



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. federica.piccolo@ibaf.cnr.it – within 15 days after the end of the visit)

Topic of the visit

Integration of the results of the Meta-analyses of rotations from RA 2.6 with the results of the landscape analysis of RA 2.3 into current understanding.

1. Information about researcher and sending partner

Name and surname: Geoffrey Caron-Lormier

Professional status: Research Scientist

Sending partner: Rothamsted Research

Institute/Department/Research Unit: Plant and Invertebrate Ecology Department

Address: Harpenden, AL5 2JQ, UK.

E-mail and phone number of the researcher: Geoffrey.Caron-Lormier@bbsrc.ac.uk

Supervisor name*: David Bohan

Supervisor e-mail*: David.Bohan@bbsrc.ac.uk

Supervisor phone number*: +441582 763133

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

2. Information about hosting partner

Hosting partner 1: INRA Avignon

Institute/Department/Research Unit: Plantes et systemes de culture horticoles (PSH)

**Address: Domaine St-Paul,
site Agroparc
84914 Avignon cedex 9
France**

Supervisor name*: Claire Lavigne

Supervisor e-mail*: clavigne@avignon.inra.fr

Supervisor phone number*:

Hosting partner 2: INRA Dijon

Institute/Department/Research Unit: Biologie et Gestion des adventices (BGA)

**Address: 17 rue Sully
BP 86510
21065 Dijon Cedex
FRANCE**

Supervisor name*: Sandrine Petit

Supervisor e-mail*: sandrine.petit2@dijon.inra.fr

Supervisor phone number*:

3. Information about the visit

Starting date:

1. **12th April 2010 to 23rd April 2010 (2 weeks)**
2. **3rd May 2010 to 14th May 2010 (2 weeks)**

Ending date:

Total duration (*number of weeks*): 4 weeks in total

4. Description of the activities and outcomes

Background and context: To consider how to integrate the results of the meta-analysis of rotations from RA 2.6c with the results of the landscape analysis of RA 2.3 into current understanding. The results of RA 2.3 and RA 2.6c can be broadly characterised as the 'spatial' and 'temporal' structural dynamics of the agro-ecosystem. These aspects of structural dynamics need to be integrated in the future to provide a better understanding of how changing practices affects the pattern of fields across the landscape and the weed and pest populations that occur in these fields.

Objective: The results of the analyses in RA 2.3 and RA 2.6c will extend our understanding of the agricultural ecosystem. It is therefore appropriate to build on past knowledge and integrate the results of RA 2.3 and RA 2.6c. The purpose of the two visits was to learn how spatio-temporal interactions are viewed at the partner institutes and to

review current spatio-temporal research being conducted in the light of developments in RA 2.6c and RA 2.3.

Activities carried out: The first part of the mobility was spent at INRA-Avignon with Claire Lavigne. We discussed the concepts of modelling population dynamics over landscape features based on published papers. This was particularly relevant for Claire's group as they are interested in pest population dynamics in orchards.

The second part of the mobility was spent at INRA-Dijon with Sabrina Gaba and Sandrine Petit. We discussed how weed population dynamics could be included in the framework developed with Claire in Avignon. This was very useful as the framework includes now both pest and weed population dynamics over landscape structure. We decided that it would be best to put this framework into the current literature context.

Overall, it was a successful mobility during which a paper outline was created, which we hope could be written in the next few weeks.

5. Links between visit activity and ENDURE

These visits link directly to the output of RA 2.3 and RA 2.6c.

6. Impact

Added value for the researcher: The paper outline is a potential very important aspect of this mobility as the paper is likely to be completed in the next few weeks. This would add to the researcher's CV. Geoffrey has now a wider knowledge and better understanding of landscape modelling and the associated pest/weed issues at the landscape scale. Finally, this allowed Geoffrey to meet potential collaborators for this paper and increased his science network.

Added value for sending partner and hosting partner: The sharing of ideas and the potential paper are definite added values for the 'supervisors' of the hosting and sending institutes. Appropriate understanding and modelling of the spatial distribution of pests/weeds and their natural enemies at a landscape scale is necessary to promote conservation biological control, but will likely be difficult to achieve. This mobility also reinforced the collaborations between sending and hosting institutes.

Date of submission

2010 – 05 – 27.



Dr. Maurizio Sattin
IA3 activity leader

Approved