

# **Efficacy and selectivity evaluation of Dacus Bait 100 after a bait application in controlling Ceratitis capitata on Orange**

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One trial was established on the commercial orange variety Navelina, grown in the Peloponnese region of Greece, to evaluate the efficacy and selectivity by bait application of Dacus Bait 100 SL (Hydrolyzed proteins 550 g/l) at 2% in tank mixture with Decis 2,5 EC at a ratio of 3‰ to control Ceratitis capitata. Its efficacy was compared with the commercial product Decis 2,5 EC (deltamethrin 25 g/l) applied at 50 ml/hl.

The experimental design of the trial was a randomised complete block with five replicates.

The Test and Reference Items were applied once at the beginning of fruit coloring.

The Test Item Dacus Bait 100 in tank mixture with Decis 2,5 EC was applied to approximately 1,0 square meter of the foliage of each tree with a back-mounted motorised pump sprayer designed to simulate commercial bait applications in oranges.

The Reference Item Decis 2,5 EC was applied with a spray gun on a hosepipe, designed to simulate commercial cover spray of insecticides in oranges.

One day after application one McPhail trap with 4 % ammonium phosphate in mixture with 0,5 % borax was set out in each plot.

Four assessments were made recording at each one the number of adults captured in the traps, the number of damaged fruits in a random sample of 100 fruits per plot and the number of fallen fruits due to the pest.

Crop phytotoxicity was assessed visually.

The results were statistically analysed by applying Student-Newman-Keuls Test at 5,0% on the assessment data and the efficacy was evaluated by using the Abbott's formula.

No external conditions occurred which adversely affected the conduct of the trial. Thus, the trial gave realistic results of the effect of the Test Item against Ceratitis capitata.

Conclusions from the statistical analysis of the results were:

## **Damaged fruits**

- DACUS BAIT 100 in a bait application in tank-mixture with Decis 2,5 EC at a ratio of 2% +3‰ gave superior control to Decis 2,5 EC alone at 50 ml/hl, with a statistically significant difference between treatments.

## **Captured adults**

- In both treatments DACUS BAIT 100 bait applied in tank-mixture with Decis 2,5 EC at a ratio of 2% + 3‰ and Decis 2,5 EC at 50 ml/hl alone in a cover spray

application, the number of captured adults was similar, with no statistically significant difference between treatments.

- There were **no phytotoxic symptoms** caused by any treatment.