

HOST RANGE STUDIES WITH THE LANTANA
MEALYBUG, *PHENACOCCLUS PARVUS*

J.T. Swarbrick^a and J.F. Donaldson^b

^aUniversity of Queensland Gatton College, Gatton, Queensland, 4343

^bQueensland Department of Primary Industries, Indooroopilly, Queensland, 4068

Abstract. The lantana mealybug *Phenacoccus parvus* Morrison (Pseudococcidae) was regarded as an unimportant Central American insect of wide tropical distribution until it was noticed on lantana in southeastern Queensland. Neither its method nor date of entry into Australia are known.

The insect was noticed on lantana in Brisbane in early 1988, and was observed killing lantana at Gatton in June 1988. Since then it has spread (and been spread) widely throughout coastal southern Queensland, where it has had at least some temporary effect against many biotypes of lantana. Its biology, ecology and population dynamics are largely unknown.

Records show the insect to be polyphagous, having been collected from a number of crops including potato, tomato, chicory, pepper (*Piper nigrum*) and siratro as well as lantana and other weeds.

Lantana mealybugs have been collected in the field near Gatton from a wide range of weeds including lantana, some native species, siratro and green panic.

Deliberate infestations in the glasshouse suggest that lantana mealybug will heavily attack celery, capsicum, cucumber, sunflower and tomato. Moderate infestations may develop on chrysanthemum, and light infestations on okra, garlic, silver beet, carrot, soybean and rhubarb. No infestations developed on infested onion, pineapple, cauliflower, chickpea, lucerne, pea, radish, wheat, oat, barley, maize or sorghum.

The identification of mealybugs collected from some of these deliberately infested hosts is still incomplete, but all checked so far have been lantana mealybug. Until species checking is completed the authors cannot confirm that all of the mealybugs collected from the hand-infested hosts in the glasshouse are in fact lantana mealybug.