

## Summary of the Minutes of the relana® meeting June 2016 - Bologna, Italy

**Participants:**

**Analytica Alimentaria, Espana**

Mr Francisco Ferrer

**Analytica Alimentaria, Germany**

Mr Juan Ramírez

**bilacon**

Mr Karsten Ott  
Mr Roy Sperling

**eurofins Dr. Specht**

Mr Marco Miebach

**eurofins LZV**

Ms Daphne van Damme  
Mr Marvin Overbeeke

**Galab**

Mr Eckard Jantzen

**Greit**

Mr Lorenzo Petrini  
Mr Mirco Faccin

**Labor Friedle**

Mr Athanasios Nitsopoulos  
Ms Monika Backhaus

**LVA**

Mr Helmut Rost  
Mr Andreas Gschaider

**Primoris Belgium**

Mr Bart Willaert  
Mr Wim de Meyer

**Lach & Bruns**

Ms Silke Bruns  
Mr Günter Lach

**Contents:**

	<i>Page</i>
<b><u>Analyses of challenging pesticides</u></b>	<b>2</b>
Guazatine .....	2
Diquat / Paraquat .....	2
Ethephon analysis in dried fruits (especially dried mango) .....	2
Stock solutions project .....	3
<b><u>Pesticides with complex residue definitions</u></b>	<b>3</b>
<b><u>Captan and Folpet: New residue definitions and the consequences</u></b>	<b>3</b>
<b><u>relana® method ring tests 2016</u></b>	<b>4</b>
<b><u>Standard deviations / expanded measurement uncertainties of SRMs</u></b>	<b>4</b>
<b><u>relana® web-meetings</u></b>	<b>4</b>

## **Analyses of challenging pesticides**

### **Guazatine**

According to the relana® position paper ([PP\\_16-01\\_Guazatine\\_vers 20160119.pdf](#)), the selection of standard reference material was/is critical as depending on the reference material, different compositions of Guazatine-cations have to be expected.

#### **Aspects discussed during the meeting:**

- On behalf of the “Gesellschaft Deutscher Chemiker” (GDCh - German Chemical Society) a ring test related to Guazatine in oranges and bananas was performed. PROOF-ACS was the corresponding organiser of this ring test and is currently in the process of evaluation of results.
- The goal is to achieve 0,01 mg/kg for each Guazatine compound. However, taking into consideration the distribution of the different Guazatine compounds, laboratories have to go below 0,01 mg/kg for some compounds.
- The background of Guazatine is the upcoming new MRL in citrus fruits (from 50 mg/kg down to 0,05 mg/kg).
- relana® will update the position paper and keep the participants informed.

### **Diquat / Paraquat**

#### **Aspects discussed during the meeting:**

- Overview about the situation related to Paraquat and Diquat findings in superfoods. One of the problems is that accreditation certificates (including technical appendices) do not allow a clear answer to the clients' question: “*Is the laboratory accredited for this analysis in superfoods?*” This problem should be addressed to accreditation bodies rather than to laboratories.
- The degree of irritation among the clients is high as they lack of evidences for competent analyses (like ring test). And due to the inhomogeneity of batches, the results can deviate significantly within one batch.
- The “no-clean up” step of the QuPPE method is not satisfying. Some kind of clean-up might be appropriate in particular for complex matrices like superfoods.
- Paraquat becomes a worldwide alert problem. In the “alert world”, it is very important to deliver reliable results.
- Exchange of positive samples (Diquat/Paraquat) between relana® laboratories.

### **Ethephon analysis in dried fruits (especially dried mango)**

#### **Aspects discussed during the meeting:**

- Organic control bodies are faced with Ethephon results of dried mangos. Applying the Headspace-GC-method (official method in Germany), Ethephon is often detected, but the counter samples / samples of the same batch analysed using the LC/MSMS approach do not confirm the positive findings of the HS-GC-method.

- Different reasons for this situation were discussed from an analytical point of view.
- In a Hemmerling (German analytical chemist) publication it was reported, that Ethylene was found in many different types (nearly all types) of food.  
How to “live” with these two officially recognised methods (GC- and LC-based)?
- relana® will prepare a Position Paper related to this issue.

### **Stock solutions project**

#### Aspects discussed during the meeting:

- L&B will work out a first draft for evaluation of the analytical results of the stock solution project. This draft will be sent to three relana® laboratories for a first verification. Afterwards, remarks / amendments will be included and the final paper / report will then be send out to all relana® laboratories.
- Risks of „interaction / degradation of standards in solvent mixtures“ with regard to Spirotetramat-enol was introduced and discussed.

### **Pesticides with complex residue definitions**

#### Aspects discussed during the meeting:

- Different EU-member states handle differently with the complex MRL definitions.
- It is not possible to determine the *Phenoxy-carboxylic acids* within the multi-method screening. An extra analysis with an extra sample preparation has do be performed.
- A relana® laboratory presented the different results when applying the hydrolysis for *Phenoxy-carboxylic acids* determination – and if not applying hydrolysis. → For the analysis of *Phenoxy-carboxylic acids* like Fluazifop or 2,4-D, a hydrolysis is absolutely necessary.
- The *Phenoxy-carboxylic acids* discussion is quite old (going back to the 1990s).
- L&B will send some proposals of how to report and interpret results related to pesticides with complex residue definitions. A Position Paper will be prepared.

### **Captan and Folpet: New residue definitions and the consequences**

#### Aspects discussed during the meeting:

- The MRLs are now increased according to the new MRL definitions.
- relana® laboratories had some positive findings , but the detection of Phthalimid (PI) does not result consequently in positive findings of Folpet. This is a high risk for the application of the new MRL definition.

- In case of dried products, PTI is related to contaminations during drying (processing). Only in a very limited number of samples (with positive PI results), also Folpet was detected. → How to deal with the new MRL definition?
- Assumption: PI might be in the samples already. With the new MRL definitions relana® laboratories expect serious problems.
- PI is nearly everywhere. It is not clear where it is coming from.
- relana® laboratories will provide data to L&B. This will be used to prepare a relana® Position Paper.

### **relana® method ring tests 2016**

Two ring tests will be organised for relana® laboratories in 2016:

- a) Metabolites: Which metabolites to be included?
- b) Pyrethroids: Which matrices resp. isomers to be included?

During the meeting, two lists were prepared with interesting metabolites and Pyrethroides for the method ring tests. L&B will check these method ring tests for feasibility.

### **Standard deviations / expanded measurement uncertainties of SRMs**

L&B introduced a poster of PROOF-ACS, which was presented at EPRW 2016. It was agreed to distribute the poster to the relana® laboratories.

### **relana® web-meetings**

New technical details and new approaches were introduced to the relana®-members. A web-meeting is planned for September / October 2016.

*Editorial remarks:*

*In the meantime one relana® Position Paper was updated  
([PP\\_16-01\\_Guazatine\\_vers 20160721\(update\).pdf](#))  
and a new Position Paper will be published in week 30 / 2016  
([PP\\_16-03\\_Folpet-PTI\\_vers20160718.pdf](#)).*

Hamburg, 21<sup>st</sup> July 2016



Dr. Silke Bruns



Dr. Günter Lach