

Lecturers:

Part 1: Electrophoretic Methods for Varietal Verification

Prof. Dr. Norbert Leist, ISTA GMO TF Chair
Mr. Rainer Knoblauch, ISTA Variety Committee Vice Chair
Staatl. Landw. Untersuchungs- und Forschungsanstalt Augustenberg, Karlsruhe, Germany



Part 2: PCR based Methods for GMO Detection

Dr. Enrico Noli, ISTA GMO TF Member
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 variety 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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Registration Form
5th ISTA/FAO Workshop
on Electrophoretic Methods and PCR-Techniques
for Variety Verification and GMO Detection
December 18th –22nd, 2004 in Giza, EGYPT

I am interested in participating this ISTA/FAO workshop and wish to apply:

Title

Name First name

Position

Technical duties performed

Company/Institution

Street/PO Box

Address

Postal code City Country

Phone # Fax #

E-mail

Travel expenses to

Giza & return

Accommodation in Giza will be needed: yes no

Curriculum vitae is enclosed.

Thank you for answering below questions for us. It will help us in organising the workshop as well as in developing and promoting technical capacity building activities in this area. (Please use an extra sheet if needed.)

1) What are your expectations from this workshop?
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2) Have you participated in similar workshops before? Which are they?
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3) What are the technical activities carried out in your institute/centre?
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4) What instruments do you have for agricultural biotechnology?
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5) Do you participate in any national, regional or international collaborations or networks?
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Please send back this form and your curriculum vitae to:

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