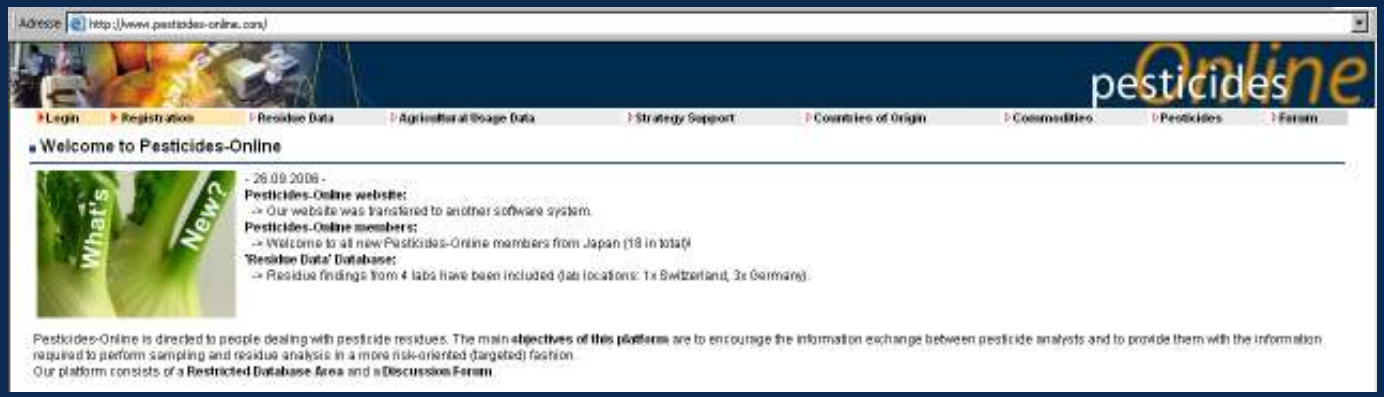
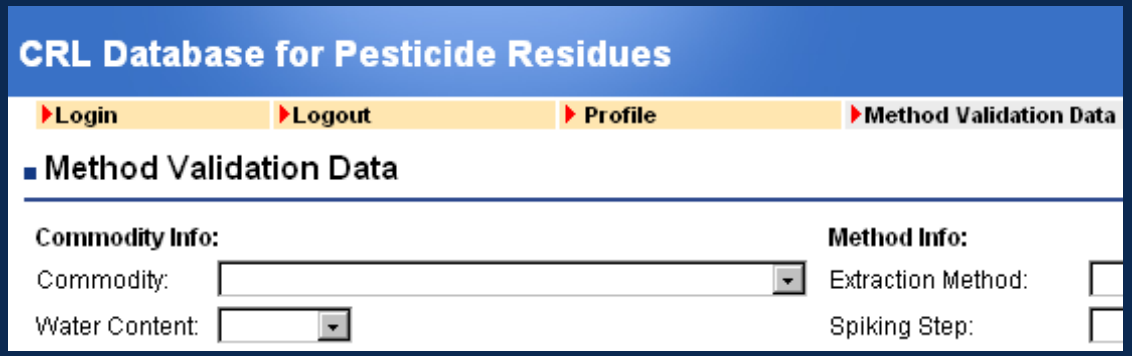
Pesticides-Online and Method Validation Database

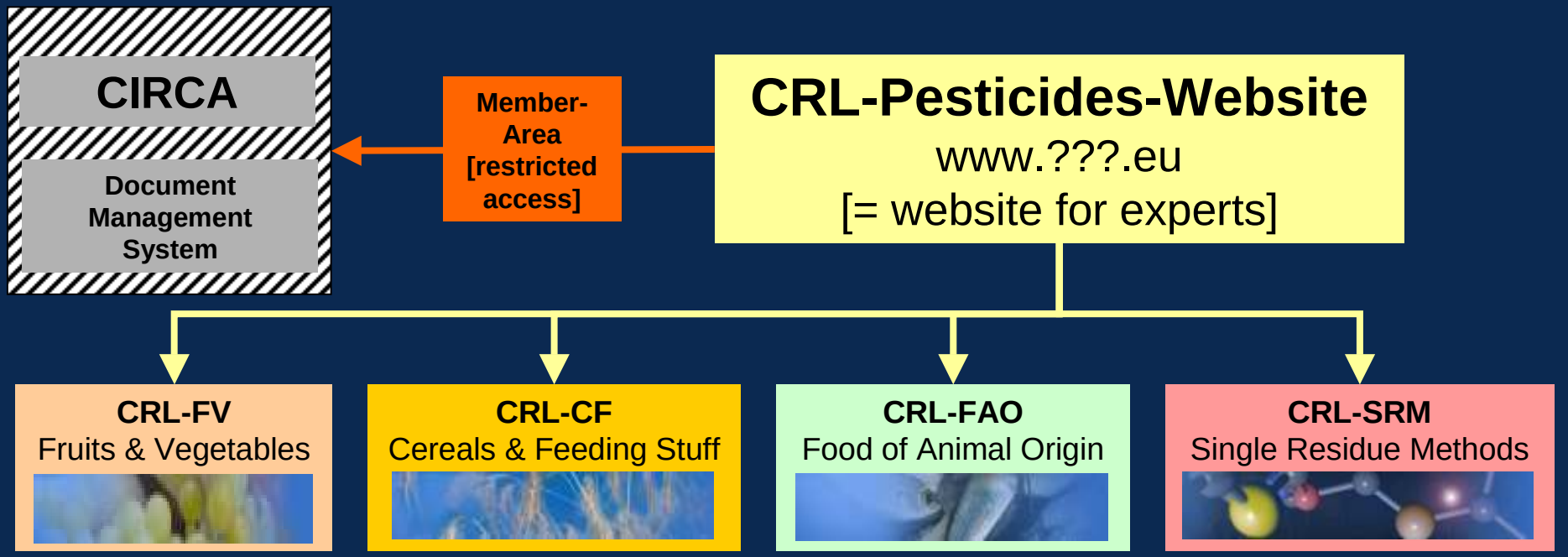
Two Database Modules to Access Pesticide-Related Data via the Internet





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...

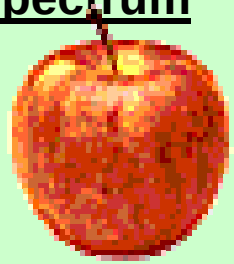
Targeted Analysis

… using **SRM**

Laboratory spectrum
using the **MRM**

Relevant spectrum

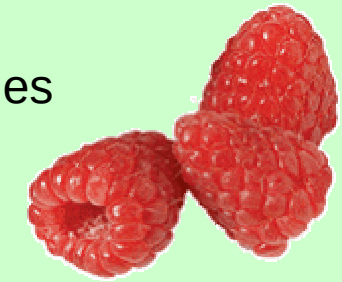
Pome Fruit



Entire spectrum
of pesticides

Relevant spectrum

Berries



Potential Spectrum
of the MRM

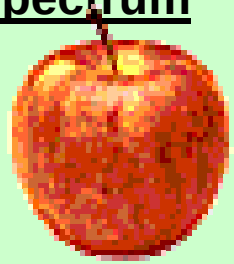
Targeted Analysis

… using **SRM**

Laboratory spectrum
using the **MRM**

Relevant spectrum

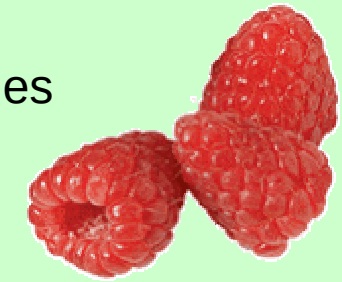
Pome Fruit



Entire spectrum
of pesticides

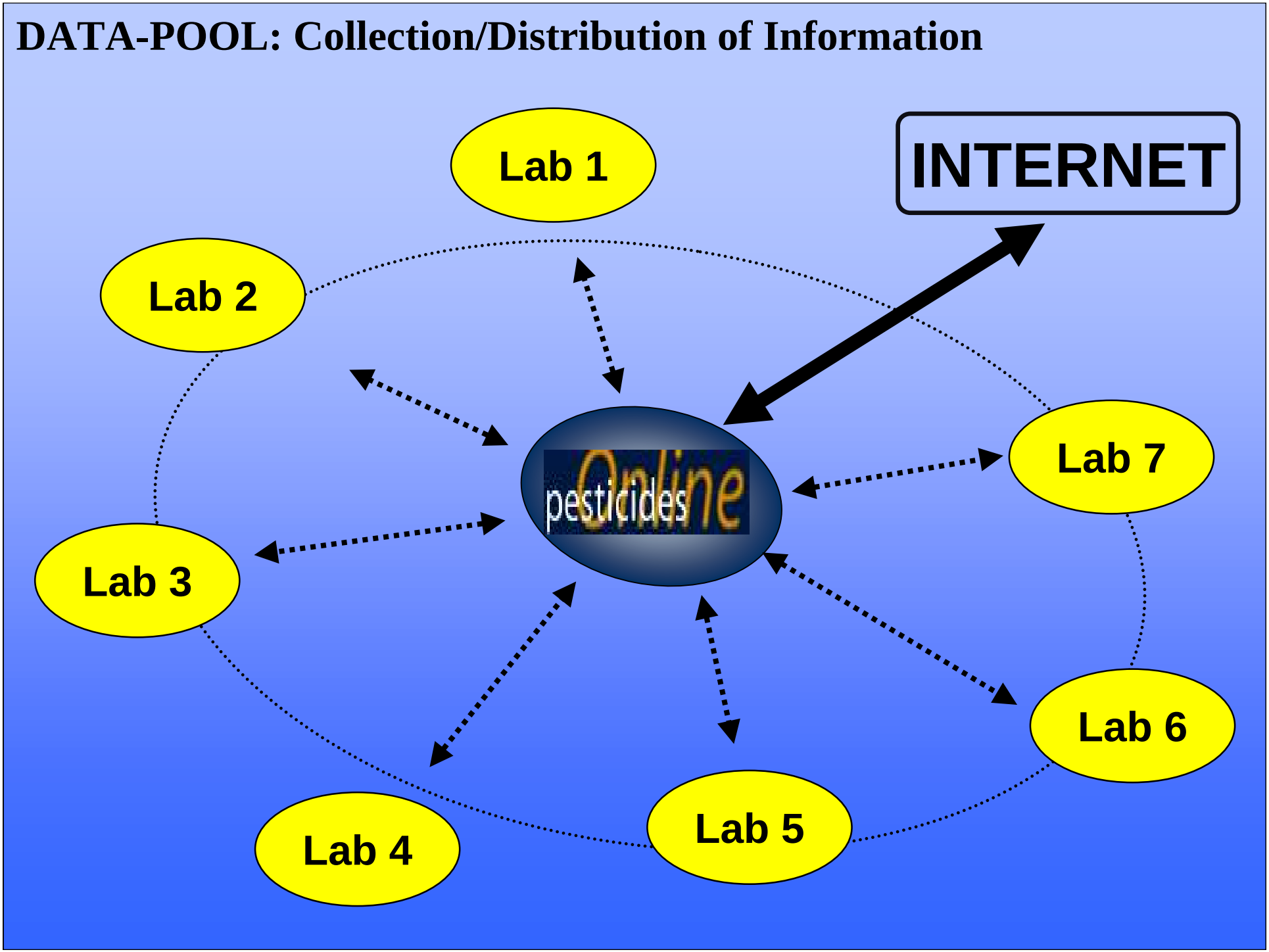
Relevant spectrum

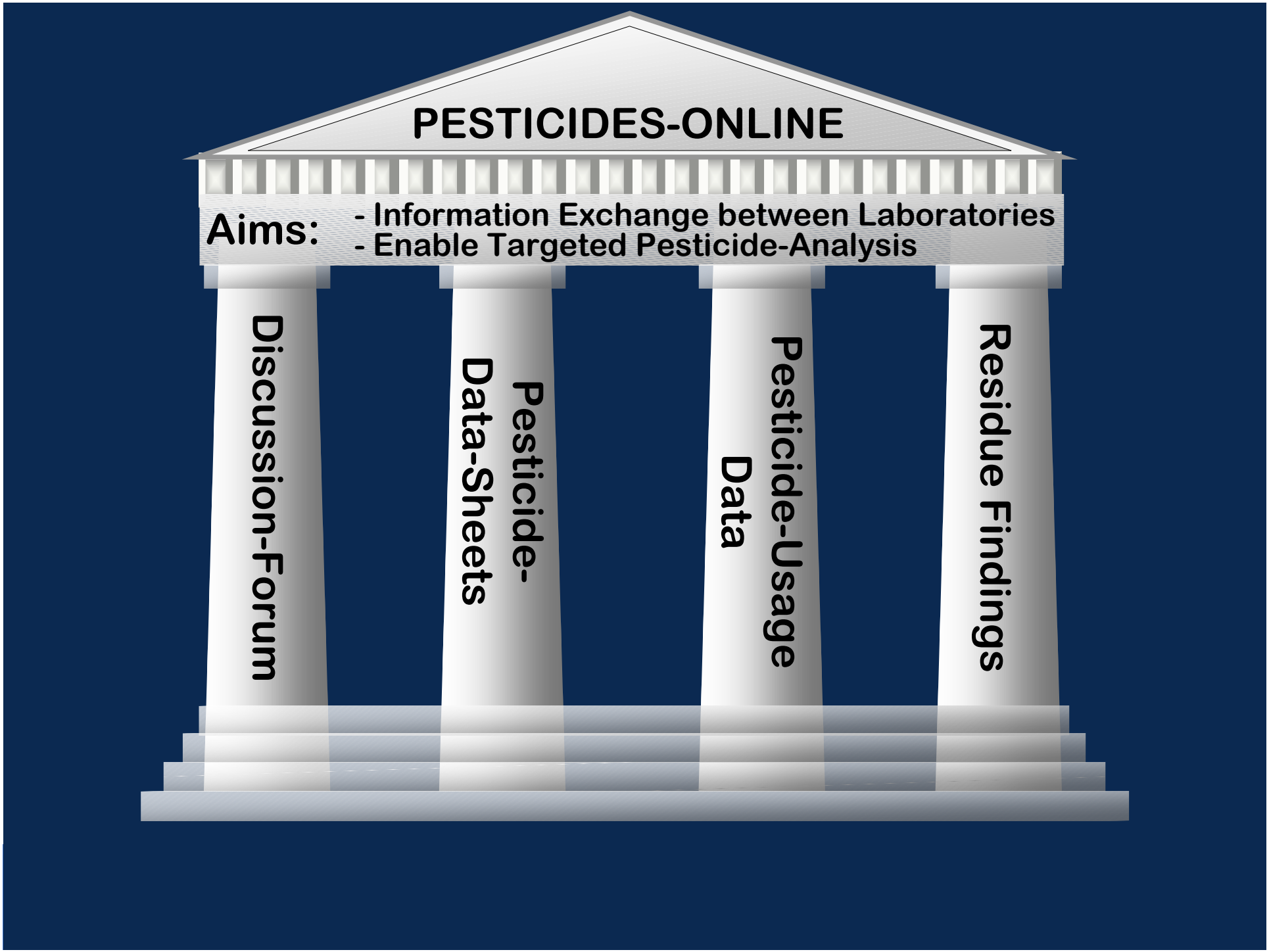
Berries



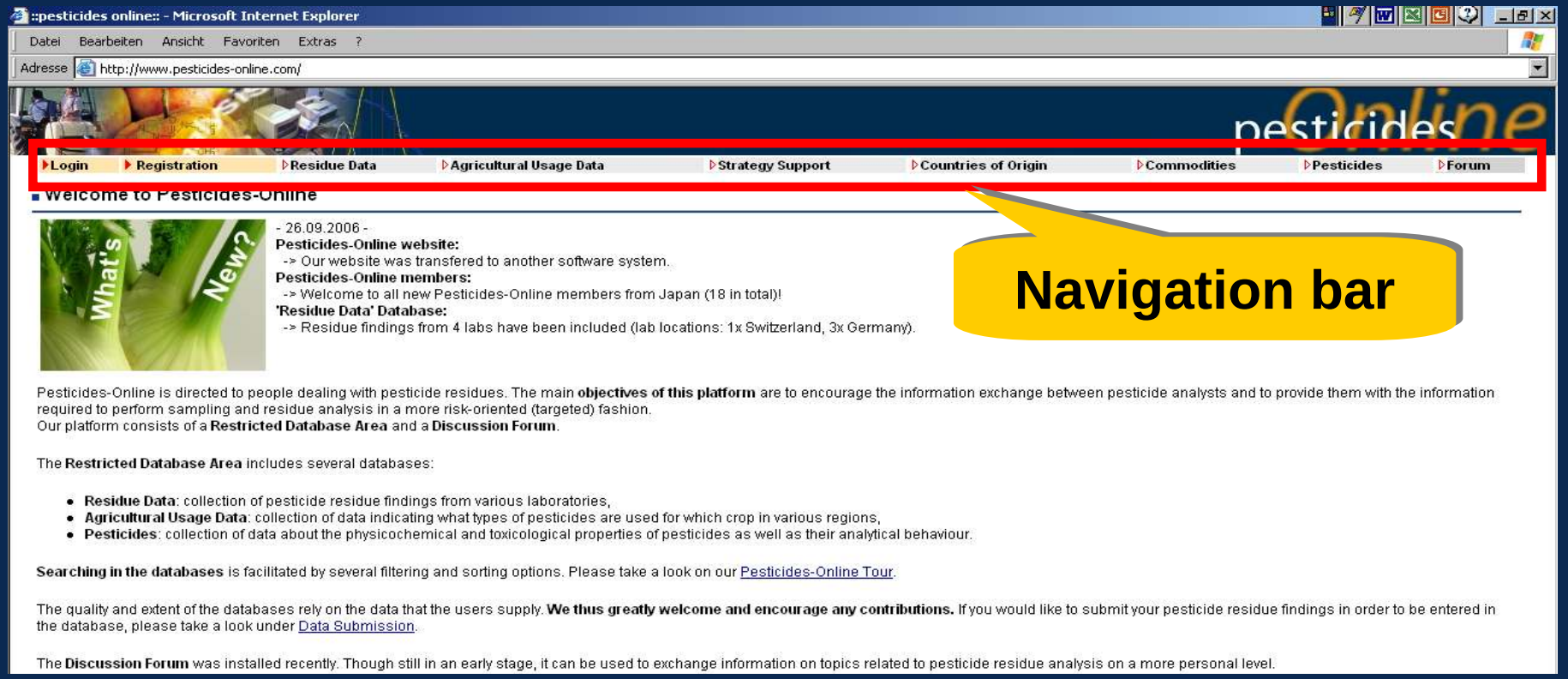
Potential Spectrum
of the MRM

DATA-POOL: Collection/Distribution of Information



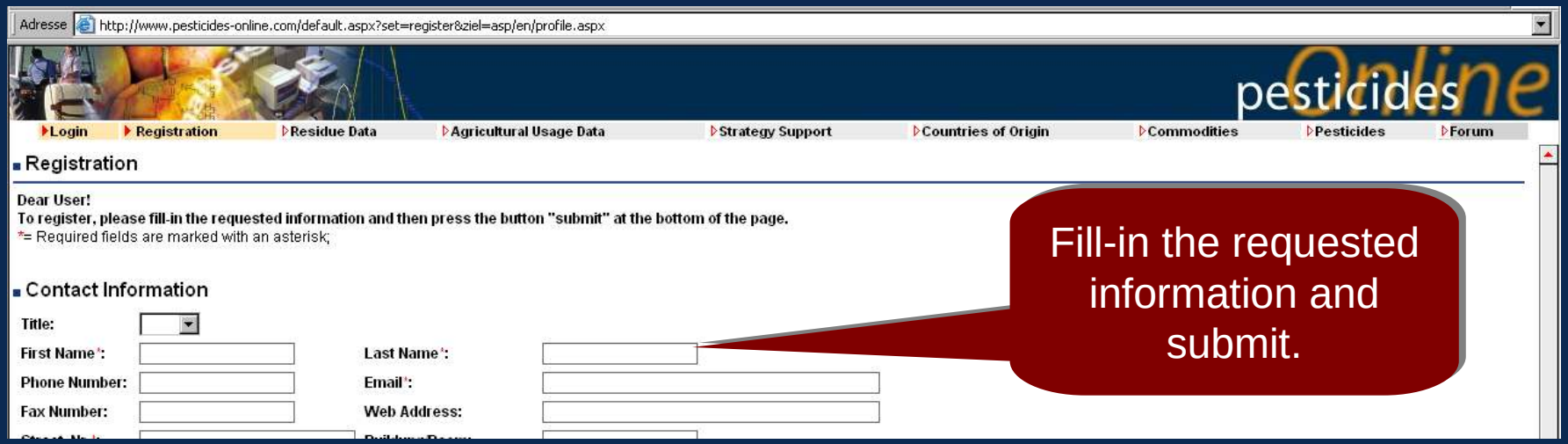

PESTICIDES-ONLINE
Aims:
- Information Exchange between Laboratories
- Enable Targeted Pesticide-Analysis
Discussion-Forum
Pesticide-Data-Sheets
Pesticide-Usage Data
Residue Findings

www.pesticides-online.com



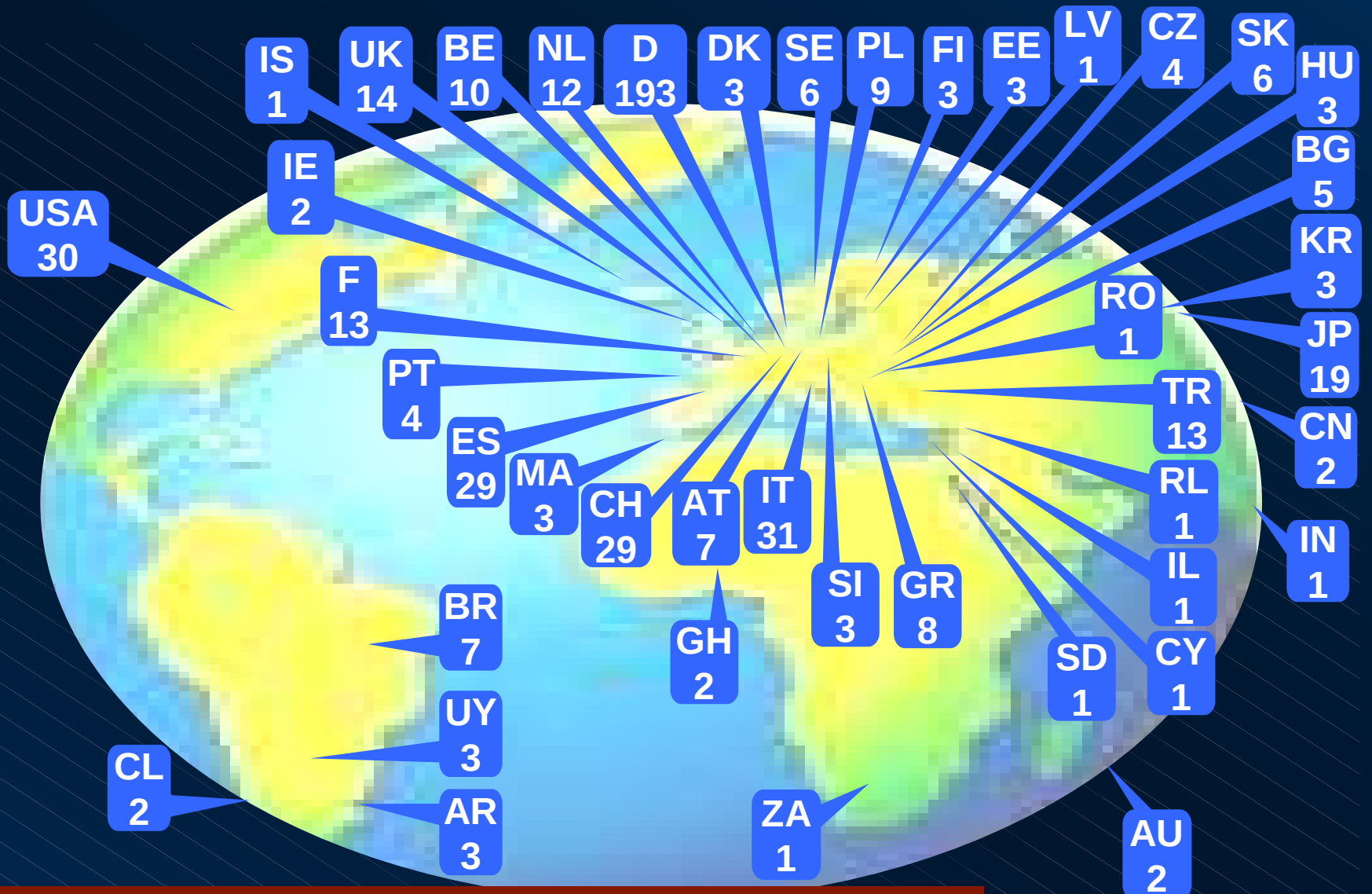
Registration to Pesticides-Online

- **Online-Registration is necessary!**

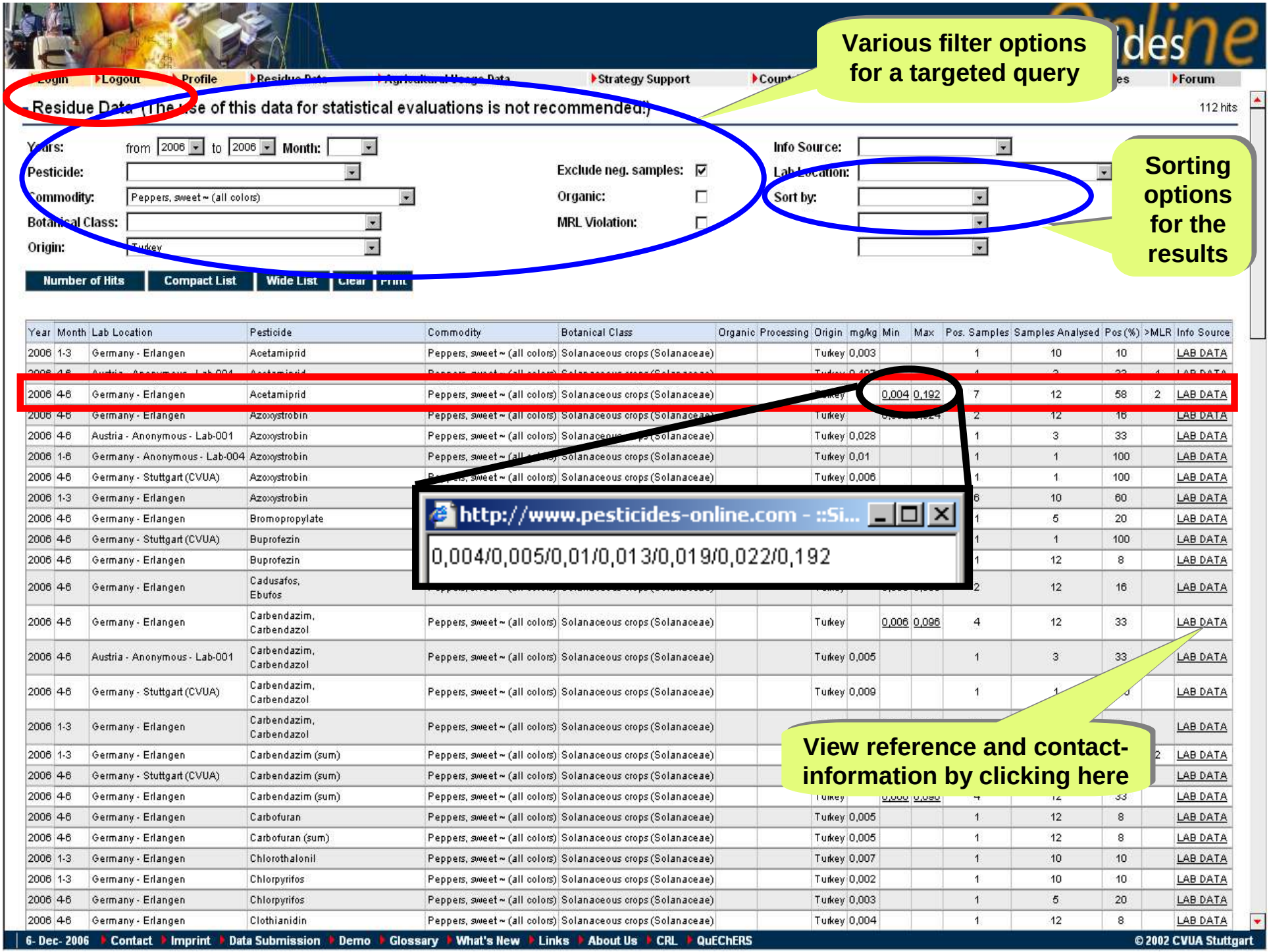


- After Registration only the **Forum** is can be used.
  Administrator will contact you by email and give you an access!
- The access is **free of charge**.
- **Different access rights to Pesticides-Online**:
  - **Full access** for official labs/organisations, labs/organisation that submit data (e.g.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

Pesticides-Online Users Around the World:



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



Login | Logout | Profile | Residue Data | Agricultural Usage Data | Strategy Support | Count... | ...es | Forum

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

112 hits

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	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				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)			Turkey				6	10	60		LAB DATA
2006	4-6	Germany - Erlangen	Bromopropylate	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey				1	5	20		LAB DATA
2006	4-6	Germany - Stuttgart (CVUA)	Buprofezin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey				1	1	100		LAB DATA
2006	4-6	Germany - Erlangen	Buprofezin	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey				1	12	8		LAB DATA
2006	4-6	Germany - Erlangen	Cadusafos, Ebufos	Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)			Turkey				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			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		0,006	0,096	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

6- Dec- 2006 | Contact | Imprint | Data Submission | Demo | Glossary | What's New | Links | About Us | CRL | QuEChERS

Pesticides-Online - Statistics

Residue Data

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

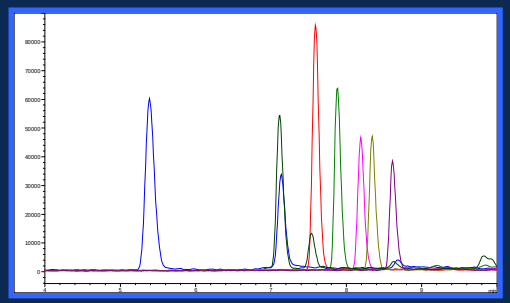
314 Different Commodities

116 Countries of Origin

678 Compounds Sought

512 Compounds Found

91 Info Sources (35 labs)

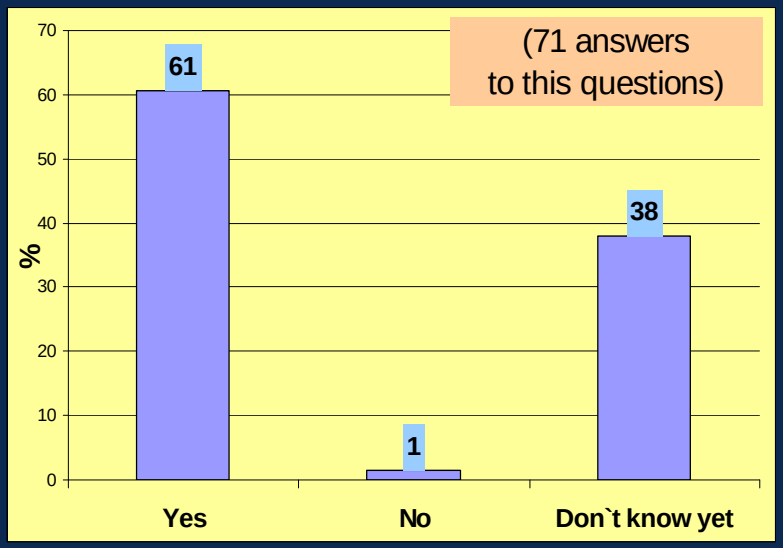


Results of Lab-Questionnaire 2006

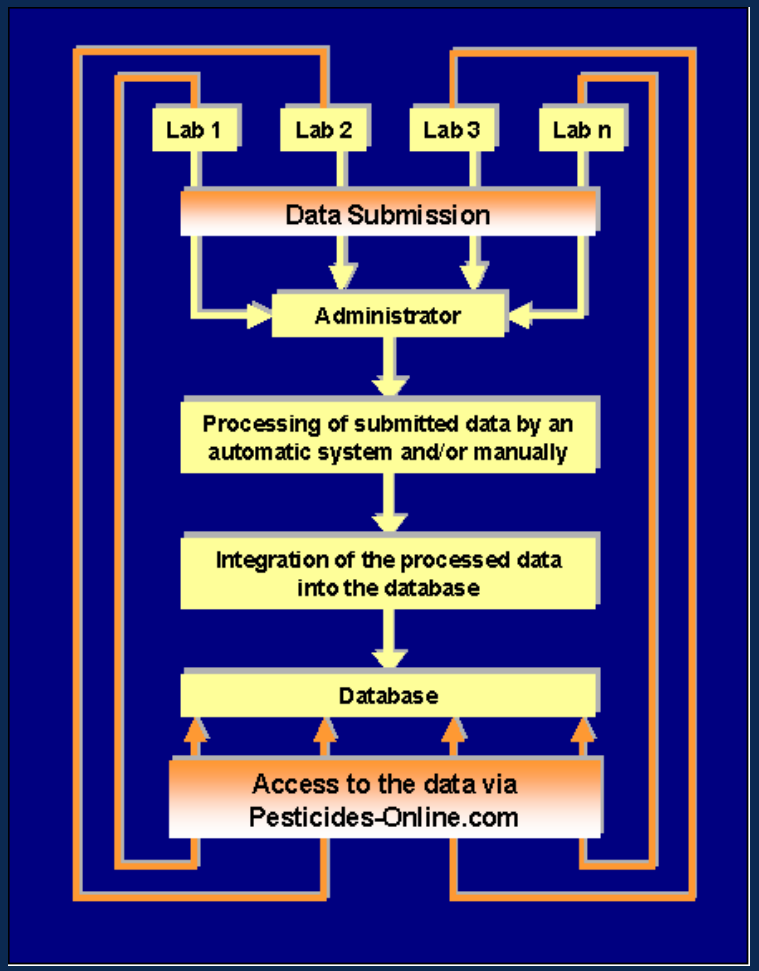
- **Website-section of lab-questionnaire:**

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

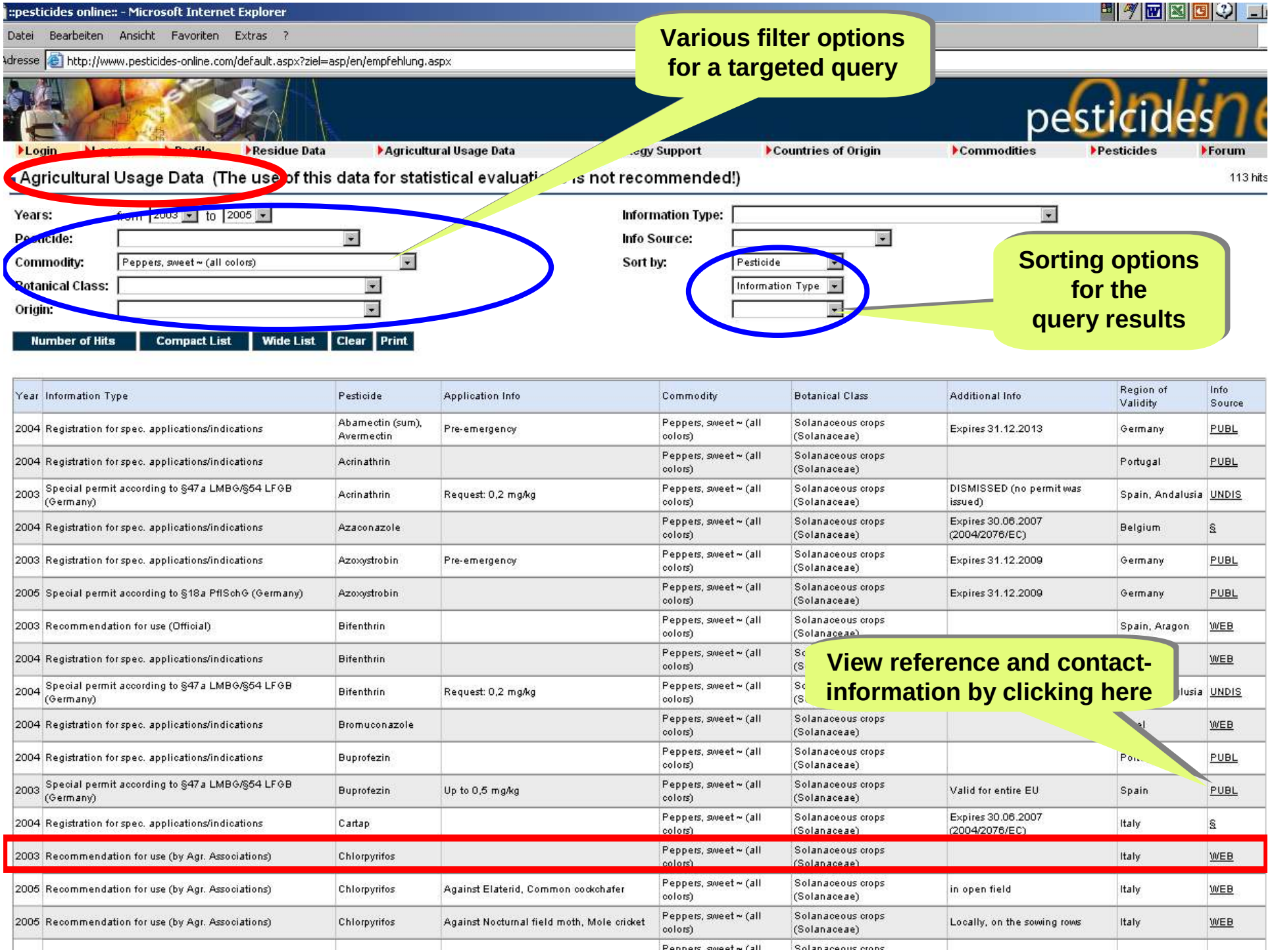
Would you be willing to contribute data to such a database (= RESIDUE FINDINGS Database)?



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)



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)	So (S			WEB
2004	Special permit according to §47a LMBG/§54 LFGB (Germany)	Bifenthrin	Request: 0,2 mg/kg	Peppers, sweet ~ (all colors)	So (S		lusia	UNDIS
2004	Registration for spec. applications/indications	Bromuconazole		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)		l	WEB
2004	Registration for spec. applications/indications	Buprofezin		Peppers, sweet ~ (all colors)	Solanaceous crops (Solanaceae)		Por	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

Pesticides-Online - Statistics

Agricultural Usage Data

>16 000 Entries

194 Commodities

473 Pesticides

35 Countries/Regions

Pesticides

29 hits

Pesticide Class: Pyrethroid

Pesticide:

Show | Clear | Help | Print

Printing option

Sort by:

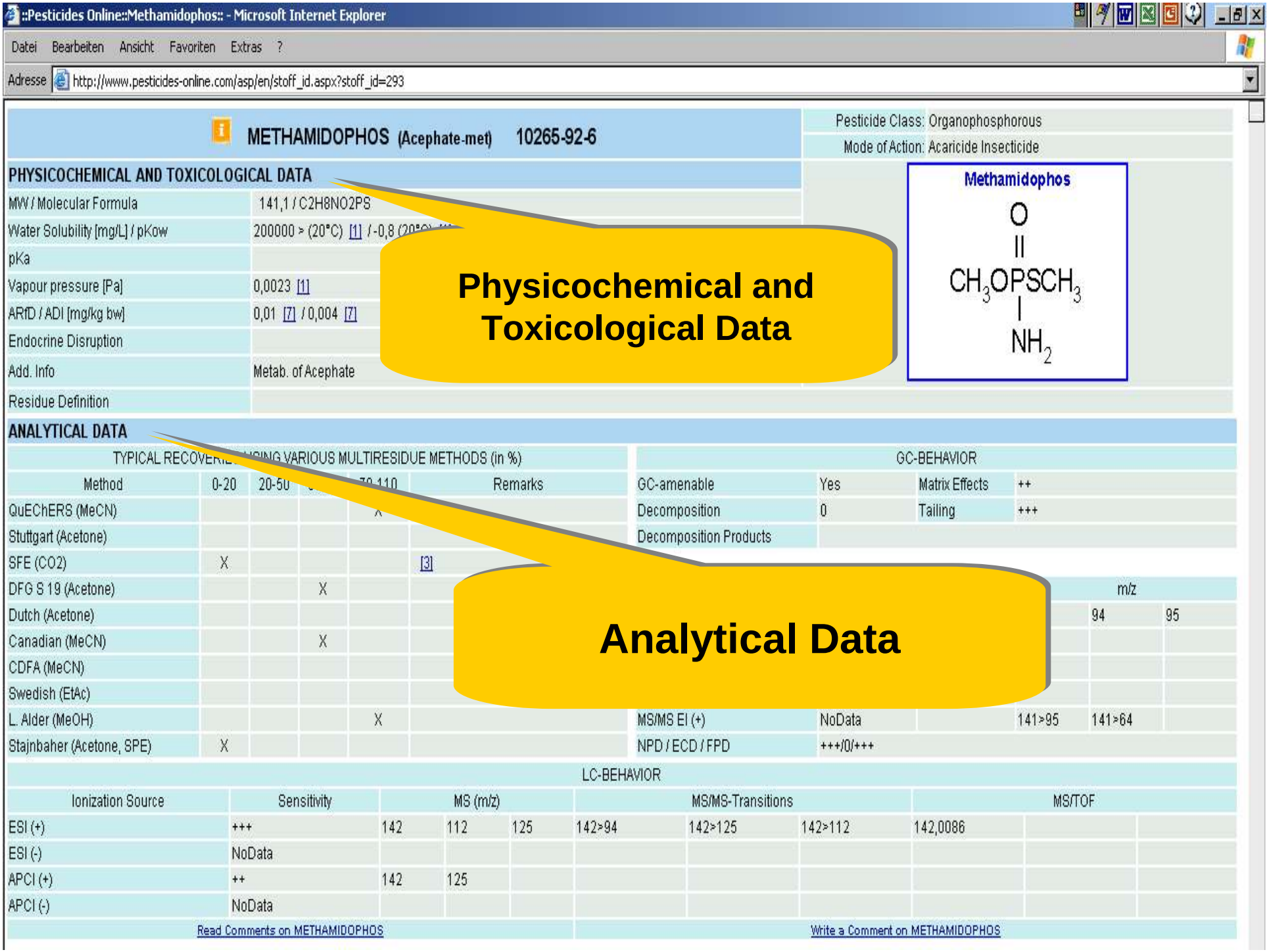
Sorting options for the results

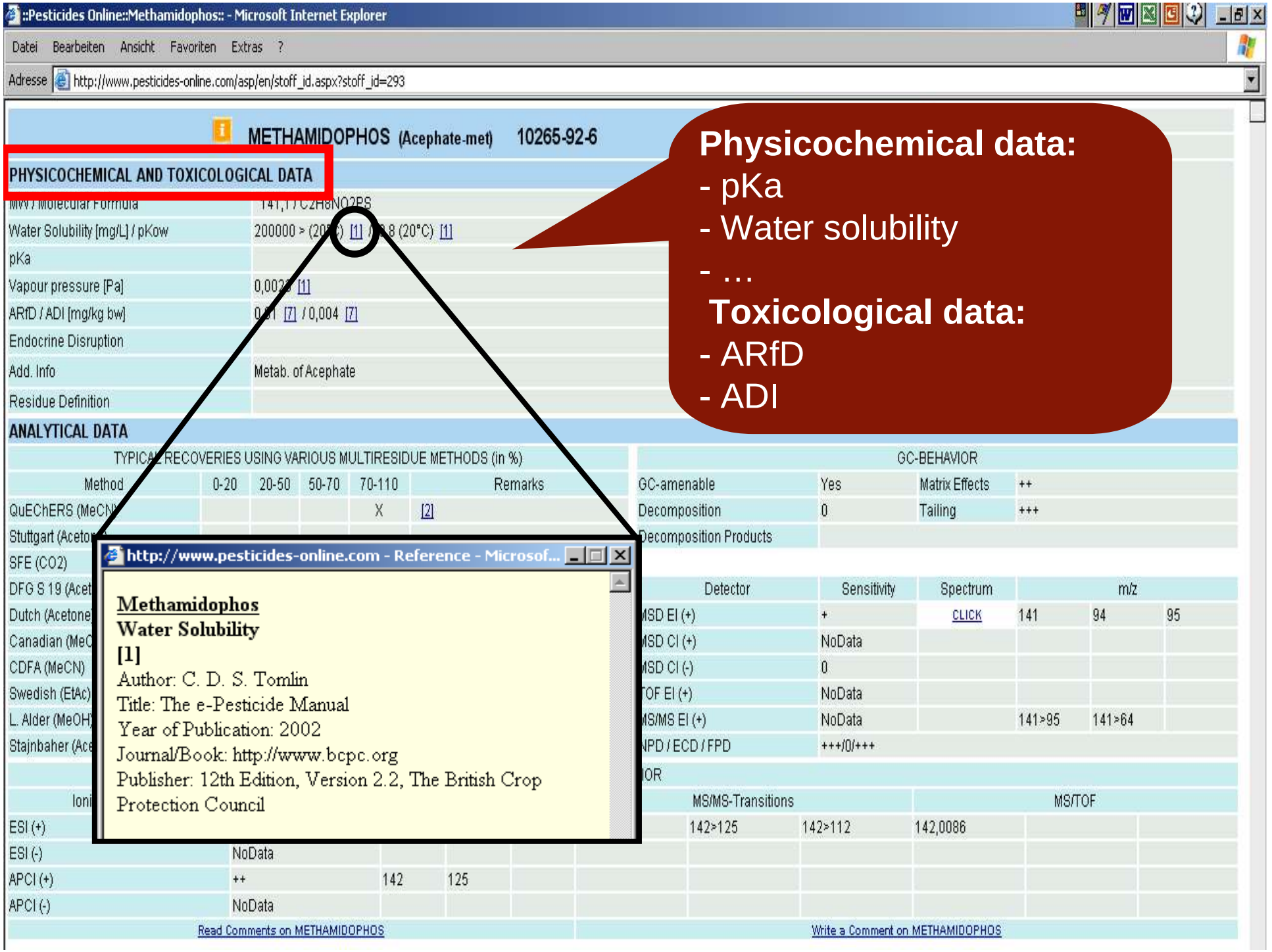
Pesticide	Pesticide Class	MW	Water solubility [mg/L]	Log Kow	Volatility [Pa]	GC-amenable	Remarks on GC-behaviour	GC-ECD	GC-NPD	GC-MSD	GC-MSD CI pos	GC-MSD CI neg	ESI pos	ESI neg	APCI pos	APCI neg
Acrinathrin	Pyrethroid	541,4	0,02	5,6	4,4E-08	Yes		+++	++	++	++	+++	NoData	++	NoData	NoData
Allethrin	Pyrethroid	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										NoData	NoData	NoData	NoData
Bioresmethrin	Pyrethroid	338,4	0,3											NoData	NoData	NoData
Cyfluthrin (incl. beta-)	Pyrethroid	434,3	0,002											NoData	NoData	NoData
Cyfluthrin, beta-														NoData	NoData	NoData
Cyhalothrin														NoData	NoData	NoData
Cyhalothrin, lambda-	Pyrethroid													NoData	NoData	NoData
Cypermethrin	Pyrethroid	416,3	0,004											NoData	NoData	NoData
Deltamethrin, Decamethrin	Pyrethroid	505,2	0,0002											NoData	NoData	NoData
Empenthrin	Pyrethroid	274,4	0,11											NoData	NoData	NoData
Fenfluthrin	Pyrethroid	389,2												NoData	NoData	NoData
Fenpropathrin	Pyrethroid	349,4	0,014											NoData	NoData	NoData
Fenvalerate/Esfenvalerate (RR/SS)	Pyrethroid													NoData	NoData	NoData
Fenvalerate/Esfenvalerate (RS/SR)	Pyrethroid													NoData	NoData	NoData
Fenvalerate/Esfenvalerate (sum)	Pyrethroid	419,9	0,01											NoData	NoData	NoData
Flucythrinate	Pyrethroid	451,5	0,5										Data	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

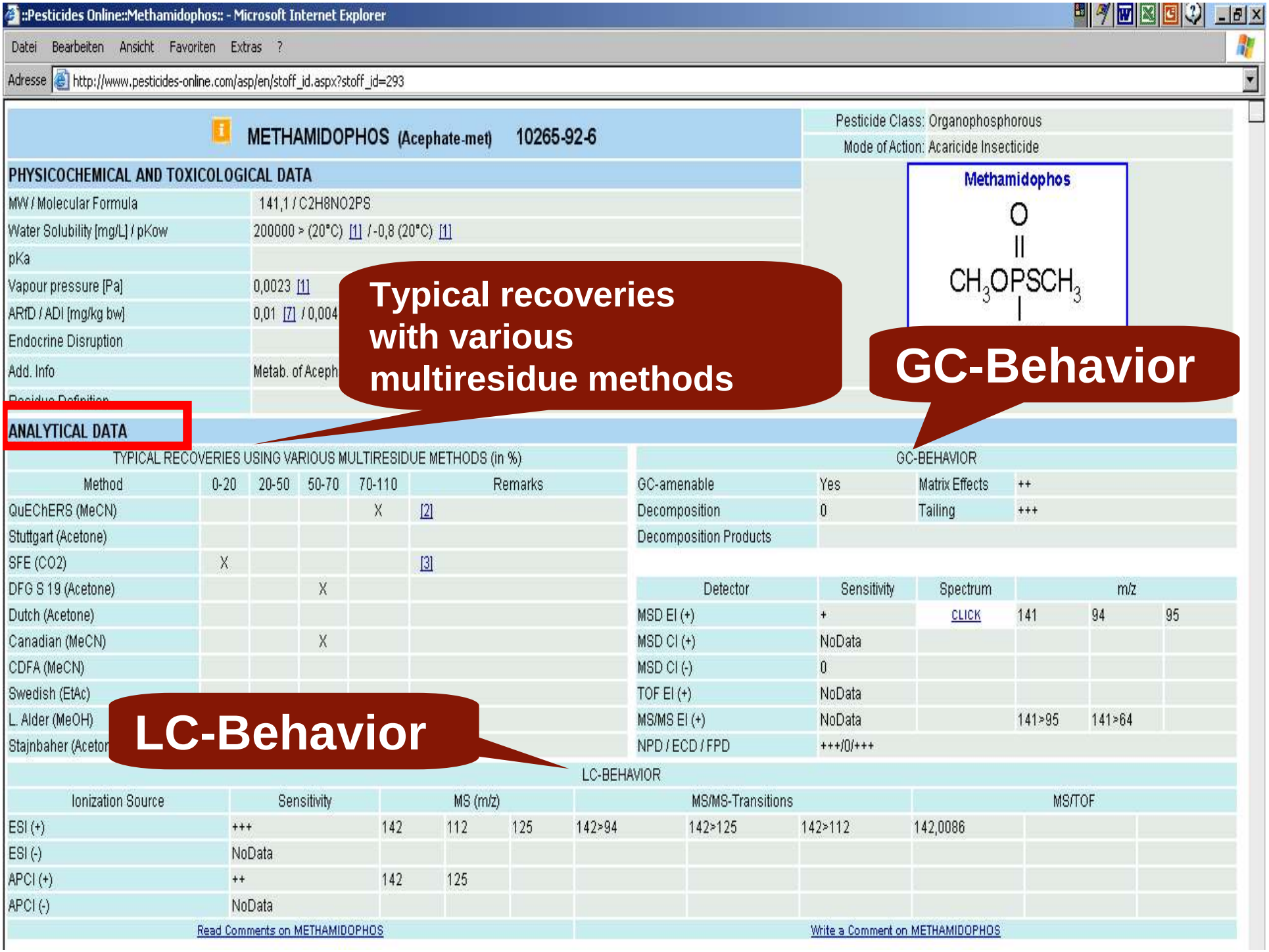
Click here to see the „Pesticide Data Sheet“

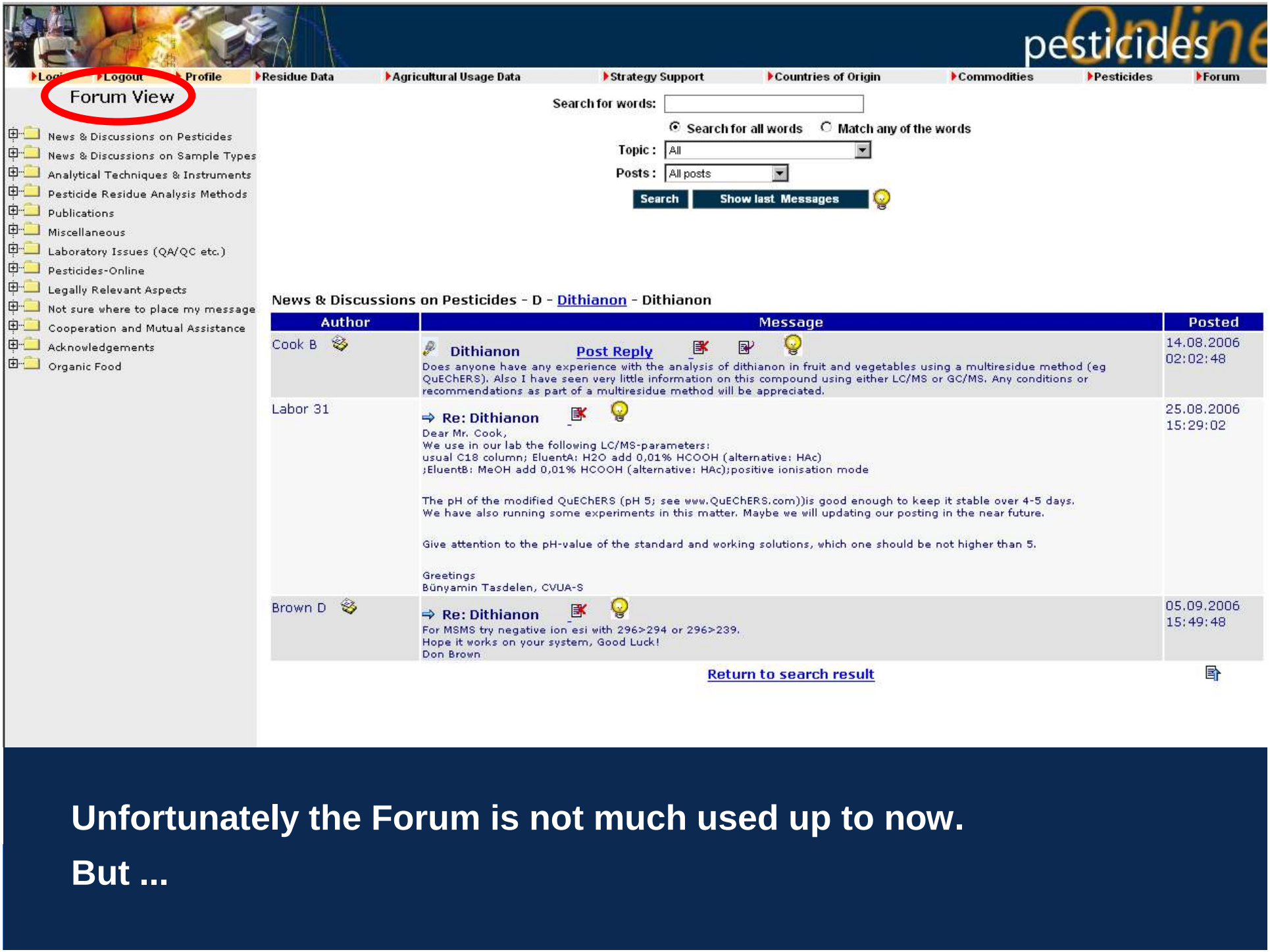
Physicochemical, Toxicological and Analytical Information for

795 Pesticides and Metabolites


::Pesticides Online::Methamidophos:: - Microsoft Internet Explorer
Datei Bearbeiten Ansicht Favoriten Extras ?
Adresse http://www.pesticides-online.com/asp/en/stoff_id.aspx?stoff_id=293
METHAMIDOPHOS (Acephate-met) 10265-92-6
Pesticide Class: Organophosphorous
Mode of Action: Acaricide Insecticide
PHYSICOCHEMICAL AND TOXICOLOGICAL DATA
MW / Molecular Formula 141,1 / C2H8NO2PS
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
Methamidophos
O
CH3OPSCH3
NH2
Physicochemical and Toxicological Data
ANALYTICAL DATA
TYPICAL RECOVERIES USING VARIOUS MULTIRESIDUE METHODS (in %)
Method 0-20 20-50 70-110 Remarks
QuEChERS (MeCN) X
Stuttgart (Acetone)
SFE (CO2) X [3]
DFG S 19 (Acetone) X
Dutch (Acetone)
Canadian (MeCN) X
CDFA (MeCN)
Swedish (EtAc)
L. Alder (MeOH) X
Stajnbaher (Acetone, SPE) X
GC-BEHAVIOR
GC-amenable Yes Matrix Effects ++
Decomposition 0 Tailing +++
Decomposition Products
m/z
94 95
MS/MS EI (+) NoData 141>95 141>64
NPD / ECD / FPD +++/0/+++
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


::Pesticides Online::Methamidophos:: - Microsoft Internet Explorer
Datei Bearbeiten Ansicht Favoriten Extras ?
Adresse http://www.pesticides-online.com/asp/en/stoff_id.aspx?stoff_id=293
METHAMIDOPHOS (Acephate-met) 10265-92-6
PHYSICOCHEMICAL AND TOXICOLOGICAL DATA
MW / Molecular Formula
Water Solubility [mg/L] / pKow
pKa
Vapour pressure [Pa]
ARfD / ADI [mg/kg bw]
Endocrine Disruption
Add. Info
Metab. of Acephate
Residue Definition
ANALYTICAL DATA
TYPICAL RECOVERIES USING VARIOUS MULTIRESIDUE METHODS (in %)
Method
0-20
20-50
50-70
70-110
Remarks
QuEChERS (MeCN)
Stuttgart (Aceto
SFE (CO2)
DFG S 19 (Acet
Dutch (Acetone
Canadian (MeC
CDFA (MeCN)
Swedish (EtAc)
L. Alder (MeOH)
Stajnbaher (Ace
GC-BEHAVIOR
GC-amenable
Yes
Matrix Effects
++
Decomposition
0
Tailing
+++
Decomposition Products
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
ESI (+)
142>125
142>112
142,0086
ESI (-)
NoData
APCI (+)
++
142
125
APCI (-)
NoData
Read Comments on METHAMIDOPHOS
Write a Comment on METHAMIDOPHOS
http://www.pesticides-online.com - Reference - Microsof...
Methamidophos
Water Solubility
[1]
Author: C. D. S. Tomlin
Title: The e-Pesticide Manual
Year of Publication: 2002
Journal/Book: http://www.bcpc.org
Publisher: 12th Edition, Version 2.2, The British Crop Protection Council
Physicochemical data:
- pKa
- Water solubility
- …
Toxicological data:
- ARfD
- ADI


::Pesticides Online::Methamidophos:: - Microsoft Internet Explorer
Datei Bearbeiten Ansicht Favoriten Extras ?
Adresse http://www.pesticides-online.com/asp/en/stoff_id.aspx?stoff_id=293
METHAMIDOPHOS (Acephate-met) 10265-92-6
Pesticide Class: Organophosphorous
Mode of Action: Acaricide Insecticide
Methamidophos
PHYSICOCHEMICAL AND TOXICOLOGICAL DATA
MW / Molecular Formula 141,1 / C2H8NO2PS
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
Typical recoveries with various multiresidue methods
GC-Behavior
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) X [3]
DFG S 19 (Acetone) X
Dutch (Acetone)
Canadian (MeCN) X
CDFA (MeCN)
Swedish (EtAc)
L. Alder (MeOH)
Stajnbaher (Aceto
GC-BEHAVIOR
GC-amenable Yes Matrix Effects ++
Decomposition 0 Tailing +++
Decomposition Products
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
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

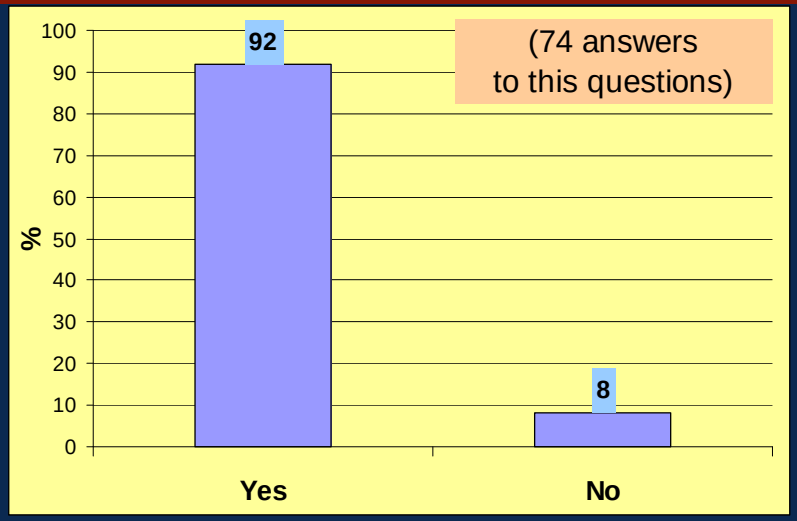


Unfortunately the Forum is not much used up to now.

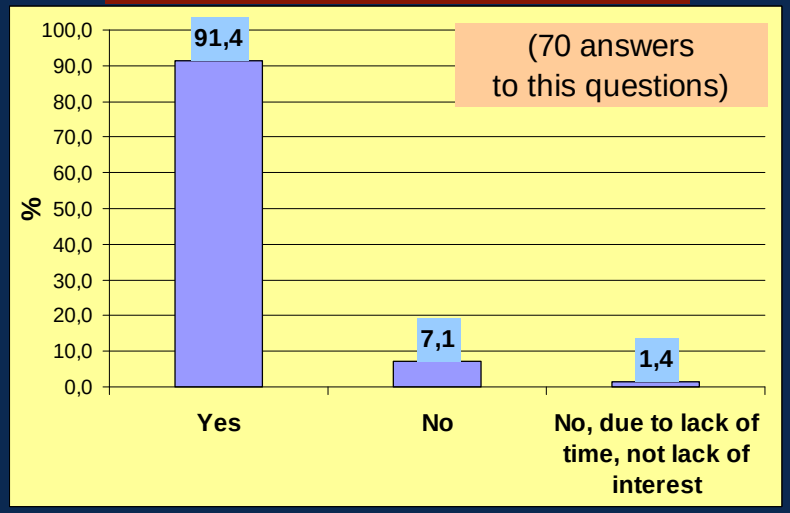
But ...

Results of Lab-Questionnaire 2006

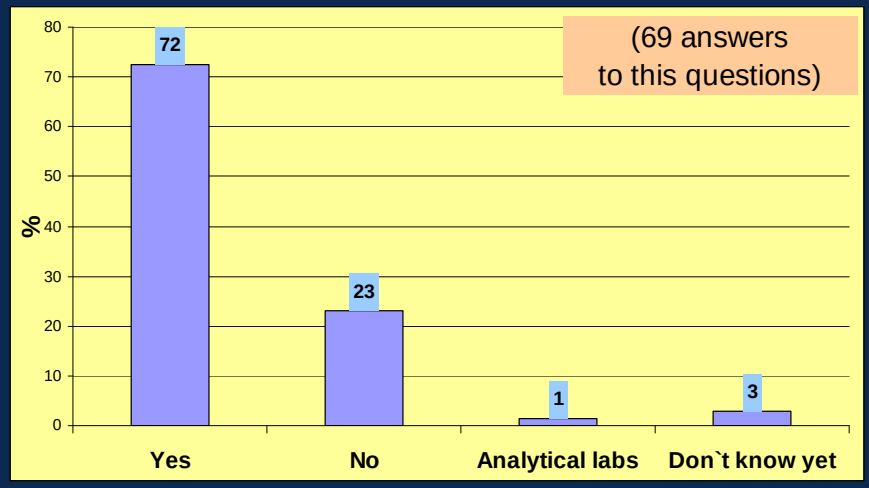
Would you like a discussion forum to be established?



Would you be willing to use such a forum?

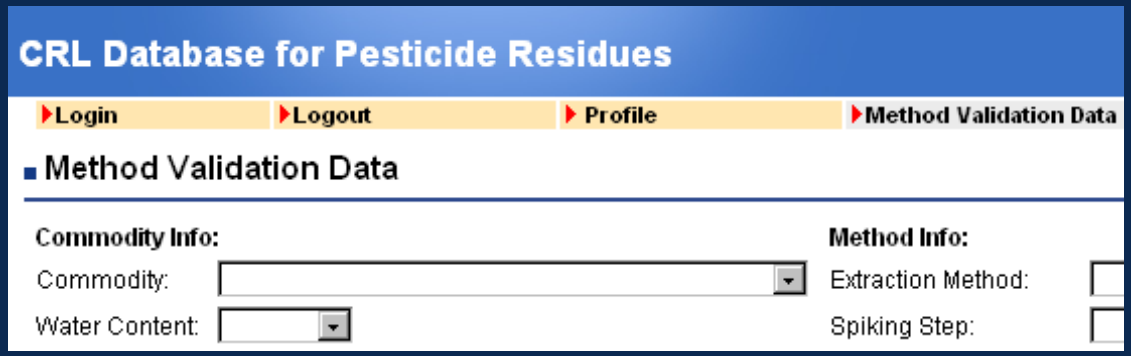


Would you like the forum to be accessible also to colleagues outsite the CRL/NRL-Network (e.g. colleagues from countries outside the EU, from private labs...)?



Method Validation Database

New project started this year:



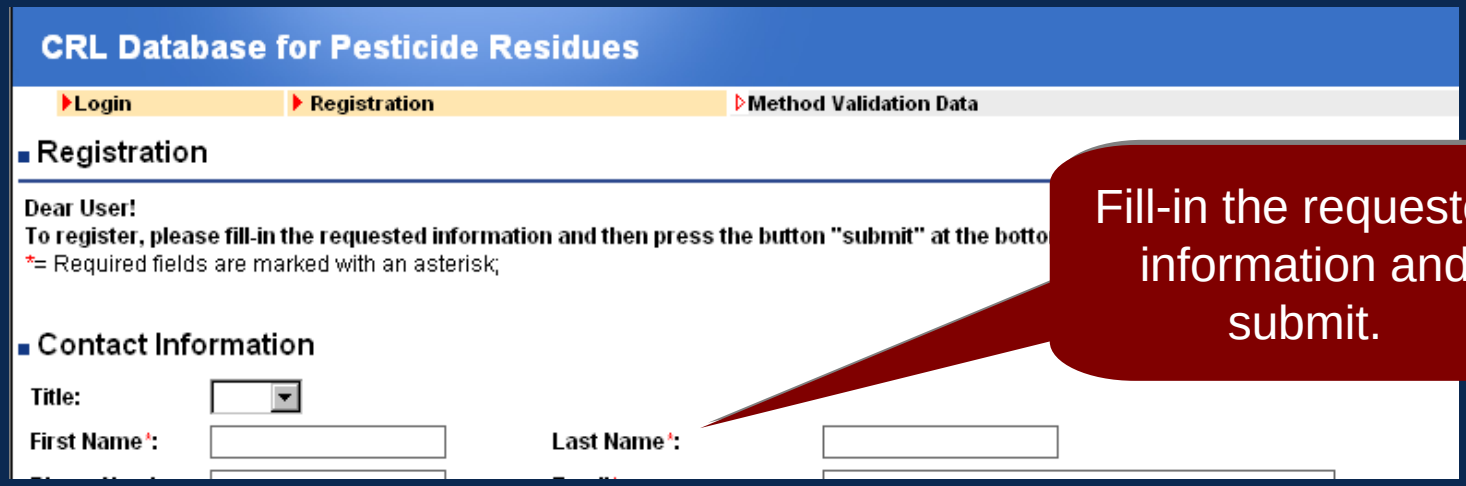
Test Version Online!

→ 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.

Registration to Method Validation Database

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

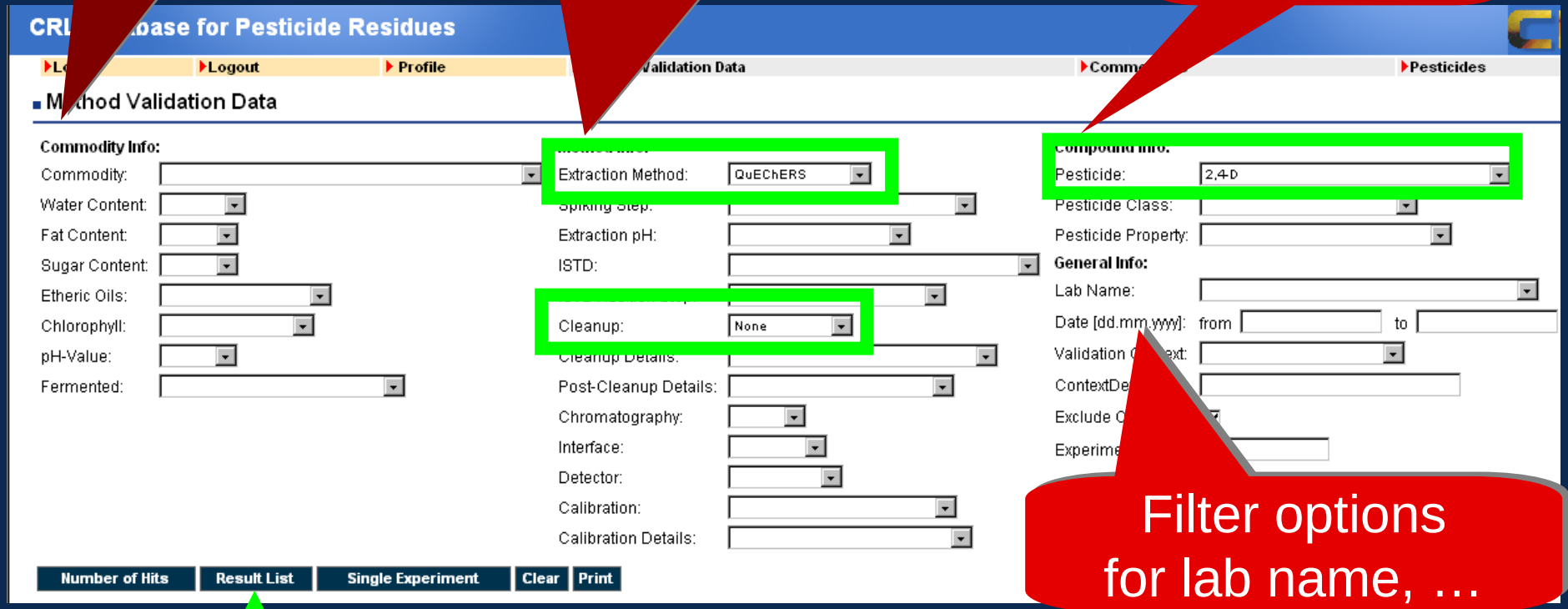


Query Section: Various filter options for a targeted query

Filter options for commodity

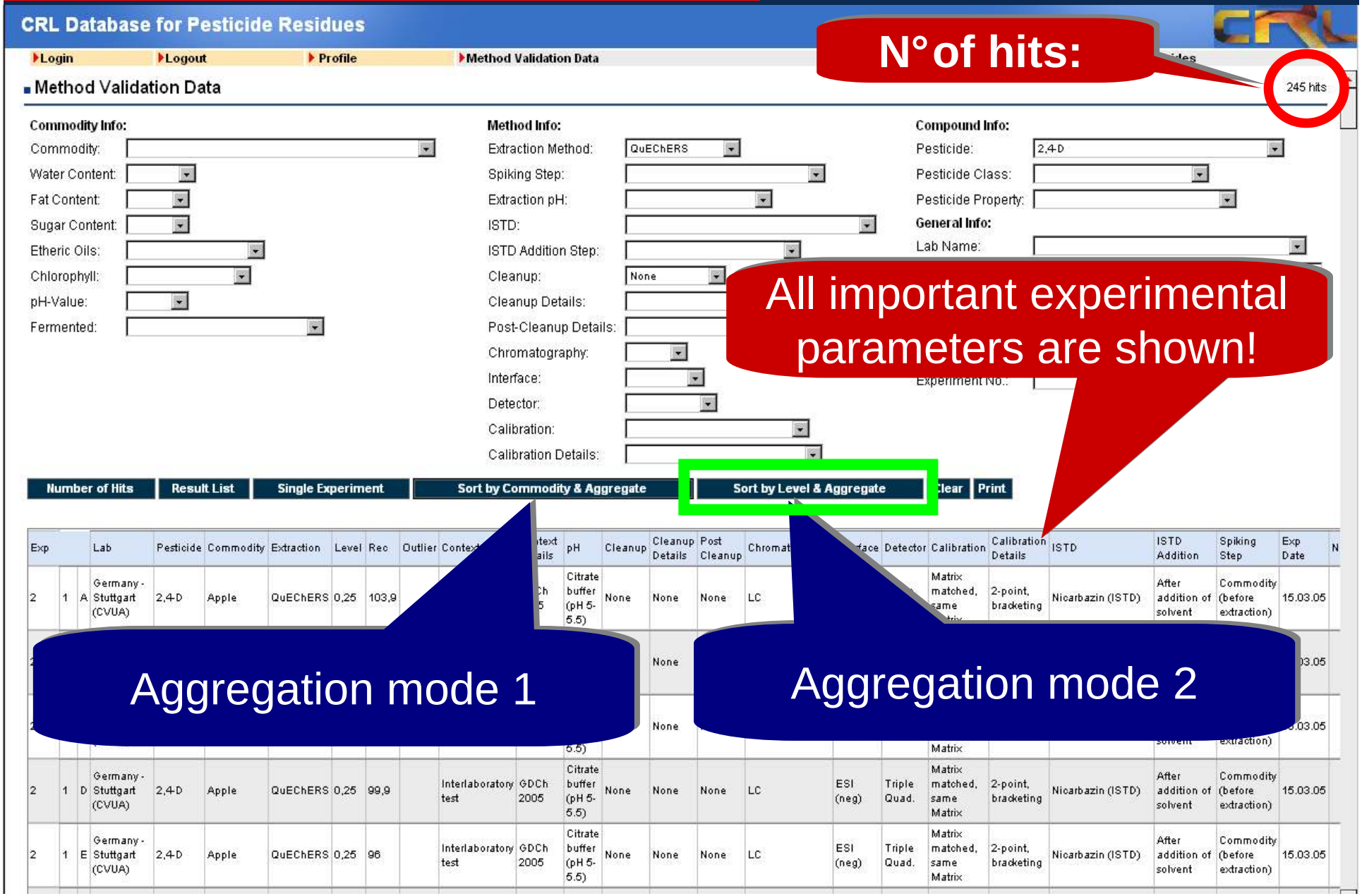
Filter options for extraction method, ISTD, Cleanup, …

Filter options for compound



Filter options for lab name, …

1. Result list of individual recovery values



Exp			Lab	Pesticide	Commodity	Extraction	Level	Rec	Outlier	Context	Context Details	pH	Cleanup	Cleanup Details	Post Cleanup	Chromat	Interface	Detector	Calibration	Calibration Details	ISTD	ISTD Addition	Spiking Step	Exp Date	N
2	1	A	Germany - Stuttgart (CVUA)	2,4-D	Apple	QuEChERS	0,25	103,9				Citrate buffer (pH 5-5.5)	None	None	None	LC			Matrix matched, same	2-point, bracketing	Nicarbazin (ISTD)	After addition of solvent	Commodity (before extraction)	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	

2. List with aggregated recovery data

CRL Database for Pesticide Residues

Login | Logout | Profile | Method Validation Data | Comm

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
Commodity per level		3	Cucumber		20						112,2	93,8	136,2	109,7	70-120	10,4	3,5	9,8		0
																4,1			22.09.06	0
																3,6			20.10.06	0
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
																,1			20.10.06	0
																,1	4,1	4,1		0
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

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

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

Aggegation line for **all commodites** at spiking level 0,01 mg/kg

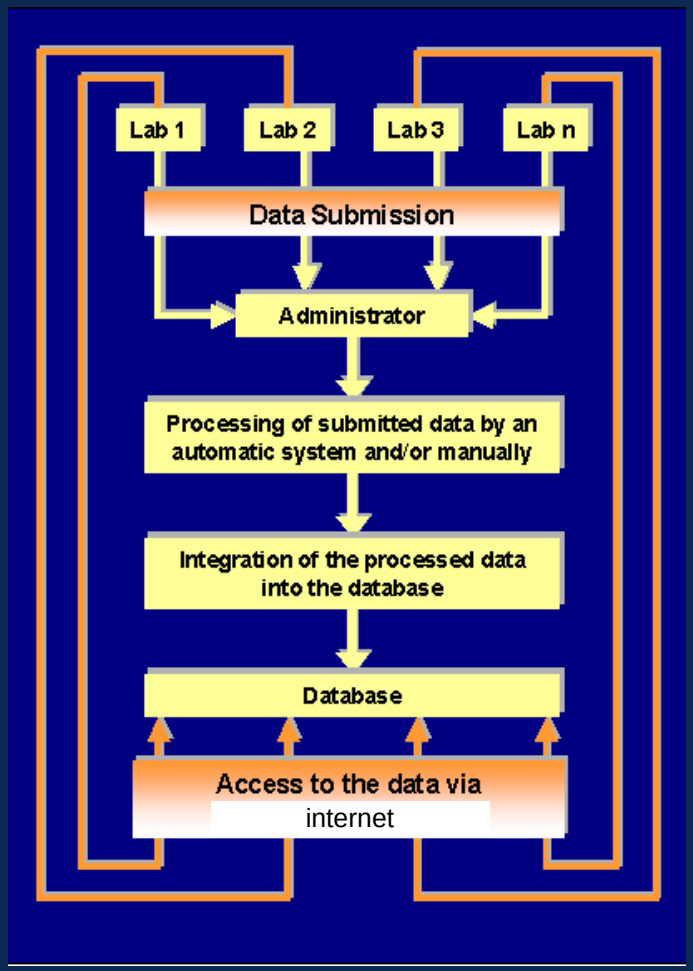
Method Validation Database - Statistics

- 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?

Data Submission to Method Validation Database



- **We offer a Data Submission-Format**
  ($\rightarrow$ 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.

Thank you very much for your Attention !