GENERAL GUIDELINE

Proficiency Test Program

Organized by

National Referral Laboratory

भाकृअनुप-राष्ट्रीय अंगूर अनुसंधान केंद्र

ICAR-National Research Centre for Grapes

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P.O. Manjri Farm, Pune - 412 307

GENERAL GUIDELINE FOR PROFICIENCY TESTING PROGRAM

Introduction

The proficiency test (PT) programs organized by National Referral Laboratory are directed to laboratories belonging to APEDA/FSSAI recognized laboratories or other commercial testing laboratories in food testing sector who are planning for APEDA/FSSAI/EIC etc. recognition or NABL accreditation and involved in the food testing.

The aim of the PT is to obtain information regarding the quality, accuracy and comparability of test results for pesticide residue analysis in food reported by the laboratories from the country for export and 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
ICAR-National Research Centre for Grapes
Manjiri Farm, Pune, India- 412307

Organising Team:

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

Program coordinator:

1. Dr. Nishant Deshmukh, Senior Scientist, ICAR-NRC for Grapes, Pune
2. Dr. Sharmistha Naik, Scientist, ICAR-NRC for Grapes, Pune

This team 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 evaluation of the results and method information submitted by the participants and the drafting of the preliminary and final reports.

Who can participate?

It is mandatory for all the APEDA recognised laboratories those are analysing grape and other fruits and vegetables samples for export under Residue Monitoring Plan of APEDA.

Further, we also welcome all other commercial food testing laboratories in the country who can analyse the target list of pesticides given in this PT and are planning for

APEDA/FSSAI/EIC/NABL etc. recognition/accreditation and involved in the food testing.

Confidentiality and Communication:

The sole proprietor of this PT data is National Referral Laboratory, ICAR-NRC for Grapes, Pune and has access to all information.

The identity of each participant was 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. The participating laboratories were linked to the corresponding laboratory codes shared with them in both the preliminary and final PT reports.

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 information provided to the PTP by a participant is treated as confidential and will not be shared with any third parties. However, as communicated to participants prior to registration, the final PT report or outcome of the PT scheme will be shared with the regulatory body APEDA, Ministry of Commerce; FSSAI, Ministry of Health and Family Welfare and/or 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 Pesticide List:

The list includes the analytes (pesticides and their metabolites and plant growth regulators, List enclosed) in Residue Monitoring Plan of APEDA along with the Minimum Required Reporting Levels (MRRLs) valid for the PT. All the participating labs must express their results as stated in the Target Pesticides 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 pesticide 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 pesticides detected should be expressed in 'mg kg^{-1}' unless indicated otherwise in the specific guideline.

Correction of results for recovery

According to the Method Validation and Quality Control Procedures for Pesticide Residues Analysis in Food and Feed (SANTE 11312/2021 V2), it is common practice that pesticide 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). Approaches for recovery correction explicitly stated in the SANTE 11312/2021 V2 document. Results may be corrected for recovery only in cases where this correction is applied in routine practice (including cases of MRL-violations). No recovery correction are required where correction for recovery is automatic by adding amounts of analytes to the test portion for using the 'standard addition' approach, or isotopically-labelled internal standards (in both cases with spiking into the Test Item at the beginning of the extraction procedures) or procedural calibration. In these cases, the laboratories should report the concentration as per the actual approach that was followed.

Methodology information

All laboratories are requested to provide information on the analytical method(s) if the test report format provided is asked for. A compilation of the methodology information submitted by all participants will 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 pesticides present within the deadline. At this stage the participant can respresent in the prescribed format for any irregulatrity (only typo mistakes or error in data transfer) in the data reported by the lab.

The Final Report will be published after the approval of the authorized signatory 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 by the PT organizer. 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 in due course of time.