EUPT-QUAL18 SPECIFIC PROTOCOL

European Union Qualitative Proficiency Test for Pesticide Residues in Fruits and Vegetables (2026)

Introduction

This protocol is complementary to the General Protocol for EU Proficiency Tests (EUPT) dealing with Pesticide Residues in Food and Feed. This Proficiency Test is organised by the EURL for Pesticide Residues in Fruits and Vegetables.

The aim of this test is to evaluate laboratory capability for detecting and identifying unexpected pesticides at levels at, or above 0.005 mg/kg – included in and/or in addition to the laboratories' quantitative methods used for frequently detected pesticides. A second aim is to encourage official laboratories to extend the scope of their methods in a cost-effective way, by using the different MS instruments/software and methods available (whether old or new).

The evaluation of this PT will be based on **qualitative information**, although an **estimated concentration** can be reported for those pesticides that are detected, **only for informative purposes**. A target pesticide list will not be provided.

Test item

This proficiency test is based on the analysis of pesticide residues in **APPLE**. Organic apples were purchased from a specialised organic market in Almería. **Apples were milled with 1 % of ascorbic acid in order to prevent oxidation and spiked with the analytical standards of the pesticides.** All the material was homogenised and packed in plastic bags. Once frozen, the material was milled again, and sub-sampled into polyethylene bottles that had previously been coded.

The stability tests will be carried out by the EURL-FV laboratory at the University of Almería (accredited under ISO/IEC 17025 by the Spanish accreditation body, ENAC). Shortly before the shipment of the PT item, three bottles that are stored in the freezer at -20°C will be chosen randomly and stored in a -80°C freezer. After the deadline for reporting results, those three bottles stored at -80°C, together with three other bottles that are stored in the freezer at -20°C and will be chosen randomly will be analysed by duplicate.

Moreover, regarding the stability of the sample arriving not completely frozen, a duplicate analysis of three bottles reproducing the delivery conditions that the samples

experienced for 48 hours will be performed. Laboratories could therefore be sufficiently confident in accepting the treated test item even if it was not completely frozen.
These results will not be included in the statistical analysis of the proficiency test. The aim is solely to check pesticide stability during the shipping process and for the duration of the proficiency test.

Steps to follow

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

1. To participate, each laboratory must complete the Application Form online, available on the EURL-FV Web page, before the deadline stipulated on the calendar.
2. Laboratories will then receive an e-mail confirming their participation in this exercise, assigning them a unique Laboratory Code. With this code, laboratories will fill in an excel file including their results.
3. The sample delivery will be free of charge to those laboratories already participating in **EUPT-FV28**. For those who are not **EUPT-FV28** participants, please see **cost for shipment of the test item** for further details. **Payments without an Invoice Number to identify them will not be considered paid.**
4. When the participant laboratories receive the test item (and not before), they must fill in the "sample reception form" or send an e-mail to omalato@ual.es to inform the Organiser that they have accepted the test item. If no test item has been received by **19th January 2026**, please contact the Organiser by e-mail (omalato@ual.es).
5. The participating laboratories must respect the deadline for submitting the results. Results must be reported using an excel file: **Form 1 - Results** within 72 hours after the arrival of the test item, and this excel file must be sent to omalato@ual.es before the 72 h deadline. If this deadline were during the weekend, it would be postponed to the next working day.
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 prepare a Preliminary Report that will be sent to the participants and uploaded to the website to show the pesticides reported. After the revision of all the data by the Scientific Panel, a Final Report will be prepared, and the organiser will upload an electronic version on the EURL-FV website. This report will include information regarding the design of the test, the homogeneity and stability test results, an evaluation of the participant's results as well as graphical displays of the results and any conclusions. Any other relevant information considered of value may also be included.

Amount of PT Item

Participants will receive:

- Approximately **200 g of apple** test item spiked with pesticides.

Shipment of PT Items

All PT items will be frozen and packed in polystyrene boxes surrounded by dry ice and packed into cardboard boxes.

The shipment of the PT items will be carried out over a one-week period from the **12th January 2026**. The Organiser will try to ensure that all the packages arrive on the same day to each laboratory. An information message will be sent out by e-mail the day of 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.

The Organisers will not take the responsibility for a parcel if it is retained at customs.

Advice on Test Item Handling

Once received, the test item should be stored deeply frozen (-18°C or less) prior to analysis to avoid 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.

Test Item Receipt

Once the laboratory has received the test item, the Organiser must be notified filling in the "sample reception form" available in our test webpage, or by e-mail to omalato@ual.es indicating the date of receipt, and acknowledging its acceptance. If the laboratory does not inform the Organiser by 19th January 2026 (at the latest) stating that no sample has been received, the Organiser will assume that the test item has been received and accepted following the shipment company indications.

Form 1 – Results

The evaluation of this PT will be based on qualitative information, although an estimated concentration will be requested for those pesticides that are detected, only for informative purposes.

It has been decided by the Quality Control Group, and based on the received questionnaires, that a target pesticide list will not be provided.

Laboratories must fill in their results in "Results Form" (an excel file).

On this form, the laboratory should report the name of each of the pesticides detected. Each pesticide may be reported more than once if it has been detected by more than one method or identification criteria, as long as details of each method used are also provided.

Information on the parameters and/or criteria used for detecting and reporting the pesticides found will be requested, such as deviation from expected retention time, and MS identification details.

The idea is to ascertain if the methods are used in routine or just specifically for this test and if the identification is undertaken manually or automatically. Moreover, the range over which the method operates will be required (the concentration range, - the minimum and maximum level of the screening method that is used to detect pesticides)

Information **must be sent up to 72 hours after sample arrival** in the laboratory. After the deadline, results submission and/or changes to the results form will no longer be possible.

EUPT-QUAL18 CALENDAR

Activity	Date
Receiving Application Form from invited laboratories	22nd Oct – 28th Nov 2025
Specific Protocol published on the Web site	22nd Dec 2025 at the latest
Sample distribution	12th Jan 2026
Deadline for receiving results: Fill in "Results form	72 hours after receiving the sample
Preliminary Report	March 2026
Final Report distributed to the Laboratories	September 2026

Cost for shipment of the test item

Only those laboratories not participating in **EUPT-FV28** will have to pay the fee for sample shipment: 350 euros for EU/EFTA laboratories and 450 euros for other participants For the payment procedures, each laboratory can specify their details and requests for invoices when applying for the test.

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

Remember to include your Invoice number 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
ACCOUNT NUMBER: ES0730580130172731005000
SWIFT: CCRIES2A

REFERENCE GIVEN: INVOICE NUMBER

Contact information
The official organising group details are as follows:

Universidad de Almería. Edificio Químicas CITE I
Ctra. Sacramento s/n
04120, La Cañada de San Urbano
Almería - Spain

Organising team (e-mail and phone no.):

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Quality Control Group

- Antonio Valverde, University of Almería, Spain
- Paula Medina, European Food Safety Authority, Italy.

Advisory Group

- Michelangelo Anastassiades, EURL-SRM, CVUA Stuttgart, Fellbach, Germany.
- Björn Hardebusch, EURL-AO, CVUA Freiburg, Germany.
- Magnus Jezussek, LGL, Erlangen, Germany.
- André de Kok, Formerly Wageningen Food Safety Research, Wageningen, The Netherlands.
- Marine Lambert, French Agency for Food, Environmental and Occupational Health & Safety (ANSES), France.
- Ralf Lippold, EURL-AO, CVUA Freiburg, Germany.
- Hans Mol, Wageningen Food Safety Research, Wageningen, The Netherlands.
- Finbarr O'Regan, Pesticide Registration Division, DAFM, Kildare, Ireland.
- Patrizia Pelosi, Istituto Superiore di Sanità, Rome, Italy.
- Tuija Pihlström, National Food Agency, Uppsala, Sweden.
- Mette Erecius Poulsen, EURL-CF, National Food Institute (DTU), Lyngby, Denmark.
- Radim Štěpán, Czech Agriculture and Food Inspection Authority Inspectorate, Prague, Czech Republic.
- Hermann Unterluggauer, AGES, Institute for Food Safety, Innsbruck, Austria.