

Detailed course schedule

Sunday 24 September 2017

Arrivals in Helsinki, accommodation in dormitories

Monday 25 September 2017

09:00 Opening and introduction to the course HH
 09:15 Lecture 1 The current climate change and insects: somebody loses, somebody wins DLM
 10:45 Break
 11:00 Lecture 2 The spotted wing drosophila *Drosophila suzukii* - a pest that is here to stay PB
 12:30 Lunch break
 14:00 Exercise 1 Open access databases and other long-term datasets as tools for insect monitoring PV
 17:00 End of day 1

Tuesday 26 September 2017

09:15 Lecture 3 Alpine insects, and the case of *Cydia molesta* expansion AF
 10:45 Break
 11:00 Lecture 4 / Exercise 2 *Drosophila suzukii*/Autographa gamma demo PB/SR
 12:30 Lunch break
 14:00 Exercise 3 Student group work on assignments DLM
 17:00 End of day 2

Wednesday 27 September 2017: Workshop on "Climate change and invasive pest threats in the North"

	Speaker	Organization	Topic area	Participation status	Paper or review title
1	Dmitry L. Musolin	Saint Petersburg State Forest Technical University, Russia	Forest pests in Russia. Responses of insects to climate change	Confirmed	Even warmer: Insects in a warmer world - a 10-year update
2	Kari Heliövaara	University of Helsinki Department of Forestry	Forest pests	Confirmed	Threatening forest pests in Finland: climate change and invasions as drivers (
3	Panu Välimäki	University of Oulu, Finland	Systematic monitoring of Lepidoptera in Lappish mountains	Confirmed	Monitoring of boreal and subarctic Lepidoptera in Finnish Lapland
4	Riikka Kaartinen	Suomen Luonto - lehti	Ecology	to be confirmed	Arctic food webs
5	Gudmundur Halldorson	Agricultural University of Iceland	Invasive insects in Iceland	Confirmed	Climate change and invasive insect pests in Iceland: Case study of <i>Elatobium abietinum</i> .
6	Toke Thomas Höye	Aarhus University, Denmark	Climate change entomology in Greenland	to be confirmed	Declining diversity and abundance of High Arctic fly assemblages over two decades of rapid climate

					warming (proposed – to be confirmed)
7	Paul Becher	Swedish University of Agricultural Sciences	Chemical ecology	Confirmed	Spotted Wing Drosophila-blueberry interactions
8	Santosh Revadi	Swedish University of Agricultural Sciences	Chemical ecology	Confirmed	<i>Autographa gamma</i> as a migratory pest
9	Aurelie Ferrer	Institut Supérieur d'Agriculture et d'Agroalimentaire Rhône-Alpes (ISARA) Lyon, France	Agroecology	Confirmed	Case study of <i>Cydia molesta</i> , the oriental fruit moth, and the impact of climate change on its potential future distribution
10	Kari Heliövaara	University of Helsinki Department of Forestry	Forest pests	Confirmed	Moth, canker disease and Norway spruce: Coincidence of <i>Cydia pactolana</i> with <i>Neonectria fuckeliana</i> (submitted)
11	Heikki Hokkanen & Ingeborg Menzler-Hokkanen	University of Helsinki Department of Agricultural Sciences	Biological control	Confirmed	<i>Acantholyda posticalis</i> on pine trees – an outbreak prevented with the use of entomopathogenic nematodes

Thursday 28 September 2017

09:15	Lecture 5	Greenland insects and food webs under climate change	TTH
10:45	Break		
11:00	Exercise 4	Insect herbivory in an Arctic context	TTH
12:30	Lunch break		
14:00	Exercise 5	<i>Cydia molesta</i> –related exercise	AF
17:00	End of day 4		

Friday 29 September 2017

09:15	Lecture 7	Changing insect fauna in Finland – trends, drivers and outcomes	KH
10:45	Break		
11:00	Field exercise	Field trip to monitor forest insects	KH
(12:30	Lunch break – picnic)		
14:00	Final exam		
16:00	Return travels		

HH = Heikki Hokkanen, DLM = Dmitry L Musolin, PB = Paul Becher, PV = Panu Välimäki, AF = Aurelie Ferrer, KH = Kari Heliövaara, SR = Santosh Revadi, TTH = Toke Thomas Höye