

EUPT-FV-SC06 SPECIFIC PROTOCOL

European Union Proficiency Test for Pesticide Residues in fresh chili pepper (2022)

Introduction

This protocol is complementary to the General Protocol of EU Proficiency Tests (EUPTs) for Pesticide Residues in Food and Feed (9th Edition). This Proficiency Test is organised by the EURL for Pesticide Residues in Fruit and Vegetables covering Multiresidue Methods (MRM) of analysis.

Test item

This proficiency test is based on the analysis of **chili pepper** containing pesticide residues. The test item will consist of **chili pepper homogenate**.

The test item will be homogenised and sub-sampled into coded bottles. Ten of those bottles containing the test item will be chosen randomly and analysed to check for homogeneity.

The test item will be stored frozen (-20°C) prior to shipment to participants.

Three bottles, again chosen randomly, will be analysed by the Organiser over a period of time to confirm the stability of the pesticides in the test item (firstly, when the test items are shipped, then a few days after the receipt deadline for participants' results).

No blank material will be provided.

Steps to follow

This Proficiency Test will be made up of the following steps:

1. **Participation in this proficiency test remains on a voluntary basis.** To participate, each laboratory must complete the Application Form, uploaded in the EURL-FV webpage, before the deadline stipulated on the Calendar. The participants will also receive the Target Pesticide List, containing the Minimum Required Reporting Limits (MRRLs). Given the limited material available, the registration forms will be accepted on a first come first served basis.

2. Laboratories will then receive an e-mail confirming their participation in this exercise and assigning them each a Laboratory Code.
3. The sample delivery will be 350 euros for EU national reference laboratories and EU official laboratories for pesticide residues and 450 euros for the rest of laboratories.
4. The sample will be delivered to the participant laboratories on November 28th 2022. The Excel file to report the results will be uploaded to the EURL-FV webpage.
5. The deadline for submitting the results of this proficiency test is 9th January 2023.
6. The Organiser will evaluate the results at the end of the proficiency test, once the deadline for the receipt of results has passed. The Organiser will upload an electronic version onto the EURL-FV website and will send the electronic copy of the Final Report to each participant laboratory. This report will include information regarding the design of the test, the homogeneity and stability results, a statistical evaluation of the participant's results as well as graphical displays of the results and any conclusions. Further relevant information considered to be of value may also be included.

Amount of Test Item

Participants will receive:

- Approximately 200 g of chili pepper homogenate containing pesticide residues.

Shipment of Test item

The shipment of the test item will be on 28th November 2022. The Organiser will try to ensure that all the packages arrive on the same day at each laboratory. An information message will be sent out by e-mail before shipment. Laboratories must make their own arrangements for the receipt of the package. They must inform the Organiser of any public holidays in their country/city during the delivery period given in the calendar, as well as making the necessary arrangements for receiving the shipment, even if the laboratory is closed.

Advice on Test item Handling

Once received, the test item should be stored deeply frozen (-18°C or less) prior to analysis thus avoiding any possible deterioration/spoilage. The test item should be mixed thoroughly before taking the analytical portion(s).

All participants should use their own routine standard operating procedures for extraction, clean-up and analytical measurement and their own reference standards for identification and quantification.

Test item Receipt

If any laboratory has not received the test item by 2nd December 2022, they must inform the Organiser by e-mail (cferrer@ual.es)

Submission of results:

Once the laboratory has analysed the test item and is ready to submit their data, they must enter their results in the Excel file provided by the Organisers and send it to the following e-mail address: cferrer@ual.es.

All analyte concentrations must be expressed in mg/kg together with the associated recovery expressed as a percentage.

The number of significant figures should be based on the guidelines provided in SANTE/11312/2021. Additional significant figures may be recorded for the purpose of statistical analysis. Please bear this in mind when reporting data:

- Residue levels above the reporting level and < 10 mg/kg should be rounded to two significant figures.
- Residue levels ≥ 10 mg/kg may be rounded to three significant figures or to a whole number.

Results should not be reported where a pesticide was not detected or was detected below the laboratory's LOQ. In both cases, this will be considered as 'ND' (Not Detected). If a pesticide was not sought, it will be considered as 'NA' (Not Analysed). The actual results/residue levels measured must be reported as numbers.

Further instructions on how to fill in the Excel file will be provided in the same file.

False Negatives

After the receipt of results, participant laboratories that have reported that they sought a pesticide present in the test item but did not find it (false negative) will be asked via e-mail about the analytical method used to determine that specific pesticide.

Calendar

ACTIVITY	DATE
Registration period	21 st October 2022- 7 th November 2022
Specific Protocol published on the Web site.	14 th November 2022 at the latest
Sample distribution.	28 th November 2022
Deadline for receiving results	9 th January 2023
Preliminary Report: (containing preliminary assigned values and z scores)	February 2023
Final Report distributed to the Laboratories.	August 2023

Cost of test item shipment.

The sample delivery will be **350 € for EU National Reference Laboratories and EU Official Laboratories and 450 € for the rest of laboratories.** Regarding payment procedures, each laboratory can specify their details and invoice requests when applying for the test.

Please, do not pay for this EUPT until we send you the invoice.

Remember to include your Laboratory Code in the subject of the bank transfer.

Payment details are as follows:

BANK NAME: CAJAMAR - Caja Rural Sociedad Corporativa de Crédito

BANK ACCOUNT HOLDER: Universidad de Almeria

BANK ADDRESS: Office Number 990. Universidad de Almeria. Spain

IBAN: ES0730580130172731005000

SWIFT: CCRIES2A

REFERENCE: Invoice No. or Lab Code

Contact information

The official organising group details are as follows:

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Organising team (e-mails and phone no.s):

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