

## Subgroup 2 - Sustainable use of pesticides

### Efficacy of different insecticides in the control of green peach aphid on nectarine

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**Abstract:** The efficacy of different insecticides in the control of green peach aphid (*Myzus persicae*) on nectarine at the the locality of Metković (Bogatić municipality) was examined conducting field trials in 2019 and 2020. The experiments was carried out according to the statistical model of completely randomized block design with four replications and standard EPPO method for evaluation of the efficacy of insecticides in the control of aphids in orchards. Insecticidal formulations were previously diluted with water and applied with a backpack sprayer "Solo". The efficacy of insecticides from the group of neonicotinoids (acetamiprid, imidacloprid, thiamethoxam), organophosphates (chlorpyrifos), pyrethroids (deltamethrin) and flonicamid were examined. Results of the experiments indicate very good efficacy of insecticides from the group of neonicotinoids in the control of *M. persicae*. The efficacy of acetamiprid three days after treatment (3DAT) was 98.23%, while seven days after treatment (7DAT) it was 99.43%. Imidacloprid showed maximum efficacy (100%) in both evaluation terms (3DAT and 7DAT). The efficacy of thiamethoxam was high, 99.69% (3DAT) and 99.92% (7DAT), respectively. Deltamethrin showed efficacy of 61.37% (3DAT) and its efficacy was 47.17% at 7DAT. The efficacy of chlorpyrifos ranged from 31.75% (7DAT) to 68.84% (3DAT). Flonicamid, considering the mode of action (anti-feeding), had a lower initial efficacy (82.13%), while the efficacy at 7DAT was significant higher (99.65%).

**Keywords:** *M. persicae*, nectarine, field trials, insecticides, efficacy