





EUROPEAN REFERENCE LABORATORY FOR MARINE BIOTOXINS

WORK PROGRAMME FOR THE EUROPEAN REFERENCE LABORATORY FOR MARINE BIOTOXINS

January-December 2013

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Work Programme for the EU Reference Laboratory for Marine Biotoxins

Objectives for the period January-December 2013

LEGAL FUNCTIONS AND DUTIES

The functions and duties of the Community Reference Laboratories for feed and food are described in Article 32(1) of Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

- Coordination of activities of NRL network and provision of technical assistance and training
 - $1.1\,$ Organization of the XVI Workshop of the European NRL network of marine biotoxins

Date: to be determined (Oct.- Nov. 2013)

Place: to be agreed during the XV meeting in Brussels

Duration: 1,5-2 days

The EURLMB will organise and coordinate the workshop and will edit the minutes that will be distributed to the participants and published on the EURLMB website.

1.2 Supply information to EU MS and third countries on analytical methods for marine biotoxins)

Duration: ongoing

In addition to on-going assistance, the EURLMB website is available at:

http://www.aesan.msssi.gob.es/en/CRLMB/web/home.shtml.

Issues related with marine toxins legislation, methodologies, standard operating procedures, validation reports, seminars, meetings, minutes, conclusions and recommendations and all the activities related to EURLMB will continue to be published and updated at the EURLMB Website.

1.3 Assist NRLs on the implementation, validation, accreditation of EU Reference methods for the analysis of marine biotoxins

Support on issues related with the EURLMB Standard Operation Procedures (SOPs) and their application will be also provided.

Duration: ongoing.

EURLMB will also assist NRLs on the implementation and validation of alternative analytical methods of interest, by providing them with technical information.

standards when available, contaminated materials, etc., at their request. Moreover, protocols for the analysis of the different groups of marine biotoxins regulated in the EU, will be published in the EURLMB website.

1.4 Technical assistance to Third Countries on analytical methods.

EURLMB will assist Third countries by providing them with samples from the EULMB Proficiency Testing trials for own testing on their methods performance. This will be also useful for the validation and accreditation of their methods for marine biotoxins detection. The provision of samples will depend on availability.

1.5 Training activities for the staff of NRL MS and Third countries

1.5.1 Trainings on methodological advances on Marine Toxins will be organised according to the NRLs needs. These needs will be discussed at the 2012 annual NRLs Workshop which will be held in Brussels, host by OD Food, Medicaments and Consumer Safety Scientific Institute of Public Health. This meeting supposed to be hosted by Sweden, but they expressed their unavailability for the organization this year. The Scientific Institute of Public Health (Belgium) kindly offered to host the meeting.

According to the 2012 Work Programme, the meeting is scheduled for October 2012.

Trainings could be also provided to Third countries, if requested (maximum 4 countries)

1.5.2 Meetings dealing with the above mentioned methodological advances on Marine Toxins could be also organised after the identification of the needs which will be also discussed at the 2012 annual NRLs Workshop in Belgium. These meetings will be organised with the participation of experts worldwide.

The training activities, as well as the meetings will be mainly focused on implemented methods currently used for the analysis of PSP (Paralytic), LPTs (Lipophilic). The application of these methodologies to additional toxins of interest in the EU could be also contemplated.

These methods will be mostly Chromatographic, coupled with different detections modes, such as Fluorescence (FLD) and Tandem Mass Spectrometry (MS/MS)

The possibility of organizing trainings and meetings on alternative methods of interest, recently validated or developed could be also contemplated if required. (Maximum two trainings).

The training activities will be carried out in collaboration with the Analytical Chemistry and Food Department at the University of Vigo.

1.6 Working group on LC-MS.

The activities will be mainly focused on the evaluation of implementations recently developed for the application of LC-MS/MS for multitoxin analysis. The possibility of carry out an international validation of implemented methodologies, for harmonization purposes, will be also discussed in this WG.

1.7 Working group on PSP.

The activity of this Working Group will be focused in evaluating possible implementations on the existing methods alternative to MBA (chromatographic methods). There is also a possibility of evaluating the applicability of other official methods as Receptor Binding Assay (RBA), the application of this method will be dependent on the on the availability of materials in the EU, strictly required for its setting up and application

1.8 Collaboration with the University of Vigo (Department of Analytical and Food Chemistry) in the organization of symposiums, seminars or activities related with the Analysis of Marine Biotoxins.

As a continuation of a Series of Symposiums of the AOAC Task Force on Marine and Freshwater Toxins, the Fourth Edition of this Symposium will be held in Baiona in the spring of 2013.

Additional meetings to discuss advances in the field of Marine Biotoxins could be also organised.

2.- Scientific advice and support

2.1 Provide scientific assistance to DGSANCO.

The EURLMB will assist DGSANCO and FVO if it is required on issues related with the control of marine biotoxins in molluscs.

Any other scientific assistance of interest for DGSANCO could be also provided when requested

2.11 Provide technical assistance in cases where the results of analysis are contested between Member States and/or Member States and Third Countries (when requested)

3.- Interlaboratory Proficiency Testing

The interlaboratory proficiency testing trails organised by the EURLMB for the NRLs are aimed at evaluating the ability of the NRLs to apply efficiently the recognised testing methods for marine biotoxins, for the purpose of Regulations (EC) Nos. 853/2004 and 854/2004 stated in Annex III of Commission Regulation (EC) Nº 2074/2005. At the same time, the equivalence of the different methods applied is evaluated. The EURLMB will organise one trial for each marine biotoxins group legislated in the EU:

- **3.1** EURLMB 2013 Proficiency Testing for PSP toxins determination (EURLMB-2013-PT-PSP).
- **3.2** EURLMB 2013 Proficiency Testing for LPTs determination (EURLMB-2013-PT-LIPO).
- **3.3** EURLMB 2013 Proficiency Testing for ASP toxins determination (EURLMB-2013-PT-ASP).

The schedule for the Proficiency Testing (participants registration, samples dispatch, results submission and PT report) will be agreed by the EU-NRLs network and published at the "EU EURLMB/NRLs timetable of activities for 2013", which will be circulated to the network in the first quarter of 2013.

NRLs will receive the Programme and the Application Forms to register on the PT trials. Information about the foreseen dates for samples dispatch and results submission will be also provided. The samples for PT trials will be accompanied with a letter including the identity Code of each laboratory participant in the study. Participants will also receive by email the protocol for the Testings. The Sample arrival Form , should be sent to the EURLMB after the reception of the materials and a Reporting Sheet will be also sent for results submission.

The results on EURLMB-2013-Profficiency Testings will be presented by the EURLMB during the XVI Workshop of the European NRL network of marine biotoxins and discussed by the group of participants. A final and detailed report including all the information about participants, aim of the study, schedule and instructions, materials preparation, methods used , evaluation of the results, etc. will be elaborated and edited by the EURLMB for each PT, and after circulation to the participants in the study, for comments and revision, this report will be published at the EURLMB website.

A follow-up report on the management, in cases of underperformance in the Proficiency Testing by NRLs, will be submitted to DG SANCO together with the EURLMB technical report for 2012 (planned for March 2013).

4.- Missions

- **4.1** Visit NRLs when necessary, in order to solve problems with results after PT trials or validation studies (see points 3 and 5)
- 4.2 Participate in activities related to the involvement on the Working Group 5 ('Biotoxins') of CEN/TC 275 Technical Committee "Food analysis – Horizontal methods" (European Committee for Standardization)
- **4.3** Ongoing participation in the Codex Alimentarius working groups and meetings related to marine biotoxins
- 4.4 Assist Third countries on technical issues on request.
- **4.5** Participation in International Forums of discussion and scientific events related with the advances on the studies on Marine Biotoxins and their Analysis.

5.- Development of analytical and detection methods

- **5.1** Accreditation of the PSP precolumn HPLC-FLD method (AOAC 2005.06 OMA) for the determination of these toxins at EURLMB
- 5.2 Studies of implementation and applicability of both AOAC 2005.06 OMA and AOAC 2011.02 for the analysis of samples contaminated with "particular" PSP toxic profiles, such as those profiles associated to species of Gymnodinium Catenatum, which are of a particular interest for Spain and Portugal
- 5.3 Validation Studies of implemented methodologies for multitoxin analysis.
- **5.4** Setting up, implementation and application of alternative assays (biochemical, biological, etc) of particular interest for the analysis of Emerging toxins (Ciguatoxins, Palytoxins).
- **5.5** Continuation with tasks related with the implementation of methodologies based on LC/ tandem mass spectrometry (LC-MS/MS) for the determination of Emerging Toxins (Cyclic Imines, Ciguatoxins, Palytoxins).

Note: All the activities related with Research and Development at the EURLMB will be carried out in collaboration with the research group of the Analytical Chemistry and Food Department of the University of Vigo.

- 6.- Implementation of DG SANCO "Protocol for the management of underperformance in comparative testing and/or lack of collaboration of National Reference Laboratories (NRLs) with CRLs activities"
 - **6.1** Underperformance (i.e failure in proficiency test). See Point 3. The EURLMB will carry out a follow-up of those NRLs that fails in the EURLMB-2012 Proficiency Testing for PSP, lipophilic and ASP toxins determination in order to identify the origin of the bad results.
 - **6.2** Re-enforcement of the collaboration between NRLs and EURLMB. According to DG SANCO protocol, the EURLMB will contact those NRLs for which a lack of collaboration with the EURL is detected.