

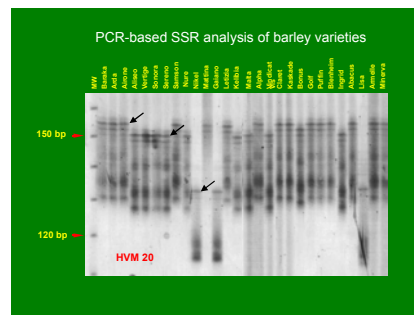


Invitation to the 4th ISTA /FAO Workshop on Electrophoretic and DNA-based Methods for Varietal Verification and GMO Detection

Date: July 10th – 14th, 2004 (4 ½ days)

Location: Agriculture Institute of Slovenia,
Crop and Seed Science Department,
Ljubljana, SLOVENIA

Local Organiser: Dr. Jelka Sustar-Vozlic



Dear Madam, Dear Sir,

It is a pleasure for the **International Seed Testing Association** (ISTA) and the **Food and Agriculture Organization of the United Nations** (FAO) to announce the 4th ISTA/FAO Workshop on Electrophoretic and DNA-based Methods for Varietal Verification and GMO Detection. This workshop is for seed testing analysts from laboratories located in the Eastern European region. The aim of the workshop is to train the seed technicians in methods for the verification of species, cultivars and hybrids as well as for qualitative and quantitative GMO detection. The workshop will be made up of lectures and practical work.

Considering the above, would you, as my contact person, please be so kind as to forward this invitation to the appropriate person, taking into account that the workshop participants should be actual technicians, with at least a basic knowledge or experience in the field of varietal verification or GMO detection.

Kindly note that funds can be secured for the workshop costs covering accommodation for 5 nights, food during the workshop period as well as a maximum of US\$300.- for the travel expenses.

The workshop is limited to 18 participants! Seed analysts can apply for the participation with the attached registration form and a short curriculum vitae about their working experiences and technical duties which they performed in their laboratory. Please send the registration form as soon as possible by latest **April 18th 2004** to the ISTA Secretariat. For further information please do not hesitate to contact me.

Looking forward to welcoming you at the workshop.

Sincerely,

Dr. Bettina Kahlert
Head of Technical Committee Administration

Lecturers:

Part 1: Electrophoretic Methods for Varietal Verification

Prof. Dr. Norbert Leist, ISTA President

Mr. Rainer Knoblauch, ISTA Variety Committee Member

Staatl. Landw. Untersuchungs- und Forschungsanstalt Augustenberg, Karlsruhe, Germany

Part 2: PCR based Methods for GMO Detection

Dr. Enrico Noli, ISTA GMO TF Member

Dr. Massimiliano Ballardini

Lab. di Ricerca e Analisi, Sementi LaRAS, DiSTA, Università di Bologna, Bologna, Italy



Considered Workshop Content:

The workshop shall provide general information regarding the possible applications and hand-on experience of electrophoresis and PCR-based methods in the field of varietal verification and GMO detection. These will cover:

- Object, field of application and general principles of the verification of species and cultivars
- Seed storage proteins analysis
- Sample preparation and DNA extraction
- PCR analysis: 1) Basis, 2) Molecular markers, 3) PCR-based methods for GMO detection
- Introduction in other methods such as ELISA and bioassay

Considered Practical Work:

- Isoelectric Focusing in Ultrathin layer (IEF) of seed storage proteins: Protein extraction, gel preparation, fixation, staining, destaining and evaluation of the gels
- Testing of seed storage proteins with PAGE; SDS; Isozymes: Protein extraction, gel preparation, fixation, staining, destaining and evaluation of the gels
- DNA extraction, UV spectrometry
- Agarose gel electrophoresis of extracted DNA
- Amplification of endogenous *invertase* gene
- PCR for qualitative detection of *CaMV 35S* promotor, *epsps* gene and *cryIA(b)* gene
- Real time PCR

Contact persons from ISTA and FAO

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FAO, Seed and Plant Genetic Resources Service, Capacity Building

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Dr. Bettina Kahlert

ISTA, Head of Technical Committee Administration

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