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## **SPECIFIC GUIDELINE**

### **Proficiency Test for Analysis of Pesticide Residues in Apple Homogenate (NRL/PT-FV/2025/Apple-1)**

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Conducted by

**National Referral Laboratory**



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**ICAR-National Research Centre for Grapes**

**भाकृअनुप-राष्ट्रीय अंगूर अनुसंधान केंद्र**

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## **SPECIFIC GUIDELINE**

### **Proficiency Test for Analysis of Pesticide Residues in Apple**

#### **Homogenate (NRL/PT-FV/2025/Apple-1)**

#### **Introduction:**

This proficiency test (PT) is directed to laboratories belonging to APEDA recognized laboratories and other commercial food testing laboratories planning for APEDA/FSSAI/EIC recognition for testing food commodities for domestic and export purposes and for organic product testing.

The PT aims to obtain information regarding the quality, accuracy, and comparability of test results for pesticide residue in apple (fruits and vegetables in general) reported by the laboratories from the country. Participating laboratories will be provided with an assessment of their analytical performance that they can use to demonstrate their analytical performance and compare themselves with other participating laboratories.

#### **Registration for the proficiency test:**

This PT is being organized as per the requirement of FSSAI and APEDA for recognizing commercial food testing laboratories for organic product testing. This PT is mandatory for all the APEDA recognized laboratories that are intended to analyse the RMP sample of fruits and vegetables for export under HortiNet for the ongoing season. FSSAI laboratories who are under the organic product testing list of FSSAI also should participate in this PT. The other food testing laboratories who cover the minimum 70% of target analytes in the scope of the laboratory as per Annexure-1 of the registration form can also be voluntarily participate. Upon registration, the PTP assume that the laboratory has the capability to analyze minimum 70% of target analytes.

To participate, each laboratory must complete the registration through **online portal** on given link below on or before the registration deadline.

#### **Link for registration:**

<https://forms.gle/8o2zTh59nkR7rb2r7>

The registration fee per laboratory as follows:

**Registration fee/ Lab = Rs. 15,000 + GST (18%)**

**= Rs. 17,700 (Seventeen thousand Seven hundred only)**

**(Note: Each registration should do the payment separately. Group registration and payment will not be entertained)**

In the online registration, the participant should clearly indicate the delivery address of the Test Item. The organizer of the PT/ the courier agent will not be responsible for the non-delivery of the Test Item due to the wrong delivery address provided by the laboratory. On successful registration, the laboratory will receive a confirmatory mail from the organizer.

Note: *The registration fee does not include the courier charges, which will be communicated separately to the participants on actual basis and should be paid to the official courier agent on delivery of PT test item.*

### **Test item:**

This proficiency test is based on analyzing apple homogenate having incurred residues/spiked with pesticide analytical standards. The test item will be homogenized and sub-sampled into coded bottles. Ten bottles containing the test item will be chosen randomly and analyzed in duplicates to check for homogeneity. The test item will be stored frozen ( $-20 \pm 2^{\circ}\text{C}$ ) before shipment to participants and will be delivered in frozen condition. Three bottles, again chosen randomly, will be analyzed by the organizer 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 deadline for participant results).

**Amount of Test Item:** Participants will receive **approximately 100 g of apple homogenate**

### **Shipment of the Test Item:**

The sample will be shipped to the participating laboratory on the scheduled date through the official courier agent identified by the organizer. On the same day, the laboratory will receive the Courier details, the tracking number, and the invoice (on an actual basis) in the laboratory's name for the shipment through E-mail.

**Laboratories must make their arrangements for the receipt of the Test Item and payment of courier charges.** The laboratories should make the necessary arrangements for receiving the shipment even if the laboratory is closed during the period. The organizer will not be responsible for any return of the shipment item.

### **Test item Receipt by the laboratory:**

The test item will be delivered to the participant laboratories on/or before the scheduled date. As per the details communicated, the shipment charge should be paid by the laboratory to the courier agent at the time of delivery. **Any failure on payment of shipment charge to the courier agent**

**will invite non communication of the PT result/PT performance to the concerned participant, and no registration fee will be refunded.**

Once the laboratory receives the test item, its arrival must be reported to the PT organizer in the prescribed format (*Acknowledgement form*) on the same day by E-mail. If the laboratory does not respond by this date, the organizer will assume that the test item has been received and accepted by the laboratory.

If any laboratory has not received the test item by the deadline specified, they must inform the organizer immediately by E-mail ([apedanrlpt@gmail.com](mailto:apedanrlpt@gmail.com))

### **Advice on test item handling:**

Once received, the test item should be stored deeply frozen ( $-20 \pm 2^{\circ}\text{C}$  or less) prior to analysis to avoid any possible deterioration/spoilage. The test item should be thawed and 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 followed by quantification.

### **Submission of results:**

Once the laboratory has analyzed the test item and is ready to submit their test results, they must enter their results in the format provided by the organizer and send it to the following E-mail address: [apedanrlpt@gmail.com](mailto:apedanrlpt@gmail.com). All analyte concentrations must be expressed in **mg/kg** together with the associated recovery expressed as percentage. The number of significant figures should be based on the guidelines provided in SANTE 11312/2021(V2). 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 of the laboratory should be rounded to **three decimal points**.

The results should be reported as **ND (Not Detected)** or **Below Limit of Quantification (BLQ)** when a pesticide was not detected or was detected below the laboratory's LOQ level, respectively. In both cases, this will be considered as '**ND**' (**Not Detected**) in final report. If a pesticide was not sought/analyzed, it should be reported as '**NA**' (**Not Analyzed**). The actual results/residue above the LOQ levels of the laboratory must be reported in **mg/kg** as numbers with **three decimal points**.

### **Announcement of the PT result:**

The organizer will evaluate the results at the end of the proficiency test, once the deadline for

the receipt of results has passed. The organizer will communicate the electronic version of the preliminary report to the individual participants through E-mail within the time schedule. 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.

#### **ACTIVITY AND DEADLINES:**

<b>Activity</b>	<b>Dead line</b>
<b>Registration Open on</b>	<b>01<sup>st</sup> August, 2025</b>
<b>Registration Close on</b>	<b>22<sup>nd</sup> August, 2025</b>
<b>Shipment of the Test Item</b>	<b>28<sup>th</sup> August, 2025</b>
<b>Deadline for receiving Test Item by the Laboratory</b>	<b>30<sup>th</sup> August, 2025</b>
<b>Deadline for receiving the result from the laboratory</b>	<b>08<sup>th</sup> September, 2025</b>
<b>Tentative Preliminary Report</b>	<b>30<sup>th</sup> September, 2025</b>
<b>Final Report</b>	<b>By 31<sup>st</sup> October, 2025</b>

#### **Organizer and Committee: NRL/PT-FV/2025/Apple-1**

##### **The Organizer:**

National Referral Laboratory

ICAR-National research Centre for Grapes Manjari Farm, Pune- 412 307, India

##### **Organizing Team:**

###### **Program director:**

Dr. Kaushik Banerjee, Director, ICAR-NRC for Grapes, Pune

###### **Program Coordinator:**

Dr. Nishant Deshmukh, Senior Scientist, ICAR-NRC for Grapes, Pune

##### **Contact Information:**

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