ANNOUNCEMENT

ISTA/ISHS SYMPOSIUM

Technological Advances in Variety and Seed Research
31 May - 3 June 1994 Wageningen, The Netherlands

This symposium is the result of collaboration between ISTA and ISHS and intends to bring together experts on varieties from both organizations - the official seed testers, institutional research personnel, commercial plant breeders and seed technologists. The symposium will focus on new molecular and physical techniques for the development and assessment of varieties and for the determination and enhancement of seed quality.

Sessions on:
- Genetics (identification, molecular markers, somaclonal variation, gene expression and manipulation)
- Physiology (germination, vigour, desiccation, oxidative stress)
- Pathology (diagnostics, etiology, epidemiology, resistance)
- Technology (NMR, NIR, X-ray, image analysis, etc.)

Enquiries to the symposium secretariats:

For scientific matters:
IR W J van der Burg, DLO-Centre for Plant Breeding and Reproduction Research, Department of Reproduction Technology, PO Box 16, 6700 AA Wageningen, The Netherlands
Telephone +31 8370 76984  Fax +31 8370 15983

For organizational matters:
Section Organization Course and Conferences, International Agricultural Centre (IAC), PO Box 88, 6700 AB Wageningen, The Netherlands
Telephone +31 8370 90287  Fax +31 8370 18552

Contact the above without delay for the preliminary registration form (first circular and call for papers)
FIFTH INTERNATIONAL WORKSHOP ON SEEDS

Basic and Applied Aspects of Seed Biology

University of Reading, UK

11 - 15 September 1995

First Circular: Preliminary Registration

The fifth meeting in the series of International Workshops which began in Israel in 1979 (continuing at Wageningen in 1985, Williamsburg in 1989, Angers in 1992) will be held at the University of Reading, UK, between Monday 11 and Friday 15 September 1995. Reading lies 40 miles west of London, 30 minutes by train. London's international airports at Heathrow and Gatwick have direct bus and train connections to Reading.

I am pleased to invite you to the meeting. Please complete the form below if you wish to receive the second circular providing details of the meeting and how to book accommodation, etc. Your prompt return of this form to me at the address shown below will enable me to better gauge the demand for accommodation, and also to determine the themes of the scientific programme. Please copy this form to interested colleagues.

I look forward to receiving your reply.

Richard Ellis (1995 Conference),
Department of Agriculture, University of Reading,
Earley Gate, P O Box 236,
Reading RG6 2AT, UK

FIFTH INTERNATIONAL WORKSHOP ON SEEDS, READING 1995

Preliminary Registration

NAME (Mr/Ms/Mrs/Dr/Prof)

ADDRESS

I am interested in presenting a paper/poster* on (please give subject area or list keywords)

I would prefer accommodation in a medium-grade hotel (about £70 per night, including breakfast)/a university hall of residence (from £30 to £45 per night, including meals)*

*please delete as appropriate
Our knowledge of the molecular biology and genetics of peas, particularly in the fields of storage product biology, genetic mapping, transformation, plant development and the rhizobium symbiosis, has increased dramatically in recent years. The pea is also a model plant for research on a number of topics including starch biosynthesis and gene regulation by light. This book contains a number of reviews on progress in various aspects of pea molecular genetics. It places them in perspective for those concerned with the breeding, agronomy and exploitation of peas and will also be of value to those working on other grain legumes. It is also an important volume for research workers and advanced students in many areas of plant sciences, especially plant genetics and biotechnology.

Contents

- The pea crop, D R Davies
- The nuclear genome, T H N Ellis
- The plastid genome, T H N Ellis
- Regulation of gene expression, P M Gilmartin
- Genetic and developmental analysis of the seed, T L Wang and C L Hedley
- Biochemistry and molecular biology of seed products, R Casey, C A M Domoney and A M Smith
- Developmental mutants, I C Murfet and J B Red
- Molecular approaches to the study of diseases of peas, A Vivian
- Root nodules, rhizobium and nitrogen fixation, N J Brewin, M J Ambrose and J A Downie
- Tissue culture and transformation, D R Davies and P M Mullineaux
- Opportunities in relation to developments in plant biotechnology, D R Davies

December 1993 336 pages HB ISBN 0 859198 863 6
Price £49 95 (US$95 00 Americas only)
CROPCD

- 20 years of information
- over 400,000 references
- worldwide coverage
- subject-specific data

All so easily accessible at the touch of a button for anyone interested in the biology, production and management of field crops, fodder crops and grasslands.

CROPCD, one of several new CD-ROM products from CAB INTERNATIONAL, will be released in September 1993. All that will be required to access this remarkable archive of research information will be a personal computer with CD-ROM drive attached.

For further details or to request a 30-day FREE trial please contact:

Marketing Executive for CD-ROM,
CABI, Wallingford, Oxon OX10 8DE, UK.
December 1993

Vol. 3 No. 4

Seed Science Research

Editorial Comment .................................................................................................................. 217

Review Articles

Bedi, S. & Basra, A. S. Chilling injury in germinating seeds: basic mechanisms and agricultural
implications ............................................................................................................................. 219

Leprince, O., Hendry, G. A. F. & McKersie, B. D. The mechanisms of desiccation tolerance in developing
seeds ........................................................................................................................................ 231

Research Papers

Demir, I. & Ellis, R. H. Changes in potential seed longevity and seedling growth during seed development
and maturation in marrow ...................................................................................................... 247

Downie, B., Bergsten, U., Wang, B. S. P. & Bewley, J. D. Conifer seed germination is faster after membrane
tube invigoration than after prechilling or osmotic priming .................................................. 259

Foley, M. E., Nichols, M. B. & Myers, S. P. Carbohydrate concentrations and interactions in afterripening-
responsive dormant Avena fatua caryopses induced to germinate by gibberellic acid .......... 271

Gutiérrez, G., Cruz, F., Moreno, J., González-Hernández, V. A. & Vázquez-Ramos, J. M.
Natural and artificial seed ageing in maize: germination and DNA synthesis ......................... 279

Kanzaki, K., Kawabata, C. & Noda, K. Localization of α-amylase and its inhibitor in germinating wheat
seed ........................................................................................................................................... 287

Index of Authors (Volume 3) .................................................................................................. 293

Index of Contents (Volume 3) ............................................................................................... 295

Abstracted in Seed Abstracts (CAB ABSTRACTS),
Current Advances in Plant Science and BIOSIS

© C-A-B International, 1993

All rights reserved. No part of this publication may be reproduced, in any form or by
any means, electronically, mechanically, by photocopying, recording or otherwise,
without prior permission of the copyright owner.

Typeset by Burgess, Thames View, Abingdon, Oxfordshire
Printed in the United Kingdom by Information Press, Eynsham, Oxford