

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

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A field survey was carried out to identify mealybug species and their host range associated with perennial plants in selected areas in *Anuradhapura* district of Sri Lanka. Mealybug samples were collected from randomly selected thirty sites from each five divisional secretariats namely *Nuwaragampalatha* Central, *Rambewa*, *Nuwaragampalatha* East, *Mihintale*, and *Thalawa*. Collected specimens were morphologically characterized and identified up to the genus level using taxonomic keys. *Phenococcus* was the most abundant genus in *Rambewa*, *Nuwaragampalatha* East and *Mihintale*, while in *Nuwaragampalatha* and *Thalawa* it was genus *Paracoccus*. *Phenococcus*, *Pseudococcus* and *Paracoccus* were found in all divisional secretaries. Mealybug diversity in *Nuwaragampalatha* Central, *Rambewa* and *Nuwaragampalatha* East was higher in compared to the rest of the areas. *Dysmicoccus* was also found in all divisional secretaries expect *Thalawa*. *Crisococcus* was found only in *Nuwaragampalatha* Central where as *Planococcus* was collected from *Rambewa* and *Nuwaragampalatha* East. Almost all mealybug genera identified were *polyphagous* and widest host range was recorded in *Ferrisia*, while *Pseudococcus* had the narrowest host range. *Musa accuminata* and *Psidium guajava* were found to be the more susceptible than other host plants. Mealybugs were found in different plant parts i.e. leaves, stems, fruits and flowers. There was a significant ($p < 0.05$) association between honey-dew production and ants infestation. During this study the scale insect *Icerya seychellarum* (Coccidae: Margodidae) were also observed in *Nuwaragampalatha* Central, *Mihintale*, and *Nuwaragampalatha* East on *Persea gratissima* (Avacado), *Citrus siensis* (Orange), *Ixora coccinea* (Rathmal), *Musa acuminata* (Banana), suggesting to revise its host range and geographical distribution in Sri Lanka.

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