EUPT-SRM8
Pesticide Residues in Potato Homogenates

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EUPT-SRM8 WEBSITE

EUPT-SRM8 Website

- **EUPT-SRM8** - Announcement/Invitation Letter
- **EUPT-SRM8** - Calendar **(last update 02 April 2013)**
- **EUPT-SRM8** - Target Pesticide List **(last update 02 April 2013)**
- **EUPT-SRM8** - **Registration** (closed on 12 March 2013)
  - *Labs from **Third Countries**: Contact eurl-srm@cvuas.bwl.de for further instructions*
  - ***Obliged EU-Official Labs** not participating in the EUPT-SRM8 have to **SUBMIT AN EXPLANATION FOR NON-PARTICIPATION on our Registration Website** (Requirement by DG-SANCO)*
- **EUPT-SRM8** - **Data Submission Website** (closed on 17 May 2013)
  - *Acknowledge sample reciept and acceptance (Sub-page 0): **opens 16 April***
  - *Submit results and mth info (sub-pages 1-3): **22 Apr. to 17 May***

- **EUPT-SRM8** - Specific Protocol **(released on 02 April 2013)**
- **EUPT-SRM8** - Preliminary Report **(released on 20 June 2013)**
- **EUPT-SRM8** - **FINAL REPORT** (Dec. 2013)

Additional Links:

- **EUPT - General Protocol**
- **Tentative list of EU labs OBLIGED to participate in the EUPT-SRM8**
- **EURL-SRM Bank Data**

If you have any questions or should anything remain unclear, please do not hesitate to contact us at any time: EUPT-SRM Team.

DISCLAIMER:
Please note that all documents mentioned above may be subject to minor changes with new versions being uploaded in the CIRCA platform and linked to the EUPT-SRM7-Website. Participants should periodically check the website for possible updates. In case of major changes, participants will be informed by e-mail.

If you don't have access to the CIRCA-website, please use this link to sign-up: CIRCA (FIS-VL) Login

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EUPT-SRM8 CALENDAR

Sample shipment:

Mon, April 15, 2013

Deadline of results submission:

Fri, May 17, 2013

Preliminary report:

Thu, June 20, 2013

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

CALENDAR for the EUPT – SRM8

(last update 02.04.2013)

Activity	Who ?	Dates
Opening of the EUPT-SRM8 Website with links to all relevant documents and to the EUPT-General Protocol	EURL-SRM	Jan. 2013
Dispatch of "Calendar"	EURL-SRM	Jan. 2013
Dispatch of "Target Pesticides List",	EURL-SRM	Jan. 2013
Dispatch "Announcement/Invitation-Letter"	EURL-SRM	Jan. 2013
Registration (use "EUPT-Registration Website") (Note: obliged OLs MUST enter this Website and either register or give explanations for non-participation) Labs from THIRD COUNTRIES please contact us by 12 March for further instructions. (eurl-srm@cvuas.bwl.de)	- Obliged OLs from EU-MSs - OLs from EFTA Countries - OLs from EU-candidate C. - Third country Labs	18 Feb. – 12 Mar. 2013
Dispatch of EUPT-SRM8-Specific Protocol	EURL-SRM	Apr. 2013
Preparation of EUPT-SRM8-Test Item (preliminary tests Spiking / Homogenization)	EURL-FV / –SRM in collaboration	Feb. 2012 – Mar. 2013
Homogeneity tests	EURL-SRM	Mar.-Apr. 2013
Stability tests	EURL-SRM	Apr.-May 2013
Shipment of EUPT-SRM8 Test Item (+reminder of upcoming parcel arrival)	EURL-SRM	15 Apr. 2013
Confirmation of sample Receipt and acceptance via "EUPT-SRM8 Result Submission Website", (sub-page 0)	Participating Labs	within 48 h of receipt
Result Submission (Pesticide scope, Results, Method Info) in "EUPT-SRM8 Result Submission Website", (sub-pages 1 – 3)	Participating Labs	22 Apr.-17 May 2013, (14:00 h CET), NO DEADLINE EXTENSION!
Preliminary Report (only compilation of results)	EURL-SRM	June 2013
Survey to collect reasons for underperformance	EURL-SRM / Participating Labs	June 2013
EUPT Evaluation Meeting	EUPT-SC, DG-SANCO	26-28 June 2013
Final Report	EURL-SRM	Nov. 2013

REMARK: Please note that the dates mentioned above may be subject to minor changes. In the case of changes the participants will be informed via e-mail. But still please check periodically our website for possible updates in case the email does not get through to you.
Contact: eurl-srm@cvuas.bwl.de

The EUPT-SRM Team

EURL-SRM

SELECTION OF PESTICIDES TO BE SPIKED

The pesticides to be put in the target list and to be spiked were selected considering…

a) **Pesticide Usage in potato-production:**
(Glyphosate, Cyromazine, Diquat, Maleic Hydrazide, Fluazifop ….)

b) **Pesticides include in MACP or Ad-hoc Monitoring plans:**
(2,4-D, Chlormequat, Fluazifop, fenbutatin-oxide, BAC, DDAC….)

c) **EUPT-Needs of labs (requests):**
(Potatoes, Fosetyl, QACs, Diquat, Maleic Hydrazide)

d) **Overall Capability of Labs**

e) **Data-needs for SRM-Pinboard, to evaluate performance of labs interested in getting subcontracted for SRM-analyses:** (Fenbutatin Oxide, Chlorothalonil…)

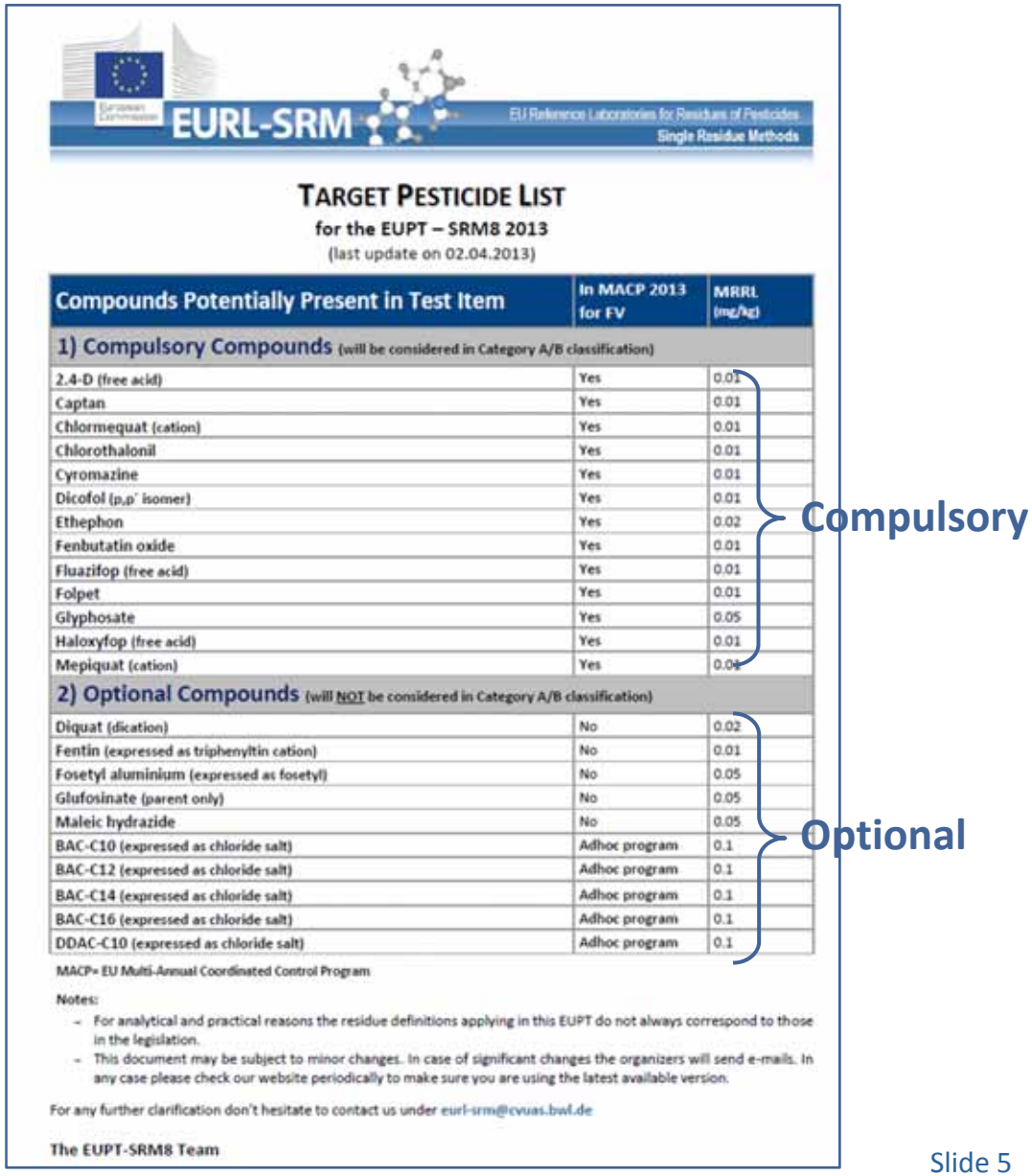
TARGET PESTICIDES LIST

→ MACP compounds were <u>compulsory</u>.

	In target List	Spiked*
Compulsory	13	8
Optional**	10	7

*Spiked in lab with analytical standards (no incurred residues).

** Optional = not considered in lab-categorization based on scope



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

TARGET PESTICIDE LIST

for the EUPT – SRM8 2013

(last update on 02.04.2013)

Compounds Potentially Present in Test Item	In MACP 2013 for FV	MRRL (mg/kg)	
1) Compulsory Compounds (will be considered in Category A/B classification)			
2,4-D (free acid)	Yes	0.01	Compulsory
Captan	Yes	0.01	
Chlormequat (cation)	Yes	0.01	
Chlorothalonil	Yes	0.01	
Cyromazine	Yes	0.01	
Dicofol (p,p' isomer)	Yes	0.01	
Ethephon	Yes	0.02	
Fenbutatin oxide	Yes	0.01	
Fluazifop (free acid)	Yes	0.01	
Folpet	Yes	0.01	
Glyphosate	Yes	0.05	
Haloxyfop (free acid)	Yes	0.01	
Mepiquat (cation)	Yes	0.04	
2) Optional Compounds (will NOT be considered in Category A/B classification)			
Diquat (dication)	No	0.02	Optional
Fentin (expressed as triphenyltin cation)	No	0.01	
Fosetyl aluminium (expressed as fosetyl)	No	0.05	
Glufosinate (parent only)	No	0.05	
Maleic hydrazide	No	0.05	
BAC-C10 (expressed as chloride salt)	Adhoc program	0.1	
BAC-C12 (expressed as chloride salt)	Adhoc program	0.1	
BAC-C14 (expressed as chloride salt)	Adhoc program	0.1	
BAC-C16 (expressed as chloride salt)	Adhoc program	0.1	
DDAC-C10 (expressed as chloride salt)	Adhoc program	0.1	

MACP= EU Multi-Annual Coordinated Control Program

Notes:

- For analytical and practical reasons the residue definitions applying in this EUPT do not always correspond to those in the legislation.
- This document may be subject to minor changes. In case of significant changes the organizers will send e-mails. In any case please check our website periodically to make sure you are using the latest available version.

For any further clarification don't hesitate to contact us under eurl-srm@cvuas.bwl.de

The EUPT-SRM8 Team

								ADD TO PESTICIDES TARGET LIST ? (VOTE: Yes/Yes?/No/Abstain)										VOTE COUNT				VOTING RESULTS <4p= No; 4 p= magbe; >=5 p = yes	FINAL DECISION by ORGANIZER			MRRLs	
	Composed	GROUPING	Background Data (click + above)	Relev. for Potato	in MACP	SRM-Pinboard Nec	EURL-SRM OVERALL NOTES	FV	CF	AO	Stewart	Antonio	Magnus	Tuja	Darinka	Sonja	André	Yes	NO	Abstain	Total Poiat			Resoning	Optional?	EURL-PROPOSAL	DECISION
3	2,4-D	Acidi		No	Yes	No		Yes	Yes	Abstain	No	Yes	Yes	No	Yes	Yes	Yes	7	2	1	5	Yes	Yes	voting		0,01	0,01
5	Fluazifop	Acidi		Yes	Yes	No		Yes	Yes	Abstain	Yes?	Yes	Yes	Yes	Yes	Yes	Yes	8,5	0	1	8,5	Yes	Yes	voting		0,01	0,01
6	Haloxyfop	Acidi		Yes	Yes	Yes		Yes	Yes	Abstain	Yes?	Yes	Yes	Yes	Yes	Yes	Yes	8,5	0	1	8,5	Yes	Yes	voting		0,01	0,01
7	Quizalofop	Acidi		Yes	No	No		Yes	Yes	Abstain	Yes?	Yes	Yes	Yes	abstain	Yes	Yes	7,5	0	2	7,5	Yes	Yes	voting	YES	0,01	0,01
9	Captan	Base-sensitives		Yes	Yes	?	Here we have to decide whether to shift those compounds to SRM schemes or to keep them as MRM or both	Abstain	Yes	Abstain	Abstain	No	Yes	Yes	Yes	Yes	Yes	6	1	3	5	Yes	Yes	voting		0,01	0,01
10	Chlorothalonil	Base-sensitives		Yes	Yes	Yes		Abstain	Yes	Abstain	Abstain	No	Yes	Yes	Yes	Yes	Yes	6	1	3	5	Yes	Yes	voting			
12	Folpet	Base-sensitives		Yes	Yes	?	Here we have to decide whether to shift those compounds to SRM schemes or to keep them as MRM or both	Abstain	Yes	Abstain	Abstain	No	Yes	Yes	Yes	Yes	Yes	6	1	3	5	Yes	Yes	voting		0,01	0,01
17	Dithiocarbamates det. as CS2	Indiv.		Yes	Yes	No		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10	0	0	10	Yes	No	To have a break			
18	Fenbutatin Oxide	Cl-tins		Yes	Yes	Yes		Yes	Yes	Abstain	Abstain	Yes	Yes	MRM	abstain	Yes	Yes	6	0	3	6	Yes	Yes	voting		0,01	0,01
23	Fosetyl	QuPPr-neg		Yes	No	?		Yes	Yes	Abstain	Abstain	Yes	Yes	Abstain	abstain	Yes	Abstain	5	0	5	5	Yes	Yes	voting **only Fosetyl**	YES	0,05	0,05
25	Glyphosate	QuPPr-neg		Yes	Yes	No		Abstain	Yes	Abstain	Abstain	Yes	Yes	Yes	Yes	Yes	Yes	7	0	3	7	Yes	Yes	voting		0,05	0,05
26	Maleic Hydrazide	QuPPr-neg		Yes	No	?		Yes	Abstain	Abstain	Yes	Yes	Yes	Yes	abstain	Yes	Yes	7	0	3	7	Yes	Yes	voting	YES	0,05	0,05
28	Chlormequat	QuPPr-pos		No	Yes	No		Yes	Yes	Abstain	Abstain	Yes	Yes	Abstain	Yes	Yes	Yes	7	0	3	7	Yes	Yes	voting		0,01	0,01
29	Cyromazine	QuPPr-pos		Yes	Yes	Yes		Yes	Yes	Abstain	Abstain	Yes	Yes	Yes	Yes	Yes	Yes	8	0	2	8	Yes	Yes	voting		0,01	0,01
30	Diquat	QuPPr-pos		Yes	No	?	There is some interest by labs, if yes only as **OPTIONAL**	Abstain	Abstain	Abstain	Yes	Yes	Yes	Yes	No	Yes	Yes	6	1	3	5	Yes	Yes	voting	YES	0,02	0,02
32	Mepiquat	QuPPr-pos		No	Yes	No		Yes	Yes	Abstain	Abstain	Yes	Yes	Abstain	Yes	Yes	Yes	7	0	3	7	Yes	Yes	voting		0,01	0,01
34	BAC-C12	QACs		Yes	No	?		Abstain	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	8	0	1	8	Yes	Yes	voting	YES	0,1	0,1
35	DDAC-C10	QACs		Yes	No	?		Abstain	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	8	0	1	8	Yes	Yes	voting	YES	0,1	0,1

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PREPARATION OF TEST ITEM

Compulsory Compounds

	Captan	Cyromazine	Dicofol	Fenbutatin oxide	Folpet	Glyphosate	Haloxyfop	Mepiquat
sample	Concentration [mg/kg]							
004	1.054 / 1.244	0.089 / 0.078	1.040 / 1.102	0.064 / 0.073	1.445 / 1.546	0.303 / 0.293	0.470 / 0.492	0.088 / 0.091
017	1.109 / 0.970	0.082 / 0.076	1.054 / 1.052	0.064 / 0.062	1.475 / 1.447	0.290 / 0.297	0.463 / 0.451	0.086 / 0.086
027	1.171 / 1.088	0.085 / 0.091	1.275 / 1.144	0.072 / 0.069	1.73 / 1.686	0.321 / 0.300	0.533 / 0.511	0.096 / 0.097
055	0.977 / 1.042	0.092 / 0.087	1.038 / 1.019	0.063 / 0.062	1.414 / 1.475	0.315 / 0.334	0.444 / 0.462	0.089 / 0.092
067	0.983 / 1.005	0.072 / 0.078	1.067 / 1.081	0.063 / 0.068	1.466 / 1.552	0.311 / 0.271	0.463 / 0.490	0.085 / 0.083
091	1.017 / 1.038	0.084 / 0.082	1.174 / 1.064	0.079 / 0.075	1.613 / 1.545	0.321 / 0.283	0.531 / 0.501	0.093 / 0.088
102	1.047 / 1.054	0.082 / 0.084	1.078 / 1.093	0.072 / 0.070	1.476 / 1.468	0.299 / 0.299	0.475 / 0.461	0.088 / 0.085
104	1.265 / 1.266	0.097 / 0.098	1.386 / 1.385	0.089 / 0.094	1.802 / 1.888	0.365 / 0.338	0.590 / 0.613	0.107 / 0.103
156	1.052 / 1.076	0.088 / 0.087	1.133 / 1.109	0.075 / 0.069	1.538 / 1.56	0.328 / 0.309	0.499 / 0.477	0.091 / 0.092
170	1.102 / 1.022	0.086 / 0.086	1.122 / 1.166	0.073 / 0.079	1.526 / 1.555	0.337 / 0.312	0.477 / 0.498	0.091 / 0.092
mean	1.079	0.085	1.129	0.072	1.560	0.311	0.495	0.091
S_{sam}^2	4.79×10^{-3}	3.20×10^{-5}	9.86×10^{-3}	6.74×10^{-5}	1.48×10^{-2}	2.08×10^{-4}	1.78×10^{-3}	3.49×10^{-6}
c	6.55×10^{-3}	8.92×10^{-5}	1.53×10^{-2}	6.74×10^{-5}	2.76×10^{-2}	1.31×10^{-3}	2.82×10^{-3}	9.12×10^{-5}
	passed	passed	passed	passed	passed	passed	passed	passed

EURL-SRM HOMOGENEITY | OPTIONAL PESTICIDES

Optional Compounds

	Diquat	Fentin	Fosetyl	Glufosinate	Maleic hydrazide	BAC-C12	DDAC-C10
Sample	Concentration [mg/kg]						
004	0.081 / 0.073	0.165 / 0.177	0.953 / 0.934	0.231 / 0.234	0.662 / 0.628	0.505 / 0.554	0.375 / 0.427
017	0.076 / 0.076	0.160 / 0.161	0.918 / 0.916	0.213 / 0.211	0.646 / 0.614	0.533 / 0.504	0.401 / 0.379
027	0.088 / 0.084	0.187 / 0.185	0.971 / 0.961	0.257 / 0.252	0.708 / 0.685	0.571 / 0.541	0.438 / 0.403
055	0.084 / 0.079	0.151 / 0.159	0.901 / 0.933	0.233 / 0.232	0.663 / 0.692	0.499 / 0.506	0.376 / 0.379
067	0.076 / 0.075	0.167 / 0.165	0.891 / 0.924	0.222 / 0.214	0.626 / 0.619	0.532 / 0.575	0.387 / 0.432
091	0.078 / 0.077	0.188 / 0.171	0.943 / 0.940	0.231 / 0.227	0.672 / 0.649	0.591 / 0.559	0.456 / 0.43
102	0.079 / 0.07	0.167 / 0.165	0.903 / 0.910	0.214 / 0.209	0.628 / 0.600	0.537 / 0.540	0.403 / 0.411
104	0.093 / 0.088	0.217 / 0.221	0.989 / 0.996	0.279 / 0.255	0.803 / 0.723	0.653 / 0.667	0.508 / 0.538
156	0.079 / 0.078	0.181 / 0.177	0.964 / 0.959	0.237 / 0.222	0.708 / 0.655	0.567 / 0.523	0.439 / 0.405
170	0.082 / 0.075	0.178 / 0.185	0.940 / 0.971	0.249 / 0.24	0.700 / 0.65	0.542 / 0.577	0.398 / 0.437
mean	**0.079**	**0.176**	**0.941**	**0.233**	**0.667**	**0.554**	**0.421**
S_{sam}^2	**1.96×10^{-5}**	**3.08×10^{-4}**	**7.32×10^{-4}**	**2.97×10^{-4}**	**1.49×10^{-3}**	**2.08×10^{-4}**	**1.34×10^{-3}**
c	**8.01×10^{-5}**	**3.59×10^{-4}**	**9.54×10^{-3}**	**6.26×10^{-4}**	**5.54×10^{-3}**	**1.31×10^{-3}**	**2.42×10^{-3}**
	passed	**passed**	**passed**	**passed**	**passed**	**passed**	**passed**

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STABILITY| COMPULSORY PESTICIDES

Compulsory Compounds

Sample	Captan [mg/kg]			Cyromazine [mg/kg]			Dicofol [mg/kg]			Fenbutatin Oxide [mg/kg]		
	12 April	30 April	21 May	12 April	30 April	21 May	12 April	30 April	21 May	12 April	30 April	21 May
4	1,071	1,013	1,034	0,084	0,081	0,080	1,035	1,005	1,016	0,066	0,067	0,067
17	1,020	0,912	0,905	0,074	0,081	0,077	1,006	0,927	0,927	0,064	0,057	0,057
67	1,026	0,960	0,958	0,077	0,074	0,077	1,036	0,986	0,914	0,064	0,057	0,062
Mean	**1,039**	**0,961**	**0,966**	**0,078**	**0,079**	**0,078**	**1,025**	**0,973**	**0,952**	**0,065**	**0,060**	**0,062**
RSD	2,66 %	5,28 %	6,72 %	6,22 %	5,13 %	1,87 %	1,68 %	4,21 %	5,84 %	1,89 %	9,48 %	8,23 %
% Difference (vs. 1st analysis)	—	**-7,45 %**	**-7,04 %**	—	**0,32 %**	**-0,43 %**	—	**-5,16 %**	**-7,12 %**	—	**-7,12 %**	**-4,54 %**
Diff (mean)		0,077	0,073		0,0003	0,0003		0,053	0,073		0,005	0,003
0,3* FFP-SD		0,078	0,078		0,006	0,006		0,077	0,077		0,005	0,005
Judgement		passed	passed		passed	passed		passed	passed		passed	passed

Sample	Folpet [mg/kg]			Glyphosate [mg/kg]			Haloxyfop free acid [mg/kg]			Mepiquat [mg/kg]		
	12 April	30 April	21 May	12 April	30 April	21 May	12 April	30 April	21 May	12 April	30 April	21 May
4	1,403	—	1,371	0,276	0,281	0,266	0,471	0,456	0,478	0,081	0,084	0,083
17	1,403	—	1,303	0,278	0,270	0,256	0,454	0,420	0,451	0,081	0,088	0,087
67	1,453	—	1,304	0,259	0,262	0,247	0,471	0,416	0,438	0,079	0,083	0,084
Mean	**1,420**	**—**	**1,326**	**0,271**	**0,271**	**0,256**	**0,465**	**0,430**	**0,455**	**0,081**	**0,085**	**0,085**
RSD	2,03 %	—	2,93 %	3,81 %	3,61 %	3,81 %	2,14 %	5,12 %	4,47 %	1,67 %	3,04 %	2,47 %
% Difference (vs. 1st analysis)	—	—	**-6,64 %**	—	**0,00 %**	**-5,42 %**	—	**-7,49 %**	**-2,08 %**	—	**5,32 %**	**5,42 %**
Diff (mean)		—	0,094		0,000	0,015		0,035	0,010		0,004	0,004
0,3* FFP-SD		—	0,106		0,020	0,020		0,035	0,035		0,006	0,006
Judgement		—	passed		passed	passed		passed	passed		passed	passed

Optional Compounds

Sample	Diquat [mg/kg]			Fentin [mg/kg]			Fosetyl [mg/kg]			Glufosinate [mg/kg]		
	12 April	30 April	21 May	12 April	30 April	21 May	12 April	30 April	21 May	12 April	30 April	21 May
4	0,086	0,081	0,082	0,164	0,161	0,167	0,914	0,879	0,786	0,225	0,224	0,235
17	0,081	0,076	0,078	0,158	0,145	0,145	0,928	0,855	0,778	0,208	0,221	0,235
67	0,079	0,071	0,075	0,164	0,145	0,151	0,889	0,794	0,751	0,210	0,217	0,219
Mean	**0,082**	**0,076**	**0,079**	**0,162**	**0,150**	**0,154**	**0,910**	**0,843**	**0,772**	**0,214**	**0,221**	**0,229**
RSD	4,55 %	6,55 %	4,97 %	2,24 %	6,06 %	7,51 %	2,13 %	5,18 %	2,33 %	4,29 %	1,71 %	3,90 %
% Difference (vs. 1st analysis)	—	**-7,14 %**	**-4,44 %**	—	**-7,22 %**	**-4,64 %**	—	-7,40 %	-15,23 %	—	**3,04 %**	**7,17 %**
Diff (mean)		0,0059	0,0037		0,0117	0,0075		0,067	0,139		0,007	0,015
0,3* FFP-SD		0,0062	0,0062		0,0121	0,0121		0,068	0,068		0,016	0,016
Judgement		**passed**	**passed**		**passed**	**passed**		**passed**	**failed**		**passed**	**passed**

Sample	Maleic hydrazide [mg/kg]			BAC-C10 [mg/kg]			DDAC-C10 [mg/kg]		
	12 April	30 April	21 May	12 April	30 April	21 May	12 April	30 April	21 May
4	0,627	0,586	0,608	0,510	0,503	0,540	0,379	0,382	0,401
17	0,590	0,5835	0,590	0,522	0,460	0,507	0,371	0,342	0,374
67	0,598	0,5605	0,579	0,516	0,471	0,503	0,380	0,354	0,367
Mean	**0,605**	**0,577**	**0,592**	**0,516**	**0,478**	**0,516**	**0,377**	**0,359**	**0,380**
RSD	3,21 %	2,44 %	2,48 %	1,21 %	4,62 %	3,90 %	1,31 %	5,73 %	4,70 %
% Difference (vs. 1st analysis)	—	**-4.63 %**	**-2,07 %**	—	**-7,37 %**	**0,10 %**	—	**-4,65 %**	**0,97 %**
Diff (mean)		0,028	0,013		0,038	0,000		0,018	0,004
0,3* FFP-SD		0,045	0,045		0,039	0,039		0,028	0,028
Judgement		**passed**	**passed**		**passed**	**passed**		**passed**	**passed**

EURL-SRM

HOMOGENEITY AND STABILITY TESTS (OVERVIEW)

Compulsory Compounds:

Compound	Homog. Test	Stability Test
Captan	passed	passed
Cyromazine	passed	passed
Dicofol	passed	passed
Fenbutatin oxide	passed	passed
Folpet	passed	passed
Glyphosate	passed	passed
Haloxyfop	passed	passed
Mepiquat	passed	passed

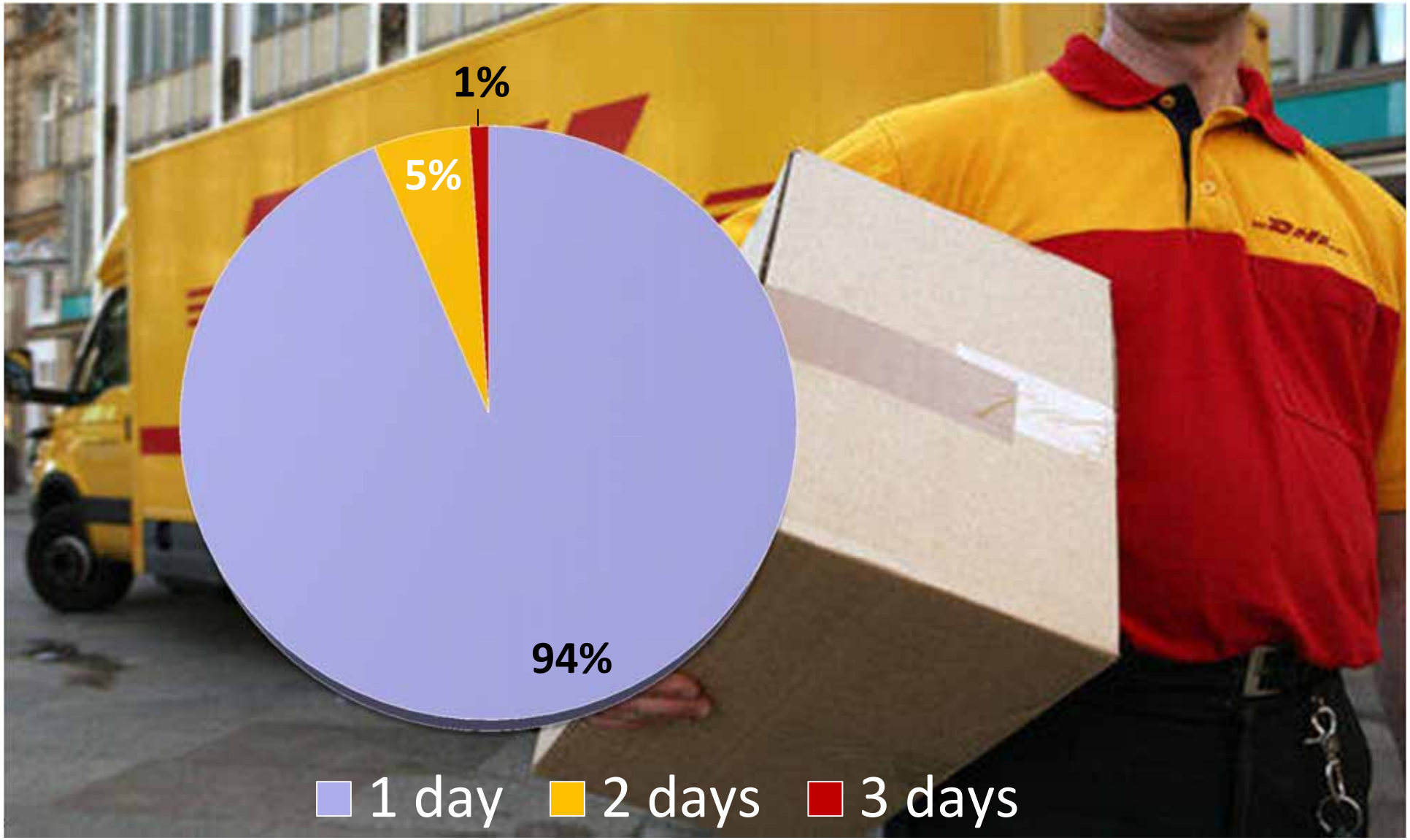
Optional Compounds:

Compound	Homog. Test	Stability Test
Diquat	passed	passed
Fentin	passed	passed
Fosetyl	passed	failed
Glufosinate	passed	passed
Maleic hydrazide	passed	passed
BAC-C12	passed	passed
DDAC-C10	passed	passed

EURL-SRM

STABILITY DURING SHIPPING

Shipping Duration (EU and EFTA labs)



EURL-SRM

TRANSPORT SIMULATION -1

Compulsory Compounds

	Temp. of Test Item	Captan	Cyromazine	Dicofol	Fenbutatin oxide	Folpet	Glyphosate	Haloxyfop	Mepiquat
		Concentration [mg/kg]							
Day 0		1,634	0,097	1,139	0,077	1,634	0,301	0,513	0,098
Day 2	-2 °C	1,665	0,092	1,163	0,081	1,665	0,296	0,512	0,096
Day 3	12 °C	1,527	0,089	1,167	0,079	1,527	0,296	0,530	0,099
Deviation [%] Day 2 vs. Day 0		6,7%	-4,7%	2,1%	5,4%	1,9%	-1,7%	-0,28%	-2,1%
Deviation [%] Day 3 vs. Day 0		-3,2%	-8,0%	2,5%	3,4%	-6,6%	-1,7%	3,2%	0,53%

Day 0: 06. August 2013 (2,5 months after deadline of submission)

Packed deep frozen in insulated styrofoam box w. dry ice left at ambient temp.

EURL-SRM

TRANSPORT SIMULATION -2

Optional Compounds

	Temp. of Test Item	Diquat	Fentin	Fosetyl	Glufosinate	Maleic hydrazide	BAC-C12	DDAC-C10
		Concentration [mg/kg]						
Day 0		0,084	0,174	0,446*	0,250	0,645	0,520	0,381
Day 2	-2 °C	0,081	0,183	0,446	0,262	0,585	0,524	0,390
Day 3	12 °C	0,083	0,178	0,389	0,269	0,611	0,499	0,391
Deviation [%] Day 2 vs. Day 0		-2,87%	5,2%	-0,0%	4,9%	-9,4%	0,82%	2,4%
Deviation [%] Day 3 vs. Day 0		-0,6%	2,1%	-12,8%	7,4%	-5,3%	-3,9%	2,8%

Day 0: 06. August 2013 (2,5 months after deadline of submission)

* 0,581 mg/kg phosphonic acid, the metabolite of fosetyl, was determined.

Packed deep frozen in insulated styrofoam box w. dry ice left at ambient temp.

EURL-SRM

PARTICIPATING LABS / COUNTRIES

		Labs submitting results	Registered but NOT submitting results	Countries…
EU		108	7	1x FR, 1x DE, 1x NL, 1x PL, 3x ES
EFTA		2	0	-
3rd Countries + EU Candidates		6	1	1x PE
SUM		116	8	

PARTICIPATING LABS / COUNTRIES

EU Country (Contracting)	Registered for PT		Submitted results	
	Total	NRL-SRM	Total (vs. SRM6)	NRL
Austria	2	1	2 (+1)	1
Belgium	9	1	8 (+3)	1
Bulgaria	1	1	1	1
Cyprus	2	1	2(+2)	1
Czech Republic	3	1	3	1
Denmark	2	1	2	1
Estonia	2	1	2	1
Finland	2	2	2	2
France	10	1	9 (+3)	1
Germany	20	1	19 (-3)	1
Greece	2	2	2(-2)	2
Hungary	4	1	4 (+1)	1
Irland	1	1	1	1
Italy	13	1	13 (+4)	1
Latvia	1	1	1	1
Lithuania	2	1	2 (+1)	1
Luxenburg	1	1	1	1
Malta *	2	2	2	2
Netherlands	1	1	1 (-1)	1
Poland	6	1	5 (-7)	1
Portugal	1		1 (+3)	
Romania**				
Slovakia	1	1	1 (-1)	1
Slovenia	2	1	2 (+1)	1
Spain	20	2	17 (+5)	2
Sweden	2	1	2	1
UK	3		3 (-1)	
EU-Total	**115**	**28**	**108**	**28**

Countries	Registered for PT	Submitted results
Norway	1	1
Switzerland	1	1
EFTA-Total	**2**	**2**
Brazil (NEW)	1	1
Egypt	1	1
Peru (NEW)	1	0
Serbia (NEW)	1	1
Singapore	1	1
Thailand (NEW)	1	1
USA	1	1
3rd Countries + EU-Cand.	**7**	**6**

*** MT subcontracts FERA as Proxy-NRL**
+ Eurofins (DE) for routine controls

**** NRL-SRM from RO did not participate**

EURL-SRM

FREQUENCY OF ANALYSIS

Compulsory compounds

Present in Test Item

Compound	No. of Labs targeting	% of participants analyzing (110 labs = 100%)*
Captan	94	85 % (NEW)
Folpet	94	85 % (NEW)
Dicofol	92	84 % (NEW)
Haloxyfop	81	74 % (+12%)
Cyromazine	77	70 % (+4%)
Mepiquat	72	65 % (+11%)
Fenbutatin Ox.	59	54 % (+14%)
Glyphosate	49	45 % (+15%)

NOT present in Test Item

Compound	No. of Labs targeting	% of participants analyzing (110 labs = 100%)*
Chlororthalonil	99	90 % (+20%)
Fluazifop	83	75 % (+13%)
2,4-D	81	74 % (+10%)
Chlormequat	73	66 % (+9%)
Ethephon	51	46 % (+16%)

*108 EU + 2 EFTA labs submitting results

(NEW: Compared against percentage in EUPT-SRM6, where 77 labs (EU + EFTA) submitted results)

EURL-SRM

FREQUENCY OF ANALYSIS

Optional Compounds

Present in Test Item

Compounds	No. of Labs targeting	% of participants analyzing (110 labs = 100%)*
DDAC-C10	53	48 % (NEW)
BAC-C12	51	46 % (NEW)
Fentin	28	25 % (NEW)
Fosetyl	25	23 % (NEW)
Glufosinate	25	23 % (NEW)
Maleic hydr.	24	22 % (NEW)
Diquat	14	13 % (NEW)

NOT present in Test Item

Compounds	No. of Labs targeting	% of participants analyzing (110 labs = 100%)*
BAC-C16	51	46 % (NEW)
BAC-C14	50	45 % (NEW)
BAC-C10	47	43 % (NEW)

*108 EU + 2 EFTA labs submitting results

(NEW: Compared against percentage in EUPT-SRM6, where 77 labs (EU + EFTA) submitted results)

EURL-SRM

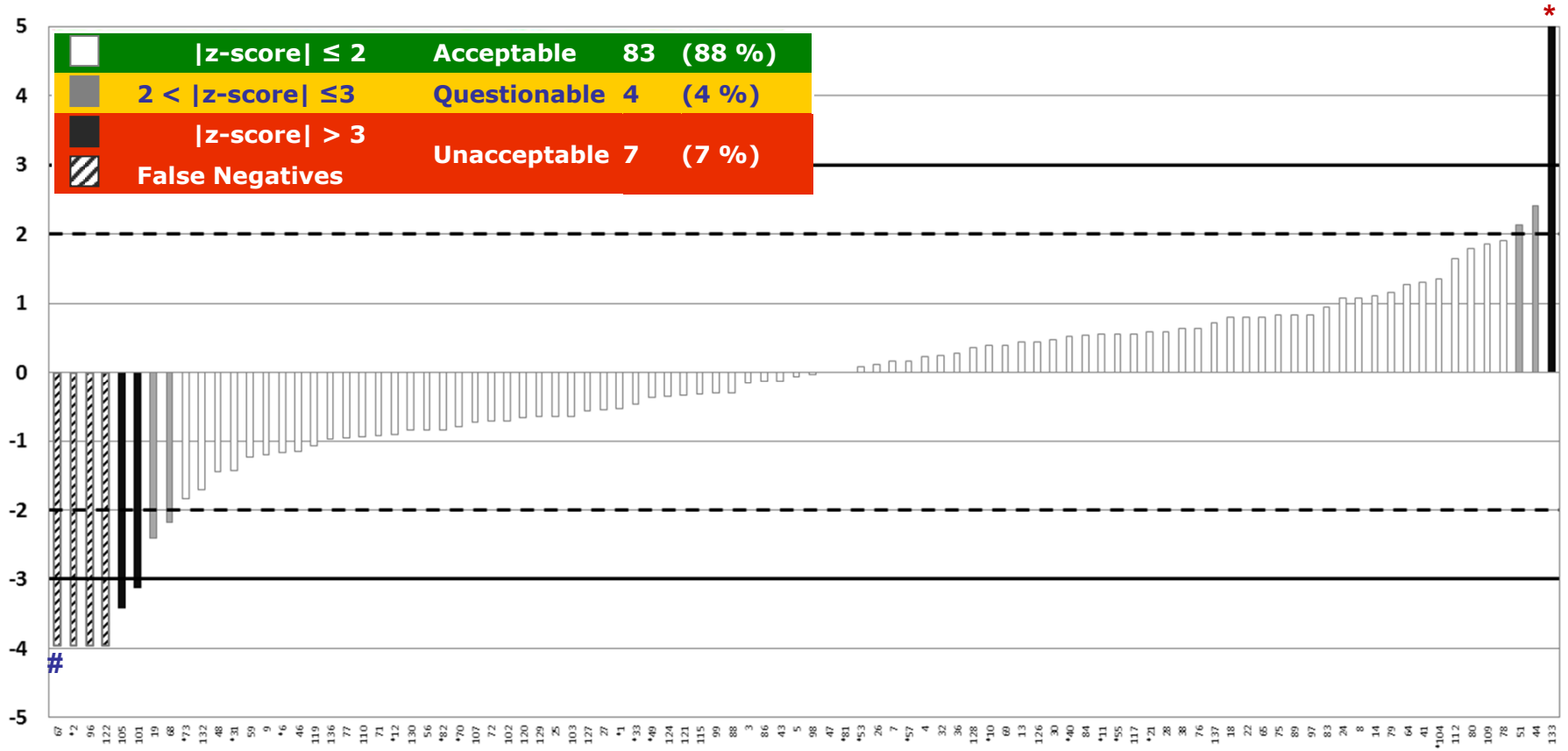
PESTICIDES REPORTED IN BLANK MATERIAL

Pesticides	Present in Test Item?	Lab reporting presence in Blank Material	Reported Concentration (mg/kg)
BAC-C12	Yes	13	-
		42	-
		89	0.003
		122	0.087
DDAC-C10	Yes	13	-
		42	-
		68	0.006
		84	-
		122	0.126
Fosetyl	Yes	107	-
Glyphosate	Yes	4	0.143
		88	0.006
Haloxyfop	Yes	38	-
		77	-
		101	0.008

Reasons should be investigated.
e.g. :
- Cross-contamination
- Poor specificity of method

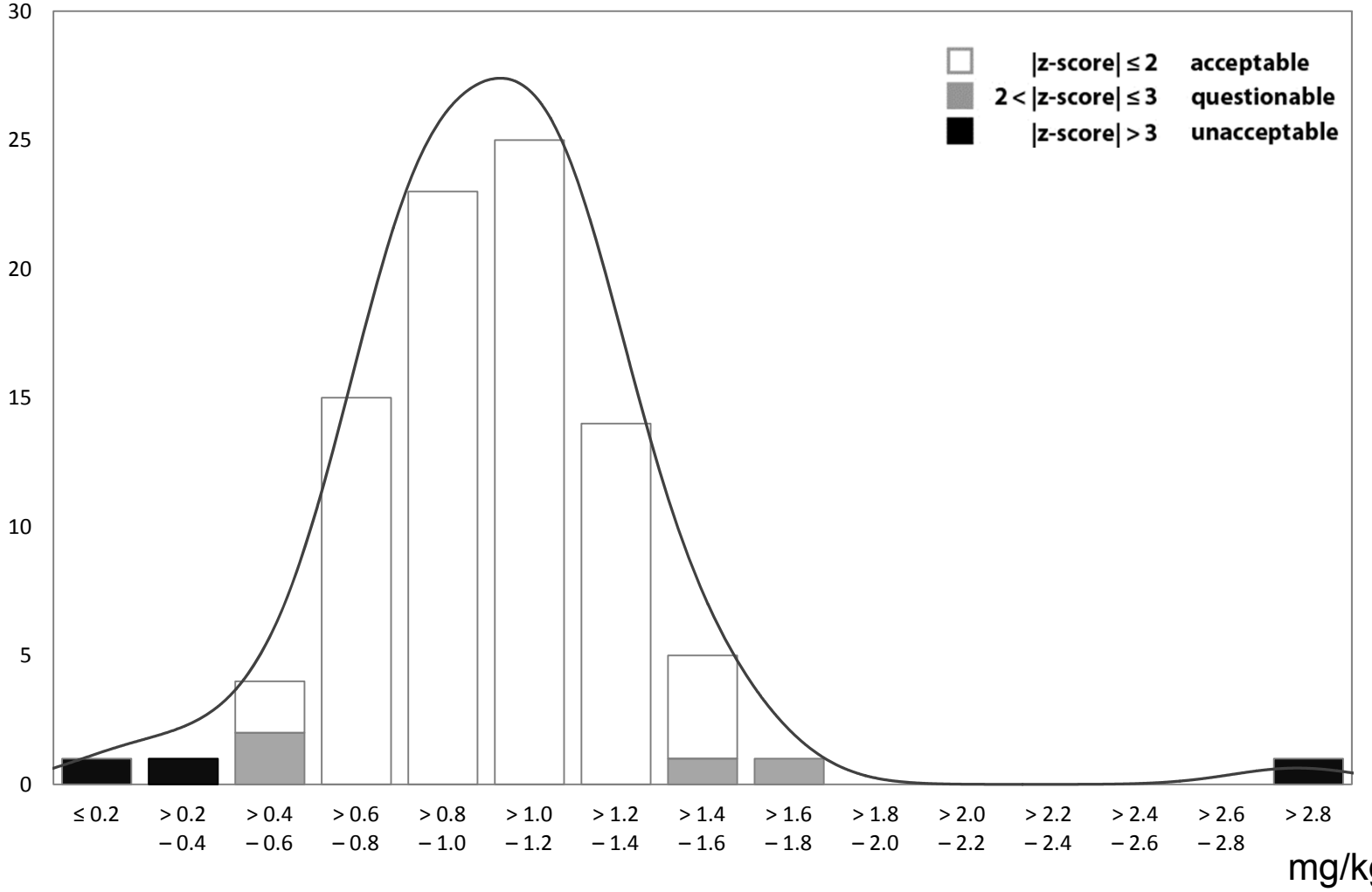
CAPTAN

Results	94
False Neg.	3+1*
Median	1.010 [mg/kg]
Qn RSD	26.0 %
MRRL	0.01 [mg/kg]



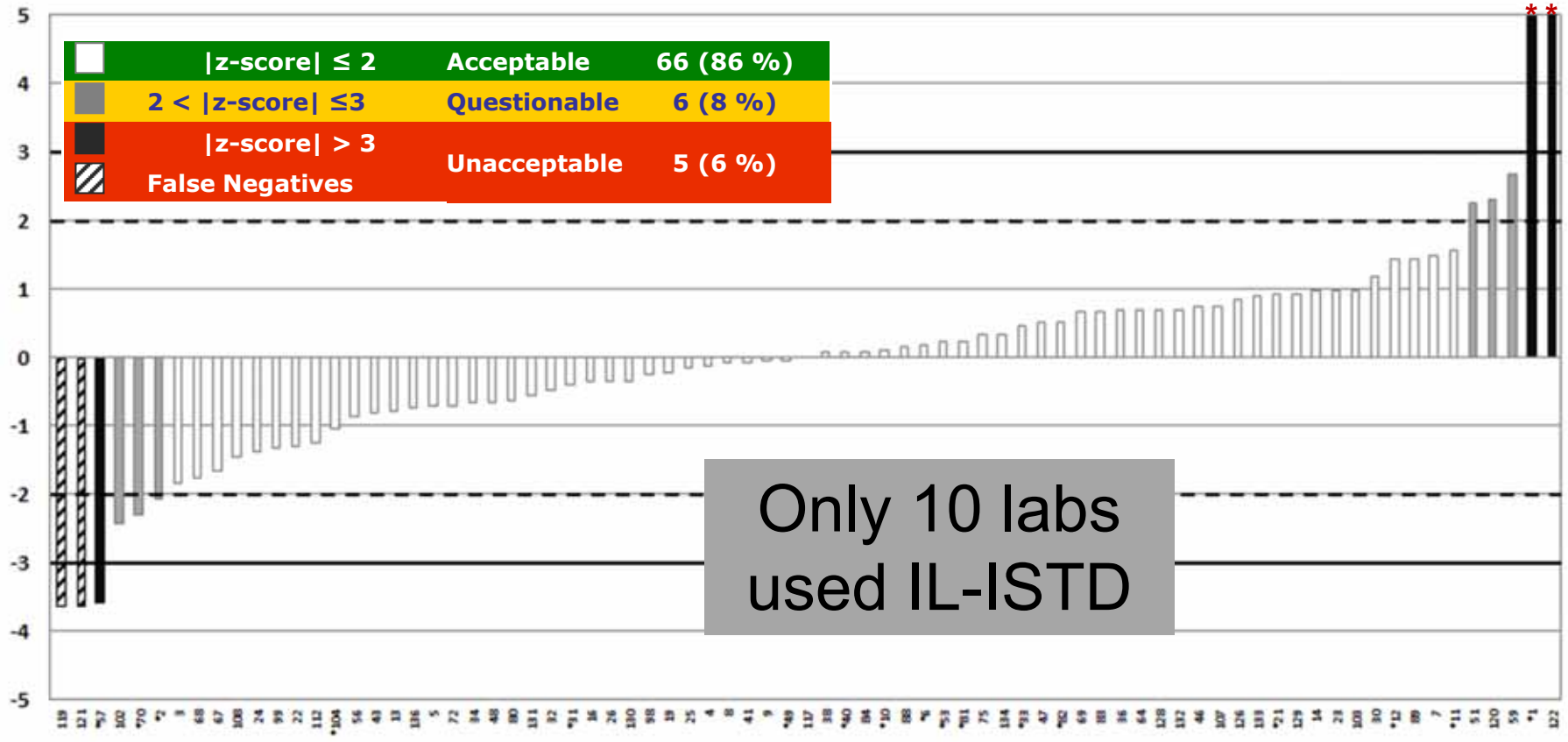
detected, but due to technical problems not quantified; treated as false negative

CAPTAN


30
25
20
15
10
5
0
|z-score| ≤ 2 acceptable
2 < |z-score| ≤ 3 questionable
|z-score| > 3 unacceptable
≤ 0.2
> 0.2 – 0.4
> 0.4 – 0.6
> 0.6 – 0.8
> 0.8 – 1.0
> 1.0 – 1.2
> 1.2 – 1.4
> 1.4 – 1.6
> 1.6 – 1.8
> 1.8 – 2.0
> 2.0 – 2.2
> 2.2 – 2.4
> 2.4 – 2.6
> 2.6 – 2.8
> 2.8
mg/kg

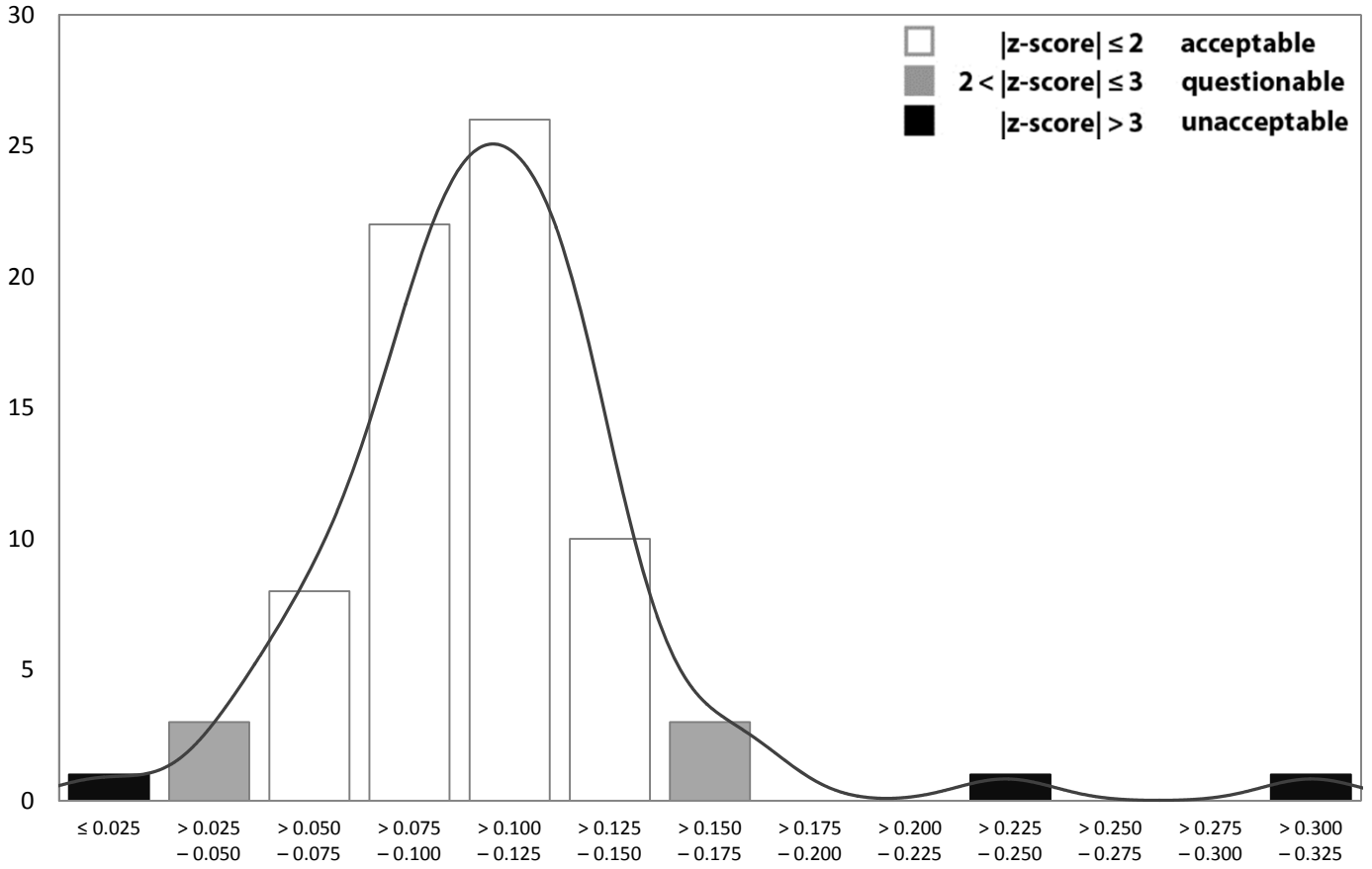
CYROMAZINE

Results	77
False Neg.	2
Median	0.102 [mg/kg]
Qn RSD	27.2 %
MRRL	0.01 [mg/kg]



Only 10 labs used IL-ISTD

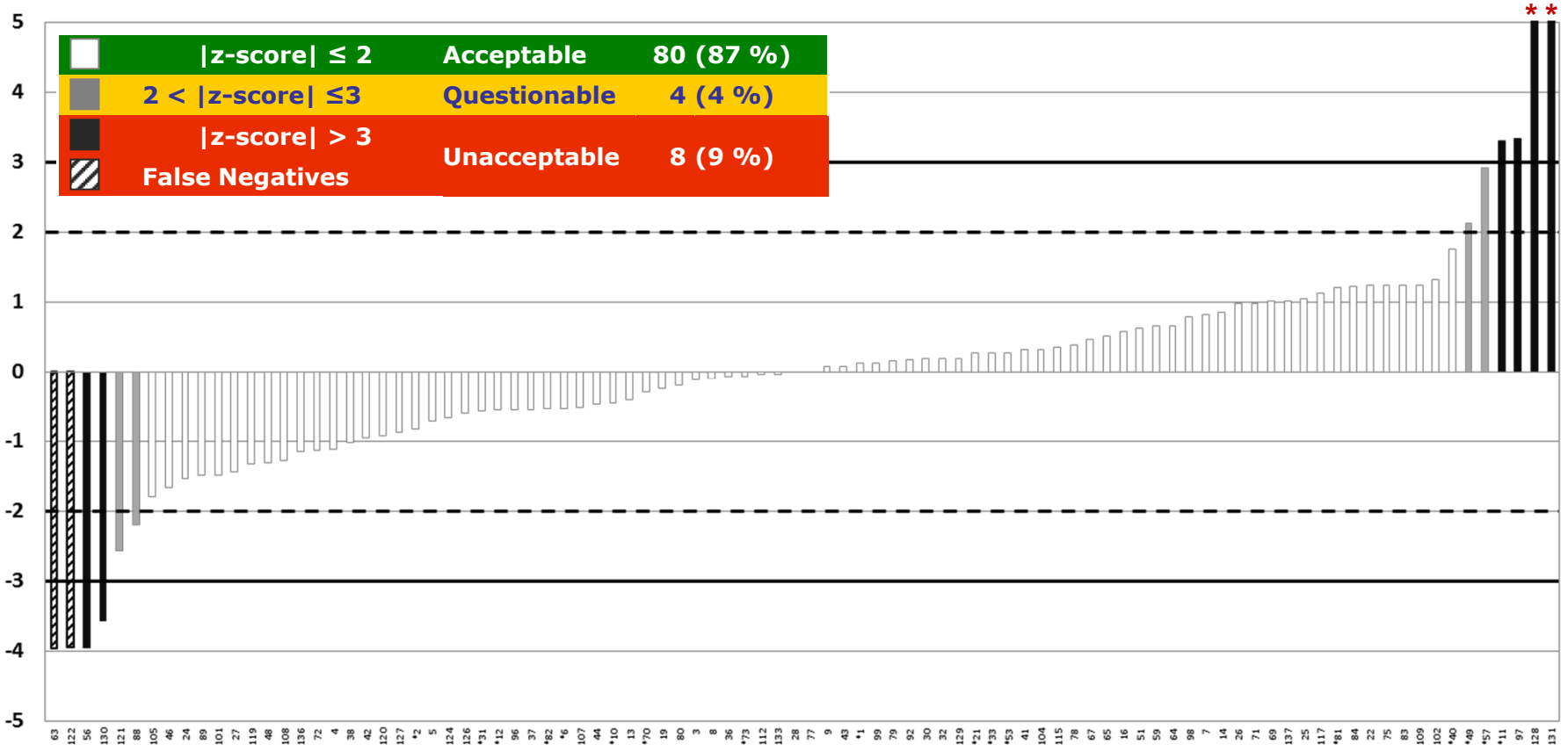
CYROMAZINE


30
25
20
15
10
5
0
|z-score| ≤ 2 acceptable
2 < |z-score| ≤ 3 questionable
|z-score| > 3 unacceptable
≤ 0.025
> 0.025 – 0.050
> 0.050 – 0.075
> 0.075 – 0.100
> 0.100 – 0.125
> 0.125 – 0.150
> 0.150 – 0.175
> 0.175 – 0.200
> 0.200 – 0.225
> 0.225 – 0.250
> 0.250 – 0.275
> 0.275 – 0.300
> 0.300 – 0.325
mg/kg

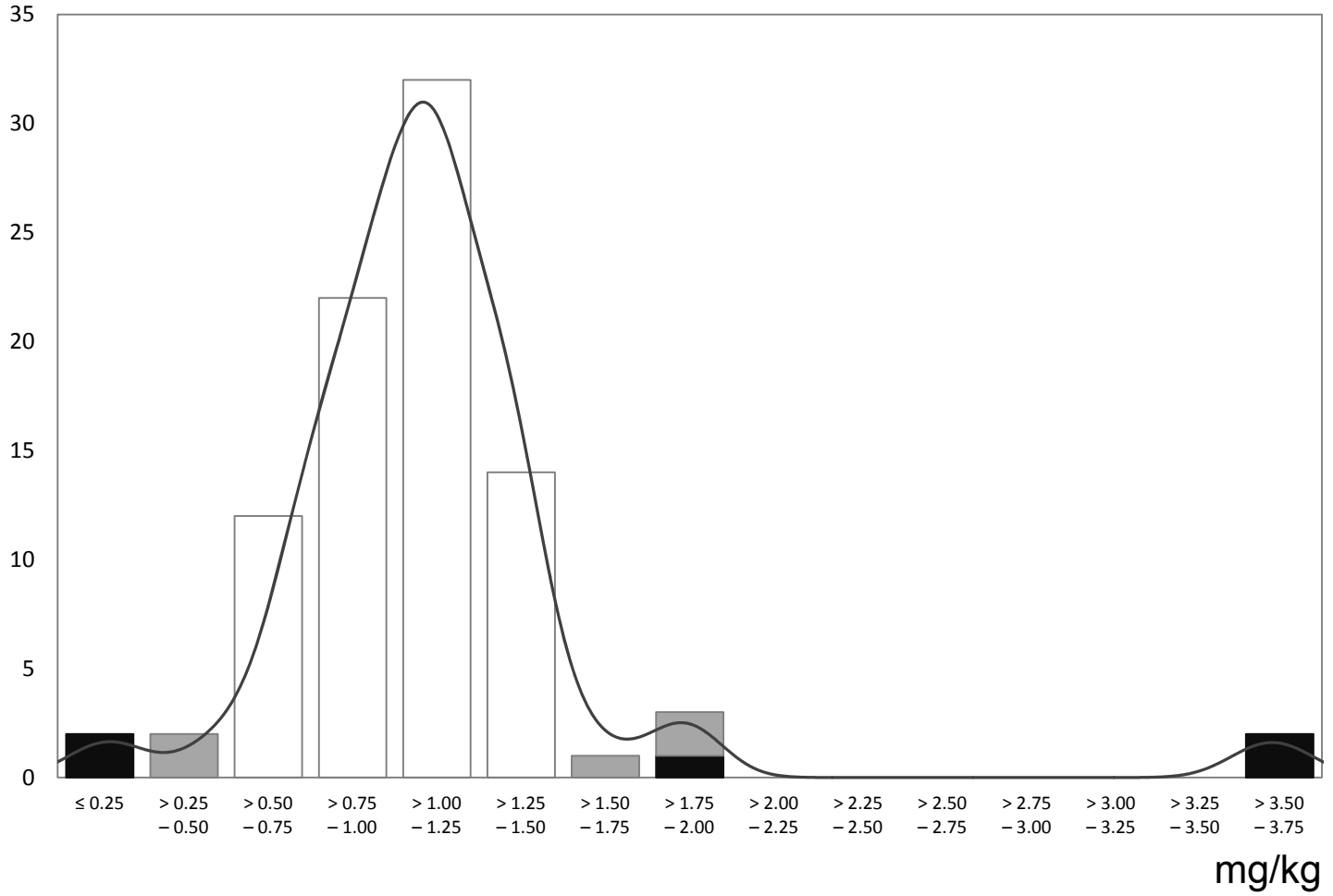
EURL-SRM DICOFOL

DICOFOL

Results	92
False Neg.	2
Median	1.030 [mg/kg]
Qn RSD	27.6 %
MRRL	0.01 [mg/kg]

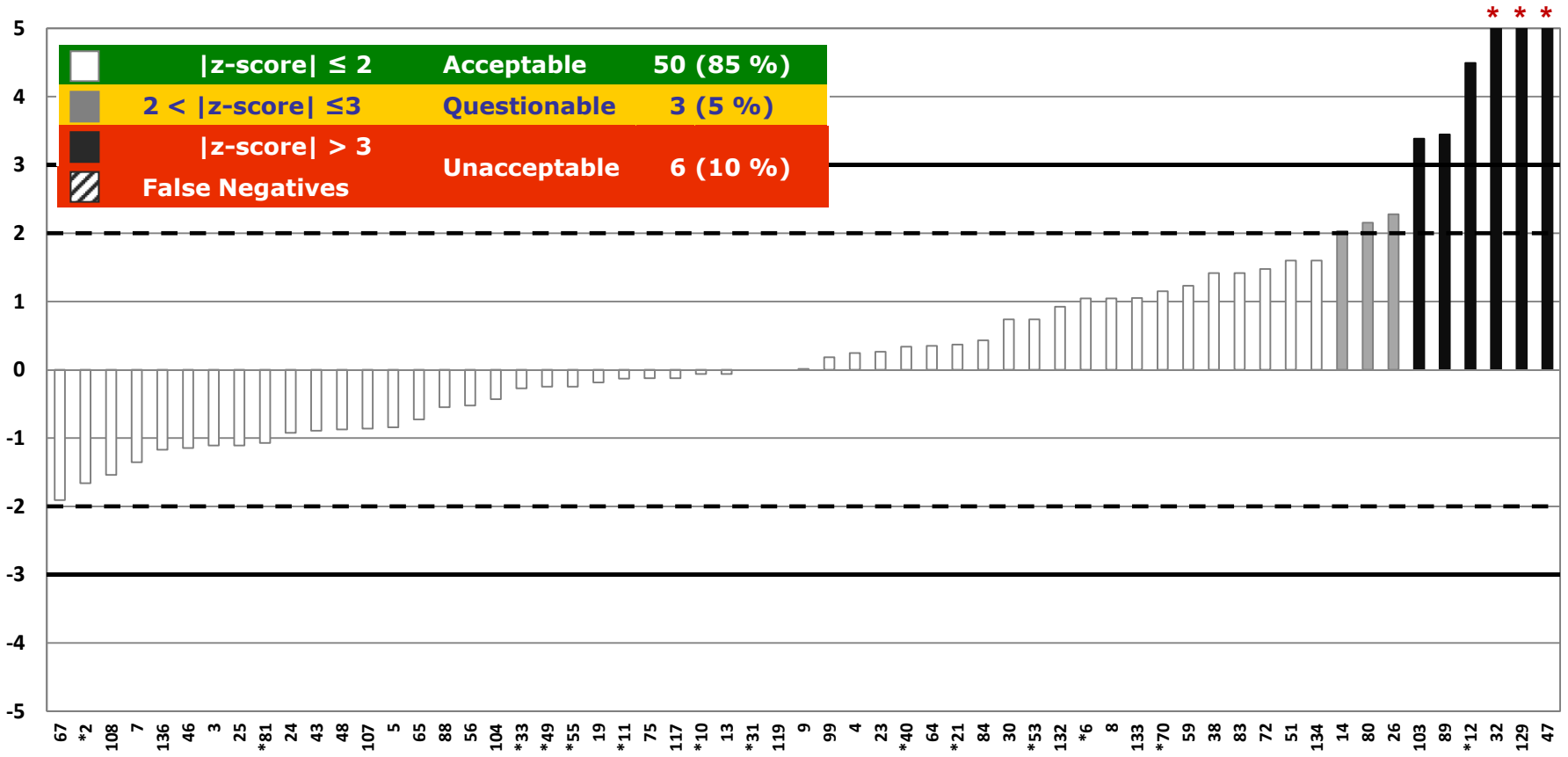


DICOFOL

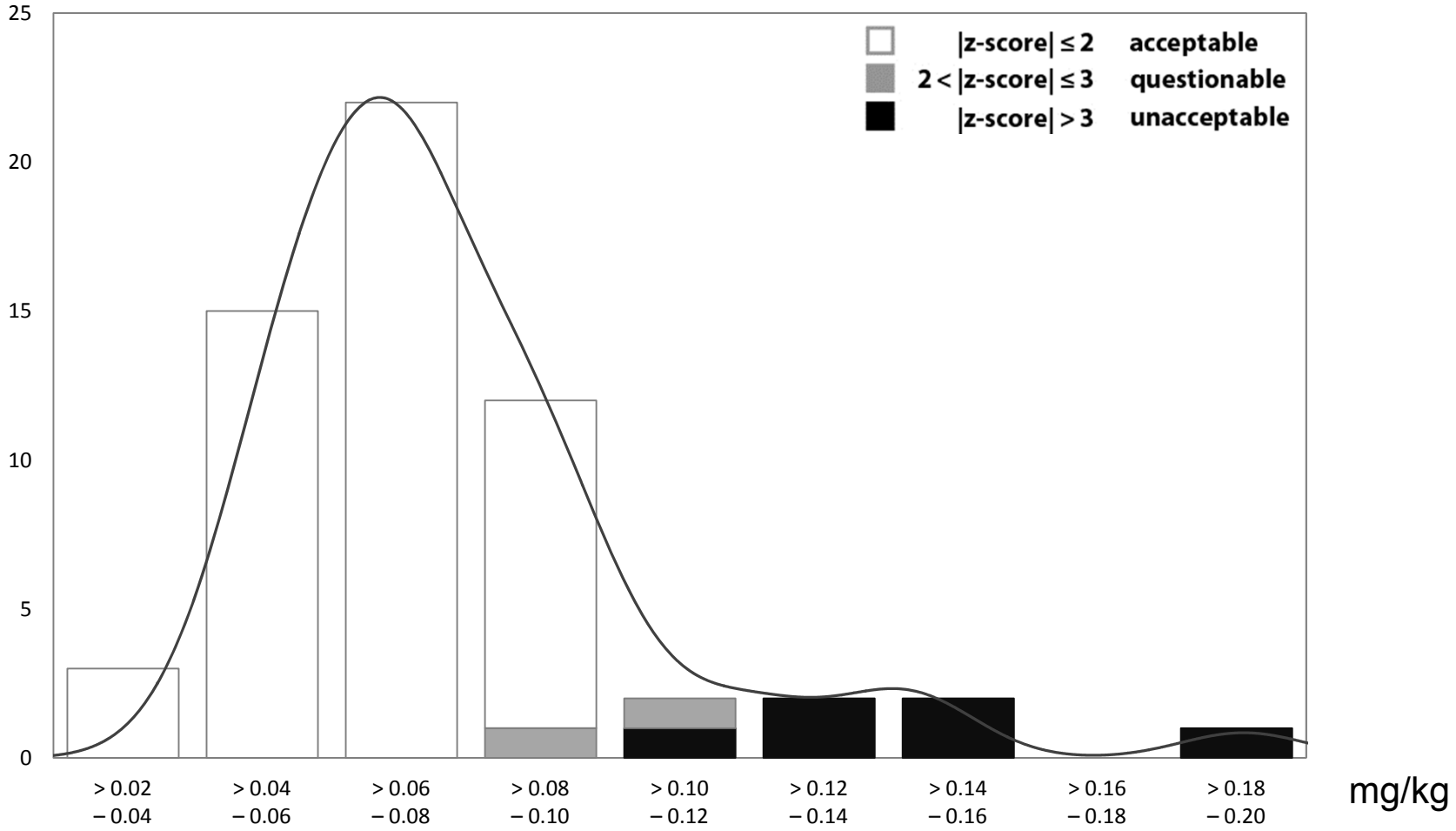

35
30
25
20
15
10
5
0
≤ 0.25
> 0.25 – 0.50
> 0.50 – 0.75
> 0.75 – 1.00
> 1.00 – 1.25
> 1.25 – 1.50
> 1.50 – 1.75
> 1.75 – 2.00
> 2.00 – 2.25
> 2.25 – 2.50
> 2.50 – 2.75
> 2.75 – 3.00
> 3.00 – 3.25
> 3.25 – 3.50
> 3.50 – 3.75
mg/kg

FENBUTATIN OXIDE

Results	59
False Neg.	0
Median	0.065 [mg/kg]
Qn RSD	31.4 %
MRRL	0.01 [mg/kg]

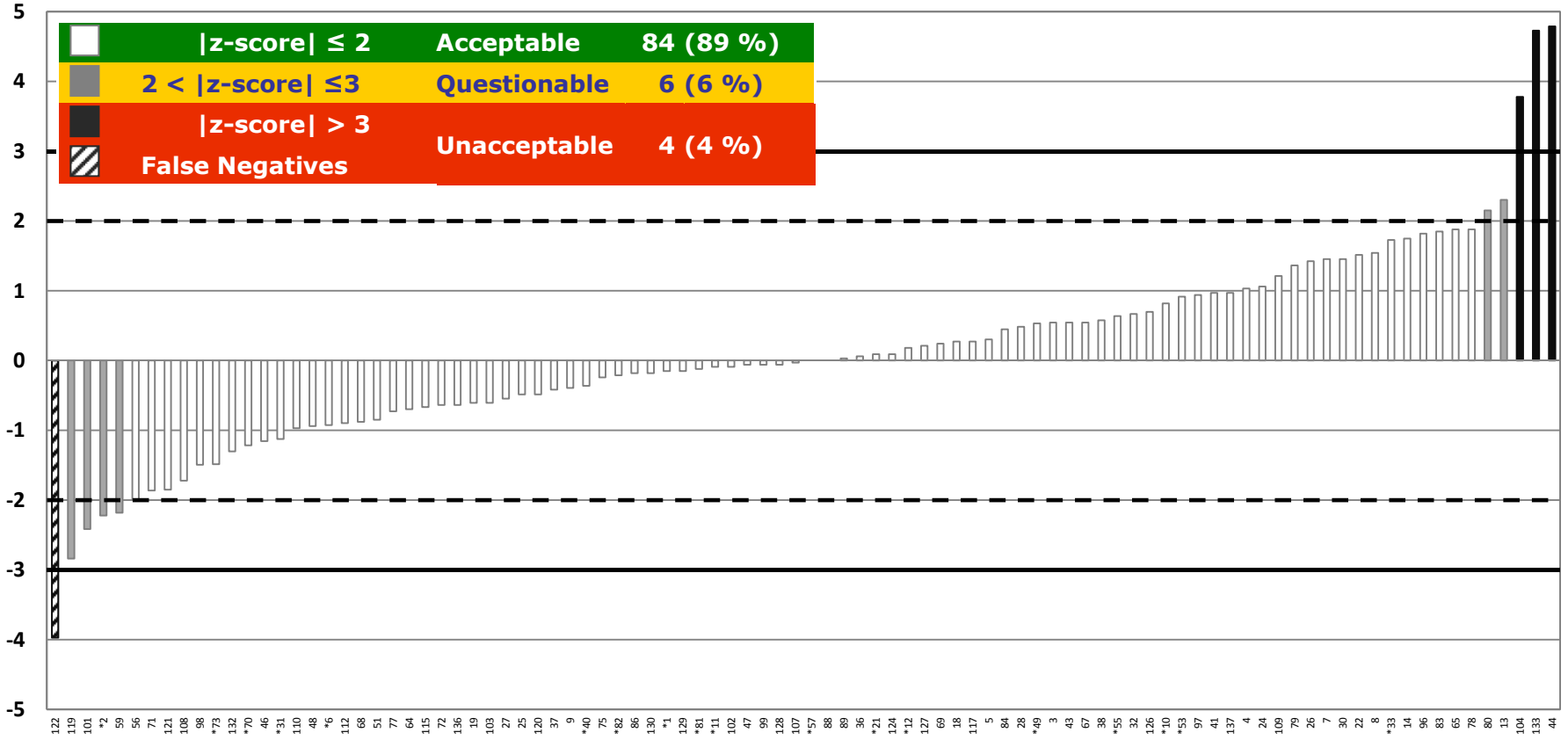


FENBUTATIN OXIDE

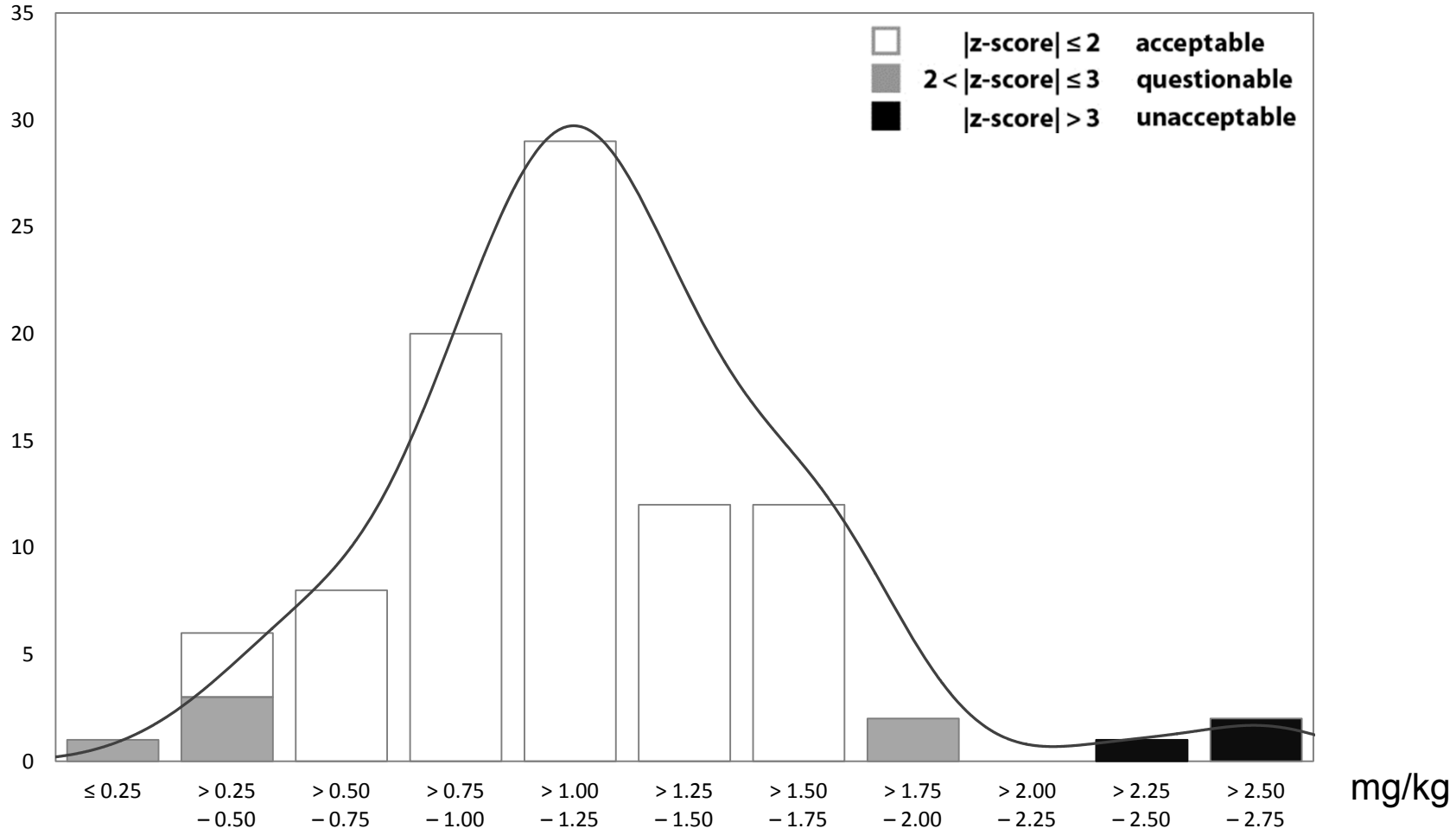


FOLPET

Results	94
False Neg.	1
Median	1.320 [mg/kg]
Qn RSD	29.6 %
MRRL	0.01 [mg/kg]

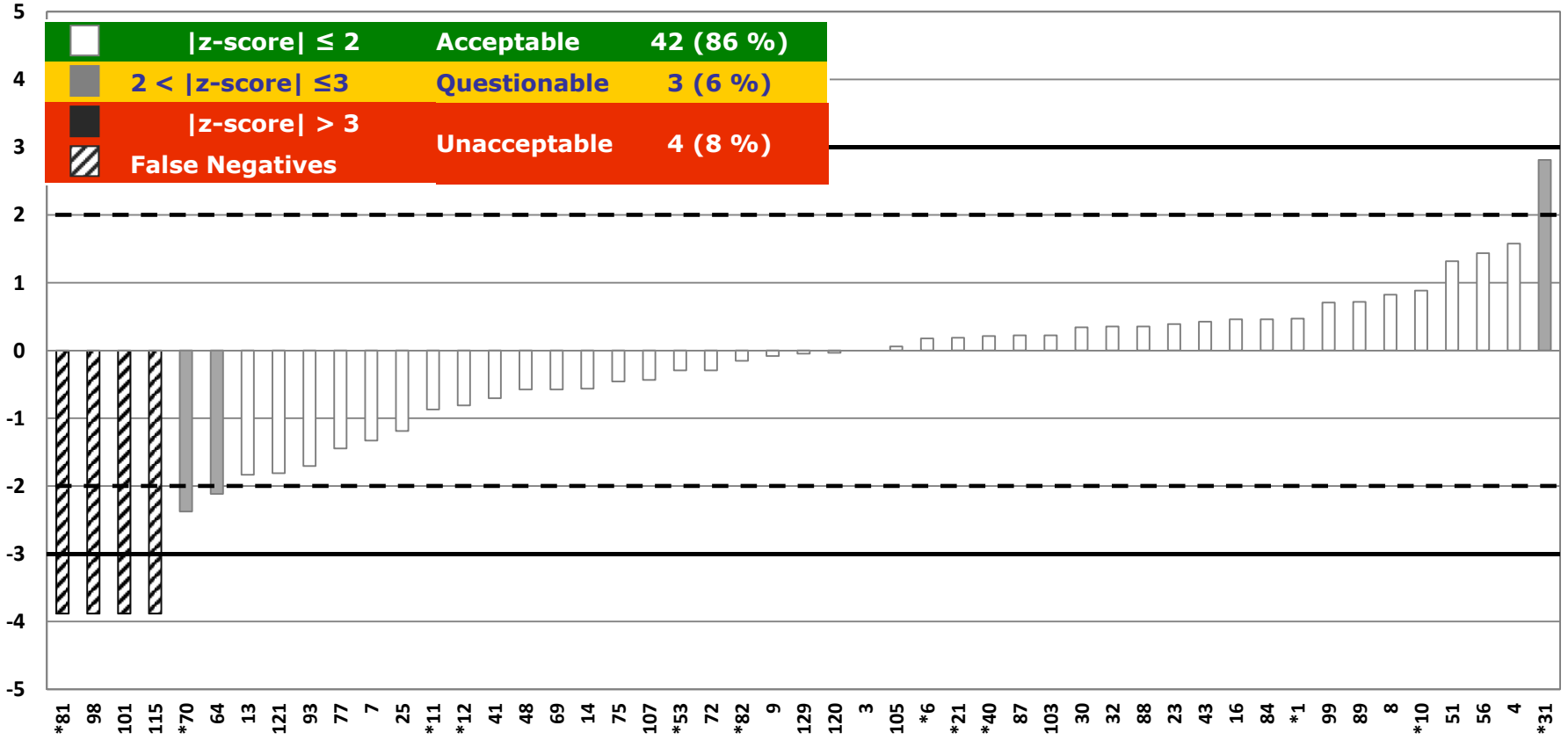


FOLPET

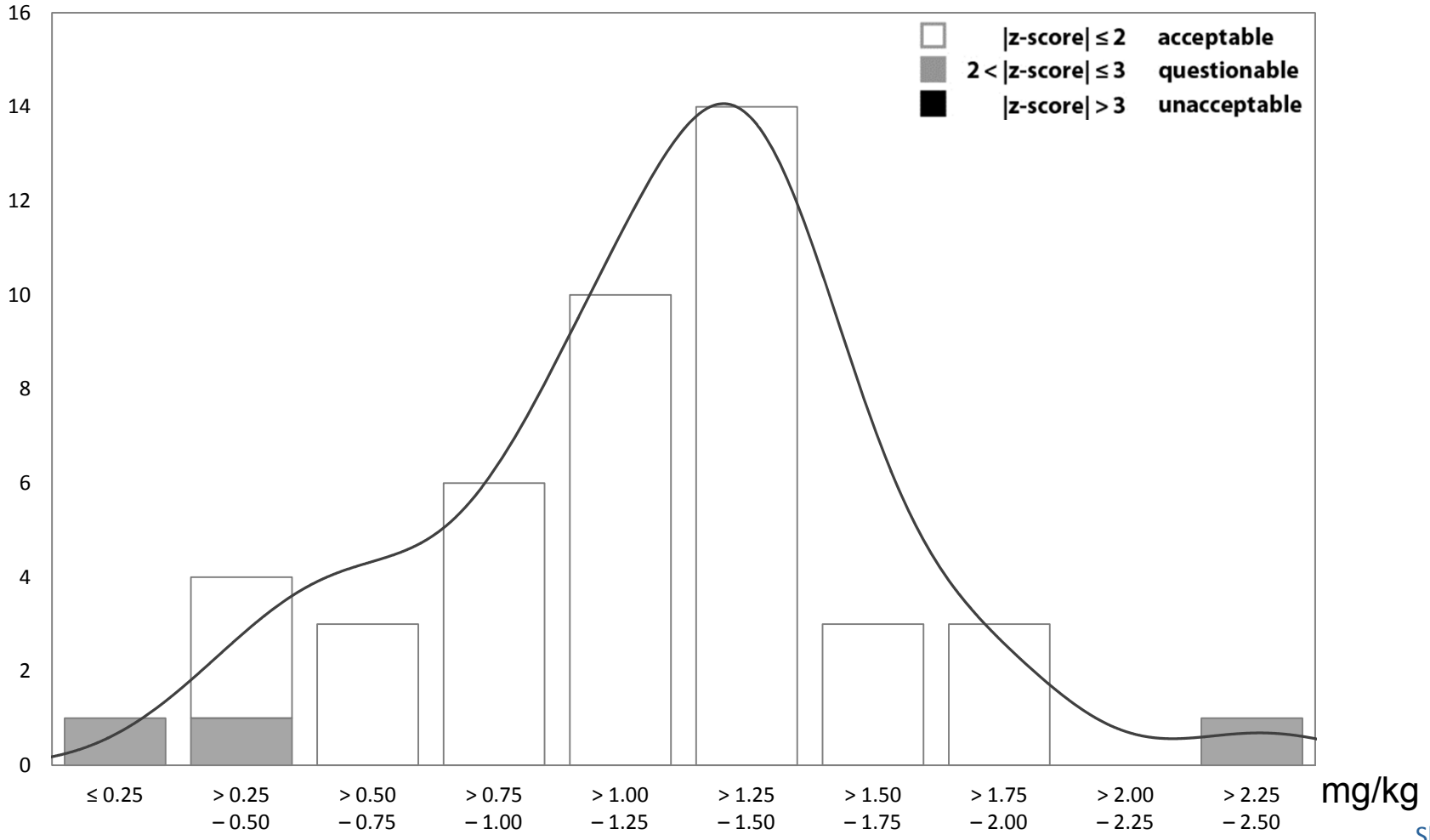

35
30
25
20
15
10
5
0
|z-score| ≤ 2 acceptable
2 < |z-score| ≤ 3 questionable
|z-score| > 3 unacceptable
≤ 0.25
> 0.25 – 0.50
> 0.50 – 0.75
> 0.75 – 1.00
> 1.00 – 1.25
> 1.25 – 1.50
> 1.50 – 1.75
> 1.75 – 2.00
> 2.00 – 2.25
> 2.25 – 2.50
> 2.50 – 2.75
mg/kg

GLYPHOSATE

Results	49
False Neg.	4
Median	0.340 [mg/kg]
Qn RSD	24.5 %
MRRL	0.01 [mg/kg]



GLYPHOSATE

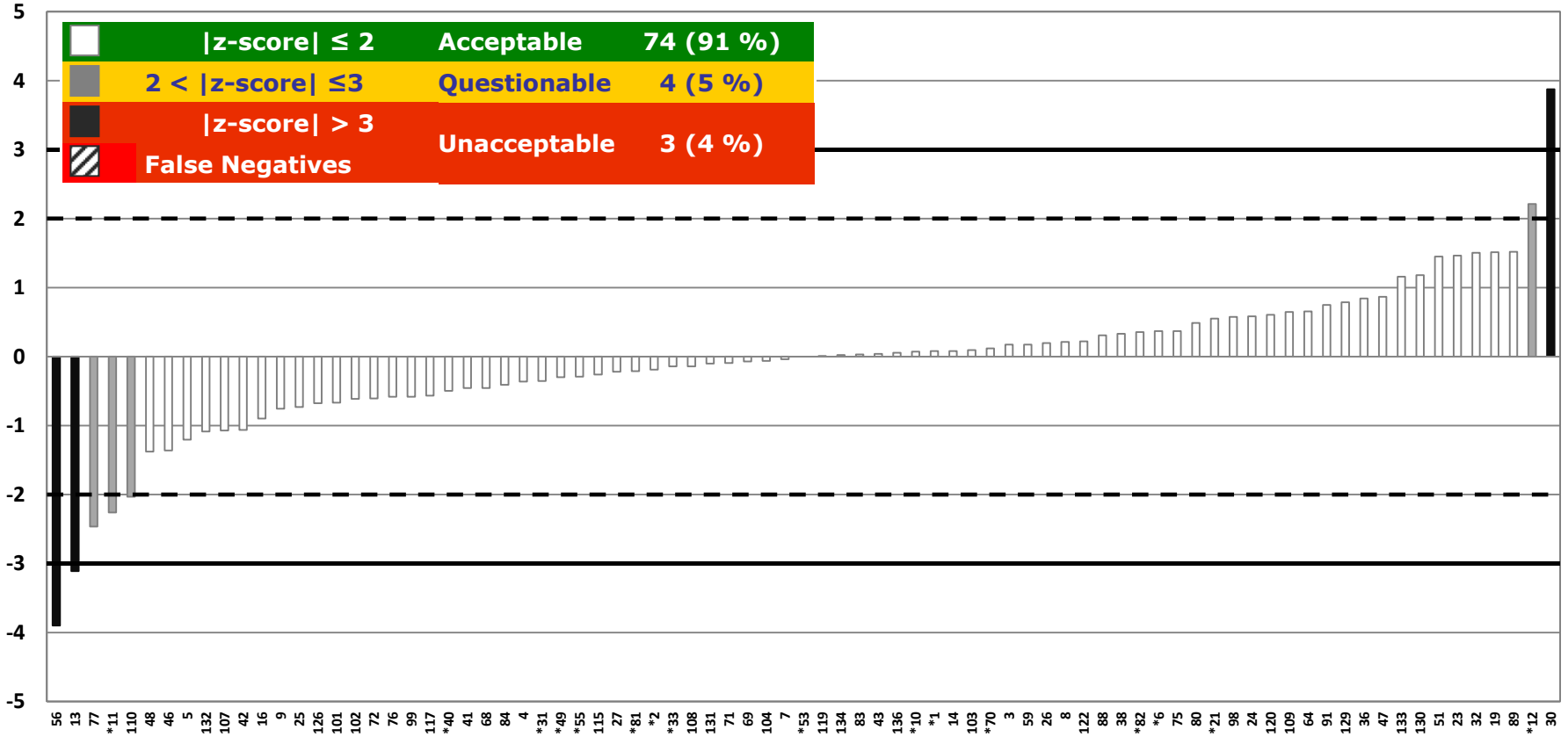

16
14
12
10
8
6
4
2
0
|z-score| ≤ 2 acceptable
2 < |z-score| ≤ 3 questionable
|z-score| > 3 unacceptable
≤ 0.25
> 0.25 – 0.50
> 0.50 – 0.75
> 0.75 – 1.00
> 1.00 – 1.25
> 1.25 – 1.50
> 1.50 – 1.75
> 1.75 – 2.00
> 2.00 – 2.25
> 2.25 – 2.50
mg/kg

EURL-SRM

HALOXYFOP (FREE ACID)

HALOXYFOP

Results	81
False Neg.	0
Median	0.508 [mg/kg]
Qn RSD	20.1 %
MRRL	0.01 [mg/kg]

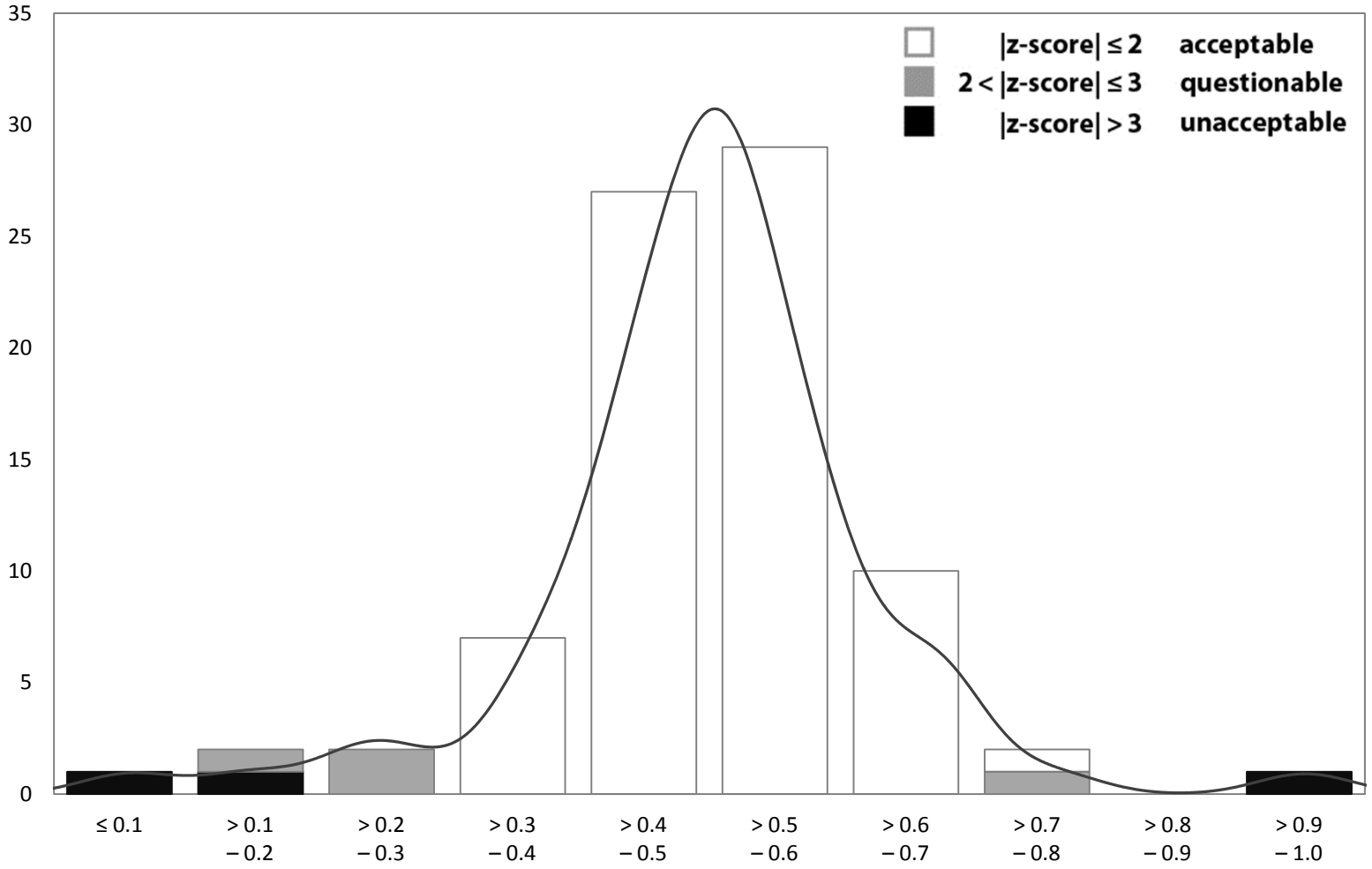


▲ using PSA for cleanup

EURL-SRM

HALOXYFOP (FREE ACID)

HALOXYFOP

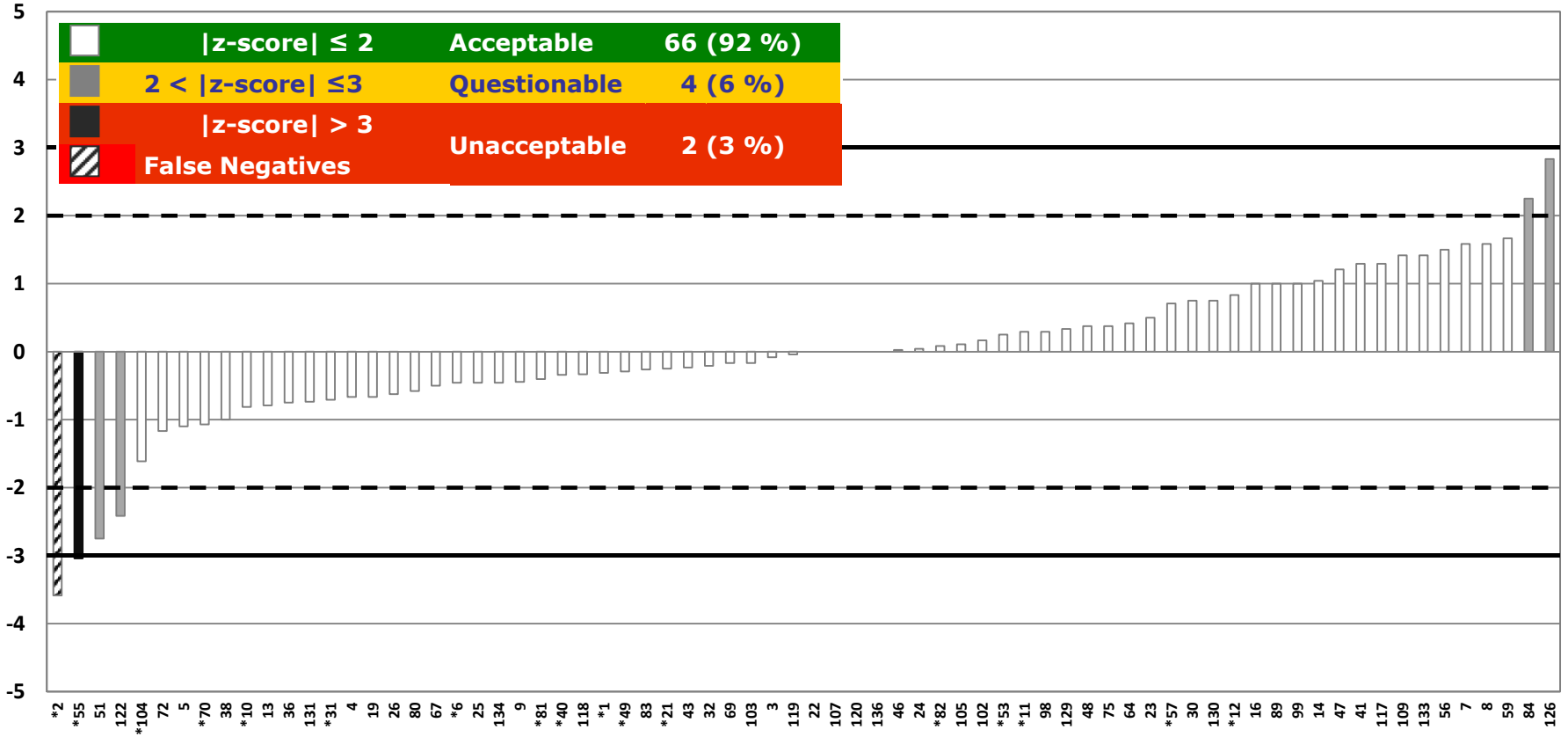


EURL-SRM

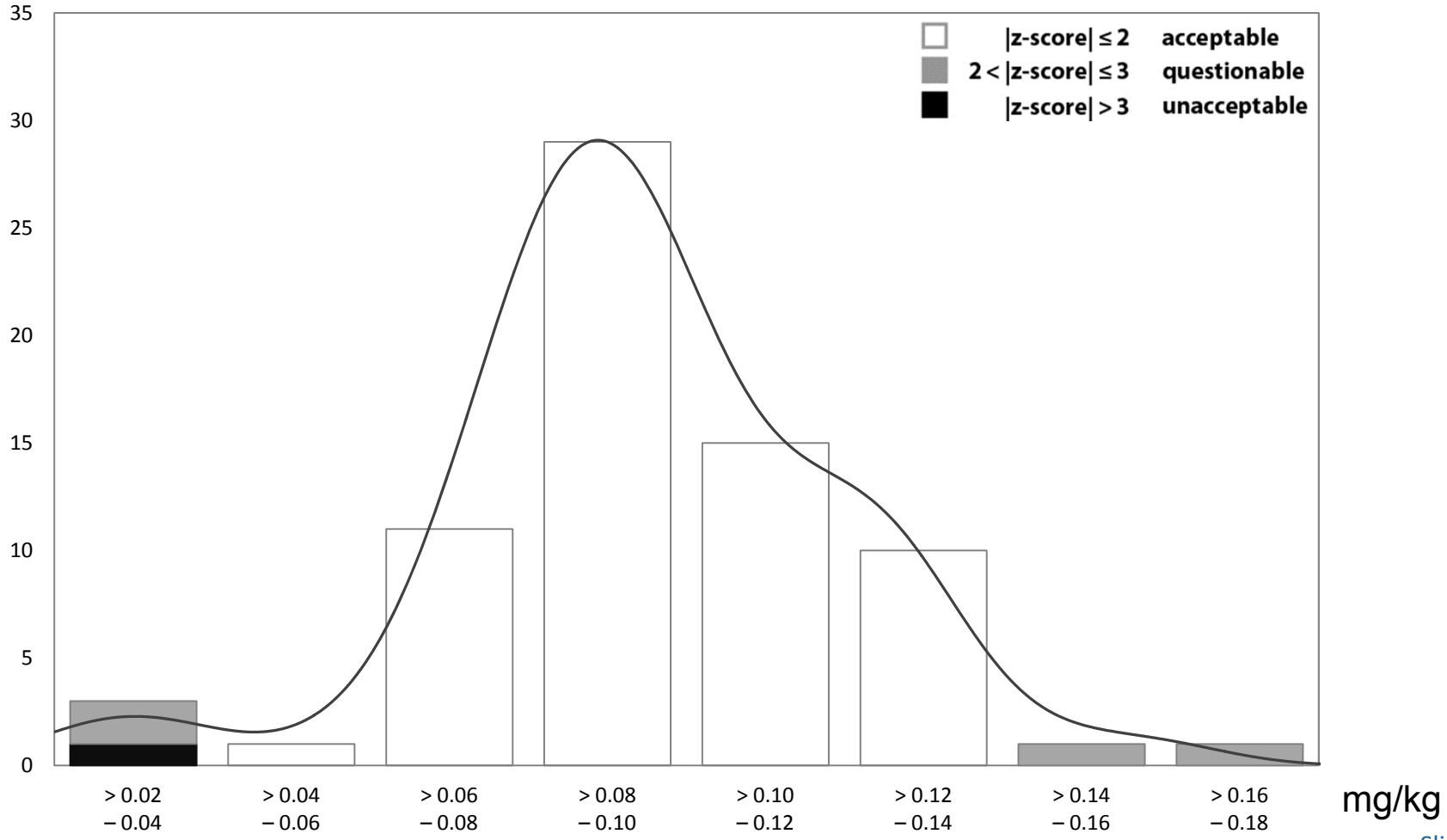
MEPIQUAT (CATION)

MEPIQUAT

Results	72
False Neg.	1
Median	0.096 [mg/kg]
Qn RSD	22.7 %
MRRL	0.01 [mg/kg]



MEPIQUAT

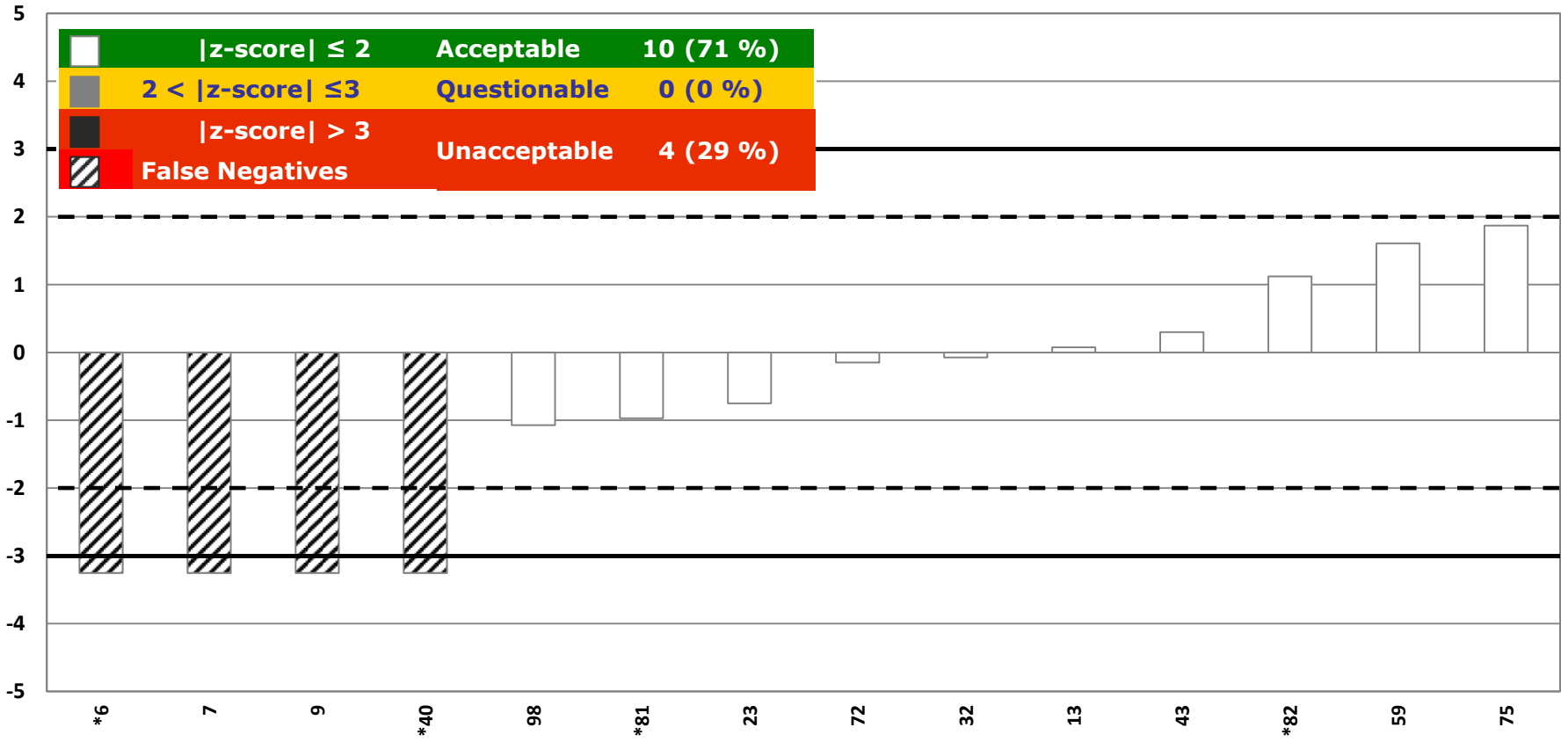

35
30
25
20
15
10
5
0
|z-score| ≤ 2 acceptable
2 < |z-score| ≤ 3 questionable
|z-score| > 3 unacceptable
> 0.02 – 0.04
> 0.04 – 0.06
> 0.06 – 0.08
> 0.08 – 0.10
> 0.10 – 0.12
> 0.12 – 0.14
> 0.14 – 0.16
> 0.16 – 0.18
mg/kg

EURL-SRM

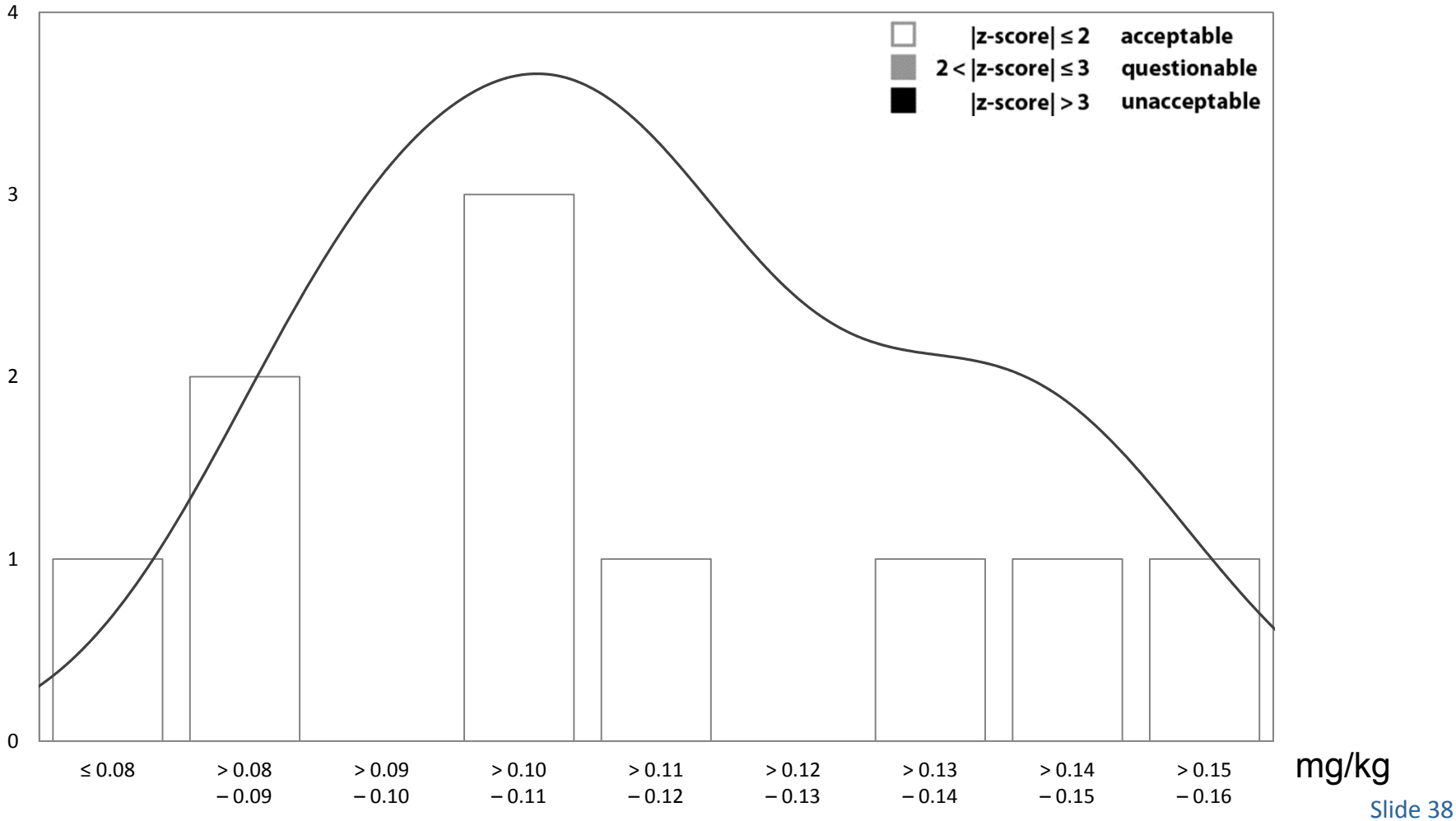
DIQUAT (DICATION)

DIQUAT

Results	14
False Neg.	4
Median	0.107 [mg/kg]
Qn RSD	28.6 %
MRRL	0.02 [mg/kg]



DIQUAT

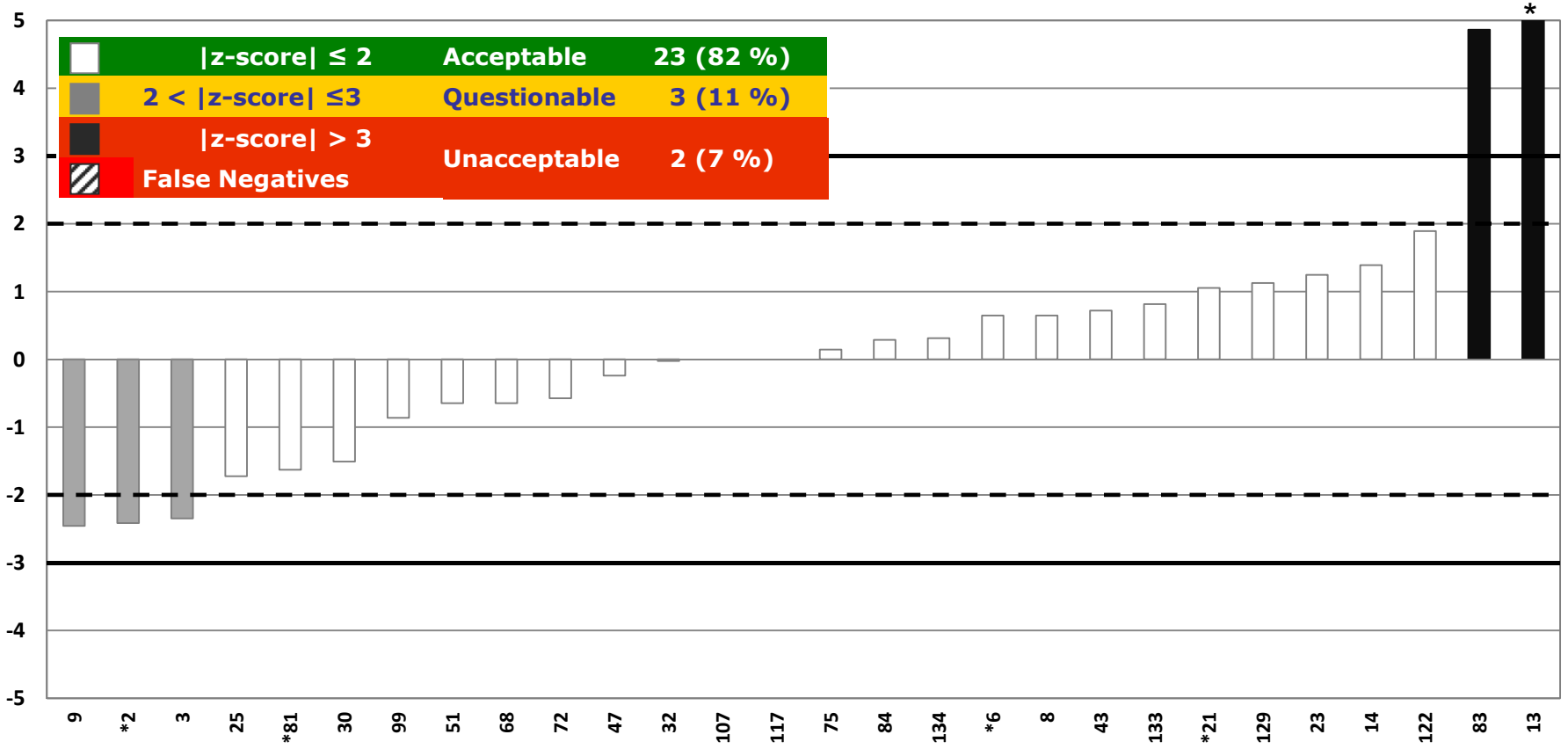

4
3
2
1
0
|z-score| ≤ 2 acceptable
2 < |z-score| ≤ 3 questionable
|z-score| > 3 unacceptable
≤ 0.08
> 0.08 – 0.09
> 0.09 – 0.10
> 0.10 – 0.11
> 0.11 – 0.12
> 0.12 – 0.13
> 0.13 – 0.14
> 0.14 – 0.15
> 0.15 – 0.16
mg/kg

EURL-SRM

FENTIN (EXPR. AS TRIPHENYLTIN CATION)

FENTIN

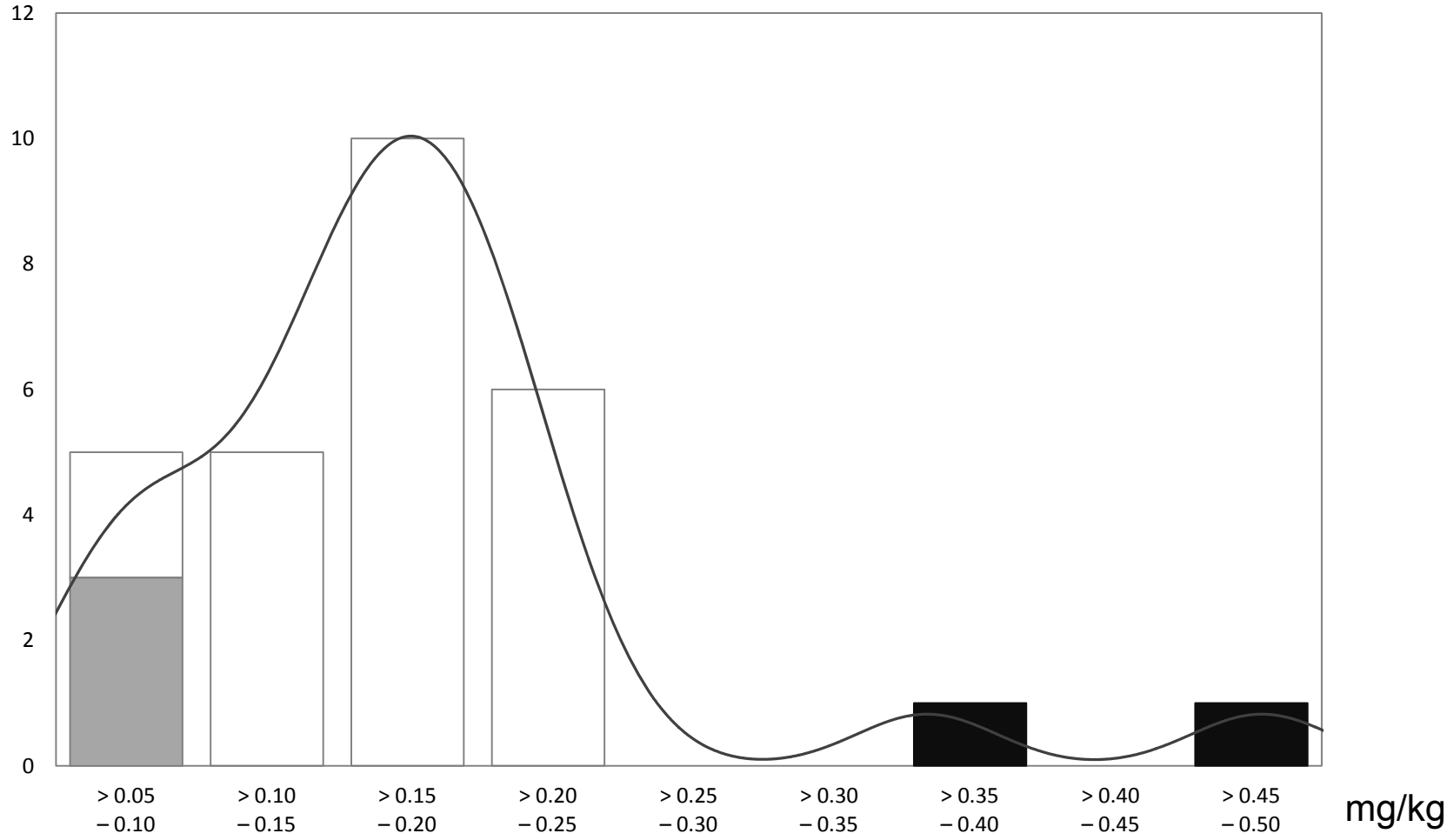
Results	28
False Neg.	0
Median	0.167 [mg/kg]
Qn RSD	37.1 %
MRRL	0.01 [mg/kg]



EURL-SRM

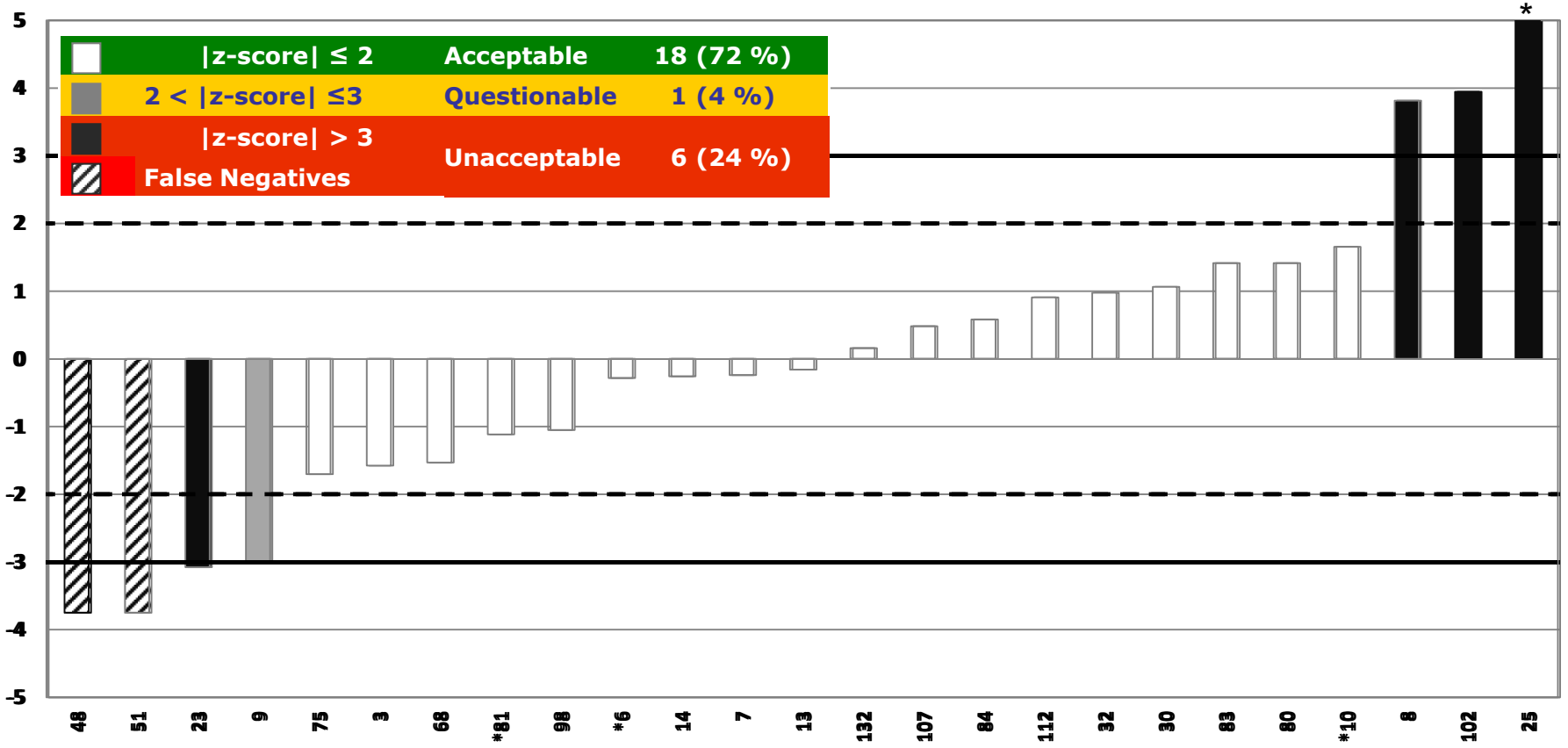
FENTIN (EXPR. AS TRIPHENYLTIN CATION)

FENTIN

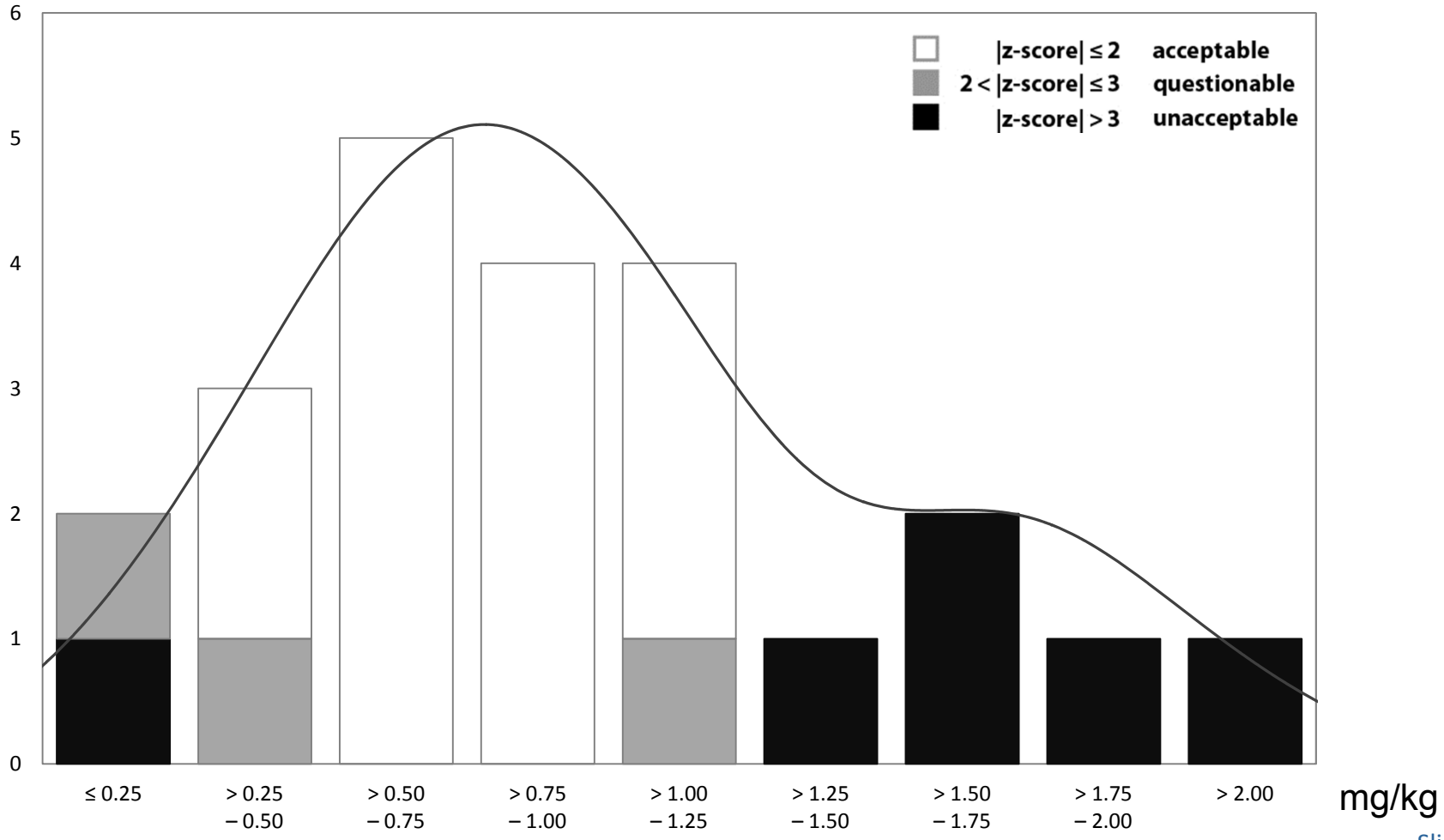


FOSETYL

Results	25
False Neg.	2
Median	0.798 [mg/kg]
Qn RSD	45.2 %
MRRL	0.05 [mg/kg]

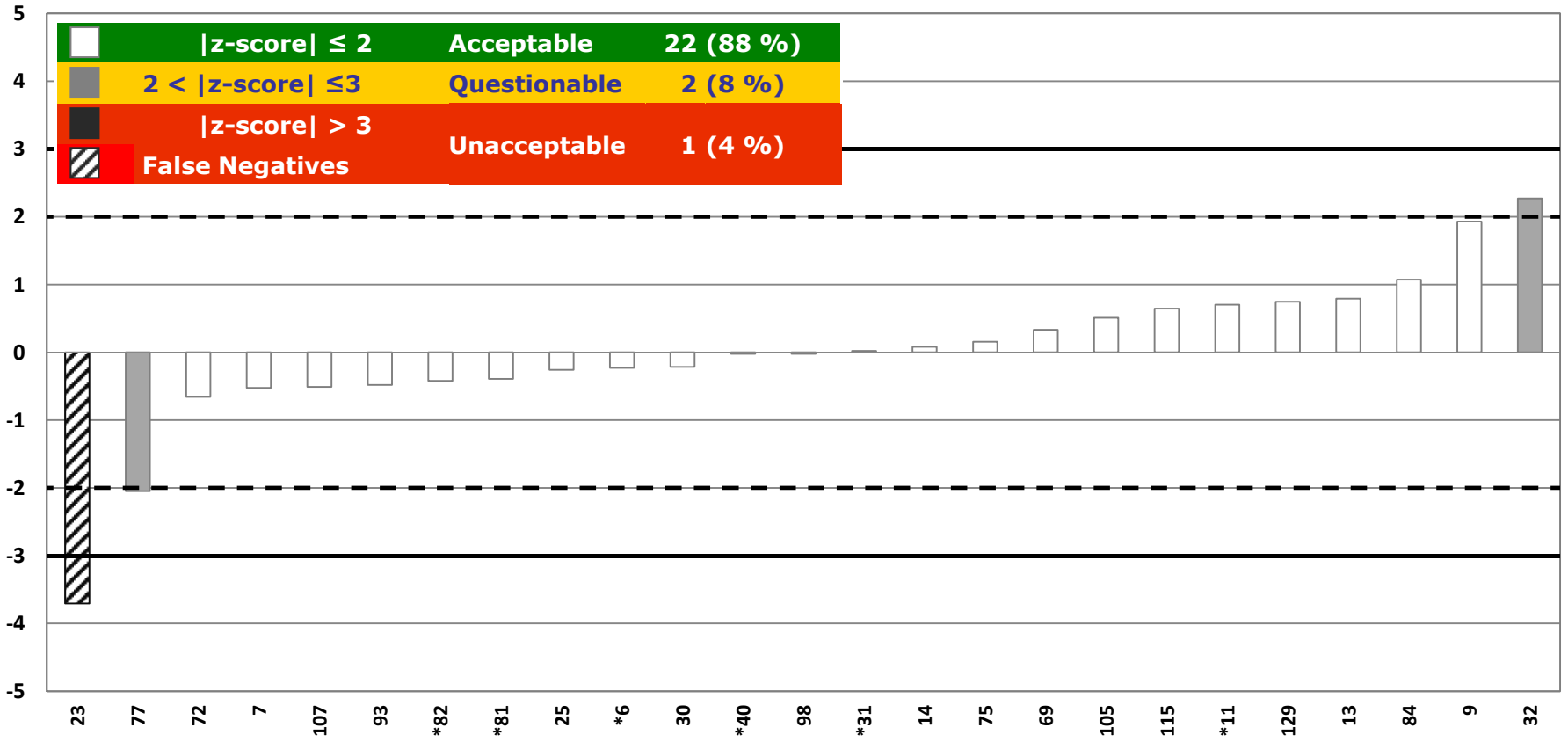


FOSETYL

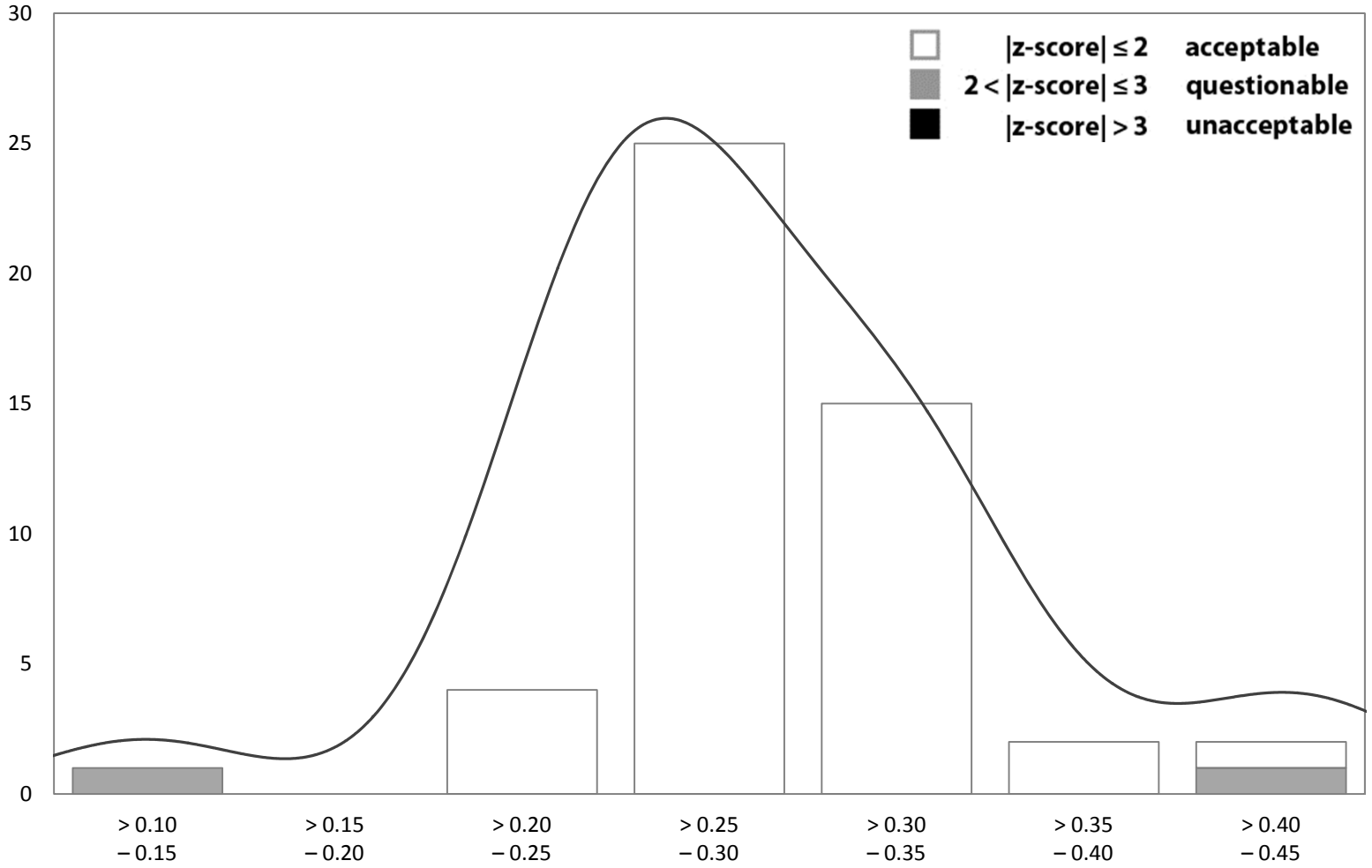

6
5
4
3
2
1
0
|z-score| ≤ 2 acceptable
2 < |z-score| ≤ 3 questionable
|z-score| > 3 unacceptable
≤ 0.25
> 0.25 – 0.50
> 0.50 – 0.75
> 0.75 – 1.00
> 1.00 – 1.25
> 1.25 – 1.50
> 1.50 – 1.75
> 1.75 – 2.00
> 2.00
mg/kg

GLUFOSINATE

Results	25
False Neg.	1
Median	0.271[mg/kg]
Qn RSD	16.9 %
MRRL	0.05 [mg/kg]

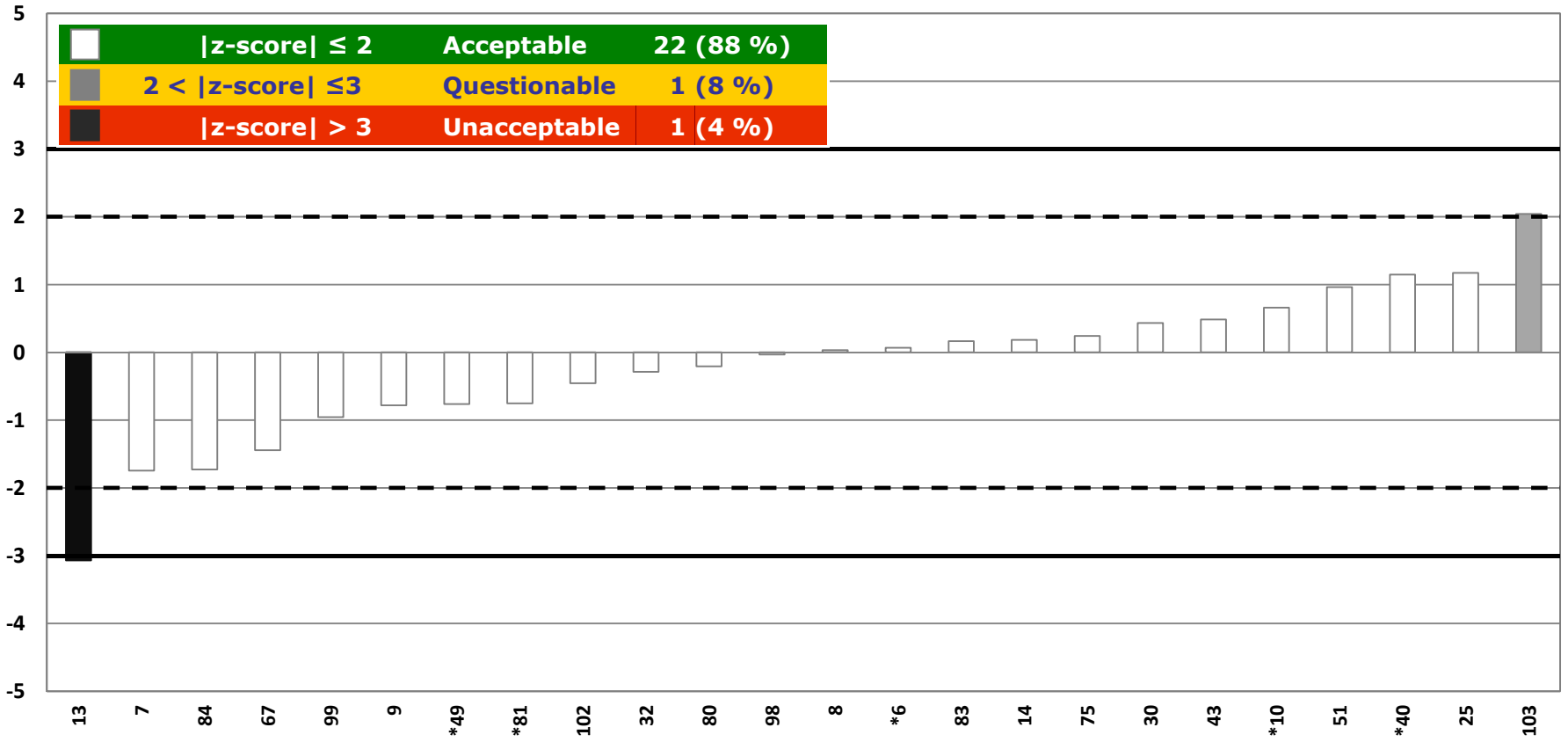


GLUFOSINATE

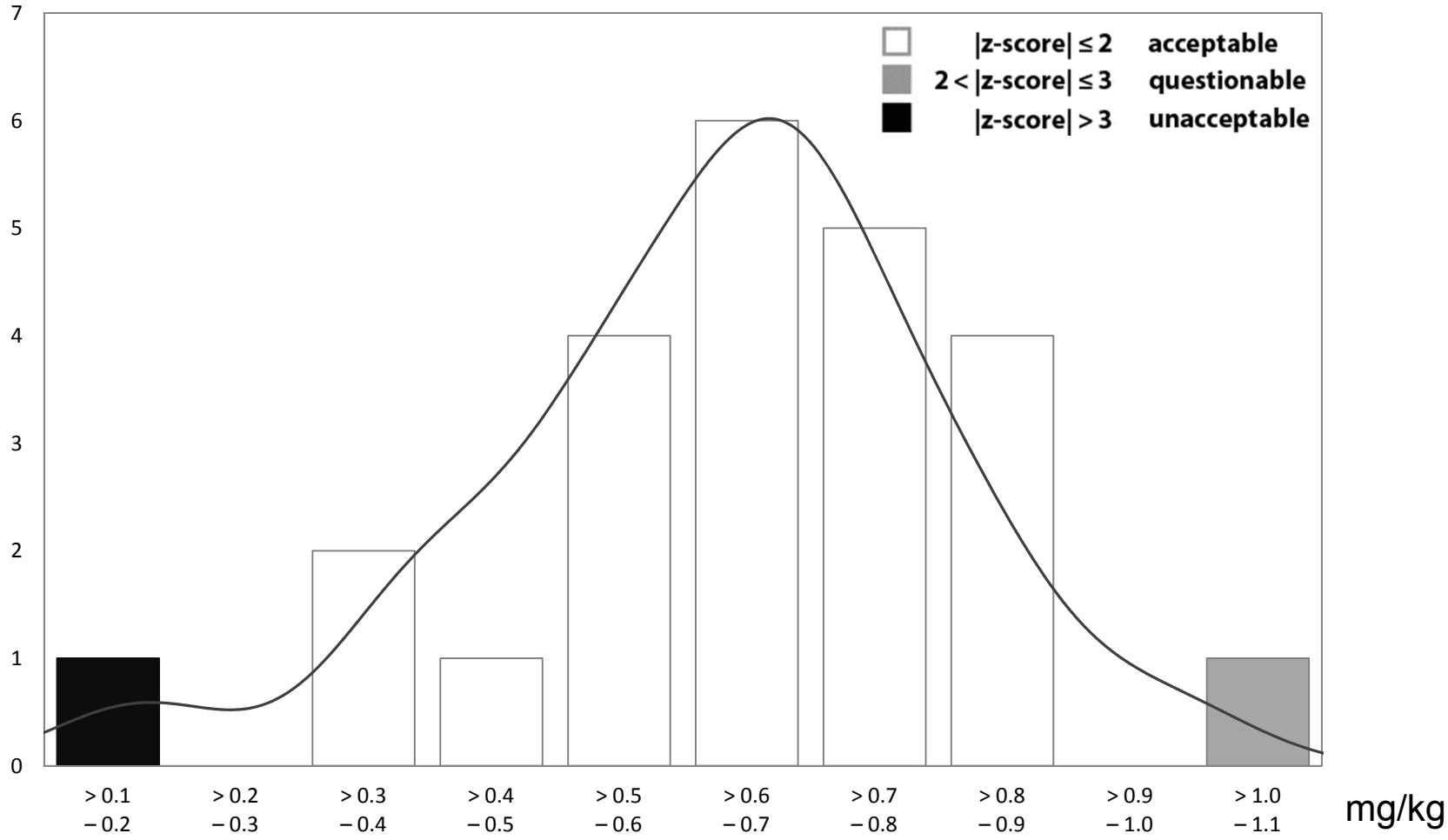


MALEIC HYDRAZIDE

Results	24
False Neg.	0
Median	0.689 [mg/kg]
Qn RSD	27.7 %
MRRL	0.05 [mg/kg]



MALEIC HYDRAZIDE

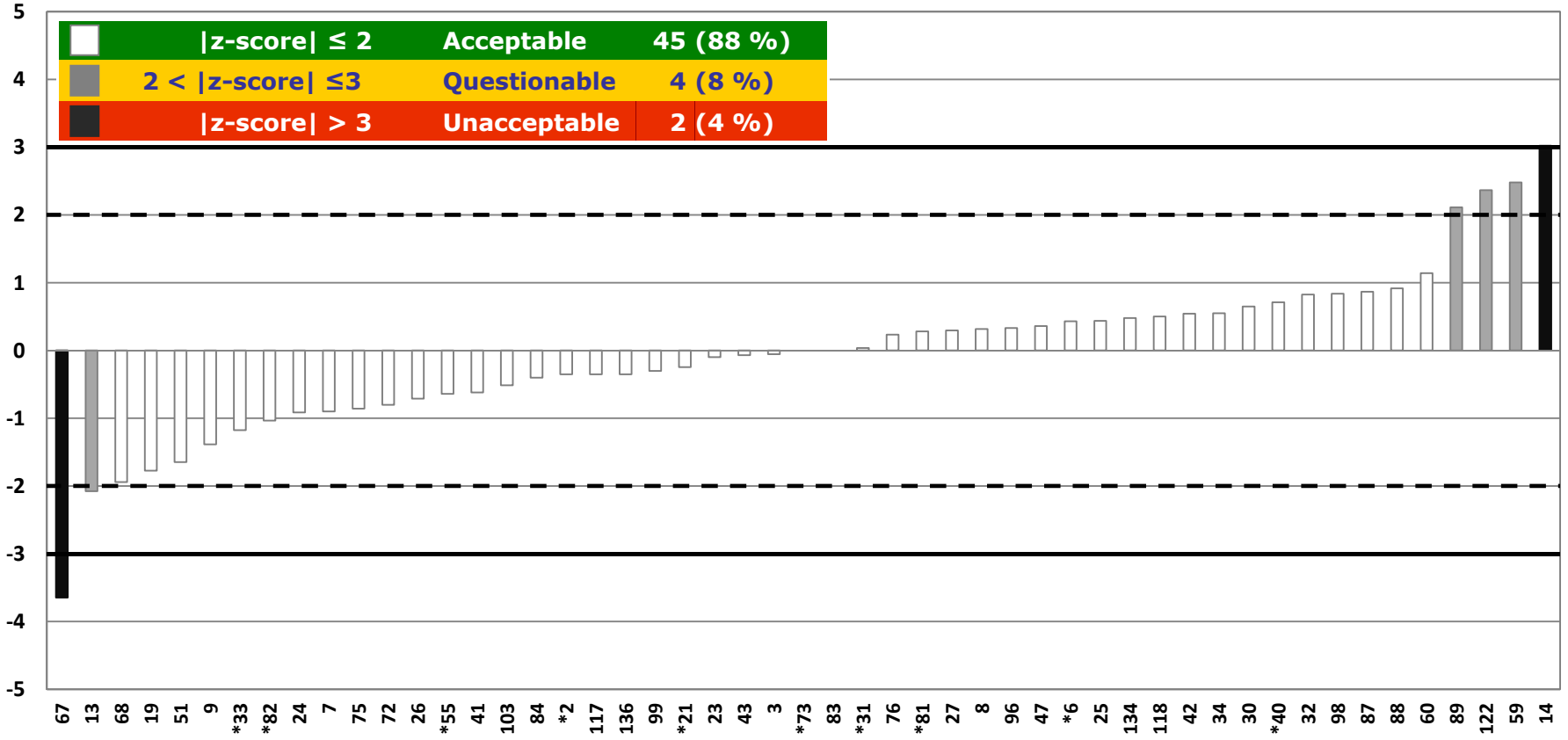


EURL-SRM

BAC-C12 (EXPR. AS CHLORIDE SALT)

BAC-C12

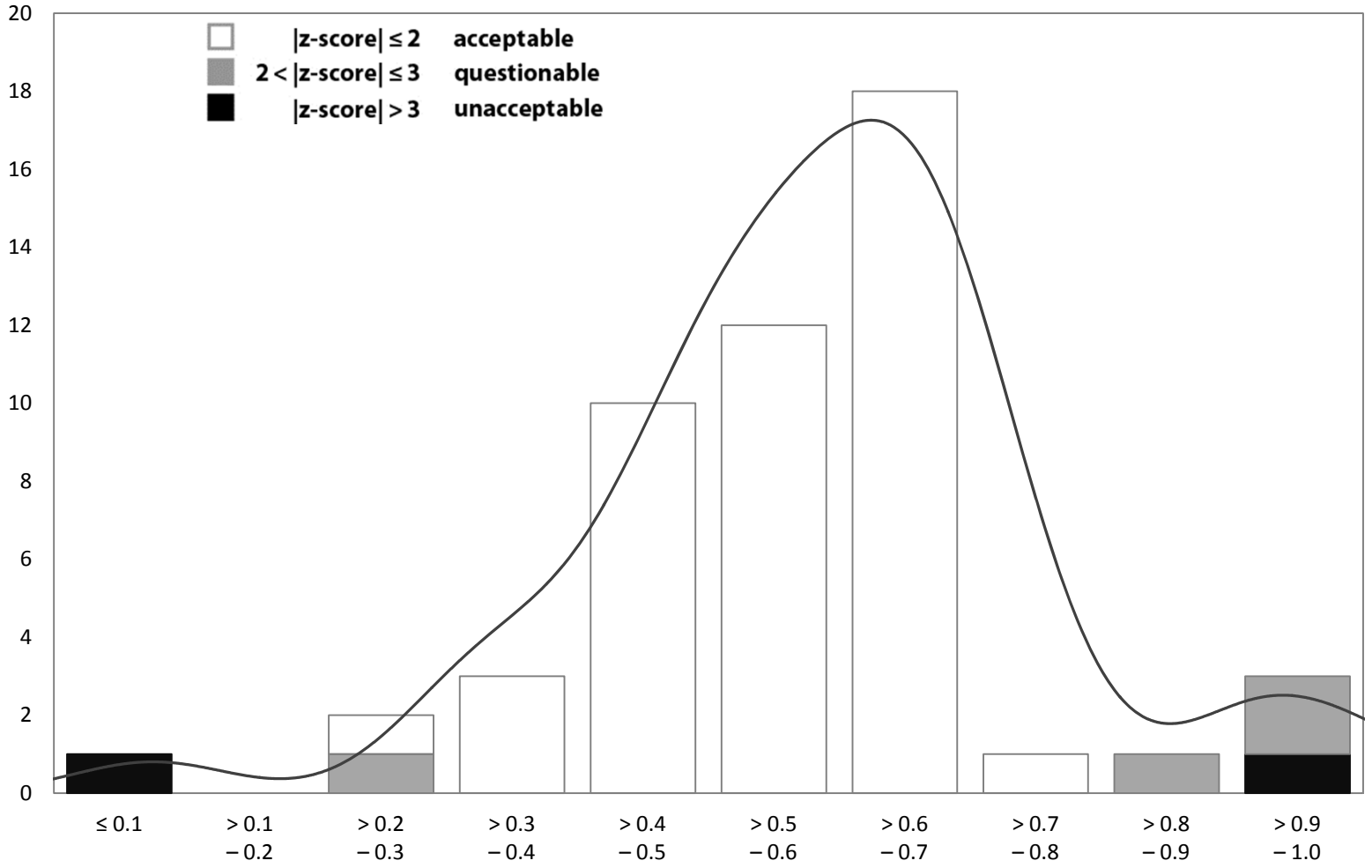
Results	51
False Neg.	0
Median	0.568 [mg/kg]
Qn RSD	24.1 %
MRRL	0.1 [mg/kg]



EURL-SRM

BAC-C12 (EXPR. AS CHLORIDE SALT)

BAC-C12

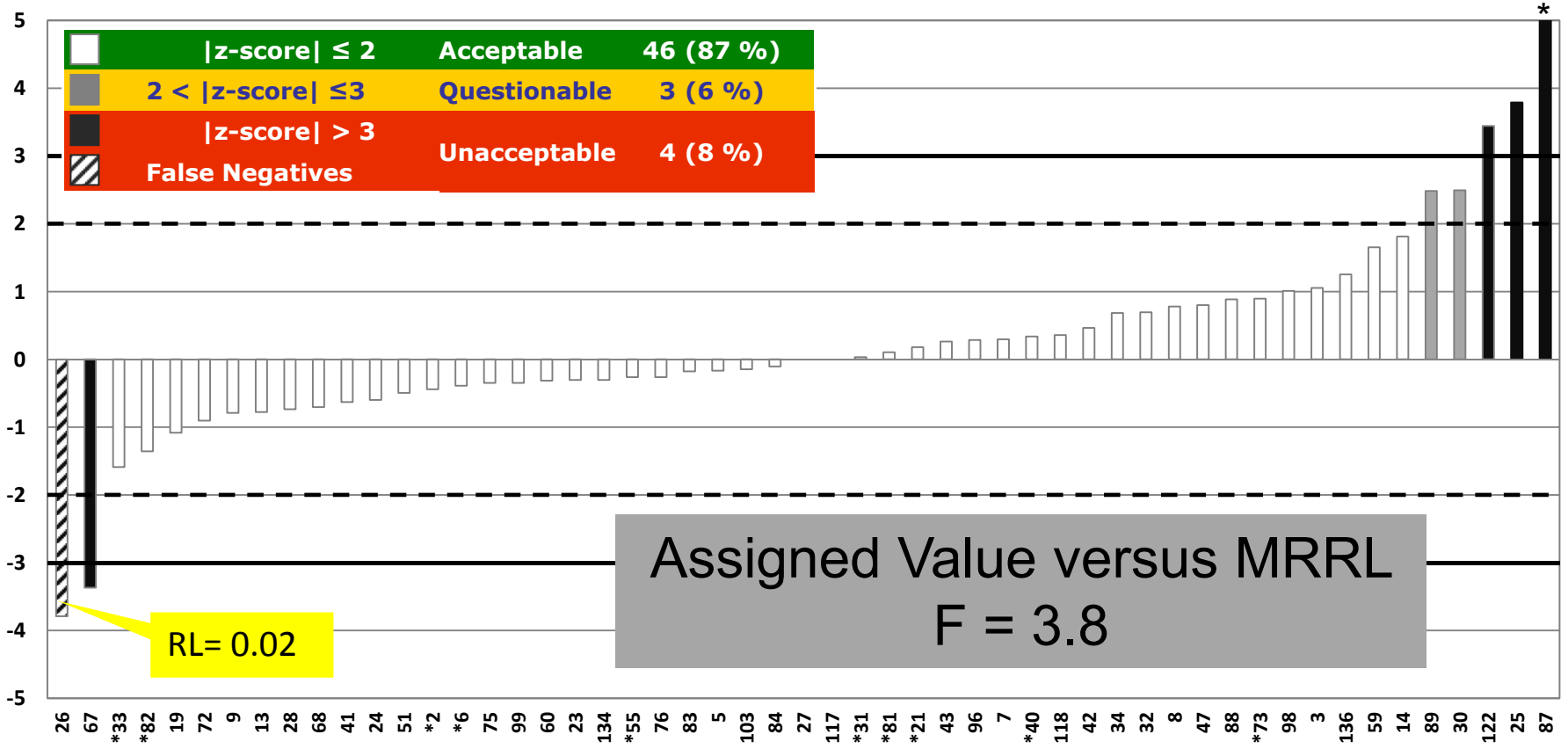


EURL-SRM

DDAC-C10 (EXPR. AS CHLORIDE SALT)

DDAC-C12

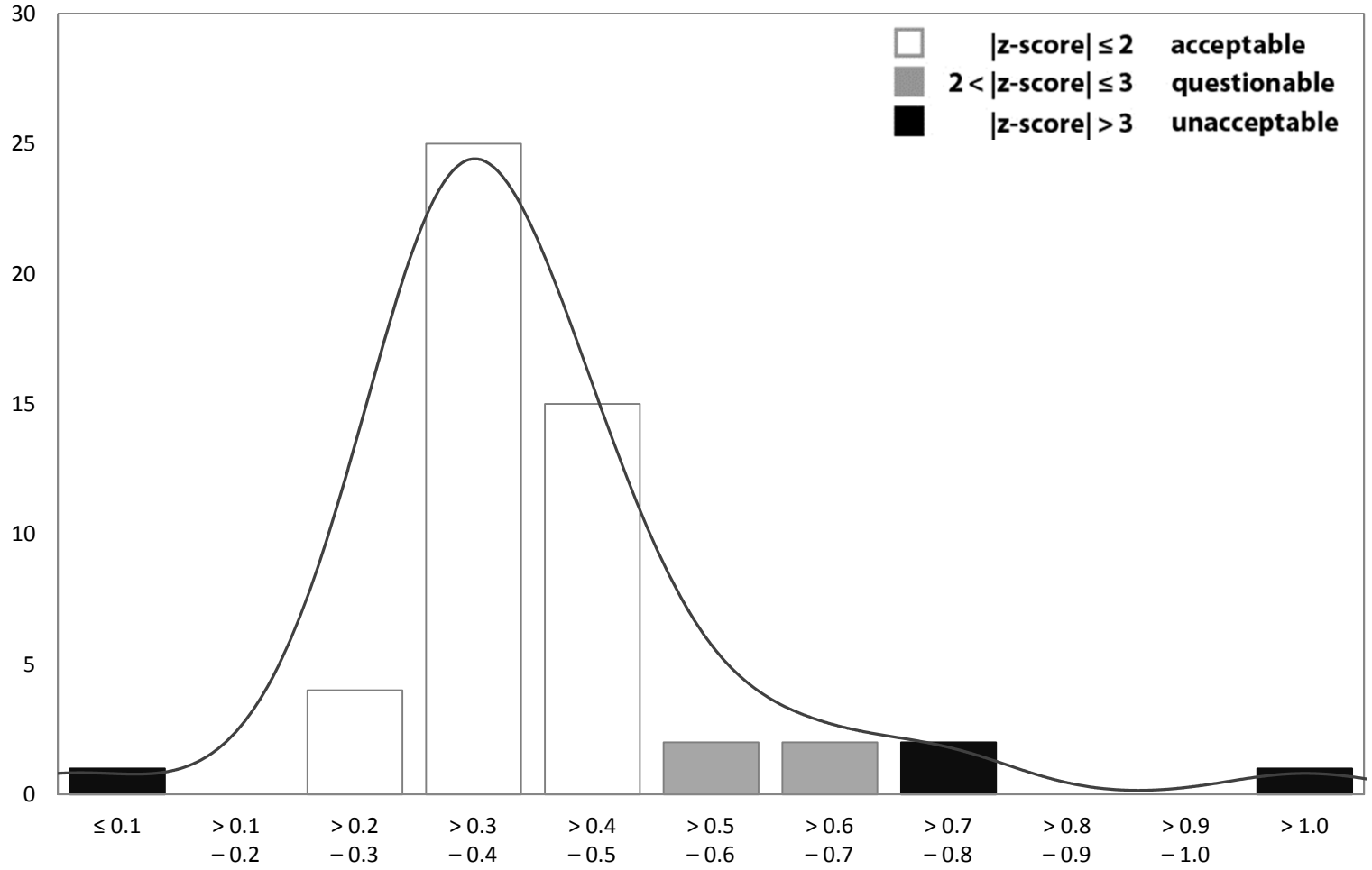
Results	53
False Neg.	1
Median	0.380 [mg/kg]
Qn RSD	22.9 %
MRRL	0.1 [mg/kg]



EURL-SRM

DDAC-C10 (EXPR. AS CHLORIDE SALT)

DDAC-C12



EURL-SRM

UNCERTAINTY OF ASSIGNED VALUE

Compulsory Compounds

Compound	No. of Numerical Results	Qn-RSD	Assigned Value (AV) [mg/kg]	Uncertainty of AV (UAV) [mg/kg]	UAV-Tolerance [mg/kg]	Judgement
Captan	90	26.0	1.010	+/- 0.03452	0.07575	passed
Cyromazine	75	27.2	0.102	+/- 0.00404	0.00765	passed
Dicofol	90	27.6	1.030	+/- 0.03742	0.07763	passed
Fenutatin Oxide	59	31.4	0.065	+/- 0.00358	0.00488	passed
Folpet	93	29.6	1.320	+/- 0.05185	0.09900	passed
Glyphosate	45	24.5	0.340	+/- 0.01509	0.02550	passed
Haloxyfop	81	20.1	0.508	+/- 0.01403	0.03810	passed
Mepiquat	71	22.7	0.096	+/- 0.00326	0.00720	passed

EURL-SRM

UNCERTAINTY OF ASSIGNED VALUE

Optional Compounds

Compound	No. of Numerical Results	Qn-RSD	Assigned Value (AV) [mg/kg]	Uncertainty of AV (UAV) [mg/kg]	UAV-Tolerance [mg/kg]	Judgement
Diquat	10	*28.6*	*(0.107)*	0.01265	0.00803	failed
Fentin	28	37.1	*(0.167)*	0.01465	0.01253	(failed)
Fosetyl	23	45.2	*(0.798)*	0.09852	0.05985	failed
Glufosinate	24	16.9	0.271	0.01199	0.02033	passed
Maleic hydrazide	24	27.7	0.689	0.04669	0.05169	passed
BAC-C12	51	24.1	0.568	0.02363	0.04260	passed
DDAC-C10	52	22.9	0.380	0.01560	0.02850	passed

EURL-SRM

FALSE POSITIVES

EU+EFTA

False Positives (FP) = 2

Compound	Lab	RL [mg/kg]	Results [mg/kg]
Chlormequat	51	0.01	0.025
Chlorothalonil	63	0.005	0.65

EURL-SRM

FALSE NEGATIVES

False Negatives (FNs) – COMPULSORY Compounds

EU+EFTA

Compulsory compounds	MRRL [mg/kg]	Assigned Value [mg/kg]	No. of FN	Lab Code	RL [mg/kg]
Captan	0.01	1.010	4	2	0.1
				67*	0.01
				96	0.05
				112	0.01
Cyromazine	0.01	0.102	2	119	0.01
				121	0.01
Dicofol	0.01	1.030	2	63	0.005
				112	0.01
Folpet	0.01	1.320	1	122	0.01
Glyphosate	0.05	0.340	4	81	0.05
				98	0.1
				115	0.05
				101	0.05
Mepiquat	0.01	0.096	1	2	0.01

14 FNs = 2.3%

* Reporting detection but no numerical result!

False Negatives (FNs) – OPTIONAL Compounds

EU+EFTA

Optional compounds:	MRRL [mg/kg]	Assigned Value [mg/kg]	No. of FNs	Lab	RL [mg/kg]
Diquat	0.02	0.107	4	6	0.02
				40	0.02
				7	0.02
				9	0.01
Fosetyl	0.05	0.798	2	51	0.5
				48	0.05
Glufosinate	0.05	0.750	2	23	0.02
				1	0.01
DDAC-C10	0.1	0.380	1	26	0.02

8 FNs = 3.6%

Overall: 22 FNs = 2.8%

EURL-SRM

OVERALL PERFORMANCE I

Compulsory compounds:

EU+EFTA

Compound	No. of Labs	FNs/ Outliers	AAZ	Qn-RSD [%]	☺ A	😐 Q	☹ U
Captan	94	4 / 1	1.03	26.0	89 %	4 %	6 %
Folpet	94	1 / 0	1.02	29.6	89 %	6 %	4 %
Dicofol	92	2 / 2	1.18	27.6	87 %	4 %	9 %
Haloxyfop	81	0 / 0	0.73	20.1	91 %	5 %	4 %
Mepiquat	72	1 / 0	0.80	22.7	92 %	6 %	3 %
Cyromazine	77	2 / 2	1.09	27.2	86 %	8 %	6 %
Fenutatin Oxide	59	0 / 3	1.26	31.4	85 %	5 %	10 %
Glyphosate	49	4 / 0	1.02	24.5	86 %	6 %	8 %

EURL-SRM

OVERALL PERFORMANCE II

EU+EFTA

Optional Compounds:

Compound	No. of Labs	FNs/ Outliers	AAZ	Qn-RSD [%]	☺ A	😐 Q	☹ U
DDAC-C10	53	1 / 1	1.00	22.9	87 %	6 %	8 %
BAC-C12	51	0 / 0	0.85	24.1	88 %	8 %	4 %
Fentin	28	0 / 1	1.36	37.1	82 %	11 %	7 %
Glufosinate	25	1 / 0	0.75	16.9	88 %	8 %	4 %
Maleic hydrazide	24	0 / 0	0.83	27.7	92 %	4 %	4 %
Fosetyl	*23*	*2 / 1*	*1.74*	*45.2*	*72 %*	*4 %*	*24 %*
Diquat	*14*	*4 / 0*	*1.50*	*28.6*	*71 %*	*0 %*	*29 %*

EURL-SRM

OVERALL PERFORMANCE III

Rules for Category A:

- Numerical results for at least 7 out of 8 compulsory pesticides present in test item
- No FPs

EU+EFTA

	No. of Labs	[%]
Category A	54	50 %
Category B	53	50 %

Reported reasons for poor performance

- No conclusive error sources identified ► various compounds
- Problematic Calibration (no IL-IS, Matrix Effects)► Glufosinate, Dicofol, Cyromazine, FBO, Mepiquat
- Degradation of Std Sln ► Captan, Folpet, Fosetyl, DDAC, Glyphosate
- Inappropriate Cleanup Approach ► Haloxyfop
- Inappropriate Method ► Fenbutatin Oxide, Glyphosate
- Technical problems
- Calculation errors

Use of isotope labelled ISTDs

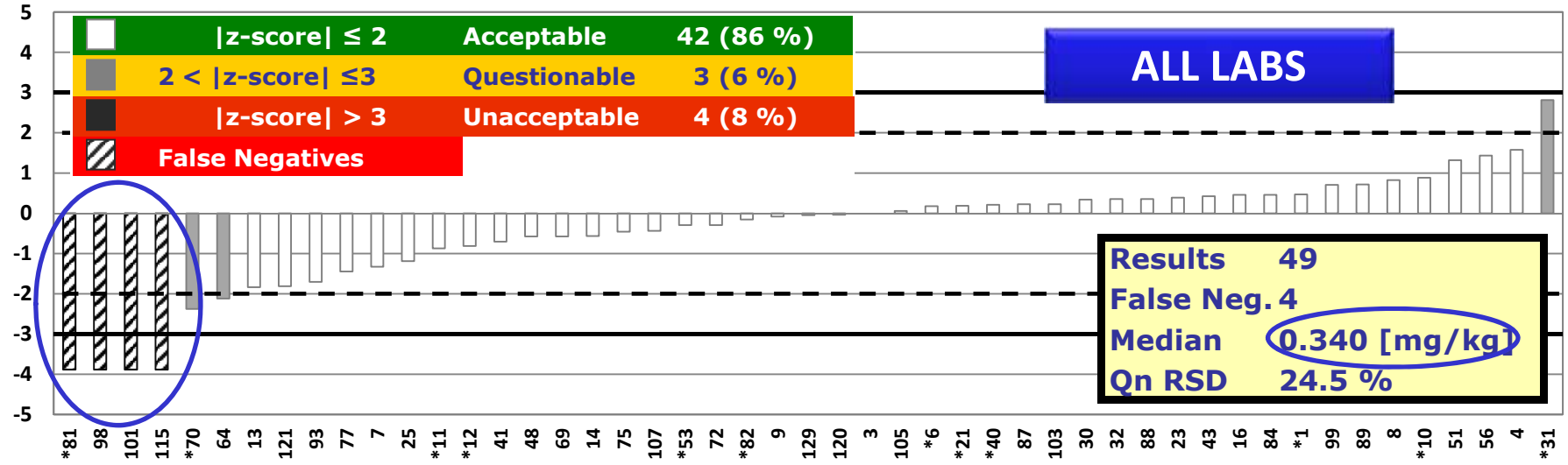
ALL LABS

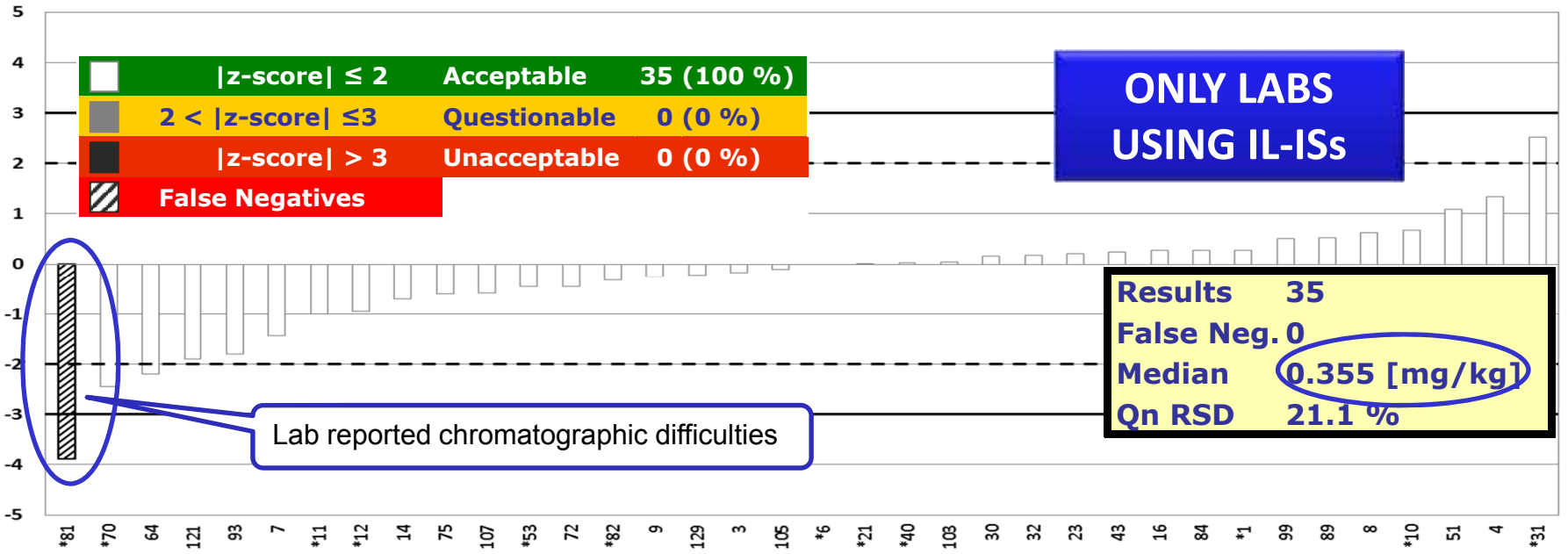
Compulsory Compound	No. of Labs	Using IL-IS	%
Glyphosate	54	35	65%
Mepiquat	76	40	47%
Cyromazine	82	10	12%
Folpet	98	8	8%
Captan	98	7	7%
Dicofol	96	5	5%
Haloxyfop	81	0	0%
Fenutatin Oxide	59	0	0%

Optional Compound	No. of Labs	Using IL-IS	%
Diquat	16	9	56%
Maleic hydrazide	25	8	32%
Fosetyl	26	8	31%
Glufosinate	27	7	26%
DDAC-C10	53	1	0,5%
BAC-C12	51	1	0,5%
Fentin	28	0	0%

EURL-SRM

BENEFIT OF USING IL-ISs





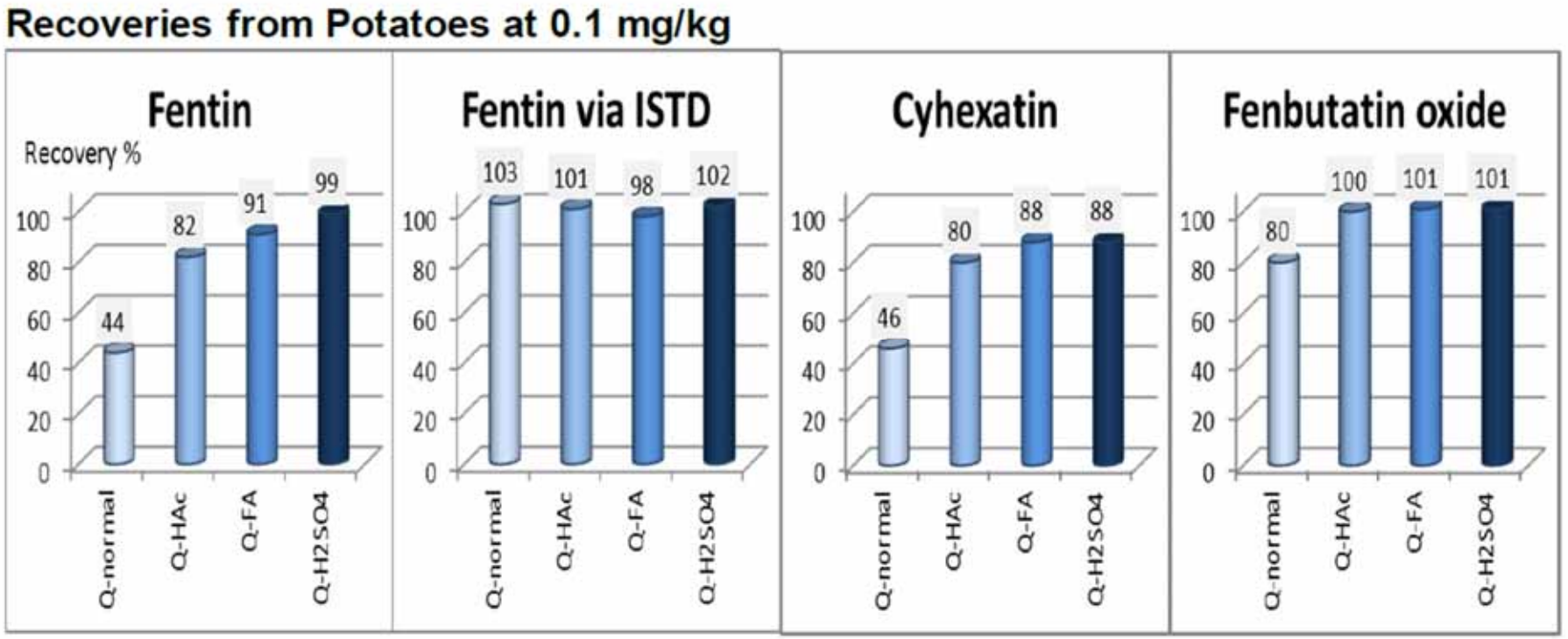
BENEFIT OF USING IL-ISs

ALL LABS

Impact of IL-IS on Qn-RSD and FNs

Compound	No. of Labs	Qn-RSD	WITH IL-IS				W/O IL-IS			
			%	QnRSD	AAZ	FNs	%	QnRSD	AAZ	FNs
Mepiquat	76	22.7%	47%	18%	0,58	0	53%	27%	0,97	1
Glyphosate	54	24.5%	65%	17%	0,64	1	35%	33%	0,91	3
Diquat	16	28.6%	56%	-	-	0	34%	-	-	5
Fosetyl	26	45.2%	31%	-	-	0	69%	-	-	2
Cyromazine	82	27.2%	12%	-	-	0	88%	-	-	2
Glufosinate	27	16.9%	26%	-	-	0	74%	-	-	1
Maleic H.	25	27.7%	32%	-	-	0	68%	-	-	1

Impact of pH in the Extraction of Organotins



Assigned Value: 0.065 mg/kg

Homogeneity test: 0.072 mg/kg

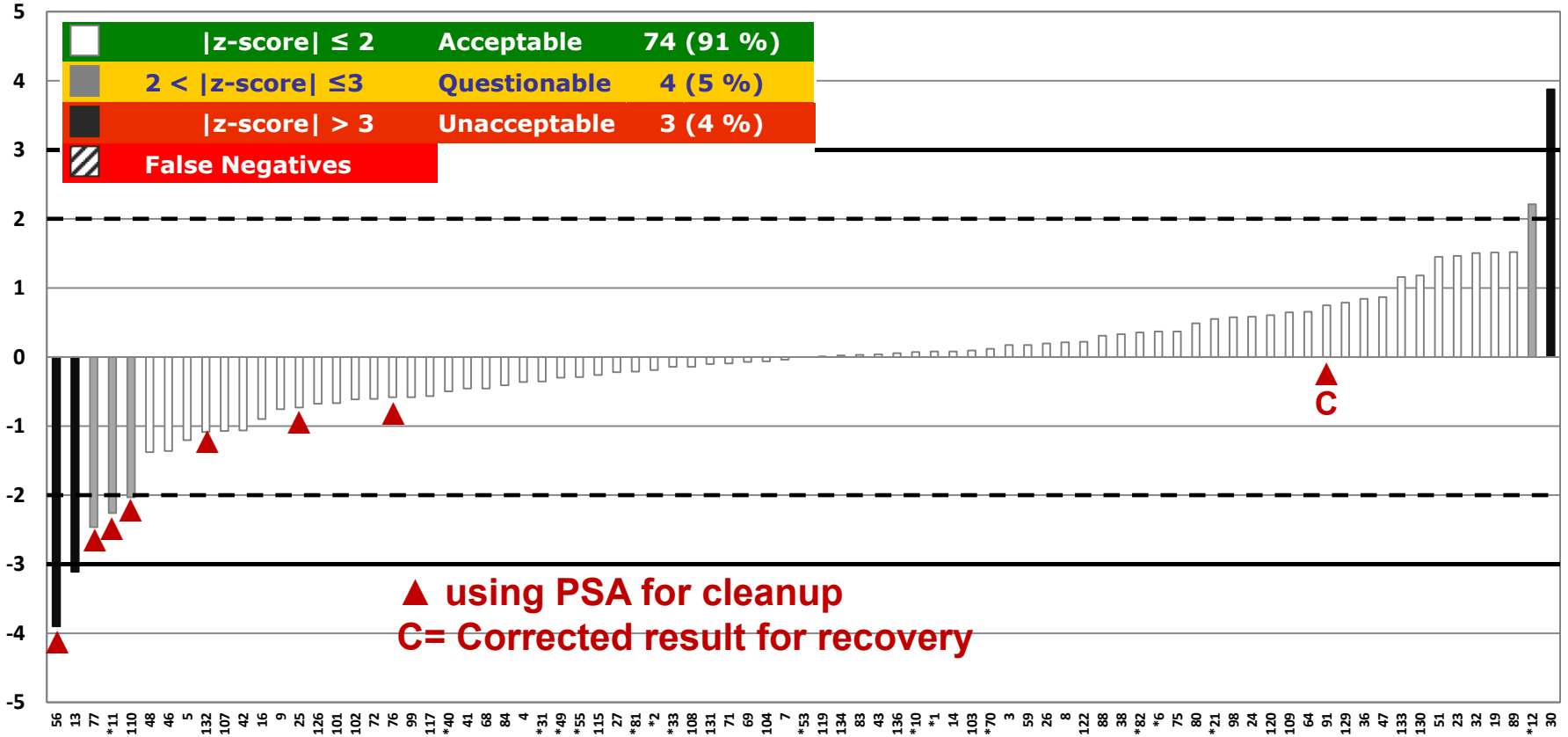
Stability test: 0.065mg/kg

EURL-SRM

IMPACT OF dSPE CLEANUP WITH PSA

HALOXYFOP

Results	81
False Neg.	0
Median	0.508 [mg/kg]
Qn RSD	20.1 %
MRRL	0.01 [mg/kg]



ALL PESTICIDES

Initial Temperature of Analytical Portion:

Initial Temperature	No. of cases	%	
Ambient	**423**	**32%**	
Cold (4 °C -10 °C)	250	19%	**34% cold**
Just thawed	227	17%	
Slightly frozen	186	14%	**31% frozen**
Deep frozen (-18°C)	250	19%	
Sum	**1336**	**100%**	

EURL-SRM

METHODOLOGY INFORMATION

ALL PESTICIDES

Soaking/waiting Time (min)	No. of cases	%
1	218	27%
2	224	28%
5	125	15%
10	101	13%
15	22	3%
20	44	5%
30	45	6%
> 30	29	4%
Sum	**808**	**100%**

55% ≤ 2 min

31% ≥ 10 min

EURL-SRM

METHODOLOGY INFORMATION

Extraktion Time	No. of cases	%
1	**305**	**23%**
2	**257**	**20%**
3	72	5%
5	181	14%
10	118	9%
15	148	11%
20	71	5%
25	8	1%
30	95	7%
45	7	1%
60	33	3%
>60	16	1%
Sum	**1311**	**100%**

ALL PESTICIDES

43% ≤ 2 min

38% ≥ 10 min

EURL-SRM

Extraction Time using QuEChERS

Extraction Time	Initial Sample Condition					OVERALL	
	Deep frozen	Slightly frozen	Just thawed	Cold (4-10 °C)	Ambient	#	%
1 min	40	44	14	33	41	172	25%
2 min	22	18	56	18	12	126	19%
3 min		10			7	17	3%
5 min		13	25	32	35	104	15%
10 min	13	7	14	19	22	76	11%
15 min	14	8	25		26	73	11%
20 min	22			12		34	5%
30 min	9	10	5	7	29	60	9%
≥ 60 min			3	10		13	2%
SUM #	120	110	142	131	172	675	100%
%	18%	16%	21%	19%	25%	100%	

Σ= 37 %

Σ= 34%

In 37 % of the cases extraction times are not sufficient !!

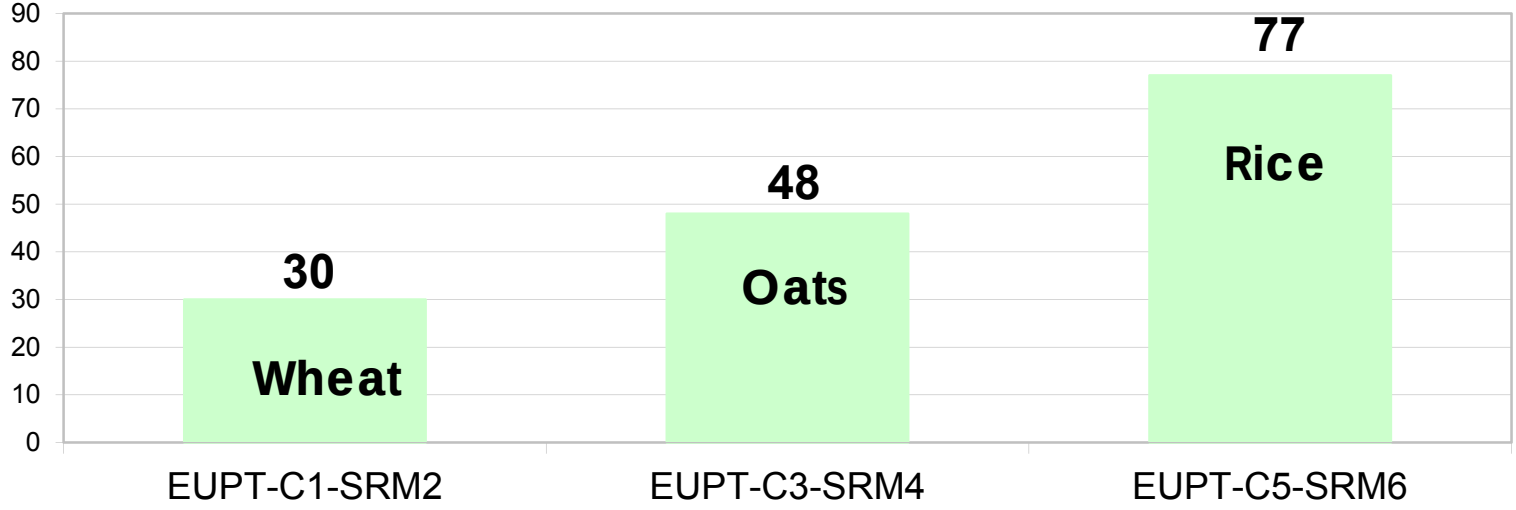
Source: EUPT-SRM8

EUPT-SRM 1– 8

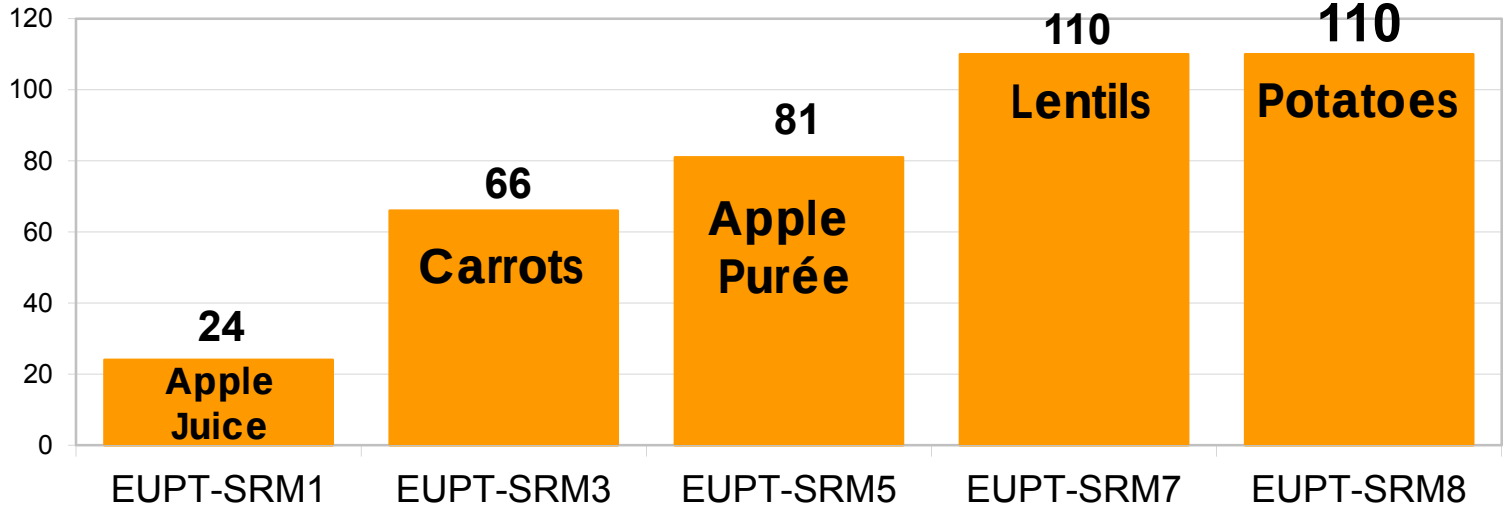
Overall Evaluation

NO. OF LABS SUBMITTING RESULTS IN EUPT-SRMs

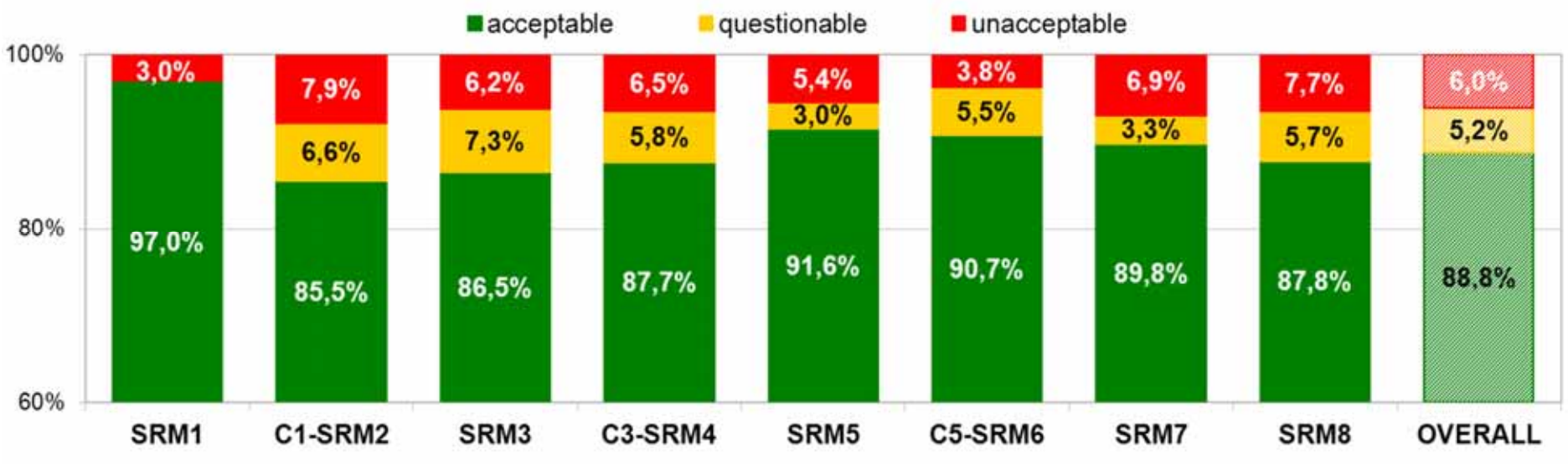
Cereals & Feed



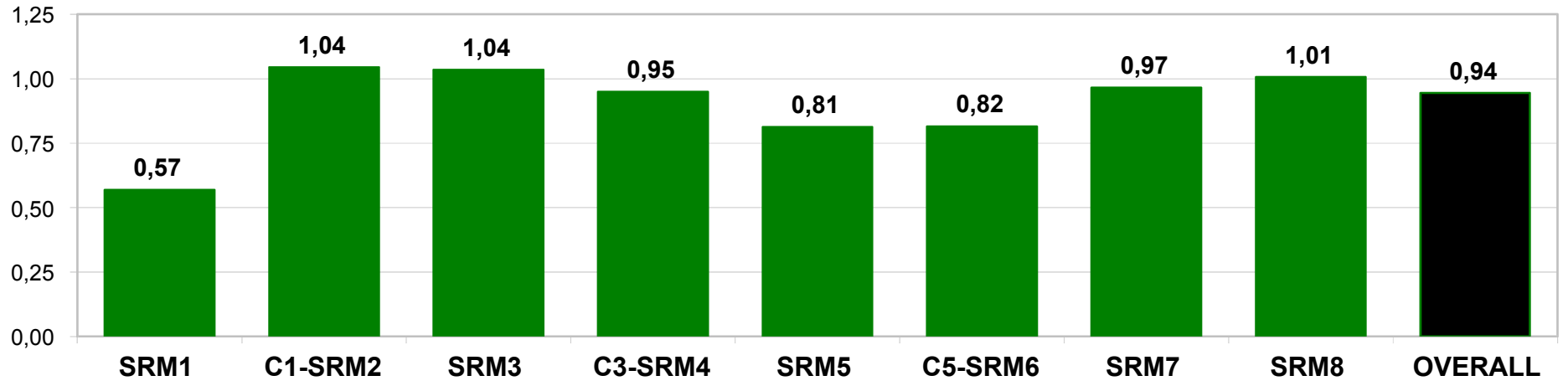
Fruits & Vegetables



EURL-SRM LAB PERFORMANCE IN EUPT-SRMs 1-8

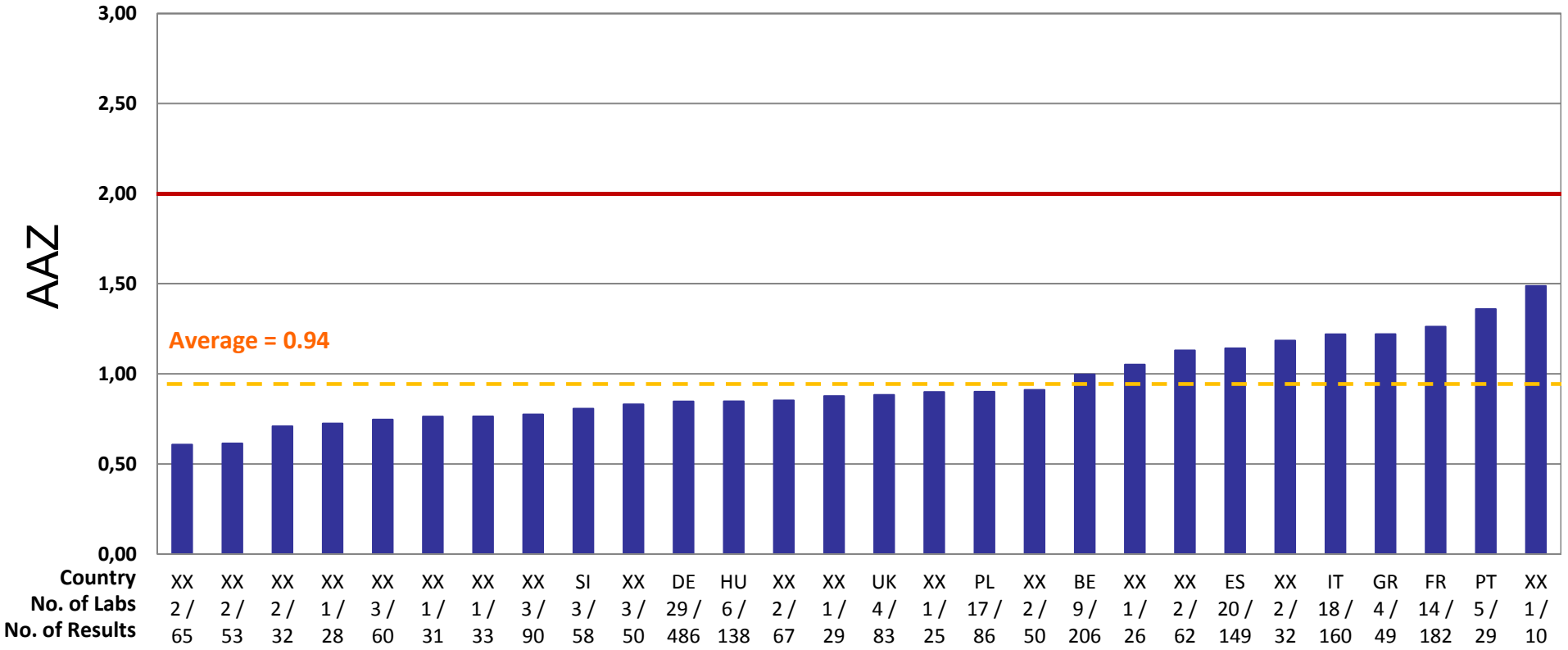


Ave. Abs. z -Score over EUPT -SRMs



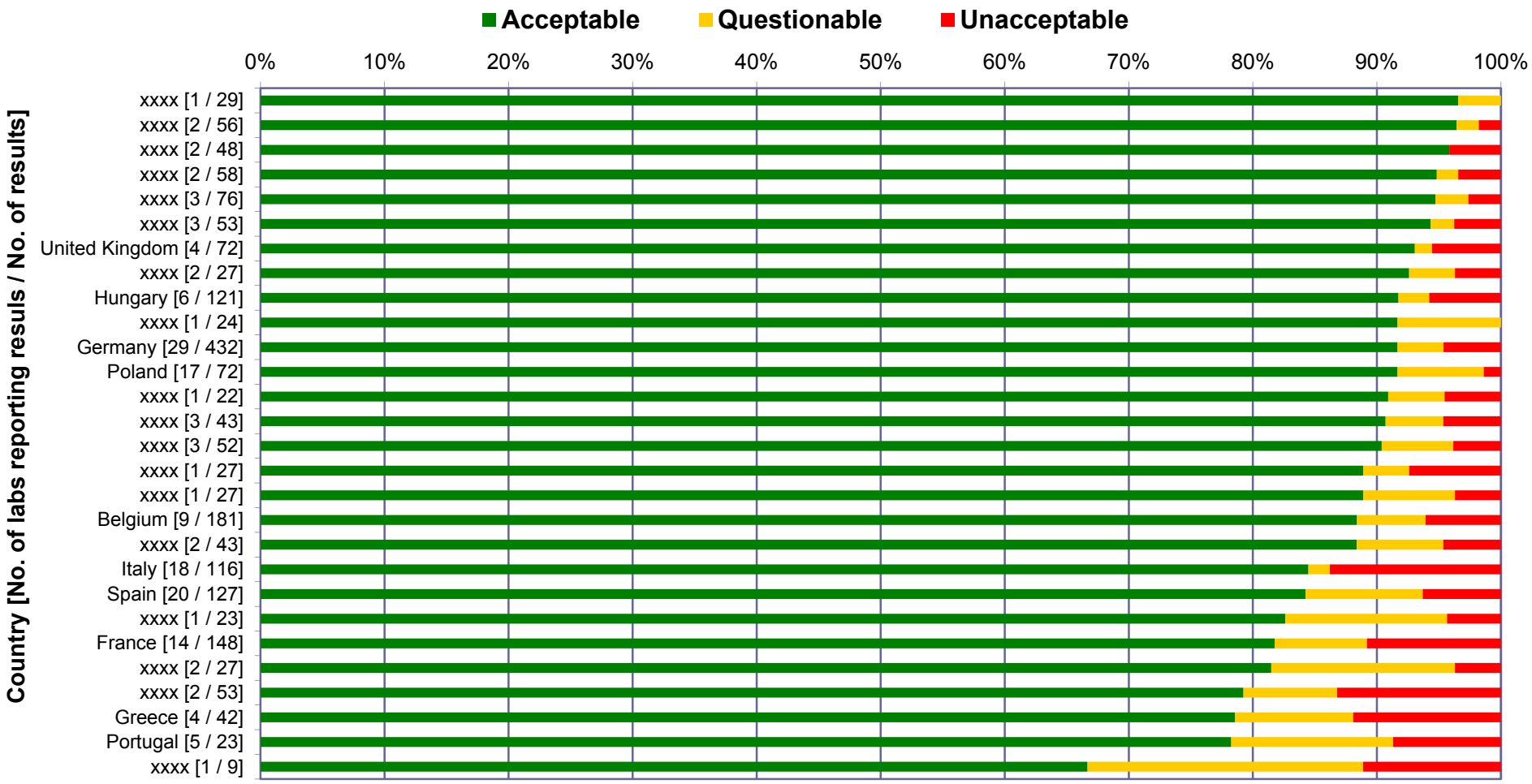
Analytes that were evaluated for information only were excluded.

AAZ IN EUPT-SRMs 1-8 (EU+EFTA) (BY COUNTRY)



Analytes evaluated for information only were excluded from the AAZ-calculation but considered in the No. of results.
Countries with less than 4 labs participating in the EUPT-SRM 1-8 are hidden

PERFORMANCE BY COUNTRY (EUPT-SRM 1-8)



Analytes evaluated for information only were excluded from the AAZ-calculation but considered in the No. of results.
Countries with less than 4 labs participating in the EUPT-SRM 1-8 are hidden.

SCOPE BY COUNTRY (EUPT-SRM 1-8)

[No of Labs that submitted results / No of Results]	2,4-D (foll. akl. Hydr.)	2,4-D (free acid) , OPTIONAL	2.4-D (free acid)	Avermectin B1a	Abamectin (sum)	BAC-C12	Bromide ion	Captan	Chlorothalonil	Cyromazine	Chlormequat	DDAC-C10	Dicamba (free acid)	Dicamba (foll. alk. Hydr.) ; OPTIONAL	Dicofol	Diquat	Dithiocarbamates	Ethephone	Fenbutatin Oxide	Fentin	Fluazifop (free acid)	Folpet	Fosetyl	Glyphosate	Glufosinate	Haloxyfop incl. Haloxyfop-R (free acids)	Maleic hydrazide	MCPA (free acid)	MCPA (free acid + bound); OPTIONAL	MCPP (free acid)	MCPP (free acid + bound); OPTIONAL	Mepiquat	Propamocarb	Quinclorac (free acid)			
Number of PTs where this compounds was present	**1**	**1**	**2**	**1**	**1**	**1**	**2**	**1**	**1**	**2**	**3**	**1**	**1**	**1**	**1**	**1**	**4**	**4**	**4**	**1**	**2**	**1**	**1**	**3**	**1**	**1**	**1**	**3**	**1**	**1**	**1**	**1**	**1**	**1**	**34**	**23**	
Germany [29 / 486]	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	**34**	23	486
Hungary [6 / 138]	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	**34**	23	138
Belgium [9 / 206]	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	**33**	22	206
France [14 / 182]	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x					x	x	x	**30**	21	182
xxxx [3 / 90]	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x		x		x		x	x	x	**30**	23	90
xxxx [2 / 67]	x	x	x	x	x	x	x	x	x	x	x	x	x		x		x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x		**30**	21	67
xxxx [2 / 53]	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x		x	x	x	x	x		x		x	x	x	**30**	23	53
xxxx [2 / 65]	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x		x		x	x	x		x		x	x	x	**29**	23	65
United Kingdom [4 / 83]	x	x	x	x	x	x	x	x	x	x	x	x	x		x		x	x	x	x	x	x		x	x	x	x		x		x	x	x		**28**	20	83
xxxx [3 / 60]		x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x	x	x			x		x	x	x	**28**	20	60
Italy [18 / 160]	x	x	x	x	x	x	x	x	x	x	x	x			x		x	x	x	x	x	x		x		x			x	x	x	x	x	x	**27**	21	160
Poland [17 / 86]	x	x	x		x	x	x	x	x	x	x	x	x	x	x		x		x		x	x		x		x		x	x	x	x	x	x	x	**27**	21	86
Spain [20 / 149]			x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x	x	x					x	x		**26**	19	149
xxxx [2 / 62]	x	x	x		x		x	x	x	x	x		x	x	x		x	x	x		x	x		x		x		x	x	x	x	x	x	x	**26**	22	62
xxxx [2 / 50]	x	x	x		x	x	x	x	x	x	x	x			x		x	x	x	x	x	x		x		x		x		x		x	x	x	**25**	21	50
xxxx [3 / 58]	x	x	x	x	x		x	x	x	x	x		x	x	x		x	x			x	x		x		x		x				x	x	x	**23**	21	58
xxxx [3 / 50]	x	x	x		x		x	x	x	x	x		x	x	x		x		x	x	x	x	x	x	x	x		x				x	x		**23**	18	50
xxxx[1 / 33]	x	x	x		x			x	x	x	x		x	x	x		x		x		x	x		x				x	x	x	x	x	x		**22**	18	33
xxxx [2 / 32]		x	x		x	x	x	x	x	x	x	x	x		x		x		x		x	x		x	x	x		x				x		x	**22**	18	32
Greece [4 / 49]	x		x		x	x	x	x	x	x	x	x			x		x	x	x	x	x	x		x		x		x				x			**21**	18	49
xxxx [1 / 31]	x		x		x			x	x	x	x				x		x	x	x		x	x		x		x		x	x	x	x	x	x		**21**	19	31
xxxx [2 / 32]		x	x	x	x		x	x	x	x	x				x		x	x	x		x	x	x	x		x						x	x		**20**	18	32
xxxx [1 / 29]	x		x	x	x			x		x	x				x		x	x	x		x	x		x		x		x				x	x		**18**	18	29
xxxx [1 / 28]			x		x		x	x	x	x	x				x		x	x	x		x	x	x	x		x	x					x			**18**	16	28
xxxx[1 / 26]		x	x			x		x	x	x		x			x	x	x	x			x	x		x	x	x		x				x			**18**	13	26
xxxx [1 / 25]	x		x		x		x	x	x	x				x	x		x		x		x	x				x						x			**15**	14	25
Portugal [5 / 29]			x		x			x	x	x					x		x		x	x	x	x				x						x			**13**	12	29
xxxx [1 / 10]			x					x	x								x					x				x		x							**7**	7	10
Sum of countries covered the compounds	**20**	**20**	**28**	**15**	**26**	**17**	**22**	**28**	**27**	**27**	**24**	**17**	**15**	**11**	**27**	**10**	**28**	**21**	**25**	**15**	**27**	**28**	**11**	**26**	**13**	**26**	**11**	**19**	**10**	**13**	**10**	**28**	**22**	**14**			**2369**

All analytes present in SRM-EUPT-SRMs included;
Countries with less than 4 labs participating in the EUPT-SRM 1-8 are hidden.

Thank You
for Your Attention

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