

POPULATION DYNAMICS OF PSEUDOCOCCIDS IN HASS (*Persea americana* Mill.) TREES

R. Ripa and P. Larral

Instituto de Investigaciones Agropecuarias, INIA V Región, Casilla 3, La Cruz. email: rripa@inia.cl

The population dynamics of *Pseudococcus calceolariae* and *P. longispinus* in avocado trees were studied in two localities of the Quillota province, Chile, between May 2005 and February 2007. Every three weeks the density of the pest and its natural enemies were determined in randomly extracted shoots, fruits and cardboard traps. The evolution of the infestation and damage was carried out by observing marked fruits. No important differences were detected in the phenology of both Pseudococcidae species. Early in summer, the mealybug nymphs colonize the small fruits, mainly in the peduncle. The population increases as the fruit grows actively, soon after density decreases, reaching nondetection levels in the spring months, coincident with harvest (spring). The growth of sooty mold on the fruits, a product of honeydew secreted by pests, has a time lapse of approximately 3 months following the beginning of the infestation. Environmental factors would influence their appearance, since differences were detected between localities. The females choose protected sites to deposit their descendants, observing abundant egg sacs and migratory nymphs in the aggregation traps in February, May-June and October-November. Slightly after these periods an increase of the populations in the shoots was registered. The natural enemies were observed almost exclusively in the aggregation traps, the most abundant were the predators *Cryptolaemus montrouzieri*, *Synnus* sp and *Symphorobius* sp and the parasitoids *Coccophagus gurneyi*, *Pseudaphycus angelicus* and *Tetracnemoidea brevicornis*.