

IPM System in Avocado Plantations in Israel

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Abstract. An IPM system was developed for avocado plantations which included control of lepidopterous pests [the giant looper, *Boarmia selenaria* (Geometridae), the honey dew moth, *Cryptoblabes gnidiella* (Phycitidae), and the carnation leaf roller, *Cacoecimorpha pronubana* (Tortricidae)], by means of *Bacillus thuringensis* preparations by aerial or ground applications. Since only young caterpillars of the giant looper are sensitive to those preparations, a monitoring system is used to forecast the appearance of the young caterpillars. Migration of Egyptian cotton leafworm, *Spodoptera littoralis* (Noctuidae), is prevented by dusting safety belts with benzene hexachloride. The outbreaks of the long-tailed mealybug, *Pseudococcus longipinus* (Homoptera: Pseudococcidae), (which have resulted from drift of aerial pesticide sprays of adjacent cotton fields), were controlled by limiting these sprays and releases of two parasitoids, *Arhopoideus* (= *Hungariella*) *pereginus* and *Anagyrus fusciventris* (Hymenoptera: Encyrtidae). The Japanese bayberry whitefly, *Parabesimia myricae* (Homoptera: Aleyrodidae), is successfully controlled by an imported California parasitoid, *Eretmocerus* sp. Efforts are being made to introduce more natural enemies against the pyriform scale, *Protopulvinaria pyriformis* (Homoptera: Coccidae), which is suppressed by two imported parasitic wasps, *Metaphycus stanleyii* and *M. swirskii* (Encyrtidae). Additionally, mineral oils are sprayed against young stages to encourage the activity of those natural enemies.