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PAPER

Distribution and Host Range of *Paracoccus marginatus* (Hemiptera: Pseudococcidae) in Batticaloa District, Sri Lanka

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Papaya mealybug, *Paracoccus marginatus* Willams and Granara Willink, is a small invasive hemipteran that attacks several genera of host plants, including economically important tropical fruits and ornamentals. It is an alien invasive species and was reported for the first time in Sri Lanka in 2008. It was observed in the Eastern region of Sri Lanka during the middle of 2009 and a field survey was conducted from January 2010 to December 2011 to investigate the host range and distribution of the pest and the status of infestation caused by this pest.

Twenty-five home gardens randomly selected from Kiran, Kaluthavalai, Vantharumoolai, Vaalaichenai and Batticaloa area of Batticaloa District were surveyed and mealybug samples, together with their host plants were collected. Papaya mealybug separated from host material was preserved in 70% ethanol permanently mounted on slides and identified using standard keys and illustrations. Host plants and distribution of papaya mealybug were determined through field observations and systematic sampling of infested plants in the sampling locations.

The results show that papaya mealybug infested more than 12 host plant species. The predominant host in the study area was papaw and other favoured hosts were jak fruit, manioc, hibiscus, chrysanthemum, sunflower, marigold, gliciridia, ixora, mussenda, curry leaves and some other ornamental plants acting as alternative hosts. The infestation of papaya mealybug was found to be 52% on papaya plants. It was distributed uniformly in the study area and no significant differences were observed among different localities. A peak in population density was observed during February to April with the rise of temperature. However, the population density reduced during the rainy months from October to December as the insects were washed off with the rain waters. Association of papaya mealybug with cotton mealybug, *Phenacoccus solenopsis*, was also observed. More studies on population dynamics, natural enemies and host preferences are important to manage the problem of papaya mealybug in the region.