

Services to companies: Laboratory trials – insects & mites

## Parasitic wasps of aphids

### Technical question? Aims of the trial

Characterize the side effects of chemical products used for pest control in fruit crops on aphid parasitoids (in order to explore/prove the suitability of those products for use in IPM programs)

- Spraying timing?
- Developmental stages (eggs, young/old larvae, mummies, adults)?
- Products with contact/systemic activity?
- Climatological conditions (T°C, RH, photoperiod)?

What are the side-effects of the test product against aphid parasitoids compared to reference products/control (check) ?

### Trial summary

- Trial in petri dishes, containers or insect cages in plant growth chambers under controlled conditions (T°C, RH, photoperiod)
- Rearing of aphid parasitoids on target aphid (for testing the side-effects of products on different developmental stages)
- Treatments: Pre- (or post-) releasing applications of (calibrated) dose rates (hand sprayer/ tower sprayer)
  - Minimal 4 replicates
  - Test product
  - Reference product : known toxic products
  - Control (check) : water
  - Different application timings (depending on request/trial goals)
    - targeting different development stages: eggs, young/old larvae, mummies, adults
    - Pre-parasitization versus post-Pre-parasitization applications
- Assessments (before and/or after application according to the trial goals)
  - Number of living/dead/affected/formed parasitoids (Eggs, young/old larvae, mummies, adults)
  - Offspring/adult performance
- Statistical analysis of outcomes



### Trial output

- Regular trial/results updates
- Data in xls/docx/ARM
- Report (trial details, graphs, summary, conclusions)



- Certified and (inter)nationally recognized centre of excellence in fruit research
- 75 years of experience and expertise
- GEP accredited
- Highly valued contractor for numerous product developments the past 75 years

**Interested?** Please do not hesitate to contact us:

pcfruit vzw, Zoology Department (services to companies):

Tim Belien [tim.belien@pcfruit.be](mailto:tim.belien@pcfruit.be) Tel. +32 (0)11/69.71.30

Eva Bangels [eva.bangels@pcfruit.be](mailto:eva.bangels@pcfruit.be) Tel. +32 (0)11/69.71.31

