

Pesticides-Online and Method Validation Database

Two Database Modules to Access Pesticide-Related Data via the Internet



CRL Database for Pesticide Residues

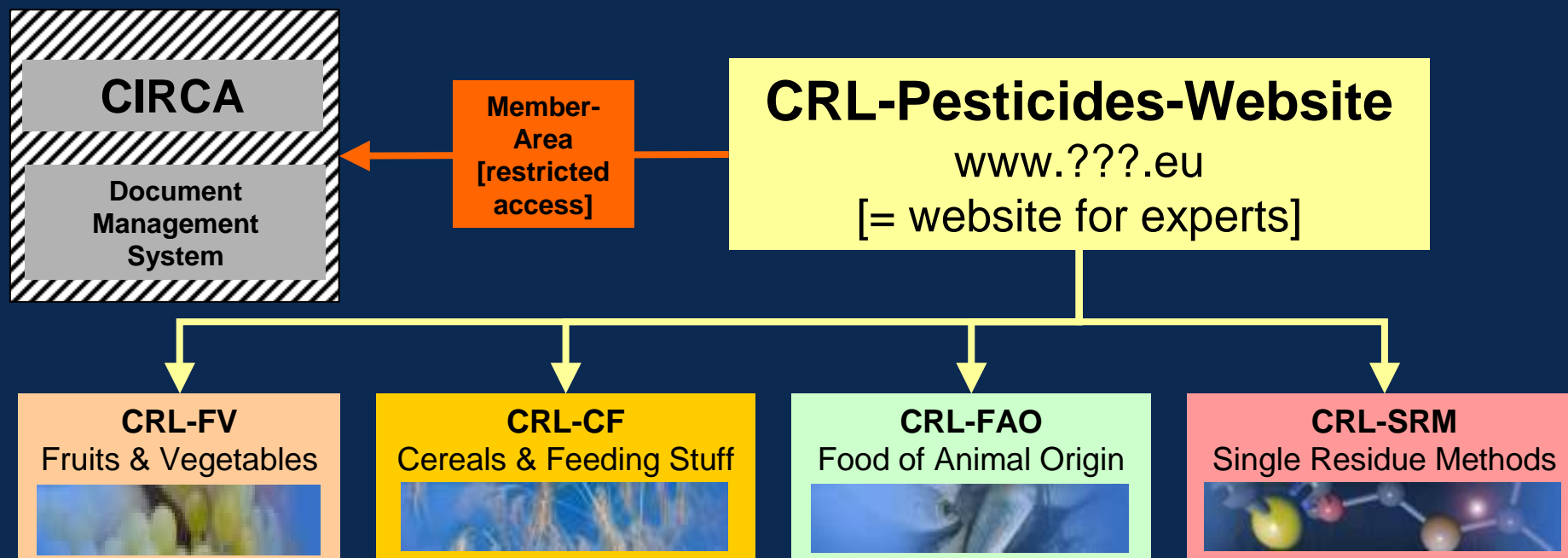
[Login](#) [Logout](#) [Profile](#) [Method Validation Data](#)

Method Validation Data

Commodity Info:	Method Info:
Commodity: <input type="text"/>	Extraction Method: <input type="text"/>
Water Content: <input type="text"/>	Spiking Step: <input type="text"/>

**Test
Version
Online!**

Dr. H. Zipper
Chemisches und Veterinäruntersuchungsamt Stuttgart
EU-CRL for Pesticide Residues using Single Residue Methods



Two Database Modules to Access Pesticide-Related Data:

- **www.pesticides-online.com**
- **Method Validation Database**

Targeted Sampling & Analysis

High-Tech-Instrumentation & Fast Sample Preparation
are Important, but...

Important is not only
How You Analyse
but also...
What You Analyse!

Set priorities based on information...

CRL

for
Residues of Pesticides

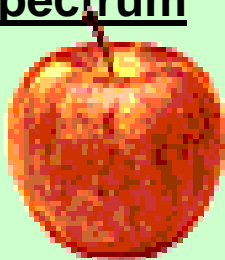


SRM

Targeted Analysis

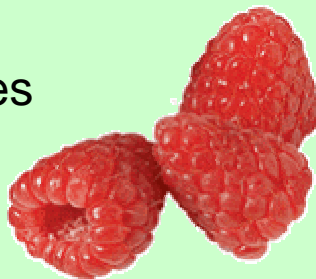
Relevant spectrum

Pome Fruit



Relevant spectrum

Berries



... using SRM

Laboratory spectrum
using the MRM

Entire spectrum
of pesticides

Potential Spectrum
of the MRM

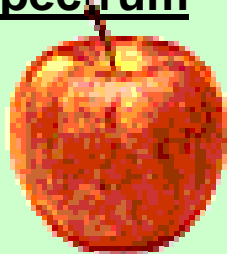
CRL for
Residues of Pesticides

SRM

Targeted Analysis

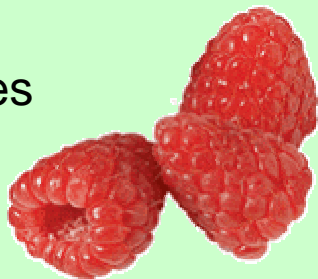
Relevant spectrum

Pome Fruit



Relevant spectrum

Berries



... using SRM

Laboratory spectrum
using the MRM

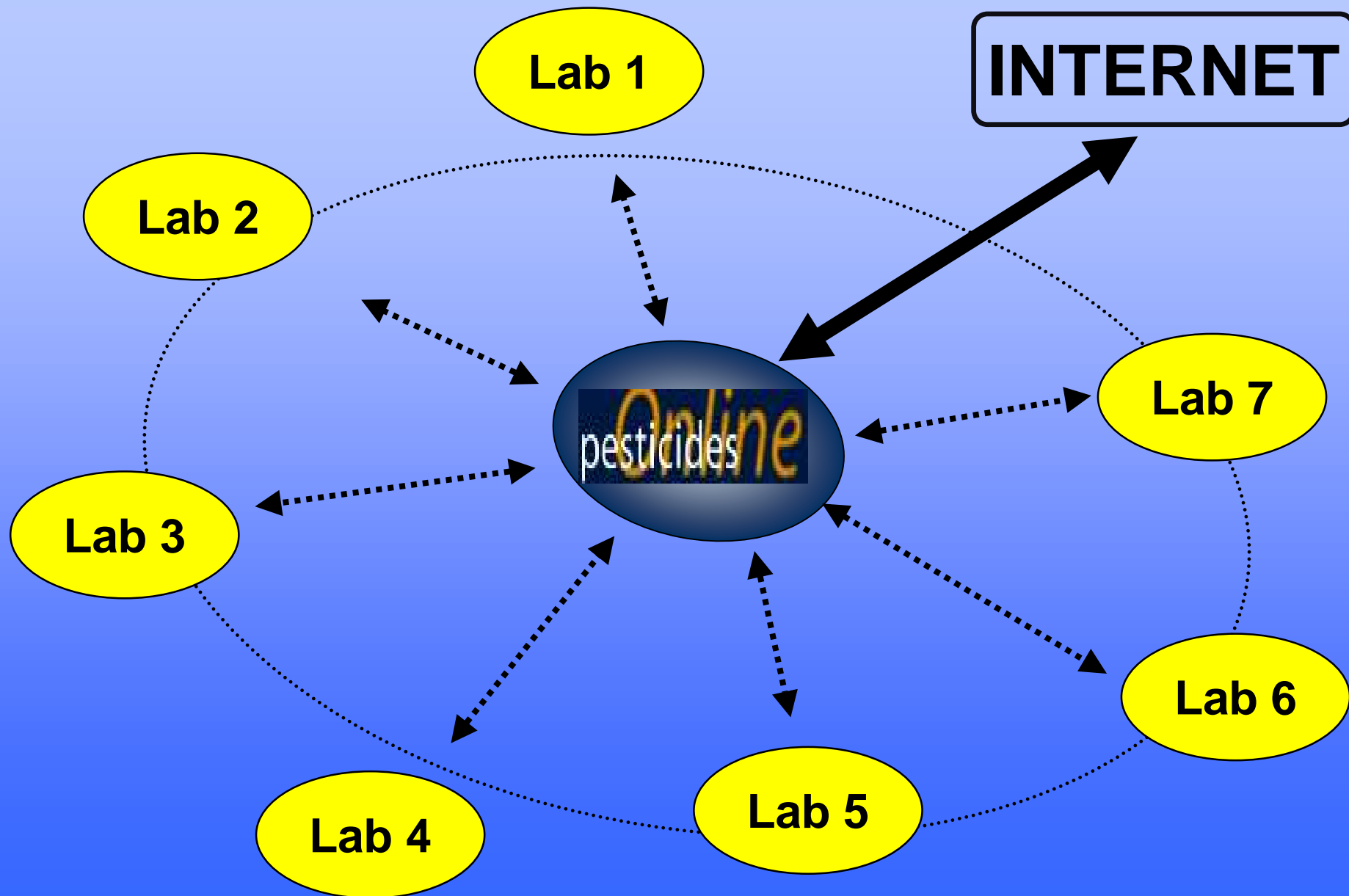
Entire spectrum
of pesticides

Potential Spectrum
of the MRM

CRL for
Residues of Pesticides

SRM

DATA-POOL: Collection/Distribution of Information



PESTICIDES-ONLINE

Aims:

- Information Exchange between Laboratories
- Enable Targeted Pesticide-Analysis

Discussion-Forum

Pesticide-
Data-Sheets

Pesticide-Usage
Data

Residue Findings

www.pesticides-online.com

Microsoft Internet Explorer window showing the website **pesticides-online.com**.

Navigation bar (highlighted with a red box):

- Login
- Registration
- Residue Data
- Agricultural Usage Data
- Strategy Support
- Countries of Origin
- Commodities
- Pesticides
- Forum

Welcome to Pesticides-Online

What's New?

- 26.09.2006 -
Pesticides-Online website:
-> Our website was transferred to another software system.
Pesticides-Online members:
-> Welcome to all new Pesticides-Online members from Japan (18 in total)!
'Residue Data' Database:
-> Residue findings from 4 labs have been included (lab locations: 1x Switzerland, 3x Germany).

Pesticides-Online is directed to people dealing with pesticide residues. The main **objectives of this platform** are to encourage the information exchange between pesticide analysts and to provide them with the information required to perform sampling and residue analysis in a more risk-oriented (targeted) fashion. Our platform consists of a **Restricted Database Area** and a **Discussion Forum**.

The **Restricted Database Area** includes several databases:

- **Residue Data:** collection of pesticide residue findings from various laboratories,
- **Agricultural Usage Data:** collection of data indicating what types of pesticides are used for which crop in various regions,
- **Pesticides:** collection of data about the physicochemical and toxicological properties of pesticides as well as their analytical behaviour.

Searching in the databases is facilitated by several filtering and sorting options. Please take a look on our [Pesticides-Online Tour](#).

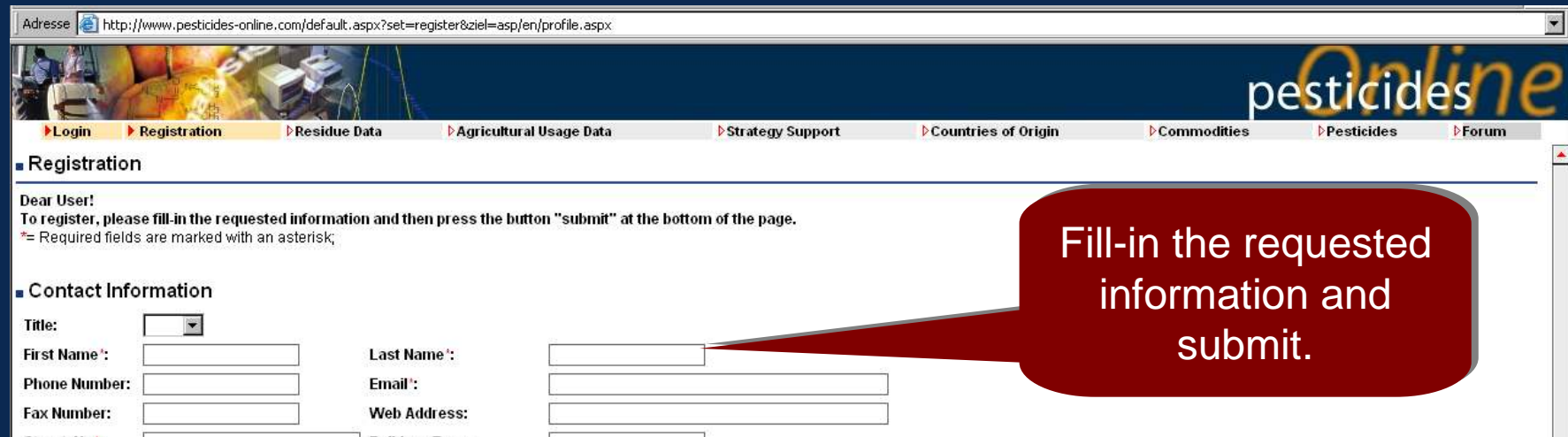
The quality and extent of the databases rely on the data that the users supply. **We thus greatly welcome and encourage any contributions.** If you would like to submit your pesticide residue findings in order to be entered in the database, please take a look under [Data Submission](#).

The **Discussion Forum** was installed recently. Though still in an early stage, it can be used to exchange information on topics related to pesticide residue analysis on a more personal level.

Navigation bar

Registration to Pesticides-Online

- **Online-Registration is necessary!**



The screenshot shows the registration page of the Pesticides-Online website. The browser address bar displays the URL: <http://www.pesticides-online.com/default.aspx?set=register&ziel=asp/en/profile.aspx>. The page features a navigation menu with links: Login, Registration, Residue Data, Agricultural Usage Data, Strategy Support, Countries of Origin, Commodities, Pesticides, and Forum. The 'Registration' section is active, displaying a message to the user: 'Dear User! To register, please fill-in the requested information and then press the button "submit" at the bottom of the page. * = Required fields are marked with an asterisk;'. Below this, the 'Contact Information' section contains several input fields: Title (a dropdown menu), First Name, Last Name, Phone Number, Email, Fax Number, and Web Address. A red callout bubble with white text points to the form, stating: 'Fill-in the requested information and submit.'

- After Registration only the **Forum** is can be used.
Administrator will contact you by email and give you an access!
- The access is **free of charge**.
- **Different access rights to Pesticides-Online:**
 - **Full access** for official labs/organisations, labs/organisation that submit data (e.g. residue findings)
 - **Limited access** for labs/organisations that submit no data
 - **No access** for NGO, journalists, private individuals, ...

Pesticides-Online Users Around the World:

Country Code	Users
USA	30
D	193
IT	31
F	13
UK	14
BE	10
NL	12
SK	6
SE	6
DK	3
PL	9
FI	3
EE	3
LV	1
CZ	4
HU	3
BG	5
KR	3
JP	19
CN	2
IN	1
TR	13
RO	1
RL	1
IL	1
CY	1
SD	1
AU	2
ZA	1
GH	2
SI	3
GR	8
AT	7
CH	29
MA	3
ES	29
PT	4
IE	2
IS	1
BR	7
UY	3
AR	3
CL	2

Currently **506** users from **53** countries

Pesticides-Online Users Around the World:

USA 30

IS 1

UK 14

BE 10

NL 12

D 193

DK 3

SE 6

PL 9

FI 3

EE 3

LV 1

CZ 4

SK 6

HU 3

BG 5

KR 3

JP 19

CN 2

IN 1

TR 13

RO 1

RL 1

IL 1

CY 1

SD 1

AU 2

ZA 1

GH 2

SI 3

GR 8

IT 31

AT 7

CH 29

MA 3

ES 29

PT 4

F 13

IE 2

BR 7

UY 3

AR 3

CL 2

Table of User Counts by Country:

Country Code	User Count
USA	30
D	193
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PL	9
GR	8
AT	7
BR	7
IE	2
CL	2
UY	3
AR	3
DK	3
FI	3
EE	3
MA	3
PT	4
CZ	4
RO	1
RL	1
IL	1
CY	1
SD	1
AU	2
ZA	1
GH	2
SI	3
LV	1
HU	3
BG	5
KR	3
CN	2
IN	1
IS	1

Currently 506 users from 53 countries

Various filter options
for a targeted query

Sorting
options
for the
results

Residue Data (The use of this data for statistical evaluations is not recommended.)

Years: from 2006 to 2006 Month:

Pesticide:

Commodity: Peppers, sweet ~ (all colors)

Botanical Class:

Origin: Turkey

Exclude neg. samples: ☒

Organic: ☐

MRL Violation: ☐

Info Source:

Lab Location:

Sort by:

Number of Hits Compact List Wide List Clear Print

Year	Month	Lab Location	Pesticide	Commodity	Botanical Class	Organic	Processing	Origin	mg/kg	Min	Max	Pos. Samples	Samples Analysed	Pos (%)	>MLR	Info Source
2006	1-3	Germany - Erlangen	Acetamiprid	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,003			1	10	10		LAB DATA
2006	4-6	Austria - Anonymous - Lab-004	Acetamiprid	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,407			4	3	33	1	LAB DATA
2006	4-6	Germany - Erlangen	Acetamiprid	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,004	0,192		7	12	58	2	LAB DATA
2006	4-6	Germany - Erlangen	Azoxystrobin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,000	0,024		2	12	16		LAB DATA
2006	4-6	Austria - Anonymous - Lab-001	Azoxystrobin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,028			1	3	33		LAB DATA
2006	1-6	Germany - Anonymous - Lab-004	Azoxystrobin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,01			1	1	100		LAB DATA
2006	4-6	Germany - Stuttgart (CVUA)	Azoxystrobin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,006			1	1	100		LAB DATA
2006	1-3	Germany - Erlangen	Azoxystrobin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)							6	10	60		LAB DATA
2006	4-6	Germany - Erlangen	Bromopropylate	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)							1	5	20		LAB DATA
2006	4-6	Germany - Stuttgart (CVUA)	Buprofezin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)							1	1	100		LAB DATA
2006	4-6	Germany - Erlangen	Buprofezin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)							1	12	8		LAB DATA
2006	4-6	Germany - Erlangen	Cadusafos, Ebufos	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)							2	12	16		LAB DATA
2006	4-6	Germany - Erlangen	Carbendazim, Carbendazol	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,006	0,096		4	12	33		LAB DATA
2006	4-6	Austria - Anonymous - Lab-001	Carbendazim, Carbendazol	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,005			1	3	33		LAB DATA
2006	4-6	Germany - Stuttgart (CVUA)	Carbendazim, Carbendazol	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,009			1	1	100		LAB DATA
2006	1-3	Germany - Erlangen	Carbendazim, Carbendazol	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)											LAB DATA
2006	1-3	Germany - Erlangen	Carbendazim (sum)	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)										2	LAB DATA
2006	4-6	Germany - Stuttgart (CVUA)	Carbendazim (sum)	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)											LAB DATA
2006	4-6	Germany - Erlangen	Carbendazim (sum)	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,000	0,000		4	12	33		LAB DATA
2006	4-6	Germany - Erlangen	Carbofuran	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,005			1	12	8		LAB DATA
2006	4-6	Germany - Erlangen	Carbofuran (sum)	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,005			1	12	8		LAB DATA
2006	1-3	Germany - Erlangen	Chlorothalonil	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,007			1	10	10		LAB DATA
2006	1-3	Germany - Erlangen	Chlorpyrifos	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,002			1	10	10		LAB DATA
2006	4-6	Germany - Erlangen	Chlorpyrifos	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,003			1	5	20		LAB DATA
2006	4-6	Germany - Erlangen	Clothianidin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey	0,004			1	12	8		LAB DATA

http://www.pesticides-online.com - ::Si...

0,004/0,005/0,01/0,013/0,019/0,022/0,192

View reference and contact-
information by clicking here

Pesticides-Online - Statistics

Residue Data

>1 000 000 Entries
(> 75 000 pos.)

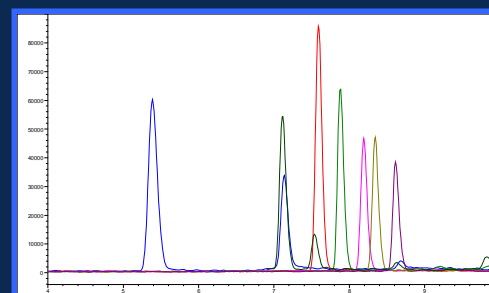
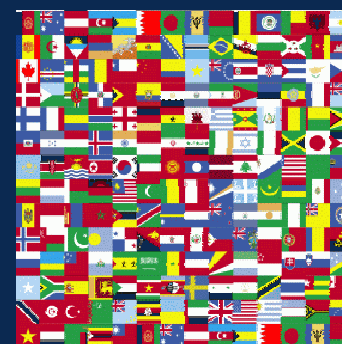
314 Different Commodities

116 Countries of Origin

678 Compounds Sought

512 Compounds Found

91 Info Sources (35 labs)

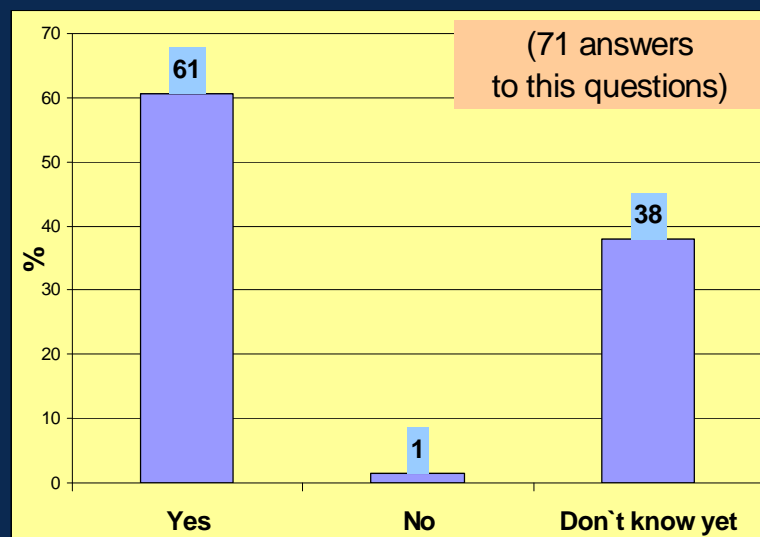


Results of Lab-Questionnaire 2006

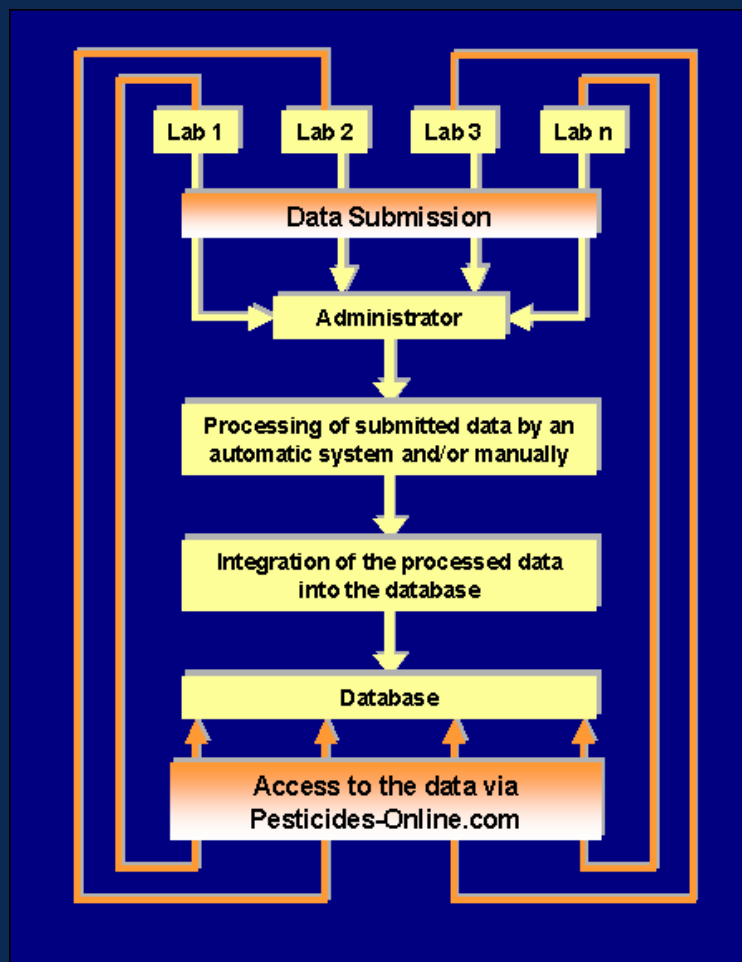
- **Website-section of lab-questionnaire:**

What types of data would you like to see in our common CRL website?

Would you be willing to contribute data to such a database
(= RESIDUE FINDINGS Database)?



Data Submission to Pesticides-Online



- For more convenience, we try to use the **data-formats (residue findings) that our users are already utilizing** in their lab and translate them into ours.
- Thus, please send us **an example of your data** so that we can look at it and see what we can do.
- If you don't have a LIMS in your lab, we can also offer you a tool based on Microsoft Access to easily collect your pesticides residue data.
- **Which information do we need at least?**
 - **Commodity** (+ Processing)
 - **Pesticide** sought for + **value** (negatives also interesting!!!)
 - **Year of analysis**
 - **Country of origin**
 - (Other: organic, MRL-violation)



Agricultural Usage Data (The use of this data for statistical evaluation is not recommended!)

113 hits

Years: from 2003 to 2005

Pesticide:

Commodity: Peppers, sweet ~ (all colors)

Botanical Class:

Origin:

Information Type:

Info Source:

Sort by: Pesticide, Information Type

Number of Hits Compact List Wide List Clear Print

Year	Information Type	Pesticide	Application Info	Commodity	Botanical Class	Additional Info	Region of Validity	Info Source
2004	Registration for spec. applications/indications	Abamectin (sum), Avermectin	Pre-emergency	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)	Expires 31.12.2013	Germany	PUBL
2004	Registration for spec. applications/indications	Acrinathrin		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)		Portugal	PUBL
2003	Special permit according to §47a LMBG/§54 LFGB (Germany)	Acrinathrin	Request: 0,2 mg/kg	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)	DISMISSED (no permit was issued)	Spain, Andalusia	UNDIS
2004	Registration for spec. applications/indications	Azaconazole		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)	Expires 30.06.2007 (2004/2076/EC)	Belgium	§
2003	Registration for spec. applications/indications	Azoxystrobin	Pre-emergency	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)	Expires 31.12.2009	Germany	PUBL
2005	Special permit according to §18a PflSchG (Germany)	Azoxystrobin		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)	Expires 31.12.2009	Germany	PUBL
2003	Recommendation for use (Official)	Bifenthrin		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)		Spain, Aragon	WEB
2004	Registration for spec. applications/indications	Bifenthrin		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			WEB
2004	Special permit according to §47a LMBG/§54 LFGB (Germany)	Bifenthrin	Request: 0,2 mg/kg	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)		Andalusia	UNDIS
2004	Registration for spec. applications/indications	Bromuconazole		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			WEB
2004	Registration for spec. applications/indications	Buprofezin		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)		Portugal	PUBL
2003	Special permit according to §47a LMBG/§54 LFGB (Germany)	Buprofezin	Up to 0,5 mg/kg	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)	Valid for entire EU	Spain	PUBL
2004	Registration for spec. applications/indications	Cartap		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)	Expires 30.06.2007 (2004/2076/EC)	Italy	§
2003	Recommendation for use (by Agr. Associations)	Chlorpyrifos		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)		Italy	WEB
2005	Recommendation for use (by Agr. Associations)	Chlorpyrifos	Against Elaterid, Common cockchafer	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)	in open field	Italy	WEB
2005	Recommendation for use (by Agr. Associations)	Chlorpyrifos	Against Nocturnal field moth, Mole cricket	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)	Locally, on the sowing rows	Italy	WEB

Various filter options for a targeted query

Sorting options for the query results

View reference and contact-information by clicking here

Pesticides-Online - Statistics

Agricultural Usage Data

>16 000 Entries

194 Commodities

473 Pesticides

35 Countries/Regions



CRL

for
Residues of Pesticides

SRM

Pesticides

29 hits

Pesticide Class:

Pesticide:

[Show](#)
[Clear](#)
[Help](#)
[Print](#)

Printing option

Sort by:

Sorting options for the results

Pesticide	Pesticide Class	MW	Water solubility [mg/L]	Log Kow	Volatility [Pa]	GC-amenable	Remarks on GC-behaviour	GC-ECD	GC-NPD	GC-MSD	GC-MSD CI pos	GC-MSD CI neg	ESI pos	ESI neg	APCI pos	APCI neg
Acrinathrin	Pyrethroid	541,4	0,02	5,6	4,4E-08	Yes		+++	++	++	++	+++	NoData	++	NoData	NoData
Allethrin	Pyrethroid	302,4		4,96	0,00016	Yes		+++	0	++	+++	+++	NoData	NoData	NoData	NoData
Alphamethrin , Alpha-Cypermethrin	Pyrethroid	416,3	0,01	6,94	2,3E-05	Yes		+++	++	+++	NoData	+++	NoData	NoData	NoData	NoData
Bifenthrin	Pyrethroid	422,9	0,001	6	2,4E-05	Yes		+++	0	+++	+++	+++	NoData	NoData	NoData	NoData
Bioallethrin , d-trans-Allethrin	Pyrethroid	302,4	4,6	4,6									NoData	NoData	NoData	NoData
Bioresmethrin	Pyrethroid	338,4	0,3										NoData	NoData	NoData	NoData
Cyfluthrin (incl. beta-)	Pyrethroid	434,3	0,002										NoData	NoData	NoData	NoData
Cyfluthrin, beta-													NoData	NoData	NoData	NoData
Cyhalothrin													NoData	NoData	NoData	NoData
Cyhalothrin, lambda-	Pyrethroid												NoData	NoData	NoData	NoData
Cypermethrin	Pyrethroid	416,3	0,004										NoData	NoData	NoData	NoData
Deltamethrin , Decamethrin	Pyrethroid	505,2	0,0002										NoData	NoData	NoData	NoData
Empenthrin	Pyrethroid	274,4	0,11										NoData	NoData	NoData	NoData
Fenfluthrin	Pyrethroid	389,2											NoData	NoData	NoData	NoData
Fenpropathrin	Pyrethroid	349,4	0,014										NoData	NoData	NoData	NoData
Fenvalerate/Esfenvalerate (RR/SS)	Pyrethroid												NoData	NoData	NoData	NoData
Fenvalerate/Esfenvalerate (RS/SR)	Pyrethroid												NoData	NoData	NoData	NoData
Fenvalerate/Esfenvalerate (sum)	Pyrethroid	419,9	0,01										NoData	NoData	NoData	NoData
Flucythrinate	Pyrethroid	451,5	0,5										NoData	NoData	NoData	NoData
Flumethrin	Pyrethroid	510,4														
Fluvalinate	Pyrethroid	502,9	0,005	3,8	1,3E-05	Yes		+++	++	++	+	+++	NoData	NoData	NoData	NoData
Fluvalinate, tau-	Pyrethroid	502,9	0,001	4,26	9E-11	Yes		+++	++	+++	++	+++	NoData	NoData	NoData	NoData
Permethrin	Pyrethroid	391,3	0,006	6,1		Yes	2 isomers (cis and trans)	+	0	+++	NoData	+	NoData	NoData	NoData	NoData
Prallethrin	Pyrethroid	300,4	8	4,49	1,3E-05	Yes		+++	0	+++	NoData	+++	NoData	NoData	NoData	NoData
Resmethrin	Pyrethroid	338,4	0,0379	5,43	1E-05			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Tefluthrin	Pyrethroid	418,7	0,02	6,4	0,0084	Yes		+++	0	+++	+++	+++	NoData	NoData	NoData	NoData
Tetramethrin , Phthalthrin	Pyrethroid	331,4	1,83	4,6	0,0021	Yes	2 peaks	+++	++	+++	++	+++	NoData	NoData	NoData	NoData
Tralomethrin	Pyrethroid	665	0,08	5	4,8E-09	Yes	As deltamethrin	+++	+	++	NoData	+++	NoData	NoData	NoData	NoData

Click here to see the „Pesticide Data Sheet“

Physicochemical, Toxicological and Analytical Information for 795 Pesticides and Metabolites

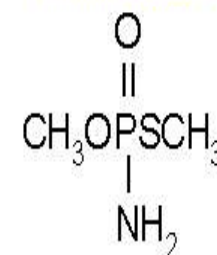
METHAMIDOPHOS (Acephate-met) 10265-92-6

Pesticide Class: Organophosphorous

Mode of Action: Acaricide Insecticide

PHYSICOCHEMICAL AND TOXICOLOGICAL DATA

MW / Molecular Formula	141,1 / C ₂ H ₈ N ₂ O ₂ P ₂ S
Water Solubility [mg/L] / pKow	200000 > (20°C) [1] / -0,8 (20°C) [1]
pKa	
Vapour pressure [Pa]	0,0023 [1]
ARfD / ADI [mg/kg bw]	0,01 [7] / 0,004 [7]
Endocrine Disruption	
Add. Info	Metab. of Acephate
Residue Definition	

Physicochemical and Toxicological Data**Methamidophos****ANALYTICAL DATA**

TYPICAL RECOVERY USING VARIOUS MULTIRESIDUE METHODS (in %)					GC-BEHAVIOR			
Method	0-20	20-50	50-110	Remarks	GC-amenable	Yes	Matrix Effects	++
QuEChERS (MeCN)			X		Decomposition	0	Tailing	+++
Stuttgart (Acetone)					Decomposition Products			
SFE (CO ₂)	X			[3]				
DFG S 19 (Acetone)			X					
Dutch (Acetone)								
Canadian (MeCN)			X					
CDFA (MeCN)								
Swedish (EtAc)								
L. Alder (MeOH)			X					
Stajnbacher (Acetone, SPE)	X							

Analytical Data

LC-BEHAVIOR									
Ionization Source	Sensitivity	MS (m/z)			MS/MS-Transitions			MS/TOF	
ESI (+)	+++	142	112	125	142>94	142>125	142>112	142,0086	
ESI (-)	NoData								
APCI (+)	++	142	125						
APCI (-)	NoData								

[Read Comments on METHAMIDOPHOS](#)[Write a Comment on METHAMIDOPHOS](#)

METHAMIDOPHOS (Acephate-met) 10265-92-6

PHYSICOCHEMICAL AND TOXICOLOGICAL DATA

Molecular Formula: C4H8N2O2PS

Water Solubility [mg/L] / pKow: 200000 > (20°C) [\[1\]](#) / 0.8 (20°C) [\[1\]](#)

pKa: [\[1\]](#)

Vapour pressure [Pa]: 0,0023 [\[1\]](#)

ARfD / ADI [mg/kg bw]: 0,01 [\[7\]](#) / 0,004 [\[7\]](#)

Endocrine Disruption: [\[1\]](#)

Add. Info: Metab. of Acephate

Residue Definition: [\[1\]](#)

ANALYTICAL DATA

TYPICAL RECOVERIES USING VARIOUS MULTIRESIDUE METHODS (in %)

Method	0-20	20-50	50-70	70-110	Remarks
QuEChERS (MeCN)				X	[2]
Stuttgart (Acetone)					
SFE (CO2)					
DFG S 19 (Acetone)					
Dutch (Acetone)					
Canadian (MeCN)					
CDFA (MeCN)					
Swedish (EtAc)					
L. Alder (MeOH)					
Stajnbacher (Acetone)					

GC-BEHAVIOR

GC-amenable	Yes	Matrix Effects	++
Decomposition	0	Tailing	+++
Decomposition Products			

Detector Sensitivity Spectrum m/z

Detector	Sensitivity	Spectrum	m/z
MSD EI (+)	+	CLICK	141 94 95
MSD CI (+)	NoData		
MSD CI (-)	0		
TOF EI (+)	NoData		
MS/MS EI (+)	NoData		141>95 141>64
NPD / ECD / FPD	+++/0/+++		

MS/MS-Transitions MS/TOF

MS/MS-Transitions	MS/TOF
142>125 142>112	142,0086

ESI (+) NoData

ESI (-) NoData

APCI (+) ++ 142 125

APCI (-) NoData

Methamidophos Water Solubility [1]

Author: C. D. S. Tomlin

Title: The e-Pesticide Manual

Year of Publication: 2002

Journal/Book: <http://www.bcp.org>

Publisher: 12th Edition, Version 2.2, The British Crop Protection Council

[Read Comments on METHAMIDOPHOS](#) [Write a Comment on METHAMIDOPHOS](#)

Physicochemical data:

- pKa
- Water solubility
- ...

Toxicological data:

- ARfD
- ADI

METHAMIDOPHOS (Acephate-met) 10265-92-6

Pesticide Class: Organophosphorous
Mode of Action: Acaricide Insecticide

PHYSICOCHEMICAL AND TOXICOLOGICAL DATA

MW / Molecular Formula	141,1 / C ₂ H ₈ N ₂ O ₂ PS
Water Solubility [mg/L] / pKow	200000 > (20°C) [1] / -0,8 (20°C) [1]
pKa	
Vapour pressure [Pa]	0,0023 [1]
ARfD / ADI [mg/kg bw]	0,01 [7] / 0,004
Endocrine Disruption	
Add. Info	Metab. of Aceph
Residue Definition	

ANALYTICAL DATA

Typical recoveries with various multiresidue methods

GC-Behavior

LC-Behavior

Methamidophos

CCOP(=O)(S)C

TYPICAL RECOVERIES USING VARIOUS MULTIRESIDUE METHODS (in %)						GC-BEHAVIOR			
Method	0-20	20-50	50-70	70-110	Remarks	GC-amenable	Yes	Matrix Effects	++
QuEChERS (MeCN)				X	[2]	Decomposition	0	Tailing	+++
Stuttgart (Acetone)						Decomposition Products			
SFE (CO ₂)	X				[3]				
DFG S 19 (Acetone)			X						
Dutch (Acetone)									
Canadian (MeCN)			X						
CDFA (MeCN)									
Swedish (EtAc)									
L. Alder (MeOH)									
Stajnbacher (Acetone)									

Detector	Sensitivity	Spectrum	m/z		
MSD EI (+)	+	CLICK	141	94	95
MSD CI (+)	NoData				
MSD CI (-)	0				
TOF EI (+)	NoData				
MS/MS EI (+)	NoData		141>95	141>64	
NPD / ECD / FPD	+++/0/+++				

LC-BEHAVIOR									
Ionization Source	Sensitivity	MS (m/z)			MS/MS-Transitions			MS/TOF	
ESI (+)	+++	142	112	125	142>94	142>125	142>112	142,0086	
ESI (-)	NoData								
APCI (+)	++	142	125						
APCI (-)	NoData								

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Online pesticides

Loc
Logout
Profile
Residue Data
Agricultural Usage Data
Strategy Support
Countries of Origin
Commodities
Pesticides
Forum

Forum View

- News & Discussions on Pesticides
- News & Discussions on Sample Types
- Analytical Techniques & Instruments
- Pesticide Residue Analysis Methods
- Publications
- Miscellaneous
- Laboratory Issues (QA/QC etc.)
- Pesticides-Online
- Legally Relevant Aspects
- Not sure where to place my message
- Cooperation and Mutual Assistance
- Acknowledgements
- Organic Food

Search for words:
☒ Search for all words ☐ Match any of the words

Topic: All
 Posts: All posts

Search
Show last Messages

News & Discussions on Pesticides - D - [Dithianon](#) - Dithianon

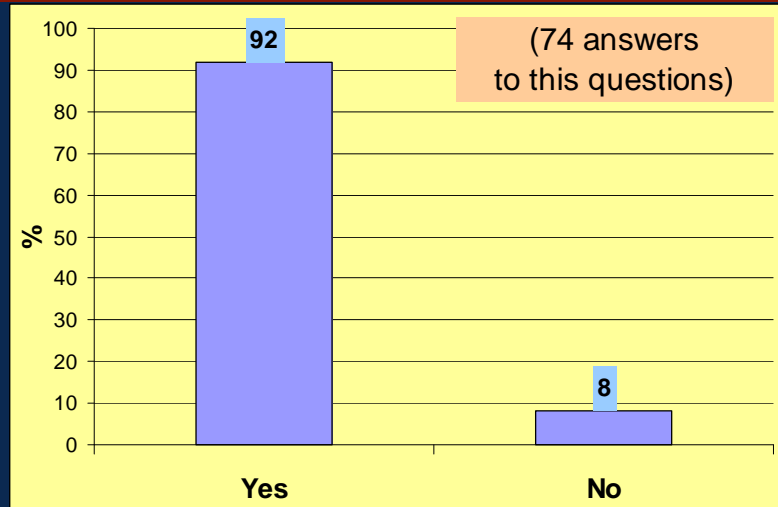
Author	Message	Posted
Cook B	Dithianon Post Reply Does anyone have any experience with the analysis of dithianon in fruit and vegetables using a multiresidue method (eg QuEChERS). Also I have seen very little information on this compound using either LC/MS or GC/MS. Any conditions or recommendations as part of a multiresidue method will be appreciated.	14.08.2006 02:02:48
Labor 31	→ Re: Dithianon Dear Mr. Cook, We use in our lab the following LC/MS-parameters: usual C18 column; EluentA: H2O add 0,01% HCOOH (alternative: HAc) ;EluentB: MeOH add 0,01% HCOOH (alternative: HAc);positive ionisation mode The pH of the modified QuEChERS (pH 5; see www.QuEChERS.com))is good enough to keep it stable over 4-5 days. We have also running some experiments in this matter. Maybe we will updating our posting in the near future. Give attention to the pH-value of the standard and working solutions, which one should be not higher than 5. Greetings Bünyamin Tasdelen, CVUA-S	25.08.2006 15:29:02
Brown D	→ Re: Dithianon For MSMS try negative ion esi with 296>294 or 296>239. Hope it works on your system, Good Luck! Don Brown	05.09.2006 15:49:48

[Return to search result](#)

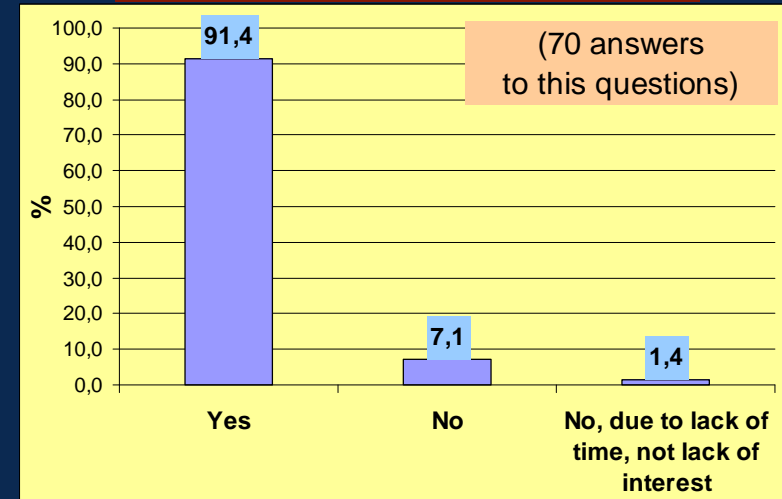
Unfortunately the Forum is not much used up to now.
But ...

Results of Lab-Questionnaire 2006

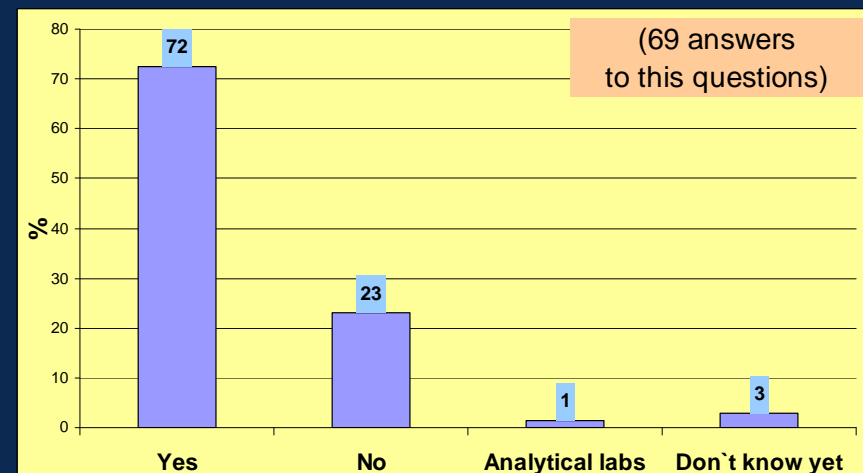
Would you like a discussion forum to be established?



Would you be willing to use such a forum?

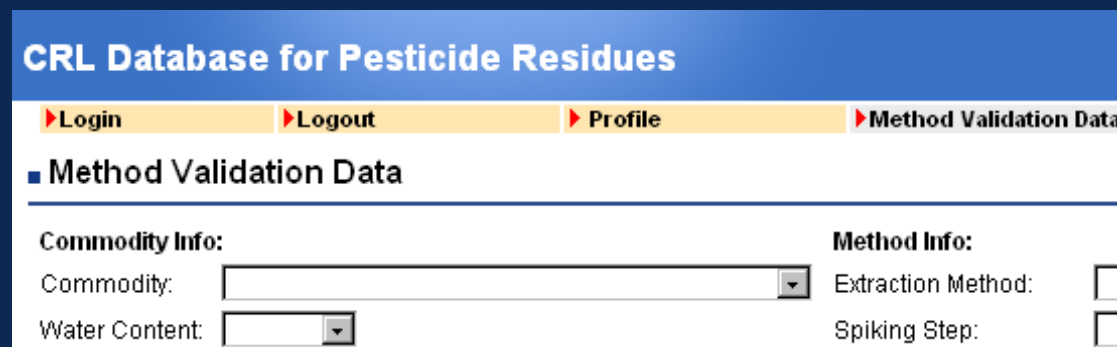


Would you like the forum to be accessible also to colleagues outside the CRL/NRL-Network (e.g. colleagues from countries outside the EU, from private labs...)?



Method Validation Database

New project started this year:



The screenshot shows a web interface titled "CRL Database for Pesticide Residues". It has a navigation bar with links: Login, Logout, Profile, and Method Validation Data. Below the navigation bar, the "Method Validation Data" section is active. It contains two main input areas: "Commodity Info" and "Method Info". The "Commodity Info" section has a "Commodity" dropdown menu and a "Water Content" dropdown menu. The "Method Info" section has an "Extraction Method" dropdown menu and a "Spiking Step" dropdown menu. All dropdown menus are currently empty.

Test
Version
Online!

- Database for **storage of data** generated within the aim of **method validation experiments** in various laboratories.
- ⇒ Enables the **systematic collection** and **customized retrieval** of data produced during method validation in different laboratories.

CRL

for
Residues of Pesticides

SRM

Registration to Method Validation Database

- **Online-Registration will be necessary!**

CRL Database for Pesticide Residues

▶ Login ▶ **Registration** ▶ Method Validation Data

■ **Registration**

Dear User!
To register, please fill-in the requested information and then press the button "submit" at the bottom.
*= Required fields are marked with an asterisk;

■ **Contact Information**

Title:

First Name *:

Last Name *:

Fill-in the requested
information and
submit.

Query Section: Various filter options for a targeted query

Filter options
for commodity

Filter options
for extraction method,
ISTD, Cleanup, ...

Filter options
for compound

CRIS Base for Pesticide Residues

Logout Profile Validation Data Comm Pesticides

Method Validation Data

Commodity Info:

Commodity:

Water Content:

Fat Content:

Sugar Content:

Etheric Oils:

Chlorophyll:

pH-Value:

Fermented:

Extraction Method:

Spiking Step:

Extraction pH:

ISTD:

Cleanup:

Cleanup Details:

Post-Cleanup Details:

Chromatography:

Interface:

Detector:

Calibration:

Calibration Details:

Compound Info:

Pesticide:

Pesticide Class:

Pesticide Property:

General Info:

Lab Name:

Date [dd.mm.yyyy]: from to

Validation Context:

ContextDe:

Exclude C:

Experi:

Number of Hits Result List Single Experiment Clear Print

Filter options
for lab name, ...

1. Result list of individual recovery values

CRL Database for Pesticide Residues

[Login](#) [Logout](#) [Profile](#) [Method Validation Data](#)

Method Validation Data

Commodity Info:

Commodity:

Water Content:

Fat Content:

Sugar Content:

Etheric Oils:

Chlorophyll:

pH-Value:

Fermented:

Method Info:

Extraction Method:

Spiking Step:

Extraction pH:

ISTD:

ISTD Addition Step:

Cleanup:

Cleanup Details:

Post-Cleanup Details:

Chromatography:

Interface:

Detector:

Calibration:

Calibration Details:

Compound Info:

Pesticide:

Pesticide Class:

Pesticide Property:

General Info:

Lab Name:

Experiment No.:

N° of hits:

245 hits

All important experimental parameters are shown!

Number of Hits Result List Single Experiment Sort by Commodity & Aggregate Sort by Level & Aggregate Clear Print

Exp	Lab	Pesticide	Commodity	Extraction	Level	Rec	Outlier	Context	Text tails	pH	Cleanup	Cleanup Details	Post Cleanup	Chromat	Interface	Detector	Calibration	Calibration Details	ISTD	ISTD Addition	Spiking Step	Exp Date	
2	1 A	Germany - Stuttgart (CVUA)	2,4-D	Apple	QuEChERS	0,25	103,9		Ch 5	Citrate buffer (pH 5- 5.5)	None	None	None	LC			Matrix matched, same Matrix	2-point, bracketing	Nicarbazin (ISTD)	After addition of solvent	Commodity (before extraction)	15.03.05	
2	1 A	Germany - Stuttgart (CVUA)	2,4-D	Apple	QuEChERS	0,25	103,9				None											15.03.05	
2	1 A	Germany - Stuttgart (CVUA)	2,4-D	Apple	QuEChERS	0,25	103,9				None											15.03.05	
2	1 D	Germany - Stuttgart (CVUA)	2,4-D	Apple	QuEChERS	0,25	99,9	Interlaboratory test	GDCh 2005	Citrate buffer (pH 5- 5.5)	None	None	None	LC	ESI (neg)	Triple Quad.	Matrix matched, same Matrix	2-point, bracketing	Nicarbazin (ISTD)	After addition of solvent	Commodity (before extraction)	15.03.05	
2	1 E	Germany - Stuttgart (CVUA)	2,4-D	Apple	QuEChERS	0,25	96	Interlaboratory test	GDCh 2005	Citrate buffer (pH 5- 5.5)	None	None	None	LC	ESI (neg)	Triple Quad.	Matrix matched, same Matrix	2-point, bracketing	Nicarbazin (ISTD)	After addition of solvent	Commodity (before extraction)	15.03.05	

Aggregation mode 1

Aggregation mode 2

2. List with aggregated recovery data

CRL Database for Pesticide Residues

[Login](#)
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[Back to the top.](#)

Important experimental parameters are shown!

Results for 2,4-D (Classification: Aryloxyalkanoic acid; Potentially anionic) using the QuEChERS method. Sorted by Level and aggregated.

Aggregated	Exp	Lab	Commodity	Level	n	pH	Cleanup	Chromatography	Interface	Detector	Rec mean	Rec min	Rec max	Rec median	Rec group	CV [%] mean	CV [%] min	CV [%] max	Date	# of outlie
Experiment	1512	Germany - Oldenburg	Wheat	0,02	1	Citrate buffer (pH 5-5,5)	None	LC	ESI (neg)	Triple Quad.	52	52	52	52	50-69				17.05.06	0
Commodity per level		1	Wheat								52	52	52	52	50-69	0	0	0		0
Level all Commodities		1	24								78,1	50	120	73	70-120	28	0	0		0
Experiment	693	Germany - Erlangen	Cucumber							Triple Quad.	110,7	97,8	126	113,3	70-120	9,8			14.07.05	0
Experiment	1602	Germany - Stuttgart (CVUA)	Cucumber							Triple Quad.	104,7	93,8	112,6	106,1	70-120	6,7			22.09.06	0
																			10.10.06	0
																			20.10.06	0

Aggregation line for 2,4-D in Cucumber at Spiking level 0,01 mg/kg

Commodity per level		3	Cucumber		20						112,2	93,8	136,2	109,7	70-120	10,4	3,5	9,8		0
---------------------	--	---	----------	--	----	--	--	--	--	--	-------	------	-------	-------	--------	------	-----	-----	--	---

Aggregation line for 2,4-D in Raisin at Spiking level 0,01 mg/kg

Commodity per level		2	Grapes, dried (only f. Valid. Data)		10						102,4	88,6	117,5	102,4	70-120	9,9	3,6	4,1		0
---------------------	--	---	-------------------------------------	--	----	--	--	--	--	--	-------	------	-------	-------	--------	-----	-----	-----	--	---

Experiment	1604	Germany - Stuttgart (CVUA)	Lemon							Triple Quad.	100,6	92	109,1	99,9	70-120	6,1			22.09.06	0
Experiment	1610	Germany - Potsdam	Lemon							Triple Quad.	104,2	87,7	115,6	106,1	70-120	11			10.10.06	0
Experiment	1616	Germany - Erlangen	Lemon							Triple Quad.	103,5	100,4	108,9	102,4	70-120	3,1			20.10.06	0
Commodity per level		3	Lemon								102,8	87,7	115,6	102,4	70-120	7,1	3,1	11		0
Experiment	699	Germany - Erlangen	Orange							Triple Quad.	103,1	96,8	111,2	103,6	70-120	5,6			14.07.05	0
Commodity per level		1	Orange		5						103,1	96,8	111,2	103,6	70-120	5,6	5,6	5,6		0

Aggregation line for all commodities at spiking level 0,01 mg/kg

Level all Commodities		3	5		55						105,9	87,7	136,2	104,1	70-120	9,8	3,1	11		0
Altogether		5	27		245						97,2	50	136,2	98,9	70-120	15,1	0	12,1		0

[Back to the top.](#)

Method Validation Database - Statistics

- currently only data for QuEChERS-Method, **but Method Validation Database is flexible to receive data from any other method!**
- Recovery data for QuEChERS-Method:
 - 478 compounds
 - 44 commodities (apple, raisin, lemon, ...)
 - 17 labs data submitted
- Recovery data of **S19-** and **ChemElute** will be submitted soon from different labs.

You're welcome to submit validation data from your lab!

But how to submit?

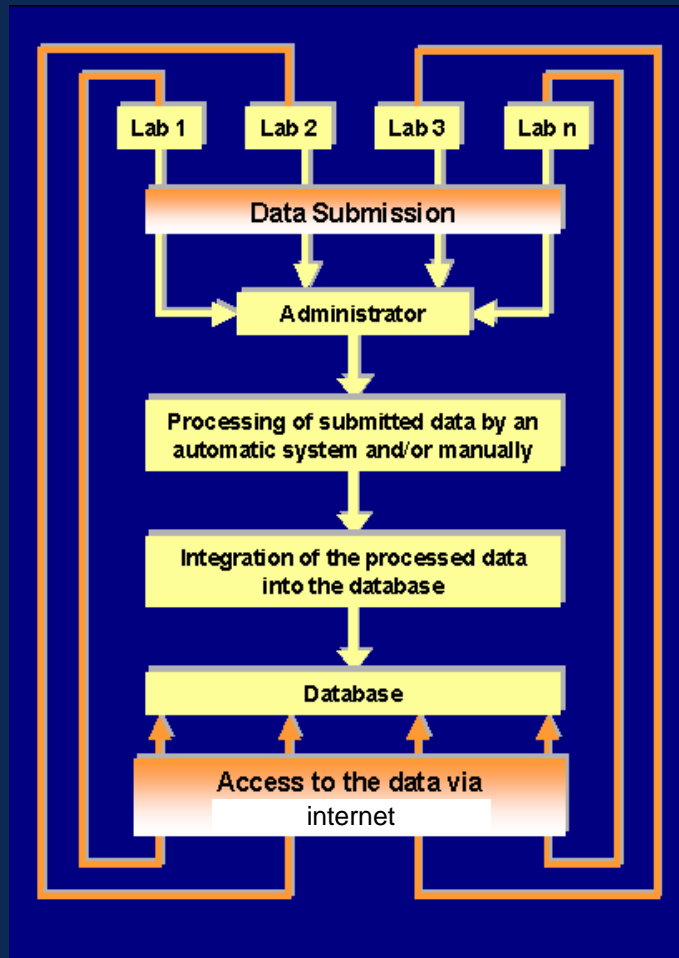
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SRM

Data Submission to Method Validation Database



- **We offer a Data Submission-Format**
(→ Excel-file)
If you are interested, please contact us!
- If you have huge amounts of recovery data, we will try to transform your data into our data-format.



...our Pesticide Residue Team...

**Thank you very much
for your Attention !**