BEE DOC & COLOSS

present

a training school on

Apiculture Extension:

Connecting Stakeholders

11-13 February 2013

Bern, Switzerland

SEVENTH FRAMEWORK PROGRAMME

Ricola Foundation Nature & Culture

UNIVERSITÄT BERN

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
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apisuisse

SLU
Swedish University of Agricultural Sciences

UNIVERSITY OF COPENHAGEN

bee care
BAYER

ARO

WAGENINGEN UNIVERSITEIT
WAGENINGEN UR

UNIVERSITY OF MARYLAND 18 56

Registration & Reimbursement

- No registration fee is required, but speakers should provide their registration and abstract forms electronically to Geoff Williams (geoffrey.williams@alp.admin.ch) by **4 February 2013**; all others just need to provide a completed registration form.
- Travel reimbursement is provided to international invited speakers to cover travel expenses up to a maximum of 500 CHF. Reimbursement forms, with all original receipts, should be submitted to Aline Fauser (see contact details below) by **15 March 2013**.

Travel

Meeting coordinates:

- Institute of Bee Health / Swiss Bee Research Centre, Agroscope Liebefeld-Posieux Research Station, Schwarzenburgstrasse 161, Bern, Switzerland
- For Google Map, refer to: http://www.bees.unibe.ch/content/bern_liebefeld_address/index_eng.html

Plane to Switzerland:

- International guests should fly to Genève, Zürich, or Basel airports.

Train to Bern:

- Upon arrival in Switzerland, participants are recommended to travel to Bern Main Station (Bahnhof) by train.
- Connections from Genève and Zürich airports are typically every half hour. From Basel airport (actually in France) participants must take a short bus to Basel Main Station, and then connect to Bern by train. Check SBB for specific connection details (www.sbb.ch).
- Second class tickets can be purchased at airport or main train stations upon arrival in Switzerland, and just prior to train travel. Seat reservations are not necessary.

Bus or Train to Liebefeld Park:

- Bus 10 can be taken to Liebefeld Park from Bern Main Station (near outside Tramway next to Loeb) in direction Köniz Schliern.
- Or, urban train S6 can be taken to Liebefeld Park from Bern Main Station in direction Schwarzenburg.
- Refer to Google Map above or the SBB website for details.

Accommodation

- Participants should book their own accommodation in central Bern.
- Recommended hostels/hotels include, in order of price:
  - Hotel Glocke http://www.chilisbackpackers.com/deutsch.htm
  - Hotel Continental http://www.hotel-continental.ch/de/index.htm
  - Hotel Astoria http://www.astoria-bern.ch
- Book directly with the hotel. **Availability is limited, so please reserve soon.**

LOCAL ORGANIZER CONTACT INFORMATION

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Schedule

Date	Time	Event	Speaker	Location
Mon. 11 Feb. 2013	19.00-	Mixer		Thai Restaurant Piman, Herrengasse 22, Bern
Tues. 12 Feb. 2013	8.30-9.00	Registration / Check-in		Institute of Bee Health / Swiss Bee Research Centre
	9.00-9.30	Training school introduction & COLOSS/BEE DOC dissemination	Peter Neumann, Gina Tanner, Aline Fauser, Geoff Williams	
	9.30-10.30	The Bee Informed Partnership & North American dissemination experiences	Dennis vanEngelsdorp	
	10.30-10.45	Coffee Break (provided)		
	10.45-11.15	Bayer Bee Care Centre	Manuel Trischler	
	11.15-11.35	Netherlands extension & dissemination experiences	Tjeerd Blacquiere	
	11.35-11.55	Swedish extension & dissemination experiences	Eva Forsgren	
	11.55-12.15	Danish extension & dissemination experiences	Annette Bruun Jensen	
	12.15-12.35	Israeli extension & dissemination experiences	Nor Chejanovsky	
	12.35-14.30	Lunch (provided)		
	14.30-15.00	Swiss Bee Health Service	Ruedi Ritter, Benjamin Dainat	
	15.00-16.30	Dissemination & extension discussion (snacks provided)	all	
	16.30-18.00	On own		
	18.00-19.15	Guided tour of Old Town Bern (provided)		Nationalbank / Bundesplatz, Bundesplatz 1, Bern
	19.15-	Social dinner		Tramdepot, Grosser Muristalden 6, Bern
Weds. 13 Feb. 2013	9.00-9.15	Registration / Check-in		Institute of Bee Health / Swiss Bee Research Centre
	9.15-9.30	COLOSS v.2.0	Geoff Williams	
	9.30-10.30	COLOSS v.2.0 discussion	all	
	10.30-11.00	Coffee Break (provided)		
	11.00-11.15	CAREBEES	Peter Neumann	
	11.15-12.00	CAREBEES discussion	all	
	12.00-12.30	Training school wrap-up	all	
	12.30-	Lunch / Depart		

Participant List

Name	Institute	Country	Email
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Summary

BEE DOC and COLOSS members met in Bern for a training school to learn and to discuss ways to improve communication among various stakeholders interested in honey bee health issues. Attendees accepted there were multiple challenges associated with successful exchange of information and knowledge.

Key to communication success, particularly for researchers includes: 1.) Thorough knowledge of idea or objective to be communicated; 2.) Correct identification of target audience; and 3.) Correct identification of most effective communication means.

Additionally, attendees identified issues of inappropriate interpretation of messages provided by researchers (e.g. media and scientific attention on CCD and 'Zombie' flies). Attendees also acknowledged that general training on communication is lacking. This includes not only scientific writing and other means of communicating to non-scientific stakeholders and the general public, but also dialogue with media. An unanimous decision was taken that COLOSS should follow up on this point by hosting an event to provide such education.

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Abstracts

Extension and dissemination for beekeepers in the Netherlands

Tjeerd Blacquière[1], Bram Cornelissen[1], Coby van Dooremalen[1], Jozef van der Steen[1] & Jeroen Vorstman[2]

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[2]Dutch Beekeepers Union, (Nederlandse Bijenhoudersvereniging, NBV), Grintweg 273, 6704 AP Wageningen, The Netherlands

In the nineteen eighties all agricultural extension services in the Netherlands have been privatized, and have since become the responsibility of the professional sectorial stakeholders. However, beekeeping is, apart from fewer than 20 (semi-) professionals, solely a hobby activity for about 7000 beekeepers. These beekeepers are united in one principal and two small unions. These unions have however taken the responsibility to create and organize education and extension activities for beekeepers in the Netherlands. To be able to take care of bee health a network of voluntary bee health specialists around the country has been set up. These are trained regularly to keep the standard up to date. In addition beekeepers can address questions and ask for help at the 'Bijenhuis' ('Bee house') directly or through the web site of NBV (http://www.bijenhouders.nl/). The union organizes a few beekeepers symposia each year. The two small beekeepers unions (ANI and ABTB) fully join the above activities.

Bees@wur has been involved in applied research in pollination, beekeeping and bee health for decades, and has always taken a role in extension and education of the beekeeping community. We are also involved in the training activities mentioned, but due to our limited team size and absence of funding for extension it is not possible to visit and help beekeepers on site.

For dissemination of our research to beekeepers we use the beekeepers periodicals, our own free E-mail newsletter and a yearly bees@wur symposium at which our research and other research is explained to beekeepers. In addition we involve beekeepers in some of our applied and demonstrative experiments, which creates commitment and therewith easier dissemination.

Israeli extension & dissemination experiences

Nor Chejanovsky[1] & Yossi Slabetski[2]

[1]Entomology department, Agricultural Research Organization, The Volcani Center, Israel

[2]Beekeeping Division, Extension Service, Israeli Ministry of Agriculture, Israel

The onset of the honey bee colony decline crisis enabled us to get a closer look at the functioning and coordination of honey bee research with our extension services. The Israeli extension services are composed by instructors with academic education, which are in close contact with the growers. This contact enables bi-directional flow of information from the field to the researchers and from the researchers to the field. The awareness of the situation, broadened through our participation in the COLOSS network, and the long experience accumulated by the extension service instructors through the years of handling problems that face the beekeepers, allowed us to rapidly develop a national program for monitoring the most important pathogens in the apiaries of the country and for evaluation of their impact on bee health. Moreover, the accessibility of the extension service people to the growers enabled almost immediate detection of emerging problems that translated in research programs that often include their active recruitment. The above interactions represents a very special characteristic of the Israeli research-extension service system that permits a high quality flow of information and scientific knowledge for implementation in the field.

The Swiss Bee Health Service: an extension organisation dedicated to disseminate knowledge

Benjamin Dainat[1], Ruedi Ritter[1]

[1]Bee Health Service, Apisuisse, Bern, Switzerland

Since the last century and the beginning of this one, beekeeping has become increasingly and tremendously difficult. One of the main reasons is the declining health of the honeybee. Many factors may explain this situation, such as intensive agriculture, habitat losses, scarce food source, globalization, climate change. Nowadays, beekeepers not only have to face traditional threats like foulbrood but also continuously new ones introduced by world trade such as *Varroa destructor* in the eighties or more recently *Vespa velutina*. It then became more and more often that research institutes progressively oriented their research in honey bee health. The gathered knowledge are disseminated through extension services like in the US or by doing continuous formation or courses like in Europe in cooperation with the branch. The Liebefeld research institute has a tradition of applied research on honey bee health, which was founded in 1907 after an epidemic of american foulbrood decimating colonies in large scale. The institute regularly is outreaching to form bee counselors and bee inspectors, which can only be possible via an organized beekeepers industry. Due to the complexity of health problem, this system reached a critical high point for which the institute start having less time available for research. In 2012 the confederation confirmed the creation of an independent competence centre, where extension specialists will be dedicated to transmit research results to beekeepers and teach good beekeeping practice to improve honeybee health. This centre is called Bee health service and started its functions on February 1st. This presentation will describe how the service, still under construction, is planning to work, its organization and the outreach, which final goal is to mitigate colony losses in Switzerland. An example of interaction between stakeholders on the topic bee-friendly plants will be shown.

Swedish extension & dissemination experiences

Eva Forsgren[1] and Preben Kristiansen[2]

[1]Department of Ecology, Swedish University of Agricultural Sciences, Uppsala, Sweden

[2]Swedish Beekeepers Association, Mantorp, Sweden

Bee health in Sweden is supervised and largely financed by the Swedish Board of Agriculture (JV). The board acts as coordinator for the county administrative boards, approximately 500 bee inspectors and financially supports a bee health advisor.

The honey bee pathology group at the Swedish University of Agricultural Sciences (SLU) provides a diagnostic service for the bee inspectors, and is also part of their yearly education. Moreover, researchers at SLU are, together with representatives of the beekeepers organizations part of an advisory board appointed by JV. In 2009, the beekeepers organizations initiated a process to design a national bee health program. A steering committee consisting of representatives of the Swedish Beekeepers' Association (SBR), the Beekeeping entrepreneurs (BF) and SLU was appointed and a project manager recruited. The project called “Bihälsan” has been running during the years 2010-2011, and has led to a nationwide health survey of bee colonies across the country. However, the goal to establish a permanent Swedish bee health program has failed, and other possible solutions will be discussed.

Danish extension & dissemination experiences
Annette Bruun Jensen[1], Per Kryger[2], Flemming Vejsnæs[3]
[1]Department of Plant and Environmental Sciences, University of Copenhagen, Denmark [2]The Danish State lab for diagnosis and treatment of honey bee diseases, Flakkebjerg, Aarhus University, Denmark [3]Danish Beekeepers Association, Sorø, Denmark
The extension and dissemination of honeybee related subjects in Denmark is conducted mainly by three units: Institute of Plant and Environmental Sciences University of Copenhagen; The National reference lab for honey bee diseases, Aarhus University and The Danish Beekeeper Association. Dissemination and extension are conducted at various levels: public outreach in newspapers, radio, television, internet, happenings and events, such as honey festival, knowledge transfer to beekeepers in special magazines, internet, meetings, talks, training schools, introduction courses, and consultancy for the Ministry for Food, Agriculture and Fisheries of Denmark, or for EFSA and finally in our education system, from high school visits at Universities, BSc, MSc and PhD courses, BSc, MSc and PhD projects.

COLOSSal Dissemination
Peter Neumann, Gina Tanner, Aline Fauser, Geoff Williams
Institute of Bee Health, Vetsuisse Faculty, University of Bern, Bern Switzerland & Swiss Bee Research Centre, Agroscope Liebefeld-Posieux ALP-Haras, Bern Switzerland
The honey bee research network COLOSS consists of more than 300 academic and government researchers, students, veterinarians, and beekeeper representatives from nearly 60 countries globally. The purpose of the network is to promote the understanding and prevention of honey bee colony losses by coordinating conferences, workshops, and scientific missions. Despite numerous forms of communication media available to stimulate the exchange ideas and dialogue (e.g., journal articles, email lists, website announcements, social media, etc.), disseminating information related to COLOSS and honey bee health in general to its members and other relevant stakeholders is a COLOSSal challenge. Here we discuss COLOSS' past research coordination and dissemination efforts.

The Bayer Bee Care Centre

Manuel Tritschler

Bayer Bee Care Centre, Bayer CropScience, Monheim, Germany

Honey bees (and other pollinators) play an essential role in the pollination of a large number of flowering plants and food crops. Although the global number of bee colonies increased by approximately 45 percent over the last half century, the decline in some countries in Europe and North America over recent years is concerning.

As a company with many years of experience in both animal health and crop protection, Bayer has set up a Bee Care Program as part of its commitment to bee health.

Improve bee health

The Varroa mite is recognized as the key threat to honey bee health in most countries. Bayer has been offering products to combat Varroa for more than 25 years and further solutions are also being developed by us, in collaboration with renowned scientists. To encourage creation of nutritional foraging habitat for bees, we have established flowering projects with communal partners and farmers and have sown flowering strips for honey bees on some company sites. Further projects are in planning.

Ensure bee safety

At Bayer, we take our responsibility to bee safety very seriously. We are working with farmers to ensure that our products, which are essential to protect plants, are used in a bee-responsible manner. Through the researching and extensive testing of our products, we aim to continuously improve the proper use of our technologies and the stewardship measures we have put in place.

Dialogue and cooperation at the Bayer Bee Care Center

We believe that cooperation is essential in developing sustainable solutions that will improve honey bee health. The Bayer Bee Care Center brings our company's knowledge on bee health under one roof and coordinates our projects with external partners. It serves as a scientific and communication platform to promote partnerships and lead to an open dialogue with all who share our concern for the welfare of bees. A second Bayer Bee Care Center will open in North Carolina, USA, later this year, focusing on North America.

The Bee Informed Partnership: Using beekeepers' real world experience to solve beekeepers' real world problems

Dennis vanEngelsdorp

University of Maryland

The Bee Informed Partnership is an extension project that endeavors to decrease the number of honey bee colonies that die over the winter. The project proposes to help beekeepers keep colonies alive by initiating several levels of surveys. These surveys will document which management practices beekeepers use and the degree of loss suffered by those beekeepers. Using methods developed by human epidemiologists, we will compare the effectiveness of different management practices by calculating and comparing the losses suffered by those that did or did not use a particular management practice. In recognition of the fact that the most appropriate management practices for a beekeeper in one region are not necessarily the same for beekeepers in other regions, we will develop web- and app-based tools that will enable beekeepers to interact with the survey data to permit them to compare management practices among groups of beekeepers that share their geography, purpose (e.g., honey production, pollination), and/or management philosophy (e.g., minimal pesticide use). To facilitate this level of engagement, we will develop a honey bee health database that will act as a repository for all honey bee health data collected from this and other bee health surveillance projects.

This project is motivated by the conviction that beekeepers, when presented with beekeeper-derived data that objectively show which management practices worked and which did not, will adopt the more successful practices. This, in turn, will reduce colony losses and increase the availability of pollinating units overall.

Notes