

Relative abundance of *Aneuretus simoni* Emery (Order: Hymenoptera; Family: Formicidae) in a selected region in "Pompakelle", Ratnapura estimated by four sampling methods

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Aneuretus simoni Emery, the Sri Lankan Relict ant, has been recorded only from Sri Lanka. A field study was conducted in a selected region in "Pompekelle" in January 2004 using several sampling methods to estimate relative abundance of *A. simoni* and to investigate the taxa of ants associated with this species. Winkler extraction (05), soil sampling (10) and pitfall trapping (10) along a 100 m transect was carried out and the ants were preserved in 85% ethanol. Honey and salmon baits were kept along a 100 m transect at 4 m intervals and the baits were collected after an hour. Worker ants collected by each method were identified to subfamily and genus/ species level in the laboratory.

Worker ants belonging to five Subfamilies, Aneuretinae, Dolichoderinae, Formicinae, Myrmicinae, Ponerinae and, twelve genera/ species, *Aneuretus simoni* Emery (8.6%), *Anochetus* Mayr (0.4%), *Lophomyrmex* Emery (3.8%), *Monomorium destructor* Mayr (0.8%), *Myrmecaria* Saunders (1.2%), *Odontomachus similimus* F. Smith (3.4%), *Oecophylla smaragdina* Fabricius (35.9%), *Paratrechina* Motschoulsky (0.8%), *Pheidole* Westwood (5.1%), *Pachycondyla* Smith (1.7%), *Solenopsis* Westwood (33.3%) and *Tapinoma indicum* Forel (4.3%) were recorded. The presence of a Subfamily, genus/ species varied with the method of collection except for *A. simoni* and *Solenopsis* sp.. The relative abundance of *A. simoni* workers was 12.4%, 7%, 10% and 2.7% in the baited traps, litter, pitfall traps and soil, respectively. *Monomorium destructor* and *O. similimus* were also observed in Winkler collection. In the soil samples, *Anochetus* sp., *O. smaragdina*, *Paratrechina* sp., *Pheidole* sp., *Pachycondyla* sp. and *T. indicum* were also observed. *Lophomyrmex* sp., *Myrmecaria* sp., *O. smaragdina*, *Pheidole* sp. and *T. indicum* were also observed in 50 baits. In the pitfall traps, *Paratrechina* sp. and *Pheidole* sp. were also recorded. Significantly lower number of *A. simoni* workers than that of other worker ants was observed with each collection method as well as in this entire region (Chi square test, $p < 0.05$). The diversity of *A. simoni* associated ant community in this selected region was different from that of the region investigated in 2003 as *Anochetus* sp., *Lophomyrmex* sp., *Myrmecaria* sp., *M. destructor* and *O. smaragdina* were also observed in the present study site.

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