Announcement

EUPT-AO19 (2024)

European Proficiency Test on Pesticides in Food of Animal Origin and Commodities with High Fat Content

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Pesticides in Beef meat

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European Union Reference Laboratory for Pesticides in Food of Animal Origin and Commodities with High Fat Content

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QCG: Quality Control Group AG: Advisory Group

Introduction

The European Union Reference Laboratory for Pesticides in Food of Animal Origin and Commodities with High Fat Content in Freiburg, Germany, announces its 19th proficiency test (PT), thus enabling again each participating laboratory to assess its analytical capability by comparing its results with the assigned values.

The matrix will be **beef meat**. The Proficiency test item (PT item) will be spiked with selected analytes of interest. They are included in the list of maximum residue levels in Commission Regulation 396/2005 and most of them also in the list of compounds to be analysed in the 2024-26 Multiannual Coordinated Control Programme (MACP, Commission Implementing Regulation (EU) 2023/731 and the Working Document SANCO/12745/2013 rev.14).

The pesticide target list in the annex of this document consists of pesticides from former EUPT lists and in addition few pesticides considered to be relevant for the matrix beef. Some pesticides are marked to be analysed on voluntary basis. For sufficient scope it is necessary

- to analyse at least 90 % of the mandatory analytes from the list in the annex and
- to detect at least 90 % of the analytes present in the test item.

The voluntary pesticides will be statistical treated as the mandatory pesticides but their results will not influence the categorising in A and B.

The PT item will be dispatched on Monday, 06 May 2024. Participating laboratories may use any analytical method of their choice. Results are to be reported to the EURL AO within the stipulated deadline. After receipt of the results, the EURL AO will carry out a statistical evaluation of the submitted data and all quantitative laboratory results will be assessed by means of z-scores. Thereafter, a report will be sent to the participating laboratories together with a certificate of participation.

Objectives

The objectives of this proficiency test are

- to assess the inter laboratory consistency of results from the analyses of pesticides in samples of animal origin and
- to provide a quality assurance assessment of the NRLs and the official laboratories within the EU.

Participants

According to Art. 101 of Reg. (EU) 625/207 and Art. 28 (3) of Reg. (EC) 396/2005, participation is mandatory for all laboratories selected as NRL for Pesticides in Food of Animal Origin and Commodities with High Fat Content and for all official laboratories undertaking the analysis of these commodities for the official control on pesticide residues. If your laboratory is obliged to participate and you do not participate in this PT, the Commission expects an explanation for non-participation. Based on the data stored in the Lab-Network Database about the commodity scope and the status of each lab, each laboratory is classified as obliged or not obliged to take part in this PT. This information can also be found on the EUPT-registration page. Errors should be reported to the corresponding NRL and to eurl-pesticides@cvuafr.bwl.de.

Laboratories are requested to enrol for participation within the EUPT-registration website (**www.eupt-registration.eu**) which is going to be used for all EUPTs performed by the EURLs for pesticide residues. The registration period will last from **15 December 2023 to 01 April 2024**. Participants will be able to re-enter the registration website and change/update the entries (e.g. addresses for shipment and invoice, contact data). Deadline for these changes is **26 April 2024.**

After the end of the registration deadline, the participants will receive their username and password for DTU EUPT-Webtool (EUPT-AO19) as well as the latest EUPT-AO-Webtool guideline via e-mail.

IMPORTANT: Before the shipment of the samples, participating laboratories have to select **CAREFULLY** the analytes from the target list being part of their analytical scope via DTU EUPT-Webtool (EUPT-AO19). Deadline for any changes in scope will be one working day before the shipment of samples (**03 May 2024**). After this deadline neither participants nor the EURL is able to change the scope. **The EURL will not accept any changes sent by email.** If scope selection is not performed, all mandatory analytes will be automatically selected.

Proficiency test item

The PT item consists of one unit of beef meat with spiked analytes of interest. The EURL AO produces the PT material at a local school for butchers and spikes the analytes of interest. The PT item will be preserved and the containers will be stored chilled until shipment. PT items will be shipped under ambient conditions. Approx. **100 g** of the PT item will be supplied. Please note that for this PT no blank (non-spiked) sample will be provided!

Analytical parameters and reporting of results

The PT item may contain any analyte from the lists given in the annexes. For each of the analytes a specific minimum required reporting level (MRRL) is given. Selected analytes were added to the beef at relevant concentrations. Single results of each analyte detected shall be reported in **mg/kg**, rounded to three significant figures (e.g. 0.0581, 0.251 or 1.35). Analyte concentrations below the individual reporting levels (RL) shall be considered as “not detected” and no figures shall be typed into the database.

Further instructions for analysis and reporting

Laboratories should

- store the PT item cooled (at 4 - 7°C) until analysis,
- mix the whole PT item carefully to make sure that the test item is homogeneous,
- suggestion of EURL: portion the content of the PT item into subsamples and store unused portions cooled (at 4 - 7°C) for later analysis,
- use their own standard operating procedures for extraction, clean-up and analytical measurement,
- use their own reference standards for identification and quantification,
- provide a detailed method description and any additional information.

Sample receipt forms will be made available in the DTU EUPT-Webtool (EUPT-AO19) when the PT item is dispatched. Reporting forms will be accessible after the receipt of the PT item has been confirmed. There will be **no extension of the deadline**. Results should be submitted by using the DTU EUPT-Webtool (EUPT-AO19) before the deadline. As laid down in Regulation 2017/625, NRLs are responsible for evaluating and improving their OfL network. For this reason, the EURL AO will confide the laboratory codes of OfLs to their NRLs together with the final report. On request of NRLs the organisers will confide the laboratory codes one month after dispatch of the preliminary report.

Statistical evaluation of results

EUPT AO 19 is one of four proficiency tests organised by the EURLs for pesticide residues as part of their work programmes for 2024. Thus, the performance and the evaluation of EUPT-AO19 will be similar to those that will be used in the other EUPTs.

The performance of each laboratory will be evaluated and presented in an anonymous format in a report written after the final evaluation. The organisers will calculate the mean, robust mean, median and standard deviation for each spiked analyte. The procedure will follow the General Protocol for EU proficiency Tests for Pesticide Residues in Food and Feed and the IUPAC/ISO/AOAC International Harmonised Protocol for the Proficiency Testing of Chemical Analytical Laboratories (see also ISO 13528). The evaluation will be performed in close cooperation with the Scientific Committee for EUPTs. First, pre-assigned values will be calculated taking into account the results of all participants. At the meeting of the Scientific Committee for EUPTs (June 2024) the pre-assigned values will be discussed. The pre-assigned values will be confirmed or recalculated after omitting results of laboratories according to the suggestions of the Scientific Committee for EUPTs.

Time schedule

Actor	Activity	Date
EURL	Preliminary announcement matrix beef meat at Joint Workshop in Stuttgart	20 October 2023
EURL	First information supplied to laboratories and call for participation	Beginning of February 2024
Participant	**Registration** via EUPT website	**15 December 2023 – 01 April 2024**
Participant	**Scope selection** via EUPT webtool	**22 April – 03 May 2024**
Participant	Proof of shipment address in EURL-Datapool	Ending 26 April 2024
EURL	**Dispatch of test material**	**06 May 2024**
Participant	Confirmation of test material receipt	07 – 13 May 2024
Participant	**Deadline for reporting of test results**	**07 June 2024***
Participant	Deadline for reporting of additional method information (no changes of reported results possible)	14 June 2024
EURL	Deadline for preliminary report	09 August 2024
EURL	Dispatch of the final report as pdf-file	Approx. end of 2024

* Please make sure to report your results on time as there will be **no extension of the deadline.**

Participation fee

There is a **fee of EUR 200.00** for shipping and handling to participants within the European Union and EFTA countries (**including NRLs**). Fees for participants from **other countries** are **EUR 400.00**. An invoice will be sent together with the samples. Please also take notice of two other studies from EURL AO that will be shipped together with EUPT AO 19. Please check the website for further details: https://www.eurl-pesticides.eu/docs/public/home.asp?LabID=300&Lang=EN

Confidentiality

In each EUPT, the participating laboratories are given a unique code, initially only known to themselves and the organisers. In the final EUPT report, the list of participating laboratories will not be linked to their laboratory codes. The organisers are allowed to provide NRLs with the EUPT-AO19 codes of all OfLs in their respective networks. The organisers further reserve the right to share EUPT results and codes with other EURLs for pesticides residues.

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Annex 1

EUPT-AO19 Pesticide target list of mandatory analytes

Table A1: List of 56 **mandatory** analytes and minimum required reporting levels (MRRL) in EUPT AO 19 (PT item beef meat). Results shall be rounded to three significant figures (e.g. 0.0581, 0.251 or 1.35)

Analyte	MRRL (mg/kg)	Analyte	MRRL (mg/kg)
Aldrin	0.010	Fipronil	0.005
Azinphos-methyl	0.010	Fipronil sulfone	0.010
Bifenthrin (sum of isomers)	0.010	Heptachlor	0.010
Chlordane, cis-	0.010	Heptachlorepoxid, cis-	0.005
Chlordane, trans-	0.010	Heptachlorepoxid, trans-	0.010
Chlorfenvinphos	0.010	Hexachlorcylcohexane (HCH), alpha-isomer	0.010
Chlorpyrifos(-ethyl)	0.010	Hexachlorcylcohexane (HCH), beta-isomer	0.010
Chlorpyrifos-methyl	0.010	Hexachlorcylcohexane (HCH), gamma-isomer (Lindane)	0.010
Cyfluthrin (sum of isomers)	0.010	Hexachlorobenzene (HCB)	0.010
Cypermethrin (sum of isomers)	0.010	Indoxacarb (sum of isomers)	0.010
DDD, p,p´- (TDE)	0.010	lambda-Cyhalothrin (sum of isomers)	0.010
DDE, p,p´-	0.010	Malathion (parent only)	0.010
DDT, o,p´-	0.010	Methoxychlor, 4,4´-	0.010
DDT, p,p´-	0.010	Nitrofen	0.010
Deltamethrin (cis-isomer)	0.010	Oxychlordane	0.010
Diazinon	0.010	Parathion(-ethyl)	0.010
Dieldrin	0.010	Parathion-methyl (parent only)	0.010
Endosulfan, alpha-	0.010	Pendimethalin	0.010
Endosulfan, beta-	0.010	Permethrin (sum of isomers)	0.010
Endosulfan-sulfate	0.010	Phosmet (parent only)	0.010
Endrin	0.010	Phoxim	0.010
Famoxadone	0.010	Pirimiphos-methyl	0.010
Fenthion oxon	0.010	Profenofos	0.010
Fenthion oxon sulfone	0.010	Pyrazophos	0.010
Fenthion oxon sulfoxide	0.010	Quintozene (parent only)	0.010
Fenthion sulfone	0.010	Resmethrin (sum of isomers)	0.010
Fenthion sulfoxide	0.010	Tecnazene	0.010
Fenvalerate/Esfenvalerate (sum of RR, SS, RS & SR isomers)	0.005	Vinclozolin (parent only)	0.010

Annex 2

EUPT-AO19 Pesticide target list of voluntary analytes

Table A2: List of 48 **voluntary** analytes and minimum required reporting levels (MRRL) in EUPT AO 19 (PT item beef meat). Results shall be rounded to three significant figures (e.g. 0.0581, 0.251 or 1.35)

Analyte	MRRL (mg/kg)	Analyte	MRRL (mg/kg)
Benzovindiflupyr	0.010	BTS 44595 (Prochloraz metabolite)	0.010
Bixafen (parent only)	0.010	BTS 44596 (Prochloraz metabolite)	0.005
Bixafen-desmethyl	0.010	Prothioconazole-desthio	0.010
Boscalid (parent only)	0.010	Spinosad(1)	0.010
Boscalid (hydroxy metabolite 2-chloro-N-(4′-chloro-5-hydroxybiphenyl-2-yl)nicotinamide, free phenol, only)	0.010	Spinosyn A(2)	0.010
Carbendazim (Carbendazim only)	0.010	Spinosyn D(2)	0.010
Coumatetralyl	0.010	Spiroxamine (parent only, sum od isomers)	0.010
Chlordecone	0.010	Sulfoxaflor (sum of isomers)	0.010
Chlorpropham (parent only)	0.010	tau-Fluvalinate (sum of isomers)	0.010
Cyproconazole	0.010	Tebuconazole	0.010
Didecyldimethylammonium chloride (DDAC)	0.010	Hydroxy-Tebuconazole (free phenol, only)	0.010
Epoxiconazole	0.010	Tetraconazole (sum of isomers)	0.010
Etofenprox	0.010	Thiacloprid	0.010
Fenpropidin (parent only)	0.010	Thiophanate methyl	0.010
Fenpyrazamine	0.010	Mefentrifluconazole	0.010
Fenpropimorph (parent only)	0.010	Metconazole (sum of isomers)	0.010
Fluopyram	0.010	Molinate	0.010
Fluopyram benzamide	0.010	Oxadiargyl	0.010
Fluquinconazole	0.010	Oxasulfuron	0.010
Flusilazole (parent only)	0.010	Oxyfluorfen	0.010
Metaflumizone (sum of isomers)	0.010	Picolinafen	0.010
Penflufen (sum of isomers)	0.010	Propaquizafop (parent only)	0.010
Penthiopyrad	0.010	Pyraclostrobin	0.010
Prochloraz (parent only)	0.010	Quinoclamine	0.010

(1) Results for Spinosad should be reported either if individual standards for Spinosyn A and D or a mixture of Spinosyn A and D are used for quantification.

(2) Results for Spinosyn A or D should be reported, if the individual standards were used for quantification.