National Food Institute



# WORK PROGRAMME FOR THE EU REFERENCE LABORATORY FOR PESTICIDES IN CEREALS AND FEEDINGSTUFF

(Version 26 August 2011)

# **January-December 2012**

#### LEGAL FUNCTIONS AND DUTIES

The functions and duties of the Reference Laboratory are described in Article 32 of the EC Regulation No 882/2004.

## 1. OBJECTIVES FOR THE PERIOD JANUARY - DECEMBER 2012

- A. General tasks
- **B.** Development and validation of analytical methods
- C. Quality assurance and quality control including the organisation and implementation of proficiency tests.
- D. Technical and scientific support to NRLs/ EU Official labs, Commission and third countries

## 2. WORKING PLAN FOR THE PERIOD JANUARY - DECEMBER 2012

## A. General Tasks

- 1. Participation in coordinating meetings and general management activities of EURLs for pesticide residues, as requested by the Commission. Participation in the horizontal advisory groups organized by the EURL for fruit and vegetables.
- 2. Maintenance of the common web portal <u>http://www.crl-pesticides.eu</u> for the pesticide EURLs (horizontal task). The communication platform supports the coordination activities of the EURLs and serves as contact, reference and service points for the National Reference laboratories and official pesticide residue

laboratories in Europe. The website for Cereal and Feeding stuff will be maintained in coordination with the other EURLs and will include presentation of the EURL. Additionally, information on proficiency test, training courses, workshop, workprogramme and general information on cereal production and pesticide use will be included.

- 3. Further development and maintenance of the online result submission website for proficiency tests. Via the website the participating laboratories will be able to submit both their results from the proficiency test and information on the analytical method to the EURL. The data enter a SQL database, where the data assessment and compilation results will easily be prepared. The website will in 2012 be used for the proficiency test for cereal and for PT organised by the other pesticide residue EURL on request.
- 4. Maintenance of the EURL/NRL/OfL network for laboratories performing analysis of cereals. The network is and will be used for communication of workprogrammes, proficiency test and other issues of importance primarily via the EURL web portal and the workshop.
- 5. Administrative duties e.g. budget management, preparation of work programme, budgets will be accomplished.
- 6. Compilation of annual report and cost estimate.
- 7. Co-operation with international organisations as agreed with the COM.

#### **B.** Development and Validation of Analytical Methods

Analytical scientific work will include the improvement and enhancement of existing approved multi-methods and the development or implementation of new multi-methods and detection techniques. As task for analytical work for 2012 are considered:

9. The development and validation with mainly focus on the following areas

Extension of the pesticide profile for the cereal and feeding stuff multi methods using LC/MS/MS or GC/MS/MS: The scope for the accredited analytical multimethods for cereals and feeding stuff will be extended by inclusion of pesticides used for worldwide cereal and feed production and/or pesticides included in the coordinated control program. However, also the Swedish Ethyl acetate method (SweEt) will be validated for a range of pesticides.

Optimization of extraction and clean up efficiencies. Extraction studies to optimize the extraction parameters for residues of so-called multi method pesticides from cereal matrices. The EUPT cereal test materials from earlier PTs will be used for this study. Investigation on the amount of PSA, C18 and other substances to improve the clean-up procedure, especially to remove co-extracted fatty acid, that can disturb the chromatography Further development and validation of screening method for cereals by LC-TOF The method will be used as a tool to select pesticides to be included in the accredited method. The development was started in 2010.

- 10. The EU-RLs for CF, SRM and AO will start cooperation on detection of possible pesticide residues in feed for ruminants and in milk. Feed is one of the main sources for incurring pesticide residues in farmed animals. The detection of residues in feed for ruminants is an indication for possible residues in milk. On the other hand the detection of residues in milk is an indication for possible residues in feed for ruminants for milk production. The joint project will include the development of analytical methods for determination of selected pesticides in feed and milk. This project is based on data evaluation and is not necessarily based on a feeding experiment
- 11. Collection and evaluation of information to support the prioritization of method development projects. In order to focus the aim of the multi methods to be used for pesticide residues in cereals and feeds it is important to examine the relevance, risk relation, chemical properties etc. for the pesticides, before the decision can be taken to include them into the multi residue methods. The task is an on-going activity.

#### C. Quality Assurance and Quality Control

12. Proficiency test PT-C6 on barley

A proficiency test on incurred pesticides in barley will be organized in 2012. The proficiency test will cover pesticides analysed by multi methods. The pesticides to be analysed for includes approximately 100 pesticides, as agree on by the Advisory Group. The barley was during the 2011 season grown, sprayed and harvested in Denmark. If necessary, the test sample will be further spiked to reach a pesticide concentration level relevant for the PT.

- 13. Preparation of samples for proficiency test 2013, EUPT-C7 To be able to perform proficiency test on cereals or feeding stuff of plant origin with incurred pesticides in the first half of 2013, it is necessary to perform a field spraying of cereals in 2012. A field spraying of cereals performed by a consultant will take place, if possible. The spraying will include several different pesticides. After harvest, the sample will be further spiked with additional pesticides if necessary and the grain/crop will be milled/chopped and homogenised to secure that the sample material are well qualified for the proficiency test. The proficiency test will focus on crops used for feeding stuff, if agreed upon by the Advisory Group.
- 14. Maintenance of in-house QA/QC activities in consequence of ISO 17025 accreditation of all analytical work done within the EURL and ISO 17043 in relation to the proficiency test organized by the EURL.

# D. Technical and Scientific Support to NRLs/EU official labs, the Commission and Third Countries

- 15. A workshop coordinated between the EURL-FV, EURL-SRM and EURL-SRM will be organized and held in Cyprus. The workshop will be arranged for all the EU-NRL. The agenda for the workshop will include results from proficiency test, discussion on coordinated monitoring programme and analytical challenges and other relevant issues decided by the EURLs. One expert from each country per EURL will be reimbursed.
- 16. Technical and scientific support to the Commission and its offices, as requested by the Commission.
- 17. Support to the COM for the drafting of the EU coordinated control programme.
- 18. Involvement of the EURL in the EFSA residue evaluation to give its opinion about residue definitions and routine validated methods
- 19. Missions

In order to coordinate workprogramme, proficiency test, method validation, Internet portal, online result submission and participation in Standing Commission meeting up to 6 missions will be carried out.

One NRL-visit will be conducted to one laboratory selected in agreement with the COM, where the EUPTs results have been problematic over the last three years. The EURL will send 2 representatives.

Mission for one person to EPRW 2012 in Vienna (25-28 June).

Pre approval from the Commission will be obtained for all non-planed missions

20. Analysis of official samples, counter analysis

Analysis of official samples, counter analysis will be performed if requested by the Commission. The EURL will ask the Commission for approval of additional eligible budget, if required.