



European Network for the durable exploitation of crop protection strategies

IA3 Activity: Human resource exchange

ENDURE - Internal Mobility

Final activity report

(The form has to be filled in and sent to the activity leader – message should be sent to his p.a. elisa.scanzi@ibaf.cnr.it – within 15 days after the end of the visit)

Topic of the visit
Weed species and weed management

1. Information about researcher and sending partner

Name and surname: Zita Dorner

Professional status: Senior scientist

Sending partner: Szent Istvan University, Hungary

Institute/Department/Research Unit: Plant Protection Institute

Address: 1, Pater K. Street, Godollo, Hungary, 2103

E-mail and phone number of the researcher:

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Supervisor name*:

Supervisor e-mail*:

Supervisor phone number*:

*Supervisor information only for PhD student, post-doc and junior researchers

2. Information about hosting partner

Hosting partner: Scuola Superiore Sant'Anna

Institute/Department/Research Unit:

Address: 33, Piazza Martiri della Libertà, Pisa, Italy, 56127

Supervisor name*: Prof. Paolo Bárberi

Supervisor e-mail*: barberi@sssup.it

Supervisor phone number*:+39-050-883.525

* For senior scientist indicate the name of the collaborating colleague

3. Information about the visit

Duration: one month

Starting date: 13 May 2008

Ending date: 7 June 2008

4. Description of the activities and outcomes

Background and context: I am interested in weed species of Italy, weed management and methods of weed surveying. The hosting institute (SSSUP) runs experiments, where I could take part in weed surveying. Their sampling methods and sampling frames are different from ours. In Hungary the weed survey is carried out with the Balazs – Ujvarosi method (similar to Braun-Blanquet scale) for estimating weed cover.

Objective: I would like to study experiments of the hosting institute and also their sampling methods on crop fields in winter wheat, maize and tomato. I would like to get some useful information about their weed management strategy the most dangerous weed species on fields and about the *Cyperus esculentus* which is a new weed species in Hungary.

Activities carried out: I carried out weed surveys and weed count in winter wheat, maize and tomato. Both in wheat and tomato sampling plots of 25 x 30 cm, in maize 16 sampling plots of 50 x 50 cm were identified. During the surveys I recorded weed species and their phenological stage.

5. Links between visit activity and ENDURE

I am member of the ENDURE RA 4.5 Working Group “Weed biology and management”. The aim of this group is to develop Weed Traits Database (WTDB) which will contain information about weed traits and parameters (life-history, eco-physiological traits) for the species most important to European agriculture.

Data are entered by volunteer weed scientist from the RA 4.5 team. I have chosen five weed species (*Ambrosia artemisiifolia*, *Datura stramonium*, *Echinochloa crus galli*, *Papaver rhoeas*, *Tripleurospermum inodorum*).

In the university of Pisa I could collect some useful scientific articles about weeds from peer reviewed journals. They provided information about weed traits and parameters, later these data were entered into WTDB.

6. Impact

Added value for the researcher:

I have got some new information about:

- the most dangerous weed species of Italy,
- *Cyperus esculentus* (new weed species in Hungary)
- the weed survey methods,
- mechanical weed control,
- agrobiodiversity.

Added value for sending partner and hosting partner:

In experimental areas (in tomato and in maize) I carried out weed surveys. I have recorded the weed species and their density. I could compare the conventional and the ecological system.

Date of submission

14 October 2008



Dr. Maurizio Sattin
IA3 activity leader

Approved

