

# Ecostacking in Theory & Practice: A New Approach to Crop Protection



**Course dates and location:** 2-6 September 2019, University of Eastern Finland, Department of Environmental and Biological Sciences, Kuopio, Finland

## Course Series Description

The PhD-course series "Ecostacking: a new approach to crop protection" focuses on sustainable use of natural resources and food production in the Nordic countries and beyond.

This introductory course covers the newest developments in the theory of pest management: the role of different levels of biodiversity (within-species genetic diversity in crop plants, within-field vegetation diversity, and diversity at the agroecosystem level) in controlling pests, diseases and weeds; mechanisms of key interactions including plant signaling and chemical communication; population dynamics of pests, diseases and weeds; and integration of agronomic and management measures to optimize pest control outcome in an ecologically and economically sustainable manner.

Upon taking the course, students will have gained knowledge and experience at the frontier of ecological interactions determining the effects of biotic diversity on pest management and ecosystem services.

**For a full course description, please see NOVA University Network website:**

<https://www.nmbu.no/en/students/nova/students/phd-courses/phd-courses-2019/node/35256>

## Pedagogical Approach

- problem-oriented learning
- positive feedback and learning within study groups
- hands-on training of key concepts in the lab and in the field

## Admission

Admission for NOVA courses is handled by the course organizer, the Swedish University of Agricultural Sciences (SLU). **Apply by sending an email to the course coordinators: Dr. Paul Egan, (paul.egan[at]slu.se) and Dr. Ingeborg Menzler-Hokkanen (ingeborg.menzler-hokkanen[at]uef.fi)**

**Course application deadline: July 10, 2019**

**NOVA**  
UNIVERSITY NETWORK

**NOVA PhD course of 3 ECTS**

## Estimated Workload

- 15 h lectures
- 15 h lab and field work
- 15 h seminars
- 45 h independent work

## Teachers

**Prof. Emeritus Jarmo Holopainen**,  
University of Eastern Finland  
**Assoc. Prof. James Blande**,  
University of Eastern Finland  
**Dr. Paul Egan**, Swedish University  
of Agricultural Sciences, Sweden  
**Dr. Ingeborg Menzler-Hokkanen**,  
University of Eastern Finland  
**Prof. Emeritus, Heikki Hokkanen**,  
University of Helsinki, Finland

## Prerequisite Knowledge

Basic or advanced courses in applied entomology, crop protection, and ecology. MSc students may participate in exceptional cases and upon supervisor endorsement.