

Presentation of ENDURE to Italian stakeholders

Bologna, 5 November 2009



The Italian contribution to the ENDURE Network of Excellence

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Defragmentation of the Italian crop protection research community



 **Two partners:**



Defragmentation of the Italian crop protection research community



🌿 Two partners:

🌿 CNR

3 institutes involved: IBAF (Ist. Biologia Agro-ambientale e Forestale), IPP (Ist. Protezione delle Piante) and ISPA (Ist. Scienze Produzioni Alimentari) scattered in 5 research sites (Padova, Firenze, Bari, Napoli, Torino)

16 researchers (14 permanent and 2 additional staff)

Competences: biology, ecology and management of a wide variety of pests (weeds, insects, diseases, nematodes) and beneficial organisms

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SSSUP

(1) Land Lab (Agriculture, Environment & Landscape)

(2) CIRAA E. Avanzi, University of Pisa (1,700 ha, 8 LTEs since the 1980s)

(3) Aedit Srl, Pontedera PI

SSSUP staff: 10 researchers (1 permanent + 9 additional)

Competences: agronomy and cropping systems, agroecology, weed ecology and management, non-chemical preventive measures (e.g. soil steaming, biofumigation), landscape ecology, entomology, ICT applications

Coordination of (sub)activities



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CNR

(1) Leader of activity 'Human resource exchange' (mobility programme)

First 3 years: 99 scientists granted (total: 213 Man Months)

Average MM/scientist: 2.2

(2) Co-leader of maize-based cropping systems case study

(3) Co-leader of sub-activity 'Exploitation of biological processes'

(4) Member of ExCom

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(1) Leader of Joint Educational Programme (aimed at PhD students)

(2) Member of Core Group of sub-activity 'Interactions with Partners Outside ENDURE'

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CNR & SSSUP

Facilitation of participation of ENDURE experts in board for discussion of PhD dissertations (main prospects for 2010)

Joint Educational Programme Summer schools



**1st ENDURE Summer School
Volterra (IT), 10-14 September 2007**



**2nd ENDURE Summer School
Volterra (IT), 15-19 June 2009**



SA1.2 ENDURE Summer schools



- 🌻 Theme 1st (Sep 07): Biodiversity supporting crop protection
- 🌻 Theme 2nd (Jun 09): Modelling approaches to support IPM
- 🌻 Theme 3rd (Sep 10): Management of new and emerging pests **CONTACT ME: barberi@sssup.it**
- 🌻 Lecturers (1st + 2nd): 17 (from 7 EU countries + the USA)
- 🌻 Applications (1st + 2nd): 210
- 🌻 Students (1st + 2nd): 34 (from 21 countries of 5 continents)

SA1.2 ENDURE Summer schools



Research community



Research community



CNR

Contribution to the Virtual Lab
Leader of mobility programme

SSSUP

Contribution to the Virtual Lab (including server hosting)
Crop Protection Network and Partners Outside ENDURE
Integration of knowledge (databases, Technical Taskforce, 2-track system)

Short term solutions



Short term solutions



CNR

Potato, tomato, grapevine case studies

CNR & SSSUP

Integrated Weed Management case study (demonstration trial, dissemination)

Maize case study (joint paper accepted by Journal of Applied Entomology)

Field vegetables case study (demonstration trial)

Case studies Demonstration trials



**Integrated Weed Mgmt
Trials in DK, FR, IT
Photos: CIRAA (Pisa)**

Case studies Leaflets



Downloadable at: www.endure-network.eu/endure_publications

From Science to Field
Integrated Weed Management Case Study – Guide Number 1

Maize Cropping With Less Herbicide

Bo Melander, Aarhus University, Denmark
Paolo Barberi, Sant'Anna School of Advanced Studies Pisa, Italy
Nicolas Monier-Jolain, National Institute for Agricultural Research, France
Romme van der Weide, Applied Plant Research, Wageningen UR, The Netherlands
Amd Verschwele, Julius Kühn Institute, Germany
Maurizio Sattin, National Research Council, Italy



Successful IWM in maize © Bo Melander, University of Aarhus, Denmark

Case studies

Demonstration trials



IPM in field vegetables
Trials in DK, FR, IT
Poto: CIRAA (Pisa)

System approaches



System approaches



CNR

Exploitation of innovative technologies for implementing crop protection strategies (soil beneficial organisms)

Assessment of crop protection strategies based on multicriteria methods

Environmental risk and benefit assessment

Exploitation of plant genetic resistance (*Meloidogyne*-tomato pathosystem)

Exploitation of natural biological processes

System approaches



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SSSUP

Sociology (multicriteria assessment)

System approaches



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SSSUP

Sociology (multicriteria assessment)

CNR & SSSUP

Landscape Ecology (e.g. effect of landscape on weed community dynamics)

Maize system case study (Po valley): adaptation of DEXiPM to maize systems, sociology (focus groups)

Weed Biology and Management

Policy support & communication



Policy support & communication



CNR

Scientific support to policies: exchange, facilitate and bridge Italian and European experiences on IPM (e.g. presentation of ENDURE to the Italian “Tavolo tecnico per il PAN sull'uso sostenibile dei pesticidi”, presentation of IPM in Emilia-Romagna Region to the EU policy seminar “Sustainable agriculture and pesticides: what is at stake? what are the options?” held in Paris on 25-26 November 2008.

Member of the communication team

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Network of Experts (BiPRO report: guidelines for NAPs)

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CNR & SSSUP

Foresight study: bringing in a Mediterranean perspective (Pisa and Chania meetings)

Beyond 2010



CNR & SSSUP

Committed, 4.1 pm/year as in-kind contribution each



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Members of Governing Council

Collaborative work (foresight, etc.)

Building up a common research agenda

Maintenance of research tools

Fostering mobility and higher education

Policy support working group

Updating the European Information Centre

Collaboration with Partners Outside Europe