# PROGRAMME

# IOBC/WPRS Working Group "Landscape management for functional biodiversity"

Meeting May 21-23, 2014, Poznan, Poland

# Organizer Logotypes:



International Organisation for Biological and Integrated Control of Noxious Animals and Plants



Institute of Plant Protection -National Research Institute Poznań



Institute of Agricultural and Forestry Environment - Polish Academy of Sciences Poznan



Warsaw University of Life Sciences - SGGW

# Sponsor Logotypes:





#### WEDNESDAY 21 MAY 2014

- 08.30 CONFERENCE REGISTRATION & SOFT DRINKS
- 09.00 **Welcome by local organizers** (Prof. Tadeusz Praczyk Research Deputy Director of the Institute of Plant Protection in Poznań)
- 09.10 Introduction by convenors (John Holland & Bärbel Gerowitt)
- 09.20 IOBC presentation (Lene Sigsgaard, WG Liaison Officer)

### Session 1: "Conservation biocontrol"

Session Organiser: Bärbel Gerowitt (University of Rostock, Germany)

- 09.40 Farming intensity and field margin complexity affected post-dispersal weed seed predation by arthropods in sunflower crops. Anna-Camilla Moonen<sup>1</sup>, Gonzalo A.R. Molina<sup>2</sup>, Gionata Bocci<sup>1</sup> and Santiago L. Poggio<sup>2</sup> (<sup>1</sup>Scuola Superiore Sant'Anna, Italy; <sup>2</sup>University of Buenos Aires, Argentina)
- 10.00 Wildflowers that serve as food supply for the parasitoid *Microplitis*mediator improve the effectiveness of biological control in a cabbage field

  Guendalina Barloggio<sup>1,2</sup>, Mathias Kölliker<sup>2</sup>, Henryk Luka<sup>1,2</sup> and Oliver Balmer<sup>1,3</sup>

  (¹Research Institute of Organic Agriculture; ²University of Basel; ³Swiss

  Tropical and Public Health Institute, Switzerland)
- 10.20 Potential of different species of winter cress (Brassicaceae) as dead-end trap crops for diamondback moth (Lepidoptera: Plutellidae). Francisco R. Badenes-Perez<sup>1,2</sup>, Michael Reichelt<sup>1</sup>, Jonathan Gershenzon<sup>1</sup>, David G. Heckel<sup>1</sup>. (<sup>1</sup>Max Planck Institute for Chemical Ecology, Germany; <sup>2</sup>Institute of Agricultural Sciences (CSIC), Spain)
- 10.40 Assessing the use of Lobularia maritima as an insectary plant for the conservation of Orius majusculus and biological control of Frankliniella occidentalis. Lorena Pumariño<sup>1</sup>, Oscar Alomar<sup>2</sup> (<sup>1</sup>Swedish University of Agricultural Sciences, Sweden; <sup>2</sup>IRTA Entomology, Spain)
- 11.00 COFFEE

# Session 2: "Utilising floral resources"

Session Organiser: Paul van Rijn (University of Amsterdam, The Netherlands)

- 11.30 Which shrubs and trees can conserve natural enemies of aphids in spring?

  Paul van Rijn (University of Amsterdam, The Netherlands)
- 11.50 Targeted flower strips effectively promote natural enemies of aphids.

  Matthias Tschumi<sup>1,2</sup>, Matthias Albrecht<sup>1</sup>, Martin H. Entling<sup>2</sup>, Katja Jacot<sup>1</sup>

  (¹Agroscope, Institute for Sustainability Sciences, Switzerland; ²University of Koblenz-Landau, Germany)
- 12.10 Flowering crops as nutritional resources for Ascogaster quadridentata (Hymenoptera, Braconidae) and other beneficials in agroecosystems.

  Annette Herz<sup>1</sup> and Gudrun Eder<sup>1,2</sup> (<sup>1</sup>JKI, Institute for Biological Control; <sup>2</sup>Technical University Darmstadt, Germany)
- 12.30 Discussion
- 13.00 LUNCH
- 14.00-15.00 **POSTER SESSION**
- 15.15- Visit to the BASF "Seeded flowering meadow" in agrocenosis Jaroslawiec; invited dinner by BASF Polska.

#### THURSDAY 22 MAY 2014

# Session 2: "Aspects of invertebrate ecology"

Session Organiser: JOHN HOLLAND (Game and Wildlife Conservation Trust, UK)

- 09.00 Changes of insect diversity and occurrence of entomopathogenic fungi in agricultural landscape. Jerzy Karg, Stanisław Bałazy (PAN, Institute for Agricultural and Forest Environment, Poland)
- 09.20 Quantifying movement of the predator carabid beetle Pterostichus melanarius in arable land. Bas Allema, Walter Rossing, Wopke van der Werf, Lia Hemerik, Jeroen Groot, Eveliene Steingröver, Joop van Lenteren (Wageningen University, The Netherlands)

- O9.40 Impact of drought and regulated deficit irrigation on attractiveness of *Diplotaxis tenuifolia* (Brassicaceae) to bees and hoverflies. Jelena Barbir<sup>1</sup>, José Dorado<sup>1</sup>, César Fernández-Quintanilla1, Tijana Blanusa<sup>2</sup>, Cedo Maksimovic<sup>3</sup>, Francisco R. Badenes-Pérez<sup>1</sup> (<sup>1</sup>Institute of Agricultural Sciences, CSIC, Spain; <sup>2</sup>University of Reading; <sup>2</sup>Imperial College London, UK)
- 10.00 Are higher taxa level assemblages suited to discriminate different habitats? A case study using Braconid subfamilies in three Tuscan vineyards. Augusto Loni, Andrea Lucchi (University of Pisa, Italy)
- 10.20 Insects and globalization: sustainable control of exotic species in Italian agro-forestry ecosystems. Daniela Lupi¹, Umberto Bernardo², Carmelo Peter Bonsignore³, Mario Colombo¹, Maria Luisa Dindo⁴, Massimo Faccoli⁵, Chiara Ferracini⁶, Liberata Gualtieri², Rita Marullo³, Luca Mazzon⁵, Gaetano Siscaro⁶, Pompeo Suma⁶, Luciana Tavella⁶, Stefano Maini⁴ (¹The University of Milan; ²CNR Institute for Plant Protection UOS of Portici; ³Mediterranea University of Reggio Calabria PAU; ⁴University of Bologna; ⁵University of Padua; ⁶University of Torino; ¬University of Catania, Italy)
- 10.40 Discussion
- 10.50 COFFEE
- 11.30 INTERACTIVE SESSION: Landscape-scale management tools for more effective biocontrol to sustain IPM. Facilitators John Holland, Camilla Moonen and Walter Rossing.
- 13.00 LUNCH
- 14.00 Visit Turew Station 2 presentations of 15 minutes on the large scale versus diversified agriculture and biodiversity, field excursion and SOCIAL interactions including dinner.

#### FRIDAY 23 MAY 2014

# Session 3: "The contribution of uncropped land" Session Organiser: Camilla Moonen (Scuola Superiore Sant'Anna, Italy)

- 09.00 Pollinator community response to vegetation of semi-natural habitats around arable fields. Agustín Bartual, Anna-Camilla Moonen (Scuola Superiore Sant'Anna, Italy)
- 09.20 Botanical surveys as a base for the assessment of ecosystem services provided by semi-natural habitats in Hungary. Orsolya Pintér, Zita Dorner, Márk Szalai, Barbara Geiger, József Kiss (Szent István University, Hungary)
- 09.40 Edges of natural vegetation to increase the diversity of wild bees in agricultural field margins. Juan Antonio Sanchez<sup>1</sup>, Aline Carrasco<sup>1</sup>, Michelangelo La-Spina<sup>1</sup>, Helena Ibáñez<sup>1</sup>, Germán Canomanuel<sup>2</sup>, F. Javier Ortiz-Sánchez<sup>3</sup>, Elena López<sup>1</sup>, Alfredo Lacasa<sup>1</sup> (<sup>1</sup>Instituto Murciano de Investigación y Desarrollo Agrario y Alimentario; <sup>2</sup>Syngenta; <sup>3</sup>Universidad de Almería, Spain)
- 10.00 Conservation biological control of codling moth, Cydia pomonella. Lene Sigsgaard (University of Copenhagen, Denmark)
- 10.20 Discussion
- 10.30 COFFEE

# Session 3: "Landscape investigations"

Session Organiser: Daniela Lupi (The University of Milan, Italy)

- 11.00 Constraints for studying the management of cereal moth borers with a landscape approach: a case study in North Benin. Robin Drieu<sup>1</sup>, Pierre Silvie<sup>2</sup>, Philippe Menozzi<sup>3</sup>, Cyrille Adda<sup>4</sup>, Joel Huat<sup>3</sup>, SandrineAuzoux<sup>2</sup>, Valérie Soti<sup>3</sup>, Régis Goebel<sup>2</sup> (<sup>1</sup>Montpellier SupAgro, France; <sup>2</sup>CIRAD, France; <sup>3</sup>CIRAD, Benin; <sup>4</sup>Africa Rice Center, Benin)
- 11.20 A remote sensing and GIS approach to the relationship between canegrub infestations and natural vegetation in the sugarcane landscape of Queensland, Australia. Peter Zellner<sup>1,2</sup>, Camille Lelong<sup>1</sup>, Valérie Soti<sup>3</sup>, Annelise Tran<sup>1</sup>, Nader Sallam<sup>4</sup>, Andrew Robson<sup>5</sup>, François-Régis Goebel<sup>1</sup>

- (<sup>1</sup>CIRAD, France; <sup>2</sup>University of Würzburg, Germany; <sup>3</sup>CIRAD, Senegal; <sup>4</sup>SRA Limited, Australia; <sup>6</sup>Agri- Science Queensland, Australia)
- 11.40 Composition and diversity of the weed flora influenced by arable management in a large-scaled agricultural landscape in North-East Germany. Ines Heyer, Bärbel Gerowitt (University of Rostock, Germany)
- 12.00 Effects of reforestation with non-native species on rove beetles (Coleoptera: Staphylinidae). Dávid D. Nagy¹ & Zsuzsanna Debnár² (¹MTA-DE Biodiversity and Ecosystem Services Research Group; ²University of Debrecen, Hungary)
- 12.20 Discussion and concluding remarks
- 12.30 LUNCH & DEPART

#### **POSTERS**

The effects of mulching as habitat manipulation on the biodiversity of spiders (Araneae) on potato fields in Hungary. Gergely Ambrus, Péter Dudás & Ferenc Tóth (Szent István University, Hungary)

Field margins for biocontrol and biodiversity across crop rotations:

Overview of the aims and approaches of Defra project IF01122. Jason Baverstock<sup>1</sup>, Judith. K. Pell<sup>2</sup>, Jonathan Storkey<sup>1</sup>, Martin T. Torrance<sup>1</sup>, Samantha M. Cook<sup>1</sup> (<sup>1</sup>Rothamsted Research, U.K.; <sup>2</sup>J. K. Pell Consulting, U.K.)

Field margin vegetation as a bridge for predatory mites (Phytoseiidae) migration into raspberry plantations. Jakub Garnis, Zbigniew T. Dąbrowski (Warsaw University of Life Sciences (SGGW), Poland)

The QuESSA Project: Quantification of Ecological Services for Sustainable Agriculture. John Holland<sup>1\*</sup>, Philippe Jeanneret<sup>2</sup>, Felix Herzog<sup>2</sup>, Anna-Camilla Moonen<sup>3</sup>, Walter Rossing<sup>4</sup>, Wopke van der Werf<sup>4</sup>, Jozsef Kiss<sup>5</sup>, Maarten van Helden<sup>6</sup>, Maria Luisa Paracchini<sup>7</sup>, James Cresswell<sup>8</sup>, Philippe Pointereau<sup>9</sup>, Bart Heijne<sup>10</sup>, Eve Veromann<sup>11</sup>, Daniele Antichi<sup>12</sup>, Martin Entling<sup>13</sup>, Bálint Balázs<sup>14</sup> (Game and Wildlife Conservation Trust, UK<sup>1</sup>; Agroscope Reckenholz-Tänikon

Research Station, Switzerland<sup>2</sup>; Scuola Superiore Sant'Anna, Institute of Life Sciences, Italy<sup>3</sup>; Wageningen University, The Netherlands<sup>4</sup>; Szent Istvan University, Hungary<sup>5</sup>; Université de Bordeaux, Ecole - BxScAgro, France<sup>6</sup>; Joint Research Centre of the European Commission, Italy<sup>7</sup>; University of Exeter, UK<sup>8</sup>; SOLAGRO, initiatives and innovations for energy, agriculture, and environment, France<sup>9</sup>; Stichting Dienst Landbouwkundig Onderzoek, Applied Plant Research, The Netherlands<sup>10</sup>; Estonian University of Life Sciences, Estonia<sup>11</sup>; University of Pisa, Italy<sup>12</sup>; University of Koblenz-Landau, Germany<sup>13</sup>; Environmental Social Science Research Group, Hungary<sup>14</sup>)

Diversified habitat as reservoir for ground-dwelling arthropods (Col., Carabidae) - preliminary results. Michał Hurej<sup>1</sup>, Jacek Twardowski<sup>1</sup>, Witold Łykowski<sup>2</sup> (¹Wrocław University of Life and Environmental Studies, Poland)

Weed composition and diversity of three organic farms in Hungary. Zsuzsanna Keresztes, Zita Dorner, Mihály Zalai (Szent István University, Hungary)

The impact of short rotation coppice (SRC) willow on insect diversity. Joanna Krzymińska, Katarzyna Nijak (Institute of Plant Protection National Research Institute, Poland)

Germination characteristics of Apera spica-venti biotypes susceptible and resistant to ALS inhibitors. Marta Stankiewicz-Kosyl, Aleksander Ciepka (Warsaw University of Life Sciences, Poland)

Ground spider variability in a dry meadow. Daniela Lupi<sup>1</sup>, Anna Rocco<sup>1</sup>, Romana F. Eördegh, Costanza Jucker<sup>1</sup>; Paolo Pantini<sup>2</sup> (<sup>1</sup>University of Milan, <sup>2</sup>Museum of Natural Sciences, Bergamo, Italy)

Testing for the weed control potential of seed predators in agroecosystems. Paula R. Westerman, Heike Pannwitt, Christian Selig, Friederike de Mol, Bärbel Gerowitt (University of Rostock, Germany)

Effects of field margins on the weed composition of organic cereals. Mihály Zalai, Zsuzsanna Keresztes, Zita Dorner (Szent István University, Hungary)