

Services to companies: Laboratory trials – insects & mites

Pear bud weevil (*Anthonomus pyri*) Dried residue toxicity

Technical question? Aims of the trial

Determination of the toxicity of a topical application of insecticides against Anthonomus pyri:

- Screening for insecticides
- Determination of adult mortality (adulticide action)
- Determination of the speed of adult mortality
- Determination of difference in sensibility between different populations

Trial summary

- A. pyri weevils to be tested are obtained by collecting infested flower buds in the field and enabling them to pupate under controlled climate conditions in a plant growth chamber
- Apple leaf disks collected in untreated orchards are dipped in or sprayed with an insecticide solution by a Potter Spray Tower

(Burkard Scientific), air dried and mounted on agar-agar in petri dishes

OR

- Insecticide coated glass vials after air drying on a roller shaker
 - Minimal 5 replicates per insecticide and concentration
 - Different test products at different concentrations
 - Positive and negative reference (check): purified water
- Transfer of the A. pyri weevils on to the dried residue
- Assessments:
 - Number of living/dead/affected A. pyri
 - Timing dependent on insecticidal action
- Statistical analysis of outcomes

Trial output

- Data in xls/ARM + Report (M&M, graphs, summary, conclusions)
- Adulticide action: mortality rates in function of time of insecticide residues
- Screening of interesting compounds
- 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



