Phenacoccus parvus Morrison, a possible injurious mealybug recorded for the first time from Florida
(Homoptera:Coccoidea:Pseudococcidae)

Phenacoccus parvus Morrison is recorded from Florida for the first time. Specimens were collected at Miami on Cestrum diurnum (Solanaceae), 1-IX-1883 by J. Frankel, and on an unidentified plant of the family Apioideae (Umbelliferae), 4-XI-1883, by D. Barger. These records are also the first for the continental US. Phenacoccus parvus material from Hawaii on Sida falcat has been examined.

This mealybug was described from the Galapagos Islands. Williams and Cox (1984) synonymized the name P. surinamensis with P. parvus. This species has been recorded from the West Indies, Central America, and South America on many hosts (Williams and Granara de Willink 1992). It has been recorded recently from Africa, the tropical South Pacific area, Australia, and southern Asia. The distribution was mapped, with references, by CAB International Institute of Entomology (1990).

Phenacoccus parvus comes close taxonomically to the important economic species P. herreni Cox and Williams and P. manihoti Matile-Ferrero, which damages cassava (Manihot spp.). Phenacoccus parvus differs from these species in lacking any multilocular disc pores on the dorsal margins and in possessing many of the dorsal setae with small clusters of unilocular pores near the setal collars.

Although P. parvus is known from a long list of host plants, it has never been recorded from cassava, unlike P. herreni and P. manihoti. Phenacoccus parvus is particularly common on Solanaceae and on Lantana camara (Verbenaceae). Records outside the New World are fairly recent. This species seems to have spread in recent years with amazing rapidity. It has increased in numbers to such an extent in the Cook Islands that biological control has been proposed. Recently in Queensland, Australia, it has been fairly successful in damaging Lantana camara. The mealybug was first thought to be a good control agent until its true polyphagy could be established. In Florida, the mealybug could be a threat to some market-garden crops, but at present its distribution outside the Miami area is not known.

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References


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