



# University of Bologna Faculty of Agriculture Dept. of Agroenvironmental Science and Technology

# IN THE WAKE OF THE DOUBLE HELI FROM THE GREEN REVOLUTION TO THE GENE REVOLUTION



Bologna, Italy • May 27 to 31, 2003

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#### IN THE WAKE OF THE DOUBLE HELIX:

# INTERNATIONAL ORGANIZING COMMITTEE

#### ROBERTO TUBEROSA

Department of Agroenvironmental Science and Technology Bologna, Italy tuberosa@agrsci.unibo.it

#### MIKE GALE

John Innes Centre Norwich, U.K. mike.gale@bbsrc.ac.uk

#### RONALD L. PHILLIPS

Department of Agronomy and Plant Genetics St. Paul, MN, U.S.A. phill005@tc.umn.edu

#### Susan Costantini

The British Council
Roma, Italy
susan.costantini@britishcouncil.it

# LOCAL ORGANIZING COMMITTEE

SERGIO CONTI, ELISABETTA FRASCAROLI, PIERANGELO LANDI, SILVIO SALVI, MARIA CORINNA SANGUINETI, ROBERTO TUBEROSA Department of Agroenvironmental Science and Technology

#### SILVIERO SANSAVINI

Department of Fruit Tree and Woody Plant Science

#### INTERNATIONAL PATRONS

Global Forum on Agricultural Research (GFAR) European Plant Science Organization (EPSO) European Molecular Biology Organization (EMBO) European Federation for Biotechnology (EFB) Association of Applied Biologists (AAB)

# National Patrons

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Federazione Italiana Scienze della Vita (FISV)
Società Italiana di Genetica Agraria (SIGA)
Società Italiana di Agronomia (SIA)
Società Orticoltori Italiana (SOI)
Società Italiana di Fisiologia Vegetale (SIFV)
Associazione di Ricercatori di Nutrizione ed Alimenti (ARNA)

Consorzio Interuniversitario per le Biotecnologie (CIB) Associazione Nazionale dei Biotecnologi Italiani (ANBI) Federazione Italiana Dottori in Agraria e Forestali (FIDAF)

Ente per le Nuove tecnologie, l'Energia e l'Ambiente (ENEA) Istituto Agronomico d'Oltremare (IAO)

## REGISTRATION, INFORMATION, UPDATES

http://www.avenuemedia.it/linkCONG/Green-Gene.html

# FROM THE GREEN REVOLUTION TO THE GENE REVOLUTION

Fifty years after the discovery of the structure of DNA, our progress in manipulating genes and unravelling their functions has been enormous and the consequences, for better or for worse, far-reaching. In the past decades, the application of sound genetic principles coupled with modern agronomic practices have fuelled the green revolution, which brought food to millions of people in many developing countries. Yet, famine, malnutrition and poverty are far from being eradicated. Additionally, the application of the intensive agronomic practices which have made possible the green revolution are often incompatible with the long-term sustainability of the agricultural systems. Agro-biotechnology and the knowledge generated by basic research can provide innovative solutions for these problems.

This Conference will bring together the architects of the green revolution and a number of pioneers of modern plant biotechnology who have laid the foundations for the gene revolution and have mastered the tools to harness its potential. Cutting-edge technologies will be critically assessed for their value in identifying valuable alleles and in manipulating such alleles with indirect (e.g. marker-assisted selection) and/or direct (e.g. genetic engineering) approaches. The controversy surrounding transgenic crops is unprecedented, and the debate on the benefits and risks of GM crops remains unsettled. Wrong information and misunderstanding have sparked, particularly in Europe, deep concerns and irrational fears towards GMOs, with negative repercussions on the public's confidence toward the scientific community as well as on the advancement of research in this area. Speakers from different countries will illustrate the present status, opportunities and future perspectives of public and private research in plant biotechnology.

A number of panel discussions will provide ample opportunities for confronting different views and for debating to what extent in the future it may be possible to benefit from the merits of biotechnology while avoiding the shortcomings.

# FROM THE GREEN REVOLUTION TO THE GENE REVOLUTION

#### **SESSION SPEAKERS**

Pere Arús Roger Beachy John Bennett Jeff Bennetzen

Eugenio Benvenuto Robert Bertram Norman Borlaug Steve Briggs

Willem Broekaert Paul Christou Paddy Cunningham

Mike Gale Cesare Gessler Jim Giovannoni

Silvana Grandillo Emanuel Guiderdoni

Perry Gustafson Tim Helentjaris David James Gurdev Khush

Andrzej Kilian Maarten Koornneef Peter Langridge

Miroslaw Maluszynski

Sue Mayer

Marc van Montagu Michele Morgante Montserrat Pages Andrew Paterson Mario Pezzotti Ron Phillips Enrico Porceddu Ingo Potrykus Calvin Qualset Antoni Rafalski Francesco Salamini

Silvio Salvi G.T. Scarascia Mugnozza Monkombu Swaminathan

Mark Thomas

Athanasios Tsaftaris Giampiero Valè Kurt Vandenberghe

Rod Wing Masahiro Yano Mark Zabeau Qifa Zhang

# PANEL DISCUSSION DELEGATES

Ron Cantrell
Paolo De Castro
Deborah Delmer
Sergio Dompé
Gebisa Ejeta
Dario Frisio
Mike Gale

Andreas Graner Emanuel Guiderdoni Daniel Kamanga

Hoan Le

Stefano Masini Mario Motto Alberto Piatti Prabhu Pingali Guglielmo Rizzioli Maurizio Ronconi Ola Smith Filippo Trifiletti Rod Wing

Robert Zeigler

#### **PROGRAM**

TUESDAY, MAY 27. The British Council • Strada Maggiore, 19 Walking tour of Bologna and welcome reception.

WEDNESDAY, MAY 28. Faculty of Agriculture • Via Fanin, 44

Session 1. The green revolution: A view from its architects.

Session 2. The contribution of mutants.

Session 3. Harnessing the value of wild and cultivated germplasm.

THURSDAY, MAY 29. Faculty of Agriculture • Via Fanin, 44

Session 4. Genome structure and applications of marker technologies in cereals.

Session 5. Understanding and exploiting hybrid vigour in cereals.

Session 6. Assigning functions to genes.

FRIDAY, MAY 30. Faculty of Agriculture • Via Fanin, 44

Session 7. Biotechnology for food security and sustainability.

Session 8. Transgenic crops for biofarming and human health.

Session 9. Progress in genetics and breeding of fruit crops through biotechnology.

Saturday, May 31. Sala Giorgio Prodi • Piazza San Giovanni in Monte, 2 Session 10. Plant biotechnology in the European Union.

# PANEL DISCUSSIONS

• The green revolution: Achievements and shortcomings.	(May 28)
• Initiatives in cereal genomics in the EU and the U.S.	(May 29)
<ul> <li>A doubly green revolution: Only a mirage?</li> </ul>	(May 30)
GMOs and the agrifood chain in Italy.	(May 31)

#### IN THE WAKE OF THE DOUBLE HELIX:

#### GENERAL INFORMATION

#### REGISTRATION FEES

before 30/4 after 30/4 € 220.00 € 250.00 **Participant** € 160.00 € 190.00 Young scientist (under 35)

The registration fee includes:

 access to all sessions congress kit

• coffee breaks and 3 lunches book of abstracts

# TOUR AND WEI COME RECEPTION

Tour of Bologna and welcome reception • May 27

Meeting point: the British Council, Strada Maggiore, 19 (Bologna centre). A walking guided tour (3-6 p.m; English speaking guide) of the city of Bologna, to discover the monuments, churches and palaces of this ancient city, followed by a welcome reception (8-10 p.m.)

#### **CONGRESS DINNER**

Social dinner • May 30

€ 45.00

A dinner in a typical restaurant of Bologna to taste the best of Italy's culinary arts.

# TOURS (Minimum no. of participants: 15; English speaking guide)

MAY, 28 AT 9.00 A.M.

Archaeological museum of Bologna (half day) € 20,00 Guided tour to the Archaelogical Museum of Bologna, with the most important exhibits of Etruscan, Egyptian and Roman people and art.

May, 29 AT 9.00 A.M.

Tour of Ravenna (full day)

€ 76.00

Bus transportation from Bologna to Ravenna and return. Guided tour of the byzantine city of Ravenna to discover an ancient world of churches, mosaics and abbeys. Lunch in a typical restaurant. Guided tour to "S. Apollinare in Classe", the most important abbey of Ravenna.

or

The famous churches of Bologna (half day) € 20,00 Guided tour to the famous churches of Bologna: S. Petronio, S. Stefano, San Giacomo and San Martino.

May, 30 at 9.00 a.m.

The collections of the University of Bologna (half day) € 20,00 Guided tour to the naturalistic collection of Poggi's Palace, the wax's Museum and tour of the oldest University in Europe.

#### FROM THE GREEN REVOLUTION TO THE GENE REVOLUTION

#### GENERAL INFORMATION

#### METHOD OF PAYMENT

The registration fees are free of every charges or banking commission. (NB: Please send the receipt or the copy of the cheque to the organising secretariat). Specify participant's name and "Green-Gene" as reason for payment.

"non-negotiable" in favor of Avenue Media Bank cheque

Wire transfer

Banca Popolare dell'Emilia Romagna, Bologna - Agenzia n° 7 from Italy:

current account n° 437531 in favor of Avenue Media S.r.l.

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from abroad: SWIFT BPMOIT22 - current account n° 437531

directly on the web site www.avenuemedia.it or fill the Credit card

special section on the registration form.

# **PROCEEDINGS**

A volume of ca. 500 pages will include the contributions of the invited speakers. The volume (hard cover in colour) will be available in spring 2004 and will be offered at the discounted rate of € 50 (ca. US \$55 + shipping expenses) to those participants who wish to reserve it (see registration form; no advance deposit required). Final cost may average € 75 (ca. US \$85 + shipping expenses)

#### **ABSTRACTS**

Deadline for poster abstracts: April 30.

Please follow the instructions below when writing the abstract:

· Font: Times New Roman

• Title: bold, 12 point-body, justify

• Author/s: 11 point-body, justify. Name of presenting author should be in CAPITAL and should be followed by the e-mail address in parentheses.

Name and address of Institution/s: 11 point-body, justify

• Keywords: maximun 5

• Text: 11 point-body, justify

• Number of characters in the text (including spaces): maximum 3,500

• References should be included directly in the text as shown in the fac-simile (see web site)

Send by e-mail: use RTF format and MS Word PC.

Send the abstract to: congressi@avenuemedia.it

#### **POSTER**

Poster size: 70 (width) x 100 (height) cm.

Faculty of Agriculture Via Fanin, 40-50 • Bologna TANGENZIALE Moronways A1 - A13 EXIT 9 STATION VIA IRNERIO

#### Arriving by train.

From the station, 10 minutes by taxi or 25 minutes by bus no. 35, to the last stop, CAAB stop (see web site for more details).

#### Arriving by car.

From the A1 and A13 Motorways.

Follow signs for "Tangenziale - San Lazzaro direction".

Take exit 9 "San Donato". At the end of the ramp, at the traffic light, turn left and proceed following CAAB signs.

#### Arriving by plane.

From the "G. Marconi" airport, 15 minutes by taxi.

# **Organizing Secretariat**



Via Riva Reno, 61 - 40122 Bologna Ufficio Congressi - Tel. +39 051 6564300 Tel. +39 051 6564311 - Fax +39 051 6564350 E-mail: avenuemedia@avenuemedia.it www.avenuemedia.it

