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INFLUENCE OF *SPINOSAD* ON NATURAL ENEMIES OF AVOCADO AND OTHER PESTS

Manes Wysoki, S. Rene, Miriam Eliahu. and D. Blumberg
Dept. of Entomology, Institute of Plant Protection, ARO
The Volcani Center, Bet Dagan, Israel

Spinosad, under the trade name Tracer®, a mixture of spinosyn A & D, produced by *Saccharopolyspora spinosa* (Actinomycetes), has a temporary one year emergency permit to be used in avocado plantations in Israel against the recently introduced orchid thrips, *Chaetanaphothrips orchidii* (Moulton) (Thysanoptera: Thripidae). Until the introduction of this pest the avocado orchards in Israel were under Integrated Pest Management practices based mainly on Biological Control, therefore, the influence of this product on introduced natural enemies of avocado pests was evaluated. Two concentrations of the commercial product, 0.02% (the recommended in avocado) and 0.01% were tested in laboratory trials and in a preliminary field trials on *Thripobius semiluteus* Boucek (Hymenoptera: Eulophidae), a well established parasitoid successfully controlling the greenhouse thrips, *Heliothrips haemorrhoidalis* (Bouche') (Thysanoptera: Thripidae) and on *Metaphycus stanleyi* Compere (Hymenoptera: Encyrtidae) the most abundant parasitoid of the pyriform scale, *Protopulvinaria pyriformis* Cockerell (Homoptera: Coccidae).

Additional trials were performed on the influence of *Spinosad* on other natural enemies of pseudococcid citrus pests, *Anagyrus pseudococci* Girault and *Leptomastix dactylopii* (Howard) (Hymenoptera: Encyrtidae), a parasitoid of citrus mealybug, *Planococcus citri* (Risso); *L. algirica* Trjapitzin (Hymenoptera: Encyrtidae), another parasitoid of citriculus mealybug, *Pseudococcus cryptus* Hempel and on *Mastrus ridibundus* (Gravenhorst) (Hymenoptera; Ichneumonidae) a parasitoid of the codling moth, *Carpocapsa pomonella* (L.) (Lepidoptera: Tortricidae), an apple pest.