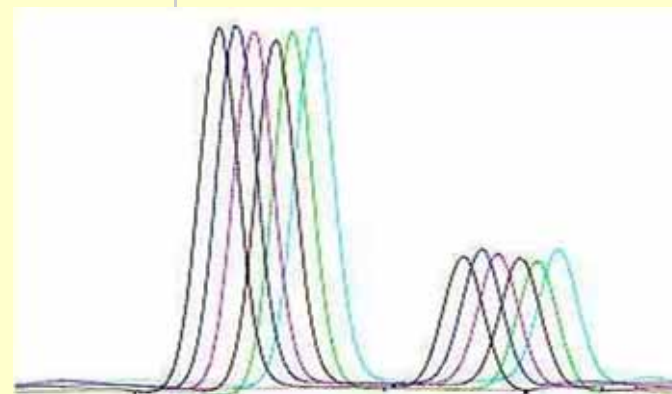


EUPT AO-08

Conception and Results



Raw Poultry Meat Test Items

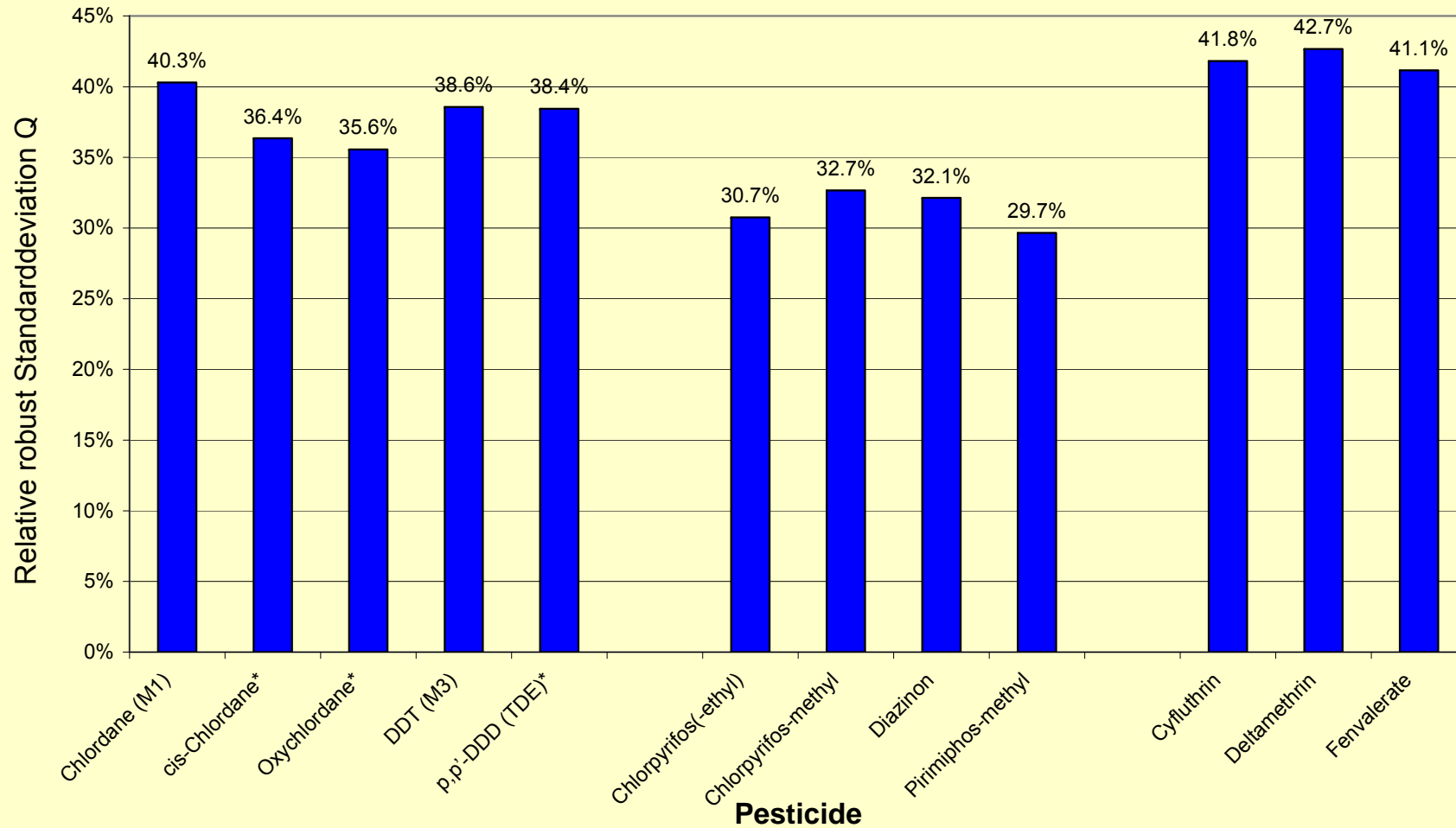


Ralf Lippold

Björn Hardebusch

Results of EUPT AO 06 – Poultry Meat

Overview about Results (EUPT AO 06 - Poultry Meat)



List of mandatory compounds

Conception

Analyte	MRRL [mg/kg]	Analyte	MRRL [mg/kg]	Analyte	MRRL [mg/kg]
Abamectin B1 α (F)	0.005	Diazinon (F)	0.005	cis-Heptachlor epoxide (F)	0.002
Abamectin B1 β (F)	0.005	Deltamethrin (F)	0.01	trans-Heptachlor epoxide (F)	0.002
Aldrin (F)	0.002	Dieldrin (F)	0.002	Malathion (parent only)	0.005
Azinphos-ethyl (F)	0.005	alpha-Endosulfan (F)	0.002	Methidathion	0.005
Bifenthrin (F)	0.005	beta-Endosulfan (F)	0.002	4.4'-Methoxychlor (F)	0.005
cis-Chlordane (F)	0.002	Endosulfan sulfate (F)	0.002	Parathion(-ethyl) (F)	0.005
trans-Chlordane (F)	0.002	Endrin (F)	0.002	Parathion-methyl (parent only)	0.005
Oxychlordane (F)	0.002	Fenthion (F)	0.005	Phosmet (parent only)	0.02
Chlorobenzilate (F)	0.01	Fenthion sulfoxide (F)	0.005	Phoxim (F)	0.02
Chlorfenvinphos (F)	0.005	Fenthion sulfone (F)	0.005	Pendimethalin (F)	0.02
Chlorpyrifos(-ethyl) (F)	0.005	Fenthion oxon (F)	0.005	Permethrin (sum)	0.01
Chlorpyrifos-methyl (F)	0.005	Fenthion oxon sulfoxide (F)	0.005	Pirimiphos-methyl (F)	0.01
Cyfluthrin (sum of isomers) (F)	0.01	Fenthion oxon sulfone (F)	0.005	Profenofos (F)	0.005
Cypermethrin (sum of isomers) (F)	0.01	Fenvalerate (F) (sum of RS/SR and RR/SS isomers)	0.005	Pyrazophos (F)	0.005
lambda-Cyhalothrin (F) (sum of isomers)	0.01	Hexachlorobenzene (HCB) (F)	0.002	Quintozene (parent only) (F)	0.002
p.p'-DDE (F)	0.002	alpha-HCH (F)	0.002	Resmethrin (F)	0.01
p.p'-DDD (TDE) (F)	0.002	beta-HCH (F)	0.002	Tecnazene (F)	0.005
p.p'-DDT (F)	0.002	gamma-HCH (Lindane) (F)	0.002	Triazophos (F)	0.005
o.p'-DDT (F)	0.002	Heptachlor (F)	0.002	Vinclozolin (parent only)	0.02

List of voluntary compounds

Conception

Analyte	MRRL [mg/kg]	Analyte	MRRL [mg/kg]
Bixafen (parent only)	0.01	Flusilazole (F) (parent only)	0.01
Boscalid (F) (parent only)	0.01	Indoxacarb (F) (sum of isomers)	0.01
Carbendazim (Carbendazim only)	0.01	Metazachlor (parent only)	0.01
Chlorpropham (F) (parent only)	0.01	Prochloraz (parent only)	0.01
Cyproconazole (F)	0.01	Prothioconazole-desthio	0.01
Epoxiconazole (F)	0.01	Spinosyn A (F)	0.01
Etofenprox (F)	0.01	Spinosyn D (F)	0.01
Famoxadone	0.01	tau-Fluvalinate (F)	0.01
Fenpropidin (parent only)	0.01	Tebuconazole	0.01
Fenpropimorph (parent only)	0.01	Tetraconazole (F)	0.01
Fluquinconazole (F)	0.01	Thiacloprid (F)	0.01
Additional pesticide spiked (not in target list):		Metaflumizone	

Spiked compounds

Conception

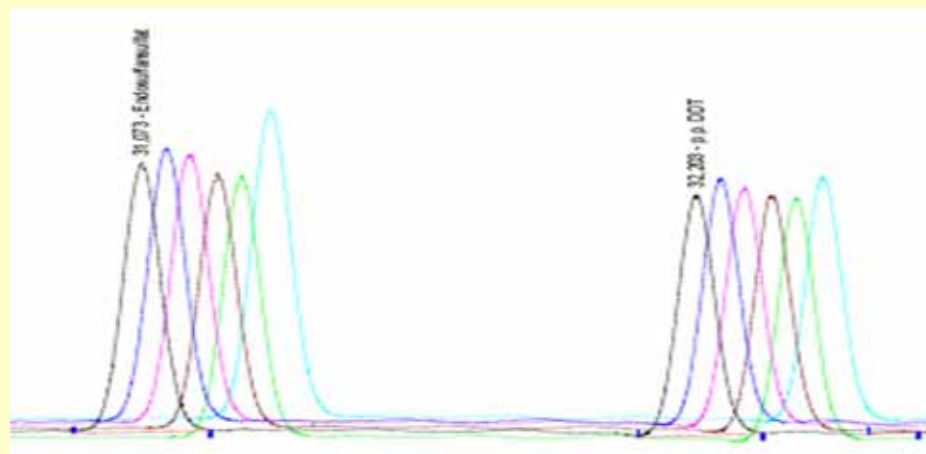
2013 Mandatory		MRL (VO 396/2005) mg/kg	MRRL mg/kg	spiking level (target)	Ratio spiking level to MRL	Ratio spiking level to MRRL	Ratio spiking level to MRRL
Group	Analyte	poultry		mg/kg		µg/kg meat	(worst case: 70% recovery)
Organo-chlorines	Oxychlorane* (F)	0.05	0.002	0.025	0.500	12.5	8.8
	o,p'-DDT (F)	1	0.002	0.030	0.300	15.0	10.5
	beta-Endosulfane* (F)	0.05	0.002	0.045	0.900	22.5	15.8
	Endosulfansulfate* (F)	0.05	0.002	0.060	1.200	30.0	21.0
	trans-Heptachlorepoxid (F)	0.2	0.002	0.025	1.250	12.5	8.8
	HCH beta (F)	0.1	0.002	0.015	1.500	7.5	5.3
Organophosphorous	Diazinon* (F)	0.05	0.005	0.065	1.300	13.0	9.1
	Chlorpyrifos(-ethyl)* (F)	0.05	0.005	0.055	1.100	11.0	7.7
	Phosmet	0.1	0.02	0.150	1.500	7.5	5.3
Pyrethroids	Cypermethrin* (F)	0.05	0.01	0.080	1.600	8.0	5.6
	Deltamethrin (F)	0.1	0.01	0.095	9.500	9.5	6.7
	lambda-Cyhalothrin* (F)	0.02	0.01	0.115	5.750	11.5	8.1
2013 Voluntary		MRL (VO 396/2005) mg/kg	MRRL mg/kg	spiking level (target)	Ratio spiking level to MRL	Ratio spiking level to MRRL	Ratio spiking level to MRRL
"new compounds"	Metaflumizone	0.02	0.01	0.080	4.000	8.0	5.6
	Prochloraz	0.1	0.01	0.095	0.950	9.5	6.7
	Tebuconazole	0.1	0.01	0.075	0.750	7.5	5.3

Preparation

- Poultry meat from the market
 - tested to be free of relevant pesticide residues
- Certified spiking solution
 - custom made by LGC Promochem GmbH, Germany
 - checked against EURL-standards
- Spiking of 1.25 kg lard with 20 ml solution
- Spiking of 25 kg poultry test material by using the fat
- Sub-sampling to portions of about 115 g each
(spiked sample and blank sample)
 - freezing
 - testing for homogeneity
 - shipment by overnight express

Homogeneity Test Results

- 10 randomly selected test portions analysed in duplicate
- Statistical evaluation according to IUPAC/ISO/AOAC International Protocol for Proficiency Testing ISO 13528:2005
- Test passed with no problems



Homogeneity Test Results

- Cleanup with EN 1528 and GC-detection for volatile pesticides
- Modified QuEChERS (citrate buffered) for LC-Pesticides
- All tests passed without problems

Homogeneity Test Results

Sample	Replicate	ECD 17(ECD 17(MSD		ECD 17(MSD		ECD 17(ECD 17(ECD 17(LCMSMS		LCMSMS		MSD		LCMSMS		ECD 17(ECD 17(LCMSMS		
		HCH, beta-	Diazinon	Chlorpyrifos	Oxychloridan	Heptachlorepoxid, trans-	Endosulfan, beta-	DDT, op-	Endosulfan-sulfat	Tebuconazol	Phosmet	Lambda-Cyhalothrin	Procloraz	Cypermethrin, ges.	Deltamethrin, ges.	Metaflumizone
5	1	11,4	32,4	53,6	18,5	19,6	35,2	24,8	45,1	72,5	144,9	74,7	96,0	60,4	68,7	91,2
	2	13,1	57,6	65,7	17,5	23,7	36,8	28,7	50,8	71,1	149,8	80,4	94,9	70,0	68,7	94,9
26	1	12,6	40,0	58,4	20,1	20,9	39,3	27,0	50,3	73,7	150,5	78,4	98,2	67,6	75,8	93,5
	2	13,7	53,7	65,7	22,2	25,2	44,0	31,2	56,3	69,8	143,1	92,8	94,9	76,8	66,8	93,0
47	1	12,2	34,2	53,7	19,6	20,2	37,8	26,3	48,7	72,7	153,8	73,5	93,6	64,2	72,4	90,8
	2	11,5	56,1	53,4	17,5	20,4	41,1	29,1	51,8	73,9	157,4	89,7	100,1	69,1	66,8	97,8
66	1	12,1	33,8	54,7	19,6	20,3	36,9	26,0	47,5	75,8	153,3	71,0	94,6	63,8	71,0	92,5
	2	13,0	56,1	62,7	20,9	23,7	40,4	28,8	52,1	70,1	148,2	81,3	93,9	70,8	68,1	93,3
87	1	12,4	41,7	53,8	19,9	20,6	37,5	26,3	48,1	74,5	159,6	74,5	98,5	64,9	74,7	93,0
	2	13,0	55,2	62,5	21,2	24,9	36,8	29,9	52,7	72,4	149,8	85,7	98,8	65,7	66,5	95,7
106	1	12,3	42,9	53,4	19,9	20,5	38,6	26,8	49,6	76,0	162,0	74,2	97,4	66,4	71,2	92,5
	2	13,0	52,6	59,7	20,8	23,3	39,1	28,7	51,3	74,7	150,0	81,7	96,0	68,6	69,6	93,0
126	1	12,7	42,7	57,9	20,4	22,0	38,9	27,4	49,7	76,6	150,3	75,4	95,7	66,1	77,0	91,3
	2	11,7	49,7	62,9	18,6	22,8	37,7	28,2	50,8	74,2	152,1	76,0	97,5	66,3	71,7	94,2
142	1	12,8	47,9	57,5	20,6	22,5	40,5	27,8	51,3	76,5	160,6	79,1	98,1	68,4	80,3	94,0
	2	14,6	52,2	72,8	23,2	25,7	48,7	33,5	62,4	75,5	157,2	93,3	98,5	81,0	70,7	93,1
161	1	12,6	43,7	57,6	20,0	21,4	39,1	27,0	49,7	75,0	154,0	72,9	97,3	66,9	75,4	92,6
	2	13,3	51,2	67,7	21,0	25,0	41,8	29,7	54,7	72,9	154,0	89,3	97,1	71,3	72,2	93,9
187	1	12,9	41,1	60,5	20,6	22,7	39,8	27,7	49,7	74,8	160,9	78,4	99,7	69,0	75,8	95,2
	2	12,9	46,9	64,1	20,4	23,3	39,6	28,6	51,5	75,1	152,4	80,4	96,6	66,0	63,0	95,4
201	1	12,9	48,1	54,9	20,6	21,3	40,4	27,7	51,8	76,4	149,5	76,8	93,5	69,0	73,7	93,8
	2	12,7	52,2	64,9	20,1	23,3	41,9	28,7	52,7	74,1	150,7	75,6	95,4	70,0	68,7	93,0
General average		12,7	46,9	59,9	20,1	22,4	39,6	28,1	51,3	74,0	152,9	79,8	96,6	68,3	71,3	93,5
Standard deviation		0,70	7,60	5,48	1,34	1,82	2,87	1,88	3,42	1,97	5,04	6,53	1,95	4,33	4,13	1,61
Cv		5,5%	16,2%	9,2%	6,6%	8,1%	7,2%	6,7%	6,7%	2,7%	3,3%	8,2%	2,0%	6,3%	5,8%	1,7%
Spiking level [µg/kg meat]		15,0	65,0	55,0	25,0	25,0	45,0	30,0	60,0	75,0	150,0	115,0	95,0	80,0	95,0	80,0
Median Value [µg/kg meat]		12,9	53,6	45,8	18,7	19,6	35,1	22,0	48,2	64,7	127,0	85,7	79,8	58,2	71,0	xxx

Homogeneity Test Results

Sample	HCH, beta-	Diazinon	Chlorpyrifos	Oxychloridan	Heptachlorepoxid, trans-	Endosulfan, beta-	DDT, op-	Endosulfan-sulfat	Tebuconazol	Phosmet	Lambda-Cyhalothrin	Prochloraz	Cypermethrin, ges.	Deltamethrin, ges.	Metaflumizone
5	12,3	45,0	59,6	18,0	21,7	36,0	26,7	47,9	71,8	147,3	77,5	95,4	65,2	68,7	93,1
26	13,2	46,8	62,0	21,1	23,1	41,6	29,1	53,3	71,7	146,8	85,6	96,5	72,2	71,3	93,3
47	11,8	45,1	53,5	18,5	20,3	39,4	27,7	50,3	73,3	155,6	81,6	96,9	66,6	69,6	94,3
66	12,5	44,9	58,7	20,3	22,0	38,6	27,4	49,8	73,0	150,7	76,1	94,2	67,3	69,6	92,9
87	12,7	48,4	58,2	20,6	22,8	37,2	28,1	50,4	73,4	154,7	80,1	98,6	65,3	70,6	94,3
106	12,7	47,8	56,5	20,4	21,9	38,9	27,7	50,5	75,4	156,0	77,9	96,7	67,5	70,4	92,8
126	12,2	46,2	60,4	19,5	22,4	38,3	27,8	50,3	75,4	151,2	75,7	96,6	66,2	74,3	92,7
142	13,7	50,1	65,2	21,9	24,1	44,6	30,6	56,8	76,0	158,9	86,2	98,3	74,7	75,5	93,5
161	13,0	47,4	62,6	20,5	23,2	40,4	28,3	52,2	74,0	154,0	81,1	97,2	69,1	73,8	93,2
187	12,9	44,0	62,3	20,5	23,0	39,7	28,1	50,6	75,0	156,7	79,4	98,2	67,5	69,4	95,3
201	12,8	50,1	59,9	20,3	22,3	40,0	28,1	51,6	75,3	150,1	76,2	94,5	69,5	71,2	93,4
Average	12,7	46,9	59,9	20,1	22,4	39,5	28,1	51,2	74,0	152,9	79,8	96,6	68,3	71,3	93,5
Standard deviation sx	0,502	2,075	3,20	1,11	1,00	2,28	1,01	2,306	1,49	3,93	3,63	1,46	2,92	2,26	0,80
Cv	4,0%	4,4%	5,3%	5,5%	4,4%	5,8%	3,6%	4,5%	2,0%	2,6%	4,5%	1,5%	4,3%	3,2%	0,9%
Cv (target)	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%	25,0%
Cv/Cv (target)	0,16	0,18	0,21	0,22	0,18	0,23	0,14	0,18	0,08	0,10	0,18	0,06	0,17	0,13	0,03
Homogeneity	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.
sw (B.8)	0,69	10,1	6,23	1,07	2,13	2,41	2,21	3,54	1,84	4,79	7,58	1,84	4,50	4,82	1,94
Ss (B.9)	0,03	-	-	0,16	-	0,16	-	-	0,08	0,15	0,14	0,02	-	-	-
Homogeneity given, if Ss < 0,3	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.

Stability

- During and after the EUPT AO-08
 - Samples were analysed during and after the time schedule
 - No degradation of any analyte was observed (range $\pm 10\%$)

Conception-Timeschedule

EURL	First Information supplied to laboratories and call for participation	Beginning of December 2012
Participant	Registration via EUPT website	Starting 21 January 2013; ending 15 February 2013
EURL	Shipment of test material	By 4 March 2013
Participant	Confirmation of test material receipt	Within 7 days
Participant	Reporting of test results and method information	By 8 April 2013*
Participant	Reporting of additional method information	Starting 8 April 2013; ending 19 April 2013
EURL	Dispatch of a preliminary report to all participants (only results, no statistical treatment)	By 28 June 2013
EURL	Dispatch of the final report as pdf-file	November 2013

Reality

- Servercrash 20 min before Deadline (08.04.2013, 12.40)
 - A quite number of laboratories were online trying to enter data
 - Emails containing results in Excelfiles
- New Deadline 09.04.2013
 - Comparison results received by email and data base entries
=> differences between database and excel in 2 cases
=> clarification between laboratories and EURL AO

Data - Participants

- 113 Participating Laboratories (2012: 106)
 - 27 different countries
 - 27 Member States were represented by NRLs
 - 1 NRL (EFTA-Countries)
 - 85 OFLs from different Member States and Norway

Data - Participants

- 108 (2012: 102) Laboratories reported results
 - 28 different countries
 - 26 Member States were represented by NRLs (no result from Denmark)
 - 1 NRL (EFTA-Countries)
 - 81 OFLs from different Member States and Switzerland

Data - Participants

Austria	1	Germany	20 (+1)	Poland	9 (+1)
Belgium	5	Greece	3	Portugal	2 (+1)
Bulgaria	1	Hungary	5 (+2)	Romania	5 (+1)
Cyprus	1	Ireland	2	Slovakia	3 (+1)
Czech Republic	2	Italy	11 (-1)	Slovenia	1
Denmark	1 (-2)	Latvia	1	Spain	10 (+4)
Estonia	2	Lithuania	1	Sweden	2
Finland	1	Netherlands	3 (-1)	Switzerland	1
France	11 (-2)	Norway	1	United Kingdom	3
Summary		European Union	25	EFTA	2

Evaluating of the results of EURL AO

Lab 8 reported all results on fat base

Decision at the meeting of the Scientific Committee:

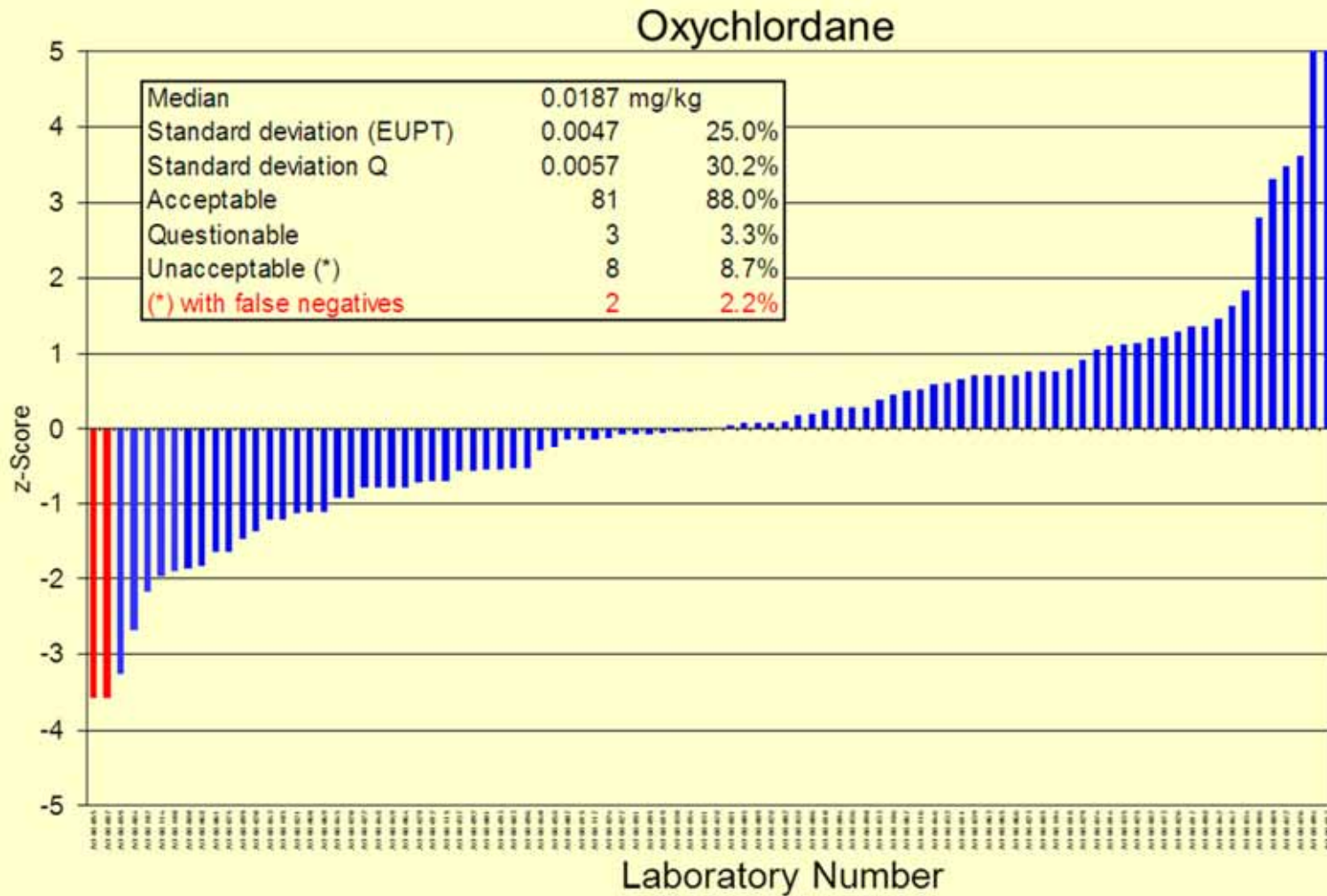
-> Eliminate the results of lab 8 from the population!

False Positive Results

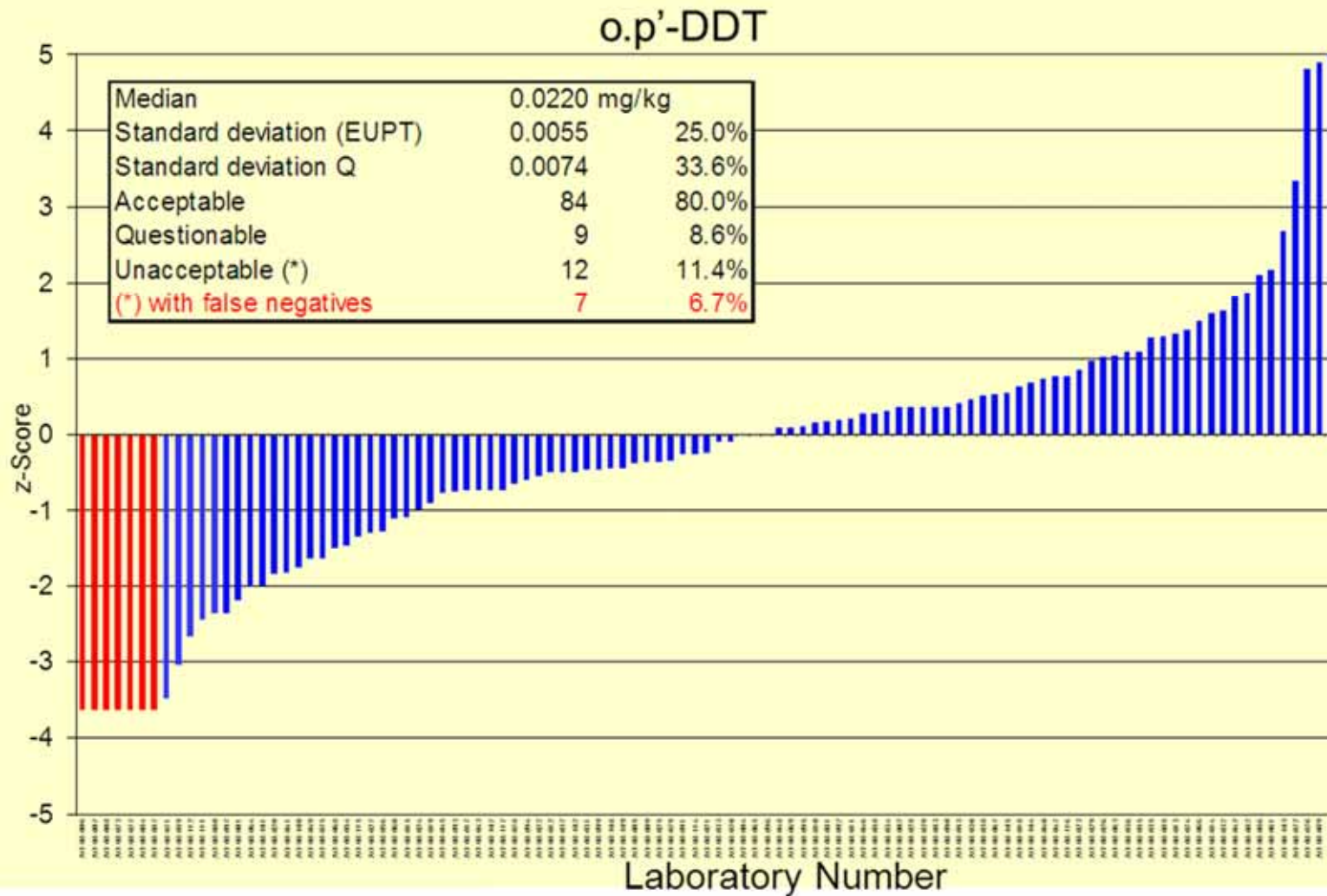
- Results exceeded the MRRL values will be considered as false positives.
 - Results below the corresponding MRRL concentrations will be ignored.
- 25 false positive results from 25 different laboratories were observed.

Pesticide	Number	Lab-Number (concentration - mg/kg)
Aldrin	1	108 (0.052)
p,p'-DDD (TDE)	5	6 (0.0078), 45 (0.0127), 80 (0.0090), 105 (0.0050), 106 (0.0259)
p,p'-DDT	2	71 (0.0054), 84 (0.0080)
Dieldrin	1	26 (0.0028)
alpha-Endosulfan	1	61 (0.0021)
alpha-HCH	1	7 (0.0040)
gamma-HCH (Lindane)	2	8 (0.130), 46 (0.0140)
cis-Heptachlor epoxide	11	13 (0.0105), 22 (0.0130), 42 (0.0276), 56 (0.0163), 58 (0.0043), 74 (0.0148), 75 (0.0110), 90 (0.0180), 93 (0.0175), 109 (0.0144), 111 (0.0085)
Cyproconazole	1	59 (0.0639)

Results (Mandatory Pesticides)



Results (Mandatory Pesticides)

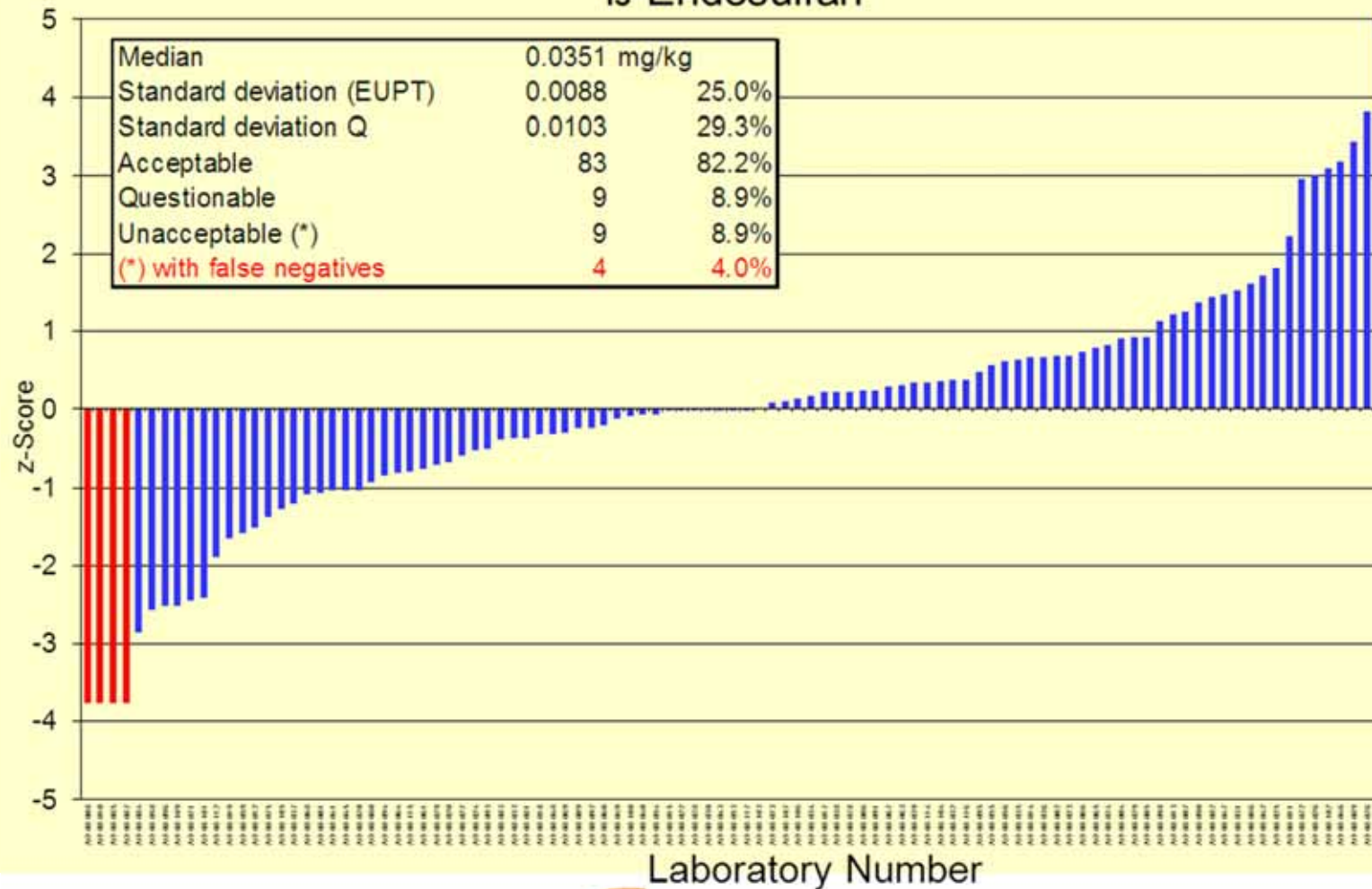


The “o.p’-DDT” case

- In EUPT AO 08 in total 7 labs reported o.p’-DDT as „nd“ (6, 7, 8, 73, 77, 84, 87)
 - 1 lab reported p.p’-DDD (TDE) instead (6 (0.0078))
 - 1 lab reported p.p’-DDT instead (84 (0.0080))

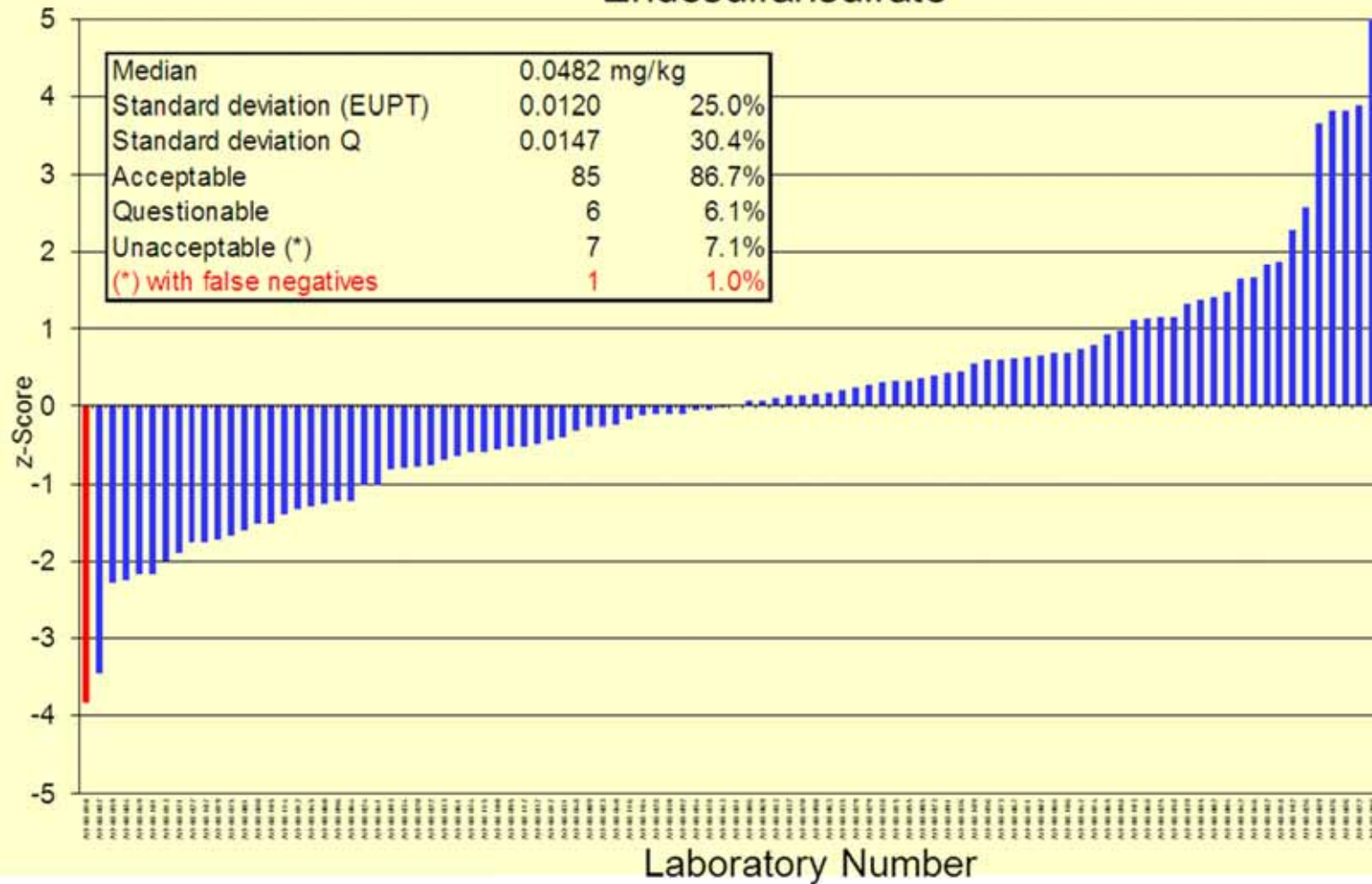
Results (Mandatory Pesticides)

β -Endosulfan



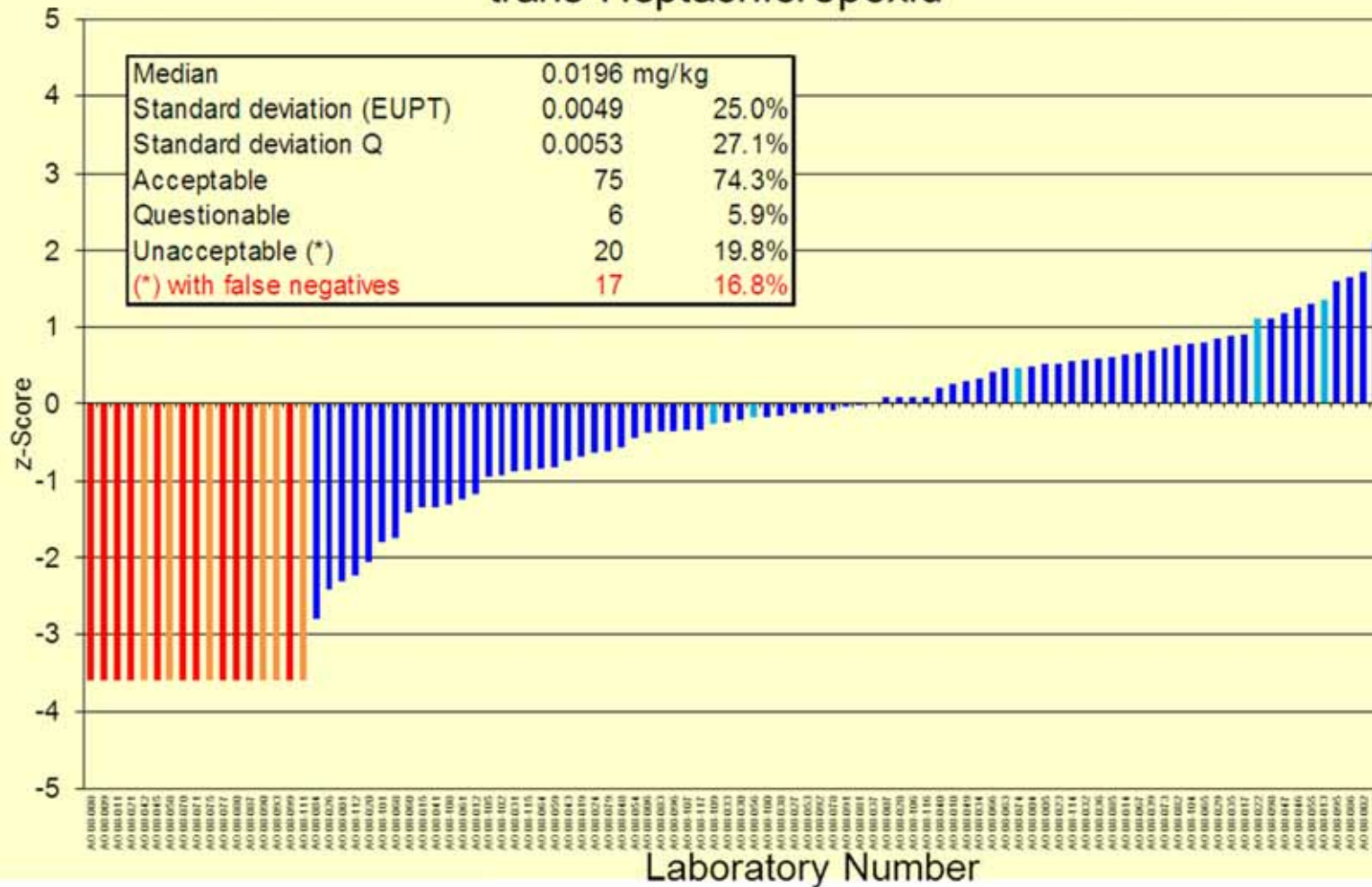
Results (Mandatory Pesticides)

Endosulfansulfate



Results (Mandatory Pesticides)

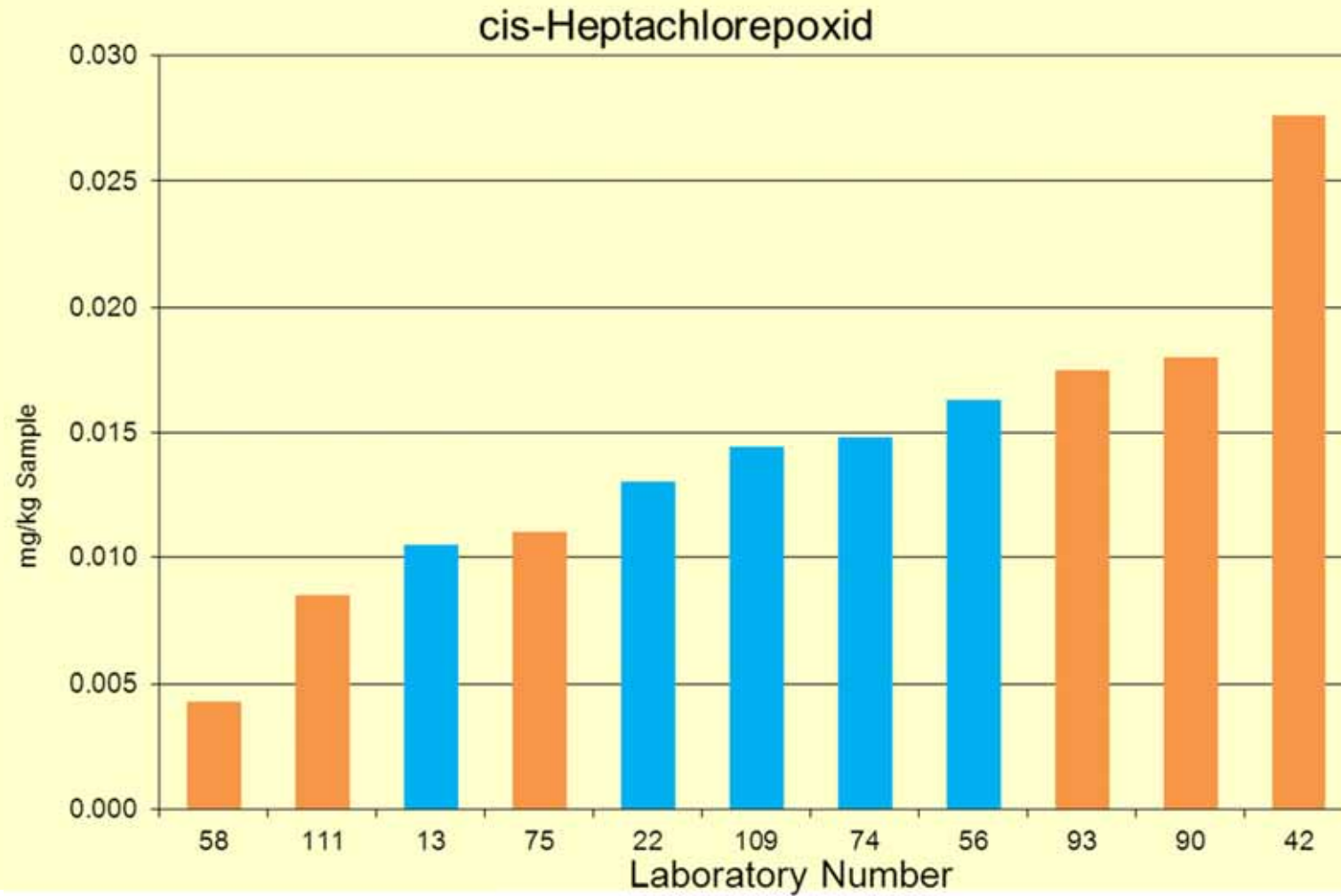
trans-Heptachlorepoxid



The “cis-heptachlor epoxide” case

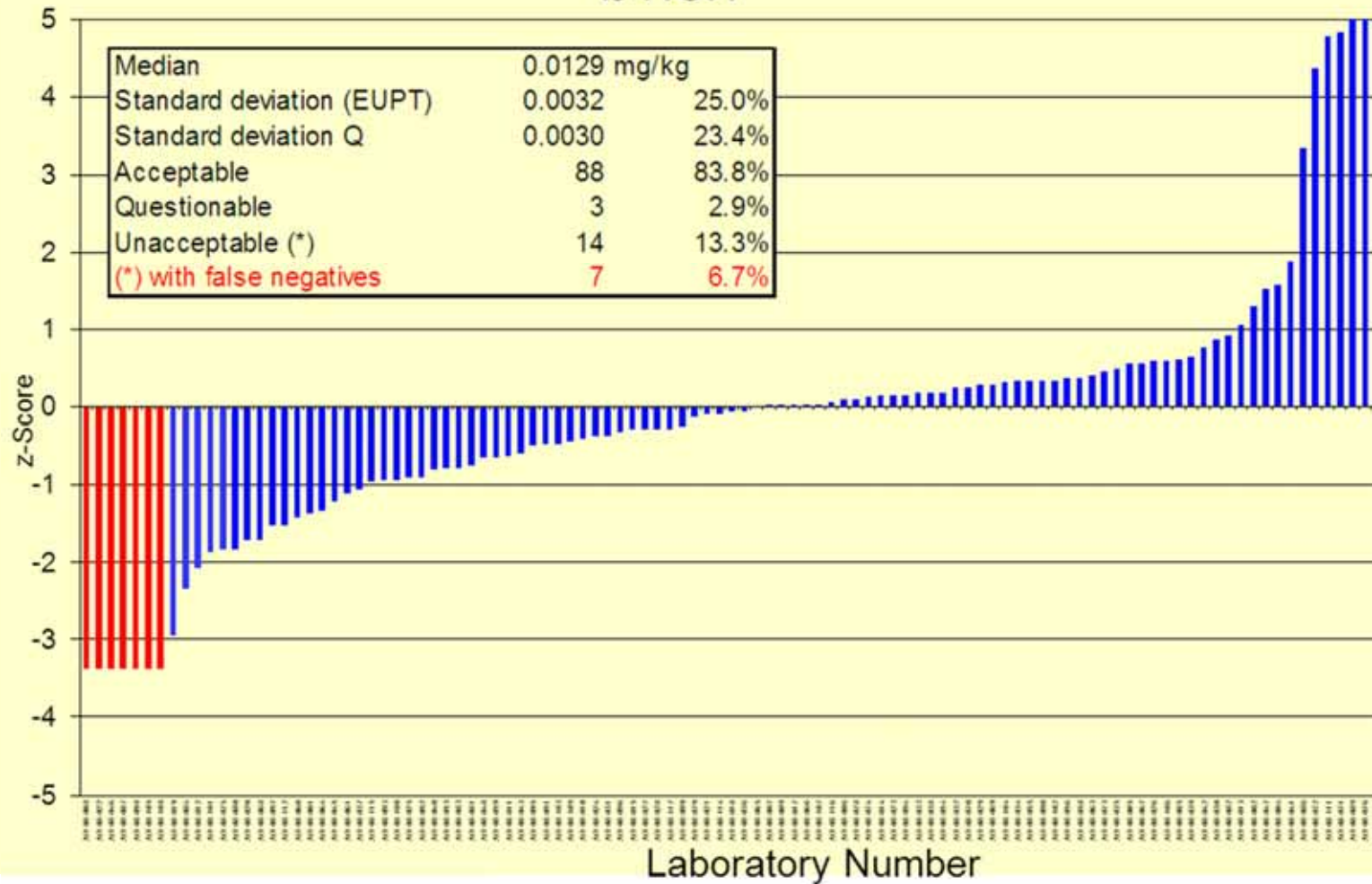
- In EUPT AO 08 in total 11 labs reported cis-heptachlor epoxide
- Blank material was free of cis-heptachlor epoxide
 - 6 labs reported no trans-heptachlor epoxide (42, 58, 75, 90, 93, 111)
 - 5 labs reported both, cis- and trans-heptachlor epoxide (13, 22, 56, 74, 109)

The “cis-heptachlor epoxide” case



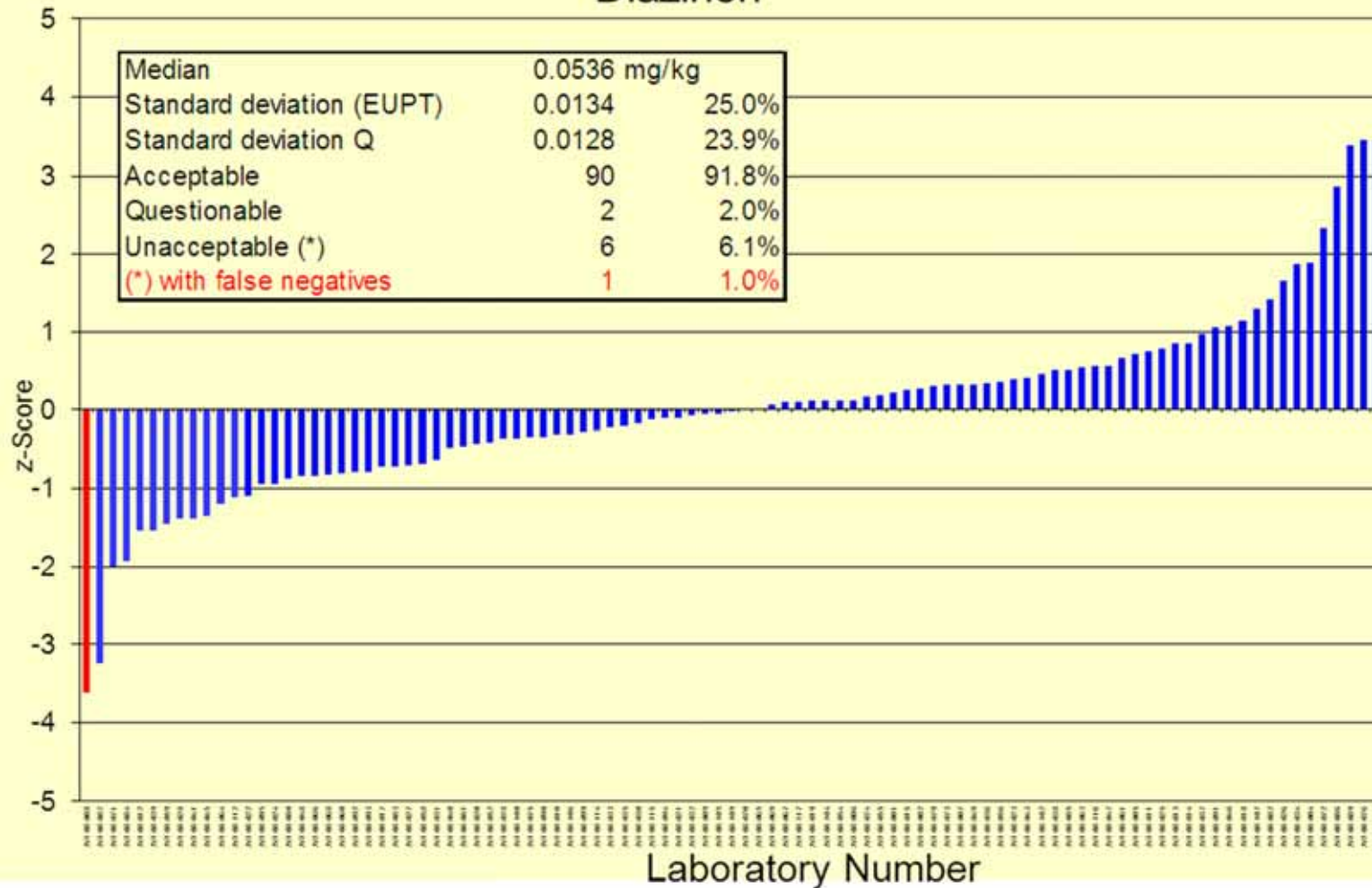
Results (Mandatory Pesticides)

β-HCH



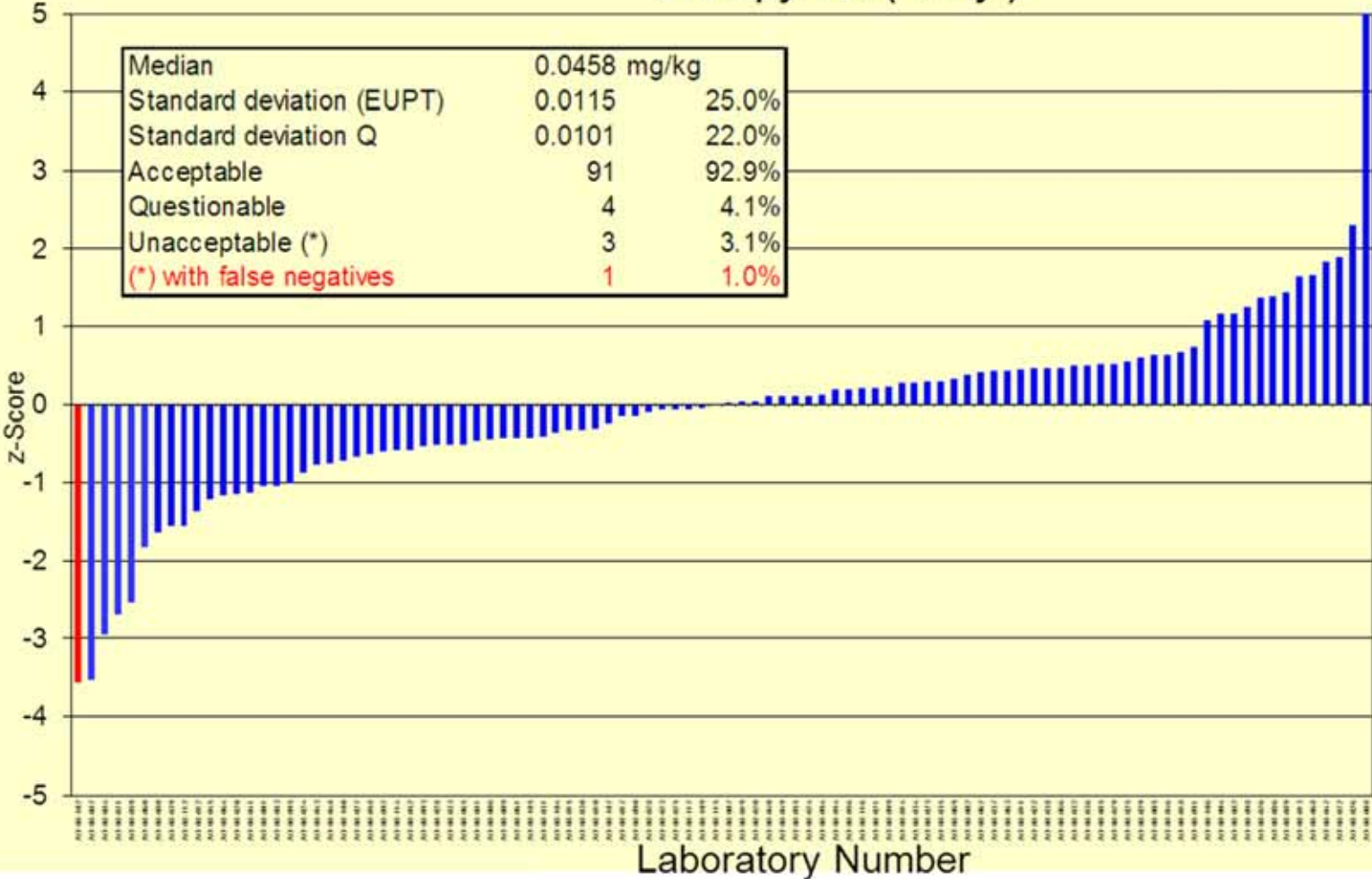
Results (Mandatory Pesticides)

Diazinon



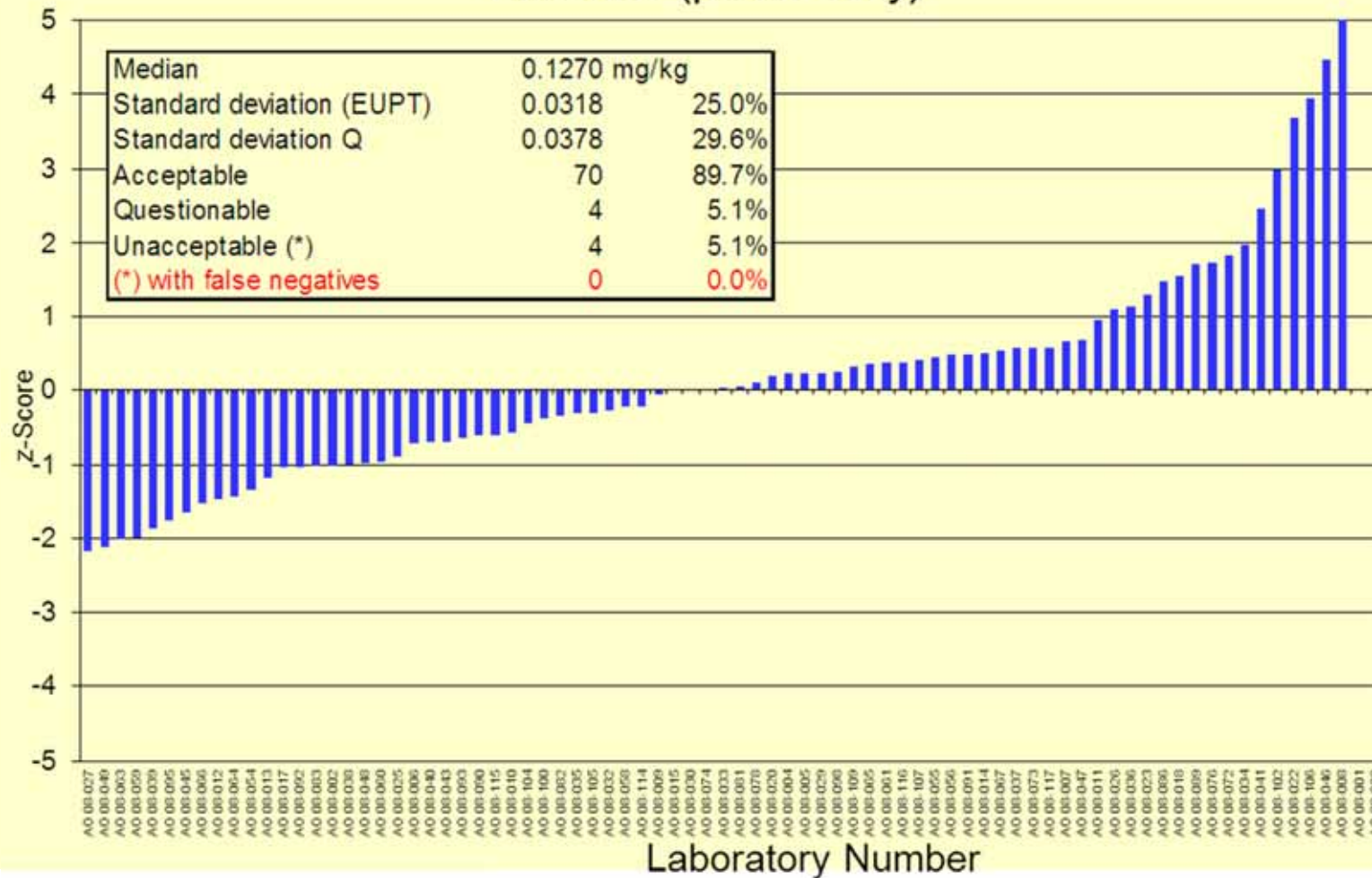
Results (Mandatory Pesticides)

Chlorpyrifos(-ethyl)



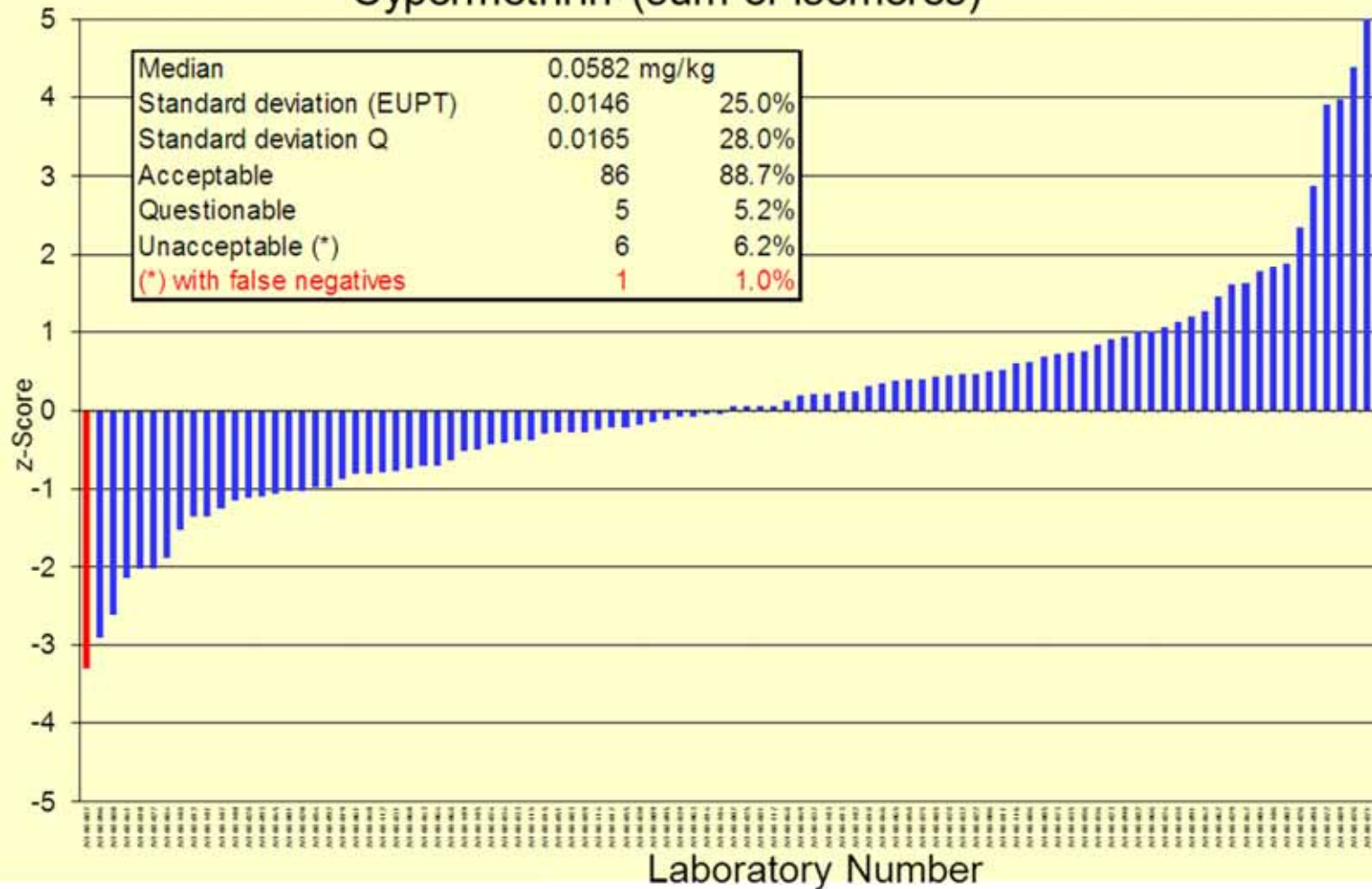
Results (Mandatory Pesticides)

Phosmet (parent only)

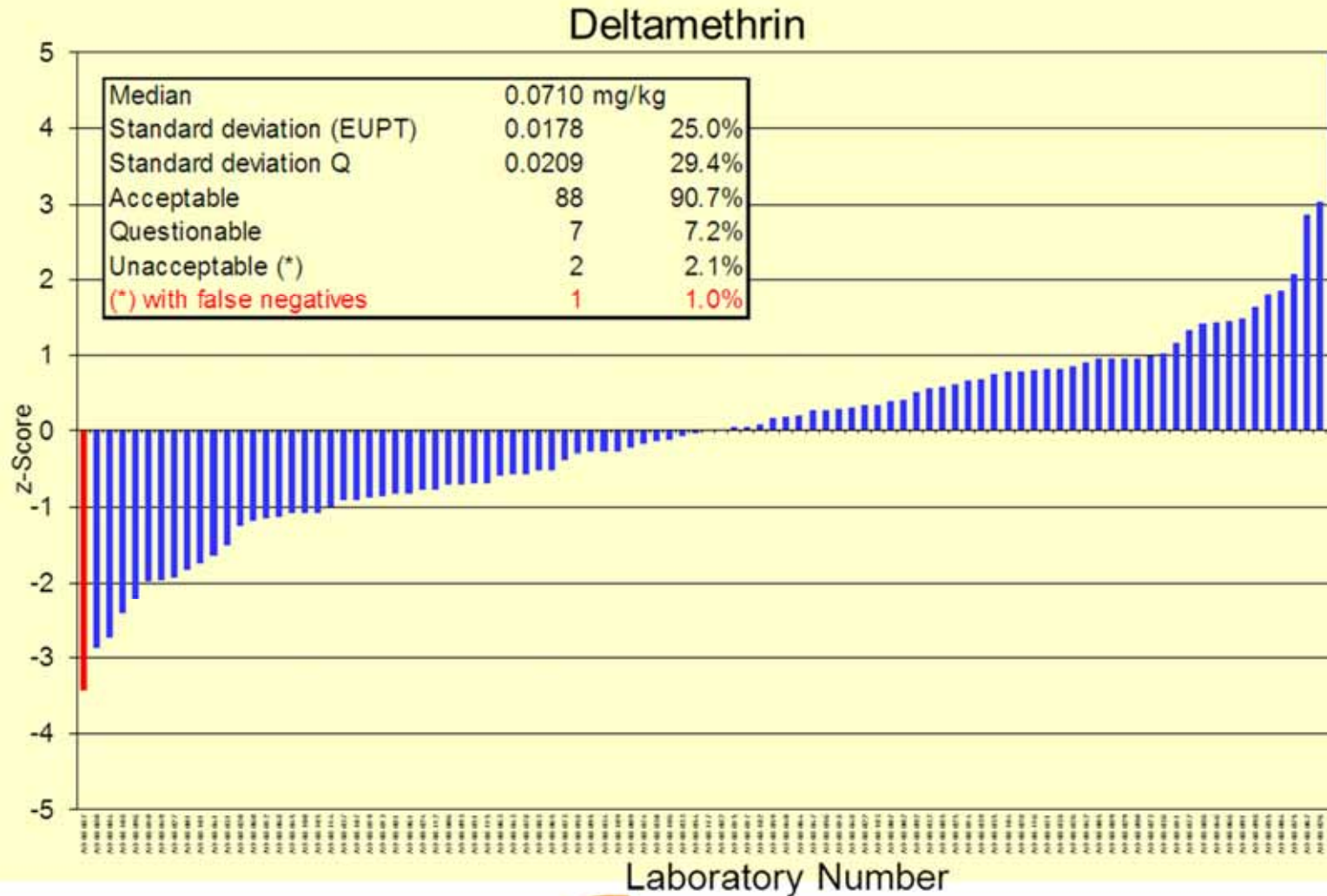


Results (Mandatory Pesticides)

Cypermethrin (sum of isomeres)

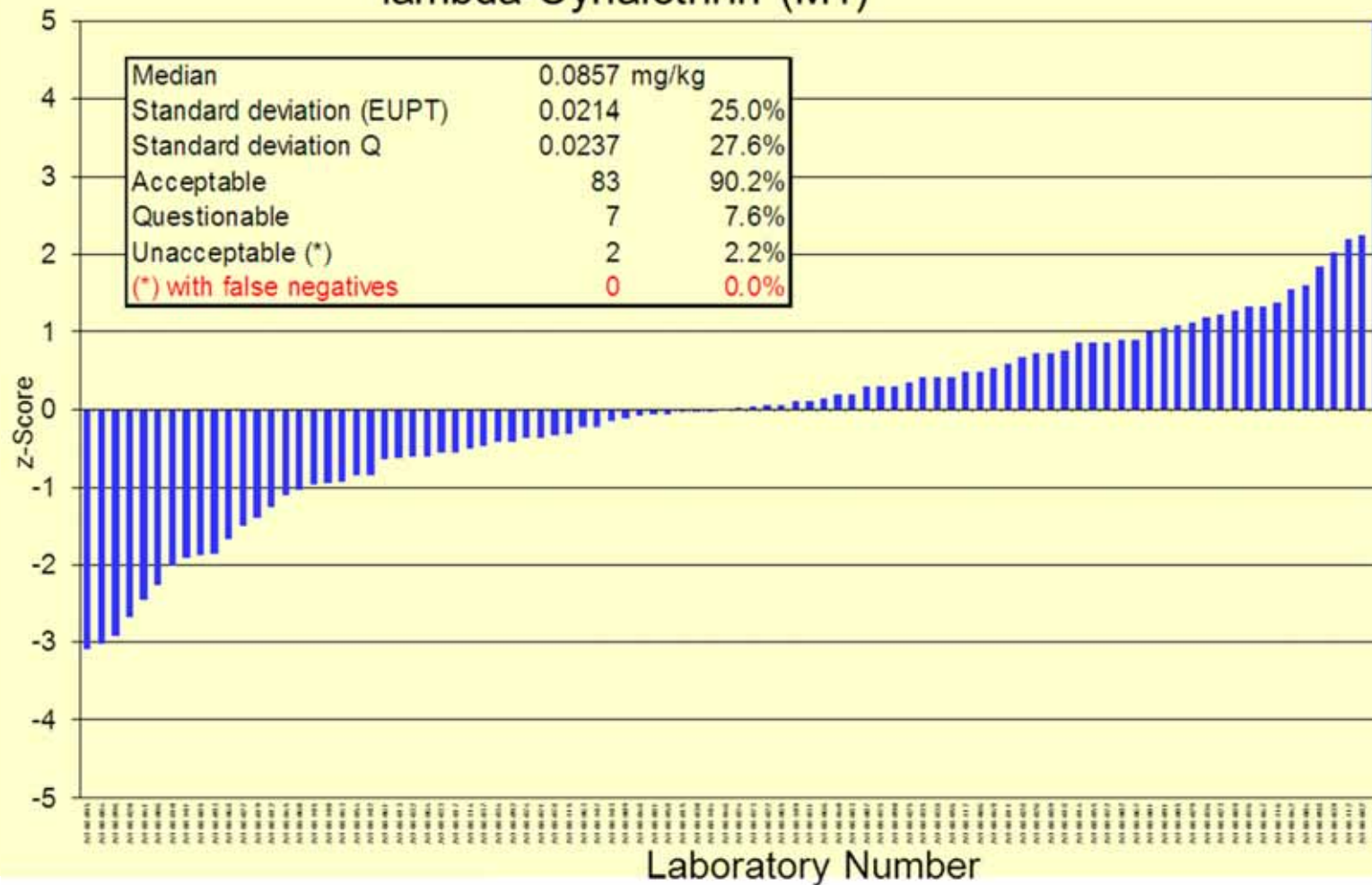


Results (Mandatory Pesticides)



Results (Mandatory Pesticides)

lambda-Cyhalothrin (M1)



Results (Mandatory Pesticides)

EUPT AO 08 (2013)

Mandatory Pesticides **86.9%**

3.2% **9.9%**

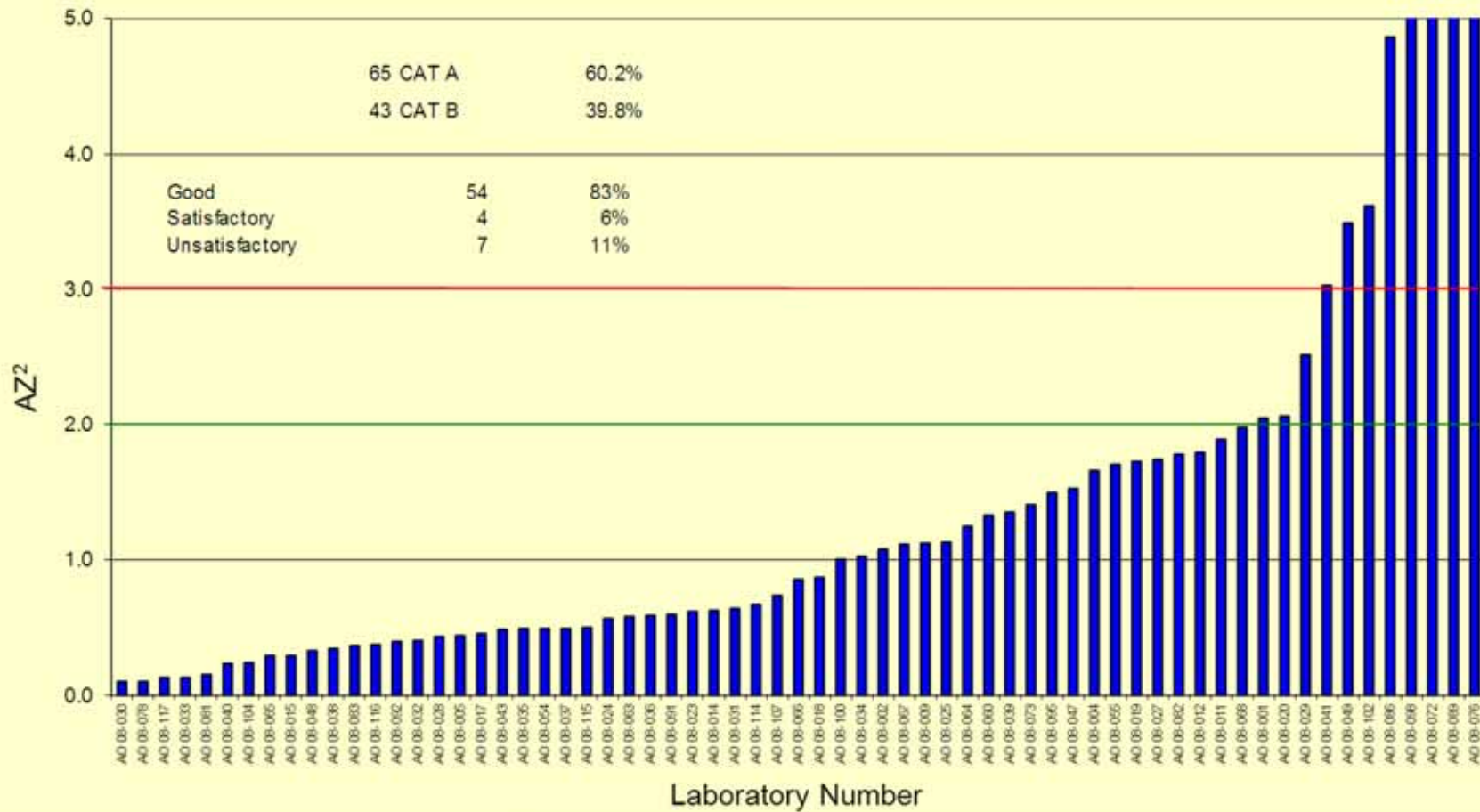
Voluntary Pesticides **51.9%**

0.5% **47.7%**

Mandatory Pesticides		Number of Detects	Accepted Quantitative Results	Median Value	Q [%] all data	Acceptable	Questionable	Unacceptable	Number of False Negatives	Number of not analysed	Analysed by Labs [%]	Spike Value	Ratio (Median / Spike Level)
Group	Analyte	1126		[mg/kg]		1004	65	93	42	128		[mg/kg]	
Organo-chlorines	Oxychlorthane	91	88	0.0187	30.2%	81	3	8	2	15	86.1%	0.025	74.6%
	o,p'-DDT	98	97	0.0220	33.6%	84	9	12	7	3	97.2%	0.030	73.3%
	beta-Endosulfane	98	96	0.0351	29.3%	83	9	9	4	6	94.4%	0.045	77.9%
	Endosulfansulfate	98	96	0.0482	30.4%	85	6	7	1	9	91.7%	0.060	80.3%
	trans-Heptachlorepoxyd	84	84	0.0196	27.1%	75	6	20	17	7	93.5%	0.025	78.4%
	beta-HCH	99	95	0.0129	23.4%	88	3	14	7	2	98.1%	0.015	86.0%
Organo-phosphorus	Diazinon	97	98	0.0536	23.9%	90	2	6	1	10	90.7%	0.065	82.5%
	Chlorpyrifos(ethyl)	97	96	0.0458	22.0%	91	4	3	1	10	90.7%	0.055	83.3%
	Phosmet	80	77	0.127	29.6%	70	4	4	0	28	74.1%	0.150	84.7%
Pyrethroids	Cypermethrin	96	94	0.0582	28.0%	86	5	6	1	11	89.8%	0.080	72.8%
	Deltamethrin	96	95	0.0710	29.4%	88	7	2	1	11	89.8%	0.095	74.7%
	lambda-Cyhalothrin	92	91	0.0857	27.6%	83	7	2	0	16	85.2%	0.115	74.5%

Results (Mandatory Pesticides)

Category A: Average of Squared z-Scores



Results (Mandatory Pesticides)

Model for a better categorizing of laboratories

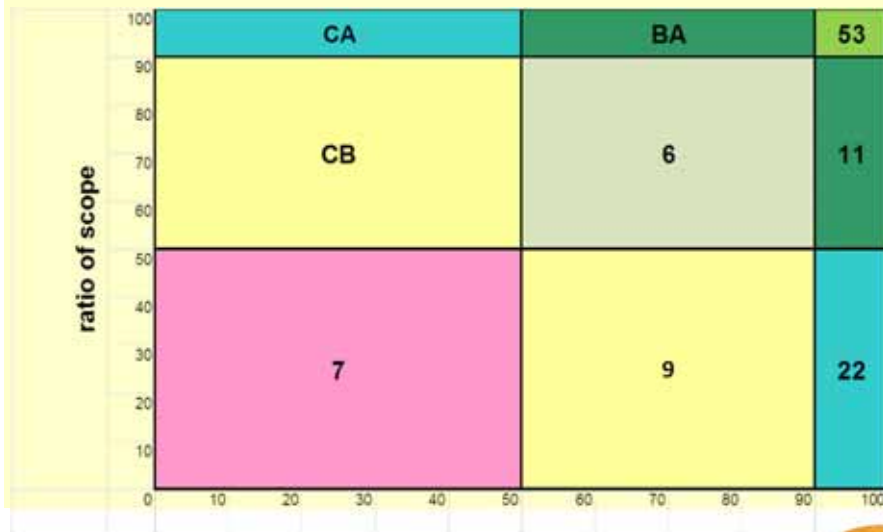
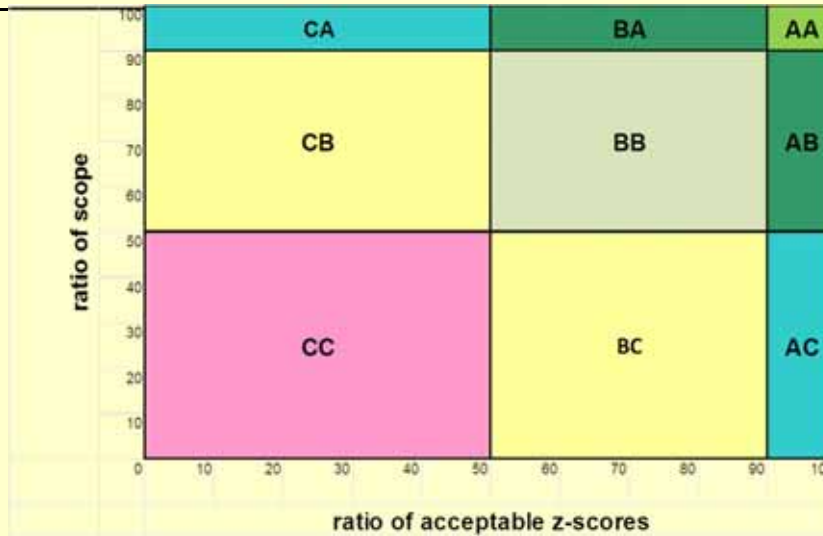
- Meeting in Almeria 22.09./23.09.2012; Discussion at the post workshop meeting in Cyprus (11.11.2012)
- The actual categorizing of labs is based on scope, only
- detecting 90 % of the pesticides in the sample (and no false positive result) -> Category A
 - Rest of the labs -> Category B
- SZ2 calculated for Cat. A laboratories, only, which can be seen as a kind of indicator for performance

Results (Mandatory Pesticides)

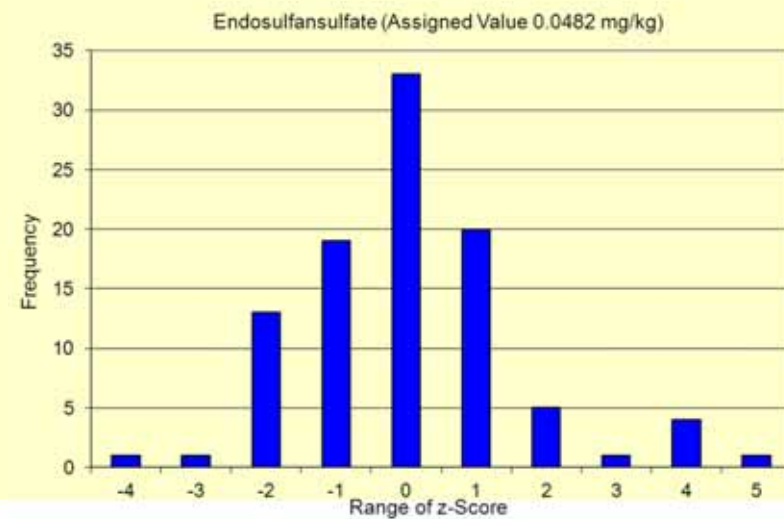
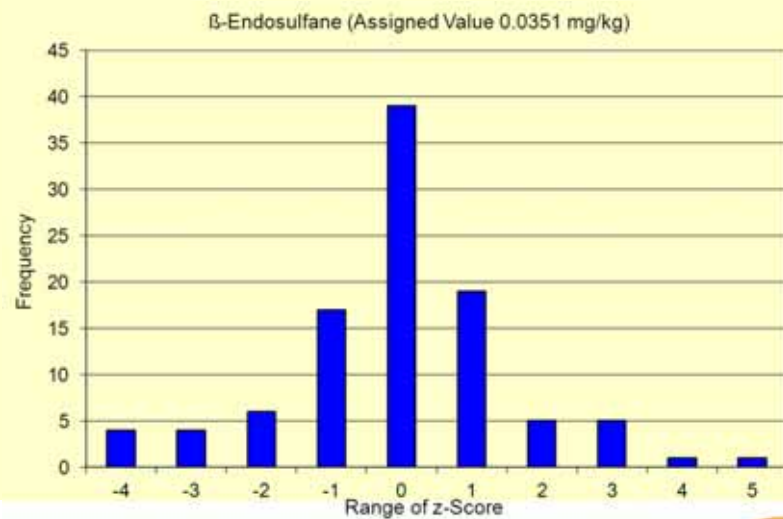
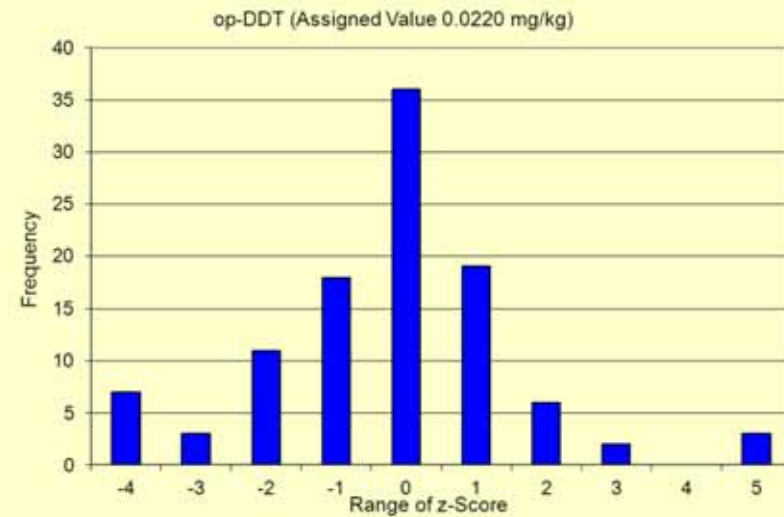
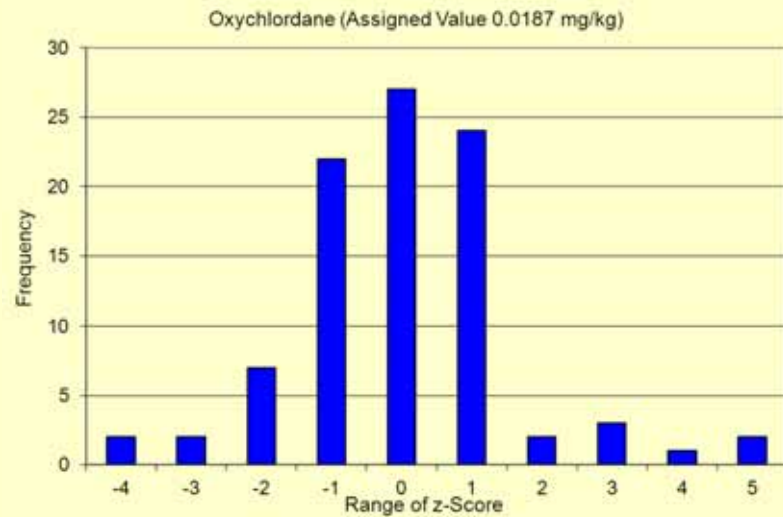
Model for a better categorizing of laboratories

- New Model
 - for scope (ratio of pesticides detected)
 - for performance (ratio of acceptable z-scores)
 - Extendable to ratio of pesticides of the target list analysed
 - Laboratories reporting false positive results will be in category C for performance

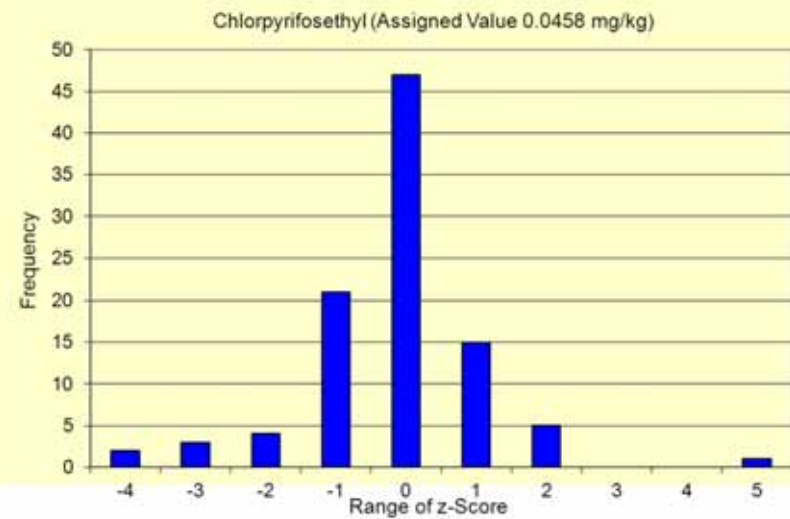
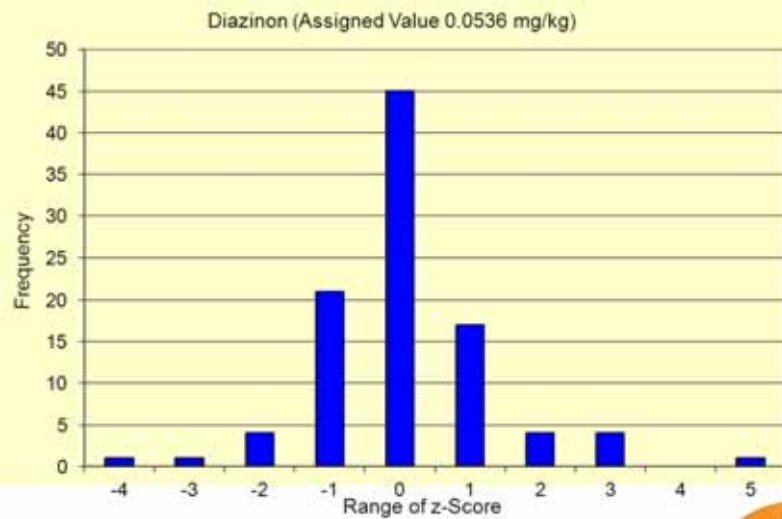
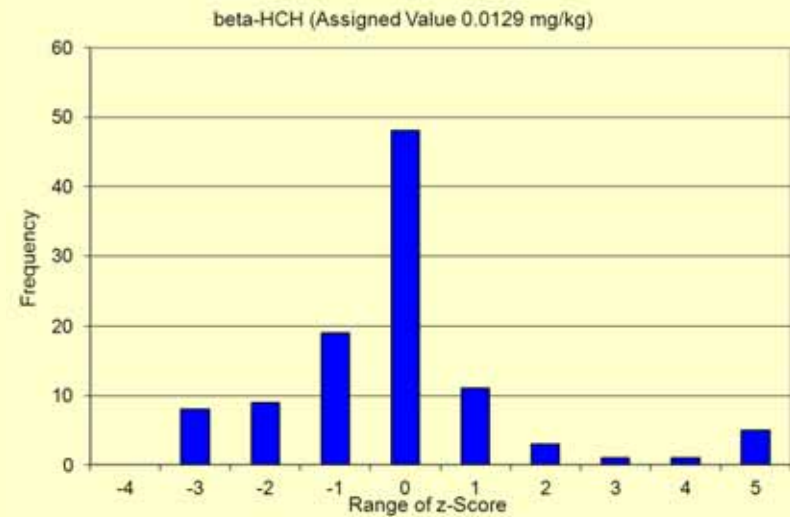
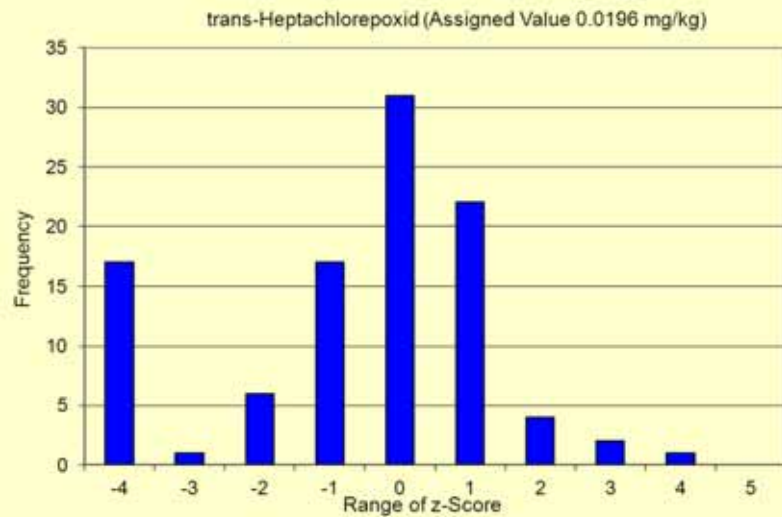
Results (Mandatory Pesticides) – New Model



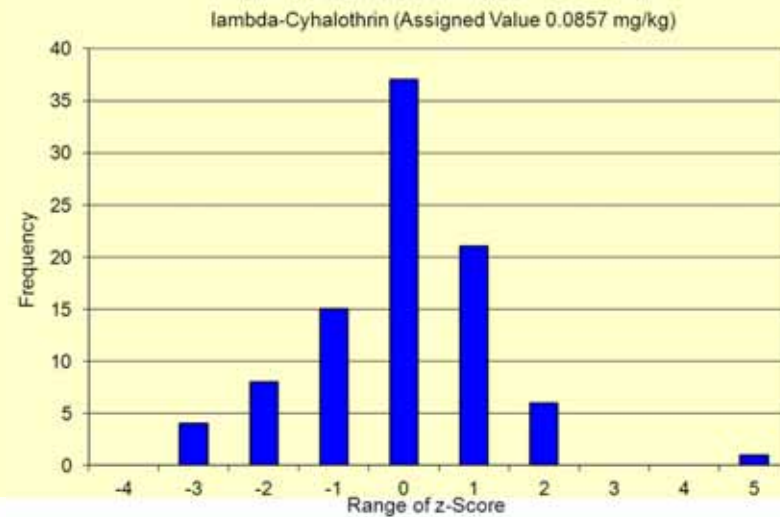
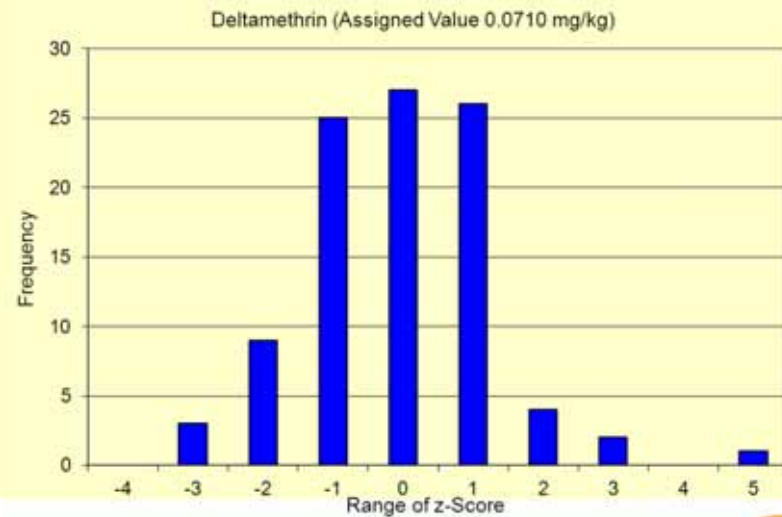
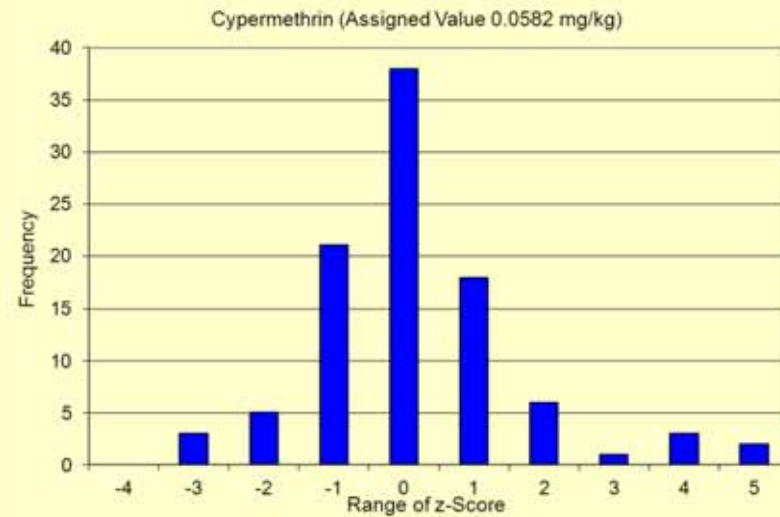
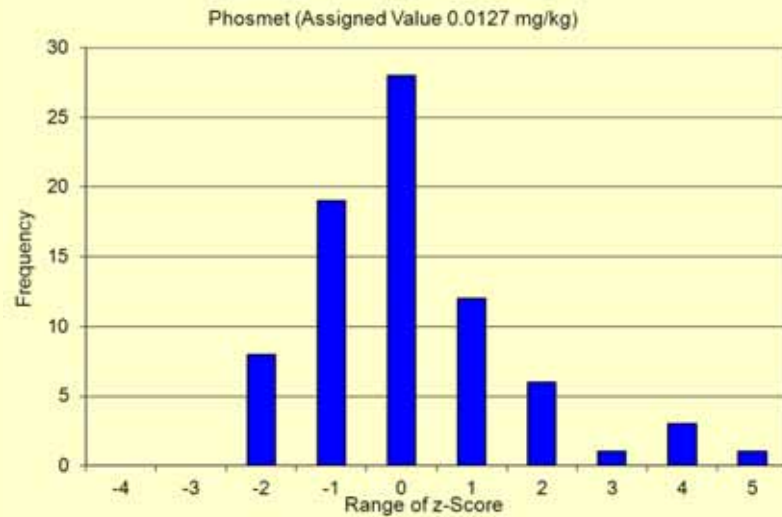
Results (Mandatory Pesticides)



Results (Mandatory Pesticides)

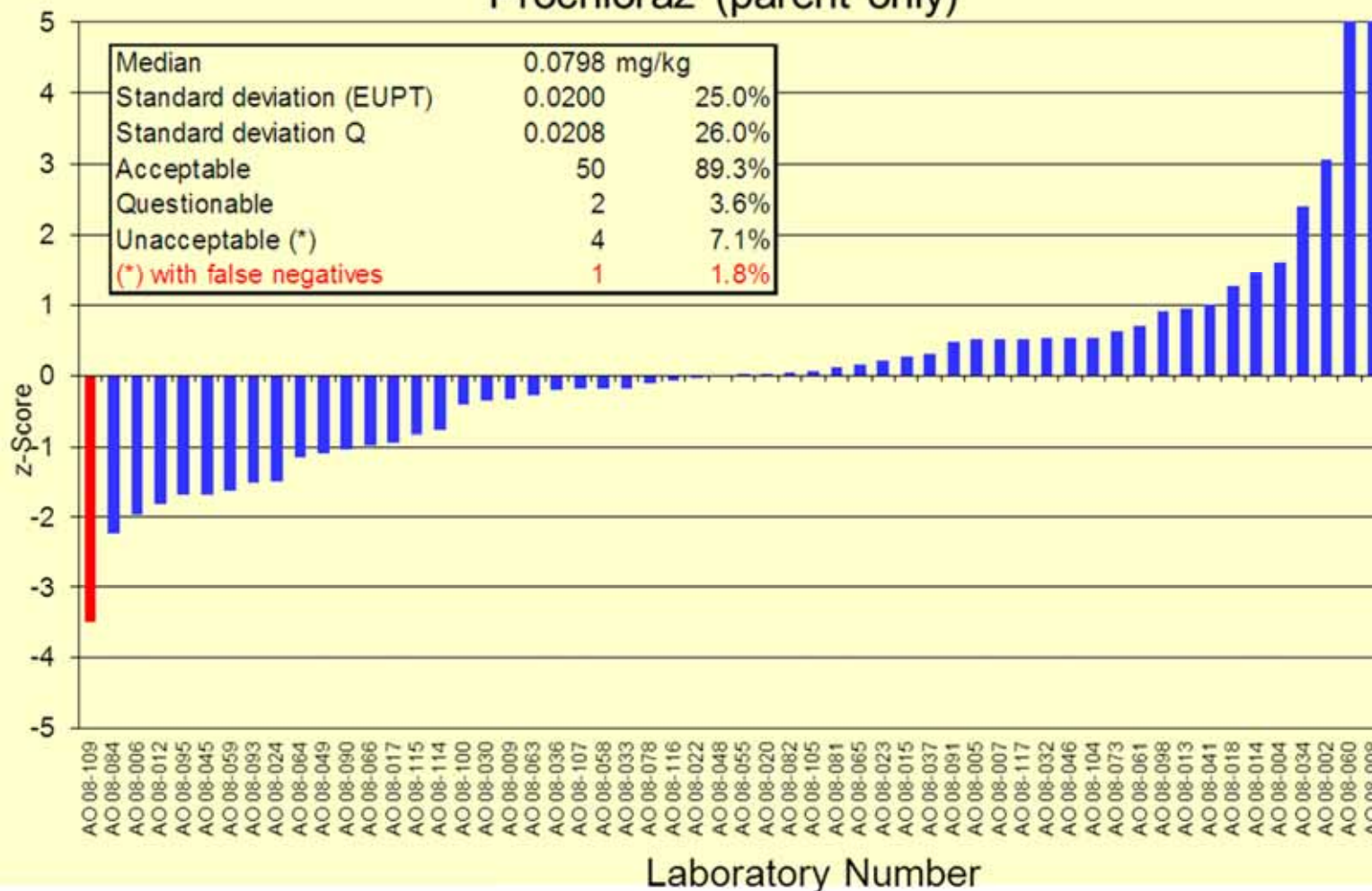


Results (Mandatory Pesticides)



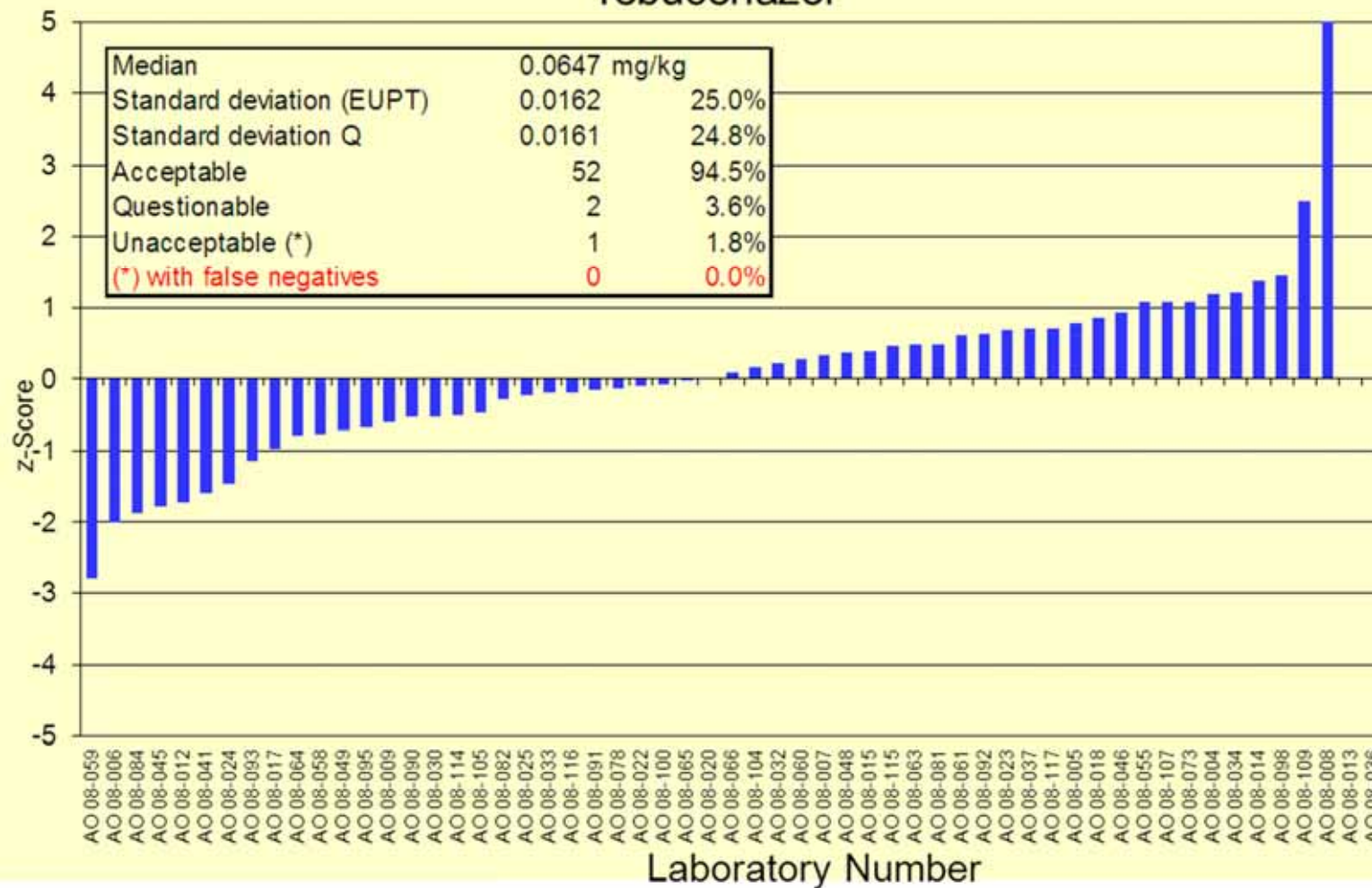
Results (Voluntary Pesticides)

Prochloraz (parent only)



Results (Voluntary Pesticides)

Tebuconazol



Results

EUPT AO 08 (2013) 81.9%
Mandatory Pesticides 86.9%
Voluntary Pesticides 51.9%

2.8% 15.3%
 3.2% 9.9%
 0.5% 47.7%

Mandatory Pesticides		Number of Detects	Accepted Quantitative Results	Median Value	Q [%] all data	Acceptable	Questionable	Unacceptable	Number of False Negatives	Number of not analysed	Analysed by Labs [%]	Spike Value	Ratio (Median / Spike Level)
Group	Analyte	1126		[mg/kg]		1004	65	93	42	128		[mg/kg]	
Organo-chlorines	Oxychlorthane	91	88	0.0187	30.2%	81	3	8	2	15	86.1%	0.025	74.6%
	o,p'-DDT	98	97	0.0220	33.6%	84	9	12	7	3	97.2%	0.030	73.3%
	beta-Endosulfane	98	96	0.0351	29.3%	83	9	9	4	6	94.4%	0.045	77.9%
	Endosulfansulfate	98	96	0.0482	30.4%	85	6	7	1	9	91.7%	0.060	80.3%
	trans-Heptachlorepoxyd	84	84	0.0196	27.1%	75	6	20	17	7	93.5%	0.025	78.4%
	beta-HCH	99	95	0.0129	23.4%	88	3	14	7	2	98.1%	0.015	86.0%
Organo-phosphorus	Diazinon	97	98	0.0536	23.9%	90	2	6	1	10	90.7%	0.065	82.5%
	Chlorpyrifos(-ethyl)	97	96	0.0458	22.0%	91	4	3	1	10	90.7%	0.055	83.3%
	Phosmet	80	77	0.127	29.6%	70	4	4	0	28	74.1%	0.150	84.7%
Pyrethroids	Cypermethrin	96	94	0.0582	28.0%	86	5	6	1	11	89.8%	0.080	72.8%
	Deltamethrin	96	95	0.0710	29.4%	88	7	2	1	11	89.8%	0.095	74.7%
	lambda-Cyhalothrin	92	91	0.0857	27.6%	83	7	2	0	16	85.2%	0.115	74.5%

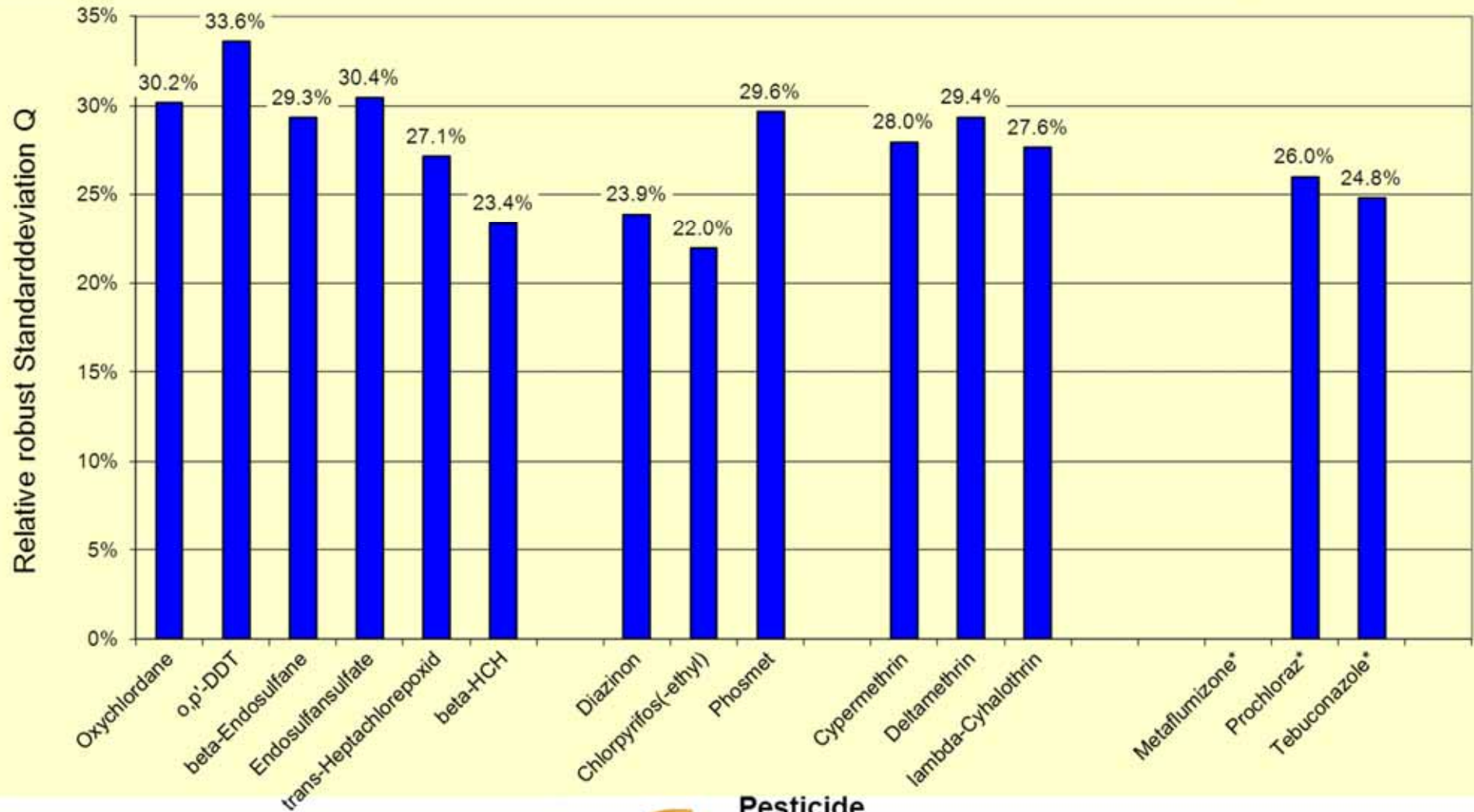
Voluntary Pesticides 112 102 4 5 1 103

Facultatives	Metaflumizone*												
	Prochloraz*	55	53	0.0798	26.0%	50	2	4	1	52	51.9%	0.095	84.0%
	Tebuconazole*	57	54	0.0647	24.8%	52	2	1	0	51	52.8%	0.075	86.2%

* not included for calculating the average of the squared z-scores (AZ²)

Results

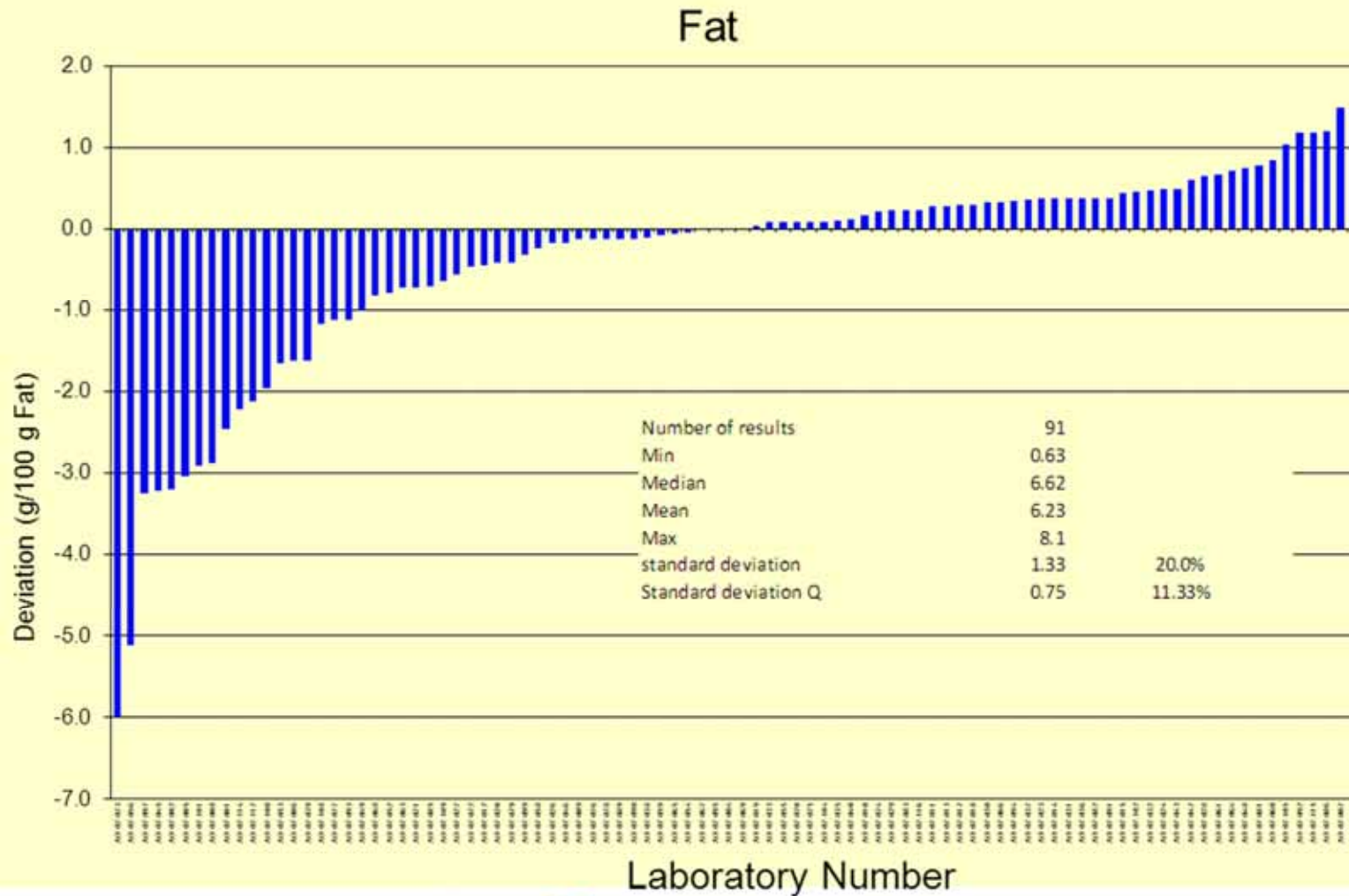
Overview about Results (EUPT AO 08 - Raw Poultry Meat)



Results (All Pesticides)

Mandatory Pesticides		Number of Detects	Median Value	Homogeneity EURL AO	Spike Value	Ratio (Median / Spike)
Group	Analyte	1126	[mg/kg]	[mg/kg]	[mg/kg]	
Organo-chlorines	Oxychlorthane	91	0,0187	0.0201	0,025	74,6%
	o,p'-DDT	98	0,0220	0.0281	0,030	73,3%
	beta-Endosulfane	98	0,0351	0.0395	0,045	77,9%
	Endosulfansulfate	98	0,0482	0.0512	0,060	80,3%
	trans-Heptachlorepoxid	84	0,0196	0.0224	0,025	78,4%
	beta-HCH	99	0,0129	0.0127	0,015	86,0%
Organo-phosphorus	Diazinon	97	0,0536	0.0469	0,065	82,5%
	Chlorpyrifos(-ethyl)	97	0,0458	0.0599	0,055	83,3%
	Phosmet	80	0,127	0.152	0,150	84,7%
Pyrethroids	Cypermethrin	96	0,0582	0.0683	0,080	72,8%
	Deltamethrin	96	0,0710	0.0713	0,095	74,7%
	lambda-Cyhalothrin	92	0,0857	0.0798	0,115	74,5%
Voluntary Pesticides		112				
Facultatives	Metaflumizone*			0.0966	0.080	
	Prochloraz*	55	0,0798	0.0935	0,095	84,0%
	Tebuconazole*	57	0,0647	0.0740	0,075	86,2%

Determination of Fat



Evaluating of the results of EURL AO

- Handling of the 17 labs not analysing the fat content

No consequence for EUPT AO 08

=> Including fat as mandatory parameter in future
(Cat A relevance if not reported)