IOBC Working group

Induced resistance in plants against insects and diseases

Convenor Annegret Schmitt

Liaison Officer Jürg Huber
JKI Darmstadt, Germany
The IOBC Working group “Induced Resistance in plants against insects and diseases”

Steering Committee:
Marcel Dicke, Wageningen University, Wageningen, The Netherlands

Brigitte Mauch-Mani, University Neuchâtel, Neuchâtel, Switzerland

Annegret Schmitt, Julius Kühn-Institut, Institute for Biological Control, Darmstadt, Germany
Main concern of the group

Foster exchange between researchers from all fields of induced resistance, i.e.

entomologists, plant pathologists, physiologists, molecular biologists, physicists etc.

on reactions that herbivore arthropods and plant pathogens induce in attacked plants
Activities 2006-2009

• 2006 Workshop in Heraklio, Crete, Greece  
  Joint event with Nick Birchs WG „Breeding for resistance to pests and diseases“  
  27-29 April

• 2007 Workshop in Doorn, The Netherlands  
  Joint event with the „PR-proteins workshop“  
  10-14 May

• 2009 Workshop in Granada, Spain, 12-16 May
Workshop in Heraklio, 2006

„Breeding for inducible resistance against pests and diseases“

Local organisers

Nikolaos Malathrakis
Nikolaos Fanourakis
Joint workshop together with the WG of Nick Birch „Breeding for Resistance“
The workshop consisted of 5 sessions

- Mechanisms involved in inducible and constitutive resistance to pests and diseases
- Evolutionary and ecological aspects of plant resistance / Deployment strategies for durable resistance within Integrated Crop Management
- Chemical ecology / Trophic interactions; associations of phenotypes and genotypes
- Types of resistance important for plant breeders and possible contribution of inducible resistance
- Biotechnology approaches to breeding for (inducible) resistance / Tools for biotechnology

see also http://www.unine.ch/bota/iobc
55 Participants from 15 countries (Europe, USA, Russia)
27 oral and 8 poster presentations; podium discussion
Workshop in Doorn, 2007

Joint workshop with PR-proteins workshop

Local organisers
Marcel Dicke
Corné Pieterse

J KI, Institute for Biological Control, Darmstadt
The workshop consisted of 4 sessions

• PR-proteins and inducible resistance

• signal-transduction in induced resistance

• molecular biology and ecology of induced resistance

• application of induced resistance in crop protection

see also http://www.bio.uu.nl/~fytopath/PR-IR2007.htm
145 Participants from 17 countries (Europe, USA, Asia)
48 oral and 77 poster presentations
Workshop in Granada, 2009
“Induced resistance - chances and limits”

Local organisers

Maria José Pozo
Victor Flors
The workshop consisted of 3 sessions

• chances and limits in multitrophic interactions
• chances and limits of model systems
• chances and limits in crop protection

http://www.fvccee.uji.es/
113 Participants from 22 countries (Europe, USA, Asia)
49 oral and 42 poster presentations
Elections

- 2009  Re-election of convenor for the period of 5 years
Future activities

- 2011 Joint workshop with the PR proteins workshop in Neuchâtel, Switzerland

  local organiser: Brigitte Mauch-Mani