

# **LAPRW2009, ROUND TABLE 2, 10 June 2009**

## **Applicability of the QuEChERS method;**

### **Chair persons:**

**Dr. Andre De Kok (VWA - Food and Consumer Product Safety Authority,  
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**Dr. Hans Mol (Rikilt Institute of Food Safety, The Netherlands)**

### **Panel members:**

**Dr. Steven Lehotay (United States Department of Agriculture, USA)**

**Dr. Michelangelo Anastassiades (CVUA, Germany)**

**Prof. Dra. Ionara Pizzutti (CEPARC - Federal University of Santa Maria, Brazil)**

**Prof. Ing. Horacio R. Beldoménico (National University of Littoral, Argentina)**

**Prof. Dr. Horacio Heinzen (University of Republic, Uruguay)**

**Prof. Dr. Jairo Arturo Guerrero Dallos (National Univ. of Colombia, Colombia)**

# **LAPRW2009, ROUND TABLE 2:**

## **Applicability of the QuEChERS method; *Questions to audience:***

### **1. Who is using QuEChERS?**

- Routinely**
- Research projects**

### **2. Which version?**

- Original (JAOAC 2003)**
- Buffered (citrate or acetate?)**
- Other modified**

### **3. With which detection methods?**

- LC (MS or non-MS)**
- GC (selective or MS)**
  - injection mode (splitless, (LVI-)PTV?)**
  - redissolving in other solvent?**

### **4. Which matrices?**

- non-fatty**
- fatty**

**What are typical advantages of QuEChERS for your laboratory (in Latin America)? Compared with your previous method.**

**What do you consider as typical disadvantages?**

**With which pesticides / matrices do you experience problems?**

**How do you deal with the shortage of acetonitrile?**

**Who is using commercial products? Are they expensive?**

**Do you use cryogenic milling for QuEChERS?**

**Other questions?**

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# ADVANTAGES QUECHERS

**EASY TO USE**

**SAVE SOLVENTS**

**MOST OF THE COMPOUNDS HAVE GOOD RECOVERIES**

# **DISADVANTAGES QUECHERS**

**BAD RECOVERIES FOR SOME COMPOUNDS LIKE:**

**CHLOROTHALONIL  
CHINOMETHIONATE  
ACEPHATE**

# **DISADVANTAGES QUECHERS**

**CONTENT OF MATRIX IS VERY HIGH  
CONTAMINATION OF GC COLUMN  
BAD PEAKS FOR CONTAMINATION OF COLUMN  
HIGH PRICES OF ACETONITRILE AND PSA**

**What are the reasons for so many different versions and protocols for QuEChERS rather than a single unified method for as many pesticides and matrices as possible?**

**What is the importance of buffering in QuEChERS, and what is the difference between citrate or acetate buffering?**

**What are the distinguishing features of a method to call it “QuEChERS” rather than a different name?**



## Sample preparation

**Do better solvents exist?**

**How to deal in reduced scale extraction procedures with high content fatty samples (more 20% fat)? (besides GPC approaches)?**

# Some thoughts.....

## Many questions..... ????????

### NO DECISIONS !!!!!!!!

How much faster is QuEChERS in comparison with another MI

The price of 1US\$ per is still valid and also for ?

The cost to use one another buffer Y buffering effici

high prices for bs?????

The cost of salts and weigh (cost with people) or to buy salts ready to use ???

much cheap and QuEChERS is in comparison with another methods???

