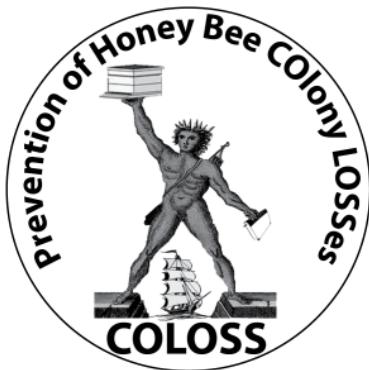




CONSIGLIO PER LA RICERCA
IN AGRICOLTURA E L'ANALISI
DELL'ECONOMIA AGRARIA

CRA - API
UNITÀ DI RICERCA
DI APICOLTURA E BACHICOLTURA



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**UNIVERSITÄT
BERN**

COLOSS Workshop: “Varroa control strategies”

Proceedings

Bologna (Italy), 2 - 3 December 2014

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Topics

- Updates about recent experiments on varroa control
- Finalization of protocols for the joint trials in active season 2015
- Creation of member subgroups performing the 2015 actions

Organization contacts

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Agenda

1 December 2014	
19:00 -	Social event
2 December 2014	
08:15 - 08:45	Registration on site
08:45 - 09:00	Welcome and workshop organization
PLENARY: Short presentation on workshop's subjects	
Chair: Claudia Garrido	
9:00 - 9:05	<i>V. Dietemann</i> - Designing the Coloss varroa task force collaborative experiments
9:05 - 9:10	<i>J.A. Ruiz et al.</i> - Protocol and valuation of varroa control strategy in Tenerife. A different point of view
9:10 - 9:15	<i>V. Soroker et al.</i> - Development of methods for varroa management in Israel
9:15 - 9:20	<i>A. Gregorc, N. Kezić</i> - Combating varroa mites in honey bee colonies using organic substances
9:20 - 9:25	<i>A. Uzunov, Ralph Büchler</i> - Brood removal method - positive effects on honey bee colony health and performance
9:25 - 9:30	<i>C. Garrido et al.</i> - Steady performances of the brood interruption technique in different environmental conditions
9:30 - 9:35	<i>P. Aldea</i> - Costs and benefits of integrate management of <i>Varroa destructor</i>
9:35 - 9:40	<i>P. Kryger et al.</i> - Data collection for varroa threshold
9:40 - 9:45	<i>Bjorn Dahle</i> - <i>Varroa destructor</i> infestation level in Norwegian honey bee colonies
9:45 - 9:55	Discussion
9:55 - 10:00	<i>M. Pietropaoli, O. Kilpinen</i> - Protocols for the comparison of methods to assess the varroa mite infestation on honey bees
10:00 - 10:05	<i>C. Costa et al.</i> - Comparison of methods for varroa infestation assessment and evaluation of hygienic behaviour
10:05 - 10:10	<i>F. Vejsnæs, O. Kilpinen</i> - Comparison of powder sugar method and natural mite fall
10:10 - 10:15	<i>A. Nanetti et al.</i> - Critical considerations on the methods to assess the varroa infestation of the honey bee colonies in summer
10:15 - 10:20	<i>B. Dainat, V. Dietemann</i> - Formic acid administration maintaining efficiency for treatment against <i>Varroa destructor</i> in Europe under highly variable climatic conditions
10:20 - 10:25	<i>M. F. Coffey, J. Breen</i> - On-going field trial on the efficacy and tolerability of mite away quick strips (MAQS)
10:25 - 10:30	<i>G. Formato</i> - Formic acid field trials in Italy: results of summer 2014
10:30 - 10:35	<i>T. Blacquière et al.</i> - Cooking with oxalic acid in summer
10:35 -	Discussion

10:45	
10:45 -	
11:10	<i>Coffee break</i>
11:10 -	SEPARATE GATHERING OF WORKING GROUPS DISCUSSING OWN PROTOCOLS
13:00	
13:00 -	<i>Lunch</i>
14:00	

PLENARY: PROTOCOL PRESENTATION AND DISCUSSION

Chair: Ales Gregorc

14:00 -	<i>M. Pietropaoli, O. Kilpinen</i> - Comparison of methods to assess the Varroa mite infestation on honey bees (WG 1)
14:40	
14:40 -	<i>A. Nanetti</i> - Brood interruption method (WG 2)
15:20	
15:20 -	<i>A. Uzunov, Ralph Büchler</i> - Brood removal method (WG 2)
16:00	
16:00 -	<i>P. Kryger, C. Costa</i> - Data collection for threshold methods (WG 3)
16:40	
16:40 -	<i>Coffee break</i>
17:10	
17:10 -	<i>G. Formato, B. Dainat</i> - Comparisons of formic acid dispensers in summer (WG 4)
17:50	
20:00 -	<i>Dinner</i>

3 December 2014

PLENARY: ORGANIZATION OF FIELD EXPERIMENTS

Chair: Cecilia Costa, Per Kryger

09:00 -	WG 1 - (Infestation assessment)
09:30	
09:30 -	WG 2 - (Brood interruption)
10:00	
10:00 -	WG 2 - (Brood removal)
10:30	
10:30 -	<i>Coffee break</i>
10:50	
10:50 -	WG 3 – (Threshold methods)
11:20	
11:20 -	WG 4 – (Formic acid dispensers)
11:50	
11:50 -	Final discussion and workshop conclusions
13:00	
13:00 -	<i>Lunch, departure, visit to the city according to participants' desires</i>

The participants will be asked to contribute to the expenses with a registration fee of 40 Euros.

Workshop summary

The Varroa Group meetings held in Bled, Slovenia (22-23 May 2014) and Murcia, Spain (6-8 September 2015) put into evidence the need to optimize the 2015 activity on varroa control, by creating member subgroups focusing on the following experimental areas:

- Comparison of methods for assessing the colony infestation level,
- Summer control concepts based on egg laying interruption and brood removal, associated with oxalic acid treatments,
- Collection of data to establish infestation thresholds,
- Comparison of methods to administer formic acid to the infested colonies.

Once established the general working lines, each subgroup needed to thoroughly discuss on their priorities and on the details of respective protocols, taking into consideration environmental and practical variables occurring in each region. In effect, many of the trials were intended to be done in highly diversified (mostly but not only European) countries.

This was the main objective of the Bologna workshop: being the main seat where the members could put their perspective on the table for global discussions, to ultimately elaborate the respective action plans.

The workshop started with short presentations on relevant aspects, to create a basis for further considerations. A later discussion session allowed the members to gather in subgroups and to prepare protocol drafts for submission to plenary discussions. Eventually, the subgroups were rebuilt according to member's interests and were given a coordinator, that is responsible for drafting the ultimate protocol versions and for collecting data during the trial completion. Once finalized, the protocols will be disseminated to participating and non-participating members.

List of participants

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