



*EUROPEAN COMMISSION PROFICIENCY TEST
FOR PESTICIDE RESIDUES IN FRUITS AND
VEGETABLES*

SCREENING METHODS 06

PRELIMINARY RESULTS WEBINAR



**OCTAVIO MALATO
AND CARMEN FERRER**





Preparation of the test item





ACTIVITY	DATE
Publishing the Calendar and Matrix on the EURL-FV Web page.	15 th November 2013
Submission of Application Form by invited laboratories.	23 rd Dec 2013 - 31 st Jan 2014
Specific Protocol published on the Web site.	3 rd Feb 2014 at the latest
Sample distribution.	24 th February 2014
Submission of sample receipt and acceptance - Form 0.	As soon as sample is received
Deadline for receiving results - Form 1	72 hours after receiving the sample
Preliminary Report.	End of April 2014
Final Report distributed to the Laboratories.	November 2014



EUROPEAN PROFICIENCY TEST - FRUITS AND VEGETABLES - MASS SCREENING 06- Participants **18 NRLs***

COUNTRY	No.	COUNTRY	No.
Austria	1*	Ireland	1*
Belgium	1*+2	Italy	6
China	2	Latvia	1*
Croatia	1	Romania	2*+1
Czech Republic	1*+1	Serbia	1
Denmark	1*	Slovenia	1*
Egypt	1	Spain	12
Estonia	1*	Sweden	1*+1
Finland	1*	Switzerland	1*+1
France	1*+6	The Netherlands	1*+1
Germany	1*+8	Turkey	1
Greece	1	UK	1*+2
Hungary	1*+1		



Participants

EUROPEAN PROFICIENCY TEST - FRUITS AND VEGETABLES - MASS SCREENING 06- Participants **18 NRLs***

COUNTRY	No.	COUNTRY	No.
Austria	1*	Ireland	1*
Belgium	1*+2	Italy	6
China	2	Latvia	1*
Croatia	1	Romania	2*+1
Czech Republic	67	Slovenia	1
Denmark	1*	Spain	12
Egypt	1	Sweden	1*+1
Estonia	1*	Switzerland	1*+1
Finland	1*	The Netherlands	1*+1
France	1*+6	Turkey	1
Germany	1*+8	UK	1*+2
Greece	1		
Hungary	1*+1		



Participants

Austria
Belgium
Croatia
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Latvia
Netherlands
Romania
Slovenia
Spain
Sweden
Switzerland
United Kingdom

**21 EU/EFTA
Countries**

China
Egypt
Serbia
Turkey

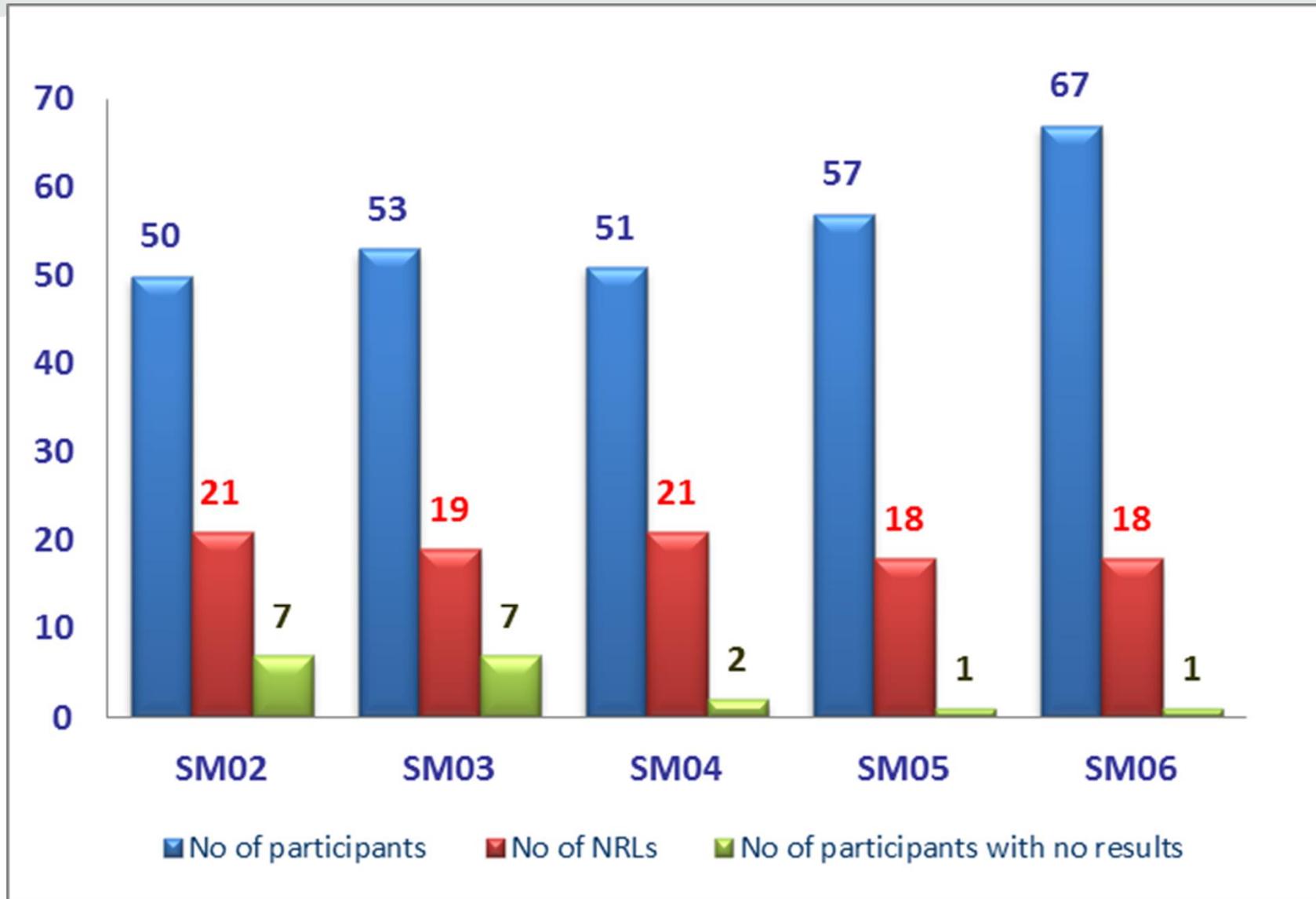
4 Non EU Countries

Bulgaria
Cyprus
Lithuania
Luxembourg
Malta
Poland
Portugal
Slovakia

**8 EU Countries
Not
Participating**



Participants





Pesticides used for the treatment



Atrazine	Fluometuron
Cadusafos	Fuberidazole
Carbetamide	Furathiocarb
Demeton-S-methylsulfone	HCB
Dinocap	Metosulam
Dodemorph	Phorate
Endrin	Prosulfocarb
Ethoprophos	Secbueton
Fenpropidin	Spiromesifen
Fipronil	Terbufos
Flubendiamide	



Pesticides used for the treatment

Atrazine

Cadusafos

Carbofenthiol

Decamethrin

Endrin

Ethoprophos

Fenpropidin

Fipronil

Flubendiamide

Fluometuron

Fuberidazole

Fenitrothion

Phorate

Prosulfocarb

Secbueton

Spiromesifen

Terbufos

**Concentrations lower than 0.1 mg/kg
for most of them**



Main Page EUPT-FV-SM 06

Link to Result - Submission:

0. Sample receipt

[Acknowledge receipt of parcel with test sample.](#)

Immediately after receiving the sample

1. Results page

[Specify which pesticides you detected.](#)

Deadline 72 hours after receiving the sample

European Commission Proficiency Test on Pesticide Residues in Fruits and Vegetables - EURL-FV-SM06 2014

Welcome to the results submission pages.

When you receive the sample, please enter subpage [0.Sample receipt](#)

To submit results for EURL-FV-SM06 you have to enter your data into the [1. Results page](#). The page contains instructions on how to enter the data. **Remember to save the data before leaving.**

For this Proficiency Test there is no target pesticide list, so please type the name of the detected pesticides and the details of the screening method/s used.

Remember to save each page separately before you leave it.

When you click "save" in the webpages the data will be stored. After the deadline all your data in the database will be downloaded by the organization to create the final report, you don't need to send us any document

You can enter into the pages as many times as you wish until the deadline. If you need to correct the data, this must be done before the deadline.

Click [here](#) to get an excell with all your inputs.

Contact Persons:

Octavio Malato
omalato@ual.es

Carmen Ferrer
cferrer@ual.es

EURL-FV



European Union Reference Laboratory for Pesticide Residues in Fruits & Vegetables

Form 0 | Sample Receipt EUPT-FV-SM 06

Please fill in the form as soon as possible **after receiving the sample**, otherwise the Organiser will understand you have accepted it.

[Back to Main page](#)[Save this page](#)

Lab code:	Lab500
Contact name:	Contact
Sample number:	<input type="text" value="55"/>
Frozen:	<input type="text" value="Yes"/>
Losses:	<input type="text" value="No"/>
Blank number:	<input type="text" value="77"/>
Date of receipt (DD-MM-YYYY):	<input type="text" value="07/04/2014"/>
Frozen:	<input type="text" value="Yes"/>
Losses:	<input type="text" value="No"/>
I accept the test material and need no replacement	<input type="text" value="Yes"/>

Contact Persons:Octavio Malato
omalato@ual.esCarmen Ferrer
cferrer@ual.es**EURL-FV**

THIS FORM WILL BE AVAILABLE TO BE FILLED IN ONLY ONE TIME, PLEASE CHECK YOUR DATA BEFORE SAVING IT.
If you have entered your data and you want to change them, please contact us.



European Union Reference Laboratory for Pesticide Residues in Fruits & Vegetables

Form1 | Results Page EUPT-FV-SM 06

Please indicate which pesticide you have detected. Please also type all the other fields taking into account if you are requested to enter a number or text.

Please specify the method used for each detected pesticide. If you use the same method for different pesticides, please describe the method for only one of the pesticides (source pesticide) and for the rest of them simply write the number of the source pesticide in the column "Method as Pesticide No". When you save the page, all fields with methods will be copied from the source pesticides.

When this page is finished click on the "Save this page" button and wait for a status message to show up.

Lab code: Lab500

Contact number: Contact

[Back to Main page](#)

[Save this page](#)

[Log Out](#)

Pesticides detected in the Blank Test Item

Please enter the name and concentration of any pesticide detected in the blank Test Item

<u>Pesticide name</u>	<u>Concentration (mg/kg)</u>
aa	<input type="text"/>
bb	<input type="text"/>
cc	<input type="text"/>
dd	<input type="text"/>
ee	<input type="text"/>
ff	<input type="text"/>
gg	<input type="text"/>
hh	<input type="text"/>

[Add more detected pesticides](#)



Submission of Results



Form1 | Results Page EUPT-FV-SM 06

Please indicate which pesticide you have detected. Please also type all the other fields taking into account if you are requested to enter a number or text.

Please specify the method used for each detected pesticide. If you use the same method for different pesticides, please describe the method for only one of the pesticides (source pesticide) and for the rest of them simply write the number of the source pesticide in the column "Method as Pesticide No". When you save the page, all fields with methods will be copied from the source pesticides.

When this page is finished click on the "Save this page" button and wait for a status message to show up.

Pesticide No:	Pesticide name:	Method as pesticide No.:	Sample weight (g)	Extraction solvent 1:	Extraction solvent 2:	Extraction solvent 3:	Ph adjusted	Agitation Mode	Agitation time (min)	Clean up
How was the identification done?			RT Deviation(in seconds):	MS Tolerance (ppm):	Other identification details (e.g. 1 transition, 2 transitions, accurate mass):	Chromatographic Technique:	Detector:	Analyzer:	Ionization Mode:	
Polarity::	Do you use this method in routine?	Do you use this scope in routine?	What is your screening reporting level? (in mg/kg)	Full Scan?:	Instrument model:	Column Type:	Injecton Volume (µL):	Software:	No. of PESTICIDES in method or library (only pesticides)	How frequently do you use a standard solution for your screening method?



Preliminary Report

Laboratory Code Total No of Reporting Laboratories = 67 (* NRL-FV)	Evaluated Pesticides (21)																				Reported Pesticides by Laboratory	% of Reported Pesticides by Laboratory	
	Atrazine	Cadusafos	Carbetamide	Demeton-S- methylsulfone	Dinocap	Dodemorph	Endrin	Ethoprophos	Fenpropridin	Fipronil	Flubendiamide	Fluometuron	Fuberidazole	Furathiocarb	HCB	Metosulam	Phorate	Prosulfocarb	Seccbumeton	Spiromesifen			Terbufos
Lab001	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	17	81
Lab002	R	R				R											R					6	29
Lab003	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R				19	90
Lab004*	R	R		R		R	R	R	R	R	R	R	R	R	R	R	R	R				12	57
Lab006*	R	R	R			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	18	86
Lab007*	R	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	20	95
Lab008	R	R		R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	19	90
Lab009	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	18	86
Lab010*	R	R	R	R			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	17	81
Lab011	R	R	R			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	20	95
Lab012	R	R	R				R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	12	57
Lab013	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	19	90
Lab014	R	R	R	R			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	14	67
Lab015	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	21	100
Lab016*	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	21	100
Lab017		R	R				R	R	R	R				R	R						R	5	24
Lab018	R	R	R	R	R		R	R	R	R			R	R	R		R	R	R	R	R	16	76
Lab019*							R	R	R	R				R	R					R		5	24
Lab020	R	R		R		R	R	R	R	R										R		13	62
Lab021	R					R	R	R	R				R	R	R		R	R				10	48
Lab022		R					R	R	R					R	R						R	5	24
Lab023	R						R	R	R								R	R			R	6	29
Lab024*	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	21	100
Lab025*	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		R	R	15	71
Lab026	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	20	95
Lab027	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	19	90
Lab028*	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R			R	15	71
Lab029	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	20	95
Lab030	R	R	R	R			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	16	76
Lab031	R	R	R	R		R	R	R	R	R			R	R	R	R	R	R	R	R	R	16	76
Lab032	R			R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	18	86
Lab033*	R	R		R			R	R	R	R				R	R		R	R				9	43
Lab034		R		R			R	R	R	R				R	R		R	R				9	43
Lab035	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		R	R	20	95
Lab036	R	R		R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	18	86
Lab037	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	21	100
Lab038	R		R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	21	100
Lab039*	R	R		R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	16	76

R: Reported Pesticide.

Other compounds have been detected or identified and quantified by the organizer at concentrations below 10 µg/kg: Atrazine-desethyl-2-hydroxy, Carbofuran, Difenconazole, Dimeturon, Endrin ketone, Fenamiphos, Fenamiphos' sulfoxide, Fipronil sulfide, Fipronil sulfone, Phorate sulfoxide, Terbufos sulfoxide and Triadimenol. Those compounds have not been included in the table.



Laboratory Code Total No of Reporting Laboratories = 67 (* NREL-FV)	Evaluated Pesticides (21)																				Reported Pesticides by Laboratory	% of Reported Pesticides by Laboratory	
	Atrazine	Cadusafos	Carbetamide	Demeton-S- methylsulfone	Dinocap	Dodemorph	Endrin	Ethrophos	Fenpropridin	Fipronil	Flubendiamide	Fluometuron	Fuberidazole	Furathiocarb	HCB	Metosulam	Phorate	Prosulfocarb	Secbumeton	Spiromesifen			Terbufos
Lab040	R	R		R			R	R	R	R	R	R	R	R		R	R	R	R	R		16	76
Lab041*	R	R	R	R		R	R	R	R	R		R	R	R		R	R	R	R	R		17	81
Lab042	R	R	R	R	R	R	R	R	R	R		R	R	R	R	R	R	R	R	R	R	19	90
Lab043	R	R	R	R			R	R	R	R		R	R	R		R	R	R	R	R	R	12	57
Lab044*	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	20	95
Lab045	R	R		R			R	R	R	R	R	R	R	R		R	R	R	R	R	R	10	48
Lab046*	R	R	R	R			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	20	95
Lab047	R	R		R	R	R	R	R	R	R		R	R	R	R	R	R	R	R	R	R	16	76
Lab048	R	R		R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	18	86
Lab049*	R	R		R			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	15	71
Lab050	R	R	R	R		R	R	R	R	R		R	R	R	R	R		R	R	R	R	17	81
Lab051*	R	R		R	R	R	R	R	R	R		R	R	R	R		R	R		R	R	16	76
Lab052	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	15	71
Lab053	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	20	95
Lab054	R	R		R			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	11	52
Lab055	R	R	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	18	86
Lab056	R					R		R	R	R		R	R	R	R	R	R	R	R	R	R	12	57
Lab057*	R	R	R	R	R	R	R	R	R	R		R	R	R	R	R	R	R	R	R	R	21	100
Lab058	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	19	90
Lab059	R	R	R	R			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	9	43
Lab060	R	R	R	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	19	90
Lab061	R						R	R	R	R												3	14
Lab062	R	R				R	R	R	R	R				R			R	R	R	R	R	13	62
Lab063		R		R			R	R	R	R												3	14
Lab064	R	R	R	R		R		R	R	R		R	R	R	R	R	R	R	R	R	R	15	71
Lab065	R	R	R	R			R	R	R	R				R	R	R	R	R	R	R	R	15	71
Lab066	R	R		R		R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	13	62
Lab067	R	R					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	15	71
Lab068	R	R		R			R	R	R	R		R	R	R	R	R	R	R	R	R	R	9	43
Reported Pesticides	60	64	37	57	25	39	54	66	56	62	33	35	39	55	52	34	50	56	35	51	53		
% of Reported Pesticides	90	96	55	85	37	58	81	99	84	93	49	52	58	82	78	51	75	84	52	76	79		

R: Reported Pesticide.

Other compounds have been detected or identified and quantified by the organizer at concentrations below 10 µg/kg: Atrazine-desethyl-2-hydroxy, Carbofuran, Difenconazole, Dimeturon, Endrin ketone, Fenamiphos, Fenamiphos sulfoxide, Fipronil sulfide, Fipronil sulfone, Phorate sulfoxide, Terbufos sulfoxide and Triadimenol. Those compounds have not been included in the table.



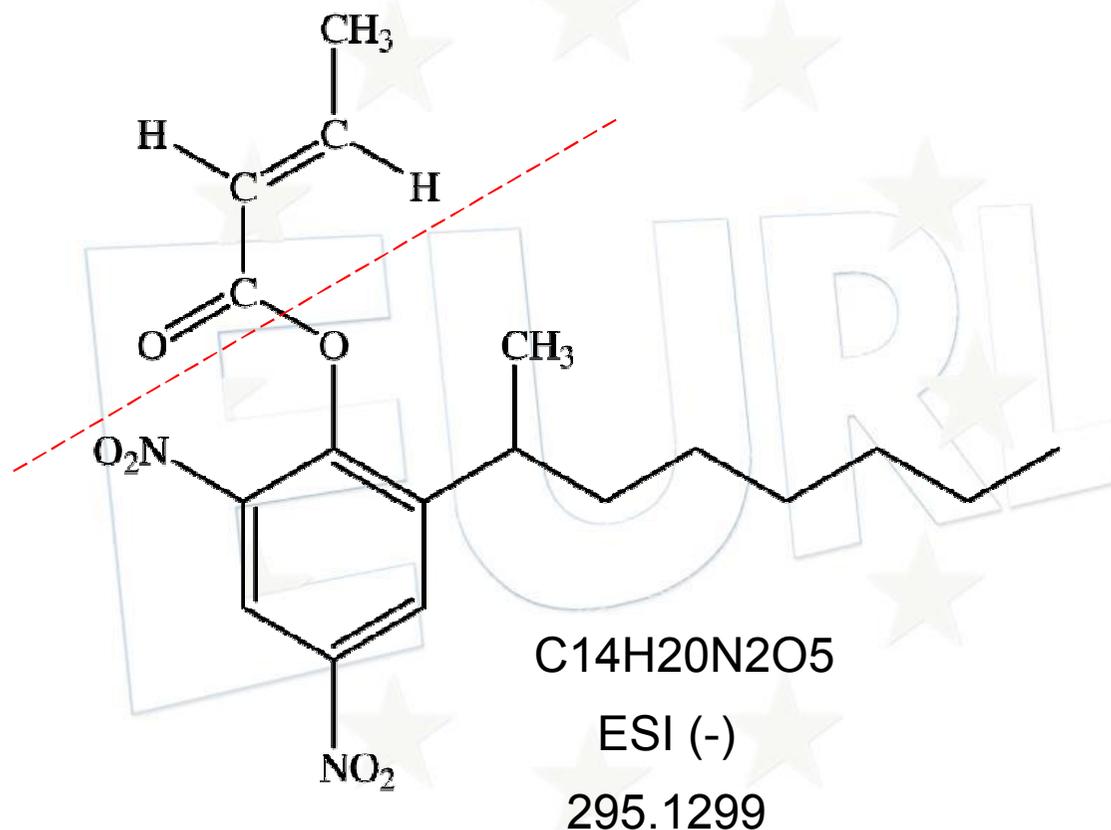
21 Evaluated Pesticides
67 Laboratories

21 Pesticides = 2+6+13

	Atrazine	Cadusafos	Carbetamide	Demeton-S-methylsulfone	Dinocap	Dodemorph	Endrin	Ethoprophos	Fenpropidin	Fipronil	Flubendiamide	Fluometuron	Fuberidazole	Furathiocarb	HCB	Metosulam	Phorate	Prosulfocarb	Secbumeton	Spiromesifen	Terbufos
Total Number of Reported Pesticides	60	64	37	57	25	39	54	66	56	62	33	35	39	55	52	34	50	56	35	51	53
% of Reported Pesticides	90	96	55	85	37	58	81	99	84	93	49	52	58	82	78	51	75	84	52	76	79



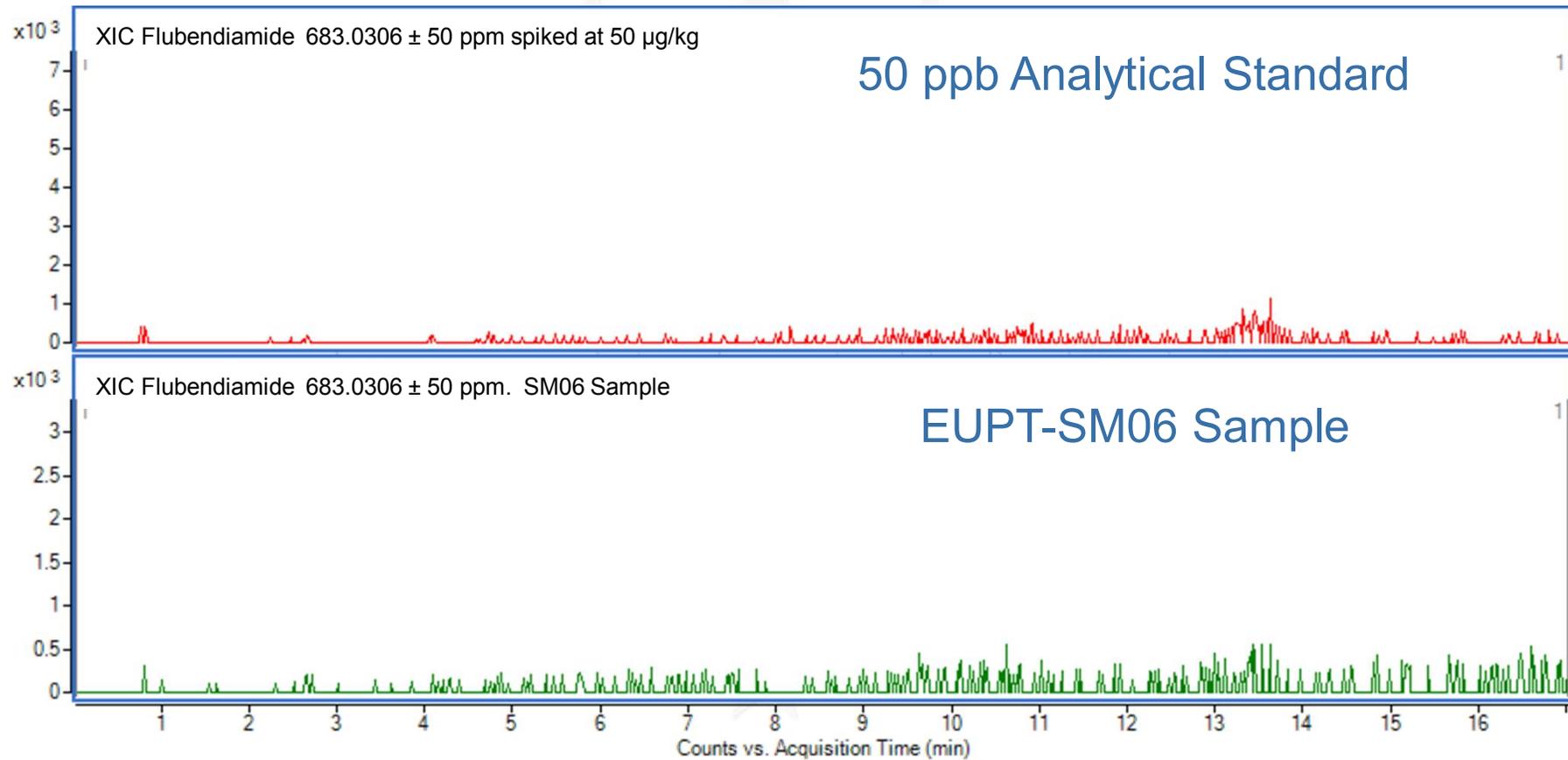
Dinocap





Flubendiamide

LC-TOF-MS



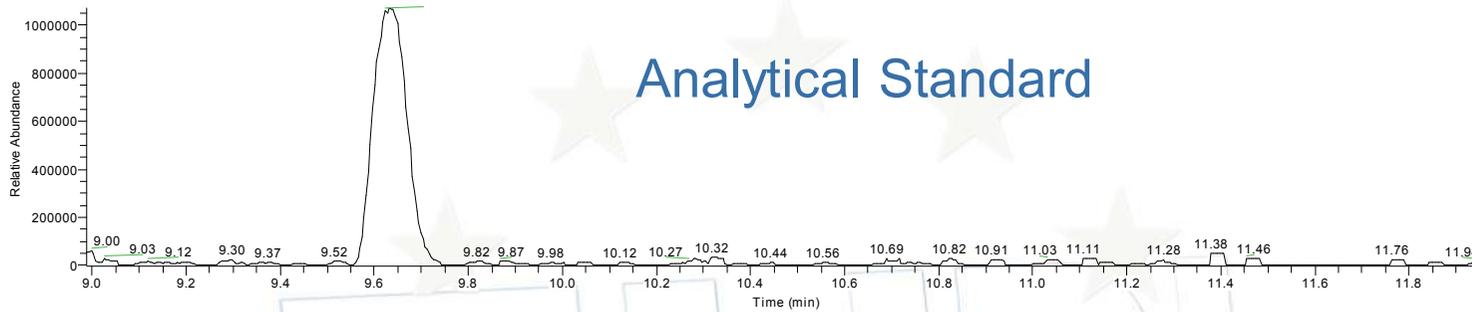


Low percentage of detections

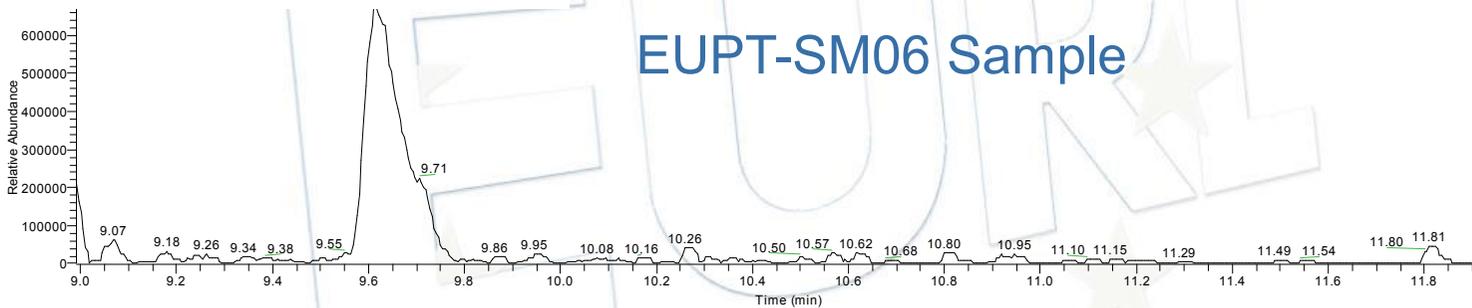
Flubendiamide

LC-Orbitrap-MS

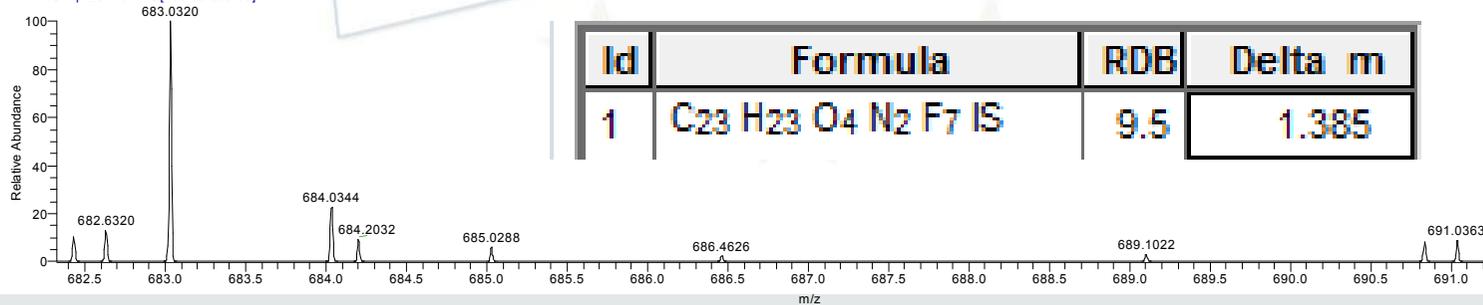
XIC Flubendiamide 683.0306± 5 ppm. Spiked at 100µg/kg



XIC Flubendiamide 683.0306± 5 ppm. SM06 Sample



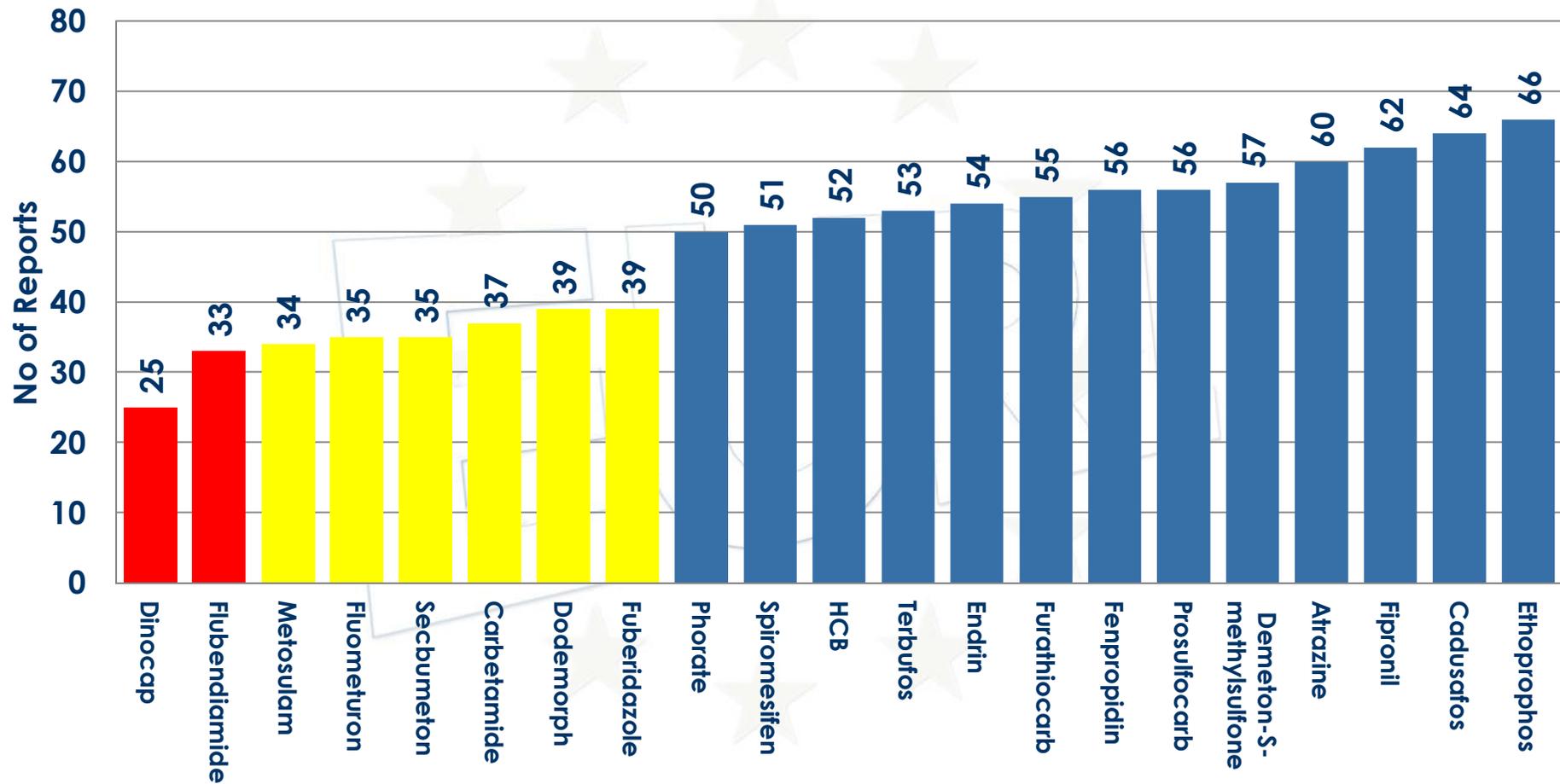
Pimiento_100ppb_pos #2159 RT: 9.64 AV: 1 NL: 1.13E6
T: FTMS + p ESI Full ms [100.00-800.00]



Id	Formula	RDB	Delta m
1	C ₂₃ H ₂₃ O ₄ N ₂ F ₇ IS	9.5	1.385

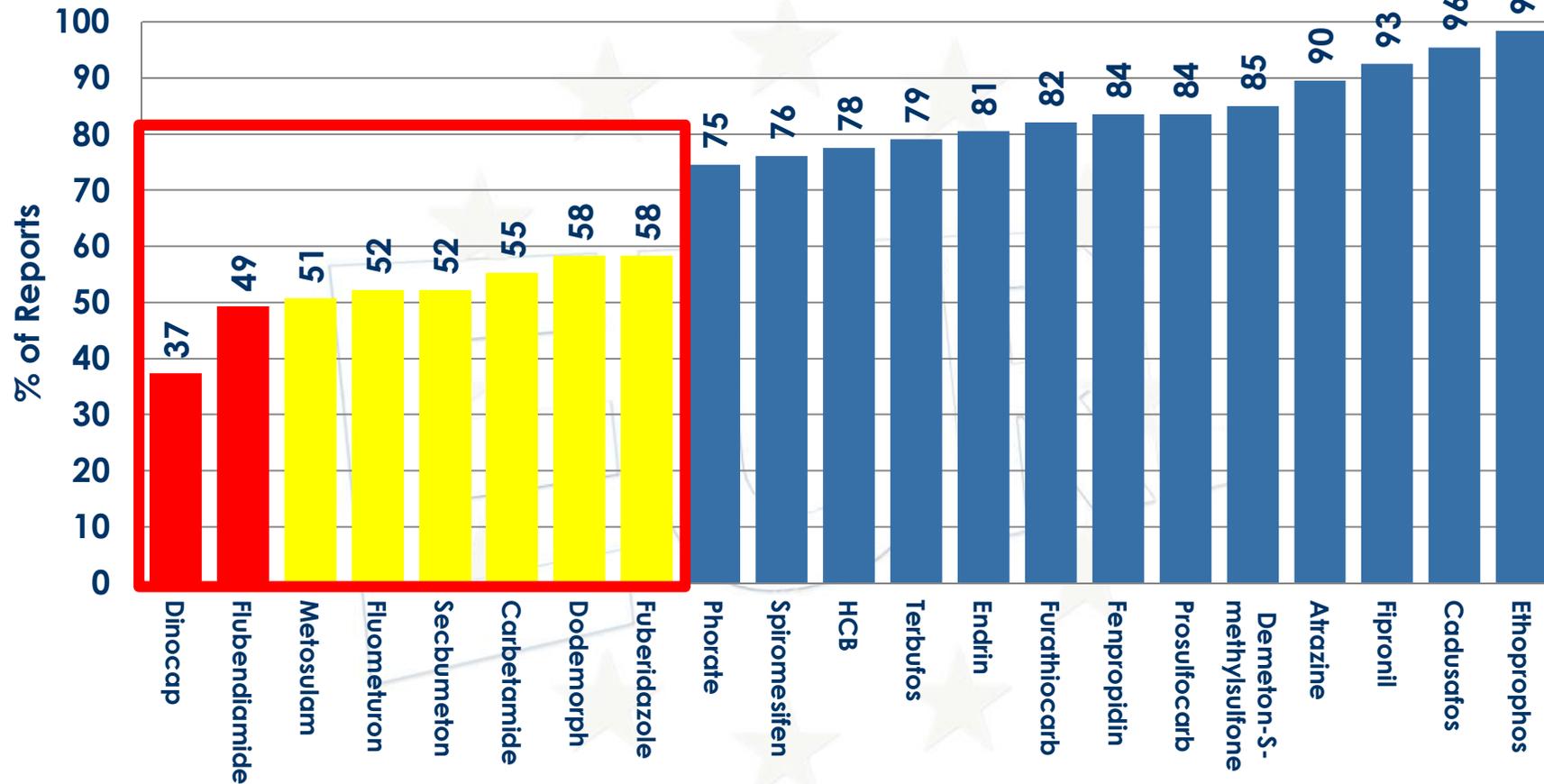


SM06 Reported Pesticides (67 Laboratories Reported Data)





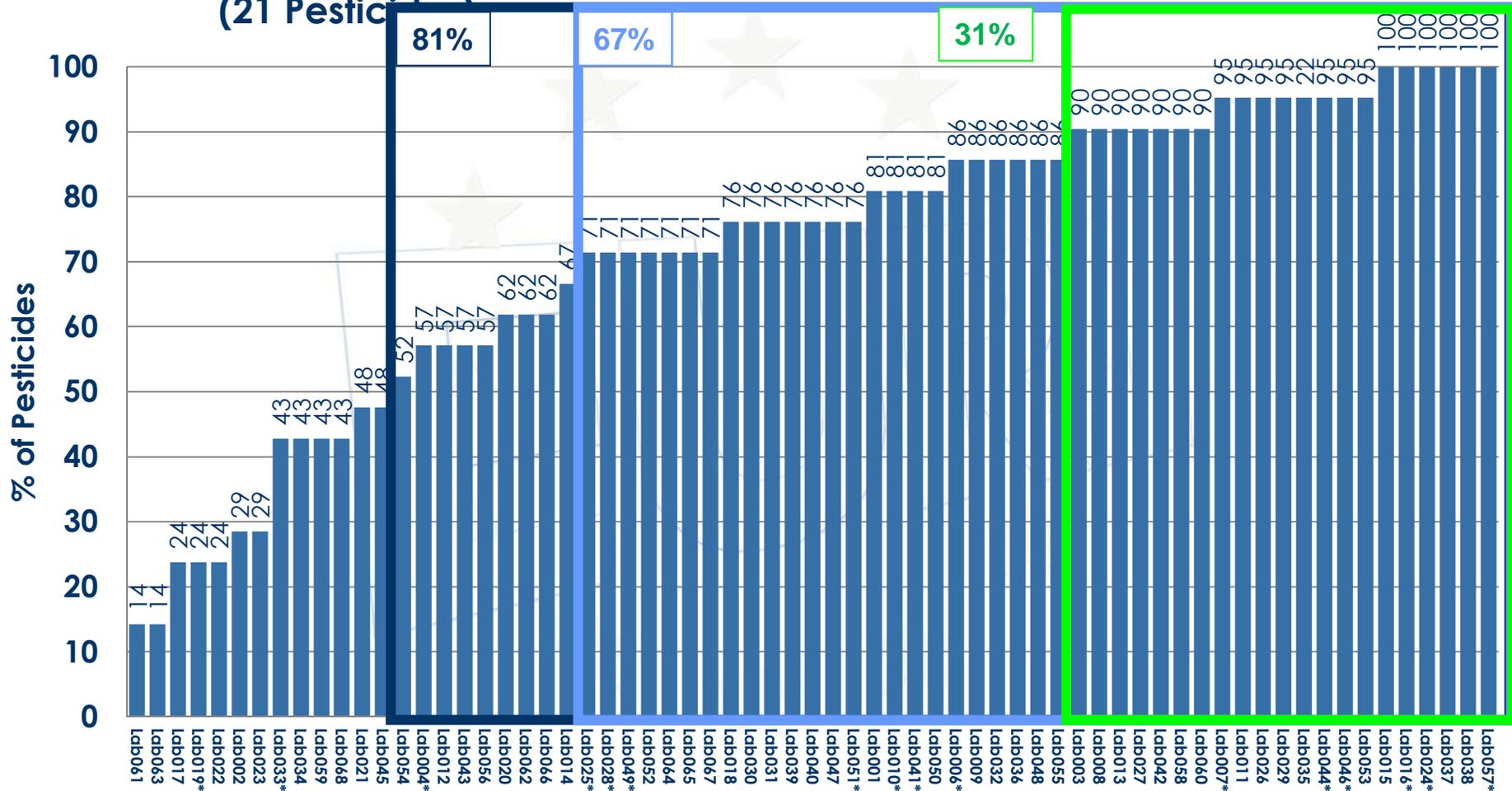
**SM06 % of Reported Pesticides
(67 Laboratories Reported Data)**





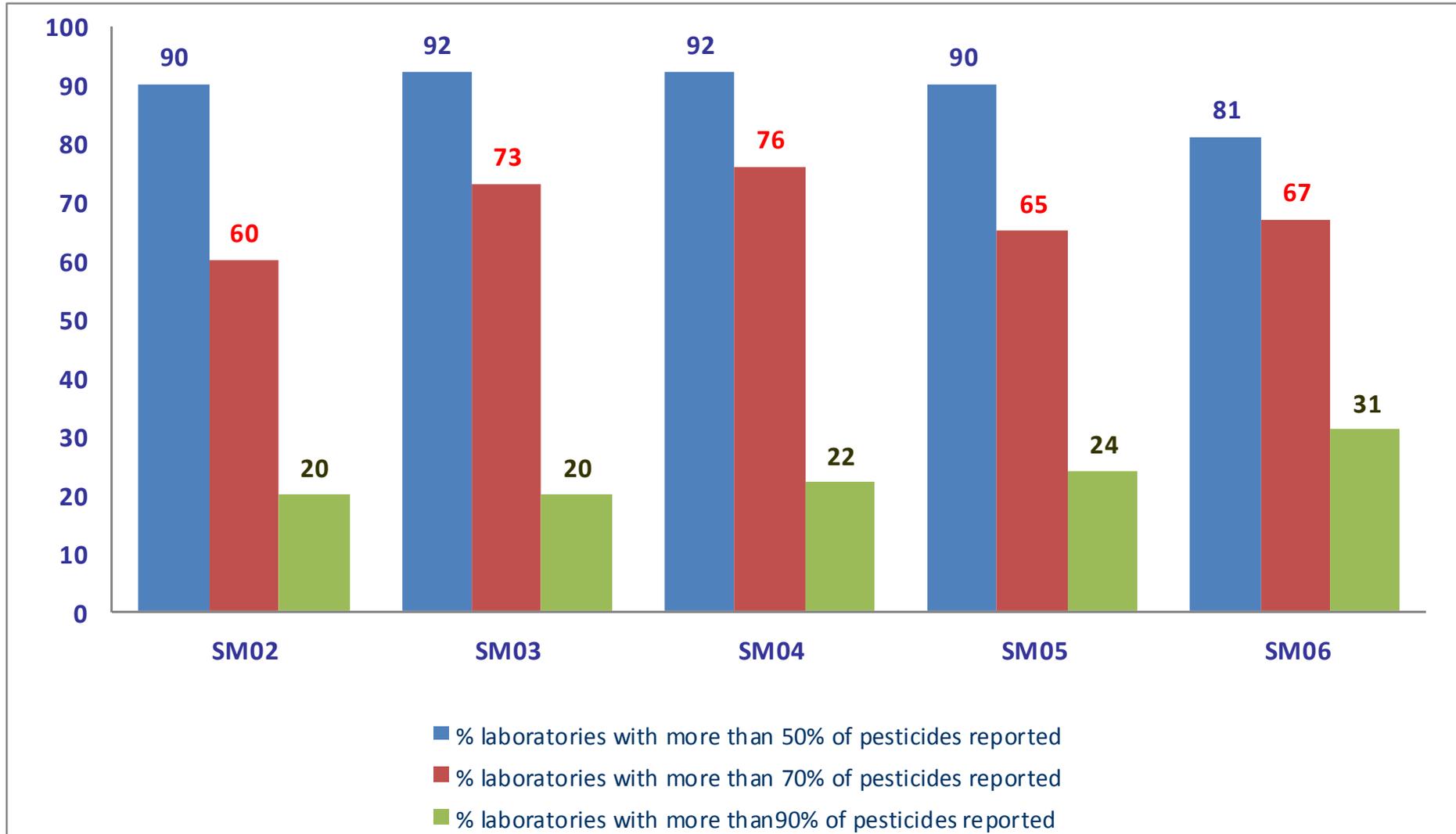
SM06 % of Reported Pesticides

(21 Pesticides)



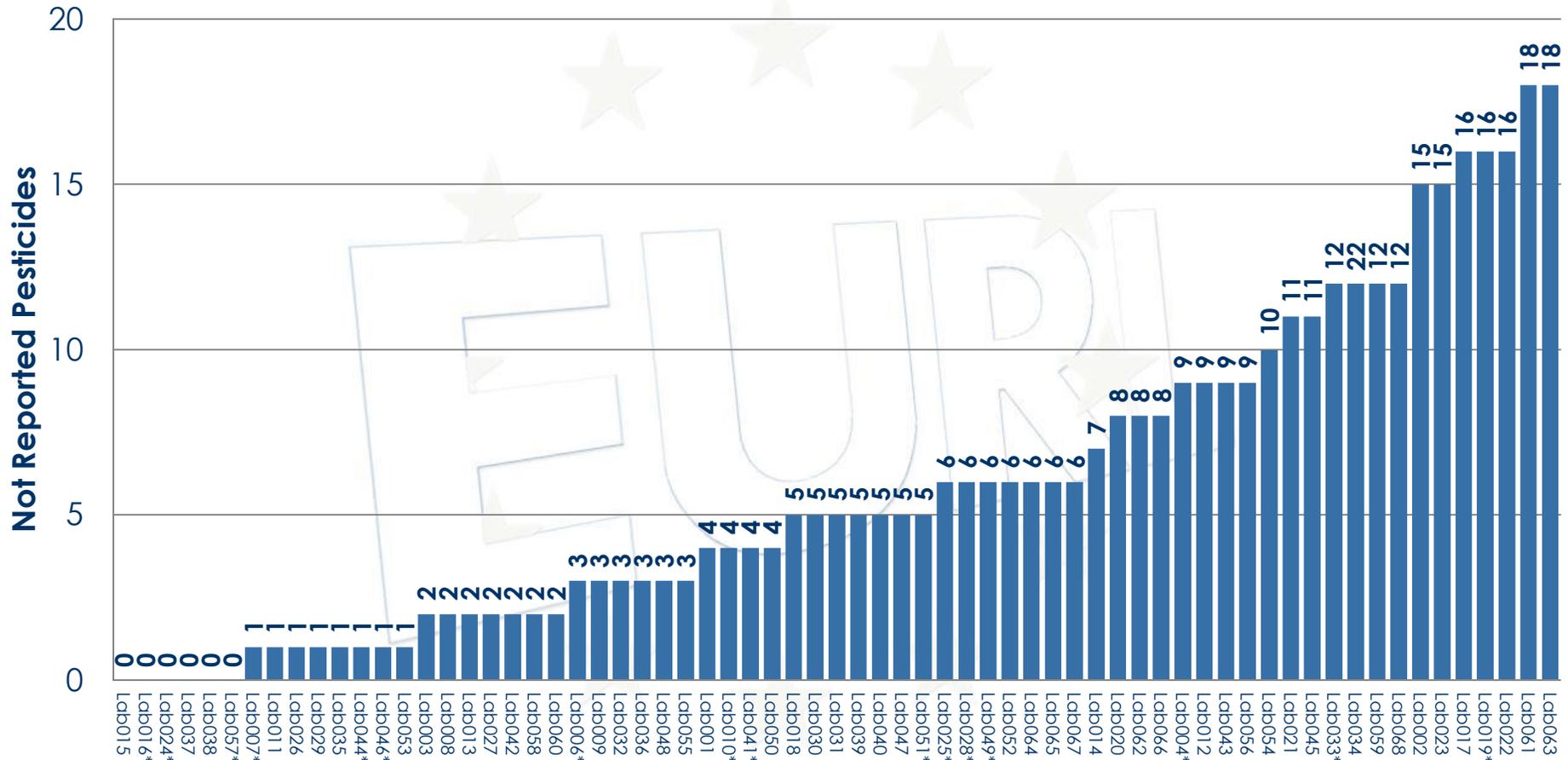


Preliminary Results



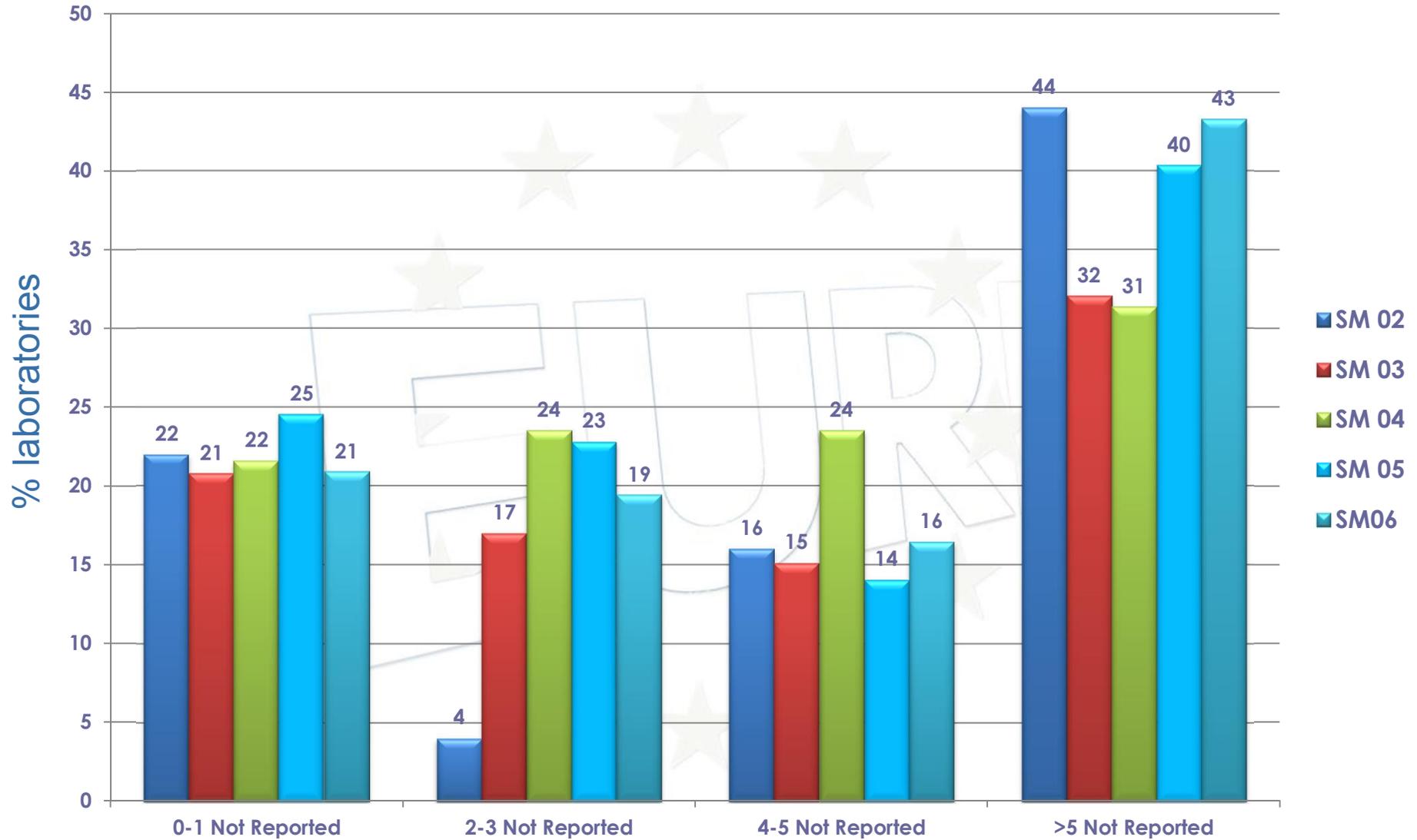


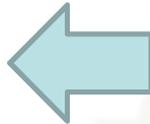
SM06 Not Reported Pesticides (21 Spiked Pesticides)





Non reported pesticides





Atrazine Cadusafos Carbetamide Demeton-S-methylsulfone
Dinocap Dodemorph Endrin Ethoprophos Fenpropidin
Fipronil Flubendiamide Fluometuron Fuberidazole Furathiocarb
HCB Metosulam Phorate Prosulfocarb Sebueton
Spiromesifen Terbufos

Other compounds have been detected or identified and quantified by the organizer at concentrations below 10 µg/kg:

- Atrazine-desethyl-2-hydroxy
- Carbofuran
- Difenoconazole
- Dimefuron
- Endrin ketone
- Fenamiphos
- Fenamiphos sulfoxide
- Fipronil sulfide
- Fipronil sulfone
- Phorate sulfoxide
- Terbufos sulfoxide
- Triadimenol



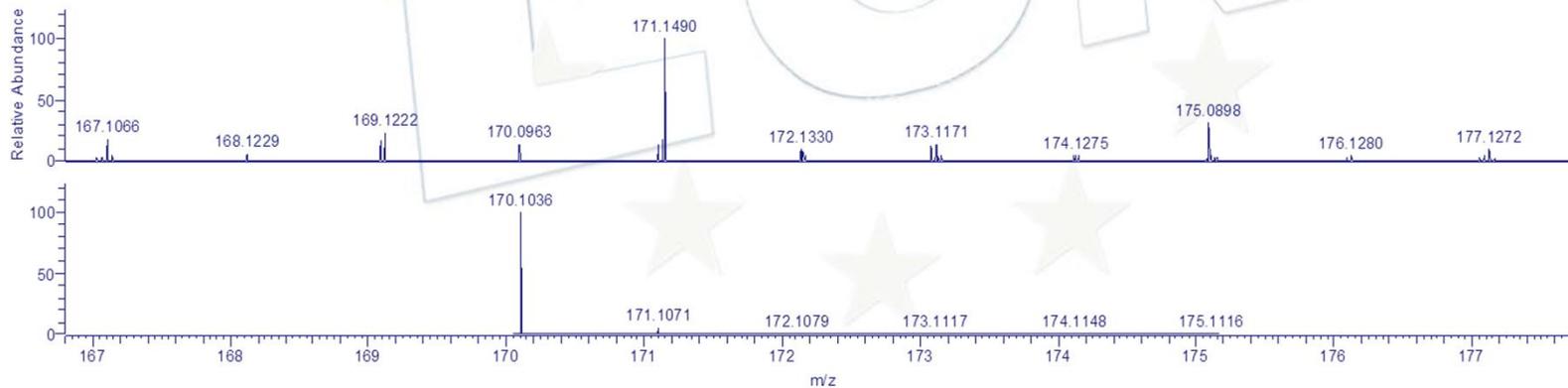
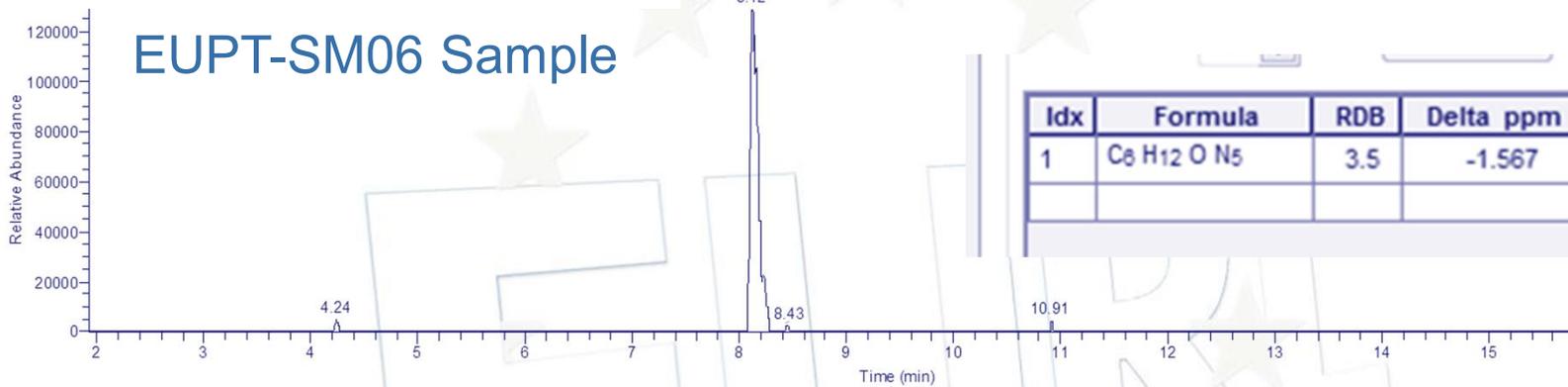
Not spiked pesticides in test item

Atrazine~~E~~desethyl-2-hydroxy

LC-Orbitrap-MS

XIC Atrazine-desethyl-2-hydroxy 170.1036 ± 5 ppm. SM06

EUPT-SM06 Sample



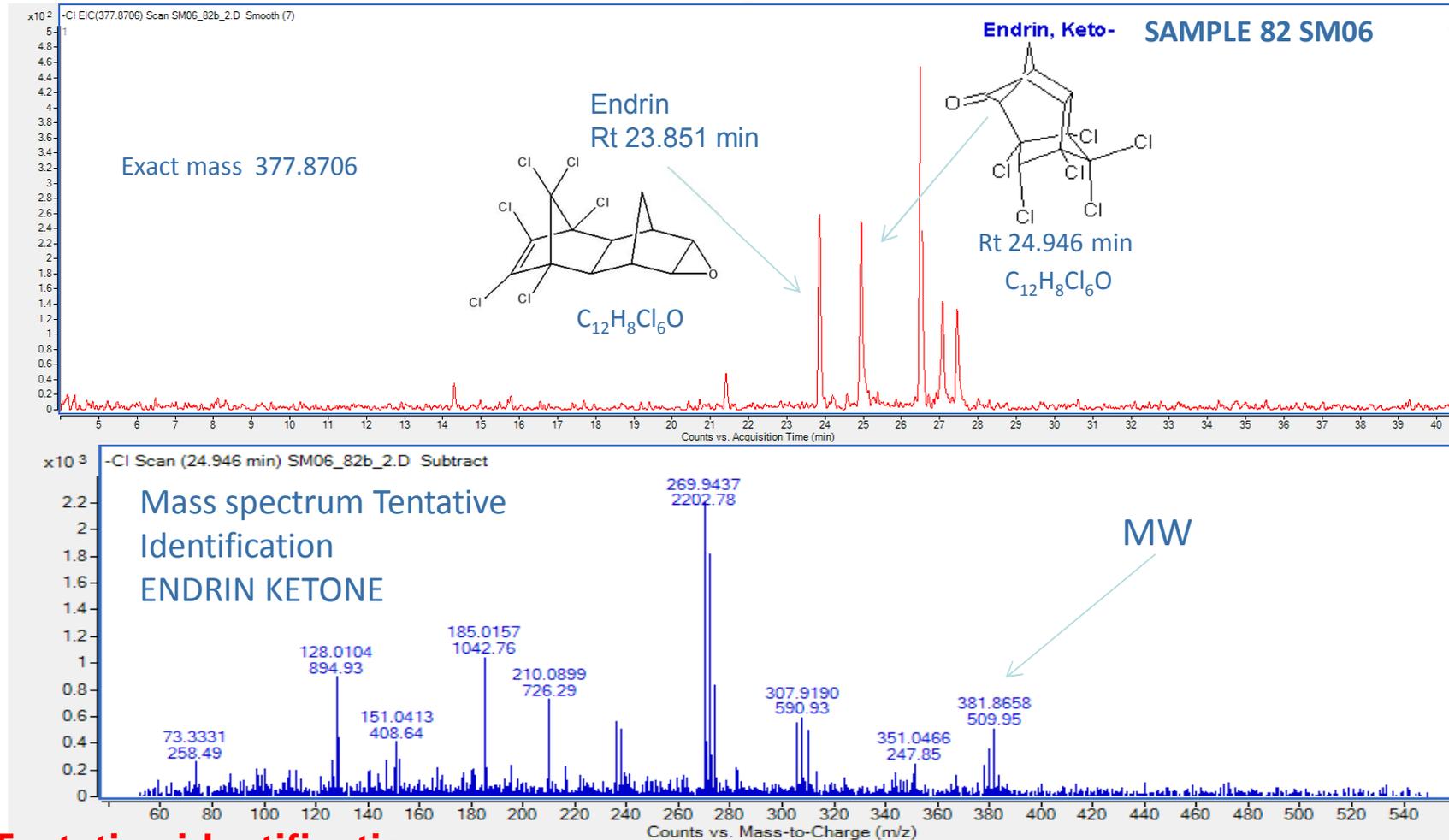
Tentative identification



Not spiked pesticides in test item

Endrin Ketone

GC-TOF-NCI-MS



Tentative identification



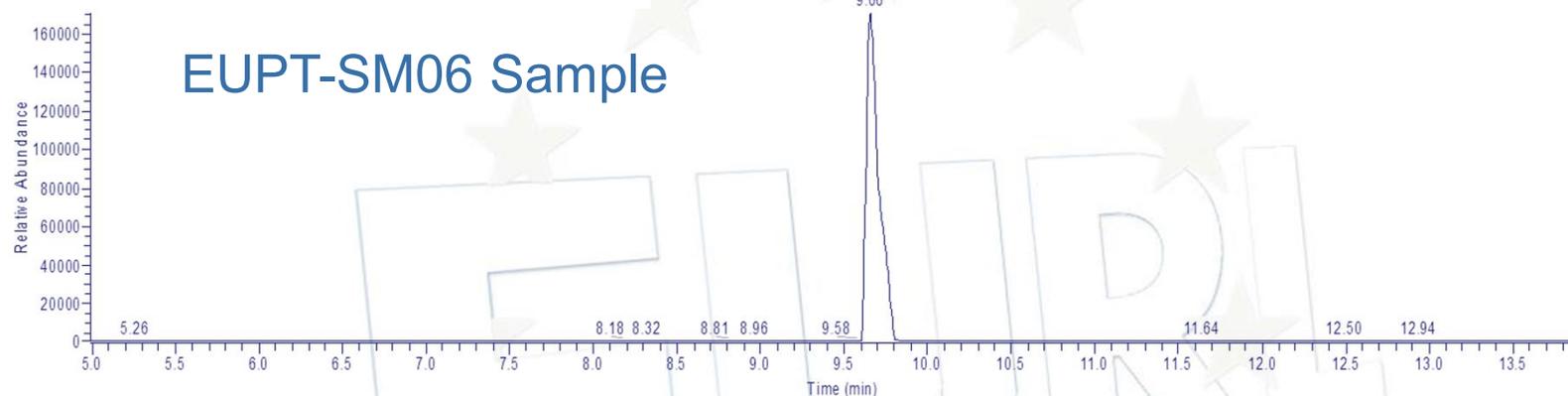
Not spiked pesticides in test item

Fipronil sulfide

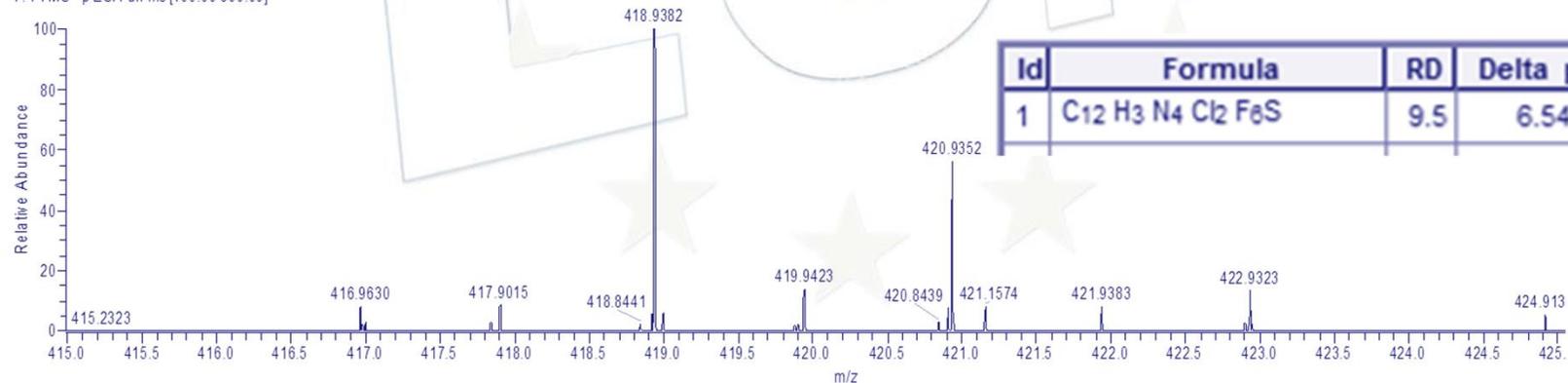
LC-Orbitrap-MS

ESI (-)

RT: 4.99 - 1 XIC Fipronil sulfide 418.9365 5 ± 5 ppm. SM06 Sample



SM06_neg #2140 RT: 9.66 AV: 1 SB: 338 8.86-9.66, 10.08-10.77 NL: 1.64E5
T: FTMS - p ESI Full ms [100.00-800.00]



Tentative identification



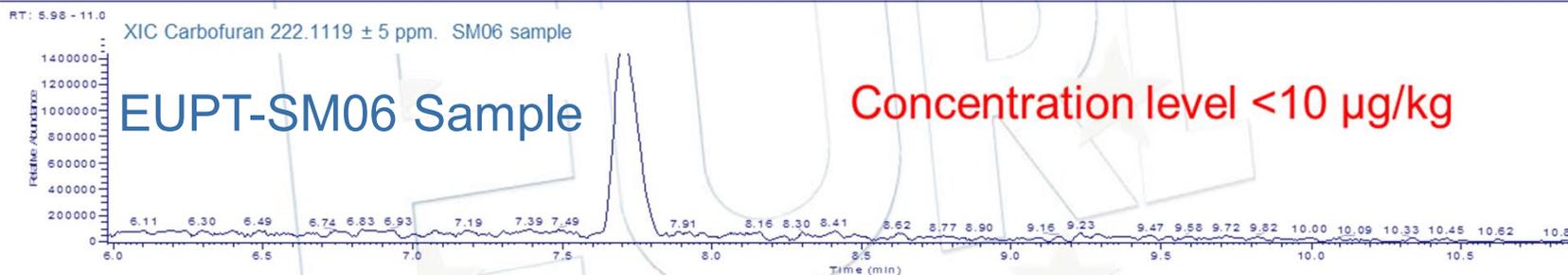
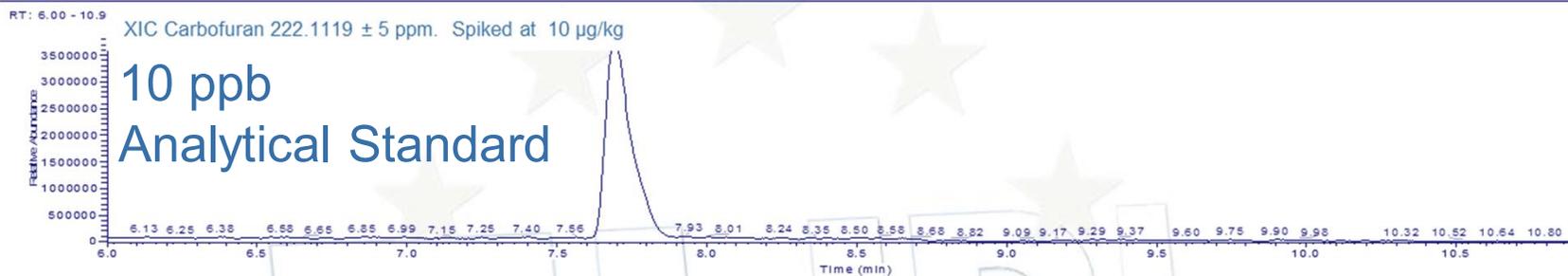
Not spiked pesticides in test item

Carbofuran

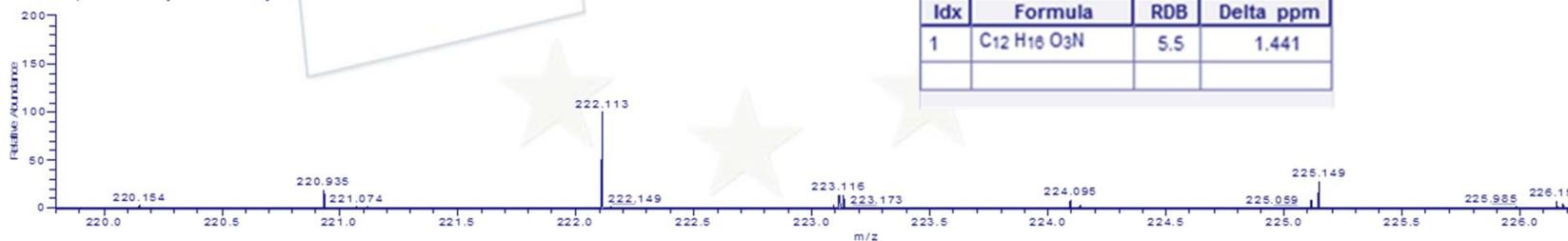
LC-Orbitrap-MS

\\192.168.211.26\calibu...SM_pos

3/21/2014 9:08:02 AM



SM_pos#1725 RT: 7.70 AV: 1 SB: 217 1.42-2.38 NL: 1.39E6
T: FTMS + p ESI Full m s [100.00-800.00]





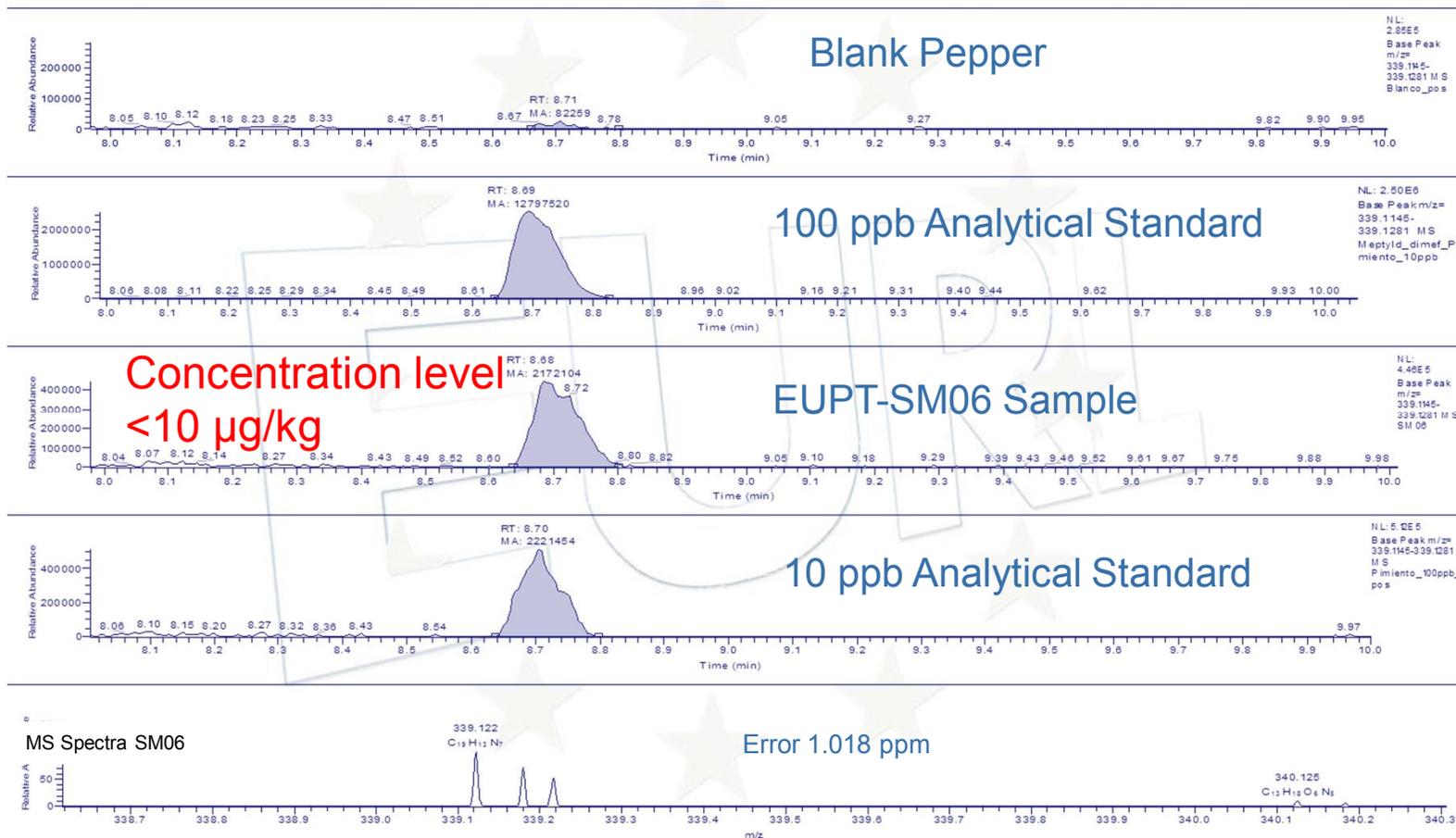
Not spiked pesticides in test item

Dimefuron

LC-Orbitrap-MS

Pimiento_100ppb_pos

3/21/2014 9:53:55 AM

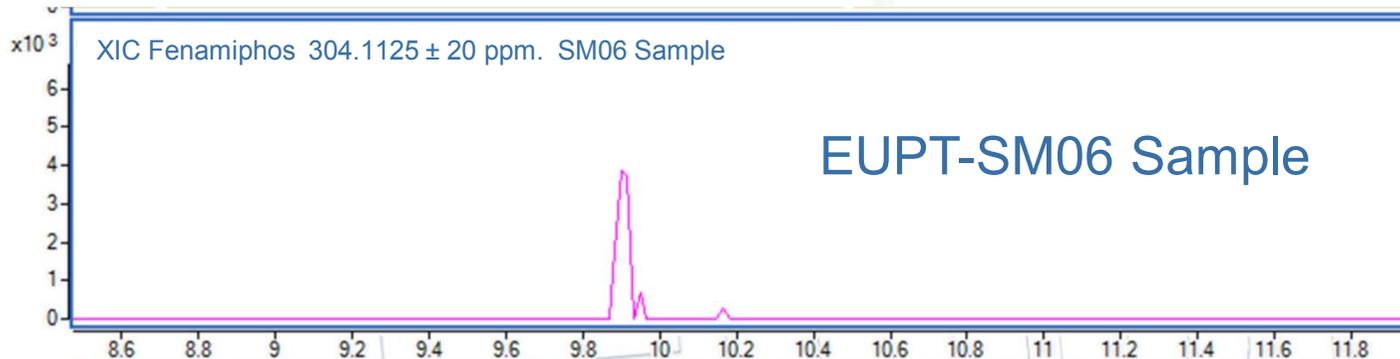




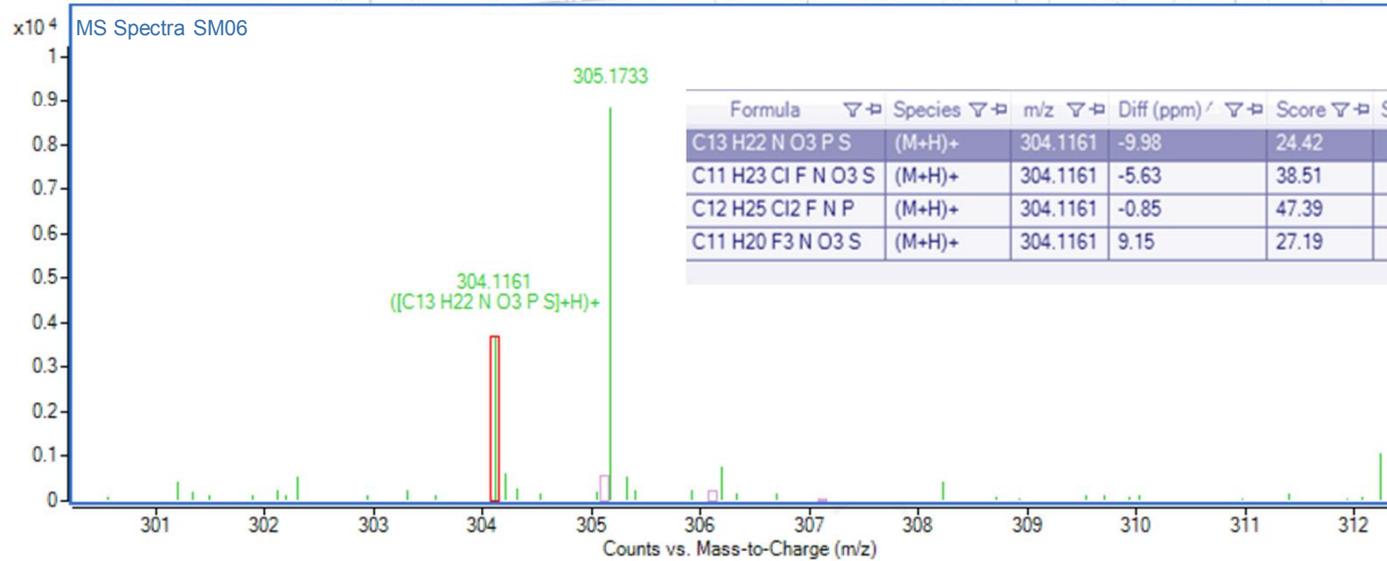
Not spiked pesticides in test item

Fenamiphos

LC-TOF-MS



Concentration level
<10 µg/kg

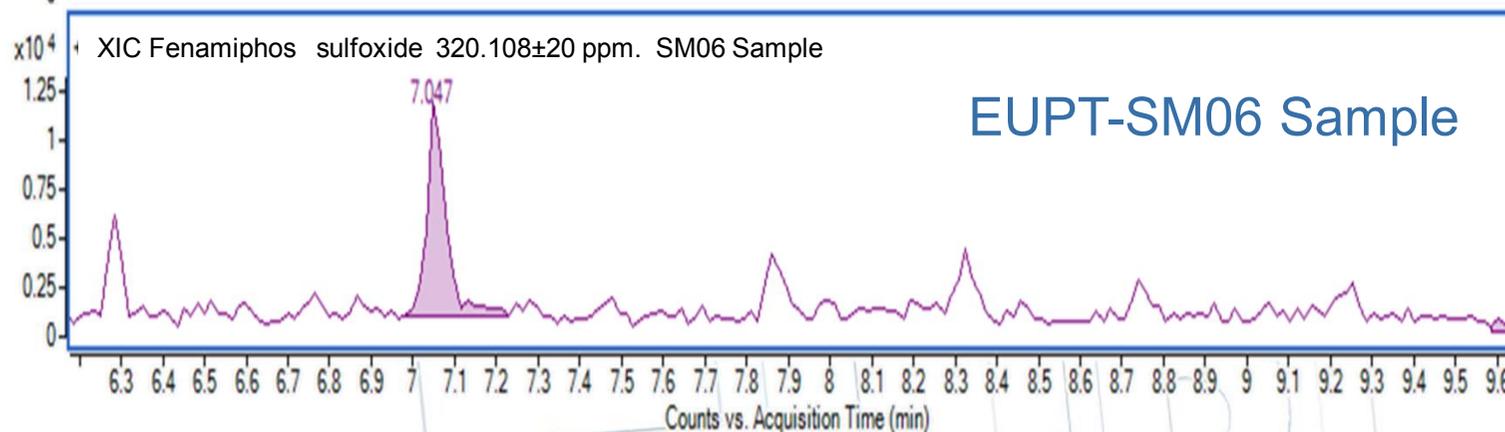




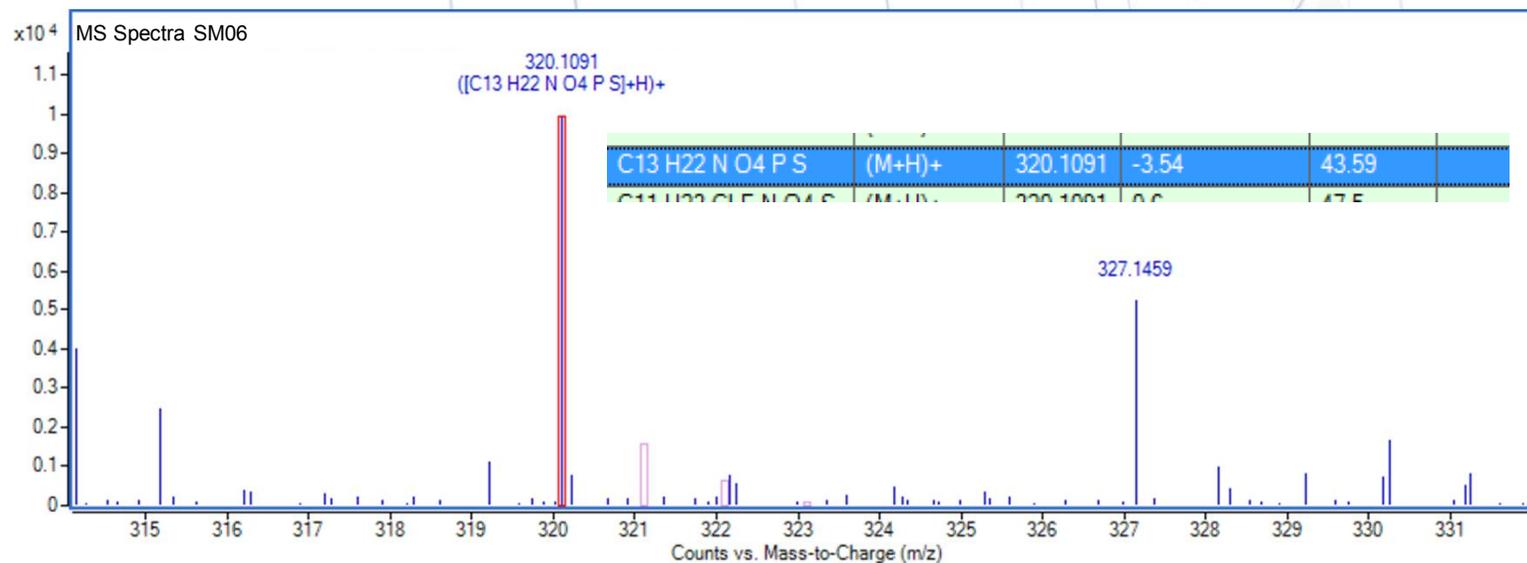
Not spiked pesticides in test item

Fenamiphos sulfoxide

LC-TOF-MS



Concentration level <10 µg/kg



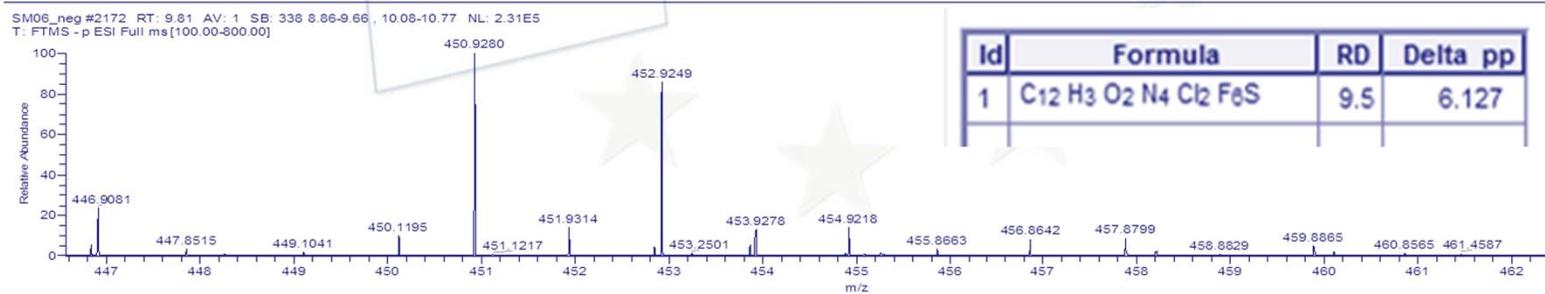
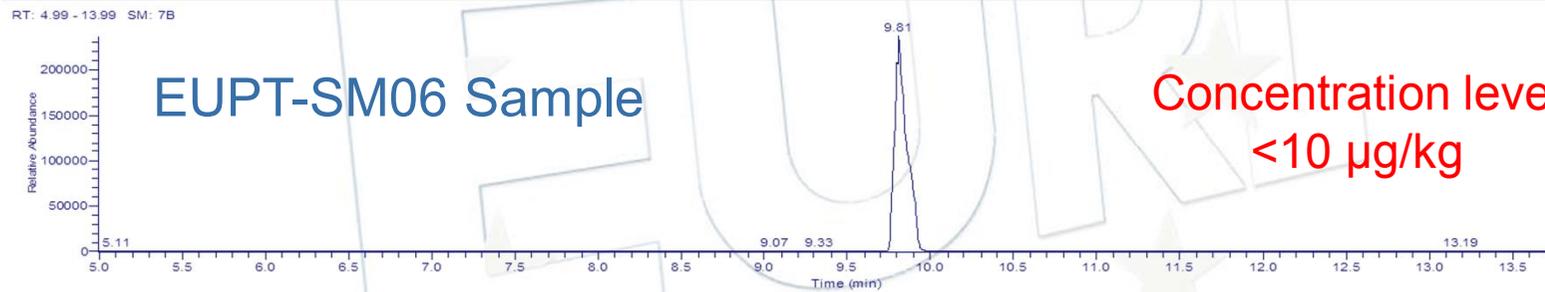
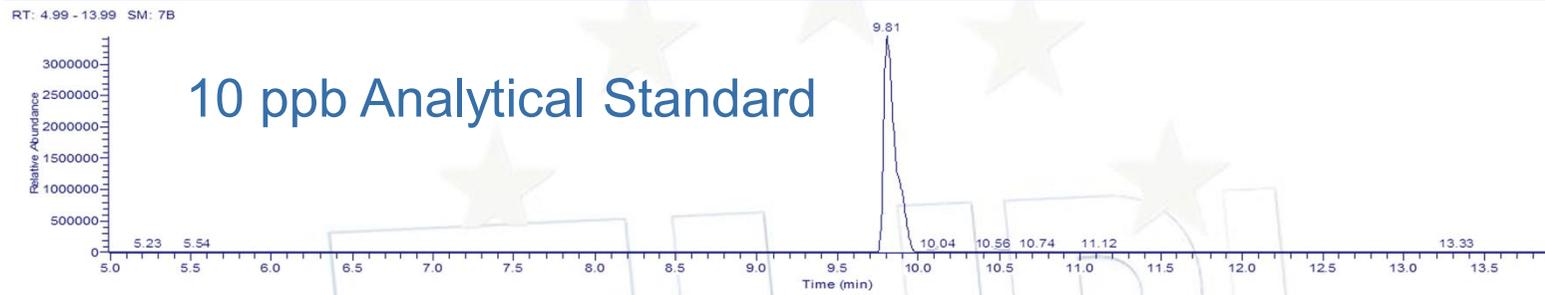


Not spiked pesticides in test item

Fipronil sulfone

LC-Orbitrap-MS

ESI (-)

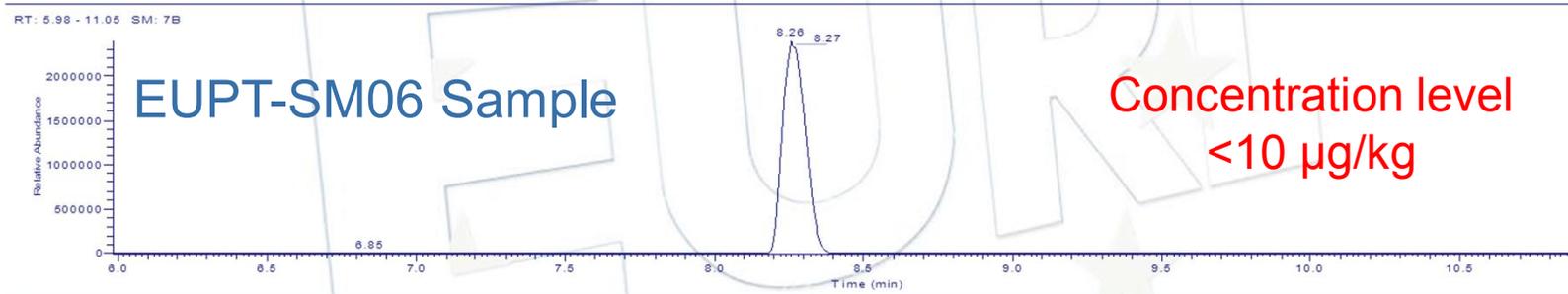
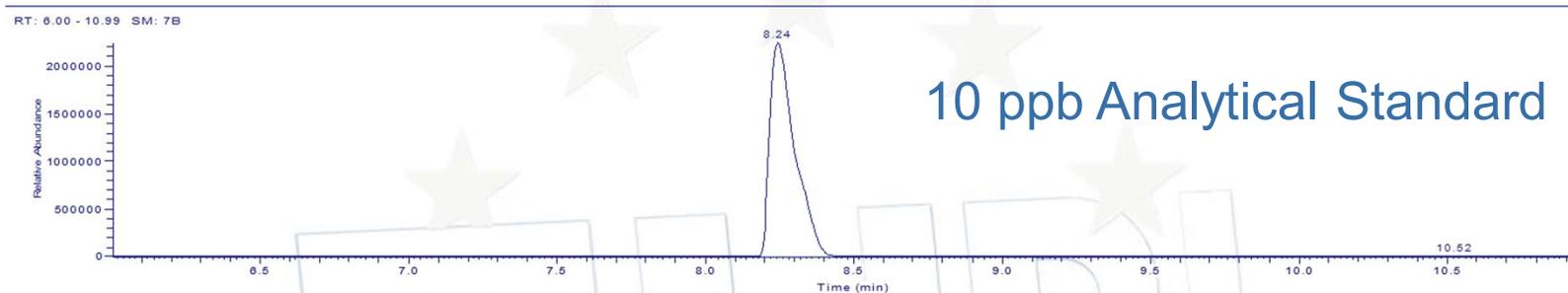




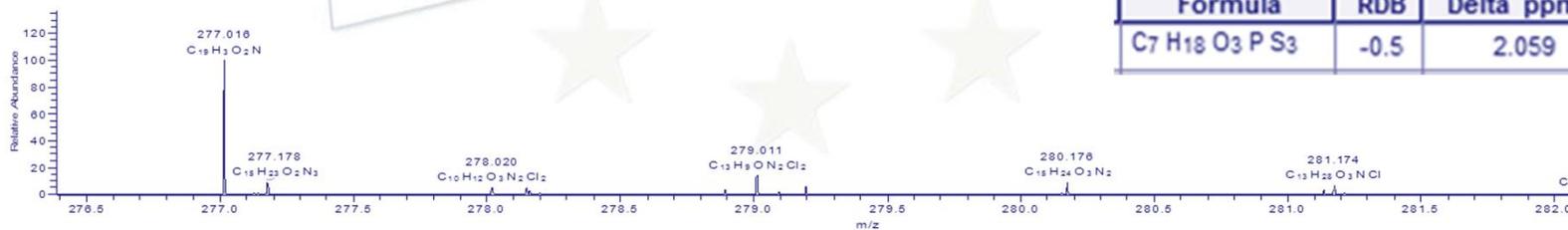
Not spiked pesticides in test item

Phorate sulfoxide

LC-Orbitrap-MS



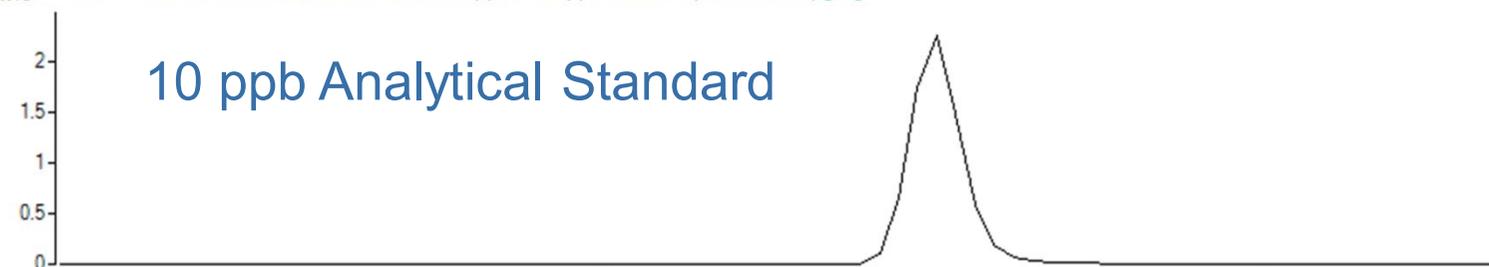
MS Spectra SM06





x10⁵ XIC Terbufos sulfoxide 305.0463 ± 20 ppm. Pepper Blank spiked at 10 µg/kg

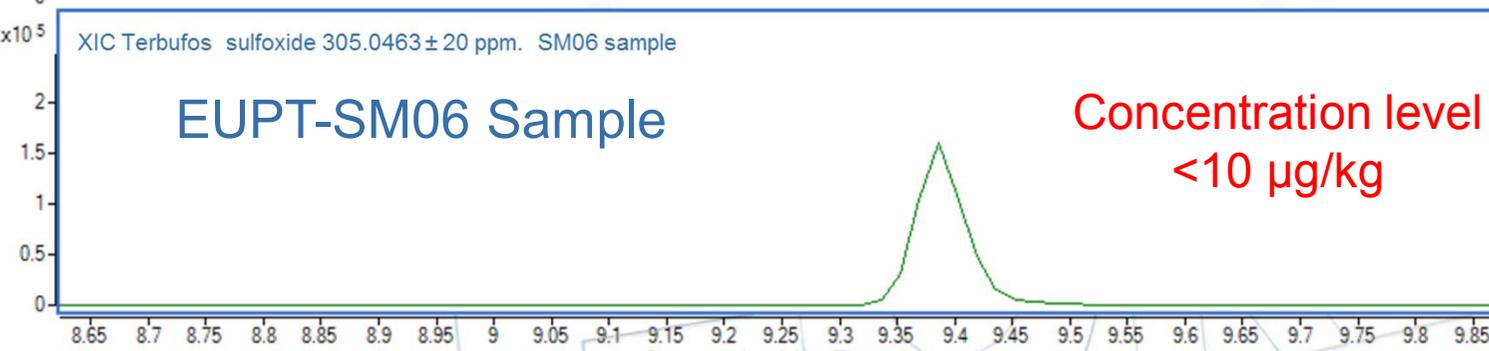
10 ppb Analytical Standard



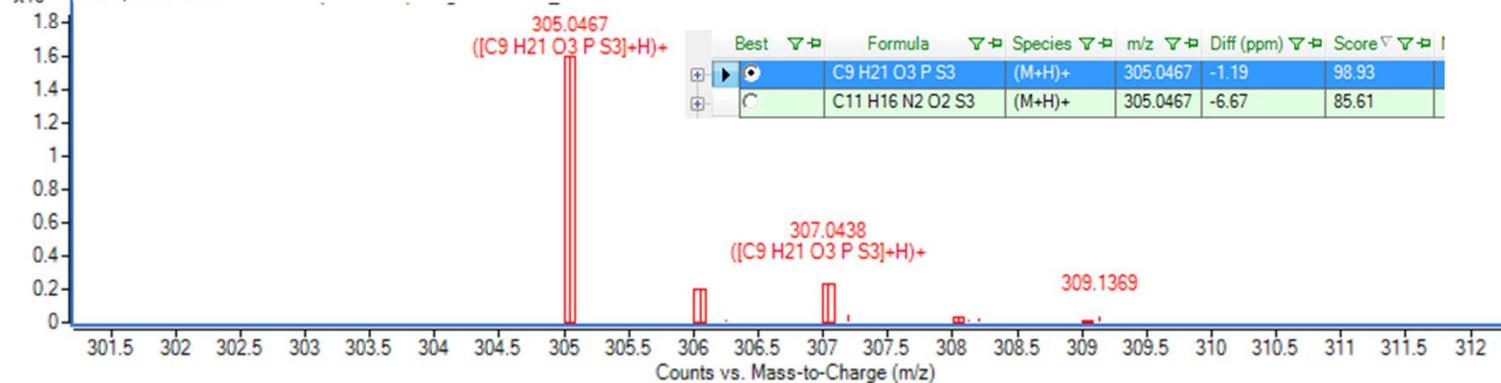
x10⁵ XIC Terbufos sulfoxide 305.0463 ± 20 ppm. SM06 sample

EUPT-SM06 Sample

Concentration level
<10 µg/kg



x10⁵ MS Spectra SM06



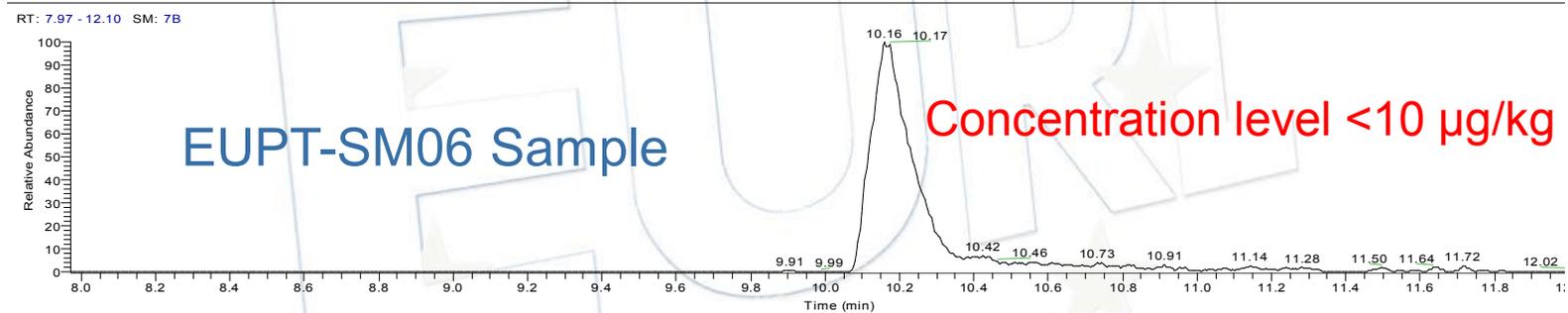
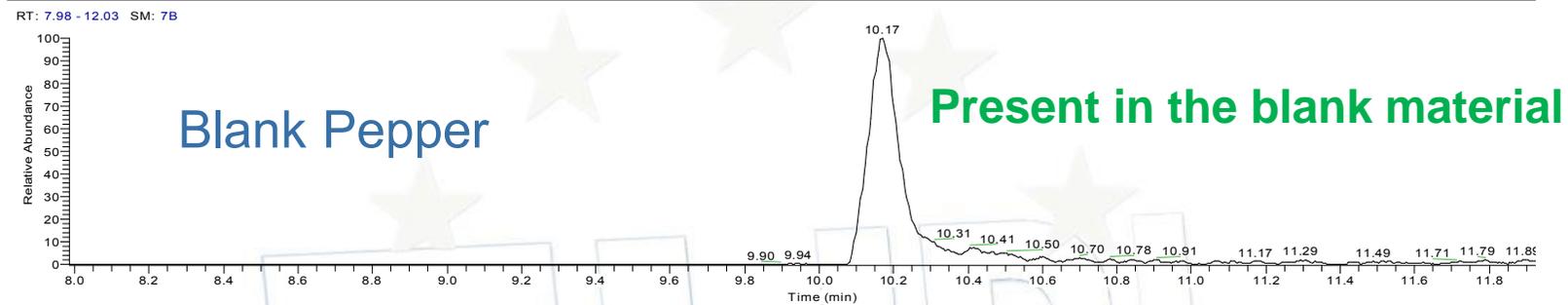
**Terbufos
sulfoxide
LC-TOF -MS**



Not spiked pesticides in test item

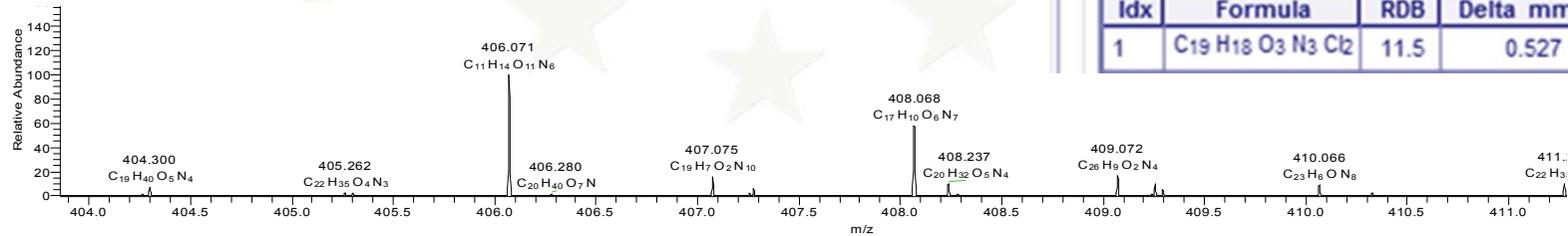
Difenoconazole

LC-Orbitrap-MS



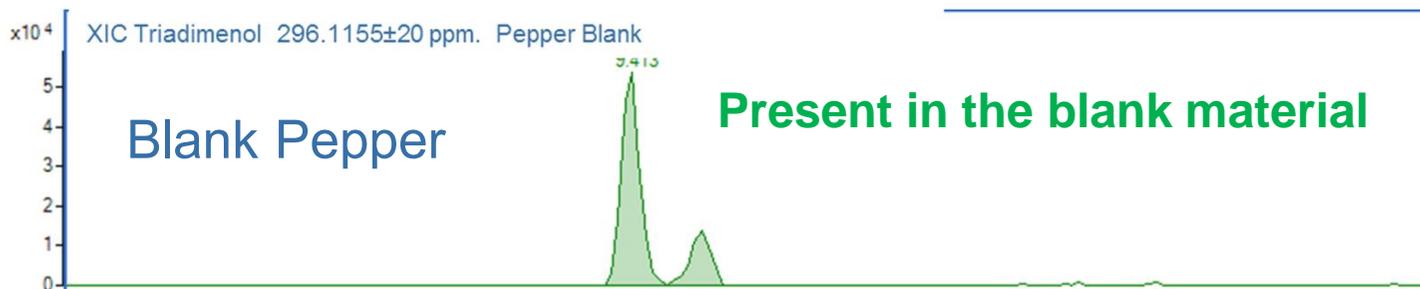
SM06_pos#2278 RT: 10.17 AV: 1 SB: 217 1.42-2.38 NL: 1.97E6
T: FTMS + p ESI Full ms[100.00-800.00]

Spectra SM06

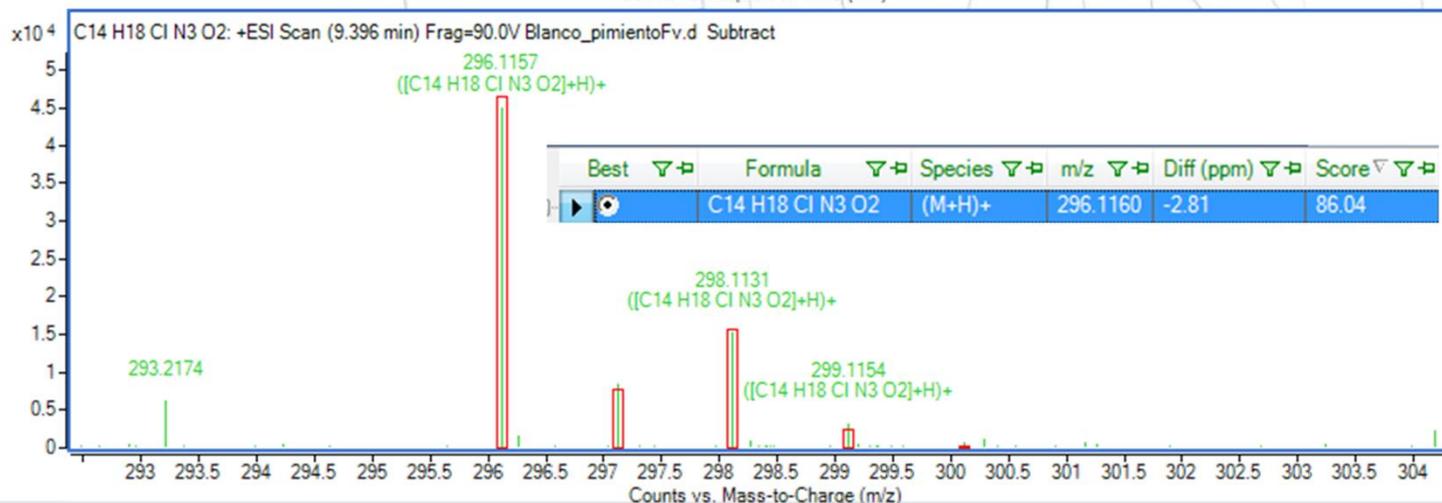
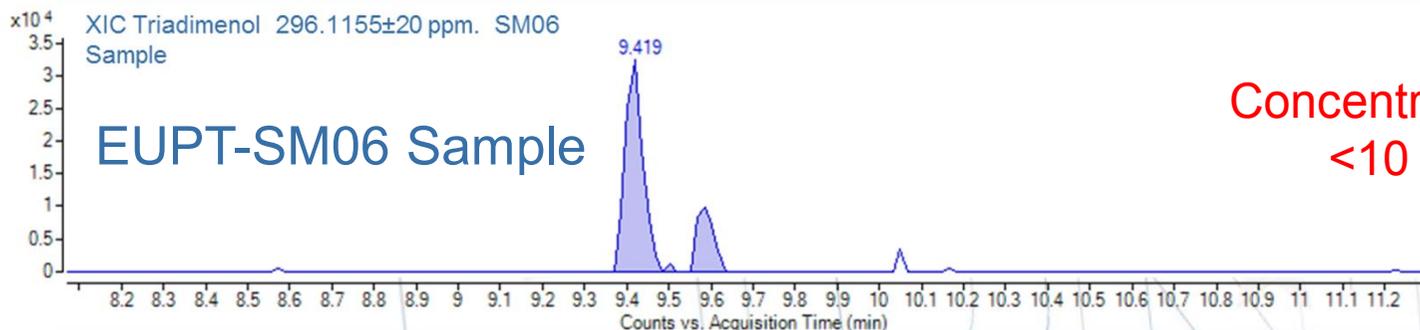




Not spiked pesticides in test item



Triadimenol
LC-TOF-MS





2 Pesticides in the blank:

DIFENOCONAZOLE

TRIADIMENOL

Concentrations below 10 µg/kg



Pesticides reported by 3 or more laboratories but not detected by the organizer:

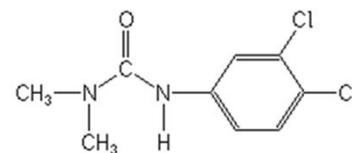
- Diuron
- Formetanate
- Prometon
- Terbumeton



Other reported pesticides

XIC Diuron 233.0243 ± 20 ppm. SM 06
Sample

Diuron

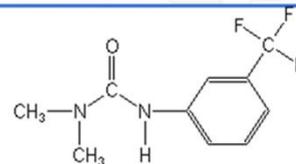


C₉H₁₀Cl₂N₂O
m/z 233.0243
Rt 8.8 min

Diuron
LC-TOF -MS

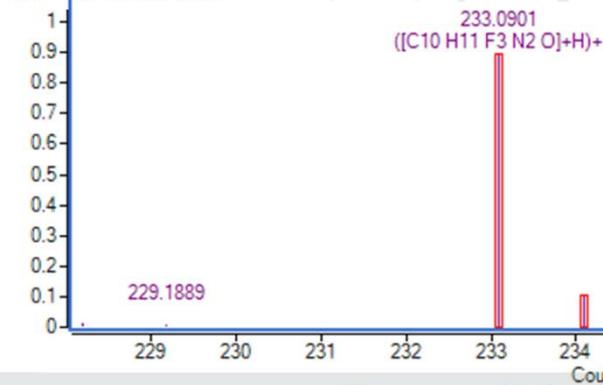
XIC Fluometuron 233.0896 ± 20 ppm. SM 06 Sample

Fluometuron (spiked)



C₁₀H₁₁F₃N₂O
m/z 233.0896
Rt 8.6

MS Spectra SM06



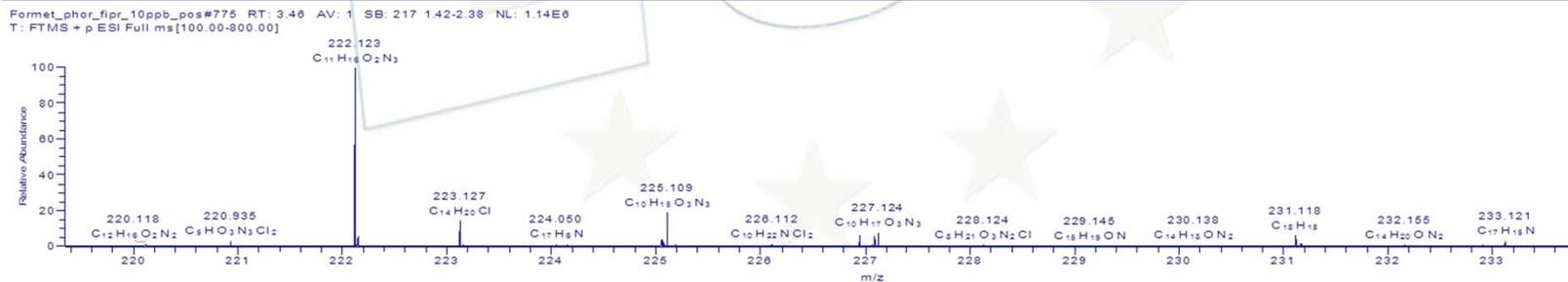
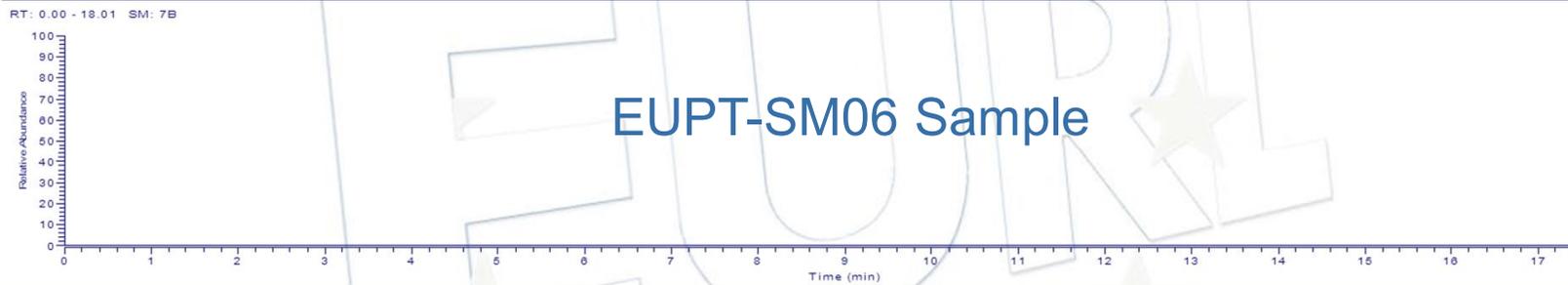
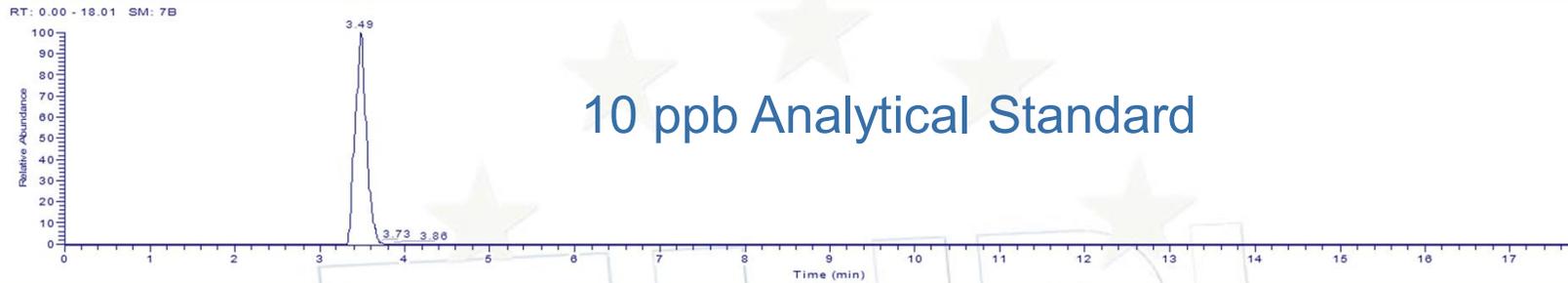
Best	Formula	Species	m/z	Diff (ppm)	Score
☑	C ₁₀ H ₁₁ F ₃ N ₂ O	(M+H) ⁺	233.0901	-1.84	98.48
☐	C ₁₃ H ₁₀ F ₂ N ₂	(M+H) ⁺	233.0901	-6.71	86.02
☐	C ₁₂ H ₁₂ N ₂ O ₃	(M+H) ⁺	233.0901	8.72	82.21



Other reported pesticides

Formetanate

LC-Orbitrap-MS

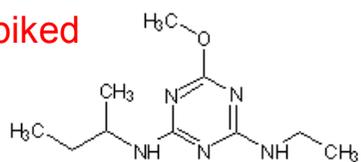




Other reported pesticides

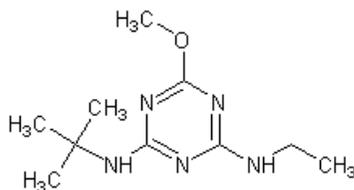
Spiked

Secbumeton



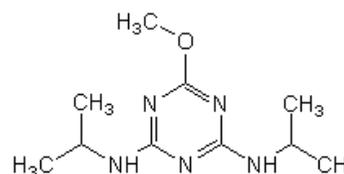
C₁₀H₁₉N₅O

Terbumeton



C₁₀H₁₉N₅O

Prometon



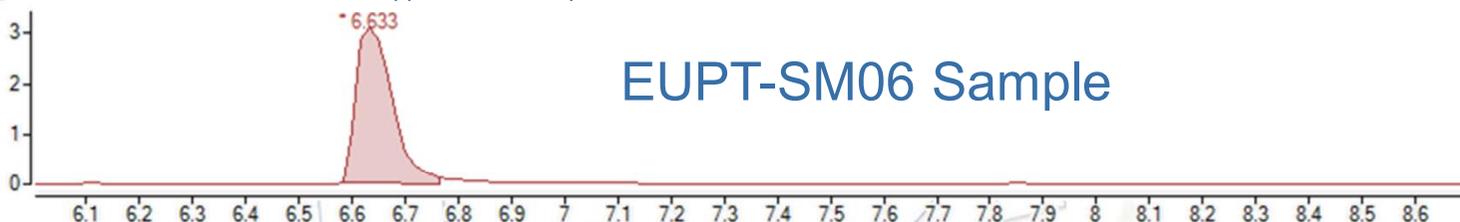
C₁₀H₁₉N₅O

LC-TOF-MS

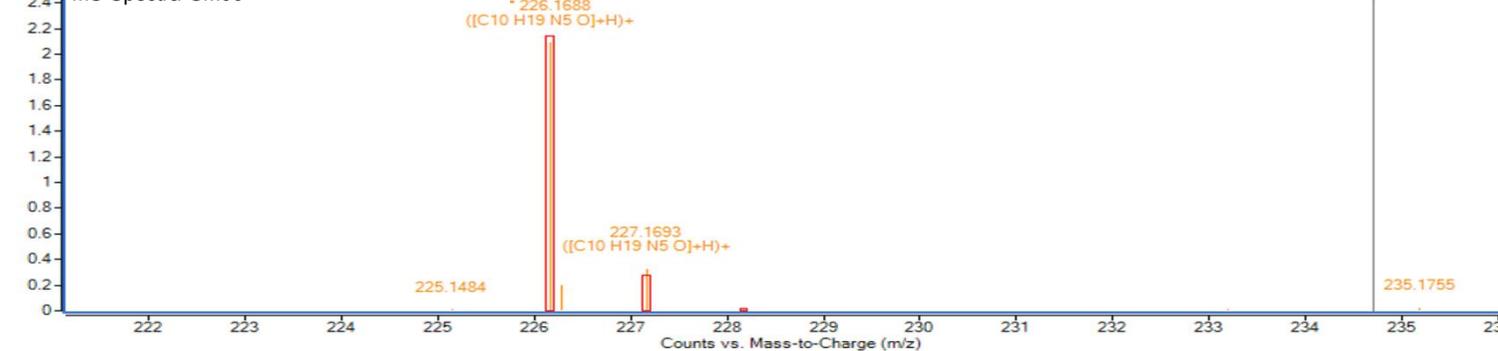
XIC Secbumeton 226.1662± 20 ppm spiked at 50 µg/kg



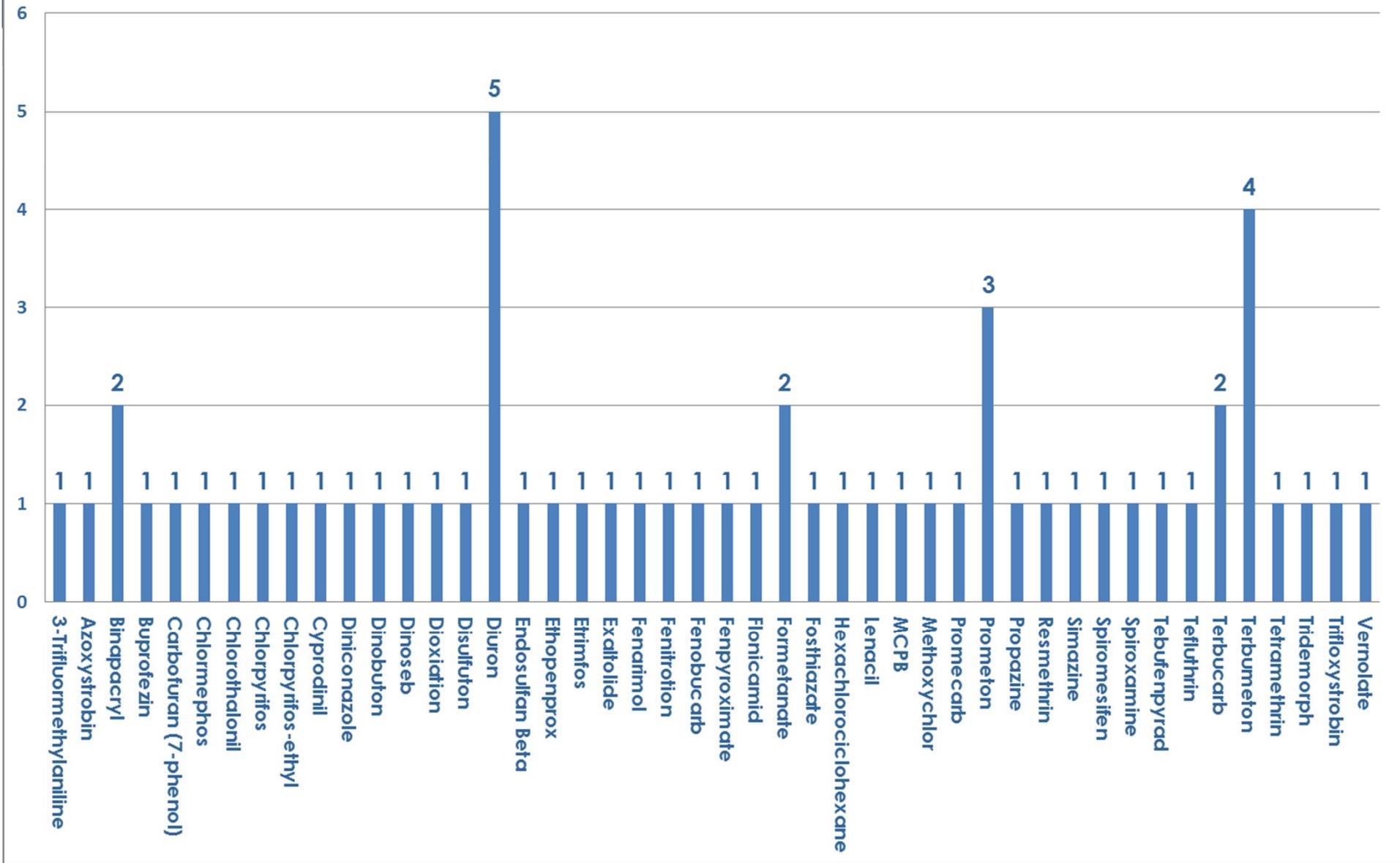
x10⁶ XIC Secbumeton 226.1662± 20 ppm. SM06 sample



MS Spectra SM06

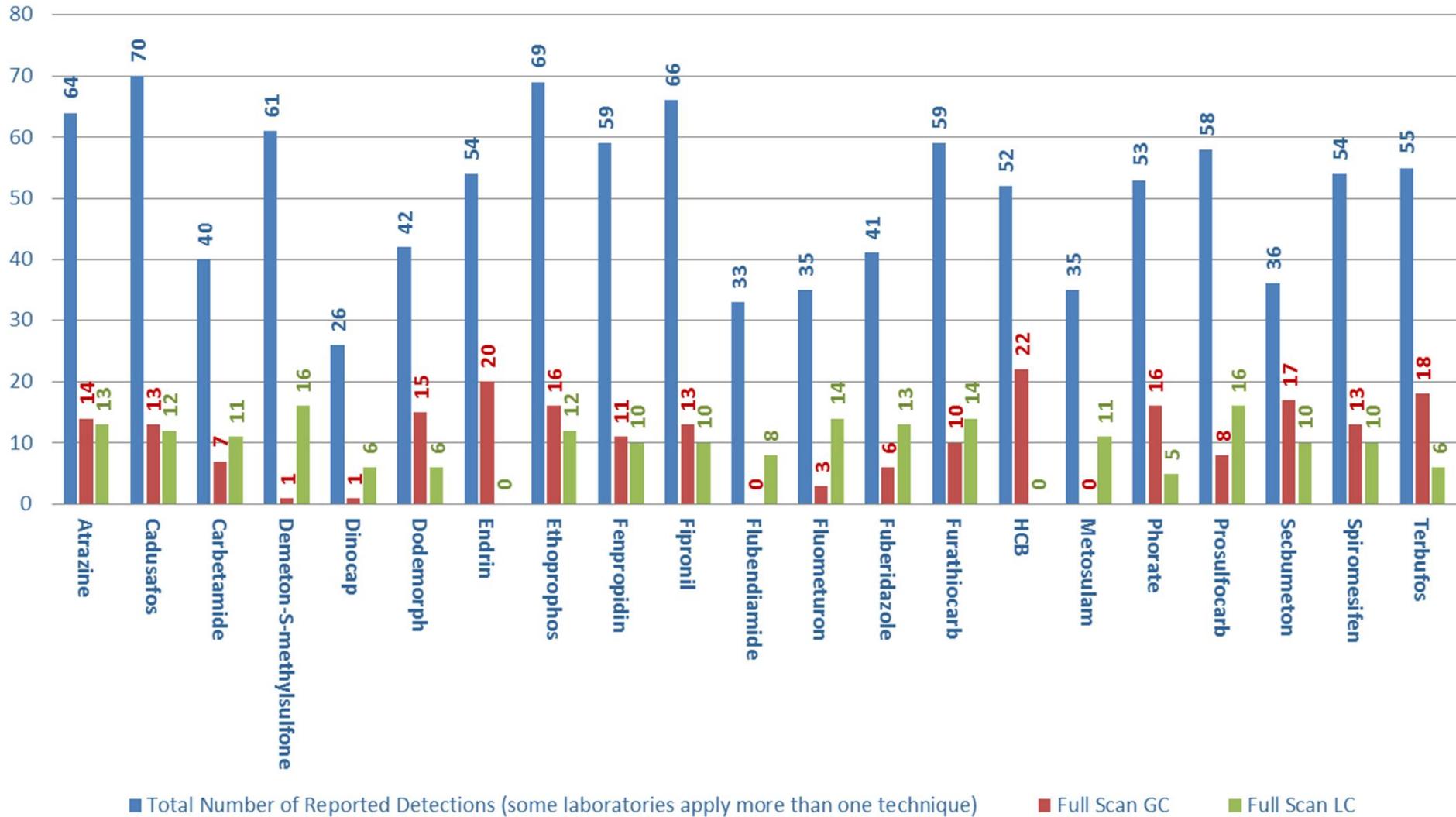


Other Reported Pesticides





SM-06 Techniques (Full Scan)

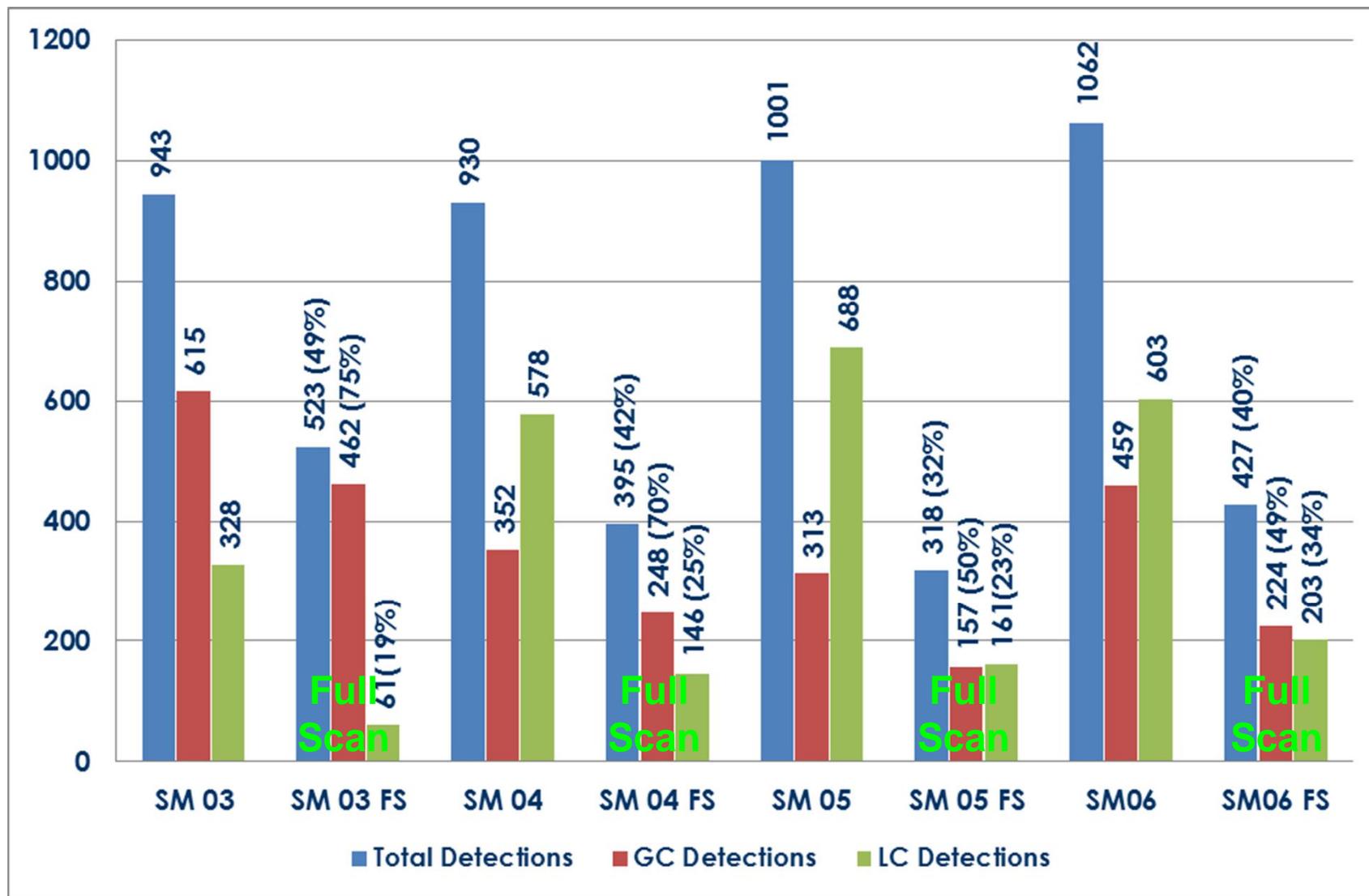




LAB. CODE	Total Detections	GC Detections	LC Detections	Total Full Scan	GC Full Scan	LC Full Scan
Lab001	18	12	6	0	0	0
Lab002	6	0	6	0	0	0
Lab003	19	4	15	7	0	7
Lab004*	17	9	8	0	0	0
Lab006*	18	16	2	0	0	0
Lab007*	20	3	17	18	2	16
Lab008	19	8	11	0	0	0
Lab009	18	4	14	15	2	13
Lab010*	17	7	10	0	0	0
Lab011	35	6	29	20	4	16
Lab012	12	7	5	0	0	0
Lab013	29	18	11	0	0	0
Lab014	14	0	14	20	16	4
Lab015	21	16	5	0	0	0
Lab016*	21	12	9	0	0	0
Lab017	5	0	5	0	0	0
Lab018	16	1	15	0	0	0
Lab019*	5	3	2	0	0	0
Lab020	13	12	1	1	0	1
Lab021	10	0	10	0	0	0
Lab022	5	5	0	5	5	0
Lab023	6	6	0	6	6	0
Lab024*	21	8	13	14	8	6
Lab025*	15	6	9	0	0	0
Lab026	20	4	16	16	0	16
Lab027	19	7	12	0	0	0
Lab028*	15	11	4	0	0	0
Lab029	20	7	13	7	11	0
Lab030	16	11	5	8	8	0
Lab031	16	8	8	0	0	0
Lab032	18	5	13	0	1	0
Lab033*	9	5	4	6	0	0
Lab034	9	3	6	0	0	0
Lab035	20	3	17	0	0	0
Lab036	18	8	10	0	0	0
Lab037	32	14	18	32	14	18
Lab038	22	4	18	0	0	0
Lab039	16	5	11	2	2	0
Lab040	17	2	14	11	0	11
Lab041*	17	2	15	17	0	15
Lab042	19	6	13	0	0	0
Lab043	12	5	7	0	0	0
Lab044*	25	19	6	19	0	19
Lab045	10	7	3	0	0	0
Lab046*	20	1	19	14	3	11
Lab047	16	12	4	3	6	0
Lab048	18	6	12	18	0	18
Lab049*	15	4	11	0	3	0
Lab050	17	3	14	3	2	0
Lab051*	16	11	5	2	8	7
Lab052	15	8	7	15	5	12
Lab053	20	5	15	20	16	4
Lab054	12	4	8	1	4	0
Lab055	18	1	17	12	1	11
Lab056	12	12	0	5	14	0
Lab057*	21	9	12	19	14	5
Lab058	19	14	5	0	0	0
Lab059	9	4	5	6	0	6
Lab060	19	6	13	0	0	0
Lab061	3	2	1	0	0	0
Lab062	13	13	0	13	13	0
Lab063	3	0	3	3	0	3
Lab064	15	12	3	11	11	0
Lab065	15	11	4	0	0	0
Lab066	13	3	10	0	0	0
Lab067	15	10	5	0	0	0
Lab068	9	4	5	4	4	0



LAB. CODE	Total Detections			GC Detections			LC Detections											
Lab001	 European Proficiency Test FV-SM06	18	Total Detections: 1062	12	GC Detections: 459	6	LC Detections: 603	Total Full Scan: 427	0	GC Full Scan: 224	0	GC Full Scan: 313	0	LC Full Scan: 203	0	GC Full Scan: 157	0	LC Full Scan: 161
Lab002																		
Lab003																		
Lab004*																		
Lab006*																		
Lab007*																		
Lab008																		
Lab009																		
Lab010*																		
Lab011																		
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EURL-FV



EUPT-FV-SM04
European Proficiency Test FV-SM04

Almería 11th April 2014

**Thank you for
your attention**