

Services to companies: Laboratory trials – insects & mites

Fruit crop aphids

Technical question? Aims of the trial

Which conditions are required/optimal for control of fruit crop aphids by the test product(s)?

- Dose rate?
- Developmental stages (aphid nymphs/adults, winged/wingless aphids)?
- Direct/indirect contact, systemic activity?
- Climatological conditions (T°C, RH, photoperiod)?

What is the efficacy of the test product against aphids compared to reference products/control (check)?

Trial summary

Trial in petri dishes/insect cages in plant growth chambers under controlled conditions (T°C, RH, photoperiod)

- Rearing of aphid colonies on potted seedlings and/or leaf discs placed in petri dishes
- Treatments: Applications of (calibrated) dose rates (hand sprayer/ tower sprayer)
 - Minimal 4 replicates
 - Test product
 - Reference product : known effective products
 - Control (check): water
 - Different treatment timings (depending on request/trial goals)
 - → targeting different development stages: mixed or separated aphids (nymphs and/or adults, winged/wingless)
 - → preventive versus curative applications
- Assessments
 - · Number of aphids 2 hours before the spraying
 - Number of living/dead/affected aphids 1-7 days after spraying (depending on trial goals)
 - Behavioral responses of aphids to test product (dispersing, gathering, winged aphid formation)
 - Plant damage level (leaf curl, honeydew production, sooty mold growth)
- 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 <u>tim.belien@pcfruit.be</u> Tel. +32 (0)11/69.71.30 Eva Bangels <u>eva.bangels@pcfruit.be</u> Tel. +32 (0)11/69.71.31

