

RESEARCH ACTIVITIES SUMMARY- 2009
Prepared by Medhat Nasr for
CHC Hive Health Committee Oct 28 ,2009

AAFC Research Station, Beaverlodge, AB

Principle Investigator: S. Pernal

Project Titles:

- Integrated management of Nosema & detection of antibiotic residues.
- AFB study
- Honey bee disease detection and food safety of honey
- Integrated management of Oxytetracycline-Resistant American Foulbrood (AFB) disease in honey bees
- Varroa mite control using Thymol powder (Guzman, Guelph)

University of Manitoba

Principle Investigator: R. Currie

Project Titles:

- Cultural and chemical treatments to synergize honey bee resistance mechanisms against the parasitic mite, Varroa destructor, and the diseases it vectors including viruses.
- Integrating chemical control and host resistance to increase treatment thresholds for Varroa destructor.
- Formic acid fumigation in indoor facilities for varroa control.

University of Guelph

Principle Investigator: E. Guzman

Project Titles:

- Study of Nosema detection, seasonality and effects on bees
- Varroa control using Thymol applied in various methods including powder
- Genetic bases for defensive behaviour of honey bees
- Heritability of mechanisms of resistance against varroa mites in honeybees

University British Columbia

Principle Investigator: L. Foster, University British Columbia
S. Pernal, Agriculture Agri-Food Canada

Project Titles:

- *Apis mellifera* Proteomics of Innate Resistance (APIS)

AAFC Research Station, Kentville NS

Principle Investigator: K. Burgher-MacLellan

Project Titles:

- The use of real time PCR to identify Nosema spp. another pathogens in honey bee (*Apis mellifera*) colonies in Nova Scotia
- Nosema in honey bee colonies: epidemiology and control

Université de Montréal, Saint-Hyacinthe, Québec

Principle Investigator: P. Dubreuil

Project Titles:

- Evaluation of three Varroa mite control products in combination with an Oxalic Acid treatment for the control of varroa mite in honey bee colonies in southern Québec

Alberta Agriculture- Research Division

Principle Investigator: M Nasr

Project Titles:

- Honey Bee Pests Surveillance: Development of a Real-Time Data Base for monitoring
- Evaluation of new miticides for varroa control in an integrated pest management system
- Optimization of Integrated Parasitic Mites Management Systems in Canadian Prairies
- Evaluation of commercially available pollen supplementary diets for feeding bees

M.A.P.A.Q. Deschambeault, (Research Station) Quebec

Principle Investigator: P. Giovenazzo

Project Titles:

- Comparison of the performance of selected bee stocks
- Thymovar efficacy
- Varroa management

Saskatchewan Beekeepers Association

Principle Investigator: A. J Robertson

Project Titles:

- Evaluation of Varroa and Tracheal mite tolerance in selected honey bee lines and attempted correlation of tolerance with DNA markers.

ONTARIO Tech-Transfer Program

Principle Investigator: Alison Skinner

Project Titles:

- Breeding and maintaining parasitic mite resistant honey bee stocks in Ontario
- Monitoring regimes for honey bee colonies in response to high winter losses in Ontario & honey bee mite scouting program
- Field trials for timing treatment applications and efficacy