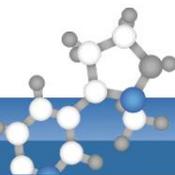




EURL-SRM



EU Reference Laboratories for Residues of Pesticides

Single Residue Methods

EU PROFICIENCY TEST

EUPT-SRM8. 2013

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

Preliminary Report

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General Remark

Please note that all assigned values, Qn-RSDs and z-scores, presented in the following are preliminary!

The final report of the EUPT-SRM8 will be drafted following the joint EURL/NRL-Workshop and the evaluation of the results by the EUPT-Scientific Committee scheduled towards October 2013.

Background

The proficiency test EUPT-SRM8 was conducted using potato homogenate as Test Item. To prepare the Test Item potatoes from organic production in Spain were spiked post-harvest with 15 compounds using standard solutions. 8 of the compounds (captan, cyromazine, dicofol, fenbutatin oxide, folpet, glyphosate, haloxyfop and mepiquat) were classified as “compulsory” and will be considered in the scope-based lab classification (e.g. Categories A/B). The 7 “optional” compounds (diquat, fentin, fosetyl aluminium, glufosinate, maleic hydrazide, BAC-C12 and DDAC-C10) will not be considered in the scope-based lab classification but will still be evaluated as far as the quantitative and qualitative results are concerned (z-scores, false positives, false negatives). For the evaluation of the median values only the results of the 117 official labs from the EU member states and EFTA countries were considered.

Following spiking, milling and mixing ca. 400 g portions of the spiked Test Item were filled into bottles and distributed to the participants on 15 April 2013. The participants were also provided the same amount of blank material prepared from the same batch of the organic potatoes.

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

The materials were sent to the participants in frozen condition in insulated boxes containing dry ice. In total 124 Laboratories, including 115 OfLs from EU member states, 2 OfLs from EFTA States, 1 OfL from one EU candidate country and 6 OfLs from third countries registered for participation. Using an online submission tool the participants had the possibility to submit their results as well as the requested information about the analytical methods employed by 17 May 2013.

Results

110 out of the 117 participating labs from EU and EFTA states and 6 out of 7 laboratories from EU candidate countries and 3rd countries submitted results.

2 false positive results were submitted (chlormequat and chlorothalonil).

20 labs reported in 23 cases potentially false negative results („analyzed, but not detected“) for compounds present in the test material. Their z-scores were calculated using the corresponding MRRL in the Target Pesticide List or the RL if this was lower. The false negative results concerned captan (3x), cyromazine (2x), dicofol (2x), folpet (1x), glyphosate (4x), mepiquat (1x), diquat (5x), fosetyl (2x), glufosinate (2x), and DDAC-C10 (1x).

All submitted results of pesticides spiked to the test material are shown in Table 1 for compulsory compounds and Table 2 for optional compounds.

False negative results are marked in the tables with the abbreviation FN. Empty cells in the tables correspond to ‘not analysed’ compounds.

The table also contains the results of the participating laboratories from 3rd countries and EU candidate countries. In these cases the z-scores were calculated using the assigned values derived from the results of the EU labs.

- **All labs are kindly asked to check their results carefully and to report any errors.**
- **Please note that only transcription errors by the Organizers can be considered at this stage.**
- **Labs with individual absolute z-scores >2 or false positives will be asked to give a feedback about any actions undertaken to find out the reasons for bad performance.**

Table 1a: Results for compulsory compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Captan		Cyromazine		Dicofol		Fenbutatin oxide		Folpet		Glyphosate		Haloxypop		Mepiquat	
	1,010		0,102		1,030		0,065		1,320		0,340		0,508		0,096	
Qn-RSD	26,0%		27,2%		27,6%		31,4%		29,6%		24,5%		20,1%		22,7%	
Labor No.	Conc. [mg/kg]	z-score														
1	0,876	-0,53	0,229	4,98	1,060	0,12			1,270	-0,15	0,380	0,47	0,518	0,08	0,089	-0,31
2	FN	-3,96	0,049	-2,08	0,818	-0,82	0,038	-1,66	0,587	-2,22			0,484	-0,19	FN	-3,58
3	0,970	-0,16	0,055	-1,84	1,000	-0,12	0,047	-1,11	1,500	0,55	0,340	0,00	0,530	0,17	0,094	-0,08
4	1,066	0,22	0,099	-0,12	0,740	-1,13	0,069	0,25	1,661	1,03	0,474	1,58	0,462	-0,36	0,080	-0,67
5	0,995	-0,06	0,084	-0,71	0,845	-0,72	0,051	-0,84	1,420	0,30			0,355	-1,20	0,070	-1,10
6	0,716	-1,16	0,107	0,20	0,893	-0,53	0,082	1,05	1,015	-0,92	0,355	0,18	0,555	0,37	0,085	-0,46
7	1,050	0,16	0,140	1,49	1,240	0,82	0,043	-1,35	1,800	1,45	0,227	-1,33	0,503	-0,04	0,134	1,58
8	1,283	1,08	0,100	-0,08	1,005	-0,10	0,082	1,05	1,829	1,54	0,410	0,82	0,535	0,21	0,134	1,58
9	0,705	-1,21	0,101	-0,04	1,050	0,08	0,065	0,01	1,190	-0,39	0,333	-0,08	0,412	-0,76	0,085	-0,45
10	1,110	0,40	0,105	0,12	0,913	-0,45	0,064	-0,06	1,590	0,82	0,415	0,88	0,517	0,07	0,077	-0,81
11	1,150	0,55	0,142	1,57	1,880	3,30	0,063	-0,13	1,290	-0,09	0,266	-0,87	0,221	-2,26	0,103	0,29
12	0,781	-0,91	0,139	1,45	0,888	-0,55	0,138	4,49	1,380	0,18	0,271	-0,81	0,789	2,21	0,116	0,83
13	1,120	0,44	0,082	-0,78	0,923	-0,42	0,064	-0,06	2,080	2,30	0,184	-1,84	0,113	-3,11	0,077	-0,79
14	1,289	1,10	0,127	0,98	1,248	0,85	0,098	2,03	1,897	1,75	0,292	-0,56	0,518	0,08	0,121	1,04
15																
16			0,093	-0,35	1,180	0,58					0,379	0,46	0,394	-0,90	0,120	1,00
17																
18	1,210	0,79							1,410	0,27						
19	0,404	-2,40	0,096	-0,24	0,965	-0,25	0,062	-0,18	1,120	-0,61			0,700	1,51	0,080	-0,67
21	1,160	0,59	0,126	0,94	1,100	0,27	0,071	0,37	1,350	0,09	0,356	0,19	0,578	0,55	0,090	-0,25
22	1,210	0,79	0,069	-1,29	1,350	1,24			1,820	1,52					0,096	0,00
23		0,00	0,127	0,98			0,069	0,26			0,373	0,39	0,694	1,46	0,108	0,50
24	1,280	1,07	0,067	-1,37	0,633	-1,54	0,050	-0,92	1,670	1,06			0,582	0,58	0,097	0,04
25	0,845	-0,65	0,098	-0,16	1,300	1,05	0,047	-1,11	1,160	-0,48	0,239	-1,19	0,415	-0,73	0,085	-0,46

Table 1a: Results for compulsory compounds in EUPT-SRM8 reported by Ofls from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Captan		Cyromazine		Dicofol		Fenbutatin oxide		Folpet		Glyphosate		Haloxypop		Mepiquat	
	1,010	0,102	1,030	0,065	1,320	0,340	0,508	0,096								
Qn-RSD	26,0%	27,2%	27,6%	31,4%	29,6%	24,5%	20,1%	22,7%								
Labor No.	Conc. [mg/kg]	z-score														
26	1,040	0,12	0,093	-0,35	1,280	0,97	0,102	2,28	1,790	1,42			0,533	0,20	0,081	-0,63
27	0,870	-0,55			0,660	-1,44			1,140	-0,55			0,480	-0,22		
28	1,160	0,59			1,030	0,00			1,480	0,48						
30	1,130	0,48	0,132	1,18	1,080	0,19	0,077	0,74	1,800	1,45	0,369	0,34	1,000	3,87	0,114	0,75
31	0,647	-1,44	0,092	-0,39	0,884	-0,57	0,065	0,00	0,949	-1,12	0,579	2,81	0,463	-0,35	0,079	-0,71
32	1,070	0,24	0,090	-0,47	1,080	0,19	0,147	5,05	1,540	0,67	0,370	0,35	0,699	1,50	0,091	-0,21
33	0,890	-0,48	0,114	0,47	1,100	0,27	0,061	-0,27	1,890	1,73			0,490	-0,14		
34			0,085	-0,66												
35																
36	1,080	0,28	0,120	0,71	1,010	-0,08			1,340	0,06			0,615	0,84	0,078	-0,75
37					0,889	-0,55			1,182	-0,42						
38	1,170	0,63	0,104	0,08	0,766	-1,03	0,088	1,42	1,510	0,58			0,550	0,33	0,072	-1,00
39																
40	1,140	0,51	0,104	0,08	1,480	1,75	0,071	0,34	1,200	-0,36	0,358	0,21	0,445	-0,50	0,088	-0,34
41	1,340	1,31	0,100	-0,08	1,110	0,31			1,640	0,97	0,280	-0,71	0,450	-0,46	0,127	1,29
42					0,783	-0,96							0,373	-1,06		
43	0,978	-0,13	0,081	-0,82	1,050	0,08	0,051	-0,89	1,500	0,55	0,376	0,42	0,513	0,04	0,090	-0,23
44	1,620	2,42			0,910	-0,47			2,900	4,79						
46	0,720	-1,15	0,121	0,75	0,601	-1,67	0,046	-1,14	0,939	-1,15			0,335	-1,36	0,097	0,03
47	1,010	0,00	0,115	0,51			0,200	8,31	1,300	-0,06			0,618	0,87	0,125	1,21
48	0,645	-1,45	0,085	-0,65	0,694	-1,30	0,051	-0,87	1,010	-0,94	0,291	-0,58	0,333	-1,38	0,105	0,38
49	0,916	-0,37	0,101	-0,04	1,575	2,12	0,061	-0,25	1,496	0,53			0,470	-0,30	0,089	-0,29
51	1,550	2,14	0,160	2,27	1,190	0,62	0,091	1,60	1,040	-0,85	0,452	1,32	0,692	1,45	0,030	-2,75
53	1,029	0,08	0,108	0,24	1,100	0,27	0,077	0,74	1,622	0,92	0,315	-0,29	0,508	0,00	0,102	0,25

Table 1a: Results for compulsory compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Captan		Cyromazine		Dicofol		Fenbutatin oxide		Folpet		Glyphosate		Haloxypop		Mepiquat	
	1,010	0,102	1,030	0,065	1,320	0,340	0,508	0,096								
Qn-RSD	26,0%	27,2%	27,6%	31,4%	29,6%	24,5%	20,1%	22,7%								
Labor No.	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
55	1,150	0,55					0,061	-0,25	1,530	0,64			0,471	-0,29	0,023	-3,04
56	0,797	-0,84	0,080	-0,87	0,006	-3,98*	0,057	-0,52	0,663	-1,99	0,462	1,44	0,013	-3,90	0,132	1,50
57	1,050	0,16	0,010	-3,59	1,780	2,91			1,320	0,00					0,113	0,71
59	0,700	-1,23	0,170	2,67	1,200	0,66	0,085	1,23	0,600	-2,18			0,530	0,17	0,136	1,67
60																
63					FN	-3,98										
64	1,330	1,27	0,120	0,71	1,200	0,66	0,071	0,35	1,090	-0,70	0,160	-2,12	0,591	0,65	0,106	0,42
65	1,210	0,79			1,160	0,50	0,053	-0,73	1,940	1,88						
66																
67		detected [†]	0,060	-1,65	1,150	0,47	0,034	-1,91	1,500	0,55					0,084	-0,50
68	0,461	-2,17	0,057	-1,76					1,030	-0,88			0,450	-0,46		
69	1,110	0,40	0,119	0,67	1,290	1,01			1,400	0,24	0,291	-0,58	0,499	-0,07	0,092	-0,17
70	0,809	-0,80	0,044	-2,29	0,954	-0,30	0,084	1,15	0,919	-1,22	0,138	-2,38	0,523	0,12	0,070	-1,07
71	0,777	-0,92			1,280	0,97			0,705	-1,86			0,496	-0,09		
72	0,828	-0,72	0,084	-0,71	0,737	-1,14	0,089	1,48	1,110	-0,64	0,315	-0,29	0,431	-0,61	0,068	-1,17
73	0,548	-1,83			1,010	-0,08			0,830	-1,48						
75	1,220	0,83	0,111	0,35	1,350	1,24	0,063	-0,12	1,240	-0,24	0,301	-0,46	0,555	0,37	0,105	0,38
76	1,170	0,63											0,434	-0,58		
77	0,769	-0,95			1,030	0,00			1,080	-0,73	0,217	-1,45	0,195	-2,46		
78	1,490	1,90			1,130	0,39			1,940	1,88						
79	1,300	1,15			1,070	0,16			1,770	1,36						
80	1,460	1,78	0,086	-0,64	0,980	-0,19	0,100	2,15	2,030	2,15			0,570	0,49	0,082	-0,58
81	1,010	0,00	0,108	0,24	1,340	1,20	0,048	-1,07	1,280	-0,12	FN	-3,88	0,481	-0,21	0,086	-0,40

[†]: This lab detected this pesticide, but could not detected its content due to technical problem. *: result reported < RL and RL = MRRL, therefore z-score was calculated using RL

Table 1a: Results for compulsory compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Captan		Cyromazine		Dicofol		Fenbutatin oxide		Folpet		Glyphosate		Haloxypop		Mepiquat	
	1,010	0,102	1,030	0,065	1,320	0,340	0,508	0,096								
Qn-RSD	26,0%		27,2%		27,6%		31,4%		29,6%		24,5%		20,1%		22,7%	
Labor No.	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
82	0,797	-0,84	0,115	0,51	0,892	-0,54			1,250	-0,21	0,327	-0,15	0,553	0,35	0,098	0,08
83	1,250	0,95	0,119	0,67	1,350	1,24	0,088	1,42	1,930	1,85			0,512	0,03	0,090	-0,26
84	1,145	0,53	0,104	0,08	1,346	1,23	0,072	0,43	1,468	0,45	0,379	0,46	0,456	-0,41	0,150	2,25
85																
86	0,976	-0,13							1,260	-0,18						
87											0,359	0,22				
88	0,934	-0,30	0,106	0,16	0,462	-2,21	0,056	-0,55	1,320	0,00	0,370	0,35	0,547	0,31		
89	1,220	0,83	0,139	1,45	0,645	-1,50	0,121	3,45	1,330	0,03	0,401	0,72	0,701	1,52	0,120	1,00
91													0,603	0,75		
92					1,073	0,17										
93											0,195	-1,71				
96	FN	-3,96			0,888	-0,55			1,920	1,82						
97	1,220	0,83			1,890	3,34			1,630	0,94						
98	1,000	-0,04	0,095	-0,26	1,230	0,78			0,827	-1,49	FN	-3,88	0,581	0,57	0,103	0,29
99	0,932	-0,31	0,068	-1,33	1,060	0,12	0,068	0,18	1,300	-0,06	0,400	0,71	0,434	-0,58	0,120	1,00
100																
101	0,220	-3,13			0,645	-1,50			0,523	-2,42	FN	-3,88	0,423	-0,67		
102	0,830	-0,71	0,040	-2,43	1,370	1,32			1,290	-0,09			0,430	-0,61	0,100	0,17
103	0,847	-0,65	0,127	0,98			0,120	3,38	1,120	-0,61	0,359	0,22	0,520	0,09	0,092	-0,17
104	1,350	1,35	0,075	-1,05	1,112	0,32	0,058	-0,43	2,567	3,78			0,500	-0,06	0,057	-1,61
105	0,148	-3,41			0,568	-1,79					0,345	0,06			0,099	0,11
107	0,825	-0,73	0,121	0,75	0,897	-0,52	0,051	-0,86	1,310	-0,03	0,303	-0,44	0,372	-1,07	0,096	0,00
108			0,065	-1,45	0,701	-1,28	0,040	-1,54	0,752	-1,72			0,490	-0,14		
109	1,480	1,86			1,350	1,24			1,720	1,21			0,590	0,65	0,130	1,42

Table 1a: Results for compulsory compounds in EUPT-SRM8 reported by Ofls from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Captan		Cyromazine		Dicofol		Fenbutatin oxide		Folpet		Glyphosate		Haloxypop		Mepiquat	
	1,010	0,102	1,030	0,065	1,320	0,340	0,508	0,096								
Qn-RSD	26,0%		27,2%		27,6%		31,4%		29,6%		24,5%		20,1%		22,7%	
Labor No.	Conc. [mg/kg]	z-score														
110	0,770	-0,95							1,000	-0,97			0,250	-2,03		
112	1,427	1,65	0,070	-1,25	1,020	-0,04			1,024	-0,90						
115	0,926	-0,33			1,120	0,35			1,100	-0,67	FN	-3,88	0,475	-0,26		
117	1,150	0,55	0,102	0,00	1,320	1,13	0,063	-0,12	1,410	0,27			0,436	-0,57	0,127	1,29
118															0,088	-0,33
119	0,738	-1,08	FN	-3,61	0,686	-1,34	0,065	0,00	0,383	-2,84			0,509	0,01	0,095	-0,04
120	0,841	-0,67	0,161	2,31	0,791	-0,93			1,160	-0,48	0,337	-0,04	0,585	0,61	0,096	0,00
121	0,924	-0,34	FN	-3,61	0,368	-2,57			0,709	-1,85	0,186	-1,81				
122	FN	-3,96	0,303	7,88	FN	-3,96			FN	-3,97			0,536	0,22	0,038	-2,42
124	0,920	-0,36			0,860	-0,66			1,350	0,09						
125																
126	1,120	0,44	0,124	0,86	0,876	-0,60			1,550	0,70			0,422	-0,68	0,164	2,83
127	0,866	-0,57			0,803	-0,88			1,390	0,21						
128	1,100	0,36	0,120	0,71	3,640	10,14			1,300	-0,06						
129	0,844	-0,66	0,126	0,94	1,080	0,19	0,150	5,23	1,270	-0,15	0,336	-0,05	0,608	0,79	0,104	0,33
130	0,796	-0,85	0,093	-0,35	0,111	-3,57			1,260	-0,18			0,658	1,18	0,114	0,75
131			0,088	-0,56	3,750	10,56							0,495	-0,10	0,078	-0,74
132	0,580	-1,70	0,120	0,71			0,080	0,92	0,890	-1,30			0,370	-1,09		
133	2,850	7,29	0,125	0,90	1,020	-0,04	0,082	1,05	2,880	4,73			0,655	1,16	0,130	1,42
134			0,111	0,35			0,091	1,60					0,511	0,02	0,085	-0,46
136	0,762	-0,98	0,083	-0,75	0,734	-1,15	0,046	-1,17	1,110	-0,64			0,515	0,06	0,096	0,00
137	1,190	0,71			1,290	1,01			1,640	0,97						

Table 1b: Results for compulsory compounds in EUPT-SRM8 reported by EU candidate and 3rd countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Captan		Cyromazine		Dicofol		Fenbutatin oxide		Folpet		Glyphosate		Haloxypop		Mepiquat	
	1,010	0,102	1,030	0,065	1,320	0,340	0,508	0,096								
Qn-RSD	26,0%		27,2%		27,6%		31,4%		29,6%		24,5%		20,1%		22,7%	
Labor No.	Conc. [mg/kg]	z-score														
45																
50			0,092	-0,39											0,110	0,58
52	0,543	-1,85	0,064	-1,49	0,208	-3,19	0,420	21,85	0,751	-1,72	0,348	0,09			0,080	-0,67
54											0,263	-0,91				
61	0,327	-2,70	0,427	12,75	0,276	-2,93	0,111	2,83	0,442	-2,66	0,365	0,29	0,394	-0,90	0,104	0,33
94	FN	-3,96			0,570	-1,79			0,073	-3,78	0,310	-0,35				
95			0,138	1,41									0,154	-2,79		

Table 2a: Results for optional compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Diquat		Fentin		Fosetyl		Glufosinate		Maleic hydrazide		BAC C-12		DDAC C-10	
	Qn-RSD													
Labor No.	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
	0,107 (uncertain due to small number of results)		0,167		0,798 (uncertain due to broad result distribution)		0,271		0,689		0,568		0,380	
	28,6%		37,1%		45,2%		16,9%		27,7%		24,1%		22,9%	
1														
2			0,066	-2,42							0,518	-0,35	0,338	-0,44
3			0,069	-2,35	0,483	-1,58					0,560	-0,06	0,480	1,05
4														
5													0,364	-0,17
6	FN	-3,25	0,194	0,65	0,741	-0,28	0,255	-0,23	0,700	0,07	0,629	0,43	0,343	-0,39
7	FN	-3,25			0,750	-0,24	0,235	-0,52	0,388	-1,75	0,440	-0,90	0,408	0,29
8			0,194	0,65	1,558	3,81			0,694	0,03	0,613	0,32	0,454	0,78
9	FN	-3,25	0,064	-2,46	0,199	-3,00	0,401	1,93	0,554	-0,78	0,371	-1,39	0,305	-0,79
10					1,128	1,65			0,802	0,66				
11							0,318	0,70						
12														
13	0,109	0,07	0,493	7,81	0,766	-0,16	0,324	0,79	0,160	-3,07	0,273	-2,08	0,306	-0,78
14			0,225	1,39	0,742	-0,26	0,276	0,08	0,720	0,18	0,997	3,02	0,552	1,81
15														
16														
17														
18														
19											0,316	-1,77	0,277	-1,08
21			0,211	1,05							0,533	-0,25	0,397	0,18
22														
23	0,087	-0,75	0,219	1,25	0,184	-3,08	FN	-3,70**			0,554	-0,10	0,351	-0,31

** : RL < MRRL, therefore z-score was calculated using RL

Table 2a: Results for optional compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Diquat		Fentin		Fosetyl		Glufosinate		Maleic hydrazide		BAC C-12		DDAC C-10	
	0,107 (uncertain due to small number of results)		0,167		0,798 (uncertain due to broad result distribution)		0,271		0,689		0,568		0,380	
Qn-RSD	28,6%		37,1%		45,2%		16,9%		27,7%		24,1%		22,9%	
Labor No.	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
24											0,438	-0,92	0,323	-0,60
25			0,095	-1,72	1,929	5,67	0,253	-0,26	0,890	1,17	0,630	0,44	0,740	3,79
26											0,467	-0,71	FN	-3,79**
27											0,610	0,30	0,380	0,00
28													0,310	-0,74
30			0,104	-1,51	1,010	1,06	0,256	-0,21	0,763	0,43	0,660	0,65	0,617	2,49
31							0,272	0,02			0,573	0,04	0,383	0,03
32	0,105	-0,07	0,166	-0,02	0,993	0,98	0,424	2,27	0,639	-0,29	0,685	0,82	0,446	0,69
33											0,401	-1,18	0,229	-1,59
34											0,646	0,55	0,445	0,68
35														
36														
37														
38														
39														
40	FN	-3,25					0,269	-0,02	0,886	1,15	0,669	0,71	0,412	0,34
41											0,480	-0,62	0,320	-0,63
42											0,645	0,54	0,424	0,46
43	0,115	0,30	0,197	0,72					0,772	0,49	0,558	-0,07	0,405	0,26
44														
46														
47			0,157	-0,24							0,619	0,36	0,456	0,80

** : RL < MRRL, therefore z-score was calculated using RL

Table 2a: Results for optional compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Diquat		Fentin		Fosetyl		Glufosinate		Maleic hydrazide		BAC C-12		DDAC C-10	
	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
	0,107 (uncertain due to small number of results)		0,167		0,798 (uncertain due to broad result distribution)		0,271		0,689		0,568		0,380	
Qn-RSD	28,6%		37,1%		45,2%		16,9%		27,7%		24,1%		22,9%	
Labor No.	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
48					FN	-3,75								
49									0,557	-0,76				
51			0,140	-0,65	FN	-3,75			0,854	0,96	0,334	-1,65	0,333	-0,49
53														
55											0,477	-0,64	0,355	-0,26
56														
57														
59	0,150	1,61									0,920	2,48	0,537	1,65
60											0,730	1,14	0,350	-0,32
63														
64														
65														
66														
67									0,440	-1,44	0,050	-3,65	0,060	-3,37
68			0,140	-0,65	0,492	-1,53					0,292	-1,94	0,313	-0,71
69							0,293	0,33						
70														
71														
72	0,103	-0,15	0,143	-0,57			0,226	-0,66			0,454	-0,80	0,294	-0,91
73											0,568	0,00	0,465	0,89
75	0,157	1,87	0,173	0,14	0,458	-1,70	0,281	0,16	0,730	0,24	0,446	-0,86	0,347	-0,35
76											0,601	0,23	0,355	-0,26
77							0,132	-2,05						

Table 2a: Results for optional compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Diquat		Fentin		Fosetyl		Glufosinate		Maleic hydrazide		BAC C-12		DDAC C-10	
	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
	0,107 (uncertain due to small number of results)		0,167		0,798 (uncertain due to broad result distribution)		0,271		0,689		0,568		0,380	
Qn-RSD	28,6%		37,1%		45,2%		16,9%		27,7%		24,1%		22,9%	
Labor No.	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
78														
79														
80					1,080	1,42			0,653	-0,21				
81	0,081	-0,97	0,099	-1,63	0,575	-1,12	0,244	-0,39	0,559	-0,75	0,608	0,28	0,390	0,11
82	0,137	1,12					0,242	-0,42			0,421	-1,04	0,251	-1,36
83			0,370	4,86	1,080	1,42			0,717	0,17	0,568	0,00	0,363	-0,18
84			0,179	0,29	0,914	0,58	0,343	1,07	0,391	-1,73	0,511	-0,40	0,370	-0,11
85														
86														
87											0,691	0,87	1,005	6,58
88											0,698	0,92	0,464	0,88
89											0,868	2,11	0,616	2,48
91														
92														
93							0,238	-0,48						
96											0,615	0,33	0,407	0,28
97														
98	0,078	-1,07			0,588	-1,05	0,269	-0,02	0,683	-0,03	0,687	0,84	0,476	1,01
99			0,131	-0,86					0,524	-0,96	0,525	-0,30	0,347	-0,35
100														
101														
102					1,584	3,94			0,610	-0,46				
103									1,040	2,04	0,495	-0,51	0,366	-0,15
104														

EU Reference Laboratory Requiring Single Residue Methods (EURL-SRM)

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Table 2a: Results for optional compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Diquat		Fentin		Fosetyl		Glufosinate		Maleic hydrazide		BAC C-12		DDAC C-10	
	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
	0,107 (uncertain due to small number of results)		0,167		0,798 (uncertain due to broad result distribution)		0,271		0,689		0,568		0,380	
Qn-RSD	28,6%		37,1%		45,2%		16,9%		27,7%		24,1%		22,9%	
Labor No.	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
105							0,305	0,51						
107			0,167	0,00	0,894	0,48	0,236	-0,51						
108														
109														
110														
112					0,979	0,91								
115							0,314	0,64						
117			0,167	0,00						0,518	-0,35	0,380	0,00	
118										0,639	0,50	0,414	0,36	
119														
120														
121														
122			0,246	1,89						0,904	2,37	0,707	3,44	
124														
125														
126														
127														
128														
129			0,214	1,13			0,321	0,75						
130														
131														
132					0,829	0,16								
133			0,201	0,81										

Table 2a: Results for optional compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Diquat		Fentin		Fosetyl		Glufosinate		Maleic hydrazide		BAC C-12		DDAC C-10	
	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
0,107 (uncertain due to small number of results)			0,167			0,798 (uncertain due to broad result distribution)			0,271			0,689		
Qn-RSD	28,6%		37,1%		45,2%		16,9%		27,7%		24,1%		22,9%	
Labor No.	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
134			0,180	0,31							0,636	0,48	0,351	-0,31
136											0,518	-0,35	0,499	1,25
137														

Table 2b: Results for optional compounds in EUPT-SRM8 reported by OfLs from EU and EFTA countries (z-scores were calculated using preliminary assigned values)

Assigned Value [mg/kg]	Diquat		Fentin		Fosetyl		Glufosinate		Maleic hydrazide		BAC C-12		DDAC C-10	
	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
0,107 (uncertain due to small number of results)			0,167			0,798 (uncertain due to broad result distribution)			0,271			0,689		
Qn-RSD	28,6%		37,1%		45,2%		16,9%		27,7%		24,1%		22,9%	
Labor No.	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score (uncertain)	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score	Conc. [mg/kg]	z-score
45														
50														
52	0,160	1,98					0,235	-0,52			0,500	-0,48	0,350	-0,32
54														
61	FN	-3,25												
94														
95											0,186	-2,69	0,168	-2,23