# GENERAL GUIDELINE

# Proficiency Test Program

Organized by

**National Referral Laboratory**

**(An ISO 17043:2010 accreditted PT provider)**


## ICAR-National Research Centre for Grapes

## भाकृअनुप-राष्ट्रीय अंगूर अनुसंधान केंद्र

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# GENERAL GUIDELINE FOR PROFICIENCY TESTING PROGRAM

## Introduction

The proficiency test (PT) organized by National Referral Laboratory are directed to all the laboratories along with APEDA, FSSAI recognized laboratories and any commercial testing laboratories in food testing sector .

The aim of the PT is to obtain information regarding the quality, accuracy and comparability of test results for aflatoxin residue analysis in peanut reported by the laboratories from the country for export or domestic purposes. Participating laboratories will be provided with an assessment of their analytical performance that they can use to demonstrate their analytical performance/ competency and compare themselves with other participating laboratories.

## PT-Organisers and Committee:

**The Organizer:**

National Referral Laboratory (ISO 17043:2010 accreditted)
ICAR-National Research Centre for Grapes
Manjiri Farm, Pune, India- 412307

**Organising Team:**

**Program Director:** Dr. R.G. Somkuwar, Director, ICAR-NRC for Grapes, Pune
**Program coordinators:**
Dr. Kaushik Banerjee, Principal Scientist, ICAR-NRC for Grapes, Pune
Dr. Ahammed Shabeer TP, Senior Scientist, ICAR-NRC for Grapes, une

The NRL is responsible for all administrative and technical matters concerning the organisation of the PT, e.g. the PT announcement, production of Test Item , the undertaking of homogeneity and stability tests, packing and shipment of the Test Item, handling and evaluationof the results and method information submitted by the participants and the drafting of the preliminary and final reports.

**PT- Advisory Committee**

To complement the internal expertise of the NRL, ICAR-NRCG, Pune, a group of external **Advisory Committee** has also been appointed. The Advisory Committee role is to help the organisers, if required, to make decisions regarding the PT design: the selection of the commodity, the selection of aflatoxin to be included in the Target Analyte List, the establishment of the Minimum Required Reporting Levels (MRRLs), the statistical treatment and evaluation of participants results (in anonymous form) etc.

**Who can participate?**

It is mandatory for all the APEDA recognised laboratories those are analysing aflatoxin in peanut and peanut productes samples for export under Residue Monitoring Plan of APEDA.

Further, we also welcome all other commercial food testing laboratories including FSSAI food testing laboratories and FSSAI official labs in the country who can analyse target list of analytes given in this PT.

Laboratories that are obliged to participate in this PT, and that are not able to participate, must provide the reasons for their non-participation. This also applies to any participating laboratories that then fail to report results.

**Confidentiality and Communication**

The identity of each participant will be kept confidential. In order to ensure this confidentiality, the laboratories were given a unique identification code (lab code) and test item code, only known to themselves and the PT provider. In the preliminary as well as final PT report, the participating laboratories were linked to the corresponding laboratory codes shared with them.

As a policy of ICAR-NRC for Grapes, Pune, we are committed to protect the participants' information and their proprietary rights. All the staffs of NRL are bound to a confidentiality agreement prior to the employment. All the information supplied by a participant to the PTP is treated as confidential and will not be shared to any third party. However, the final PT report or outcome of a PT scheme will be shared with the regulatory body APEDA, Ministry of Commerce and NABL for the regulatory and official purposes.

**Announcement / Invitation Letter**

Announcement/Invitation letter will be announced on NRCG web-portal and will be distributed it via E-mail to the mailing list of APEDA/FSSAI recognized laboratories available with NRL, ICAR- NRCG.

**Target Analyte List**

The list contains the analytes in Residue Monitoring Plan of APEDA for the current season along or in FSSAI regulation with the Minimum Required Reporting Levels (MRRLs) valid for the PT. All the participating labs must express their results as stated in the target analytes list.

**Methodologies to be used by the participants**

Participating laboratories are instructed to use the analytical procedure(s) that they would routinely employ in official control activities (monitoring etc.). Where an analytical method has not yet been established routinely this should be stated.

**General procedures for reporting results**

Participating laboratories are responsible for reporting their own quantitative results to the organiser within the stipulated deadline. Any analyte that was targeted by a participating laboratory should be reported as "analysed". Each laboratory will be able to report only one result for each analyte detected in the Test Item. The concentrations of the analytes detected should be expressed in 'µg/kg' unless indicated otherwise in the specific guideline.

**Correction of results for recovery**

It is common practice that aflatoxin analysis results are not corrected for recovery if the recovery rates range between 70 to 120 %. Correction of results for recovery is recommended if the average recovery is significantly different from 100 % (typically if outside the 70 – 120 % range). Laboratories are required to report whether their results were adjusted for recovery and, if a recovery factor was used, the recovery rate (in percentage) must also be reported.

**Methodology information**

All laboratories are requested to provide information on the analytical method(s) they have

used. A compilation of the methodology information submitted by all participants is presented in an Annex of the final report if required.

**Publication of results**

The NRL, ICAR-NRCG will publish a preliminary report, containing tentative assigned values and z-score values for all analytes present within the deadline.

The Final Report will be published after the Advisory Panel has discussed the results (if required) followed by approval by Director, NRCG or Head, NRL, NRCG and will be communicated to individual laboratories.

**Feedback**

At any time before, during or after the PT participants have the possibility to contact the organisers and make suggestions or indicate errors. After the distribution of the Final Report, participating laboratories will be given the opportunity to give their feedback to the organisers and make suggestions for future improvements.

**Complaint/Appeal**

The PT provider has a set procedure for complaint/ appeal from the PT participants in case any sort of irregularities observed by the participant during the period of the current PT. Under such situation, the participants can put their complaint or appeal to the PT provider in the precribed format attached herewith.

**Correction of errors**

If any participant reported any error in any of the documents issued prior to the PT, the corrected documents will be communicated to participants through E-mails. Before starting the exercise participants should make sure to download the latest version of these documents from the communicated E-mails.

If substantial errors are discovered in the Preliminary PT-Report, the organiser will distribute a new corrected version, where it will be stated that the previous version is no longer valid. Where substantial errors are discovered in the Final PT-Report, the PT-Panel will decide whether a corrigendum will be issued and how this should look. Where errors are discovered in PT-Certificates the relevant laboratories will be sent new corrected ones. Where necessary

the laboratories will be asked to return the old ones.

**Follow-up activities**

Laboratories are expected to undertake follow-up activities to trace back the sources of erroneous or strongly deviating results (typically those with $|z| > 2.0$) - including all false positives. Even results within $|z| \leq 2.0$ may have to be checked if there is indications of a significant positive or negative bias.

If required, outcome of any investigative activities for false positives, false negatives and for results with $|z| \geq 3.0$ or Z-scores between 2.0 and 3.0 will be reviewed in the Advisory Committee. Communication of the outcome of follow-up activities by each laboratory is optional but highly appreciated since the source of deviation could be identified and could be useful for other participating labs and in future PT programs.

**Disclaimer**

The NRL, ICAR-NRCG retains all the right to change any parts of the PT based on new scientific or technical information. Any changes will be communicated to participants in due course of time.

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