



JOINT FAO/IAEA DIVISION
OF NUCLEAR TECHNIQUES IN FOOD AND AGRICULTURE



INTERNATIONAL ATOMIC ENERGY AGENCY
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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FAO/IAEA Training and Reference Centre for Food and Pesticide Control

PROSPECTUS of a Training Workshop on “Introduction to Quality Assurance/Quality Control Measures in Pesticide Residue Analytical Laboratories”

Place: FAO/IAEA Agriculture and Biotechnology Laboratory, Seibersdorf, Austria

Date: 28 April – 6 June 2003

Background of the course:

The current international agreements require that the certification of pesticide residue content of commodities moving in international trade are provided by laboratories implementing appropriate quality control and quality assurance systems. In addition, the residue data provided to support the establishment of Codex Maximum Residue Limits (MRLs) reflecting a country's Good Agriculture Practice (GAP) should be derived from supervised field trials performed according to the Good Laboratory Practice (GLP) Principles. The laboratory staff should be familiar with the principles of ISO Guide 17025 and GLP if they wish to produce internationally acceptable results. This requires intensive practical and theoretical training.

Objectives: Introduction and detailed explanation of QA/QC principles relevant to pesticide residue analysis. Practical examples will be used to demonstrate the application of the general principles outlined in the ISO Guide 17025 and the GLP Guidelines.

Language: English

Participation: The Training Workshop is open to analysts from Member Countries of FAO or IAEA. These analysts should come from laboratories authorised by Governments to perform official control of pesticide residues in food commodities to facilitate their international trade and safe food supply at national level.

Qualification: The minimum requirements are: BSc degree in chemistry or biochemistry, 3 years experience in pesticide residue analysis in food, sufficient knowledge in English to be able to communicate, and to actively take part in the programme of the Workshop.

Commitment of

Nominating Institutions:

The nominating institutions shall undertake in writing that they intend to implement appropriate quality control/quality assurance system in their laboratories, and the laboratories will take part in international proficiency tests.

Deadline for nomination:

30 December 2002

The nominations may be submitted by the Heads of nominating institutions through the FAO Representative, FAO National Committee or National Atomic Energy Authority.

The nominations together with the completed questionnaire and Language Proficiency Certificate, issued by a language school or cultural institution or the British Embassy, should be returned to:

International Atomic Energy Agency
Wagramer Strasse 5, P.O. Box 100
A-1400 Vienna, Austria
Fax: +43 1 26007
Email: Official.Mail@iaea.org

With reference to: FAO/IAEA Training Workshop on Introduction to Quality Assurance/Quality Control Measures in Pesticide Residue Analytical Laboratories.

Advanced nominations by facsimile or e-mail are welcomed.

Acceptance of nominations:

The nominating institutions will be informed about the selection of participants minimum 3 months before the training starts. The eligible participants who cannot be accepted for the first training workshop because of space limitations will be kept on record and will be considered for training at future workshops.

Administrative and financial arrangements:

The high-standard 6-week training will be provided free of charge by the sponsoring Organizations. The travel cost, living expenses (approximately US \$4500) and accommodation (estimated 1500 Euros) of the participants shall be borne by the nominating governments¹.

For the period of engagement with the sponsoring Organizations, participants will be covered under the IAEA's insurance policy for, inter alia, permanent total disability or death up to an amount of US \$ 100,000 and for medical expenses up to an amount of US \$10,000 in case of illness, injury or death attributable to the participants' relationship with the sponsoring Organizations, subject to the terms of the insurance policy.

Programme: The programme comprises lectures in the subjects cited below, some of which are supported by laboratory exercises, workshops and the preparation of a project.

- The WTO Agreement on the Application of Sanitary and Phytosanitary Measures and the role of Codex Alimentarius and its Subsidiary Bodies;
- Planning of experiments, field studies and surveys;
- Analytical facilities required concerning the objectives of tests;
- Setting up task proposals;
- Sampling and sample preparation;
- Proper execution and quality control of basic laboratory operations (e.g. calibration of equipment and instruments, sampling, sample preparation, extraction, cleanup, preparation and use of reference analytical standards, qualitative and quantitative determination);
- Basic principles and practice of chromatographic techniques;
- Adaptation, validation and internal quality control of analytical procedures;
- Basic statistics;

¹ Limited funds are available to support the participation of analysts from least developed countries. Requests to benefit from this support should be made by the respective governments.

- Estimation of uncertainty of the results including sampling, sample processing and analysis;
- Detailed discussion of the criteria of ISO Standard 17025 and GLP;
- Role and responsibility of management, quality assurance officer, study director and other personnel;
- Preparation of Quality Manual and SOPs;
- Internal quality control measures, system suitability tests;
- Proficiency testing of laboratories;
- Establishing a quality assurance system;
- Inspection of the laboratory and auditing of the results;
- Reporting and interpretation of the results in view of legal limits or other objectives of the analysis (e.g. certification of residue concentration, dissipation of residues, environmental fate, effect of processing);
- Laboratory accreditation, equivalency of food control procedures and mutual recognition;
- The relation of Codex Limits and the WTO agreements;
- Use of analytical data to support decision-making;
- Estimation of acute and chronic dietary intake.

Training

Certificate:

A certificate of successful attendance will be given to the participants who obtain acceptable results in the laboratory activities and other tests related to the subjects of the Workshop.