## Technology Transfer Program

2018 UPDATE

### The Team

Les Eccles

Melanie Kempers

Daniel Thurston

Daniel Borges

Kelsey Ducsharm

Violet

+ summer students



## Workshops

#### **Basic:**

- Introductory Beekeeping
- Integrated Pest Management
- Queen Rearing

#### **Advanced:**

- Integrated Pest Management
- Queen Breeding







# Apiology 1⊖1

#### Introduction to Beekeeping



This beginner beekeeping course consists of modules that teach you everything you need to know to get started keeping your own bees. Topics include basic honey bee biology, beekeeping equipment, working in the bee colony, seasonal beekeeper

#### Integrated Pest Management



This intermediate beekeeping workshop consists of modules that teach you everything you need to know to keep your bees alive and healthy. Topics include pest and disease biology and identification, monitoring for pests and diseases, record keeping, treatments

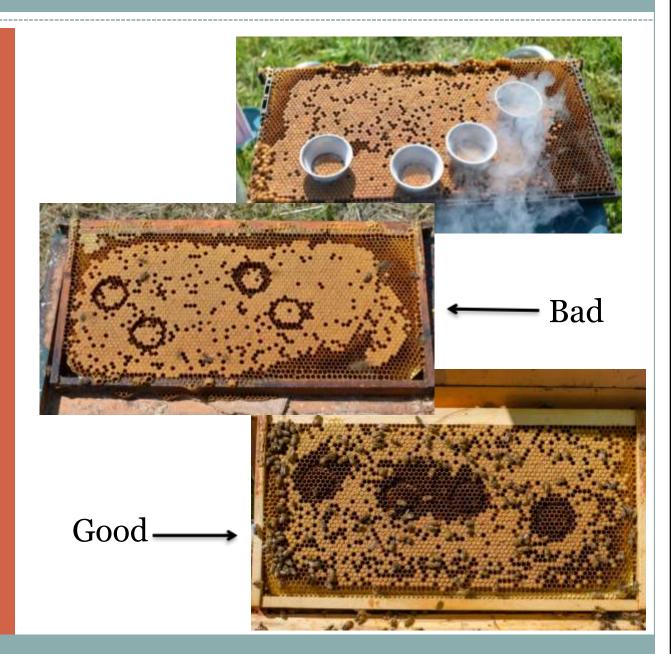
### Ontario Resistant Honey Bee Selection Program



- "...helping Ontario bee breeders select for improved genetic stock since 1992!"
- Collaborative effort between OBA Technology Transfer Team (TTP) and Ontario Bee Breeders Association
- Desirable traits selected by breeders, then hygienic testing is conducted on preferred colonies by TTP technicians
- Highest performing colonies are then selected and bred within a controlled mating system

### **Hygienic Testing**

- Breeder selected colonies
- o Freeze kill young brood
- Assess tested areas after24 hrs
- o Rank colonies 1-5 based
- Collect samples for Varroa mite, tracheal mite, and *Nosema* testing
- Breeders use top ranking colonies



### Huntsville Isolated Mating Yard

- Reserve of desirable genetics
- Open for ORHBS members to use as a mating yard
- Set-up in summer of 2015, ongoing.

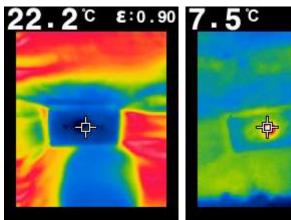


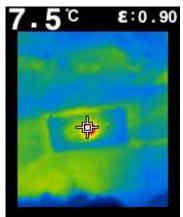
Using Thermal Imaging as a Monitoring Tool

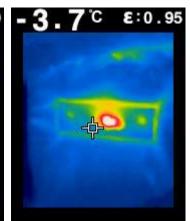


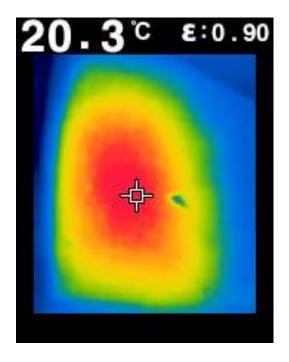


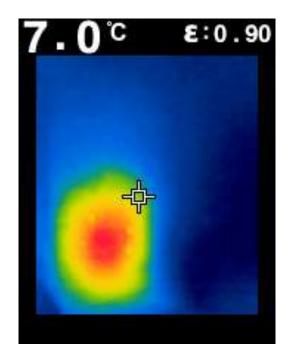


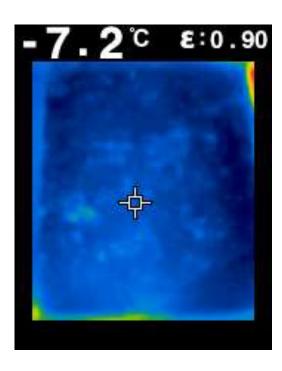


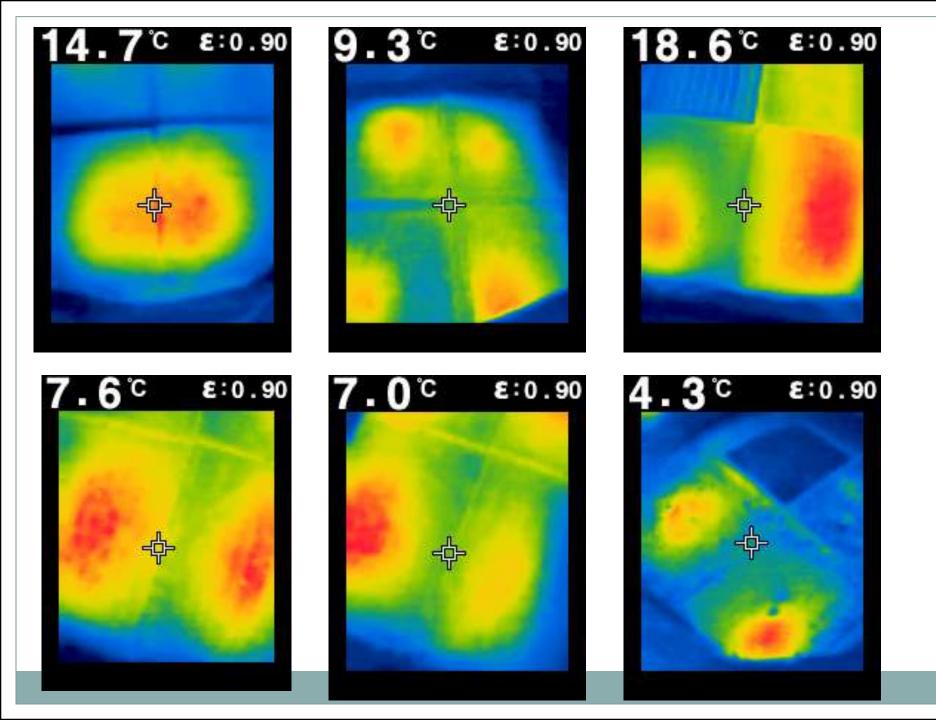


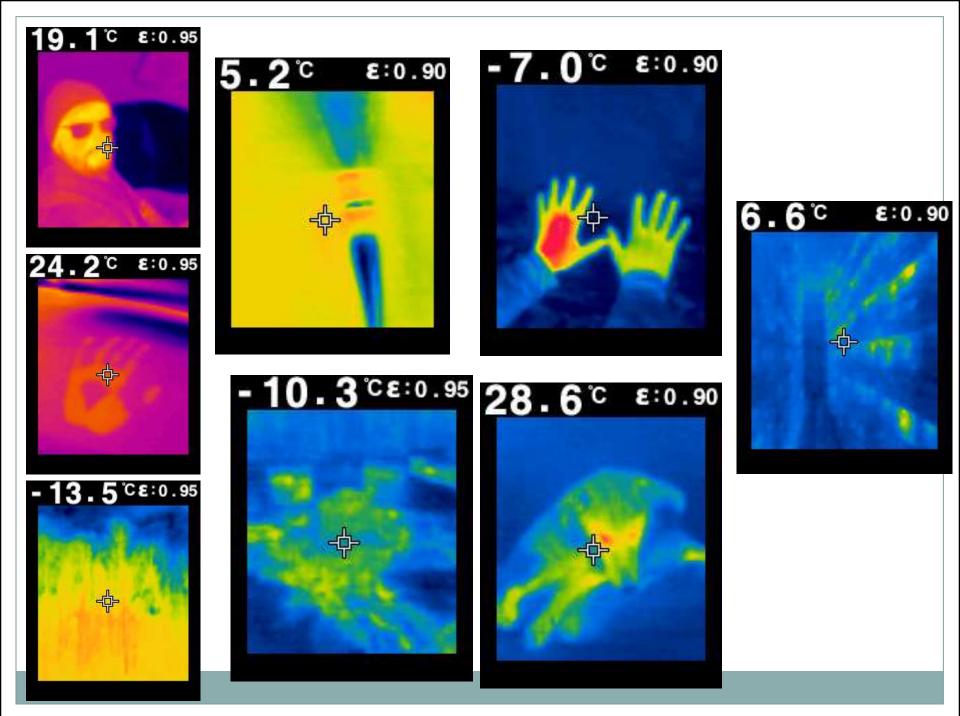


















**FLIR One Pro** 

**FLIR TG 165** 

**FLIR E6** 



Mid-range Accessible On sale at Canadian Tire

Mid-season treatments for Varroa mites

Apidologie (2016) 47:596–605 © INRA, DIB and Springer-Verlag France, 2015 DOI: 10.1007/s13592-015-0405-7 Original article

#### A new formulation of oxalic acid for Varroa destructor control applied in Apis mellifera colonies in the presence of brood

Matías Maggi<sup>1,2</sup>, Elian Tourn<sup>3,4,5</sup>, Pedro Negri<sup>1,2</sup>, Nicolás Szawarski<sup>1</sup>,
Alfredo Marconi<sup>3,4,5</sup>, Liliana Gallez<sup>6</sup>, Sandra Medici<sup>1,2</sup>, Sergio Ruffinengo<sup>7</sup>,
Constanza Brasesco<sup>1</sup>, Leonardo De Feudis<sup>1</sup>, Silvina Quintana<sup>8</sup>, Diana Sammataro<sup>9</sup>,
Martin Eguaras<sup>1,2</sup>

- Grooming Behaviour
- Collaboration with Dr. Ernesto Guzman at the University of Guelph



- Varroa Sensitive Hygiene
- Collaboration with Dr. Pierre Giovenazzo from the Université Laval



### Other hot topics...

New Antibiotic Regulations



# Thank you.

**QUESTIONS?**