat chloride
Chlorpropham metabolite 4-HSA	Optional	No	Yes	Sodium 4-Hydroxychlorpropham sulfate
Copper	Mandatory	Traces	Yes	Copper sulphate pentahydrate
Emamectin B1a	Extra	No	Yes	Emamectin B1a
Fenpropimorph carboxylic acid	Optional	No	Yes	Fenpropimorph carboxylic acid
Fluazifop (free acid)	Extra	No	Yes	Fluazifop (free acid)
Fluazifop (sum, following hydrolysis)	Optional	No	Yes	Fluazifop (free acid)
Glufosinate	Mandatory	No	Yes	Glufosinate ammonium
Glyphosate	Mandatory	No	Yes	Glyphosate
Haloxyfop (free acid)	Extra	No	Yes	Haloxyfop (free acid)
Haloxyfop (sum, following hydrolysis)	Optional	No	Yes	Haloxyfop-glucoside + Haloxyfop (free acid)
Mepiquat chloride	Mandatory	No	Yes	Mepiquat chloride
MPP (aka MPPA)	Mandatory	No	Yes	MPP
Phosphonic acid	Extra	Traces	Yes	Phosphonic acid
Trifluoroacetic acid (TFA)	Optional	Traces	Yes	Trifluoroacetic acid

only the results submitted by the 79 OfLs from EU member states and EFTA countries were considered. Results with z scores greater than 8, corresponding to a result greater than 3 times the respective robust means, were considered outliers and excluded from the population of assigned values and the assigned values were recalculated. A summary of the preliminary assigned values and CV* is shown in **Table 2, p. 4**.

Establishment of the Assigned Values

Except three optional analytes – **4-HSA**, **Fenpropimorph carboxylic acid** and **TFA** – for all other analytes the number of numerical results was sufficient for a reliable statistical evalution with the respecive UAVs (Uncertainty of Assigned Value) remaining below the permissible limit in all cases. The preliminary assigned values (prel. AV) for these compounds were calculated using the mean value of the robust statistics (according to Algorithm A) using the whole result population except the outliers.

In the case of **4-HSA** and **fenpropimorph carboxylic acid** the number of results 2 and 7, respectively, was insufficient for statistical evaluation. For **4-HSA**, the result of the homogeneity test was used as the preliminary reference value to calculate preliminary z scores. For **fenpropimorph carboxylic acid** the robust mean of the 7 participants results was used to calculate preliminary z scores. All these scores are provided for information only in order to give the participants indication on the quality of their analysis regarding these two analytes. It should be noted that these two preliminary reference values were close both to the spiking levels as well as to the average of the homogeneity test by the organizers.

Table 2. Preliminary evaluation of EUPT-SRM21 results in summary

	Compulsory Analytes							Optional Analytes		
	Chlorate (anion)	Chlormequat chloride	Copper	Glufosinate	Glyphosate	Mepiquat chloride	MPP	Bromide (anion)	4-HSA	Fenpropimorph carboxylic acid
Population for AV	entire population	entire population	entire population	entire population	entire population	entire population	entire population	entire population	Result of Homo-geneity Test as Reference value	entire population, but informative only
No. of numerical results	60	65	53	66	68	65	58	18	2	7
therein Outliers	0	0	0	0	0	0	1	1	0	0
No. results for AV	60	65	53	66	68	65	57	17	–	7
No. of FNs	0	0	1	0	0	1	1	7	0	1
Prel. Assigned Value [mg/kg]	0.0966	0.0315	1.87	0.0601	0.0588	0.0251	0.0469	0.743	0.0654 informative	0.0562 informative
CV*	14.1%	19.6%	6.7%	14.0%	20.4%	14.6%	15.5%	19.5%	–	14.5%
Uncertainty of AV (UAV)	0.0022	0.0010	0.0217	0.0013	0.0018	0.0006	0.0012	0.0439	–	0.0039
Tolerance of AV	0.0072	0.0024	0.1403	0.0045	0.0044	0.0019	0.0035	0.0557	–	0.0042
UAV Test	passed	passed	passed	passed	passed	passed	passed	passed	–	passed

	Optional Analytes			Extra Analytes					
	Fluazifop (sum)	Haloxyfop (sum)	TFA	alpha-Cypermethrin	Carbofuran-3-OH	Emamectin B1a	Fluazifop (free acid)	Haloxyfop (free acid)	Phosphonic acid
Population for AV	entire population	entire population	entire population	entire population	entire population	entire population	entire population	entire population	entire population
No. of numerical results	39	38	17	52	44	39	38	36	41
therein Outliers	0	0	0	1	0	1	0	0	1
No. results for AV	39	38	17	51	44	38	38	36	40
No. of FNs	0	2	0	0	4	3	0	2	1
Prel. Assigned Value [mg/kg]	0.0233	0.0152	0.338 informative	0.0297	0.00447	0.00938	0.0221	0.00831	0.249
CV*	19.2%	25.1%	27.0%	22.6%	15.2%	13.9%	14.7%	15.6%	21.0%
Uncertainty of AV (UAV)	0.0009	0.0008	0.0276	0.0012	0.0001	0.0003	0.0007	0.0003	0.0103
Tolerance of AV	0.0017	0.0011	0.0254	0.0022	0.0003	0.0007	0.0017	0.0006	0.0187
UAV Test	passed	passed	failed	passed	passed	passed	passed	passed	passed

Table 3. Preliminary z score scenarios (robust mean based, lower bound and upper bounda) for each of the results for **TFA**, sorted according to the lab codes

Lab Code	Conc. [mg/kg]	z Score	z Score (min.)	z Score (max.)
13	0.512	2.1	1.6	2.6
14	0.279	-0.7	-0.9	-0.4
20	0.303	-0.4	-0.7	-0.1
21	0.343	0.1	-0.2	0.4
27	0.282	-0.7	-0.9	-0.4
33	0.314	-0.3	-0.6	0.0
34	0.320	-0.2	-0.5	0.1
45	0.450	1.3	0.9	1.8
47	0.245	-1.1	-1.3	-0.8
48	0.247	-1.1	-1.3	-0.8
57	0.325	-0.2	-0.4	0.2
61	0.431	1.1	0.7	1.6
64	0.466	1.5	1.1	2.0
66	0.273	-0.8	-1.0	-0.5
68	0.329	-0.1	-0.4	0.2
70	0.424	1.0	0.6	1.5
81	0.24	-1.2	-1.4	-0.9

In the case of **TFA** the number of the numerical results was sufficient, but CV* was higher than the fit-for-purpose RSD of 25 %, and the UAV-Test failed, that means, the uncertainty of the robust mean of the participant results is higher than what is permissible for this value to qualify as an assinged value for assessing participants' performance. Therefore, this assigned value and the respective z scores are given for informative purpose only. It is noted, however, that the robust mean of the participants' results for **TFA** matched very well with the organizers average in the homogeneity test. In addition to the z scores that were calculated based on the robust mean, a z score range was calculated for each result reflecting the uncertainty range of the robust mean (95 % confidence level). The z scores calculated according to these three scenarios are shown in **Table 3**. With the exception of one Lab with the code 13 all labs remain within the acceptable z score-range even at a worst-case scenario. Lab13 was marginally placed within the quastionable range (z score 2.1) when calculating based on the lower-bound reference value scenario.

Cases of False Positives (FPs) and False Reportings (FRs)

Among the results received from EU/EFTA-OfLs, two cases were identified in which participating laboratories analyzed and reported numerical values for compounds that were not present in the sample at relevant levels. The reported values exceeded the laboratories' reporting limits (RL) and were therefore classified as false positives (FPs). The affected compounds were (**Table 4**):

- *BAC-C12 chloride* (compulsory)
- *Maleic hydrazide* (optional).

Table 4. False positive results FPs in the EUPT-SRM21. : mandatory analytes, : optional analytes.

Compounds	Lab Code	Analysed	Detected	Conc. [mg/kg]	MRRL [mg/kg]	RL [mg/kg]	Judgement (preliminary)
BAC-C12 chloride	65	Yes	Yes	0.0114	0.005	0.005	FP
Maleic hydrazide	70	Yes	Yes	1.108	0.01	0.01	FP

In accordance with the EUPT General Protocol (12th Ed.), a total of 14 results submitted by 9 laboratories were found to be below the laboratories' reporting limits (RLs) and, as such, should not have been reported. These results were preliminarily classified as false reportings (FRs). The compounds involved include:

- **glufosinate** (2×), **glyphosate** (1×), **mepiquat chloride** (1×), **MPP** (1×),
- **bromide (anion)** (2×), **fluazifop (sum)** (1×), **haloxyfop (sum)** (1×),
- **carbofuran-3-OH** (2×), **alpha-cypermethrin** (1×), **emamectin B1a** (1×), and **haloxyfop (free acid)** (1×).

Among the results reported by the participating laboratories outside the EU/EFTA zone, there were no FPs, but one laboratory reported results for **copper**, **bromide (anion)** and **emamectin B1a** at levels lower the respective RLs of these lab. These three results were thus preliminarily judged as FRs.

All the above mentioned cases and their judgement are listed in **Table 5**.

False negatives (FNs)

In total, 17 EU/EFTA-OfLs reported in 23 cases results that were **preliminarily judged as FNs** (**Table 6, p. 7**). These concerned compounds that were present in the test item at relevant levels and were analysed but not detected by the laboratories. In accordance with the General Protocol (12th Ed.), the z scores for these FNs were all set at −4.0 by default. In a few cases, the affected laboratories indicated on the webtool that they detected the analytes, however, the concentrations were lower than the laboratories' RLs and thus reported as "not detected". While it is technically correct for laboratories not to report results below their own RL, according to the EUPT General Protocol, these non-reports should still be judged as FNs in order to penalise insufficient method sensitivity. If the RL of the laboratory is higher than the AV,

Table 5. False reporting results FRs in the EUPT-SRM21. : mandatory analytes, : optional analytes; : extra analytes. (FP): results < RL, but > 90% RL

Compounds	Lab Code	Analysed	Detected	Present in Test Item	RL [mg/kg]	Conc. [mg/kg]	Judgement
Copper	3rd-35	Yes	Yes	Yes	2.5	1.654	FR
Glufosinate	40	Yes	Yes	Yes	0.1	0.065	FR
	49	Yes	Yes	Yes	0.05	0.043	FR
Glyphosate	23	Yes	Yes	Yes	0.01	0.0097	(FR)
Mepiquat chloride	84	Yes	Yes	Yes	0.02	0.0198	(FR)
MPP	40	Yes	Yes	Yes	0.05	0.049	(FR)
Bromide (anion)	16	Yes	Yes	Yes	2	1.03	FR
	45	Yes	Yes	Yes	1.4	0.850	FR
	3rd-35	Yes	Yes	Yes	1.5	0.514	FR
Fluazifop (sum)	23	Yes	Yes	Yes	0.02	0.0109	FR
Haloxyfop (sum)	79	Yes	Yes	Yes	0.01	0.00921	(FR)
alpha-Cypermethrin	23	Yes	Yes	Yes	0.02	0.0146	FR
Carbofuran-3-OH	23	Yes	Yes	Yes	0.01	0.00626	FR
	24	Yes	Yes	Yes	0.01	0.0057	FR
Emamectin B1a	64	Yes	Yes	Yes	0.01	0.007	FR
	3rd-35	Yes	Yes	Yes	0.01	0.00564	FR
Haloxyfop (free acid)	40	Yes	Yes	Yes	0.01	0.009	(FR)

Table 6. False negative results in the EUPT-SRM21. : mandatory analytes, : optional analytes; : extra analytes.

Compounds	Lab Code	Analysed	Detected	Prel. AV [mg/kg]	MRRL [mg/kg	RL [mg/kg]	Judgement (preliminary)
Copper	21	Yes	No	1.87	0.2	0.2	FN
Mepiquat chloride	48	Yes	No	0.0251	0.005	0.05	FN*
MPP	8	Yes	No	0.0469	0.01	0.01	FN
Bromide (anion)	3	Yes	No	0.743	0.1	0.1	FN
	8	Yes	No			0.1	FN
	19	Yes	No			0.1	FN
	57	Yes	No			2.5	FN*
	59	Yes	No			0.5	FN
	60	Yes	No			1	FN*
	81	Yes	No			0.5	FN
	3rd-73	Yes	No			2	FN*
	3rd-9	Yes	No			1	FN*
Fenpropimorph carboxylic acid	6	Yes	No	0.0562	0.01	0.01	FN
Haloxyfop (sum)	23	Yes	No	0.0152	0.002	0.02	FN*
	89	Yes	No			0.0008	FN
Carbofuran-3-OH	21	Yes	No	0.00447	0.001	0.001	FN
	40	Yes	No			0.01	FN*
	45	Yes	No			0.005	FN*
	89	Yes	No			0.001	FN
Emamectin B1a	44	Yes	No	0.00938	0.002	0.005	FN
	45	Yes	No			0.01	FN*
	71	Yes	No			0.01	FN*
Haloxyfop (free acid)	45	Yes	No	0.00831	0.002	0.01	FN*
	71	Yes	No			0.01	FN*
Phosphonic acid	65	Yes	No	0.249	0.03	0.03	FN

the FN is additionaly marked with an asterix (FN*) and accompanied by a note addressing this issue; but if the RL is lower than the AV, it is a clear FN. The FN- and FN*-cases are:

- **copper** (1× FN), **mepiquat chloride** (1× FN*), **MPP** (1× FN),
- **bromide (anion)** (5× FN and 2× FN*), **fenpropimorph carboxylic acid** (1× FN), **haloxyfop (sum)** (1× FN and 1× FN*),
- **carbofuran-3-OH** (2× FN and 2× FN*), **emamectin B1a** (1× FN and 2× FN*), **haloxyfop (free acid)** (2× FN*), and **phosphonic acid** (1× FN).

In addition, two participating laboratories outside the EU/EFTA zone received FN* for their results of **bromide (anion)**. They are also listed in **Table 6, p. 7**

All results and their preliminary z scores

All submitted numerical results and all FN results are shown in **Table 7, p. 8.** This table also includes results reported by the participating laboratories settled outside the EU/EFTA countries at the end of the table. In all these cases the z scores were calculated using the same assigned values as for the EU/EFTA-OfLs.

Table 7. Results reported by the participants in EUPT-SRM21 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 violet.**
- Analytes **present** in the test material are written in **bold**, *absent* in the test material in *regular italic*.
- Prel. AVs shown in square brackets and the scores based on those AVs are for informative purpose only:
  In the case of **4-HSA**: Instead of the robust mean, the result of the homoteneity test was set as a reference value to calcualte the informative scores for the two submitted results;
  in the case of **Fenpropimorph carboxylic acid**: the robust mean of the 7 reported results was set as the Prel. AV to calcualte the informative scores.
- In the case of **TFA**, the prel. AV. based on the robust mean did not pass the UAV-Test and the CV* > 25 %, therefore the scores are for informative purpose only.
- FN: Result was preliminarily judged as a false negative, i.e., the analyte was present in the test sample at a relevant concentration, but the lab did not report a quantitative result.
- FN*: the same as FN, but with lab's RL being higher than the prel. AV
- FP: Result was judged as false positive, i.e., the analyte was not present in the test material, but the lab reported a numerical value.
- FR: The reported value was lower than the lab's reporting limit for this analyte
- (o): Preliminary outliers (not included in the establishment of prel. AVs).
- Prel. AAZ: preliminary average of absolute z scores of mandatory analytes for laboratories with 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 at least 9 out of the 10 compulsory analytes listed in the Target Pesticides List (see **Table 8, p.18**) and correctly found at least 6 out of the 7 compulsory analytes present in the sample, and have not reported any false positive results among the compulsory analytes.

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
2	A	Chlorate (anion)	0.0966	14.1%	0.0845	-0.5	0.5
		Chlormequat chloride	0.0315	19.6%	0.0258	-0.7	
		Copper	1.87	6.7%	1.99	0.6	
		Glufosinate	0.0601	14.0%	0.0489	-0.7	
		Glyphosate	0.0588	20.4%	0.0640	0.4	
		Mepiquat chloride	0.0251	14.6%	0.0239	-0.2	
		MPP	0.0469	15.5%	0.0536	0.6	
3	B	Chlorate (anion)	0.0966	14.1%	0.107	0.4	0.6
		Chlormequat chloride	0.0315	19.6%	0.035	0.4	
		Copper	1.87	6.7%	1.9	0.2	
		Glufosinate	0.0601	14.0%	0.056	-0.3	
		Glyphosate	0.0588	20.4%	0.065	0.4	
		Mepiquat chloride	0.0251	14.6%	0.0203	-0.8	
		MPP	0.0469	15.5%	0.027	-1.7	
		Bromide (anion)	0.743	19.5%	FN	-4.0	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.012	-1.9	
		Haloxyfop (sum)	0.0152	25.1%	0.006	-2.4	
		alpha-Cypermethrin	0.0297	22.6%	0.027	-0.4	1.3
		Carbofuran-3-OH	0.00447	15.2%	0.003	-1.3	
		Emamectin B1a	0.00938	13.9%	0.005	-1.9	
		Fluazifop (free acid)	0.0221	14.7%	0.014	-1.5	
		Haloxyfop (free acid)	0.00831	15.6%	0.004	-2.1	
		Phosphonic acid	0.249	21.0%	0.19	-0.9	
4	B	Copper	1.87	6.7%	1.97	0.5	n.c.
5	A	Chlorate (anion)	0.0966	14.1%	0.118	0.9	0.5
		Chlormequat chloride	0.0315	19.6%	0.035	0.4	
		Copper	1.87	6.7%	1.90	0.2	
		Glufosinate	0.0601	14.0%	0.061	0.1	
		Glyphosate	0.0588	20.4%	0.048	-0.7	
		Mepiquat chloride	0.0251	14.6%	0.025	0.0	
		MPP	0.0469	15.5%	0.058	0.9	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
6	A	Chlorate (anion)	0.0966	14.1%	0.103	0.3	0.3
		Chlormequat chloride	0.0315	19.6%	0.030	-0.2	
		Copper	1.87	6.7%	1.90	0.2	
		Glufosinate	0.0601	14.0%	0.070	0.7	
		Glyphosate	0.0588	20.4%	0.062	0.2	
		Mepiquat chloride	0.0251	14.6%	0.025	0.0	
		MPP	0.0469	15.5%	0.056	0.8	
		Fenpropimorph carboxylic acid	[0.0562]	14.5%	FN	-4.0	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.035	2.0	
		Haloxyfop (sum)	0.0152	25.1%	0.018	0.7	
		alpha-Cypermethrin	0.0297	22.6%	0.030	0.0	0.3
		Carbofuran-3-OH	0.00447	15.2%	0.005	0.5	
		Emamectin B1a	0.00938	13.9%	0.008	-0.6	
		Fluazifop (free acid)	0.0221	14.7%	0.024	0.3	
		Haloxyfop (free acid)	0.00831	15.6%	0.008	-0.1	
		Phosphonic acid	0.249	21.0%	0.260	0.2	
7	B	Chlorate (anion)	0.0966	14.1%	0.095	-0.1	0.5
		Chlormequat chloride	0.0315	19.6%	0.033	0.2	
		Glufosinate	0.0601	14.0%	0.085	1.7	
		Glyphosate	0.0588	20.4%	0.065	0.4	
		Mepiquat chloride	0.0251	14.6%	0.024	-0.2	
		alpha-Cypermethrin	0.0297	22.6%	0.019	-1.4	n.c.
8	B	Chlorate (anion)	0.0966	14.1%	0.105	0.3	1.5
		Chlormequat chloride	0.0315	19.6%	0.018	-1.7	
		Copper	1.87	6.7%	2.03	0.9	
		Glufosinate	0.0601	14.0%	0.053	-0.5	
		Glyphosate	0.0588	20.4%	0.085	1.8	
		Mepiquat chloride	0.0251	14.6%	0.015	-1.6	
		MPP	0.0469	15.5%	FN	-4.0	
		Bromide (anion)	0.743	19.5%	FN	-4.0	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.005	0.5	n.c.
		Emamectin B1a	0.00938	13.9%	0.008	-0.6	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
10	A	Chlorate (anion)	0.0966	14.1%	0.11	0.6	0.4
		Chlormequat chloride	0.0315	19.6%	0.0323	0.1	
		Copper	1.87	6.7%	2.0	0.7	
		Glufosinate	0.0601	14.0%	0.0678	0.5	
		Glyphosate	0.0588	20.4%	0.0678	0.6	
		Mepiquat chloride	0.0251	14.6%	0.0252	0.0	
		MPP	0.0469	15.5%	0.0444	-0.2	
		Fluazifop (sum)	0.0233	19.2%	0.028	0.8	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.021	1.5	
		alpha-Cypermethrin	0.0297	22.6%	0.031	0.2	0.4
		Emamectin B1a	0.00938	13.9%	0.0088	-0.2	
		Fluazifop (free acid)	0.0221	14.7%	0.0249	0.5	
		Haloxyfop (free acid)	0.00831	15.6%	0.0096	0.6	
		Phosphonic acid	0.249	21.0%	0.221	-0.4	
11	A	Chlorate (anion)	0.0966	14.1%	0.107	0.4	0.4
		Chlormequat chloride	0.0315	19.6%	0.0332	0.2	
		Copper	1.87	6.7%	2.08	1.1	
		Glufosinate	0.0601	14.0%	0.0558	-0.3	
		Glyphosate	0.0588	20.4%	0.0519	-0.5	
		Mepiquat chloride	0.0251	14.6%	0.0244	-0.1	
		Fluazifop (sum)	0.0233	19.2%	0.0272	0.7	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.0089	-1.7	
		alpha-Cypermethrin	0.0297	22.6%	0.208(o)	24.0	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.0048	0.3	
		Emamectin B1a	0.00938	13.9%	0.0100	0.3	
		Phosphonic acid	0.249	21.0%	0.331	1.3	
12	B	Chlorate (anion)	0.0966	14.1%	0.093	-0.1	0.5
		Chlormequat chloride	0.0315	19.6%	0.029	-0.3	
		Copper	1.87	6.7%	1.82	-0.3	
		Glyphosate	0.0588	20.4%	0.053	-0.4	
		Mepiquat chloride	0.0251	14.6%	0.018	-1.1	
		alpha-Cypermethrin	0.0297	22.6%	0.026	-0.5	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.0041	-0.3	
13	A	Chlorate (anion)	0.0966	14.1%	0.0956	0.0	0.3
		Chlormequat chloride	0.0315	19.6%	0.0338	0.3	
		Copper	1.87	6.7%	1.97	0.5	
		Glufosinate	0.0601	14.0%	0.0592	-0.1	
		Glyphosate	0.0588	20.4%	0.0511	-0.5	
		Mepiquat chloride	0.0251	14.6%	0.0260	0.1	
		MPP	0.0469	15.5%	0.0442	-0.2	
		4-HSA	[0.0654]	–	0.0699	0.3	n.c.
		Fenpropimorph carboxylic acid	[0.0562]	14.5%	0.0593	0.2	
		Fluazifop (sum)	0.0233	19.2%	0.0259	0.4	
		Haloxyfop (sum)	0.0152	25.1%	0.0165	0.3	
		TFA	[0.338]	27.0%	0.512	2.1	
		alpha-Cypermethrin	0.0297	22.6%	0.0306	0.1	0.3
		Carbofuran-3-OH	0.00447	15.2%	0.0048	0.3	
		Emamectin B1a	0.00938	13.9%	0.0095	0.1	
		Fluazifop (free acid)	0.0221	14.7%	0.0262	0.7	
		Haloxyfop (free acid)	0.00831	15.6%	0.0092	0.4	
		Phosphonic acid	0.249	21.0%	0.263	0.2	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
14	A	Chlorate (anion)	0.0966	14.1%	0.106	0.4	0.5
		Chlormequat chloride	0.0315	19.6%	0.0266	-0.6	
		Copper	1.87	6.7%	1.9	0.2	
		Glufosinate	0.0601	14.0%	0.0526	-0.5	
		Glyphosate	0.0588	20.4%	0.0671	0.6	
		Mepiquat chloride	0.0251	14.6%	0.0209	-0.7	
		MPP	0.0469	15.5%	0.0424	-0.4	
		Bromide (anion)	0.743	19.5%	0.784	0.2	n.c.
		Fenpropimorph carboxylic acid	[0.0562]	14.5%	0.0588	0.2	
		Fluazifop (sum)	0.0233	19.2%	0.0247	0.2	
		Haloxyfop (sum)	0.0152	25.1%	0.0174	0.6	
		TFA	[0.338]	27.0%	0.279	-0.7	
		alpha-Cypermethrin	0.0297	22.6%	0.0346	0.7	0.4
		Carbofuran-3-OH	0.00447	15.2%	0.00447	0.0	
		Emamectin B1a	0.00938	13.9%	0.00845	-0.4	
		Fluazifop (free acid)	0.0221	14.7%	0.0250	0.5	
		Haloxyfop (free acid)	0.00831	15.6%	0.00903	0.3	
		Phosphonic acid	0.249	21.0%	0.281	0.5	
15	A	Chlorate (anion)	0.0966	14.1%	0.109	0.5	0.5
		Chlormequat chloride	0.0315	19.6%	0.032	0.1	
		Glufosinate	0.0601	14.0%	0.063	0.2	
		Glyphosate	0.0588	20.4%	0.055	-0.3	
		Mepiquat chloride	0.0251	14.6%	0.034	1.4	
		MPP	0.0469	15.5%	0.043	-0.3	
		Fluazifop (sum)	0.0233	19.2%	0.026	0.5	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.014	-0.3	
		alpha-Cypermethrin	0.0297	22.6%	0.031	0.2	0.6
		Carbofuran-3-OH	0.00447	15.2%	0.004	-0.4	
		Fluazifop (free acid)	0.0221	14.7%	0.025	0.5	
		Haloxyfop (free acid)	0.00831	15.6%	0.007	-0.6	
		Phosphonic acid	0.249	21.0%	0.315	1.1	
16	A	Chlorate (anion)	0.0966	14.1%	0.113	0.7	0.3
		Chlormequat chloride	0.0315	19.6%	0.0346	0.4	
		Copper	1.87	6.7%	1.91	0.2	
		Glufosinate	0.0601	14.0%	0.0625	0.2	
		Glyphosate	0.0588	20.4%	0.0496	-0.6	
		Mepiquat chloride	0.0251	14.6%	0.0264	0.2	
		MPP	0.0469	15.5%	0.0480	0.1	
		Bromide (anion)	0.743	19.5%	1.03FR	1.5	n.c.
		Phosphonic acid	0.249	21.0%	0.219	-0.5	n.c.
17	B	Chlormequat chloride	0.0315	19.6%	0.0391	1.0	n.c.
		Glyphosate	0.0588	20.4%	0.0227	-2.5	
		Mepiquat chloride	0.0251	14.6%	0.0277	0.4	
19	A	Chlorate (anion)	0.0966	14.1%	0.100	0.1	0.6
		Chlormequat chloride	0.0315	19.6%	0.034	0.3	
		Copper	1.87	6.7%	2.084	1.1	
		Glufosinate	0.0601	14.0%	0.043	-1.1	
		Glyphosate	0.0588	20.4%	0.051	-0.5	
		Mepiquat chloride	0.0251	14.6%	0.024	-0.2	
		MPP	0.0469	15.5%	0.041	-0.5	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
		Bromide (anion)	0.743	19.5%	FN	-4.0	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.022	-0.2	
		Haloxyfop (sum)	0.0152	25.1%	0.014	-0.3	
		alpha-Cypermethrin	0.0297	22.6%	0.032	0.3	0.3
		Carbofuran-3-OH	0.00447	15.2%	0.004	-0.4	
		Emamectin B1a	0.00938	13.9%	0.009	-0.2	
		Fluazifop (free acid)	0.0221	14.7%	0.023	0.2	
		Haloxyfop (free acid)	0.00831	15.6%	0.008	-0.1	
		Phosphonic acid	0.249	21.0%	0.212	-0.6	
20	A	Chlorate (anion)	0.0966	14.1%	0.0954	0.0	0.5
		Chlormequat chloride	0.0315	19.6%	0.0271	-0.6	
		Copper	1.87	6.7%	2.10	1.2	
		Glufosinate	0.0601	14.0%	0.0663	0.4	
		Glyphosate	0.0588	20.4%	0.0531	-0.4	
		Mepiquat chloride	0.0251	14.6%	0.0243	-0.1	
		MPP	0.0469	15.5%	0.0402	-0.6	
		Bromide (anion)	0.743	19.5%	0.656	-0.5	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.0278	0.8	
		Haloxyfop (sum)	0.0152	25.1%	0.0173	0.6	
		TFA	[0.338]	27.0%	0.303	-0.4	
		alpha-Cypermethrin	0.0297	22.6%	0.0265	-0.4	0.5
		Carbofuran-3-OH	0.00447	15.2%	0.00536	0.8	
		Emamectin B1a	0.00938	13.9%	0.00798	-0.6	
		Fluazifop (free acid)	0.0221	14.7%	0.0218	-0.1	
		Haloxyfop (free acid)	0.00831	15.6%	0.0102	0.9	
		Phosphonic acid	0.249	21.0%	0.222	-0.4	
21	A	Chlorate (anion)	0.0966	14.1%	0.093	-0.1	1.0
		Chlormequat chloride	0.0315	19.6%	0.044	1.6	
		Copper	1.87	6.7%	FN	-4.0	
		Glufosinate	0.0601	14.0%	0.059	-0.1	
		Glyphosate	0.0588	20.4%	0.073	1.0	
		Mepiquat chloride	0.0251	14.6%	0.028	0.5	
		MPP	0.0469	15.5%	0.046	-0.1	
		Fluazifop (sum)	0.0233	19.2%	0.025	0.3	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.018	0.7	
		TFA	[0.338]	27.0%	0.343	0.1	
		alpha-Cypermethrin	0.0297	22.6%	0.044	1.9	1.2
		Carbofuran-3-OH	0.00447	15.2%	FN	-4.0	
		Emamectin B1a	0.00938	13.9%	0.010	0.3	
		Fluazifop (free acid)	0.0221	14.7%	0.024	0.3	
		Haloxyfop (free acid)	0.00831	15.6%	0.010	0.8	
		Phosphonic acid	0.249	21.0%	0.250	0.0	
22	A	Chlorate (anion)	0.0966	14.1%	0.108	0.5	0.4
		Chlormequat chloride	0.0315	19.6%	0.025	-0.8	
		Copper	1.87	6.7%	1.942	0.4	
		Glufosinate	0.0601	14.0%	0.063	0.2	
		Glyphosate	0.0588	20.4%	0.059	0.0	
		Mepiquat chloride	0.0251	14.6%	0.020	-0.8	
		MPP	0.0469	15.5%	0.050	0.3	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
23	A	Chlorate (anion)	0.0966	14.1%	0.0697	-1.1	1.6
		Chlormequat chloride	0.0315	19.6%	0.0218	-1.2	
		Glufosinate	0.0601	14.0%	0.0398	-1.4	
		Glyphosate	0.0588	20.4%	0.0097(FR)	-3.3	
		Mepiquat chloride	0.0251	14.6%	0.0156	-1.5	
		MPP	0.0469	15.5%	0.0368	-0.9	
		Fluazifop (sum)	0.0233	19.2%	0.0109FR	-2.1	n.c.
		Haloxyfop (sum)	0.0152	25.1%	FN*	-4.0	
		alpha-Cypermethrin	0.0297	22.6%	0.0146FR	-2.0	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.00626FR	1.6	
		Emamectin B1a	0.00938	13.9%	0.0114	0.9	
		Phosphonic acid	0.249	21.0%	0.184	-1.0	
24	B	alpha-Cypermethrin	0.0297	22.6%	0.028	-0.2	
		Carbofuran-3-OH	0.00447	15.2%	0.0057FR	1.1	
25	A	Chlorate (anion)	0.0966	14.1%	0.0622	-1.4	0.5
		Chlormequat chloride	0.0315	19.6%	0.0341	0.3	
		Copper	1.87	6.7%	1.87	0.0	
		Glufosinate	0.0601	14.0%	0.0573	-0.2	
		Glyphosate	0.0588	20.4%	0.0548	-0.3	
		Mepiquat chloride	0.0251	14.6%	0.0285	0.5	
		MPP	0.0469	15.5%	0.0516	0.4	
		Fluazifop (sum)	0.0233	19.2%	0.0245	0.2	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.0184	0.8	
		alpha-Cypermethrin	0.0297	22.6%	0.0330	0.4	0.5
		Carbofuran-3-OH	0.00447	15.2%	0.00516	0.6	
		Emamectin B1a	0.00938	13.9%	0.0110	0.7	
		Fluazifop (free acid)	0.0221	14.7%	0.0206	-0.3	
		Haloxyfop (free acid)	0.00831	15.6%	0.00901	0.3	
		Phosphonic acid	0.249	21.0%	0.271	0.4	
26	B	Chlorate (anion)	0.0966	14.1%	0.0946	-0.1	n.c.
		Glufosinate	0.0601	14.0%	0.0574	-0.2	
		Glyphosate	0.0588	20.4%	0.0851	1.8	
		alpha-Cypermethrin	0.0297	22.6%	0.0413	1.6	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.0047	0.2	
		Emamectin B1a	0.00938	13.9%	0.0096	0.1	
27	A	Chlorate (anion)	0.0966	14.1%	0.0987	0.1	0.1
		Chlormequat chloride	0.0315	19.6%	0.0314	0.0	
		Copper	1.87	6.7%	1.882	0.1	
		Glufosinate	0.0601	14.0%	0.0576	-0.2	
		Glyphosate	0.0588	20.4%	0.0588	0.0	
		Mepiquat chloride	0.0251	14.6%	0.0237	-0.2	
		MPP	0.0469	15.5%	0.0446	-0.2	
		TFA	[0.338]	27.0%	0.282	-0.7	n.c.
		Phosphonic acid	0.249	21.0%	0.344	1.5	n.c.
28	A	Chlorate (anion)	0.0966	14.1%	0.098	0.1	0.3
		Chlormequat chloride	0.0315	19.6%	0.035	0.4	
		Glufosinate	0.0601	14.0%	0.059	-0.1	
		Glyphosate	0.0588	20.4%	0.058	-0.1	
		Mepiquat chloride	0.0251	14.6%	0.029	0.6	
		MPP	0.0469	15.5%	0.041	-0.5	
		Bromide (anion)	0.743	19.5%	0.803	0.3	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.027	0.6	
		Haloxyfop (sum)	0.0152	25.1%	0.016	0.2	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
		Carbofuran-3-OH	0.00447	15.2%	0.004	-0.4	0.3
		Emamectin B1a	0.00938	13.9%	0.009	-0.2	
		Fluazifop (free acid)	0.0221	14.7%	0.021	-0.2	
		Haloxyfop (free acid)	0.00831	15.6%	0.007	-0.6	
		Phosphonic acid	0.249	21.0%	0.241	-0.1	
29	A	Chlorate (anion)	0.0966	14.1%	0.113	0.7	0.3
		Chlormequat chloride	0.0315	19.6%	0.0334	0.2	
		Copper	1.87	6.7%	1.79	-0.4	
		Glufosinate	0.0601	14.0%	0.0562	-0.3	
		Glyphosate	0.0588	20.4%	0.0665	0.5	
		Mepiquat chloride	0.0251	14.6%	0.0259	0.1	
		MPP	0.0469	15.5%	0.0474	0.0	
		Bromide (anion)	0.743	19.5%	0.724	-0.1	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.0270	0.6	
		Haloxyfop (sum)	0.0152	25.1%	0.0143	-0.2	
		alpha-Cypermethrin	0.0297	22.6%	0.0267	-0.4	0.5
		Carbofuran-3-OH	0.00447	15.2%	0.0045	0.0	
		Emamectin B1a	0.00938	13.9%	0.0085	-0.4	
		Fluazifop (free acid)	0.0221	14.7%	0.0259	0.7	
		Haloxyfop (free acid)	0.00831	15.6%	0.0064	-0.9	
30	A	Chlorate (anion)	0.0966	14.1%	0.0852	-0.5	0.3
		Chlormequat chloride	0.0315	19.6%	0.0331	0.2	
		Glufosinate	0.0601	14.0%	0.0607	0.0	
		Glyphosate	0.0588	20.4%	0.0539	-0.3	
		Mepiquat chloride	0.0251	14.6%	0.0233	-0.3	
		MPP	0.0469	15.5%	0.0421	-0.4	
		Fluazifop (sum)	0.0233	19.2%	0.0285	0.9	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.0155	0.1	
		alpha-Cypermethrin	0.0297	22.6%	0.0364	0.9	0.5
		Carbofuran-3-OH	0.00447	15.2%	0.0043	-0.2	
		Fluazifop (free acid)	0.0221	14.7%	0.0263	0.8	
		Haloxyfop (free acid)	0.00831	15.6%	0.0078	-0.2	
		Phosphonic acid	0.249	21.0%	0.284	0.6	
31	A	Chlormequat chloride	0.0315	19.6%	0.0285	-0.4	0.7
		Copper	1.87	6.7%	1.80	-0.4	
		Glufosinate	0.0601	14.0%	0.0596	0.0	
		Glyphosate	0.0588	20.4%	0.0494	-0.6	
		Mepiquat chloride	0.0251	14.6%	0.0261	0.2	
		MPP	0.0469	15.5%	0.0795	2.8	
		Fluazifop (sum)	0.0233	19.2%	0.0233	0.0	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.0172	0.5	
		alpha-Cypermethrin	0.0297	22.6%	0.0527	3.1	n.c.
		Phosphonic acid	0.249	21.0%	0.265	0.3	
32	A	Chlorate (anion)	0.0966	14.1%	0.094	-0.1	0.6
		Chlormequat chloride	0.0315	19.6%	0.036	0.6	
		Copper	1.87	6.7%	1.760	-0.6	
		Glufosinate	0.0601	14.0%	0.052	-0.5	
		Glyphosate	0.0588	20.4%	0.087	1.9	
		Mepiquat chloride	0.0251	14.6%	0.026	0.1	
		MPP	0.0469	15.5%	0.042	-0.4	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
33	A	Chlorate (anion)	0.0966	14.1%	0.26	6.8	1.6
		Chlormequat chloride	0.0315	19.6%	0.040	1.1	
		Copper	1.87	6.7%	1.794	-0.4	
		Glufosinate	0.0601	14.0%	0.048	-0.8	
		Glyphosate	0.0588	20.4%	0.025	-2.3	
		Mepiquat chloride	0.0251	14.6%	0.027	0.3	
		MPP	0.0469	15.5%	0.029	-1.5	
		Fenpropimorph carboxylic acid	[0.0562]	14.5%	0.044	-0.9	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.025	0.3	
		Haloxyfop (sum)	0.0152	25.1%	0.015	-0.1	
		TFA	[0.338]	27.0%	0.314	-0.3	
		alpha-Cypermethrin	0.0297	22.6%	0.023	-0.9	0.9
		Carbofuran-3-OH	0.00447	15.2%	0.005	0.5	
		Emamectin B1a	0.00938	13.9%	0.013	1.5	
		Fluazifop (free acid)	0.0221	14.7%	0.024	0.3	
		Haloxyfop (free acid)	0.00831	15.6%	0.008	-0.1	
		Phosphonic acid	0.249	21.0%	0.141	-1.7	
34	A	Chlorate (anion)	0.0966	14.1%	0.105	0.3	0.6
		Chlormequat chloride	0.0315	19.6%	0.034	0.3	
		Copper	1.87	6.7%	1.66	-1.1	
		Glufosinate	0.0601	14.0%	0.063	0.2	
		Glyphosate	0.0588	20.4%	0.042	-1.1	
		Mepiquat chloride	0.0251	14.6%	0.024	-0.2	
		MPP	0.0469	15.5%	0.040	-0.6	
		Bromide (anion)	0.743	19.5%	0.700	-0.2	n.c.
		4-HSA	[0.0654]	–	0.066	0.0	
		Fenpropimorph carboxylic acid	[0.0562]	14.5%	0.060	0.3	
		Fluazifop (sum)	0.0233	19.2%	0.022	-0.2	
		Haloxyfop (sum)	0.0152	25.1%	0.016	0.2	
		TFA	[0.338]	27.0%	0.320	-0.2	
		alpha-Cypermethrin	0.0297	22.6%	0.035	0.7	0.4
		Carbofuran-3-OH	0.00447	15.2%	0.005	0.5	
		Emamectin B1a	0.00938	13.9%	0.009	-0.2	
		Fluazifop (free acid)	0.0221	14.7%	0.022	0.0	
		Haloxyfop (free acid)	0.00831	15.6%	0.008	-0.1	
		Phosphonic acid	0.249	21.0%	0.294	0.7	
36	A	Chlorate (anion)	0.0966	14.1%	0.069	-1.1	1.5
		Chlormequat chloride	0.0315	19.6%	0.024	-1.0	
		Copper	1.87	6.7%	1.9	0.2	
		Glufosinate	0.0601	14.0%	0.055	-0.3	
		Glyphosate	0.0588	20.4%	0.012	-3.2	
		Mepiquat chloride	0.0251	14.6%	0.018	-1.1	
		MPP	0.0469	15.5%	0.089	3.6	
		Bromide (anion)	0.743	19.5%	1.8	5.7	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.025	0.3	
		Haloxyfop (sum)	0.0152	25.1%	0.029	3.6	
		alpha-Cypermethrin	0.0297	22.6%	0.033	0.4	0.7
		Carbofuran-3-OH	0.00447	15.2%	0.004	-0.4	
		Emamectin B1a	0.00938	13.9%	0.007	-1.0	
		Fluazifop (free acid)	0.0221	14.7%	0.021	-0.2	
		Haloxyfop (free acid)	0.00831	15.6%	0.010	0.8	
		Phosphonic acid	0.249	21.0%	0.17	-1.3	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
37	A	Chlorate (anion)	0.0966	14.1%	0.0590	-1.6	0.7
		Chlormequat chloride	0.0315	19.6%	0.0264	-0.6	
		Copper	1.87	6.7%	2.16	1.6	
		Glufosinate	0.0601	14.0%	0.0609	0.1	
		Glyphosate	0.0588	20.4%	0.0560	-0.2	
		Mepiquat chloride	0.0251	14.6%	0.0229	-0.4	
		MPP	0.0469	15.5%	0.0430	-0.3	
38	A	Chlorate (anion)	0.0966	14.1%	0.105	0.3	0.9
		Chlormequat chloride	0.0315	19.6%	0.0403	1.1	
		Copper	1.87	6.7%	1.92	0.3	
		Glufosinate	0.0601	14.0%	0.0863	1.7	
		Glyphosate	0.0588	20.4%	0.0680	0.6	
		Mepiquat chloride	0.0251	14.6%	0.0313	1.0	
		MPP	0.0469	15.5%	0.0333	-1.2	
		alpha-Cypermethrin	0.0297	22.6%	0.0374	1.0	n.c.
39	B	Chlorate (anion)	0.0966	14.1%	0.0949	-0.1	0.6
		Chlormequat chloride	0.0315	19.6%	0.0196	-1.5	
		Glufosinate	0.0601	14.0%	0.0556	-0.3	
		Glyphosate	0.0588	20.4%	0.0505	-0.6	
		Mepiquat chloride	0.0251	14.6%	0.0299	0.8	
		MPP	0.0469	15.5%	0.0540	0.6	
40	B	Chlorate (anion)	0.0966	14.1%	0.026	-2.9	1.0
		Chlormequat chloride	0.0315	19.6%	0.03	-0.2	
		Glufosinate	0.0601	14.0%	0.043FR	-1.1	
		Glyphosate	0.0588	20.4%	0.084	1.7	
		Mepiquat chloride	0.0251	14.6%	0.025	0.0	
		MPP	0.0469	15.5%	0.049(FR)	0.2	
		Fluazifop (sum)	0.0233	19.2%	0.02	-0.6	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.017	0.5	
		alpha-Cypermethrin	0.0297	22.6%	0.026	-0.5	1.1
		Carbofuran-3-OH	0.00447	15.2%	FN*	-4.0	
		Emamectin B1a	0.00938	13.9%	0.01	0.3	
		Fluazifop (free acid)	0.0221	14.7%	0.02	-0.4	
		Haloxyfop (free acid)	0.00831	15.6%	0.009(FR)	0.3	
41	B	Glufosinate	0.0601	14.0%	0.0583	-0.1	n.c.
		Glyphosate	0.0588	20.4%	0.0494	-0.6	
		MPP	0.0469	15.5%	0.0478	0.1	
42	B	Chlorate (anion)	0.0966	14.1%	0.088	-0.4	0.6
		Copper	1.87	6.7%	1.9	0.2	
		Glufosinate	0.0601	14.0%	0.062	0.1	
		Glyphosate	0.0588	20.4%	0.067	0.6	
		MPP	0.0469	15.5%	0.068	1.8	
		Carbofuran-3-OH	0.00447	15.2%	0.004	-0.4	n.c.
		Emamectin B1a	0.00938	13.9%	0.009	-0.2	
		Phosphonic acid	0.249	21.0%	0.247	0.0	
44	B	alpha-Cypermethrin	0.0297	22.6%	0.0232	-0.9	
		Emamectin B1a	0.00938	13.9%	FN	-4.0	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
45	A	Chlorate (anion)	0.0966	14.1%	0.093	-0.1	0.3
		Chlormequat chloride	0.0315	19.6%	0.031	-0.1	
		Copper	1.87	6.7%	1.9	0.2	
		Glufosinate	0.0601	14.0%	0.052	-0.5	
		Glyphosate	0.0588	20.4%	0.055	-0.3	
		Mepiquat chloride	0.0251	14.6%	0.026	0.1	
		MPP	0.0469	15.5%	0.037	-0.8	
		Bromide (anion)	0.743	19.5%	0.850FR	0.6	n.c.
		Fenpropimorph carboxylic acid	[0.0562]	14.5%	0.060	0.3	
		TFA	[0.338]	27.0%	0.450	1.3	
		alpha-Cypermethrin	0.0297	22.6%	0.021	-1.2	2.3
		Carbofuran-3-OH	0.00447	15.2%	FN*	-4.0	
		Emamectin B1a	0.00938	13.9%	FN*	-4.0	
		Fluazifop (free acid)	0.0221	14.7%	0.025	0.5	
		Haloxyfop (free acid)	0.00831	15.6%	FN*	-4.0	
		Phosphonic acid	0.249	21.0%	0.255	0.1	
46	B	Chlorate (anion)	0.0966	14.1%	0.0987	0.1	n.c.
		Chlormequat chloride	0.0315	19.6%	0.0341	0.3	
		Copper	1.87	6.7%	1.94	0.4	
		Mepiquat chloride	0.0251	14.6%	0.0273	0.4	
		alpha-Cypermethrin	0.0297	22.6%	0.032	0.3	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.0039	-0.5	
		Fluazifop (free acid)	0.0221	14.7%	0.0218	-0.1	
		Haloxyfop (free acid)	0.00831	15.6%	0.0046	-1.8	
47	A	Chlorate (anion)	0.0966	14.1%	0.0833	-0.6	0.4
		Chlormequat chloride	0.0315	19.6%	0.0300	-0.2	
		Copper	1.87	6.7%	1.81	-0.3	
		Glufosinate	0.0601	14.0%	0.0645	0.3	
		Glyphosate	0.0588	20.4%	0.0709	0.8	
		Mepiquat chloride	0.0251	14.6%	0.0245	-0.1	
		MPP	0.0469	15.5%	0.0444	-0.2	
		Fluazifop (sum)	0.0233	19.2%	0.0260	0.5	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.0200	1.3	
		TFA	[0.338]	27.0%	0.245	-1.1	
		alpha-Cypermethrin	0.0297	22.6%	0.0239	-0.8	0.4
		Carbofuran-3-OH	0.00447	15.2%	0.00393	-0.5	
		Emamectin B1a	0.00938	13.9%	0.00960	0.1	
		Fluazifop (free acid)	0.0221	14.7%	0.0240	0.3	
		Haloxyfop (free acid)	0.00831	15.6%	0.00780	-0.2	
48	B	Chlorate (anion)	0.0966	14.1%	0.0546	-1.7	1.4
		Copper	1.87	6.7%	1.67	-1.1	
		Glufosinate	0.0601	14.0%	0.0660	0.4	
		Glyphosate	0.0588	20.4%	0.0510	-0.5	
		Mepiquat chloride	0.0251	14.6%	FN*	-4.0	
		MPP	0.0469	15.5%	0.0420	-0.4	
		Bromide (anion)	0.743	19.5%	0.384	-1.9	n.c.
		TFA	[0.338]	27.0%	0.247	-1.1	
		alpha-Cypermethrin	0.0297	22.6%	0.0312	0.2	n.c.

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
49	A	Chlorate (anion)	0.0966	14.1%	0.104	0.3	0.4
		Chlormequat chloride	0.0315	19.6%	0.024	-1.0	
		Copper	1.87	6.7%	1.92	0.3	
		Glufosinate	0.0601	14.0%	0.065FR	0.3	
		Glyphosate	0.0588	20.4%	0.063	0.3	
		Mepiquat chloride	0.0251	14.6%	0.026	0.1	
		MPP	0.0469	15.5%	0.053	0.5	
		Fluazifop (sum)	0.0233	19.2%	0.015	-1.4	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.016	0.2	
		alpha-Cypermethrin	0.0297	22.6%	0.012	-2.4	0.8
		Carbofuran-3-OH	0.00447	15.2%	0.0053	0.7	
		Emamectin B1a	0.00938	13.9%	0.0093	0.0	
		Fluazifop (free acid)	0.0221	14.7%	0.016	-1.1	
		Haloxyfop (free acid)	0.00831	15.6%	0.009	0.3	
		Phosphonic acid	0.249	21.0%	0.241	-0.1	
50	B	alpha-Cypermethrin	0.0297	22.6%	0.022	-1.0	
52	A	Chlorate (anion)	0.0966	14.1%	0.075	-0.9	1.0
		Chlormequat chloride	0.0315	19.6%	0.041	1.2	
		Copper	1.87	6.7%	1.75	-0.6	
		Glufosinate	0.0601	14.0%	0.062	0.1	
		Glyphosate	0.0588	20.4%	0.050	-0.6	
		Mepiquat chloride	0.0251	14.6%	0.047	3.5	
		MPP	0.0469	15.5%	0.043	-0.3	
		Fluazifop (sum)	0.0233	19.2%	0.012	-1.9	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.016	0.2	
		alpha-Cypermethrin	0.0297	22.6%	0.028	-0.2	0.5
		Carbofuran-3-OH	0.00447	15.2%	0.004	-0.4	
		Emamectin B1a	0.00938	13.9%	0.009	-0.2	
		Fluazifop (free acid)	0.0221	14.7%	0.012	-1.8	
		Haloxyfop (free acid)	0.00831	15.6%	0.009	0.3	
		Phosphonic acid	0.249	21.0%	0.237	-0.2	
53	A	Chlorate (anion)	0.0966	14.1%	0.088	-0.4	1.2
		Chlormequat chloride	0.0315	19.6%	0.027	-0.6	
		Copper	1.87	6.7%	1.724	-0.8	
		Glufosinate	0.0601	14.0%	0.118	3.9	
		Glyphosate	0.0588	20.4%	0.046	-0.9	
		Mepiquat chloride	0.0251	14.6%	0.021	-0.7	
		alpha-Cypermethrin	0.0297	22.6%	0.081	6.9	3.3
		Carbofuran-3-OH	0.00447	15.2%	0.011	5.8	
		Emamectin B1a	0.00938	13.9%	0.032(o)	9.6	
		Fluazifop (free acid)	0.0221	14.7%	0.025	0.5	
		Haloxyfop (free acid)	0.00831	15.6%	0.010	0.8	
54	B	Chlorate (anion)	0.0966	14.1%	0.103	0.3	0.6
		Chlormequat chloride	0.0315	19.6%	0.0258	-0.7	
		Copper	1.87	6.7%	1.7	-0.9	
		Glufosinate	0.0601	14.0%	0.0702	0.7	
		Mepiquat chloride	0.0251	14.6%	0.0211	-0.6	
		Bromide (anion)	0.743	19.5%	0.824	0.4	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.0249	0.3	
		Haloxyfop (sum)	0.0152	25.1%	0.0170	0.5	
		alpha-Cypermethrin	0.0297	22.6%	0.02620	-0.5	0.3
		Carbofuran-3-OH	0.00447	15.2%	0.00462	0.1	
		Emamectin B1a	0.00938	13.9%	0.0107	0.6	
		Fluazifop (free acid)	0.0221	14.7%	0.0215	-0.1	
		Haloxyfop (free acid)	0.00831	15.6%	0.00755	-0.4	
		Phosphonic acid	0.249	21.0%	0.222	-0.4	
55	B	Chlorate (anion)	0.0966	14.1%	0.068	-1.2	n.c.
		Glufosinate	0.0601	14.0%	0.038	-1.5	
		Glyphosate	0.0588	20.4%	0.056	-0.2	
		MPP	0.0469	15.5%	0.045	-0.2	
		Phosphonic acid	0.249	21.0%	0.162	-1.4	n.c.
56	A	Chlorate (anion)	0.0966	14.1%	0.103	0.3	0.7
		Chlormequat chloride	0.0315	19.6%	0.043	1.5	
		Glufosinate	0.0601	14.0%	0.058	-0.1	
		Glyphosate	0.0588	20.4%	0.061	0.1	
		Mepiquat chloride	0.0251	14.6%	0.035	1.6	
		MPP	0.0469	15.5%	0.042	-0.4	
		Bromide (anion)	0.743	19.5%	0.780	0.2	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.024	0.1	
		Haloxyfop (sum)	0.0152	25.1%	0.014	-0.3	
		Carbofuran-3-OH	0.00447	15.2%	0.005	0.5	0.7
		Emamectin B1a	0.00938	13.9%	0.011	0.7	
		Fluazifop (free acid)	0.0221	14.7%	0.025	0.5	
		Haloxyfop (free acid)	0.00831	15.6%	0.007	-0.6	
		Phosphonic acid	0.249	21.0%	0.324	1.2	
57	B	Chlorate (anion)	0.0966	14.1%	0.106	0.4	0.5
		Chlormequat chloride	0.0315	19.6%	0.0365	0.6	
		Glufosinate	0.0601	14.0%	0.0561	-0.3	
		Glyphosate	0.0588	20.4%	0.0574	-0.1	
		Mepiquat chloride	0.0251	14.6%	0.0319	1.1	
		MPP	0.0469	15.5%	0.0520	0.4	
		Bromide (anion)	0.743	19.5%	FN*	-4.0	n.c.
		TFA	[0.338]	27.0%	0.325	-0.2	
		alpha-Cypermethrin	0.0297	22.6%	0.0260	-0.5	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.0046	0.1	
		Emamectin B1a	0.00938	13.9%	0.0142	2.1	
58	A	Chlorate (anion)	0.0966	14.1%	0.0950	-0.1	0.2
		Chlormequat chloride	0.0315	19.6%	0.0322	0.1	
		Copper	1.87	6.7%	1.93	0.3	
		Glufosinate	0.0601	14.0%	0.0612	0.1	
		Glyphosate	0.0588	20.4%	0.0643	0.4	
		Mepiquat chloride	0.0251	14.6%	0.0220	-0.5	
		MPP	0.0469	15.5%	0.0503	0.3	
		alpha-Cypermethrin	0.0297	22.6%	0.0283	-0.2	n.c.
		Phosphonic acid	0.249	21.0%	0.233	-0.3	
59	A	Chlorate (anion)	0.0966	14.1%	0.093	-0.1	0.7
		Chlormequat chloride	0.0315	19.6%	0.022	-1.2	
		Copper	1.87	6.7%	2.052	1.0	
		Glufosinate	0.0601	14.0%	0.054	-0.4	
		Glyphosate	0.0588	20.4%	0.047	-0.8	
		Mepiquat chloride	0.0251	14.6%	0.022	-0.5	
		MPP	0.0469	15.5%	0.040	-0.6	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
		Bromide (anion)	0.743	19.5%	FN	-4.0	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.016	-1.3	
		Haloxyfop (sum)	0.0152	25.1%	0.013	-0.6	
		alpha-Cypermethrin	0.0297	22.6%	0.028	-0.2	0.6
		Carbofuran-3-OH	0.00447	15.2%	0.003	-1.3	
		Emamectin B1a	0.00938	13.9%	0.008	-0.6	
		Fluazifop (free acid)	0.0221	14.7%	0.019	-0.6	
		Haloxyfop (free acid)	0.00831	15.6%	0.007	-0.6	
		Phosphonic acid	0.249	21.0%	0.251	0.0	
60	A	Chlorate (anion)	0.0966	14.1%	0.107	0.4	0.8
		Chlormequat chloride	0.0315	19.6%	0.0280	-0.4	
		Glufosinate	0.0601	14.0%	0.0670	0.5	
		Glyphosate	0.0588	20.4%	0.0180	-2.8	
		Mepiquat chloride	0.0251	14.6%	0.0230	-0.3	
		MPP	0.0469	15.5%	0.0490	0.2	
		Bromide (anion)	0.743	19.5%	FN*	-4.0	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.0186	-0.8	
		Haloxyfop (sum)	0.0152	25.1%	0.00830	-1.8	
		alpha-Cypermethrin	0.0297	22.6%	0.0259	-0.5	0.9
		Carbofuran-3-OH	0.00447	15.2%	0.00400	-0.4	
		Emamectin B1a	0.00938	13.9%	0.0163	3.0	
		Fluazifop (free acid)	0.0221	14.7%	0.0186	-0.6	
		Haloxyfop (free acid)	0.00831	15.6%	0.00830	0.0	
		Phosphonic acid	0.249	21.0%	0.286	0.6	
61	A	Chlorate (anion)	0.0966	14.1%	0.13	1.4	0.8
		Chlormequat chloride	0.0315	19.6%	0.04	1.1	
		Copper	1.87	6.7%	1.97	0.5	
		Glufosinate	0.0601	14.0%	0.071	0.7	
		Glyphosate	0.0588	20.4%	0.074	1.0	
		Mepiquat chloride	0.0251	14.6%	0.028	0.5	
		MPP	0.0469	15.5%	0.044	-0.2	
		Fluazifop (sum)	0.0233	19.2%	0.03	1.2	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.02	1.3	
		TFA	[0.338]	27.0%	0.431	1.1	
		Carbofuran-3-OH	0.00447	15.2%	0.0072	2.4	1.3
		Emamectin B1a	0.00938	13.9%	0.01	0.3	
		Fluazifop (free acid)	0.0221	14.7%	0.032	1.8	
		Haloxyfop (free acid)	0.00831	15.6%	0.01	0.8	
		Phosphonic acid	0.249	21.0%	0.33	1.3	
63	B	Copper	1.87	6.7%	1.70	-0.9	n.c.
		Glufosinate	0.0601	14.0%	0.0588	-0.1	
		Glyphosate	0.0588	20.4%	0.0597	0.1	
		MPP	0.0469	15.5%	0.0494	0.2	
		Fluazifop (sum)	0.0233	19.2%	0.0227	-0.1	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.0098	-1.4	
		alpha-Cypermethrin	0.0297	22.6%	0.0368	1.0	n.c.
		Fluazifop (free acid)	0.0221	14.7%	0.0246	0.5	
		Haloxyfop (free acid)	0.00831	15.6%	0.0096	0.6	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
64	A	Chlorate (anion)	0.0966	14.1%	0.108	0.5	0.8
		Chlormequat chloride	0.0315	19.6%	0.031	-0.1	
		Copper	1.87	6.7%	1.0	-4.7	
		Glufosinate	0.0601	14.0%	0.062	0.1	
		Glyphosate	0.0588	20.4%	0.056	-0.2	
		Mepiquat chloride	0.0251	14.6%	0.025	0.0	
		MPP	0.0469	15.5%	0.047	0.0	
		Bromide (anion)	0.743	19.5%	0.821	0.4	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.026	0.5	
		Haloxyfop (sum)	0.0152	25.1%	0.017	0.5	
		TFA	[0.338]	27.0%	0.466	1.5	
		alpha-Cypermethrin	0.0297	22.6%	0.029	-0.1	0.4
		Carbofuran-3-OH	0.00447	15.2%	0.004	-0.4	
		Emamectin B1a	0.00938	13.9%	0.007[FR]	-1.0	
		Fluazifop (free acid)	0.0221	14.7%	0.021	-0.2	
		Haloxyfop (free acid)	0.00831	15.6%	0.009	0.3	
		Phosphonic acid	0.249	21.0%	0.265	0.3	
65	B	*BAC-C12 chloride*	–	–	0.0114	–	FP
		Chlorate (anion)	0.0966	14.1%	0.0751	-0.9	
		Chlormequat chloride	0.0315	19.6%	0.0274	-0.5	
		Glufosinate	0.0601	14.0%	0.0404	-1.3	
		Glyphosate	0.0588	20.4%	0.0489	-0.7	
		Mepiquat chloride	0.0251	14.6%	0.0263	0.2	
		MPP	0.0469	15.5%	0.0486	0.1	
		Bromide (anion)	0.743	19.5%	0.597	-0.8	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.0143	-1.5	
		Haloxyfop (sum)	0.0152	25.1%	0.0140	-0.3	
		alpha-Cypermethrin	0.0297	22.6%	0.0314	0.2	1.1
		Carbofuran-3-OH	0.00447	15.2%	0.00447	0.0	
		Emamectin B1a	0.00938	13.9%	0.0104	0.4	
		Fluazifop (free acid)	0.0221	14.7%	0.0143	-1.4	
		Haloxyfop (free acid)	0.00831	15.6%	0.00756	-0.4	
		Phosphonic acid	0.249	21.0%	FN	-4.0	
66	A	Chlorate (anion)	0.0966	14.1%	0.0873	-0.4	0.6
		Chlormequat chloride	0.0315	19.6%	0.0331	0.2	
		Copper	1.87	6.7%	1.95	0.4	
		Glufosinate	0.0601	14.0%	0.0659	0.4	
		Glyphosate	0.0588	20.4%	0.0667	0.5	
		Mepiquat chloride	0.0251	14.6%	0.0239	-0.2	
		MPP	0.0469	15.5%	0.0718	2.1	
		Bromide (anion)	0.743	19.5%	0.762	0.1	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.0182	-0.9	
		Haloxyfop (sum)	0.0152	25.1%	0.0132	-0.5	
		TFA	[0.338]	27.0%	0.273	-0.8	
		alpha-Cypermethrin	0.0297	22.6%	0.0461	2.2	0.6
		Carbofuran-3-OH	0.00447	15.2%	0.0042	-0.2	
		Emamectin B1a	0.00938	13.9%	0.0095	0.1	
		Fluazifop (free acid)	0.0221	14.7%	0.0196	-0.5	
		Haloxyfop (free acid)	0.00831	15.6%	0.0077	-0.3	
		Phosphonic acid	0.249	21.0%	0.268	0.3	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
67	A	Chlormequat chloride	0.0315	19.6%	0.0337	0.3	0.4
		Copper	1.87	6.7%	1.89	0.1	
		Glufosinate	0.0601	14.0%	0.0576	-0.2	
		Glyphosate	0.0588	20.4%	0.0675	0.6	
		Mepiquat chloride	0.0251	14.6%	0.0276	0.4	
		MPP	0.0469	15.5%	0.0557	0.8	
68	A	Chlorate (anion)	0.0966	14.1%	0.089	-0.3	0.3
		Chlormequat chloride	0.0315	19.6%	0.027	-0.6	
		Copper	1.87	6.7%	1.716	-0.8	
		Glufosinate	0.0601	14.0%	0.061	0.1	
		Glyphosate	0.0588	20.4%	0.062	0.2	
		Mepiquat chloride	0.0251	14.6%	0.024	-0.2	
		MPP	0.0469	15.5%	0.049	0.2	
		TFA	[0.338]	27.0%	0.329	-0.1	n.c.
		Phosphonic acid	0.249	21.0%	0.181	-1.1	n.c.
69	B	Chlormequat chloride	0.0315	19.6%	0.044	1.6	n.c.
		Mepiquat chloride	0.0251	14.6%	0.031	0.9	
70	A	Chlorate (anion)	0.0966	14.1%	0.097	0.0	0.6
		Chlormequat chloride	0.0315	19.6%	0.025	-0.8	
		Copper	1.87	6.7%	1.9	0.2	
		Glufosinate	0.0601	14.0%	0.043	-1.1	
		Glyphosate	0.0588	20.4%	0.052	-0.5	
		Mepiquat chloride	0.0251	14.6%	0.023	-0.3	
		MPP	0.0469	15.5%	0.035	-1.0	
		Bromide (anion)	0.743	19.5%	83.08(o)	443.3	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.025	0.3	
		Haloxyfop (sum)	0.0152	25.1%	0.018	0.7	
		Maleic hydrazide	–	–	1.108	–	FP
		TFA	[0.338]	27.0%	0.424	1.0	n.c.
		alpha-Cypermethrin	0.0297	22.6%	0.025	-0.6	0.5
		Carbofuran-3-OH	0.00447	15.2%	0.004	-0.4	
		Emamectin B1a	0.00938	13.9%	0.009	-0.2	
		Fluazifop (free acid)	0.0221	14.7%	0.021	-0.2	
		Haloxyfop (free acid)	0.00831	15.6%	0.009	0.3	
		Phosphonic acid	0.249	21.0%	0.187	-1.0	
71	A	Chlorate (anion)	0.0966	14.1%	0.096	0.0	0.5
		Chlormequat chloride	0.0315	19.6%	0.028	-0.4	
		Copper	1.87	6.7%	2.01	0.7	
		Glufosinate	0.0601	14.0%	0.066	0.4	
		Glyphosate	0.0588	20.4%	0.056	-0.2	
		Mepiquat chloride	0.0251	14.6%	0.022	-0.5	
		MPP	0.0469	15.5%	0.065	1.5	
		alpha-Cypermethrin	0.0297	22.6%	0.033	0.4	1.7
		Carbofuran-3-OH	0.00447	15.2%	0.004	-0.4	
		Emamectin B1a	0.00938	13.9%	FN*	-4.0	
		Fluazifop (free acid)	0.0221	14.7%	0.018	-0.7	
		Haloxyfop (free acid)	0.00831	15.6%	FN*	-4.0	
		Phosphonic acid	0.249	21.0%	0.29	0.7	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
72	A	Chlormequat chloride	0.0315	19.6%	0.0336	0.3	0.5
		Copper	1.87	6.7%	1.70	-0.9	
		Glufosinate	0.0601	14.0%	0.0688	0.6	
		Glyphosate	0.0588	20.4%	0.0643	0.4	
		Mepiquat chloride	0.0251	14.6%	0.0274	0.4	
		MPP	0.0469	15.5%	0.0529	0.5	
		Bromide (anion)	0.743	19.5%	0.426	-1.7	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.0224	-0.2	
		Haloxyfop (sum)	0.0152	25.1%	0.00896	-1.6	
		alpha-Cypermethrin	0.0297	22.6%	0.0307	0.1	0.4
		Carbofuran-3-OH	0.00447	15.2%	0.00358	-0.8	
		Emamectin B1a	0.00938	13.9%	0.00910	-0.1	
		Fluazifop (free acid)	0.0221	14.7%	0.0197	-0.4	
		Haloxyfop (free acid)	0.00831	15.6%	0.00873	0.2	
		Phosphonic acid	0.249	21.0%	0.283	0.5	
74	B	Copper	1.87	6.7%	1.78	-0.5	n.c.
75	B	Chlormequat chloride	0.0315	19.6%	0.0314	0.0	0.3
		Copper	1.87	6.7%	1.78	-0.5	
		Glufosinate	0.0601	14.0%	0.0562	-0.3	
		Glyphosate	0.0588	20.4%	0.0687	0.7	
		Mepiquat chloride	0.0251	14.6%	0.0238	-0.2	
		Fluazifop (sum)	0.0233	19.2%	0.0244	0.2	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.0149	-0.1	
		alpha-Cypermethrin	0.0297	22.6%	0.0216	-1.1	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.00409	-0.3	
		Emamectin B1a	0.00938	13.9%	0.00987	0.2	
76	B	Chlormequat chloride	0.0315	19.6%	0.0421	1.3	n.c.
		Glufosinate	0.0601	14.0%	0.0506	-0.6	
		Glyphosate	0.0588	20.4%	0.0415	-1.2	
		Mepiquat chloride	0.0251	14.6%	0.0227	-0.4	
78	B	Chlormequat chloride	0.0315	19.6%	0.0326	0.1	0.5
		Glufosinate	0.0601	14.0%	0.0742	0.9	
		Glyphosate	0.0588	20.4%	0.0535	-0.4	
		Mepiquat chloride	0.0251	14.6%	0.0279	0.4	
		MPP	0.0469	15.5%	0.0521	0.4	
		alpha-Cypermethrin	0.0297	22.6%	0.027	-0.4	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.0042	-0.2	
79	B	Chlorate (anion)	0.0966	14.1%	0.0859	-0.4	n.c.
		Copper	1.87	6.7%	1.82	-0.3	
		Fluazifop (sum)	0.0233	19.2%	0.0219	-0.2	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.00921 (FR)	-1.6	
		alpha-Cypermethrin	0.0297	22.6%	0.0344	0.6	n.c.
		Carbofuran-3-OH	0.00447	15.2%	0.00479	0.3	
		Emamectin B1a	0.00938	13.9%	0.00827	-0.5	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
80	A	Chlormequat chloride	0.0315	19.6%	0.040	1.1	0.7
		Copper	1.87	6.7%	1.8	-0.4	
		Glufosinate	0.0601	14.0%	0.070	0.7	
		Glyphosate	0.0588	20.4%	0.069	0.7	
		Mepiquat chloride	0.0251	14.6%	0.030	0.8	
		MPP	0.0469	15.5%	0.041	-0.5	
		Bromide (anion)	0.743	19.5%	0.639	-0.6	n.c.
		Fenpropimorph carboxylic acid	[0.0562]	14.5%	0.048	-0.6	
		Fluazifop (sum)	0.0233	19.2%	0.021	-0.4	
		Haloxyfop (sum)	0.0152	25.1%	0.017	0.5	
		alpha-Cypermethrin	0.0297	22.6%	0.045	2.1	0.7
		Carbofuran-3-OH	0.00447	15.2%	0.005	0.5	
		Emamectin B1a	0.00938	13.9%	0.010	0.3	
		Fluazifop (free acid)	0.0221	14.7%	0.021	-0.2	
		Haloxyfop (free acid)	0.00831	15.6%	0.007	-0.6	
81	B	Chlorate (anion)	0.0966	14.1%	0.100	0.1	0.2
		Chlormequat chloride	0.0315	19.6%	0.030	-0.2	
		Glufosinate	0.0601	14.0%	0.065	0.3	
		Glyphosate	0.0588	20.4%	0.064	0.4	
		Mepiquat chloride	0.0251	14.6%	0.026	0.1	
		MPP	0.0469	15.5%	0.050	0.3	
		Bromide (anion)	0.743	19.5%	FN	-4.0	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.023	-0.1	
		Haloxyfop (sum)	0.0152	25.1%	0.014	-0.3	
		TFA	[0.338]	27.0%	0.24	-1.2	
		Fluazifop (free acid)	0.0221	14.7%	0.022	0.0	n.c.
		Haloxyfop (free acid)	0.00831	15.6%	0.0074	-0.4	
		Phosphonic acid	0.249	21.0%	0.25	0.0	
82	B	Chlormequat chloride	0.0315	19.6%	0.007	-3.1	n.c.
		Copper	1.87	6.7%	1.81	-0.3	
		Glyphosate	0.0588	20.4%	0.159	6.8	
		Mepiquat chloride	0.0251	14.6%	0.049	3.8	
		Fluazifop (sum)	0.0233	19.2%	0.022	-0.2	n.c.
		Haloxyfop (sum)	0.0152	25.1%	0.007	-2.2	
		Carbofuran-3-OH	0.00447	15.2%	0.002	-2.2	n.c.
84	A	Chlorate (anion)	0.0966	14.1%	0.141	1.8	2.4
		Chlormequat chloride	0.0315	19.6%	0.0228	-1.1	
		Copper	1.87	6.7%	1.80	-0.4	
		Glufosinate	0.0601	14.0%	0.102	2.8	
		Glyphosate	0.0588	20.4%	0.138	5.4	
		Mepiquat chloride	0.0251	14.6%	0.0198(FR)	-0.8	
		MPP	0.0469	15.5%	0.224(o)	15.1	
		alpha-Cypermethrin	0.0297	22.6%	0.0287	-0.1	n.c.
		Phosphonic acid	0.249	21.0%	1.017(o)	12.3	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
86	A	Chlorate (anion)	0.0966	14.1%	0.097	0.0	0.2
		Chlormequat chloride	0.0315	19.6%	0.028	-0.4	
		Glufosinate	0.0601	14.0%	0.058	-0.1	
		Glyphosate	0.0588	20.4%	0.054	-0.3	
		Mepiquat chloride	0.0251	14.6%	0.026	0.1	
		MPP	0.0469	15.5%	0.048	0.1	
		Phosphonic acid	0.249	21.0%	0.19	-0.9	n.c.
87	A	Chlorate (anion)	0.0966	14.1%	0.101	0.2	0.3
		Chlormequat chloride	0.0315	19.6%	0.034	0.3	
		Copper	1.87	6.7%	1.91	0.2	
		Glufosinate	0.0601	14.0%	0.057	-0.2	
		Glyphosate	0.0588	20.4%	0.069	0.7	
		Mepiquat chloride	0.0251	14.6%	0.026	0.1	
		MPP	0.0469	15.5%	0.050	0.3	
88	A	Chlorate (anion)	0.0966	14.1%	0.104	0.3	1.4
		Chlormequat chloride	0.0315	19.6%	0.0349	0.4	
		Copper	1.87	6.7%	1.93	0.3	
		Glufosinate	0.0601	14.0%	0.152	6.1	
		Glyphosate	0.0588	20.4%	0.106	3.2	
		Mepiquat chloride	0.0251	14.6%	0.0219	-0.5	
		MPP	0.0469	15.5%	0.0488	0.2	
		Bromide (anion)	0.743	19.5%	0.715	-0.2	n.c.
		Fenpropimorph carboxylic acid	[0.0562]	14.5%	0.0633	0.5	
		alpha-Cypermethrin	0.0297	22.6%	0.0224	-1.0	0.3
		Carbofuran-3-OH	0.00447	15.2%	0.0046	0.1	
		Emamectin B1a	0.00938	13.9%	0.0091	-0.1	
		Fluazifop (free acid)	0.0221	14.7%	0.0223	0.0	
		Haloxyfop (free acid)	0.00831	15.6%	0.0084	0.0	
		Phosphonic acid	0.249	21.0%	0.284	0.6	
89	B	Haloxyfop (sum)	0.0152	25.1%	FN	-4.0	n.c.
		alpha-Cypermethrin	0.0297	22.6%	0.0364	0.9	n.c.
		Carbofuran-3-OH	0.00447	15.2%	FN	-4.0	

Lab code	Cat	Analyte	prel. AV [mg/kg]	prel. CV*	Conc. [mg/kg]	prel. z score	prel. AAZ
Results reported by the laboratories outside EU/EFTA zone							
3rd-9	B	Copper	1.87	6.7%	2.092	1.2	n.c.
		Glufosinate	0.0601	14.0%	0.055	-0.3	
		Glyphosate	0.0588	20.4%	0.070	0.8	
		MPP	0.0469	15.5%	0.041	-0.5	
		Bromide (anion)	0.743	19.5%	FN*	-4.0	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.024	0.1	
		Haloxyfop (sum)	0.0152	25.1%	0.018	0.7	
		alpha-Cypermethrin	0.0297	22.6%	0.037	1.0	0.5
		Carbofuran-3-OH	0.00447	15.2%	0.005	0.5	
		Emamectin B1a	0.00938	13.9%	0.011	0.7	
		Fluazifop (free acid)	0.0221	14.7%	0.024	0.3	
		Haloxyfop (free acid)	0.00831	15.6%	0.008	-0.1	
3rd-35	A	Chlorate (anion)	0.0966	14.1%	0.0867	-0.4	0.6
		Chlormequat chloride	0.0315	19.6%	0.0344	0.4	
		Copper	1.87	6.7%	1.654FR	-1.2	
		Glufosinate	0.0601	14.0%	0.0497	-0.7	
		Glyphosate	0.0588	20.4%	0.0558	-0.2	
		Mepiquat chloride	0.0251	14.6%	0.0275	0.4	
		MPP	0.0469	15.5%	0.0362	-0.9	
		Bromide (anion)	0.743	19.5%	0.514FR	-1.2	n.c.
		Fluazifop (sum)	0.0233	19.2%	0.0166	-1.2	
		Haloxyfop (sum)	0.0152	25.1%	0.0126	-0.7	
		alpha-Cypermethrin	0.0297	22.6%	0.028	-0.2	1.6
		Carbofuran-3-OH	0.00447	15.2%	0.00399	-0.4	
		Emamectin B1a	0.00938	13.9%	0.00564FR	-1.6	
		Fluazifop (free acid)	0.0221	14.7%	0.0166	-1.0	
		Haloxyfop (free acid)	0.00831	15.6%	0.0900(o)	39.3	
		Phosphonic acid	0.249	21.0%	0.169	-1.3	
3rd-51	A	Chlormequat chloride	0.0315	19.6%	0.0296	-0.2	0.9
		Copper	1.87	6.7%	1.72	-0.8	
		Glufosinate	0.0601	14.0%	0.0541	-0.4	
		Glyphosate	0.0588	20.4%	0.0570	-0.1	
		Mepiquat chloride	0.0251	14.6%	0.0274	0.4	
		MPP	0.0469	15.5%	0.0859	3.3	
		alpha-Cypermethrin	0.0297	22.6%	0.0280	-0.2	
3rd-73	A	Chlorate (anion)	0.0966	14.1%	0.0920	-0.2	0.5
		Chlormequat chloride	0.0315	19.6%	0.0320	0.1	
		Copper	1.87	6.7%	2.046	0.9	
		Glufosinate	0.0601	14.0%	0.0467	-0.9	
		Glyphosate	0.0588	20.4%	0.0564	-0.2	
		Mepiquat chloride	0.0251	14.6%	0.0265	0.2	
		MPP	0.0469	15.5%	0.0347	-1.0	
		Bromide (anion)	0.743	19.5%	FN*	-4.0	
		alpha-Cypermethrin	0.0297	22.6%	0.0415	1.6	0.8
		Carbofuran-3-OH	0.00447	15.2%	0.00499	0.5	
		Emamectin B1a	0.00938	13.9%	0.0126	1.4	
		Fluazifop (free acid)	0.0221	14.7%	0.0276	1.0	
		Haloxyfop (free acid)	0.00831	15.6%	0.00886	0.3	
		Phosphonic acid	0.249	21.0%	0.239	-0.2	

Table 8. Target Pesticides List of EUPT-SRM21

EURL-SRM — EU Reference Laboratories for Residues of Pesticides — Single Residue Methods

Target Pesticides List

for the EUPT–SRM21 (2026), Cow's Milk
(released on 10 Dec. 2025)

Analytes are grouped into Mandatory, Optional and Extra
For alphabetical sorting in the same order as in the Webtool: See "Ordered A -> Z"

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

M: Mandatory O: Optional E: Extra	Analytes	Notes	Listed in	MRRL [mg/kg]
M	BAC-C12 chloride	Benzyldimethyldodecylammonium chloride (expressed as chloride salt)	MACP-Reg-AO	0.005
M	Chlorate (anion)		MACP-Reg-AO	0.01
M	Chlormequat chloride	Expressed as chloride salt	MACP-Reg-AO	0.005
M	Copper		MACP-Reg-AO	0.2
M	DDAC-C10 chloride	Didecyldimethylammonium chloride	MACP-Reg-AO	0.005
M	Glufosinate		MACP-Reg-AO	0.01
M	Glyphosate		MACP-Reg-AO	0.01
M	Mepiquat chloride	Expressed as chloride salt	MACP-Reg-AO	0.005
M	MPP (aka MPPA)	Metabolite of Glufosinate (expressed as such)	MACP-Reg-AO	0.01
M	N-Acetyl glufosinate	Metabolite of Glufosinate (expressed as such)	MACP-Reg-AO	0.01
O	Aminocyclopyrachlor		WD-AO	0.01
O	AMPA	Aminomethylphosphonic acid, metabolite of Glyphosate (expressed as such)	WD-AO	0.01
O	Bromide (anion)		WD-Data on Background needed	0.1
O	Chlorpropham metabolite 4-HSA	4'-hydroxychlorpropham-O-sulphonic acid (expressed as such)	WD-AO	0.01
O	Fenpropidin acid	2-methyl-2-[4-(2-methyl-3- piperidin-1-yl-propyl)-phenyl]propionic acid (expressed as such)	WD-AO	0.01
O	Fenpropimorph carboxylic acid	(=BF 421-2), expressed as such	WD-AO	0.01
O	Fluazifop (sum, following hydrolysis)	Following hydrolysis and expressed as free acid (sum of isomers)	WD-AO	0.005
O	Haloxyfop (sum, following hydrolysis)	Following hydrolysis and expressed as free acid (sum of isomers)	WD-AO, Highly toxic*	0.002
O	Maleic hydrazide		WD-AO	0.01
O	N-Acetyl glyphosate	Metabolite of Glyphosate (expressed as such)	WD-AO	0.01
O	Spiroxamine carboxylic acid (M06)	free acid (expressed as such)	WD-AO	0.01
O	Trifluoroacetic acid (TFA)	free acid	WD-General	0.03
E	Alpha-Cypermethrin (aka alphamethrin)	Share of Alpha-Cypermethrin in an isomer mixture	COM-Request	0.005
E	Amitrole	free base	Highly toxic*	0.004
E	Avermectin B1a		Highly toxic*	0.01
E	Carbofuran-3-OH	free phenol	Highly toxic*	0.001
E	Emamectin B1a		Highly toxic*	0.002
E	Fluazifop (free acid)	free acid, sum of isomers	WD-AO	0.005
E	Haloxyfop (free acid)	free acid, sum of isomers	WD-AO, Highly toxic*	0.002
E	Nicotine	free base	Highly toxic*	0.003
E	Phosphonic acid	free acid	Findings in Infant formulae and milk reported	0.03

*Highly toxic: Compounds with very low ADI values for which MRLs <0.01 mg/kg are needed for reconstituted infant formulae to be safe.

**In view of envisaged separate MRLs for alpha-cypermethrin. Parameter needs to be determined irrespective of the composition of the cypermethrin isomeric mixture detected in the sample. Alpha-cypermethrin refers to the Cis-II pair of isomers (eluting in third position in GC analyses). No enantioselective analysis is needed