

THE TEMPUS PROJECT “INTEGRATED PLANT PROTECTION” (JEP 41164-2006)

Long lasting improvements in
the curricula for plant protection

Prof. dr. sc. Marija Ivezić

INTEGRATED PLANT PROTECTION

- IPM is a combination of methods which reduces chemical plant protection measures to the absolutely necessary minimum, giving preference to biological, cultural measures, and plant-breeding.

Project objectives

- The objectives are to increase and enhance significantly
 - human resource development,
 - curriculum development - and
 - institutional and systems development, all related to the theme 'integrated plant protection'.

Specific objectives

- To develop and exchange **interdisciplinary** training elements in Plant Protection and
- Establish a sustainable basis for outgoing **mutual teaching for research** support in this key scientific area.

Partners

1. **Coordinator:** University of Helsinki, **Finland**
2. University of Copenhagen, **Denmark**
3. University of Catania, **Italy**
4. University of Osijek, Osijek, **Croatia**
5. University of Sarajevo, Sarajevo, **Bosnia and Herzegovina**
6. University of Belgrade, **Serbia**

Activities of J. J. Strossmayer University in Osijek, Faculty of Agriculture

- PhD and MSc students will take short training courses organized by consortium members;
- Organizing visits, lectures and workshops of consortium members at home institution;

Activities of J. J. Strossmayer University in Osijek, Faculty of Agriculture

- Testing and implementing novel web based tools for teaching plant protection;
- Development of Joint Curriculum with regard to plant protection.

Activities in project year first and second

1. Short training courses

- a) Insect Pathology and Microbial Control
- b) Advanced Plant Microbe Interactions

2. Training visits

- a) Economics in Plant Protection
- b) Entomology and Population Ecology
- c) International Course Participation
- d) Ecosystem Services in Plant Protection

3. Implementation of web-based tools

- a) Web-based teaching/e-learning, part 1
- b) Web-based teaching/e-learning, part 2

4. Joint Curriculum Development

- a) Development of Integrated Plant Protection course, MSc-level
- b) Development of PhD-course “Modern Concepts and Advanced Methods in Crop Protection”

Short training courses

- **Insect Pathology and Microbial Control**
 - Short Training Course for **three PhD** students from the CARDS partners at partner 2 (**DK**).
- **Advanced Plant-Microbe Interactions**
 - Stay of **five PhD** students at partner 2 (**DK**). They will attend the high level inter-national PhD courses “Advanced Plant-Microbe Interactions” and ‘Advanced Methods in Plant Pathology’ organised by partner 2, with major emphasis on plant diseases.

Training visits

■ Economics in Plant Protection

- training visit of three weeks by two senior scientists from partner 1(FI) at CARDS partners 4-6 (HR, BA, CS)

■ Entomology and Population Ecology

- _ training one MSc and one PhD student from partner 4, 5 or 6 at partner 3 (IT).

Training visits

■ **International Course Participation**

- The activity consists of attending training courses at partner 1 (FI) by 5 MSc students from partners 4, 5 and 6.

■ **Ecosystem Services in Plant Protection**

- The activity involves stays at partner 1 (FI) by 2 MSc students from CARDS (BA, HR).

■ **Implementation of web-based tools, part 1**

- The aim of this activity is to test and implement novel web based tools at CARDS partners, developed by partners 2 (DK) and 3 (IT) specifically for plant protection.

■ **Implementation of novel web-based tools, part 2**

- Activity involves stay at partners 4, 5 and 6 by one scientist from partner 2 (DK) and one scientist from partner 3 (IT).

Joint Curriculum Development: Development of Integrated Plant Protection Course, MSc-level

- The aim of this activity is to design an innovative integrated plant protection course unit
- The activity involves a didactics specialist from partner 1 (FI) and/or 2 (DK), spends time at partners 4, 5, and 6, developing a new course for piloting and for adoption at similar institutions.

Joint Curriculum Development: PhD-course

“Modern Concepts and Advanced Methods in Crop Protection”

- A PhD course is to be arranged by partner 6 (CS), involving teachers and students from all partners with the collaboration of FI, DK and IT
- Target an Academic and administrative staff (curriculum development) as well as PhD-students groups: CARDS partners (HR, BA, CS)

Dissemination

- Promotion the use of the training packages through partners collaboration with other national and international universities,
- Thematic expansion,
- Partner extension and
- More research.

Sustainability

- Ensuring and strengthening sustainability of IPM education via:
 - Modern approaches ,
 - Joint curricula,
 - Joint grant applications and
 - Successful research.
- Consortium will influence that the project outcomes will be considered into national and international legislation and standards.

Quality control and monitoring

- **Internal evaluation:**
 - EC project Cycle Management (2004) will be used for the procedures;
 - Annual progress reviewed at workshop;
 - Students feedback on the new curricula

Quality control and monitoring

- **External evaluation:**
 - Auditing
 - Evaluating of practical solutions by extension services
 - Partners presentation at national and international forums, by leaflets and uploads on the web (e-learning)

Summary of the project:

- To enhance skill and mobility of teaching and research staff (20) and postgraduate students (120)
- Collaborations between universities in order to minimize the use of chemical pesticides in Europe

- Creation of joint research group in effective crop protection
- Implementation of modern IT system (web conferences and e-learning methods)
- Establish a sustainable platform for future development of education curricula (MSc and PhD)

- Develop a dissemination and communication system through workshops and seminars, at 3 levels:
 - The University level
 - The grower level
 - The public level

Outputs and outcome

- Enhanced capacities in the integrated plant protection
- Long-lasting improvements for in the curricula for the plant protection



Thank you for your attention!