

DIVERSITY OF MEALYBUGS (HEMIPTERA: PSEUDOCOCCIDAE) IN SELECTED AREAS OF KANDY DISTRICT

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Mealybugs is an important group of sucking pests in Sri Lanka that attack a wide range of host plants. However, host range of mealybug species under local condition is incomplete. Hence, this study, a field survey was conducted to identify mealybug species and their host range associated with perennial plants in selected areas in Kandy district of Sri Lanka. Randomly selected thirty locations in five divisional secretariats namely *Pathadumbara*, *Poojapitiya*, *Kundasale*, *Yatinuwara* and *Harispattuwa* were surveyed and specimens were collected. Samples were identified up to genus level in the laboratory using taxonomic keys. The genera *Paracoccus*, *Phenococcus*, *Ferrisia*, *Crisococcus*, *Planococcus*, and *Dysmicoccus* were identified among the collected specimens. *Phenococcus* was the most abundant genus of all areas except in *Yatinuwara*. Highest mealybug diversity was reported in *Harispattuwa*, and all six genera were present. Recently introduced *Paracoccus marginatus* was also found in all locations except in *Kundasale*. Many of the genera identified were *polyphagous*. Wider host range was shown by *Phenococcus*, while *Ferrisia* had the narrowest host range. *Hibiscus rosasinensis* and *Psidium guajava* were found to be more susceptible in contrast to other host plants. Mealybugs were found in different parts of plant i.e. leaves, stems, fruits and flowers. *Paracoccus* were significantly high in stems than any other parts of host plants. The main plant part attacked by genus *Phenococcus* was leaves. Genus *Ferrisia*, was found only on leaves, in contrast to genus *Planococcus*, which showed significantly high abundance on stems and leaves than other parts. There was a significant association between honey dew production and ants infestation in mealybug colonies.

Key words: *Ferrisia*, Mealybugs, *Paracoccus*, *Phenococcus*, *Pseudococcidae*