

Services to companies: Laboratory trials – insects & mites

Asiatic Fruit Fly (*Drosophila suzukii*) dried residue toxicity

Technical question? Aims of the trial

Determination of the toxicity of dried residues of insecticides against *Drosophila suzukii*:

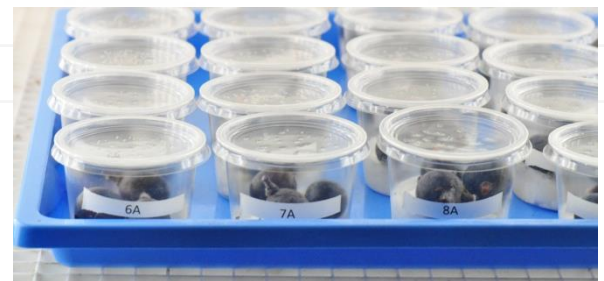
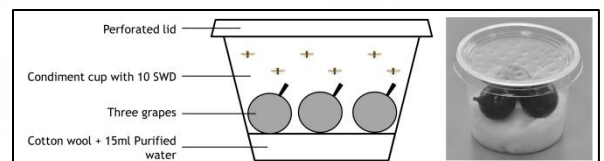
- Screening for insecticides
- Determination of adult mortality (adulticide action) versus number of larvae per fruit (ovicide / larvicide / fecundity effect)
- Determination of the speed of adult mortality
- Determination of the larval stadia present in the fruit (ovicide / L1, L2 and/or L3 larvicide)

Trial summary

Trial in condiment cups with insecticide treated grapes incubated under controlled conditions with 10 *D. suzukii* flies:

- Rearing of selected *Drosophila suzukii* populations and age synchronization
- Treatment: Dipping or spraying of untreated fruits with different insecticides and concentrations, followed by air drying
 - Minimal 5 replicates per insecticide and concentration
 - Different test products at different concentrations
 - Positive reference: spinosad / Negative reference (check): purified water
- Transfer of the grapes to the bioassay arena (condiment cup with hydrophilic cotton)
- Anesthesia of 10 *D. suzukii* flies and transfer to the condiment cup
- Assessments
 - Number of living/dead/affected ♂ and ♀ *D. suzukii*
 - Timing dependent on insecticide action
 - After larval growth: number of larvae and larval stage / fruit
- Statistical analysis of outcomes

Illustration and photograph of the insecticide residue trial



Trial output

- Data in xls/ARM + Report (M&M, graphs, summary, conclusions)
- Adulticide action: mortality rates in function of time
- Ovicide / Larvicide action: number of larvae per fruit and stage
- 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 tim.belien@pcfruit.be Tel. +32 (0)11/69.71.30

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

