
SPECIFIC GUIDELINE

NRL-Proficiency Test of analysis of pesticide residues in Okra homogenate (NRL/PT-FV/2019/Okra)



Conducted by
National Referral Laboratory



ICAR-National Research Centre for Grapes

भारत -राष्ट्रीय अंगूर और आंवला केंद्र

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Introduction:

This proficiency test (PT) is directed to laboratories belonging to APEDA recognized laboratories and other commercial food testing laboratories that are planning for APEDA recognition having capability to analyze target list of analytes in food matrices.

The aim of the PT is to obtain information regarding the quality, accuracy and comparability of test results for pesticide residue in okra reported by the laboratories from the country for export purposes. 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 mandatory for all the APEDA recognized laboratories that are intended to analyse the RMP sample of Okra for export to EU countries under HortiNet for the ongoing season. The other food testing laboratories who cover at least 75% of the target analytes in the scope of the laboratory can also be voluntarily participate.

To participate, each laboratory must complete the registration form in the prescribed format and return to the E-mail communicated (apedanrl@gmail.com) before the deadline of the registration. The registration fee per laboratory as follows:

Registration fee/ Lab = Rs. 10,000 + GST (18%)
= Rs. 11,800 (Eleven thousand eight hundred only)

The registration form 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 wrong delivery address provided by the laboratory.

On successful registration, the laboratory will receive a confirmatory mail from the organizer regarding the registration fee and delivery address.

Test item:

This proficiency test is based on the analysis of okra homogenate spiked with pesticide analytical standards. The test item will be homogenized and sub-sampled into coded bottles. The homogenization was done with 1:2 addition of water. 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 ($-20 \pm 2^{\circ}\text{C}$) 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 at periodic interval until a few days after the deadline for participant results).

Amount of Test Item: Each participants will receive two samples of **approximately 100 g of okra homogenate**. The participant has to report the result in both samples separately.

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 and on the same day the laboratory will receive the Courier details, the tracking number and the invoice (on actual basis) in the name of the laboratory for the shipment through E-mail.

Laboratories must make their own arrangements for the receipt of the Test Item. The laboratories 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. **The shipment charge as per the invoice communicated 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 disqualify the laboratory from the PT and no registration fee will be refunded.

Once the laboratory received the test item, its arrival must be reported to the PT organizer in the prescribed format on the same day by e-mail. The deadline for acceptance (or non-acceptance) is **11.06.2019**. If the laboratory does not respond by this date, the organiser will assume that the test item has been received and accepted.

If any laboratory has not received the test item by **11.06.2019**, they must inform the organiser immediately by e-mail (apedanrl@gmail.com)

Advice on test item handling:

Once received, both 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 (SOPs) for extraction, clean-up and analytical measurement and their own reference standards for identification followed by quantification. Each sample has to process independently.

Submission of results:

Once the laboratory has analysed the test items and is ready to submit their test results, they must enter their results in the prescribed format provided by the organisers and send it to the following e-mail address: apedanrl@gmail.com. All analyte concentrations must be expressed in **mg/kg in three replicates** together with the associated recovery expressed as percentage. The number of significant figures should be based on the guidelines provided in SANTE/11813/2017. 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 three significant figures.
- Residue levels ≥ 10 mg/kg may be rounded to two 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) or $< \text{LOQ}$. 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.

The deadline for receiving the result by the organizer is **21th June, 2019**.

Announcement of the PT result:

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 communicate the electronic version of the

preliminary report to the individual participants through E-mail within the time schedule. The PDF copy of the final report and certificate of participation will be communicated to each participant laboratory via E-mail. 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 DEAD LINE:

Activity	Dead line
Opening Registration period	16.5.2019
Deadline for Registration	31.5.2019
Shipment of the Test Item	3.6.2019 to 5.6.2019
Deadline for receiving Test Item by the laboratory	11.6.2019
Deadline for receiving the result from the laboratory	21.6.2019
Preliminary Report	28.6.2019
Final Report	08.7.2019

Organiser and Committee: NRL/PT-FV/2019/Okra

The Organizer:

National Referral Laboratory
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Organising Team:

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