

Institute for Health and Consumer Protection Molecular Biology and Genomics Unit



## 11<sup>th</sup> WORKSHOP OF GMO NATIONAL REFERENCE LABORATORIES REGULATION (EC) No 882/2004 and 24<sup>th</sup> ENGL PLENARY MEETING

## 22-23 September 2015, Ispra, Italy

**Meeting Report** 

## Session: National Reference Laboratories and Official Control

## 1. Welcome and approval of the agenda

The Chair welcomed the participants (Annex 1) and the observer, Dr. Kazumi Kitta, of the National Food Research Institute of Japan. The agenda (Annex 2) was approved without modification.

## **2.** Approval of the 10<sup>th</sup> workshop report

The report of the last meeting was adopted without changes.

#### 3. Tour de table: issues/opinions from NRLs

The participants were invited to present their control activities and to highlight important issues or problems. NRLs provided information on their controls during the past year, which varied from a few up to >1000 samples of food and/or feed. Due to the high workload in terms of number of samples and the increasing number of GM events to be tested, some NRLs are looking into multiplexing approaches. Obtaining accreditation for the multiplex methods is an issue for some NRLs, not for others. Several NRLs reported the need for easier and cheaper screening methods, particularly for smaller countries with limited resources and poor political support from the authorities. Many, but not all NRLs are also active in other areas of food control.

There is an interest in receiving training in dPCR, bioinformatics and NGS. Some laboratories do not have such a need as they are lacking the resources to purchase such instruments. NRLs in larger MS are organising trainings and workshops at the national level, others rely on the EURL/ENGL.

Several NRLs report difficulties in preparing the calibration standards from AOCS CRMs. The Chair reiterated that laboratories should send their complaints to the CRM producer, and in copy to the EURL GMFF in case of difficulties.

# 4. Preliminary results of EURL GMFF survey on reference methods used by NRLs (L. Bonfini, EURL GMFF)

L. Bonfini presented an overview of the results of the survey on the use of the reference methods in the GMOmethods database that was sent to NRLs and other ENGL members earlier this year. It appears that a considerable proportion of control laboratories are applying some modifications to the reference methods.

#### 5. Update on comparative testing activities (W. Broothaerts, EURL GMFF)

W. Broothaerts provided an overview of the participation and performance scores in CTs since 2010, which showed a steady increase in the satisfactory performance of NRLs designated under Regulation 882/2004 in the last years.

An update was given on the results obtained in the four most recent CTs that at least partially fell in 2015, 01/14, 02/14, 01/15 and 02/15. Particularly CT 02/14 has been challenging with regard to quantification of soybean event 40-3-2 in the chicken feed material. Further investigations pointed to the importance of the DNA extraction method and inhibition controls. NRLs are reminded to keep their laboratory capacities up-to-date in terms of event-specific methods. The EURL GMFF was asked to make sure the laboratories are informed on-time on the tasks requested in coming CT rounds in order to have sufficient time to purchase the CRMs and implement the methods.

#### 6. Discussion on NRLs training needs specific to their function as NRL

This agenda point was covered during the tour de table.

#### 7. AOB and conclusions

No other business suggested.

#### 8. Welcome by Directors IHCP and IRMM and by G. Van den Eede

Prof. K. Maruszewski, Director of the Institute for Health and Consumer Protection (IHCP), welcomed the participant (see Annex 1 for the list of participants). Prof. E. Anklam, Director of the Institute for Reference Material and Measurements (IRMM), presented the GMOs activities of the two Institutes located respectively at the JRC sites of Ispra and Geel.

She announced that in order to increase synergies and efficiency the JRC Director General decided to move the EURL GMFF activities under the control of IRMM. A road map has been designed for the year 2016.

She asked participants to reflect on the future of the ENGL and stressed that the activities will remain within the JRC. The IHCP Director added that the move will not have impact on the EU laboratories as a whole.

Mr. Guy van den Eede, JRC advisor for bio-economy, added that the existing expertise could be better used and focused on new areas where the high quality performance is needed such as i.e. species identification and diagnostics for human diseases. He remarked that the activities of the MBG Unit in Ispra will not disappear but on the contrary will be more effectively employed on new challenging areas.

It was commented that official control laboratories have so far greatly benefited from the JRC support. It was also stated that legislation on allergens presents the same type of problems faced by GMO laboratories some years ago and proposed including these new areas in the ENGL activities. Mrs. Anklam commented that the expertise could be enlarged to these subjects.

An ENGL member from Germany reviewed the ENGL activities and remarked that they have a global impact, underlining that ENGL has the leadership in the area and that it is recognised as a centre of excellence globally. It was warned that this decision could bring instability and it was suggested to discuss the issue within the ENGL Steering Committee. Ms Anklam stressed that the expertise on GMOs is also present at the IRMM site and welcomed the suggestion of discussing the transfer within the Steering Committee.

Participants also commented that Member States operate in sectors and warned that the enlargement of activities of the ENGL would fail if means were not found for motivating and financing them. They also expressed their concern on the possibility of changing the mandate of the ENGL. It was commented that it would be more practical to set up a new network with a new mandate.

Members asked to be reassured on the continuation of the support on GMO control activities.

Guy van den Eede assured that the core business was intended to remain and that the network will maintain its role in enforcing GMO legislation. Ms Anklam added that it will be discussed how to best address these issues and promised to make the transition as much as possible smooth and efficient.

Participants finally mentioned that within the ENGL, laboratories received substantial support also in the application of modern technology and wished to continue the collaboration. Ms. Anklam assured that the

know-how of the network will be made available by IRMM and that the collaboration with ENGL laboratories will continue.

Additional information provided by the Secretariat (after the meeting):

A working group, also attended by DG SANTE, analysed the suitable options for the transfer of the EURL GMFF under the control of IRMM; however, it became clear to the working group that the initial assumptions that triggered the early announcements were based on wrong assumptions (overlapping, possibility to outsource, routine nature of activities, possibility to outsource EURL GMFF tasks). The Working Group also underlined the importance of the role of the ENGL and suggested that the mandate and the structure of the network remain unchanged. Also some Member States officially voiced their concern on the future of the ENGL and of the EURL GMFF at the October meeting of the PAFF Committee, Section Genetically Modified Food and Feed (report available and already distributed to all ENGL members by the Secretariat).

The JRC management has recently announced that no physical move of the EURL GMFF from IHCP-Ispra to IRMM- Geel will take place. The decision on other options (administrative relocation) is postponed.

## Session: NRL 882 WS and 24<sup>th</sup> ENGL Plenary meeting

#### 9. Approval of the Agenda

The agenda (Annex 2) was approved without modifications

## **10. Approval Report 23<sup>rd</sup> ENGL plenary**

The report of the last meeting was approved without changes.

## 11. Dynamic Action List (DAL) of 23<sup>rd</sup> ENGL plenary

The Secretary reviewed the open points of the list. No suitable speaker on new breeding techniques was found for the meeting. Participants reported their difficulties in assessing the method's trueness with AOCS certified reference material (as no mass fraction GM % is available) and complained about the quality of that material. The laboratories were advised to send complains to the producers in copy to the EURL GMFF if the material was found to be no fit for the purpose and were reminded that acceptance of CRM is specified in EU Regulation (641/2004) and should comply with ISO guidelines. The Chair added that the EURL GMFF had raised the issue at all levels concerned.

## 12. Outcome of the 29<sup>th</sup> ENGL SC meeting (June 2015)

The Secretary summarised the main outcome of the ENGL SC meeting.

He informed that long discussions took place on the possibility to hold one ENGL plenary per year. The proposal has the scope of freeing resources for other areas of interest, but no consensus was found and the discussion remained open.

#### 13. Update from SANTE (I. Ciabatti, SANTE)

The representative from DG SANTE was excused and could not provide an update.

14. Progress reports ENGL working group

#### 14.1 AG SMV (Advisory Group on Selection of Methods for Validation)

The group, following a survey, selected a pentaplex PCR method for validation. The pCambia T35S method selected in the previous year will be validated soon by the EURL GMFF. Dr. Maria Pla (University of Girona, Spain) recently joined the WG. Laboratories are encouraged to submit new proposal for method validation.

#### 14.2 WG DIR (Detection Interpretation Reporting)

The final report in its final reviewing phase and it is expected to be published soon.

#### 14.3 WG Seed Testing

The report has been provided to SANTE and will be discussed at the PAFF committee in December.

#### 14.4 WG Update of Methods

The kick-off meeting of this WG took place in Ispra on 27-28 of May. The results of the survey launched by the EURL GMFF for identifying methods used by the laboratories and their implemented modifications will be valuable information the WG will take into account. The work is ongoing and the second meeting has taken place on 11-12 November 2015.

#### 14.5 WG digital PCR

The kick-off meeting of this WG took place in Ispra at the end of June 2105. The outline of the WG report has been agreed and various contributions for the text have been collected. The WG plans to deliver a draft at the beginning of January 2016 and the finalised document for February 2016. The second WG meeting will take place in Ispra on 1-2 December 2015.

#### 14.6 WG Unit of Measurement

The task of the WG is to define a practical recommendation on conversion of copy number into mass fractions. The kick-off meeting took place in Ispra at the end of June 2015. The first contributions were received in July 2015 and a consolidated draft is expected to be ready in December 2015. The adoption of the final document by the ENGL plenary is planned for April 2016. The second WG meeting has taken place on 16-17 November 2015 in Ispra.

#### 15. Scientific and technical session 1

# 15.1 The application of isothermal nucleic acid amplification techniques in GMO analysis. (L. Yang, PRC)

Dr. Yang presented the advantages and disadvantages of two types of approaches for detecting nucleic acid transgenic sequences: non-isothermal and isothermal amplification. The latter could be very interesting for performing on-spot tests with a simplified procedure. Procedures and experimental applications of different types of isothermal amplification, the nucleic acid sequence-based amplification (NASBA), NASBA implemented microarray analysis (NAIMA), rolling circle amplification (RCA), recombinant polymerase amplification (RPA) and loop-mediated isothermal amplification (LAMP) were presented. Applications of LAMP amplification to GMO screening based on universal elements and GM maize and soybean event-specific identification were explained. Dr. Yang also presented a new DNA extraction devise and modification of LAMP assays including multiplex for on-spot quick monitoring of GM contents.

# **15.2** Multiplex quantification of individual GM events by droplet digital PCR (Dr. D. Dobnik, National Institute of Biology, Ljubljana)

Dr. Dobnik presented two new multiplex assays using ddPCR technology for detecting and quantifying seven EU authorised GM maize events. For each multiplex reaction two different fluorophores (FAM and HEX) were employed allowing distinguishing the amplification results of four different targets. The concentration of primers and probes is the most critical factor for obtaining a good separation of the signals. The performance of real-time PCR and ddPCR in the analysis of DNA sample mixes containing 7 individual GM maize lines were compared; ddPCR showed results comparable to qPCR with linearity, LOD and LOQ values compliant with the ENGL/EURL minimum performance parameters; however, some issues with specificity at GM concentrations higher than 300 copies/reaction were observed. Dr. Dobnik also reported on the development of a ddPCR multiplex calculator to optimise cluster positions in data analysis.

### 15.3 Event-specific multiplex PCR - screening for six GM soybean lines (L. Grohmann, DE)

Dr. Grohmann presented a new screening approach for detecting six GM soybean events which are not covered by the common element-specific PCR methods. The EUginius database and its related detection tools, as well as the JRC GMO matrix, are helping laboratories in the analysis of an increasing number of GMOs. However, a significant number of soybean and maize GM events containing unique genetic elements cannot be detected by the screening approaches commonly employed; thus a multiplex approach where event-specific singleplex for those GM soybean events are combined in the same assay has been developed. With this approach further identification of those events with event-specific singleplex methods is pursued only when a positive signal is observed from the multiplex reaction. The multiplex method was validated in a collaborative study where the false positive and negative rates, the probability of detection (POD) and the LOD were determined. The collaborative trial results indicate that the combination of event-specific methods is feasible. However, a general guidance is still needed for validation and verification of multi-target/multiplex PCR methods.

#### 16. Scientific and technical session 2

#### 16.1 Risk-based inspection of import flows (Martijn Slot, MSc, RIKILT Wageningen UR, NL)

Commercial shipments may contain unathorised GMOs. RIKILT (NL) has developed a tool to minimise the number of random analyses and perform a more cost-effective risk-based sampling. This tool makes use of data on GMOs authorised worldwide to calculate the likelihood that unauthorised GMOs are present. Different parameters that may affect the presence of GMOs in the import are taken into account. RIKILT has developed a similar tool incorporating environmental aspects of uGMO crops in imports, taking into account the potential of GMOs to disperse into the environment. This model incorporates 105 entries with 25 crops in 31 countries.

#### 16.2 Detection of GM fish (F. Debode, CRA-W)

Dr. Debode presented data on DNA extraction methods from salmon tissues. PCR detection methods for GM salmon (including the recently approved Aquabounty salmon) have been developed based on sequence

information of the plasmids used for transformation. CRA-W also developed PCR methods for detecting ornamental fluorescent transgenic fish (glowfish). The detection of illegal imports of GM ornamental fish in some EU MS was reported.

# 16.3 Wheat reference genes: seeking a suitable taxon-specific module for GMO analysis (U. Marchesi, IZSLT, Italy)

Dr. Marchesi presented the results of a project funded by the Italian Ministry of Health for the varietal characterisation of *Triticum eastivum* and the selection of a suitable endogenous gene for GMO analysis. The methods developed by Matsuoka *et al.* and Ida *et al.*, targeting the waxy and SSII wheat genes respectively were tested, using qPCR and ddPCR, on 16 wheat cultivars sown in Italy. The waxy and SSII gene targets were found to be stable and the two methods seemed equivalent in terms of performance.

They were completing the *in-house* validation of the real-time PCR modules and were planning to validate the ddPCR module which was very promising. The data supported the transferability of the taxon real-time PCR modules to the ddPCR systems.

17. Break-out Groups

18. Reports of break-out groups and discussion

#### 1) DNA extraction (follow-up)

The group underlined the need of sharing information on the extraction methods used by the laboratories, the modifications implemented, problems encountered with solutions. The group observed that quality of DNA extracted may influence the correctness of the final result and that DNA quality controls, including evaluation of inhibition, could be quite different in the different laboratories. Members suggested conducting a survey to collect this kind of information. The Chair proposed preparing a table with that information to be provided to the SC and to decide later if a WG would be necessary. The EURL GMFF will be responsible for assembling the information in the table. The table will be provided as a web form.

#### 2) Multi-target methods

The group shared different experiences in developing and using multi-target methods, including duplex methods, pentaplex for screening GM soybean events and ddPCR for detection of maize and soya events.

The group agrees that there is a need for definition of performance criteria for ddPCR and multiplex PCR and guidelines for their verification. In the respect it was reminded that within the Decathlon project some performance criteria for multiplex methods are under development, which could be later taken on discussed and possibly endorsed by ENGL. Another point of discussion was whether multiplexing previously validated singleplex methods would require a full re-validation or only a verification of some performance characteristics.

### 3) Interpretation of results at the limit of detection

The group underlined that there are different ways of implementing cut-off values in different laboratories. Cut-off values are method and sample specific, therefore it may not be advisable to provide guidance on precise values to be applied. The group suggested, starting from the existing draft prepared by the WG DIR, providing recommendation on how to implement the different cut-off strategies, underlying the factors to be considered when establishing such a decision support system. The new guidance document could also suggest performance tests or provide guidelines for validation of these strategies. It was suggested to generate data and evaluate the different approaches. Participants suggested adding a sample at the LOD level in the CT rounds where laboratories are asked to apply the strategies for their validation.

#### 19. ENGL matters

#### 19.1 Pre-spotted plates, update (S. Rosa & F. Gatto, EURL GMFF)

The main goal of the PSP proof-of concept project was the integration of the PSPs in the routine workflow of official control laboratories. A series of screening PSPs and PSP specific for maize and soy had been distributed to five laboratories. Some of the laboratories have already started the accreditation procedure for the PSP. Among the requirements for accreditation, specificity did not need to be re-investigated and only the LOD needed to be tested. Most of the screening targets had a LOD value close to five copies while the soy and maize PSPs had a partial result close to 20 copies.

The results of the PSP survey and market assessment were also presented. Most of the respondents reported a workload of more than 100 samples analysed per year, showing interested in using PSP and considering the estimated price acceptable given the number of analysis that could be performed.

Dr. Rosa finally presented the demonstration project aimed at testing needs and feasibility of a systematic PSP production/distribution done in-house by the JRC. The results of stability tests (based on accelerated

ageing theory) performed on plates stored at different temperatures demonstrated that the plates were quite stable and can be distributed at room temperature.

20. Scientific and technical session 3

#### 20.1 Practical demonstration on EURL GMFF bioinformatics tools (A. Angers, JRC)

Dr. Angers explained that the increased number of GMOs on the market and the relative wealth and disparity of sources of information demanded the development of bioinformatics decision supporting tools to help defining time and cost-effective routine testing strategies to GMO official laboratories.

The JRC GMO-Matrix tool provides in silico prediction of GMO detection by the EU reference methods included in the GMOMETHODS database. These predictions are not purely based on annotations from public available resources but are based on sequences supplied by the applicants for the GM event under authorisation and stored in the internal CCSIS database. The *in silico* predictions resulted to be quite reliable and did not require heavy investment of human resources as for experimental evaluation.

A pipeline was developed for enriching the CCSIS database with GMO sequences from public resources and patents collections. Dr. Angers carried out a practical demonstration of the JRC GMO-amplicon tool recently released which allows mining and retrieval of GMO sequences from public repositories. An article on the application will be published soon.

21. AOB

None

## 22. DAL ENGL 24<sup>th</sup>

The Secretary reviewed the DAL, available in Annex 3

#### Annex 1: list of participants



EUROPEAN COMMISSION

11TH NRL 682 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country - 22/09/2015 to 23/09/2015

#### Austria

HOCHEGGER RUPERT AGES - Austrian Agency for Health and Food Safety Spargelfeldstr. 191 1220 VIENNA (Austria) tel: +435055532201 fax: +435055532219 E-mail: rupert.hochegger@ages.at PETERSEIL VERENA AGES Austrian Agency for Health and Food Safety SpargelfeldstraĂŸe 191 1220 VIENNA (Austria)

E-mail: verena.peterseil@ages.at

### Belgium

BERBEN GILBERT Centre wallon de recherches agronomiques Chaussée de Namur, 24 5030 GEMBLOUX (Belgium) tel: ++32 81 620363 fax: ++32 81 620388 E-mail: g.berben@cra.wallonie.be

DEBODE FREDERIC Centre Wallon de Recherches Agronomiques chaussee de Namur, 24 5030 GEMBLOUX (Belgium) tel: 003281620351 fax: 003281620388 E-mail: f.debode@cra.wallonie.be

#### Bulgaria

GEORGIEVA TSVETA National Center of Public Health and Analyses 15, Acad Iv.E.Geshov 1431 SOFIA (Bulgaria) tel: + 359 2 80 56 239 E-mail: tzvege@gmail.com

PIRONEVA ALEXANDRA National Center of Public Health and Analyses Acad. Ivan Evst. Geshov 15 blvd 1431 SOFIA (Bulgaria)

E-mail: aleksandra.pironeva@gmail.com

DE LOOSE MARC ILVO Burg. Van Gansberghelaan 115 9820 MERELBEKE (Belgium) tel: 003292722842 fax: 003292722801 E-mail: marc.deloose@ilvo.vlaanderen.be

PAPAZOVA NINA Scientific Institute of Public Health (WIV-ISP) J.Wytsmanstreet 14 1050 BRUSSELS (Belgium) tel: 0032 2 642 5257 fax: 0032 2 642 5292 E-mail: nina.papazova@wiv-isp.be

PETROVA NINA Executive Environment Agency Tzar Boris III blvd 1618 SOFIA (Bulgaria) tel: +359 2 9559011 fax: +359 2 9559015 E-mail: nina\_petrova@eea.government.bg



11TH NRL 882 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country - 22/09/2015 to 23/09/2015

## China

SHI JIANXIN Shanghai Jiao Tong University 800 Dongchuan Road, Minhang District 200240 SHANGHAI (China) tel: 0086-21-34207174 fax: 0086-21-34204869 E-mail: sjianxin@gmail.com YANG LITAO School of lifescience and biotechnology Shanghai Jiao Tong University 800 Dongchuan Road 200240 SHANGHAI (China) tel: 86-21-34207417

E-mail: yylltt@gmail.com

### Croatia

FERENCAK IVANA Croatian National Institute of public Health Rockefellerova 7 10000 ZAGREB (Croatia) tel: +385 1 4863206 fax: +385 1 4863365 E-mail: ivana.ferencak@hzjz.hr

## Cyprus

IOANNIDES IOANNIS Agricultural Research Institute P.O.Box 22016 1516 NICOSIA (Cyprus)

E-mail: ioannide@ari.gov.cy

## Czech Republic

,

KYROVA VERONIKA National Institute of Public Health Palackeho 3a 612 42 BRNO (Czech Republic) tel: +420515577513 fax: +420541211764 E-mail: kyrova@chpr.szu.cz TELLO ANTRI State General Laboratory Kimonos 44 1451 NICOSIA (Cyprus) tel: 0035722809442 fax: 0035722809455 E-mail: atello@sgl.moh.gov.cy

E-mail: ovesna@vurv.cz

OVESNA JAROSLAVA Crop Research Institute Drnovska 507 161 06 PRAGUE 6 - RUZYNE (Czech Republic) tel: +420 233 022 424 fax: +420 233 022 286



11TH NRL 882 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country - 22/09/2015 to 23/09/2015

ZDENKOVA KAMILA UCT Prague Technicka 5 16628 PRAGUE (Czech Republic) tel: +420220445196

E-mail: zdenkovk@vscht.cz

## Denmark

HOUGS LOTTE Danish Vet and Food Administration Soendervang 4 4100 RINGSTED (Denmark) tel: +4572276119

E-mail: hou@fvst.dk

## EUROPEAN COMMISSION

CORBISIER PHILIPPE CIABATTI ILARIA DG Santé Joint Research Centre Retieseweg 111 Rue Breydel 4 1040 BRUSSELS (Belgium) 2440 GEEL (Belgium) tel: 1890 tel: +32 229-67452 fax: 1548 E-mail: Ilaria.CIABATTI@ec.europa.eu

TRAPMANN STEFANIE Joint Research Centre Retieseweg 111 2440 GEEL (Belgium) tel: 1714 E-mail: Stefanie.TRAPMANN@ec.europa.eu

## Estonia

KELVE MERIKE Tallinn University of Technology Akadeemia tee 15 12618 TALLINN (Estonia) tel: +372 6204432

E-mail: merike.kelve@ttu.ee

## Finland

E-mail: Philippe.CORBISIER@ec.europa.eu



## EUROPEAN COMMISSION

11TH NRL 882 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country - 22/09/2015 to 23/09/2015

KALLINEN ANU Finnish Customs Laboratory Tekniikantie 13 02150 ESPOO (Finland) tel: +358403326998

E-mail: anu.kallinen@tulli.fi

#### France

PHILIPP PATRICK SCL - Laboratoire de Strasbourg-Illkirch Chemin du routoir 67400 ILLKIRCH-GRAFFENSTADEN (France) tel: +33388664896 fax: +33388671832 E-mail: patrick.philipp@scl.finances.gouv.fr

#### Germany

DAGAND EMILIE Bundesamt für Verbraucherschutz und Lebensmittelsicherheit Diedersdorferweg 1 12277 BERLIN (Germany) tel: 49 30 18445 8318 fax: 49 30 18445 8399 E-mail: emilie.dagand@bvl.bund.de

HÜBERT PETER Landeslabor Schleswig-Holstein Max-Eyth-Str. 5 D-24537 NEUMÜNSTER (Germany) tel: +49 4321 904-669 fax: +49 4321 904-619 E-mail: peter.huebert@lvua-sh.de

SPECK BRIGITTE Center for Agricultural Technology Augustenberg Neßlerstrasse 23; D-76227 Karlsruhe 43 02 30 D-76217KARLSRUHE (Germany) tel: 0049 721 9468 225 fax: 0049 721 9468 387 E-mail: brigitte.speck@ltz.bwl.de ROLLAND MATHIEU GEVES Rue Georges Morel 49071 BEAUCOUZE (France) tel: +33 (0)241225839

WELLING ANNIKKI

Mustialankatu 3

00790 HELSINKI (Finland)

E-mail: annikki.welling@evira.fi

tel: +358 404812270

fax: +358 295304350

Finnish Food Safety Authority Evira

E-mail: mathieu.rolland@geves.fr

GROHMANN LUTZ

Federal Office of Consumer Protection & Food Safety Mauerstr. 39-42 D-10117 BERLIN (Germany) tel: +49 30 18445 6503

E-mail: lutz.grohmann@bvl.bund.de

## PECORARO SVEN

Bayerisches Landesamt fuer Gesundheit und Lebensmittelsicherheit Veterinaestr. 2 85764 OBERSCHLEISSHEIM (Germany) tel: +49913168085585 fax: +49913168085846 E-mail: sven.pecoraro@lgl.bayern.de

WOLL KARL Landesamt f Verbraucherschutz Konrad-Zuse-Str. 11 66115 SAARBRUECKEN (Germany) tel: ++49(0)151253759401

E-mail: k.woll@lav.saarland.de



11TH NRL 882 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country - 22/09/2015 to 23/09/2015

## Hungary

UJHELYI GABRIELLA National Food Chain Safety Office Mester utca 81. 1095 BUDAPEST (Hungary) tel: +3614563010

E-mail: ujhelyig@nebih.gov.hu

## Italy

BARBANTE ALESSANDRA CRA-SCS, sede di Tavazzano, Laboratorio via Emilia km307 26838 TAVAZZANO (LO) (Italy) tel: +390371761919 fax: +390371760812 E-mail: alessandra.barbante@entecra.it

MARCHESI UGO Ist. Zooprof. Sperim. Lazio e Toscana Via Appia Nuova, 1411 00178 ROMA (Italy) tel: +39 (0)6 79099450 fax: +39 (0)6 79099450 E-mail: ugo.marchesi@izslt.it

TILOCCA MARIA GIOVANNA ISTITUTO ZOOPROFILATTICO SPERIMENTALE DELLA SARDEG via Duca degli Abruzzi 8 07100 SASSARI (Italy) tel: +39 079 2892332 fax: +39 079 2892324 E-mail: mgtilocca@gmail.com

## Japan

KITTA-KOGA KAZUMI National Food Research Institute, National Agriculture and Food Research Organization 2-1-12 Kannon-dai 305-8642 TSUKUBA (Japan) tel: +81-29-838-7369 fax: +81-29-838-7996

DE GIACOMO MARZIA Istituto Superiore di Sanita' viale Regina Elena 299 00161 ROME (Italy) tel: +390649902367 fax: +390649902363 E-mail: marzia.degiacomo@iss.it

PERRI ELENA CRA-SCS sede di Tavazzano, Laboratorio via Emilia Km 307 26838 TAVAZZANO (Italy) tel: +390371761919 fax: +390371760812 E-mail: elena.perri@entecra.it



11TH NRL 882 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country - 22/09/2015 to 23/09/2015

E-mail: kaz@affrc.go.jp

## Latvia

KOVALCUKA LILIJA Institute of Food Safety, Animal Health and Environment "BIOR" Lejupes str. 3 1076 RIGA (Latvia) tel: +371 67620526

E-mail: lilija.kovalcuka@bior.lv

## Lithuania

JURGELEVICIUS VACLOVAS NATIONAL FOOD AND VETERINARY RISK ASSESSMENT INSTITUT, LITHUANIA KAIRIUKSCIO-10 08409 VILNIUS (Lithuania) tel: +37052780459 fax: +37052780471 E-mail: vjurgelevicius@vet.lt

## Luxembourg

MORIS GILBERT national health laboratory 1, rue Louis Rech L-3555 DUDELANGE (Luxembourg) tel: (352) 28100 639

E-mail: gilbert.moris@lns.etat.lu

## Netherlands

LAURENSSE EMILE Netherlands Food and Consumer Product Safety Authority Catharijnesingel 59 3511GG UTRECHT (Netherlands) tel: 00 31 (0)611724886

E-mail: emile.laurensse@vwa.nl

SCHOLTENS-TOMA INGRID RIKILT Wageningen UR PO Box 230 6700 AE WAGENINGEN (Netherlands) tel: 0031 (0)317 480364 fax: 0031 (0)317 417717 E-mail: ingrid.scholtens@wur.nl



11TH NRL 882 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country - 22/09/2015 to 23/09/2015

SLOT MARTIJN RIKILT Wageningen UR Akkermaalsbos 2 6708WB WAGENINGEN (Netherlands) tel: 0317480256

E-mail: martijn.slot@wur.nl

#### Norway

HOLST-JENSEN ARNE Norwegian Veterinary Institute Ullevaalsveien 68 0106 Sentrum OSLO (Norway) tel: +47 2321 6243 fax: +47 2321 6202 E-mail: arne.holst-jensen@vetinst.no

#### Poland

KAMINSKA PATRYCJA

Wojewódzka Stacja Sanitarno Epdemiologiczna in Rzeszów, Regional Laboratory of Genetically Modified Food in Tarnobrzeg

1 Maja 5 39-400 TARNOBRZEG (Poland)

E-mail: gmo@wsse.rzeszow.pl

#### PUZIO HANNA

Instytut Zootechniki Panstwowy Instytut Badawczy Krajowe Laboratorium Pasz Pracownia w Szczecinie Zubrow 1 71-617 SZCZECIN (Poland) tel: +48914223850 fax: +48914223850 E-mail: hanna.puzio@gmail.com

ZURAWSKA-ZAJFERT MAGDA PLANT BREEDING AND ACCLIMATIZATION INSTITUTE Radzikow 05-870 BLONIE (Poland)

E-mail: m.zurawska@ihar.edu.pl

Portugal

LINKIEWICZ ANNA Plant Breeding and Acclimatization Institute Radzikow 05-870 BLONIE (Poland) tel: +48227334517 fax: +48227334681 E-mail: a.linkiewicz@ihar.edu.pl

#### SIERADZKI ZBIGNIEW

National Veterinary Research Institute AI. Partyzantow 57 24-100 PULAWY (Poland) tel: +48 81 889 30 80 fax: +48 81 886 25 95 E-mail: zbigniew.sieradzki@piwet.pulawy.pl



11TH NRL 882 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country - 22/09/2015 to 23/09/2015

ALEIXO CRISTINA INIAV estrada do paço do lumiar, nº22, edifícioS 1649-038 LISBOA (Portugal) tel: 00351217127130 fax: 00351217127162 E-mail: cristina.aleixo@iniav.pt

## Romania

DUMITRESCU DIANA Institute of Diagnosis and Animal Health 63, Dr. Staicovici Street, District 5 050557 BUCHAREST (Romania) tel: +40374322013 fax: +40214113394 E-mail: diana.dumitrescu@idah.ro

## Slovak Republic

BALEKOVÁ SILVIA State Veterinary and Food Institute Janoskova 1611/58 026 01 DOLNY KUBIN (Slovak Republic) tel: +421435837153 fax: +421435868207 E-mail: balekova@svpudk.sk

## Slovenia

DEMŠAR TINA National Institute of Biology Vecna pot 111 SI1000 LJUBLJANA (Slovenia) tel: + 386 59 232 818 fax: + 386 1 257 38 47 E-mail: tina.demsar@nib.si

ŠTEBIH DEJAN National Institute of Biology Vena pot 111 1000 LJUBLJANA (Slovenia) tel: + 386 59 232 822 fax: + 386 1 257 38 47 E-mail: dejan.stebih@nib.si FEKETOVA MIROSLAVA Central Control and Testing Institutute of Agriculture Hanulova 9/A 841 01 BRATISLAVA (Slovak Republic) tel: +421 2 64462089 fax: +421 2 64462089 E-mail: miroslava.feketova@uksup.sk

DOBNIK DAVID National institute of biology Vecna pot 111 1000 LJUBLJANA (Slovenia) tel: +386 59 232 819

E-mail: david.dobnik@nib.si



EUROPEAN COMMISSION

11TH NRL 882 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country 22/09/2015 to 23/09/2015

## Spain

GIL SILVIA CENTRO NACIONAL DE ALIMENTACION Ctra POZUELO-MAJADAHONDA KM 5.100 MAJADAHONDA (MADRID) 28220 MADRID (Spain) tel: +034 913380888 MARTIN LUIS Laboratorio Arbitral Agroalimentario Calle Aguaron, 13 28023 MADRID (Spain) tel: 34913474960 fax: 34913474941 E-mail: Imartinm@magrama.es

#### Sweden

E-mail: sgil@msssi.es

ERIKSSON RONNIE National Food Agency Hamnesplanaden 5 Box 622 UPPSALA (Sweden) tel: +4618174317 fax: +4618105848 E-mail: Ronnie.eriksson@slv.se

## Switzerland

PRADERVAND NICOLAS Agroscope - Institute for Livestock Sciences - Research division Animal Feed Analytics Tioleyre 4, P.O. Box 64 1725 POSIEUX (Switzerland) tel: +41584667216

E-mail: nicolas.pradervand@agroscope.admin.ch

## Turkey

AYDIN ERARSLAN FATMA NATIONAL FOOD REFERENCE LABORATORY Fatih Sultan Mehmet Bulvar No:70 Tarm Kampüsü 06171 ANKARA (Turkey) tel: +9003123274181 fax: +9003123274156 E-mail: aydinfatos8585@gmail.com

#### MARTLI AYTÜL

Ankara Food Control Laboratory (ENGL member) Gayret Mahallesi Sehit Cem Ersever Cad. No:12 Yenimahalle 06170 ANKARA (Turkey) tel: +903123150089 fax: +903123157934 E-mail: aytulm@gmail.com

### Ukraine



11TH NRL 682 2004 WORKSHOP AND ENGL 24TH PLENARY MEETING Participants Details by Country - 22/09/2015 to 23/09/2015

BLUME YAROSLAV Institute of Food Biotechnology and Genomics Osipovskogo str., 2a 04123 KIEV (Ukraine) tel: +380 44 437 3777 fax: +380 44 437 3777 E-mail: cellbio@cellbio.freenet.viaduk.net

## United Kingdom

BURNS MALCOLM LGC Queens Road TW11 0LY TEDDINGTON (United Kingdom) tel: +44 (0)208 943 7000 fax: +44 (0)208 943 2767 E-mail: Malcolm.Burns@lgcgroup.com

PEARSON KAREN SASA- Scottish Government Roddinglaw Road EH12 9FJ EDINBURGH (United Kingdom) tel: +44 131 244 8853

E-mail: karen.pearson@sasa.gsi.gov.uk

HIRD HEZ Fera Sand Hutton YO41 1LZ YORK (United Kingdom) tel: 00 44 1904462585 fax: 00 44 1904 462111 E-mail: hez.hird@fera.gsi.gov.uk

## Annex 2: list of participants



EUROPEAN COMMISSION JOINT RESEARCH CENTRE Institute for Health and Consumer Protection Molecular Biology and Genomics Unit



## 11<sup>th</sup> WORKSHOP OF GMO NATIONAL REFERENCE LABORATORIES REGULATION (EC) No 882/2004 and 24<sup>th</sup> ENGL PLENARY MEETING

22-23 September 2015, Ispra, Italy

Final Draft Agenda

## Day 1: 22<sup>nd</sup> September 2015

Session: National Reference Laboratories and Official Control

AP	Time	Topic	Documents/comments
1 2 3	9:00	<ul> <li>Welcome and approval of the agenda</li> <li>Approval of the 10<sup>th</sup> workshop report</li> <li>Tour de table: issues/opinions from NRLs (each NRL is invited to report orally)</li> </ul>	Draft agenda Report Oral input from NRLs
	10:45	Coffee Break	
4	11.15	<ul> <li>Preliminary results of EURL GMFF survey on reference methods used by NRLs (L. Bonfini, EURL GMFF)</li> </ul>	Presentation
5		<ul> <li>Update on comparative testing activities (W. Broothaerts, EURL GMFF)</li> </ul>	Presentation
6		<ul> <li>Discussion on NRLs training needs specific to their function as NRLs</li> </ul>	Oral input from NRLs
7		<ul> <li>AOB and conclusions</li> </ul>	
	12:45	End of session NRLs	
		Buffet lunch	

AP	Time	Topic	Documents
8	14:00	<ul> <li>Welcome by Directors IHCP and IRMM and</li> </ul>	
		by G. Van den Eede	
9		<ul> <li>Approval of the Agenda</li> </ul>	Draft agenda
10		<ul> <li>Approval Report 23<sup>rd</sup> ENGL plenary</li> </ul>	Report
11		<ul> <li>Dynamic Action List (DAL) of 23<sup>rd</sup> ENGL</li> </ul>	DAL ENGL23
12		<ul> <li>Outcome of the 29<sup>th</sup> ENGL SC meeting (June</li> </ul>	Report SC29
		2015)	
13		<ul> <li>Update from SANTE (I. Ciabatti, SANTE)</li> </ul>	
14		Progress reports ENGL working groups:	
14.1		<ul> <li>AG SMV (Advisory Group on Selection of</li> </ul>	
		Methods for Validation)	
14.2		<ul> <li>WG DIR (Detection Interpretation Reporting)</li> </ul>	
14.3		<ul> <li>WG Seed Testing</li> </ul>	
14.4		<ul> <li>WG Update of Methods</li> </ul>	
14.5		<ul> <li>WG digital PCR</li> </ul>	
14.6		<ul> <li>WG Unit of Measurement</li> </ul>	
	15:30	Coffee Break	
15	16:00	Scientific and technical session 1	
15.1		<ul> <li>The application of isothermal nucleic acid</li> </ul>	Presentation
		amplification techniques in GMO analysis. (L.	
150		Yang, PRC)	Description
15.2		<ul> <li>Multiplex quantification of individual GM</li> <li>swarts has desplot disited DCB (Dr. D. Debails)</li> </ul>	Presentation
		National Institute of Biology, Linkling)	
15.2		<ul> <li>Event-specific multipley PCP - screeping for</li> </ul>	Presentation
15.5		six GM southean lines (L. Grohmann, DF)	i resentation
	17:30	End of day 1	
	19:30	Networking dinner at Hotel Europa, Ispra	

## Day 2: 23<sup>rd</sup> September 2015

AP	Time	Topic	Documents
16	09:15	Scientific and technical session 2	
16.1		<ul> <li>Risk-based inspection of import flows</li> </ul>	Presentation
		(Martijn Slot, MSc, RIKILT Wageningen UR,	
		NL)	
16.2		<ul> <li>Detection of GM fish (F. Debode, CRA-W)</li> </ul>	Presentation
16.3		<ul> <li>Wheat reference genes: seeking a suitable</li> </ul>	Presentation
		taxon-specific module for GMO analysis (U.	
		Marchesi, IZSLT, Italy)	
	11:00	Coffee Break	
17	11:30	Break-out Groups	
		<ol> <li>DNA extraction (follow-up)</li> </ol>	Mandate
		<ol><li>Multi-target methods</li></ol>	Mandate
		3) Interpretation of results at the limit of	Mandate
		detection	
	12:45	Buffet lunch	
18	14:30	Reports of break-out groups and discussion	
19	15:30	ENGL matters	
19.1		<ul> <li>Pre-spotted plates, update (S. Rosa &amp; F. Gatto,</li> </ul>	Presentation
		EURL GMFF)	
	15:45	Coffee Break	
20	16:15	Scientific and technical session 3	
20.1		<ul> <li>Practical demonstration on EURL GMFF</li> </ul>	
		bioinformatic tools (A. Angers, JRC)	
21		AOB	
22	16:45	DAL ENGL 24 <sup>th</sup>	
	17:00	End of meeting	

## Annex 3: action list

<sup>24rd</sup> ENGL PLENARY ACTION LIST 23/09/2015				
ACTIONS	Poop -	Timoling	Statue	Comments
ACTIONS	Kesp.	Timeline *	Status	Comments
ENGL CONSORTIUM AGREEMENT				
Make available on ENGLNet report and presentations of 24th ENGL Plenary	SEC	Oct-15	Open	
Set dates for the 25th plenary ENGL	SEC + SC	31/10/2015	Open	
ENGL WORKING GROUPS				
WG Detection Interpretation Reporting (DIR)				
Publish final report	SEC	30/10/2015	Open	
WG UoM Organise and meeting	850		Onen	16 17 November 2015
organise zhu meeting	SEC	30/09/2015	Open	10-17 November 2015
				No
Organise 2nd meeting	SEC	30/09/2015	Open	Nov or Dec 2015
WG UpMeth				
Organise 2nd meeting	SEC	30/09/2015	Open	End October 2015
AG Method Selection for Validation	050			
Organise next meeting	SEC	30/09/2015	Open	November/December 2015
OTHERS				
Report on EURL survey on reference methods	SEC	31/12/2015	Open	
Provide table on DNA extraction methods	SEC	15/10/2015	Open	Send table by email. Webform ? Deadline for replies end of November
Send SOP for PCR inhibition	SEC	30/09/2015	Open	Proposed by BOG on DNA extraction
Establishment of "cut-off"	EURL/ENGL	30/11/2015	Open	follow-up BOG group, reflect on how to produce data
Postion document identyfying issues with 619 and suggesting possible solutions, including approach for MU	EURL/ENGL	31/01/2016	Open	electronic forum? WG?
Reactivate WG Verification	SEC	30/09/2015	Open	BOG multitarget suggestion, criteria for multiplex methods