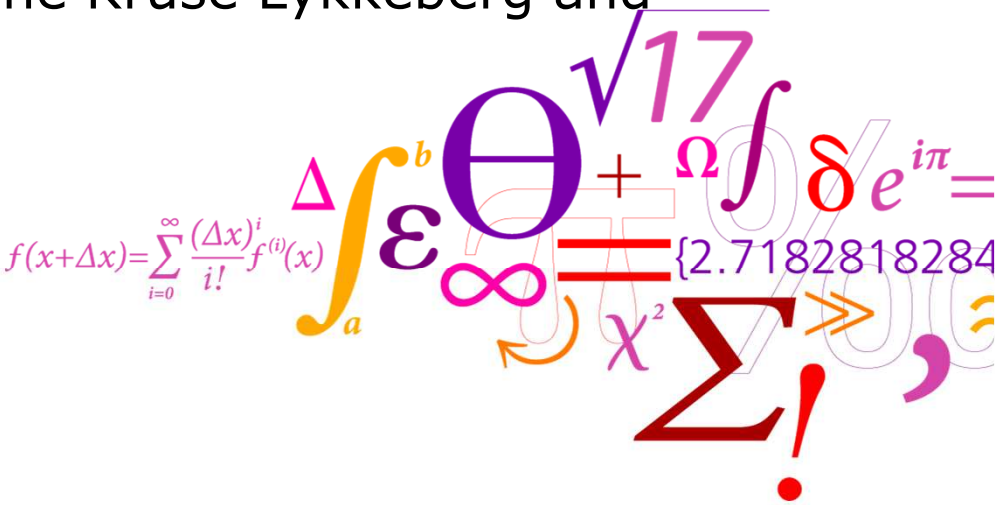
EUPT-CF7
Incurred and spiked pesticides in feed for laying hens

Mette Erecius Poulsen, Anne Kruse Lykkeberg and Gitte Andersen

Almeria, 24 October 2013



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Overall conclusions

- A difficult PT
  - High number of pesticide residues
  - 23 >0.04 mg/kg
  - 8 < 0.02 mg/kg (not evaluated)
  - → High number of false negative and positive results

- An easy PT
  - Matrix was easy to analyse.
  - Average Qn was 20%
  - Could be analysed by standard multimethod used for cereals

PTs on cereals/feed – overview

		2007 **EUPT-C1** /SRM2	2008 **EUPT-C2**	2009 **EUPT-C3** /SRM4	2010 **EUPT-C4**	2011 **EUPT-C5** /SRM6	2012 **EUPT-C6**	2013 **EUPT-CF7**
	Test material	Wheat flour	Wheat flour	Oat flour	Rye flour	Rice flour	Barley	Feed
	no. of participants	**64**	**74**	**111**	**118**	**155 (133)**	**149 (127)**	**120 (106)**
	No. of target pesticides	**37**	**55**	**60**	**72**	**104**	**107**	**116**
MRM	no. of **incurred** pesticides	**3**	**9**	**14**	**13**	**10**	**8**	**19**
	no. of **spiked** pesticides	**4**	**4**		**3**	**7**	**10**	**4**
SRM	no. of **incurred** pesticides	**2**	**2**	**2**	**2**			
	no. of **spiked** pesticides	**1**		**2**	**1**	**7**		
	Total no. of pesticides in test item	**10**	**15**	**18**	**19**	**24**	**18**	**23**

Additional 8 incurred pesticides at low levels <0.02 mg/kg

Organising team at EURL

- Mette Erecius Poulsen, Senior Chemist
- Anne Kruse Lykkeberg, Senior Chemist
- Gitte Andersen, Chemist
- Merete B. Ludwigsen, Chemical Technician
- Inge Schröder, Chemical Technician
- Lisbet Pilhkjær, Chemical Technician
- Arne Bent Jensen, System Developer

Scientific Group

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Tuija Pihlström

Quality Group

Antonio Valverde

Stewart Reynolds

Participation

Country	# labs	Country	# labs	Country	# labs
Argentina	1	Germany	16	Poland	12
Austria	1	Ghana	1	Portugal	2
Belgium	3	Greece	3	Romania	5
Brazil	2	Hungary	5	Serbia	1
Bulgaria	2	Ireland	1	Singapore	1
Chile	1	Italy	16	Slovakia	2
Costa Rica	2	Kenya	2	Slovenia	4
Cyprus	1	Latvia	1	Spain	10
Czech Republic	2	Lithuania	1	Sweden	2
Denmark	1	Luxembourg	0	Switzerland	1
Egypt	1	Malta		Turkey	1
Estonia	1	Netherlands	4	United Kingdom	2
Finland	1	Norway	1		
France	6	Peru	1	**Total**	**120**

Participation

Country	# labs	Country	# labs	Country	# labs
Argentina	1	Germany	16	Poland	12
Austria	1	Ghana	1	Portugal	2
Belgium	3	Greece	3	Romania	5
Brazil	2	Hungary	5	Serbia	1
Bulgaria - No NRL	2	Ireland	1	Singapore	1
Chile	1	Italy	16	Slovakia	2
Costa Rica	2	Kenya	2	Slovenia	4
Cyprus	1	Latvia	1	Spain	10
Czech Republic	2	Lithuania	1	Sweden	2
Denmark	1	Luxembourg	0	Switzerland	1
Egypt	1	Malta		Turkey	1
Estonia	1	Netherlands	4	United Kingdom	2
Finland	1	Norway	1		
France	6	Peru	1	**Total**	**120**

Target Pesticide List

- 116 pesticides
- 9 new
  - Aldrin
  - Chlordane, cis-
  - Chlordane, oxy
  - Chlordane, trans-
  - Dieldrin
  - Endrin
  - Heptachlor
  - Heptachlorepoxid-cis
  - Heptachlorepoxid-trans

  (Directive 2002/32 on undesirable substance in animal feed)

EU Reference Laboratories for **Residues of Pesticides**

CRL

Cereals and Feeding Stuff

TARGET PESTICIDE LIST

for the EUPT – CF7 2013

(last updated: 19.12.2012)

Nine new pesticides added to the Target Pesticide List from EUPT-C6 (2012) are marked in bold.

MRM-Compounds

Pestide no.	Pesticides	MRRL (mg/kg)
1	2-phenyl phenol	0.01
2	3-hydroxy-carbofuran	0.01
3	Acephate	0.01
4	**Aldrin**	0.01
5	Azinphos-methyl	0.01
6	Azoxystrobin	0.01
7	Bifenthrin	0.01
8	Boscalid	0.01
9	Captan	0.01
10	Carbaryl	0.01
11	Carbendazim	0.01


Rye
Barley
Maize
Soybean cake
Soybean meal
Vitacarb
Lime
Mineral and
Vitamin premix
SOJAOLIE
BAST
K11-1263
Bilag-334

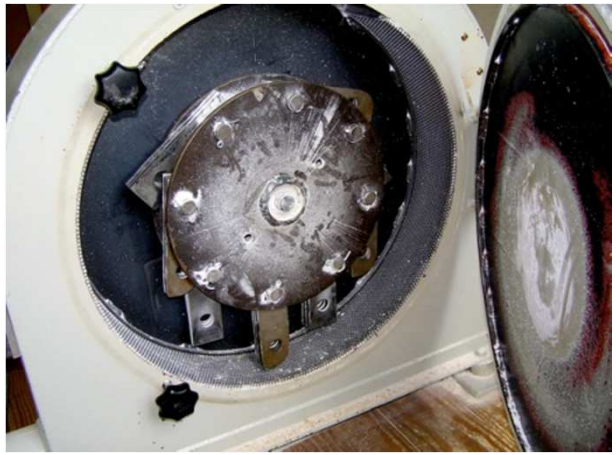
Feed for laying hens

Ingredients	Test sample	Test blank
Wheat	25%	25%
Barley	13%	12%
Rye	13%	12%
Maize	13%	12%
Sum Cereals	**63%**	**62%**
Soybean meal	25%	
Soybean cake		27%
Lime	9%	9%
soya oil	3%	1%
Mineral and vitamin premix	1%	1%
Total amount	**100%**	**100%**

- Ingredients
  - Wheat, rye and barley are grown in Denmark in 2006, 2007, 2009, 2011
  - Maize, soybean meal, soybean cake, lime, mineral and vitamin premix was delivered from DLG – Danish feed producer
- Production
  - Raw materials were shipped to Forschungsinstitut Futtermitteltechnik der IFF, Braunschweig-Thune in Germany
    - Internationale Forschungsgemeinschaft Futtermitteltechnik

Pesticide	Application in the field	Spike in laboratory	EUPT-C1 wheat	EUPT-C2 wheat	EUPT-C4 rye	EUPT-C6 barley
Aldrin		x				
Azoxystrobin	x		x	x	x	
Boscalid	x					x
Carbendazim	x			x	x	
Chlorpyrifos-methyl	x	x		x	x	
Cypermethrin	x	x		x		
Endosulfan-alpha		x				
Endosulfan-sulfate		x				
Epoxiconazole	x			x		x
Fenpropidin	x					x
Fenpropimorph	x				x	
Fluquinconazole	x				x	
Flutriafol	x				x	
Iprodione	x	x		x		
Kresoxim-methyl	x				x	
Lindane		x				
Malathion	x	x			x	
Propiconazole	x	x				x
Pyraclostrobin	x					x
Spiroxamine	x			x	x	
Tebuconazole	x					x
Triadimenol	x			x		
Trifloxystrobin	x			x		

Tietjen hammer mill type VHM 15



Amandus Kahl laboratory

flat die pelleting press type 14-175

Dinnissen twin-shaft paddle mixer type 300 L

Ho

Sample shipment

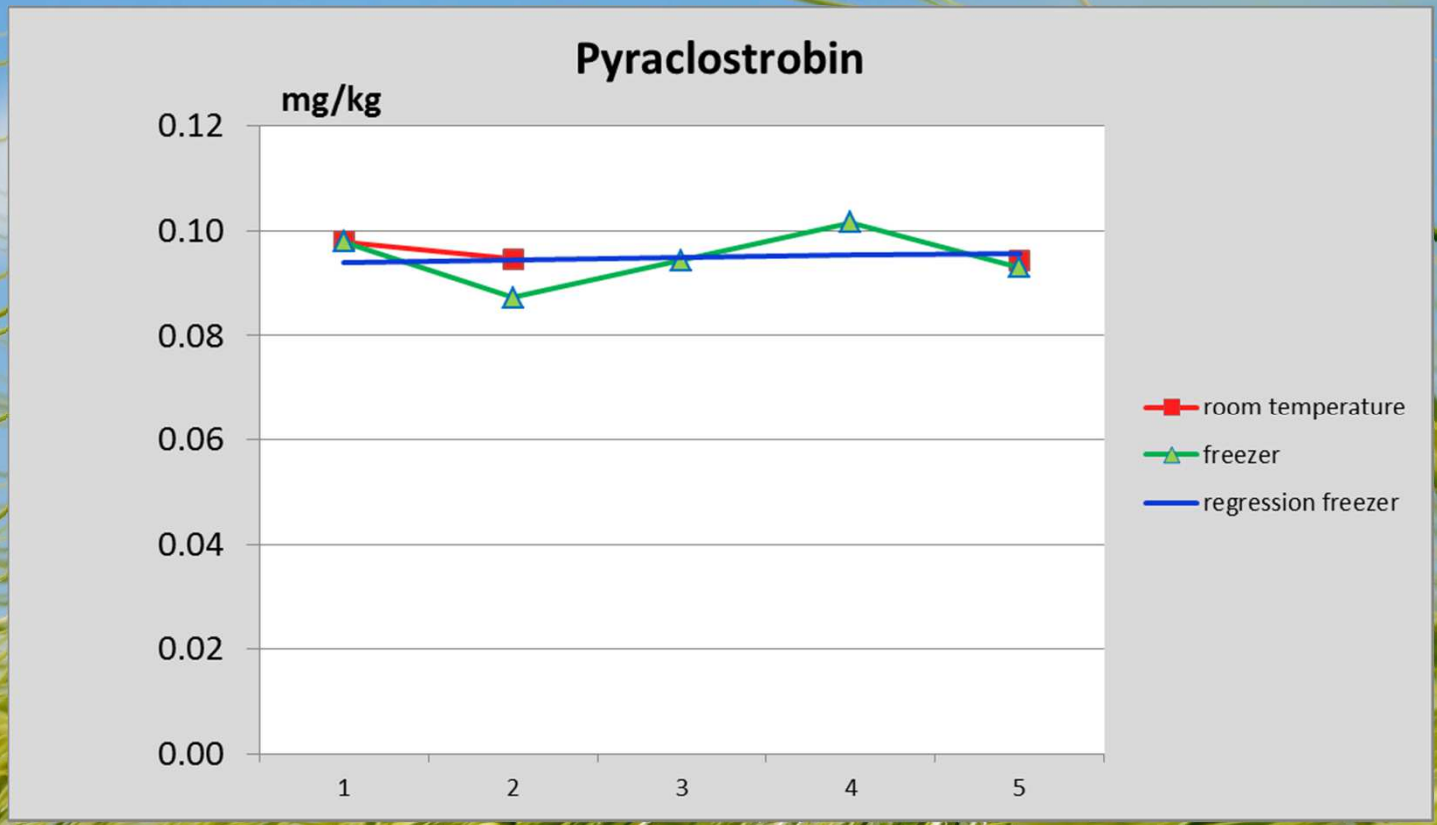
- Samples were distributed on Monday 13 May 2013 (6 May to Third Countries
- Most samples were delivered to EU laboratories on 14 or 15 May

Homogeniety test

	Aldrin	Azoxystrobin	Boscalid	Carbendazim	Chlorpyrifos-methyl	Cypermethrin	Endosulfan-alpha	Endosulfan-sulfate	Epoxiconazole	Fenpropidin	Fenpropimorph	Fluquinconazole
Mean, mg/kg	0.329	0.106	0.132	0.228	0.244	0.236	0.232	0.312	0.129	0.101	0.352	0.099
S_s^2	0.0001	0.0001	0	0	0.00003	0	0.00004	0	0	0	0	0
c	0.0026	0.0001	0.0004	0.0008	0.0010	0.0017	0.0007	0.0019	0.0003	0.0002	0.0020	0.0002
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

	Flutriafol	Iprodione	Kresoxim-methyl	Lindane	Malathion	Propiconazole	Pyraclostrobin	Spiroxamin	Tebuconazole	Triadimenol	Trifloxystrobin
Mean, mg/kg	0.317	0.322	0.070	0.286	0.259	0.213	0.084	0.181	0.070	0.236	0.053
S_s^2	0.00003	0	0.00000	0.00002	0	0	0.00000	0	0.0000	0	0
c	0.0019	0.0021	0.0001	0.0017	0.0014	0.0006	0.0001	0.0007	0.0001	0.0009	0.00004
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Stability test

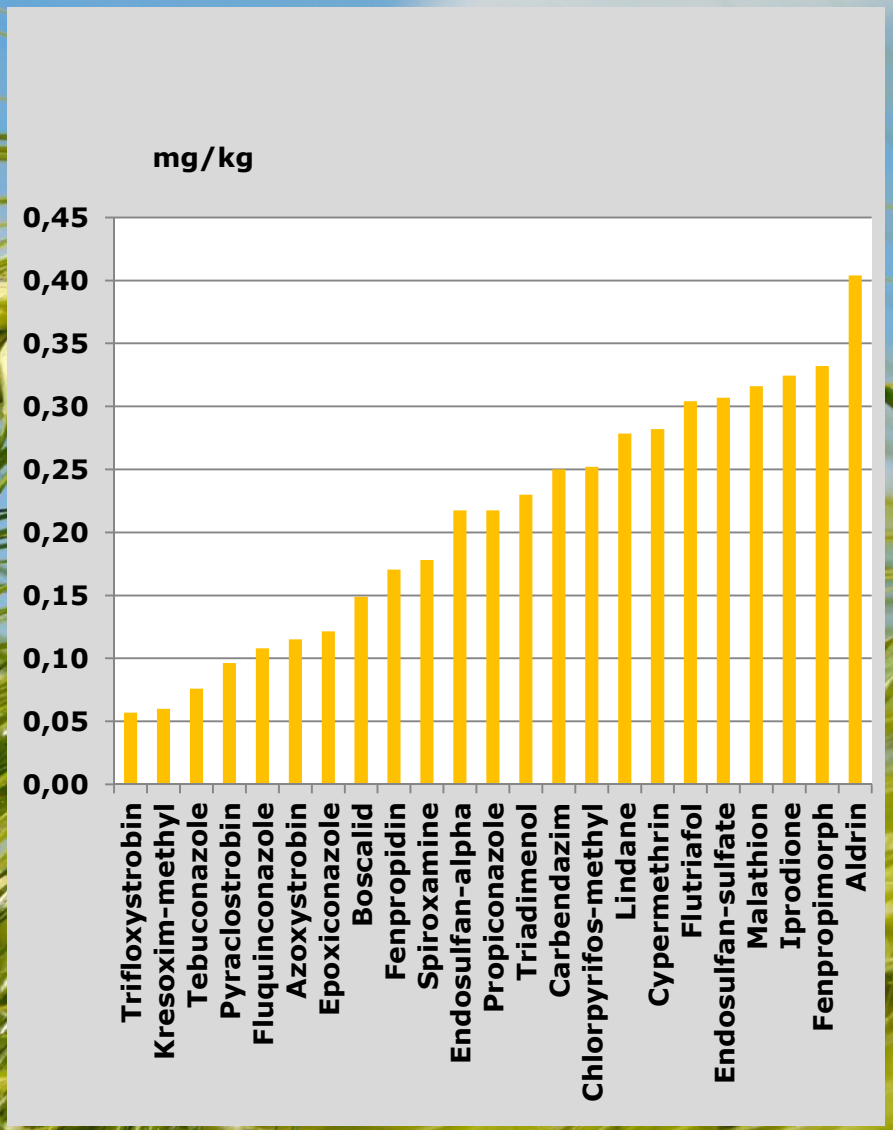


Calculation of assigned values and uncertainty of assigned values

- Median values of the results from EU laboratories (and EFTA)
  - Only result from participant that
    - Reported to add water to the samples before extration or
    - used mixture of solvent and water or
    - used ASE
- Outliers
    - results with z-scores >5
    - Result from one lab submitting results from recovery samples
- Uncertainty
    - $u = 1.25 * (s^* / \sqrt{n})$
    - s* is robust standard deviation
    - N is the number of participants

Assigned values

Pesticides	Assigned values, mg/kg
Aldrin	0.405
Azoxystrobin	0.115
Boscalid	0.149
Carbendazim	0.252
Chlorpyrifos-methyl	0.252
Cypermethrin	0.282
Endosulfan-alpha	0.220
Endosulfan-sulfate	0.307
Epoxiconazole	0.121
Fenpropidin	0.171
Fenpropimorph	0.333
Fluquinconazole	0.107
Flutriafol	0.308
Iprodione	0.325
Kresoxim-methyl	0.060
Lindane	0.279
Malathion	0.316
Propiconazole	0.217
Pyraclostrobin	0.096
Spiroxamine	0.176
Tebuconazole	0.076
Triadimenol	0.230
Trifloxystrobin	0.057



Additional pesticides

PESTICIDES	Calculated content mg/kg	Median all results mg/kg	Submitted results
Bifentrin	0.010	0.013	57
Deltametrin	0.007	0.012	20
Diazinon	0.009	0.009	23
Difenoconazole	0.001	0.006	11
Lambda-cyhalothrin	0.008	0.011	30
Pirimicarb	0.005	0.006	7
Pirimiphos-methyl	0.009	0.012	48
Prothioconazole-desthio	0.011	0.015	33

Re

Pesticide	No. of reported results	No. of NA	False negatives	% results
Aldrin	95	8	3	92
Azoxystrobin	87	16	3	84
Boscalid	86	17		83
Carbendazim	69	34		67
Chlorpyrifos-methyl	94	9		91
Cypermethrin	92	11	2	89
Endosulfan-alpha	100	3	5	97
Endosulfan-sulfate	95	8	2	92
Epoxiconazole	81	22	1	79
Fenpropidin	62	41	4	60
Fenpropimorph	78	25		76
Fluquinconazole	78	25	1	76
Flutriafol	79	24	5	77
Iprodione	82	21		80
Kresoxim-methyl	88	15	4	85
Lindane	97	6	3	94
Malathion	94	9	1	91
Propiconazole	88	15		85
Pyraclostrobin	69	34	5	67
Spiroxamine	69	34	2	67
Tebuconazole	87	16	2	84
Triadimenol	78	25	4	76
Trifloxystrobin	84	19	3	82

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Trifloxystrobin	84	19	3	82

False positive results

Lab code	Pesticide	Concentration mg/kg	Determination technique
6	Trifluralin	0.072	LC-MS/MS QQQ
26	Imazalil	0.018	LC-MS/MS QQQ
31	p'p'-DDT	0.063	GC- (μ) ECD
31	Quinoxyfen	0.046	GC-Ion Trap
34	HCH-beta	0.239	GC-MS/MS (QQQ)
35	Hexaconazole	0.018	LC-MS/MS QQQ
68	HCH-beta	0.270	GC-MS/MS (QQQ)
91	Chlorpyrifos	0.021	GC-MS/MS (QQQ)
91	Pendimethalin	0.017	LC-MS
122	p'p'-DDT	0.015	GC-Ion Trap
125	Permethrin	0.020	?
126	HCH-beta	0.092	GC-MSD
129	HCH-beta	0.150	GC-MSD

Results <0.01 mg/kg

Lab code	Pesticide	Concentration mg/kg	Determination technique	RL, mg/kg
27	Pirimicarb-desmethyl	0.006	LC-MS/MS QQQ	0.01
61	Chlorpyrifos	0.0011	GC-MS/MS (QQQ)	0.005
61	Pirimicarb-desmethyl	0.0041	LC-MS/MS QQQ	0.005
61	Prochloraz	0.0014	LC-MS/MS QQQ	0.005
61	Triadimefon	0.0014	LC-MS/MS QQQ	0.005
67	HCH-alpha	0.0024	GC-MS/MS (QQQ)	0.01
67	Pirimicarb-desmethyl	0.0056	LC-MS/MS QQQ	0.01
113	Malaoxon	0.0008	?	0.01
113	Pirimicarb-desmethyl	0.0075	LC-MS/MS QQQ	0.01
125	Chlorpyrifos	0.001	?	?
125	Pendimethalin	0.001	?	?

Calculations of z-scores

- For each laboratory/pesticide combination :

$$z = (x-X) / \sigma$$

  - x is the result reported by the participant or the specific reporting limit of the lab for those labs not having detected the pesticide present in the test material
  - X is the assigned value, mean without outliers
  - σ is the target standard deviation obtained by multiplying the median by the FFP RSD of 25%

- $|z| \leq 2$ Acceptable
- $2 < |z| \leq 3$ Questionable
- $|z| > 3$ Unacceptable

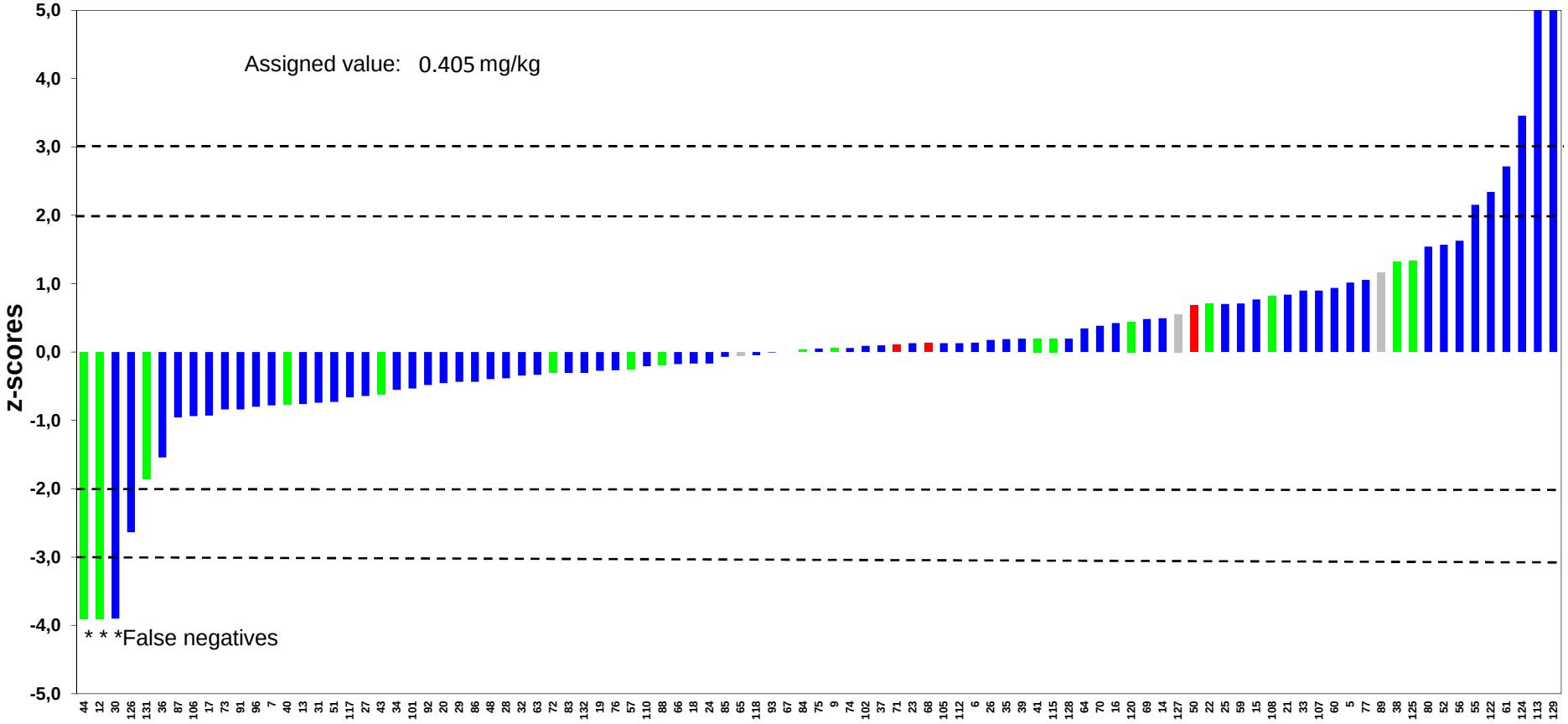
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Aldrin

Water added
No water added
Not specified
ASE

Acceptable	85
Questionable	4
Unacceptable	6
Number of labs	95



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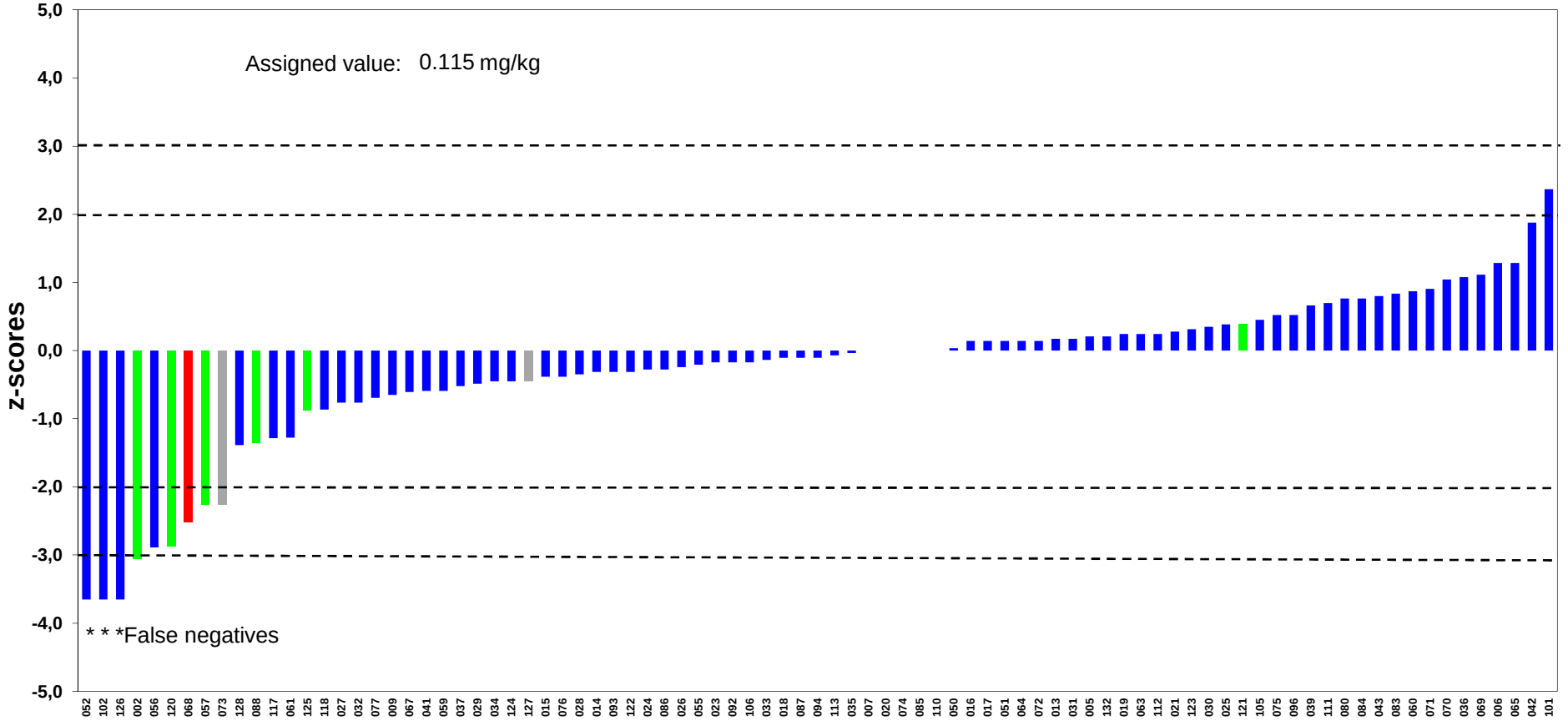
DTU

Azoxystrobin

- Water added
- No water added
- Not specified
- ASE

Acceptable	77
Questionable	6
Unacceptable	4
Number of labs	87



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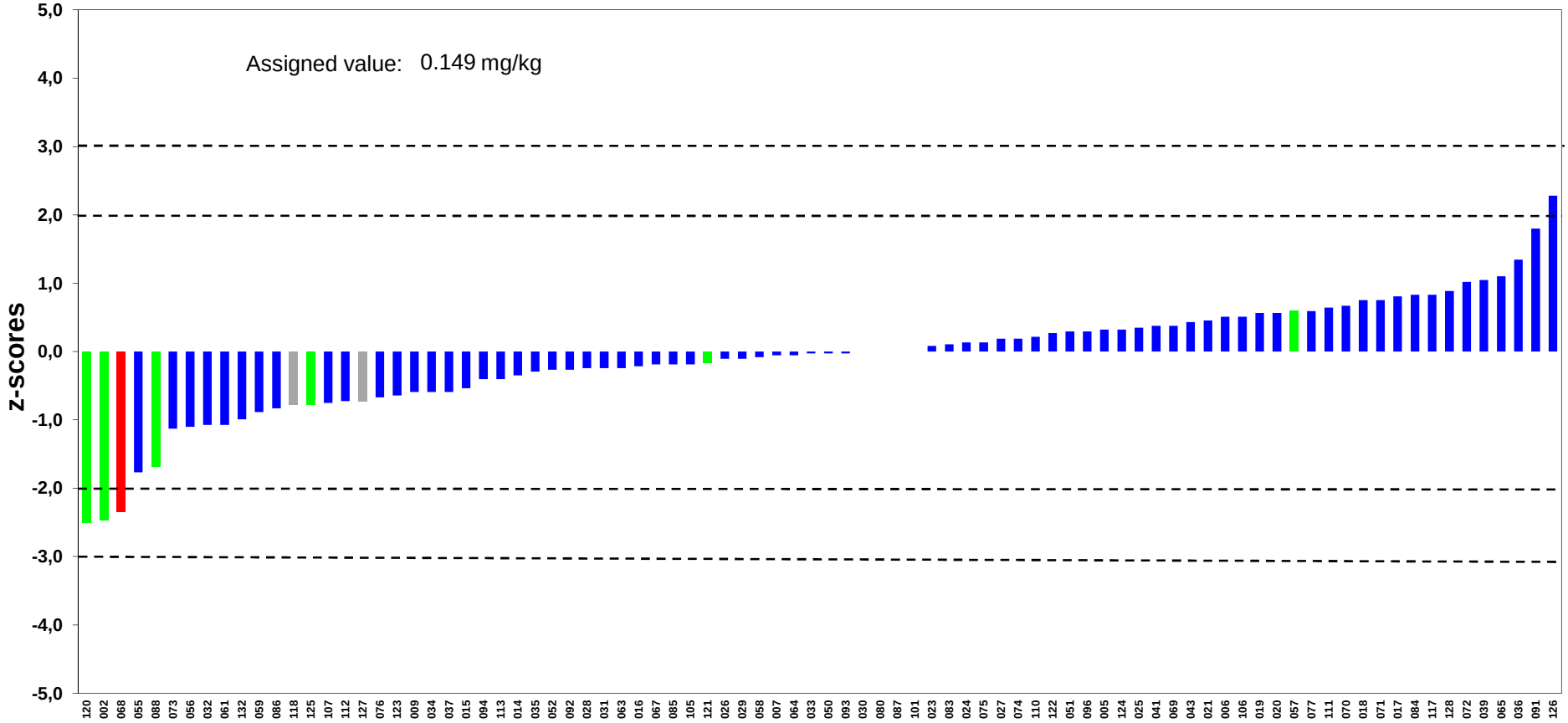
DTU

Boscalid

- Water added
- No water added
- Not specified
- ASE

Acceptable	82
Questionable	4
Unacceptable	0
Number of labs	86



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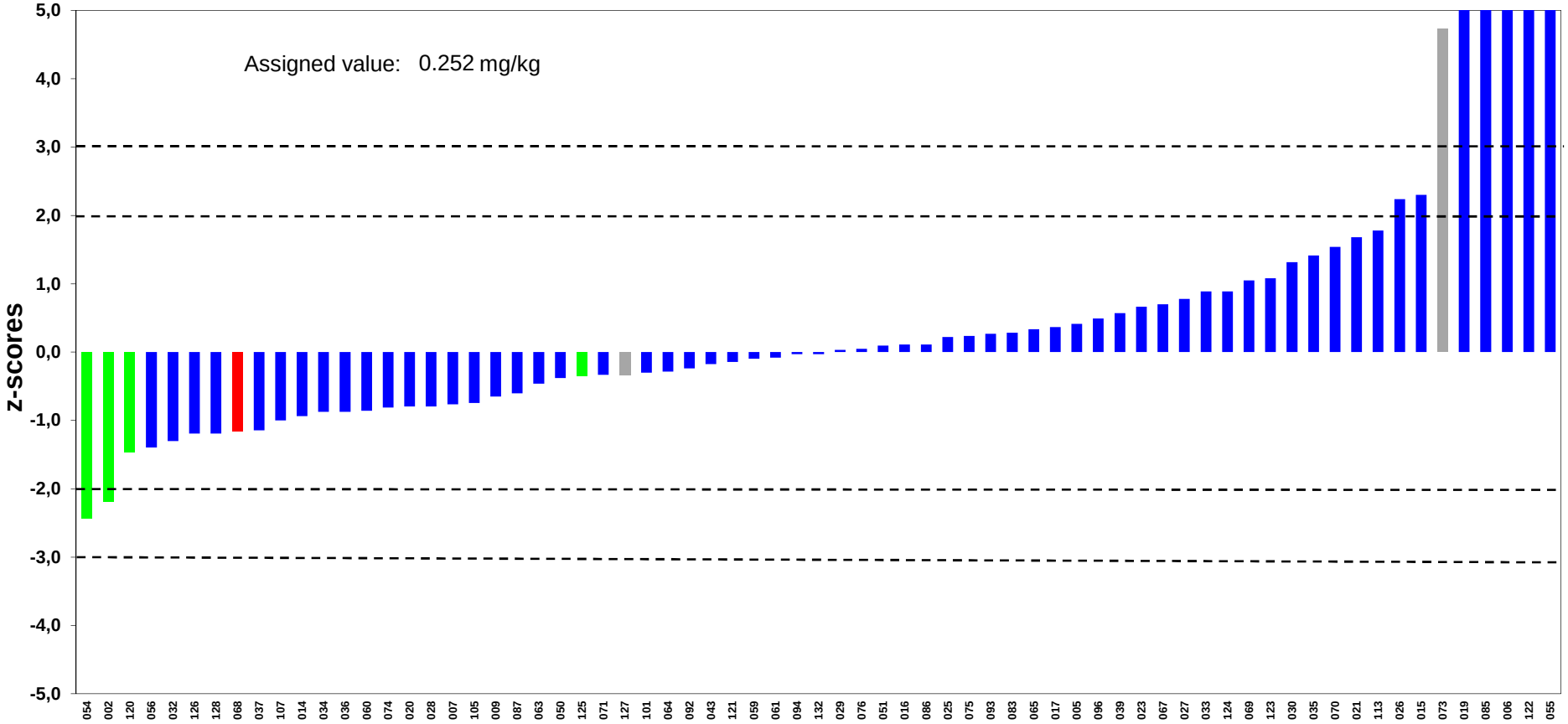
DTU

Carbendazim

Water added
No water added
Not specified
ASE

Acceptable	59
Questionable	4
Unacceptable	6
Number of labs	69



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DTU

Chlorpyrifos-methyl

Water added
No water added
Not specified
ASE

Acceptable	89
Questionable	2
Unacceptable	3
Number of labs	94

Assigned value: 0.252 mg/kg

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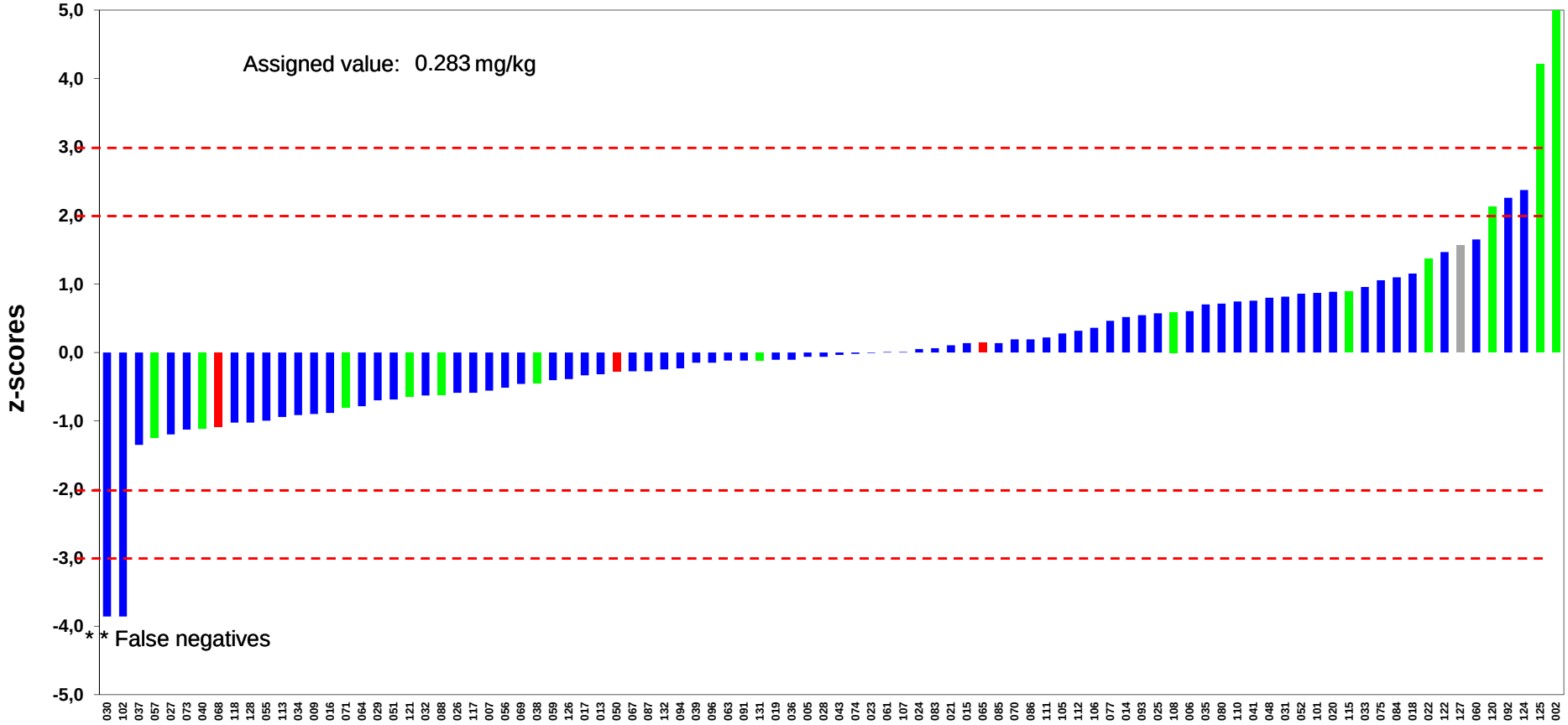
DTU

Cypermethrin

- Water added
- No water added
- Not specified
- ASE

Acceptable	85
Questionable	3
Unacceptable	4
Number of labs	92



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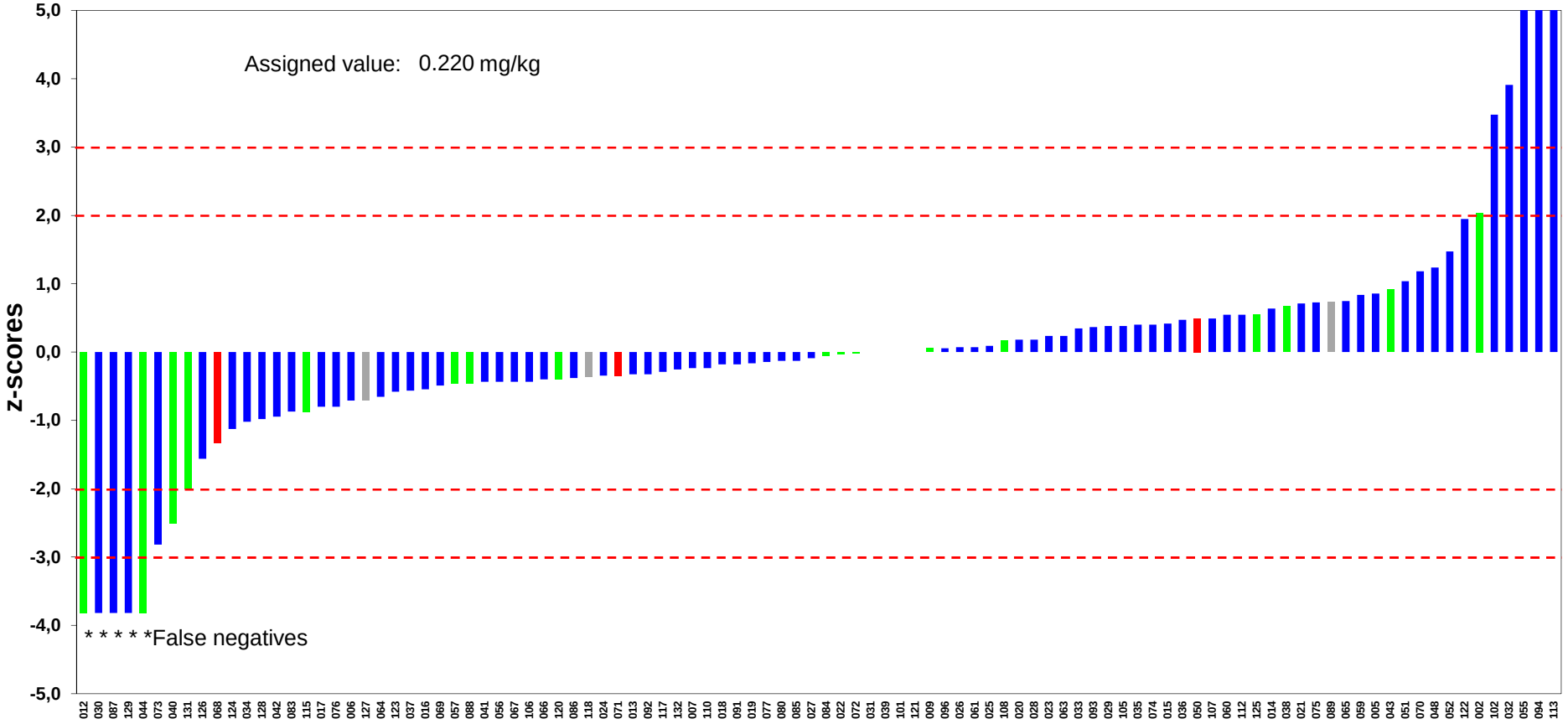
DTU

Endosulfan-alpha

Water added
No water added
Not specified
ASE

Acceptable	88
Questionable	2
Unacceptable	10
Number of labs	100



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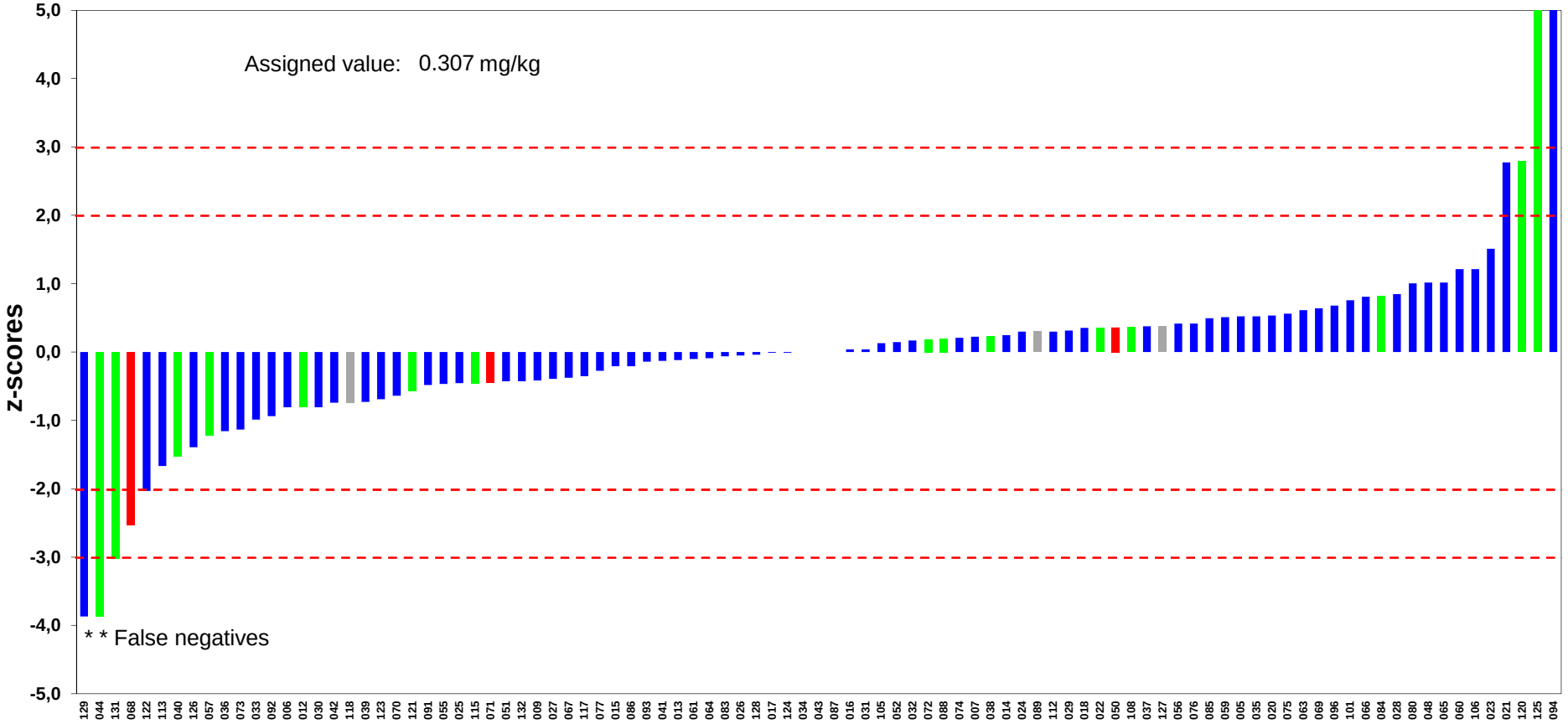
DTU

Endosulfan-sulfate

Water added
No water added
Not specified
ASE

Acceptable	87
Questionable	4
Unacceptable	4
Number of labs	95



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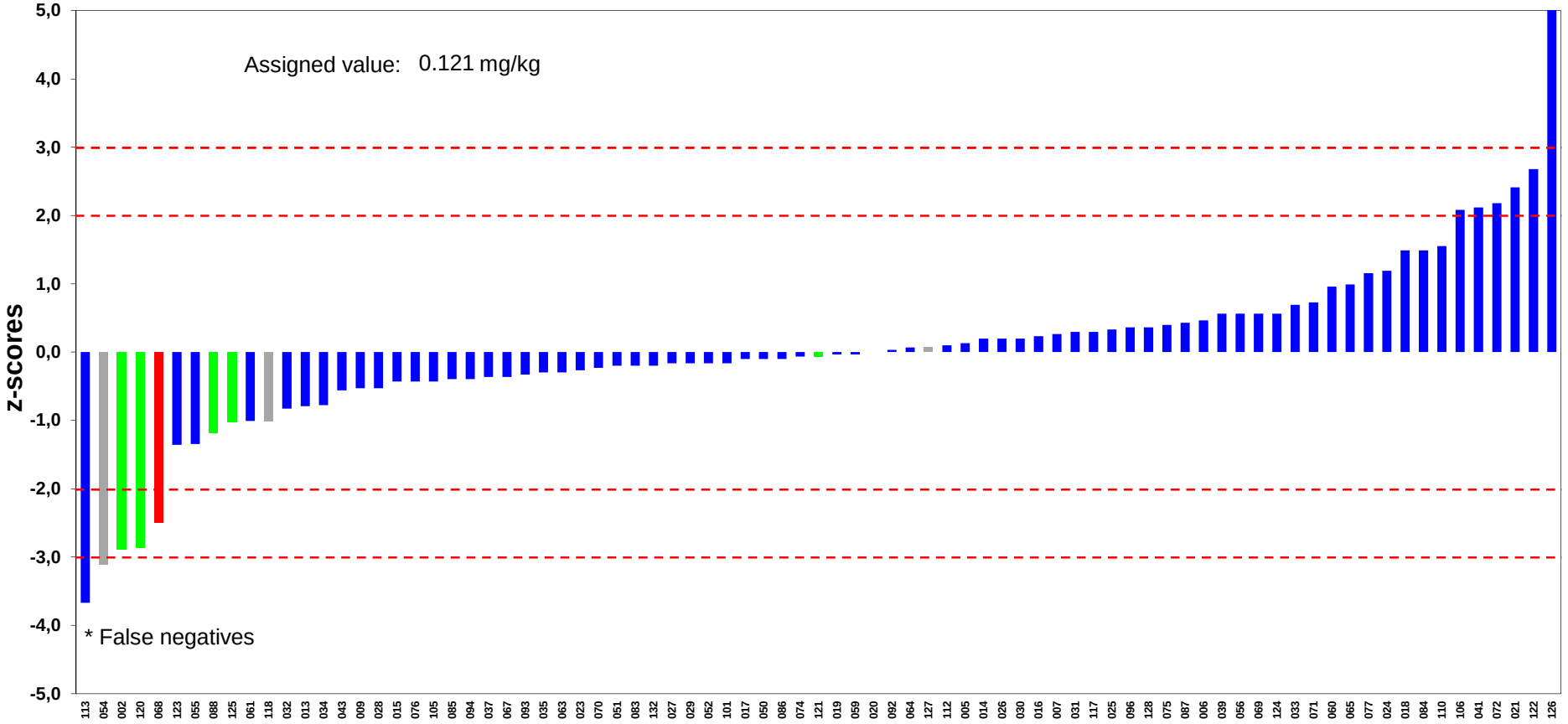
DTU

Epoxiconazole

Water added
No water added
Not specified
ASE

Acceptable	70
Questionable	8
Unacceptable	3
Number of labs	81



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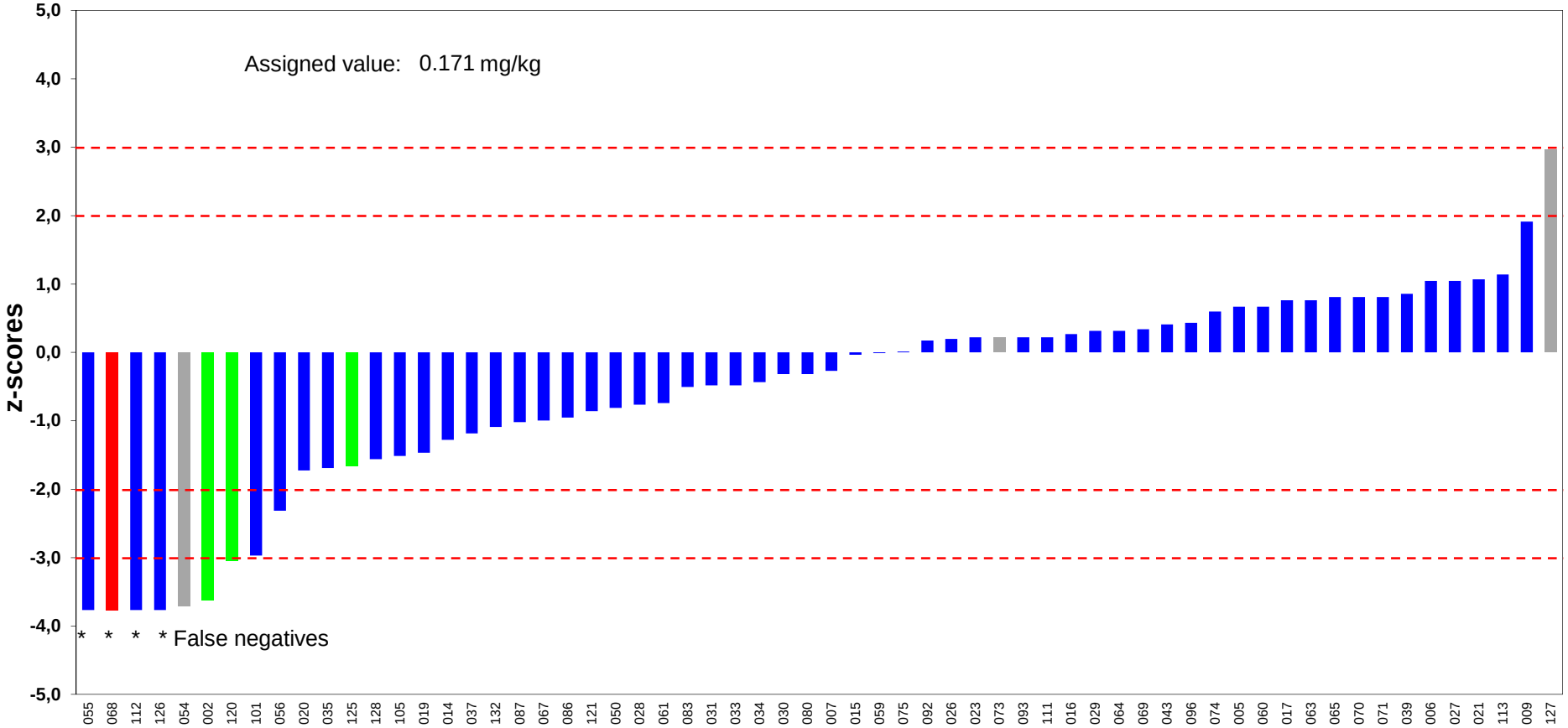
DTU

Fenpropidin

Water added
No water added
Not specified
ASE

Acceptable	52
Questionable	4
Unacceptable	6
Number of labs	62



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DTU

Fenpropimorph

Water added
No water added
Not specified
ASE

Acceptable	71
Questionable	4
Unacceptable	3
Number of labs	78

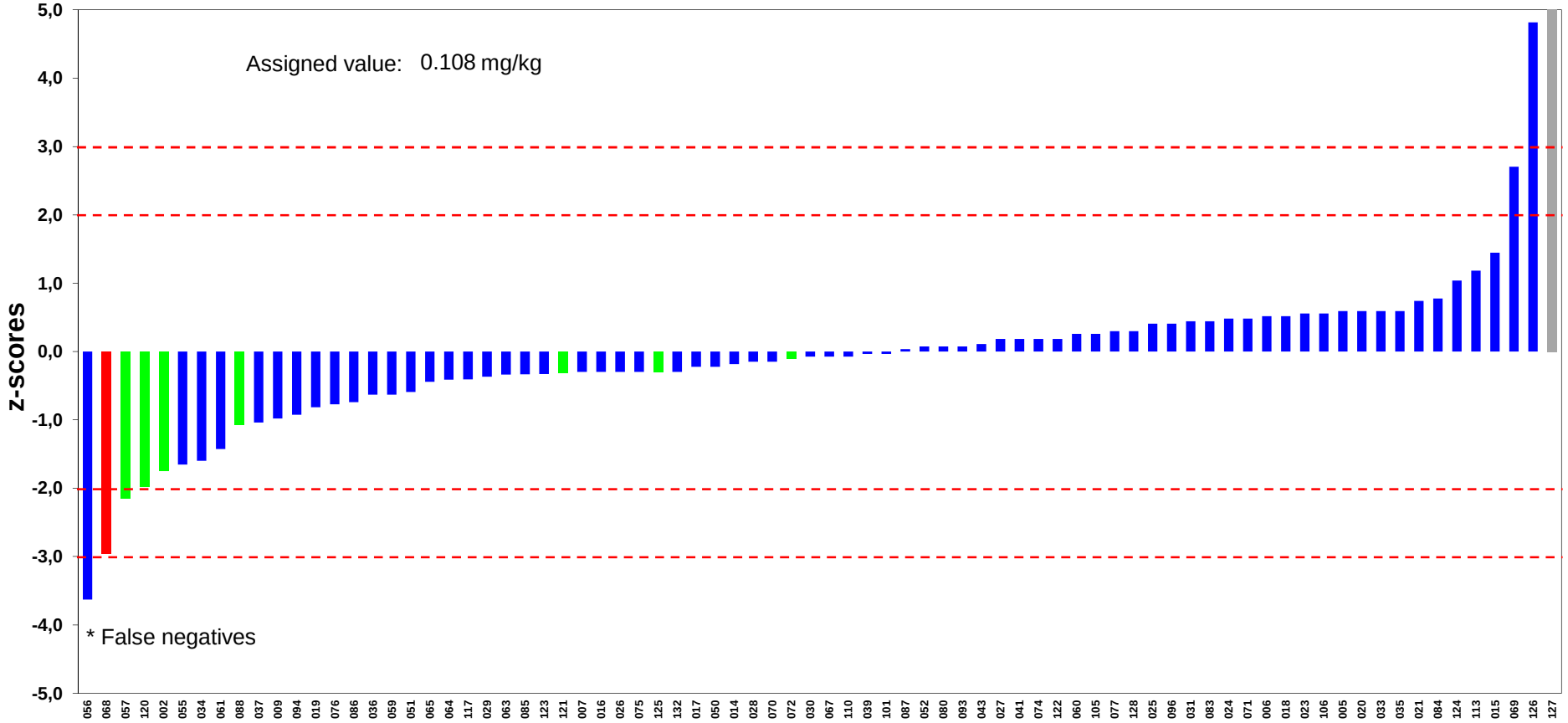
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Fluquinconazole

- Water added
- No water added
- Not specified
- ASE

Acceptable	72
Questionable	3
Unacceptable	3
Number of labs	78



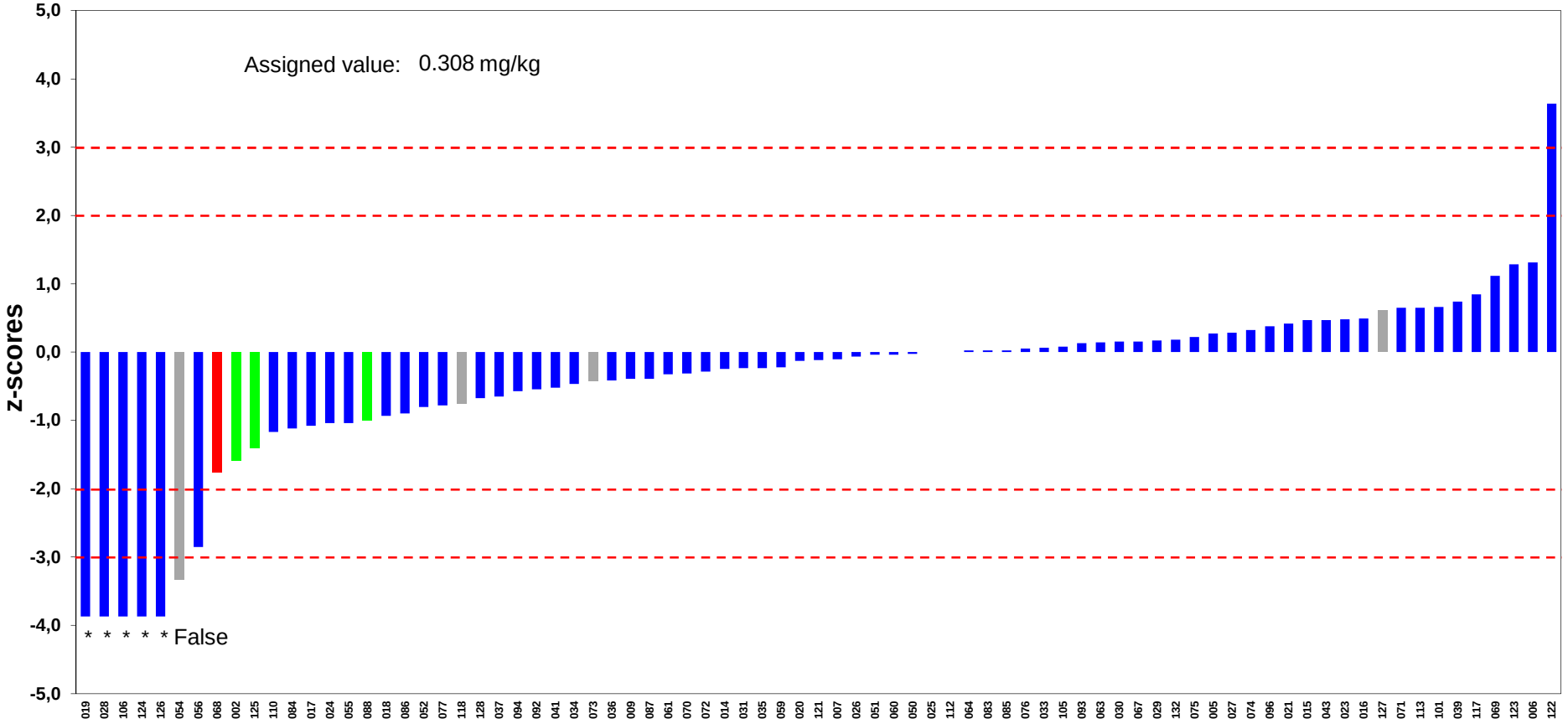
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Flutriafol

Water added
No water added
Not specified
ASE

Acceptable	71
Questionable	1
Unacceptable	7
Number of labs	79



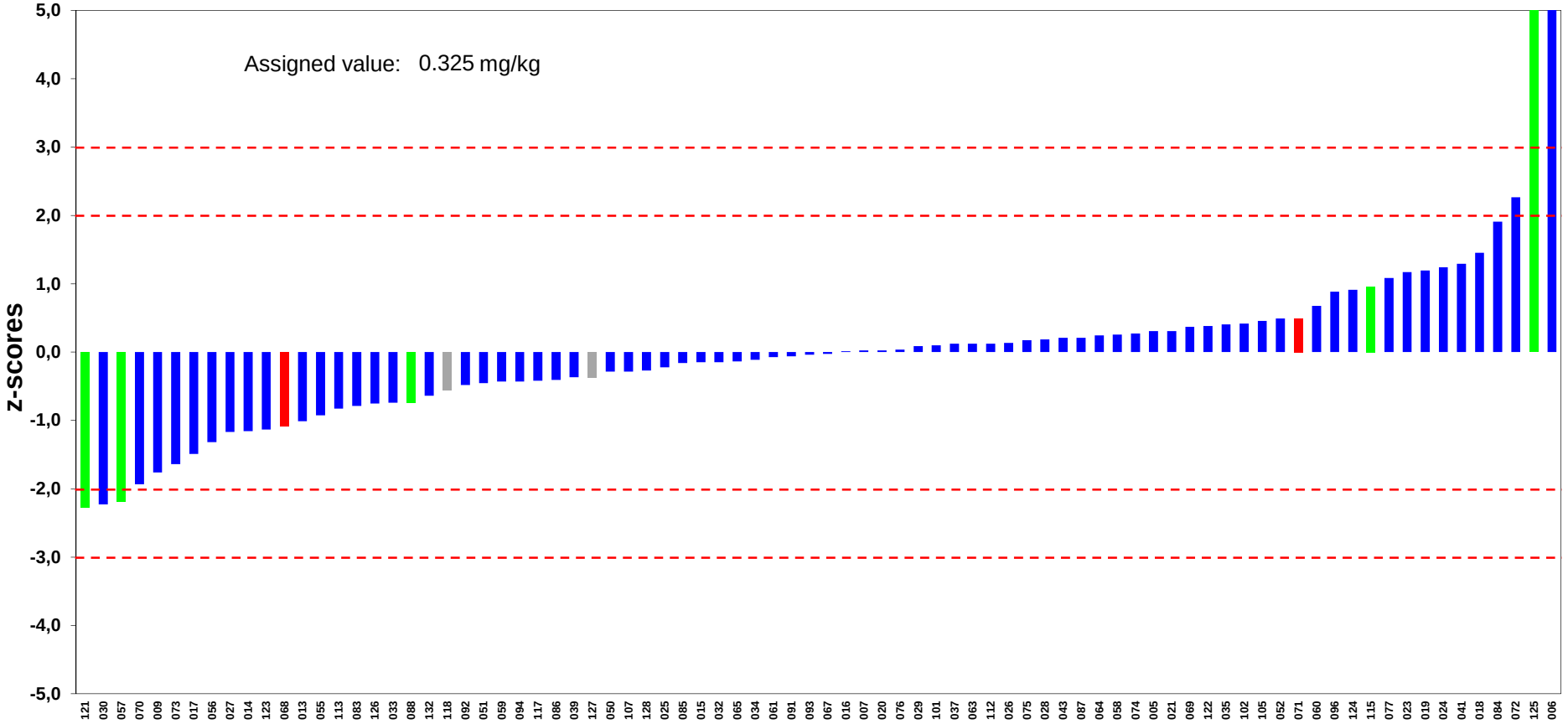
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Iprodione

Water added
No water added
Not specified
ASE

Acceptable	76
Questionable	4
Unacceptable	2
Number of labs	82



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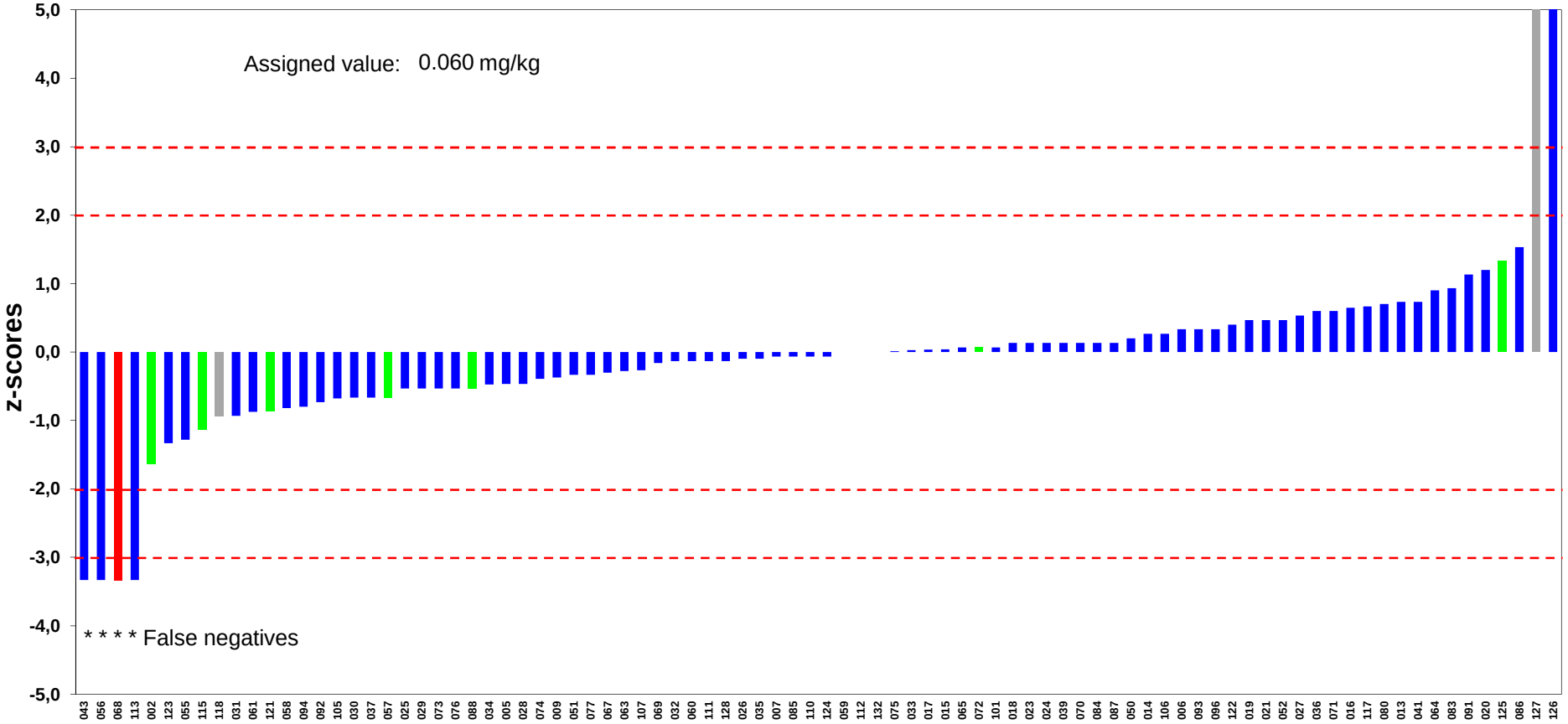
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Kresoxim-methyl

Water added
No water added
Not specified
ASE

Acceptable	82
Questionable	0
Unacceptable	6
Number of labs	88



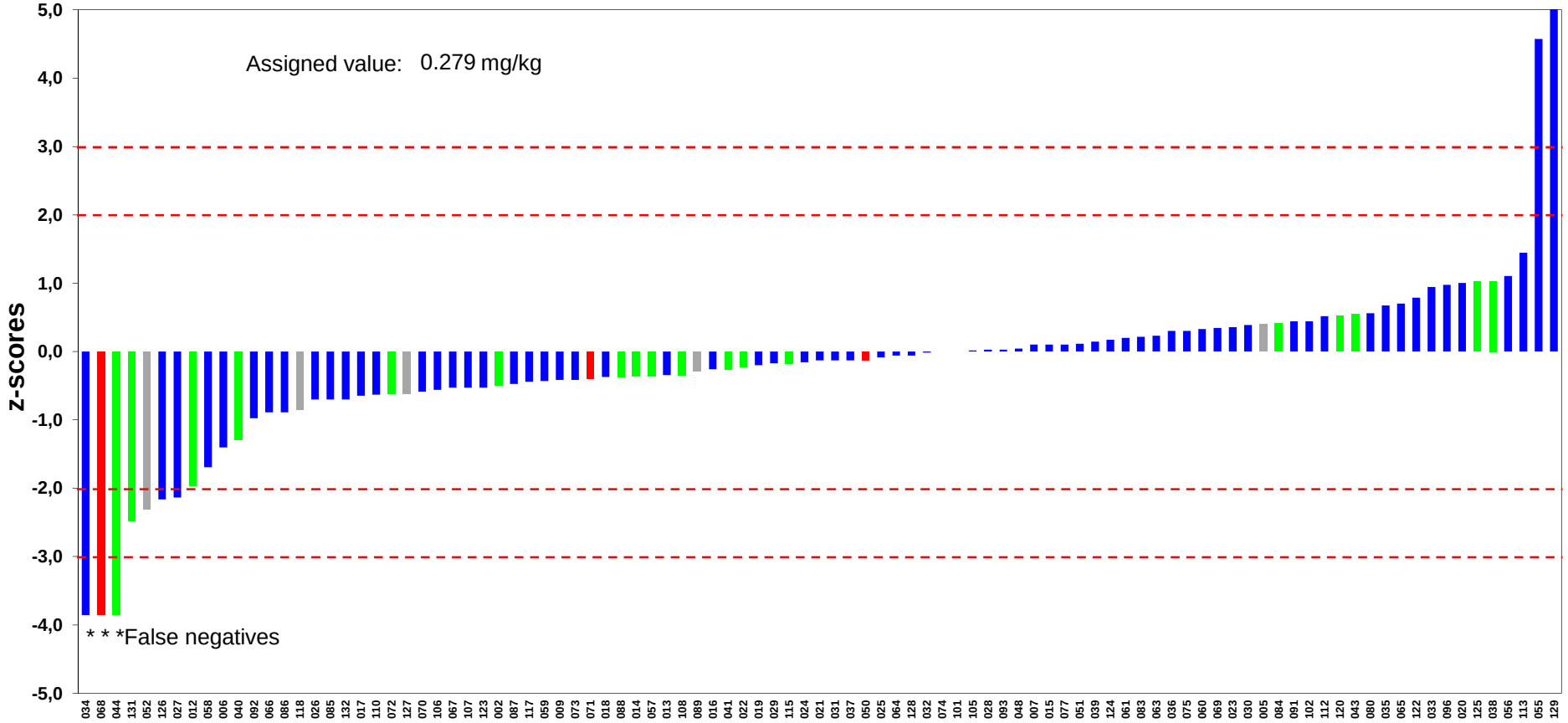
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Lindane

Water added
No water added
Not specified
ASE

Acceptable	88
Questionable	4
Unacceptable	5
Number of labs	97



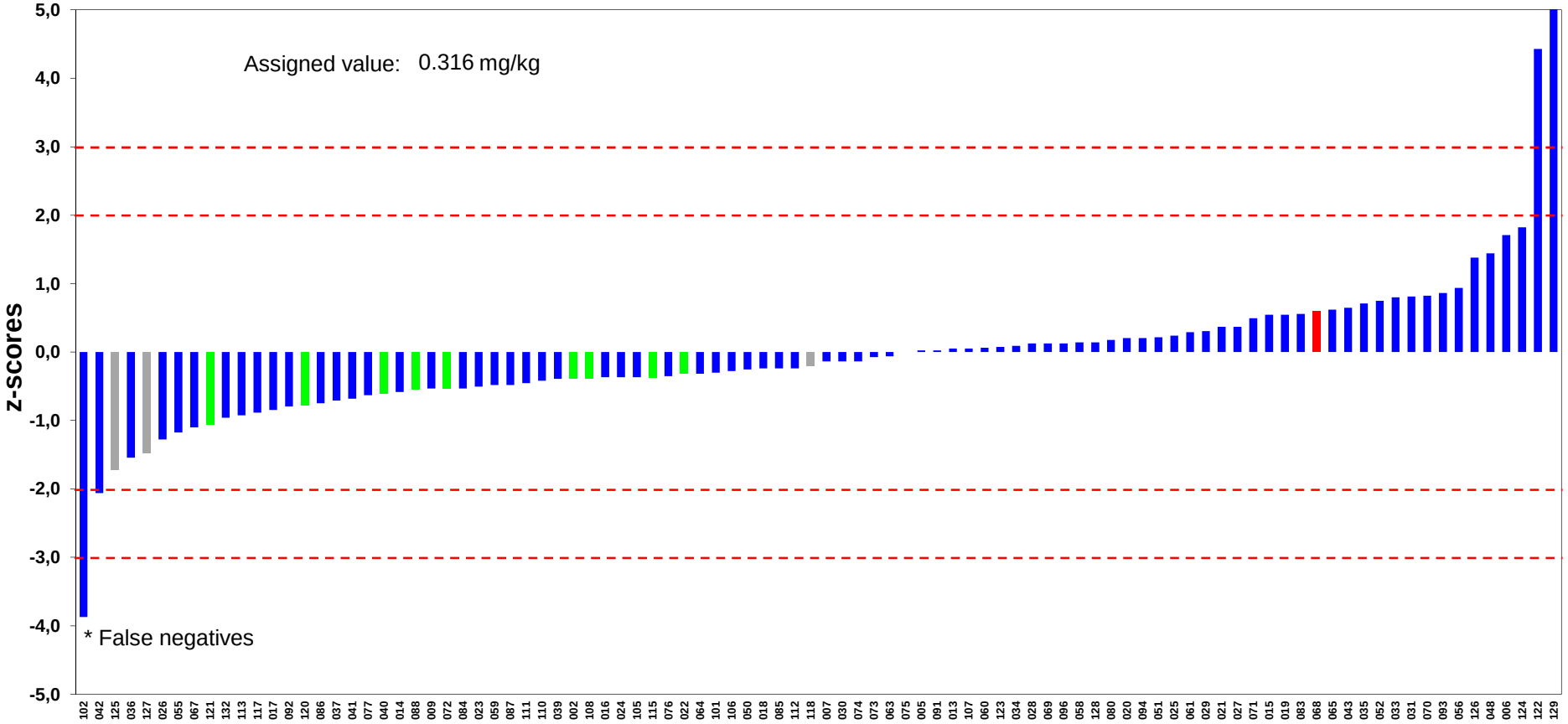
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Malathion

- Water added
- No water added
- Not specified
- ASE

Acceptable	90
Questionable	1
Unacceptable	3
Number of labs	94



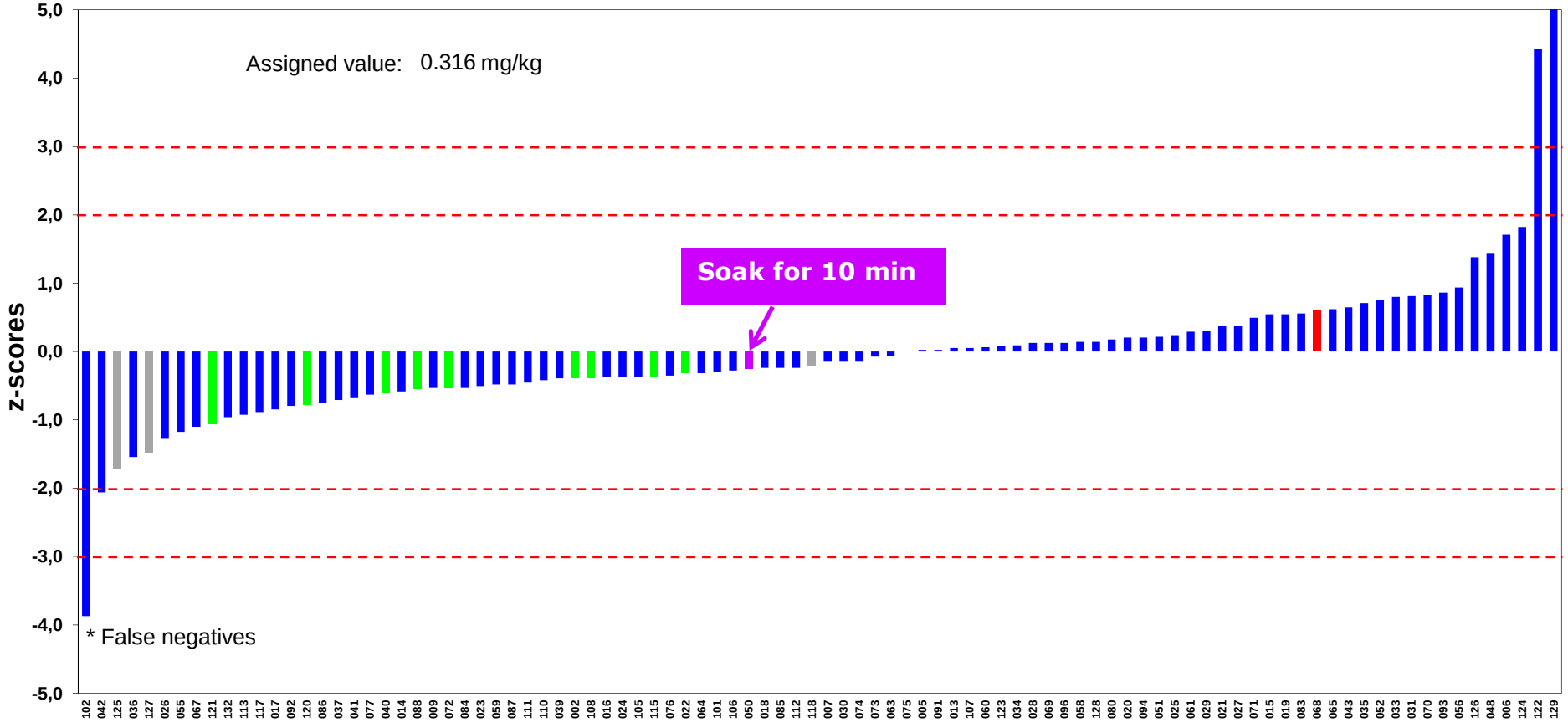
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Malathion

- Water added
- No water added
- Not specified
- ASE

Acceptable	90
Questionable	1
Unacceptable	3
Number of labs	94



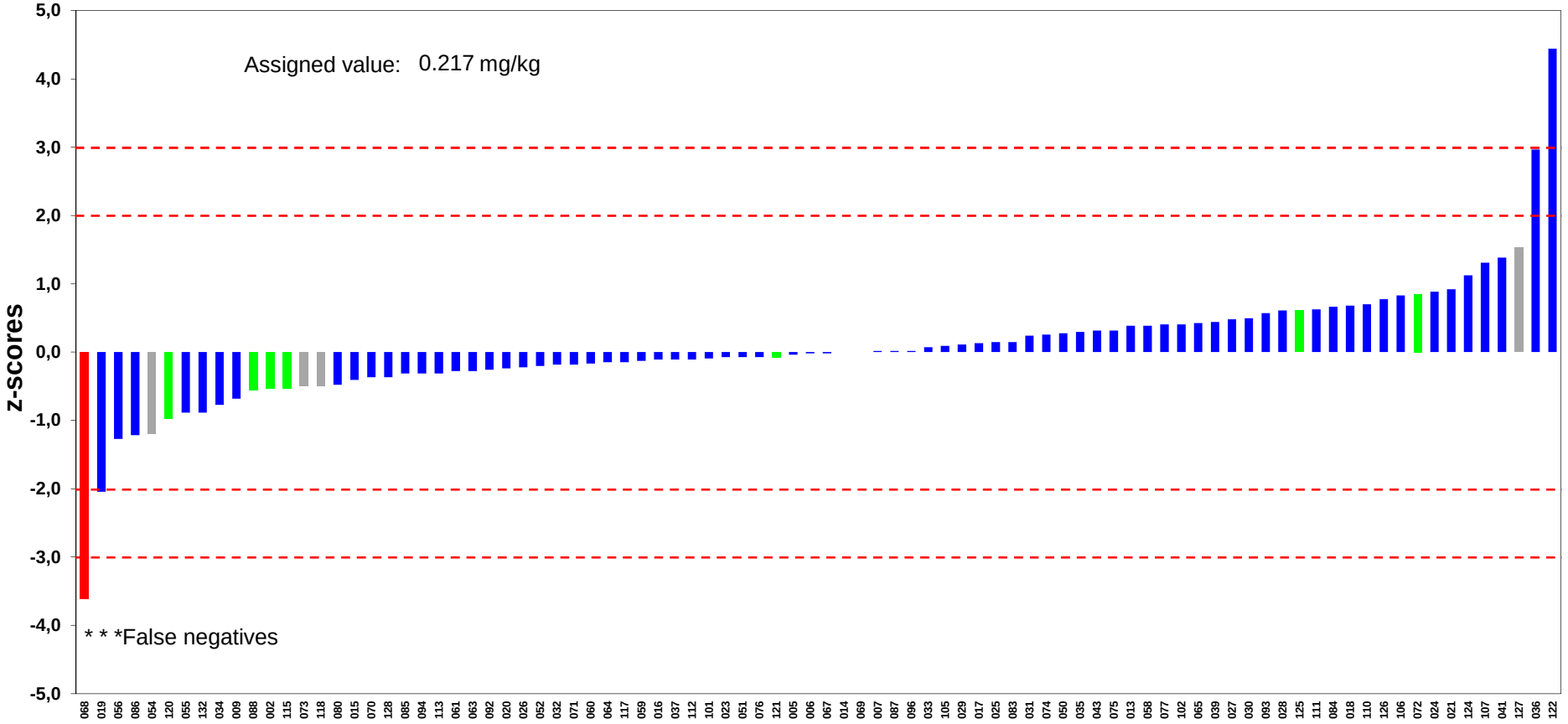
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Propiconazole

- Water added
- No water added
- Not specified
- ASE

Acceptable	85
Questionable	1
Unacceptable	2
Number of labs	88



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EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

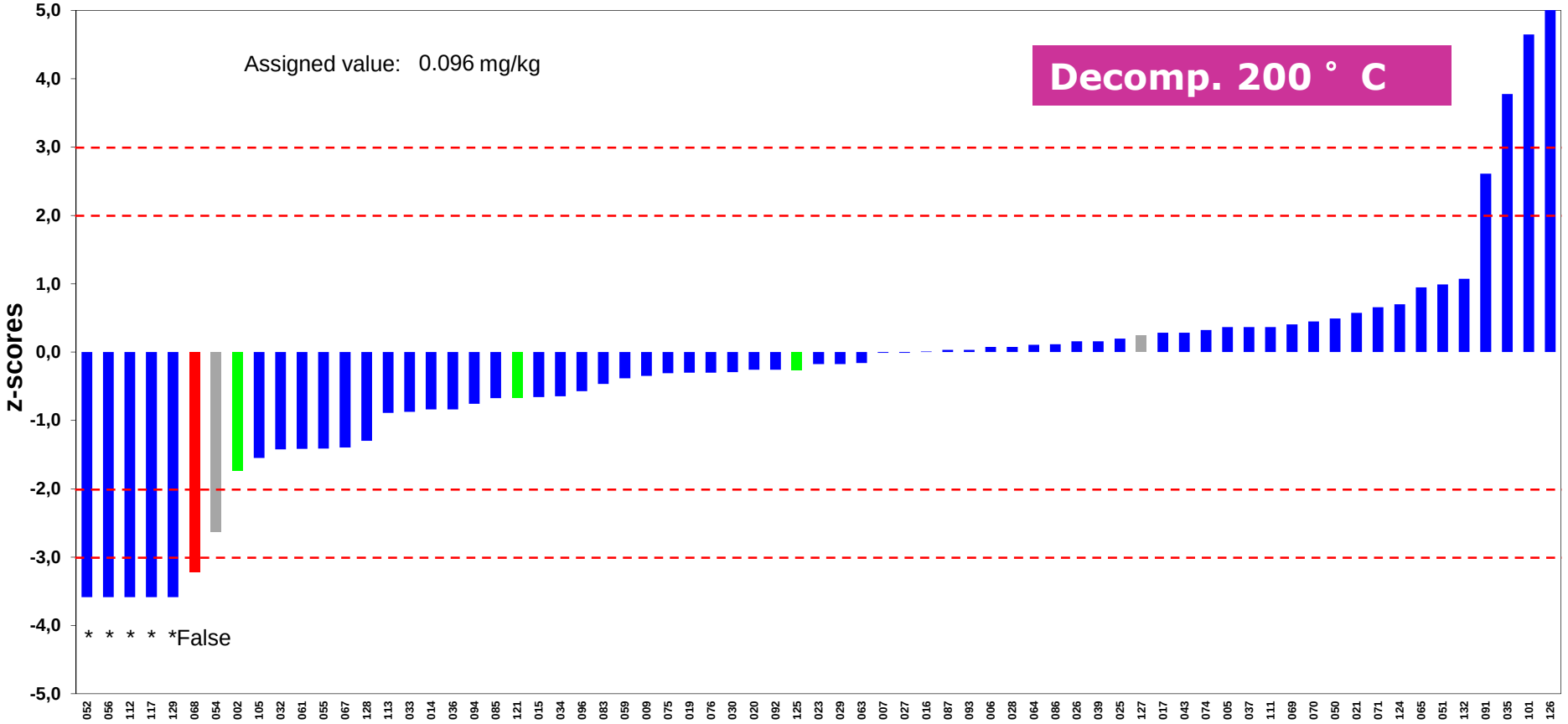
Pyraclostrobin

Water added
No water added
Not specified
ASE

Acceptable	58
Questionable	2
Unacceptable	9
Number of labs	69

Assigned value: 0.096 mg/kg

Decomp. 200 ° C



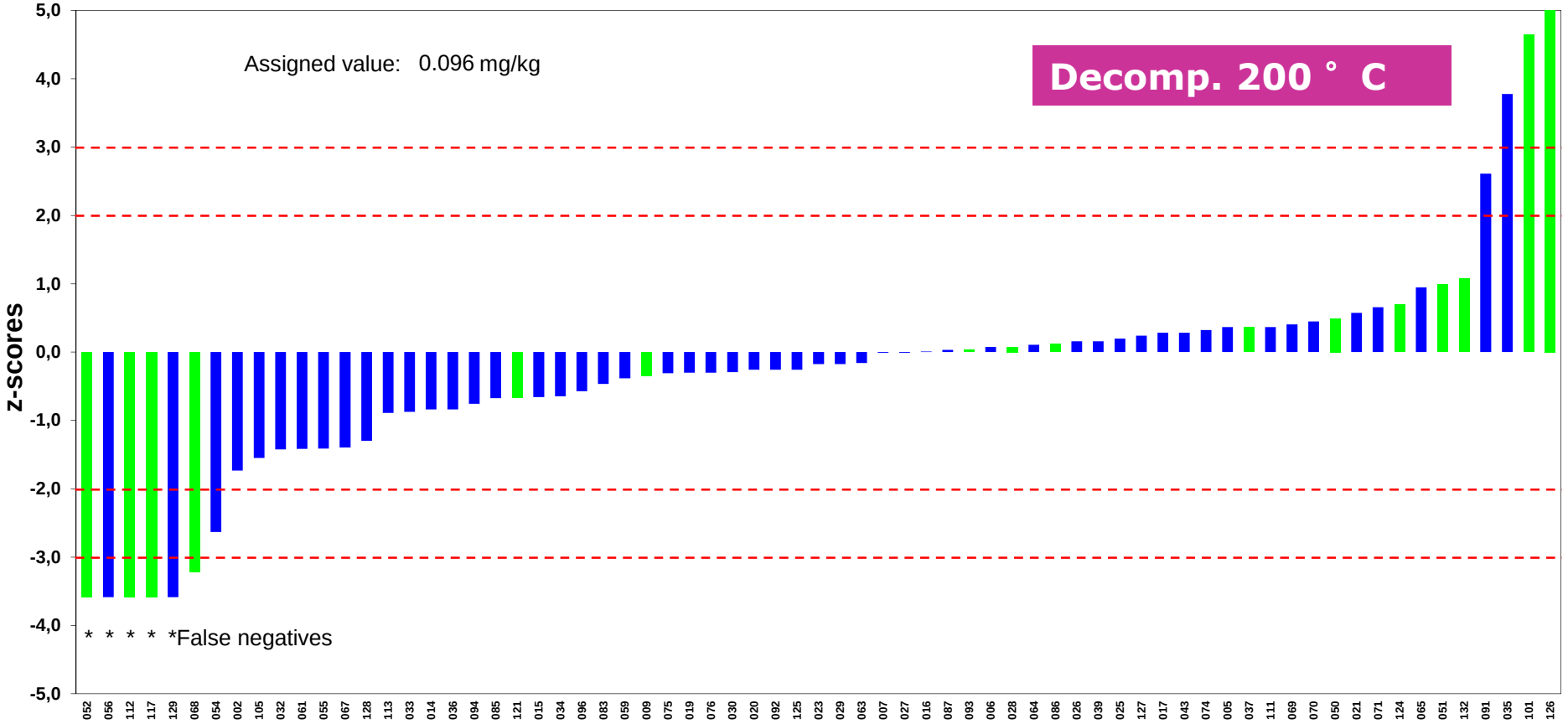
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Pyraclostrobin

LC
GC

Acceptable	58
Questionable	2
Unacceptable	9
Number of labs	69



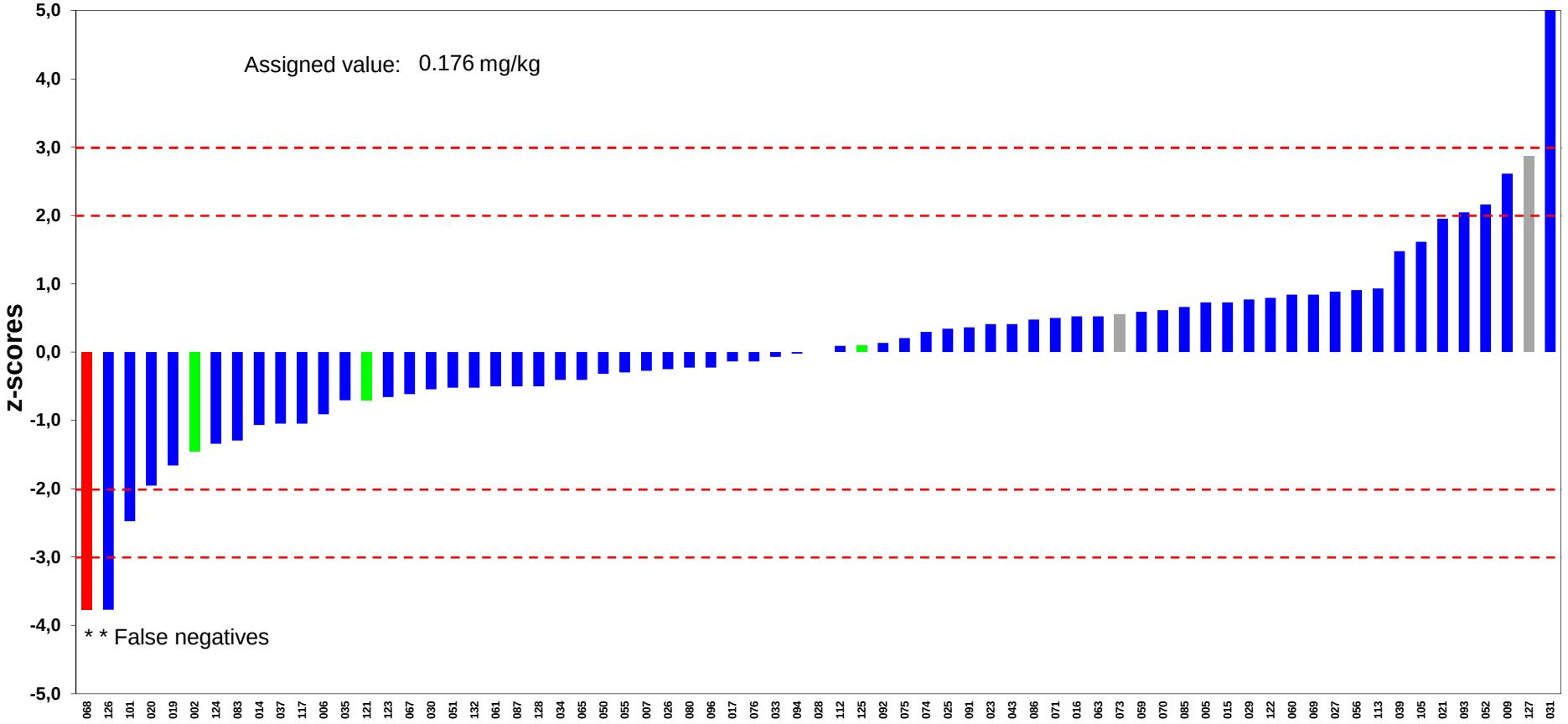
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Spiroxamine

Water added
No water added
Not specified
ASE

Acceptable	62
Questionable	4
Unacceptable	3
Number of labs	69



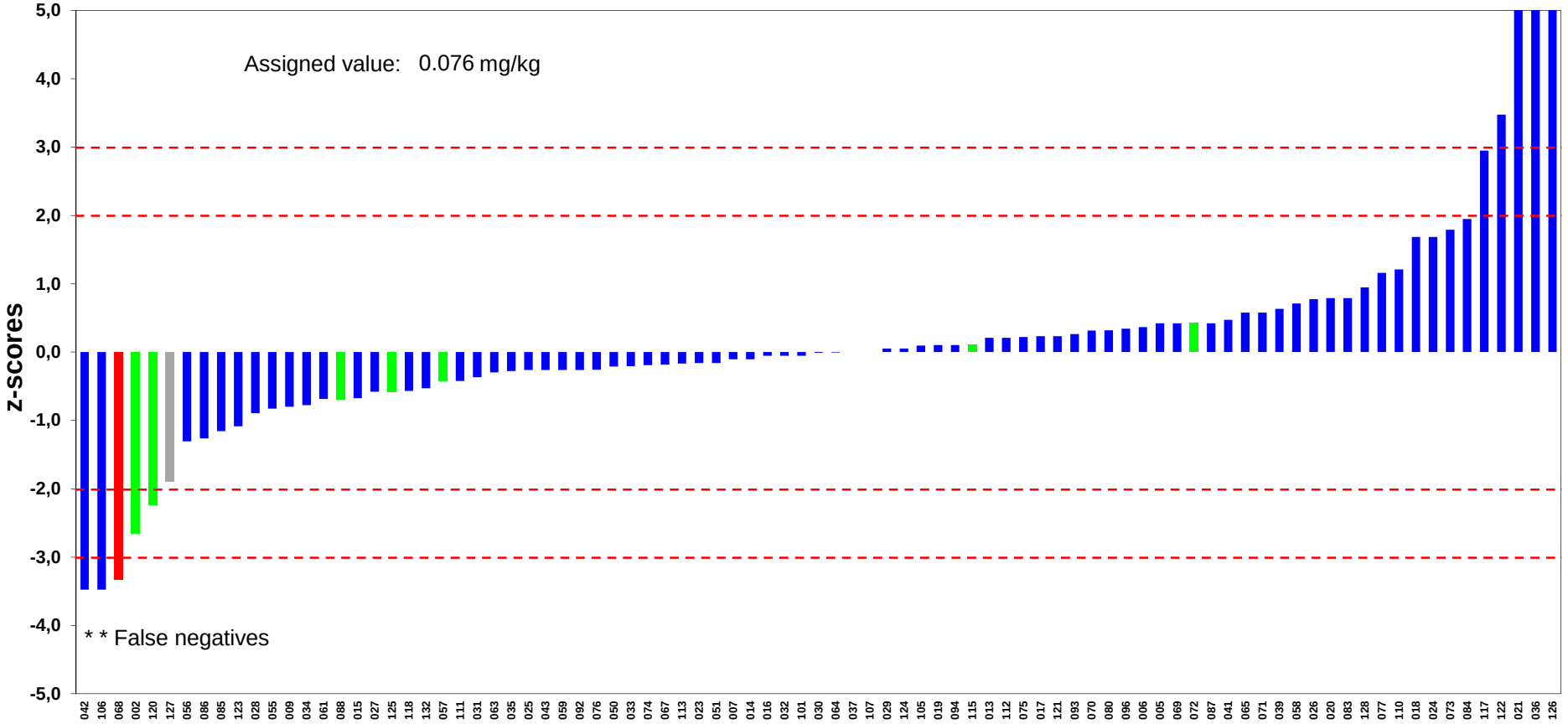
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Tebuconazole

Water added
No water added
Not specified
ASE

Acceptable	77
Questionable	3
Unacceptable	7
Number of labs	87



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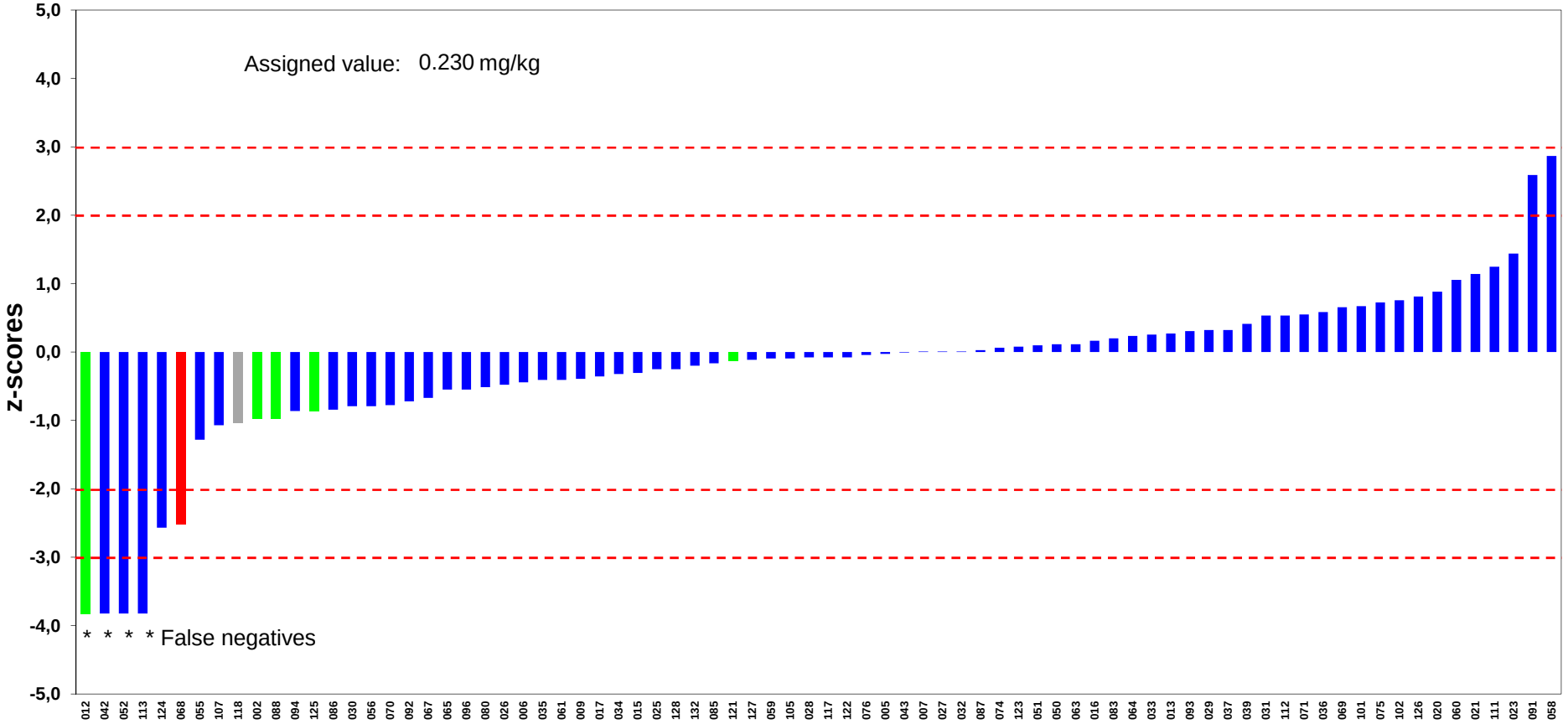
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

Triadimenol

Water added
No water added
Not specified
ASE

Acceptable	70
Questionable	4
Unacceptable	4
Number of labs	78



National Food Institute, Technical University of Denmark

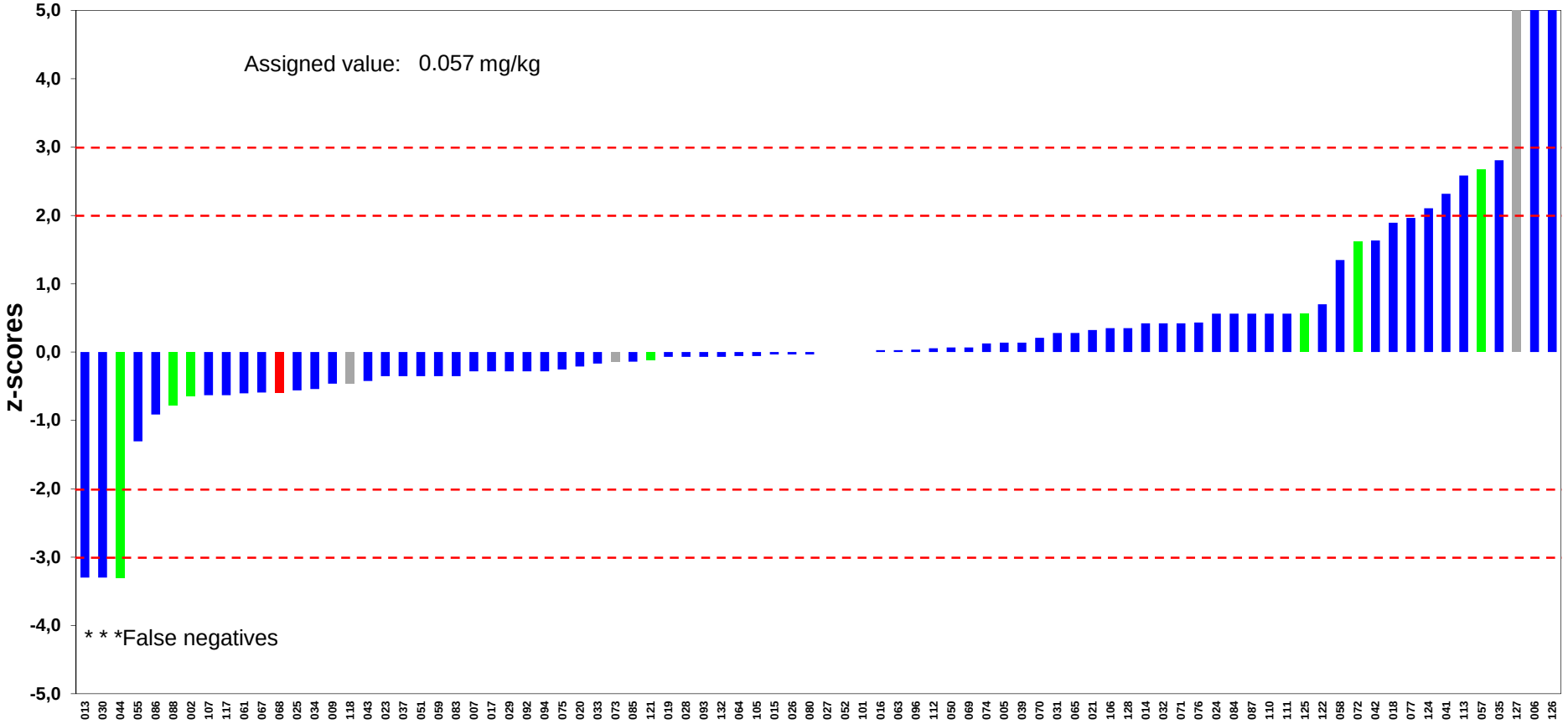
EURL EUROPEAN UNION REFERENCE LABORATORY PESTICIDE RESIDUES IN CEREALS & FEEDING STUFF

DTU

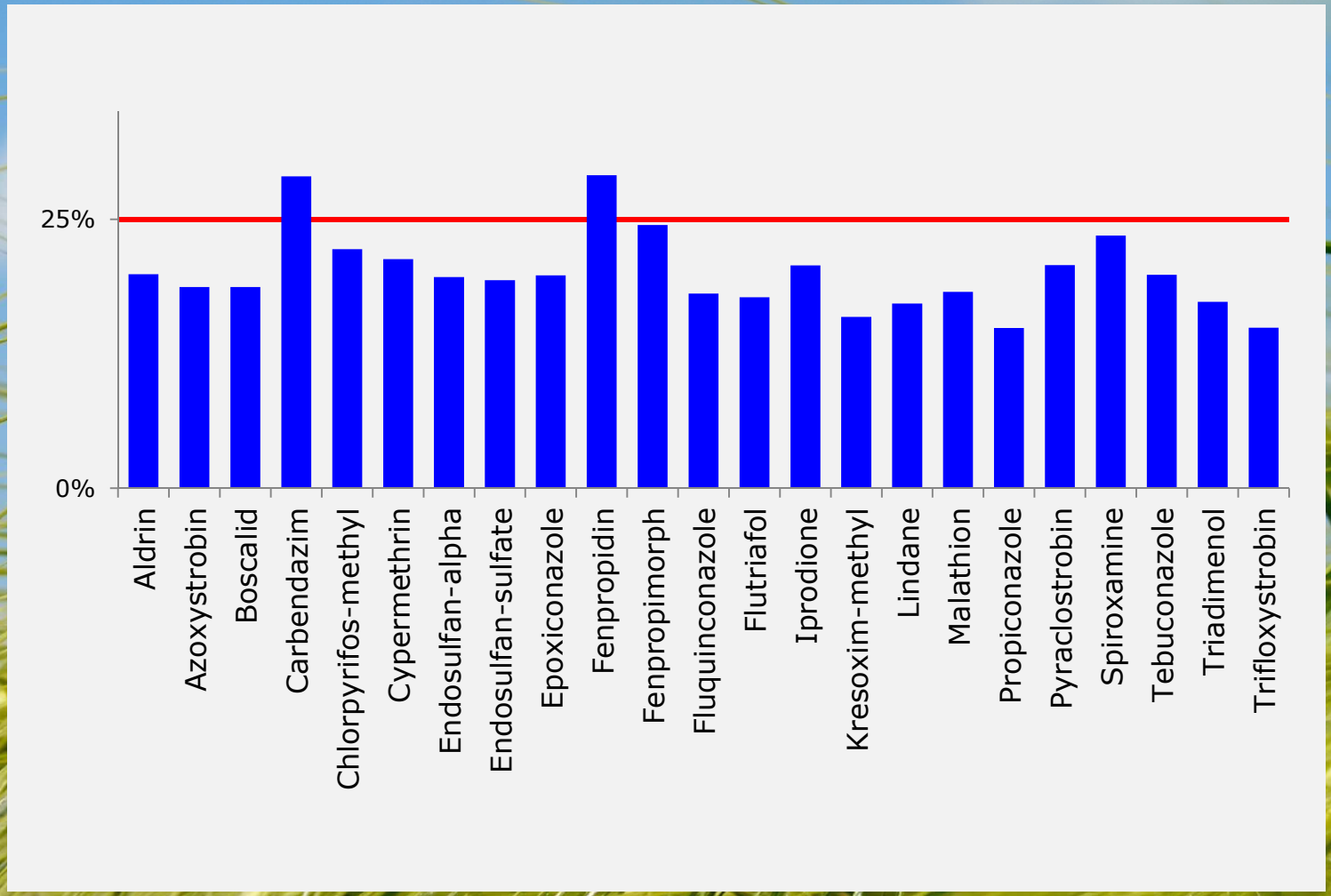
Trifloxystrobin

Water added
No water added
Not specified
ASE

Acceptable	73
Questionable	5
Unacceptable	6
Number of labs	84



Qn


25%
0%
Aldrin
Azoxystrobin
Boscalid
Carbendazim
Chlorpyrifos-methyl
Cypermethrin
Endosulfan-alpha
Endosulfan-sulfate
Epoxiconazole
Fenpropidin
Fenpropimorph
Fluquinconazole
Flutriafol
Iprodione
Kresoxim-methyl
Lindane
Malathion
Propiconazole
Pyraclostrobin
Spiroxamine
Tebuconazole
Triadimenol
Trifloxystrobin

	No. of reported results	Acceptable %	Questionable %	Unacceptable %	False negatives %
Aldrin	95	89	4	6	3
Azoxystrobin	87	89	7	5	3
Boscalid	86	95	5	0	
Carbendazim	69	86	6	9	
Chlorpyrifos-methyl	94	95	2	3	
Cypermethrin	92	92	3	4	2
Endosulfan-alpha	100	87	3	10	5
Endosulfan-sulfate	95	92	4	4	2
Epoxiconazole	81	86	10	4	1
Fenpropidin	62	84	6	10	6
Fenpropimorph	78	91	5	4	
Fluquinconazole	78	92	4	4	1
Flutriafol	79	90	1	9	6
Iprodione	82	93	5	2	
Kresoxim-methyl	88	93	0	7	5
Lindane	97	91	4	5	3
Malathion	94	96	1	3	1
Propiconazole	88	95	2	2	
Pyraclostrobin	69	84	3	13	7
Spiroxamine	69	90	6	4	3
Tebuconazole	87	89	3	8	2
Triadimenol	78	90	5	5	5
Trifloxystrobin	84	87	6	7	4

	No. of reported results	Acceptable %	Questionable %	Unacceptable %	False negatives %
Aldrin	95	89	4	6	3
Azoxystrobin	87	89	7	5	3
Boscalid	86	95	5	0	
Carbendazim	69	86	6	9	
Chlorpyrifos-methyl	94	95	2	3	
Cypermethrin	92	92	3	4	2
Endosulfan-alpha	100	87	3	10	5
Endosulfan-sulfate	95	92	4	4	2
Epoxiconazole	81	86	10	4	1
Fenpropidin	62	84	6	10	6
Fenpropimorph	78	91	5	4	
Fluquinconazole	78	92	4	4	1
Flutriafol	79	90	1	9	6
Iprodione	82	93	5	2	
Kresoxim-methyl	88	93	0	7	5
Lindane	97	91	4	5	3
Malathion	94	96	1	3	1
Propiconazole	88	95	2	2	
Pyraclostrobin	69	84	3	13	7
Spiroxamine	69	90	6	4	3
Tebuconazole	87	89	3	8	2
Triadimenol	78	90	5	5	5
Trifloxystrobin	84	87	6	7	4

	No. of reported results	Acceptable %	Questionable %	Unacceptable %	False negatives %
Aldrin	95	89	4	6	3
Azoxystrobin	87	89	7	5	3
Boscalid	86	95	5	0	
Carbendazim	69	86	6	9	
Chlorpyrifos-methyl	94	95	2	3	
Cypermethrin	92	92	3	4	2
Endosulfan-alpha	100	87	3	10	5
Endosulfan-sulfate	95	92	4	4	2
Epoxiconazole	81	86	10	4	1
Fenpropidin	62	84	6	10	6
Fenpropimorph	78	91	5	4	
Fluquinconazole	78	92	4	4	1
Flutriafol	79	90	1	9	6
Iprodione	82	93	5	2	
Kresoxim-methyl	88	93	0	7	5
Lindane	97	91	4	5	3
Malathion	94	96	1	3	1
Propiconazole	88	95	2	2	
Pyraclostrobin	69	84	3	13	7
Spiroxamine	69	90	6	4	3
Tebuconazole	87	89	3	8	2
Triadimenol	78	90	5	5	5
Trifloxystrobin	84	87	6	7	4

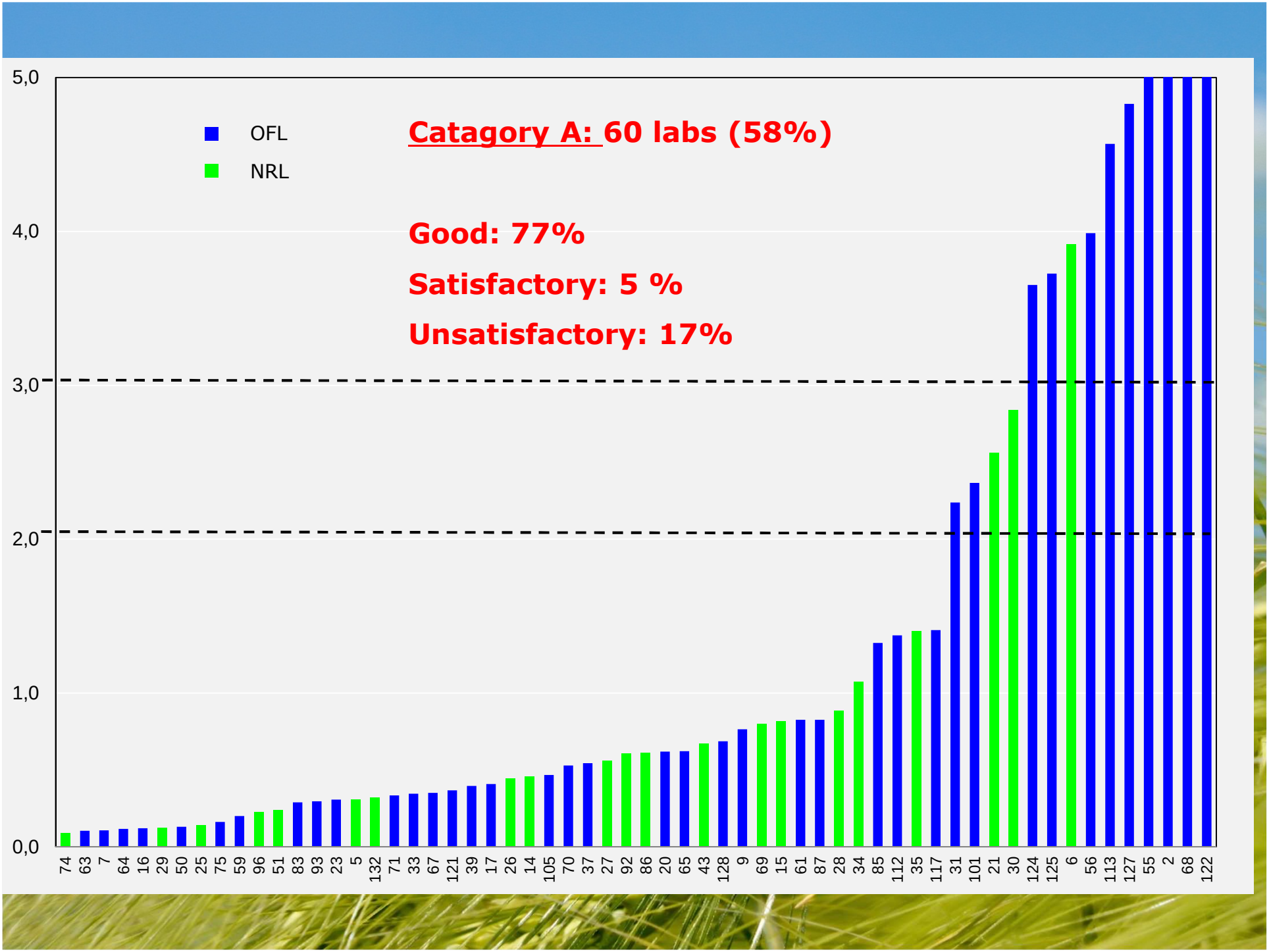
Catagory A laboratories and combined z-scores

- To be classified as Category A laboratory the labs had to report at least 90% of the pesticide present in the test material (≥16 pesticide residues) and report no false positive.

- Evaluation of the overall performance, the Average of the Squared z-Score (AZ2) are calculated:

$$AZ^2 = \frac{\sum_{i=1}^{n} |Z_i| |Z_i|}{n}$$

- $z \leq 2$ Good
- $2 < z \leq 3$ Satisfactory
- $z > 3$ Unsatisfactory


5,0
4,0
3,0
2,0
1,0
0,0
OFL
NRL
Catagory A: 60 labs (58%)
Good: 77%
Satisfactory: 5 %
Unsatisfactory: 17%
74 63 7 64 16 29 50 25 75 59 96 51 83 93 23 5 132 71 33 67 121 39 17 26 14 105 70 37 27 92 86 20 65 43 128 9 69 15 61 87 28 34 85 112 35 117 31 101 21 30 124 125 6 56 113 127 55 2 68 122

Conclusions

- EUPT-CF7 was the first EUPT focusing on cereal-based feed Test Items.
- The cereal used to prepare the feed was sprayed in the field with commercially available pesticide formulations, and the soya oil used was spiked in the laboratory.
- The treated Test Item contained 14 incurred pesticides, 5 pesticides that were incurred and spiked and 4 that were spiked only.
- 106 laboratories, representing 29 EU and EFTA countries participated
- 14 laboratories from Third Countries representing 10 countries participated

Conclusions

- Both the number of false positives and false negatives increased considerable in comparison to the last EUPT on cereals EUPT-C6.
  - The 13 false positive results were reported by 11 laboratories
  - The 50 false negative results were reported by 22 laboratories
- For boscalid, chlorpyrifos-methyl, cypermethrin, endosulfan-sulfate, fenpropimorph, fluquinconazole, flutriafol, iprodione, kresoxim-methyl, lindane, malathion, propiconazole, spiroxamine and triadimenol acceptable results were obtained for 90-96% of the laboratories.
- For aldrin, azoxystrobin, carbendazim, endosulfan-alpha, epoxiconazole, fenpropidin, pyraclostrobin, tebuconazole and trifloxystrobin acceptable results were obtained by 84-89% of the laboratories.

EUPT-CF8

- What
  - Wheat with incurred pesticides
- When
  - April/May 2014


Thank you to the Advisory Group
Thank you to the Quality Group
Thank you very much for your attention