

The relative abundance and density of *Aneuretus simoni* Emery (Sri Lankan Relic ant) in a selected region in the forest associated with water pumping station in Ratnapura

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Aneuretus simoni Emery (Family: Formicidae) has been recorded as a highly threatened species and is restricted to Ratnapura region in Sri Lanka. This species has been first recorded from the forest ("Pompakelle") associated with water pumping station in Ratnapura. The presence or absence of *A. simoni* workers in a selected region in "Pompakelle" was investigated during a preliminary survey on the 5th April 2002 by sieving subsamples of litter within each 1 m² quadrat. Fallen twigs and decaying wood pieces within each quadrat were also examined for this species as it was recorded earlier from decaying wood pieces. However, *Aneuretus simoni* workers were observed only from leaf litter associated soil. *Aneuretus simoni* workers were present in 75% of the quadrats and the cumulative frequency of *A. simoni* workers in twenty quadrats gradually increased to 93.

The relative abundance of *A. simoni* Emery in the selected region in "Pompakelle" was investigated in May 2002 by sieving all litter and litter associated soil within thirty random 1 m² quadrats. All ants fallen in to the tray were preserved in 85% ethanol. All the worker ants were identified to Subfamily and genus/ species levels. Members of five Subfamilies, Aneuretinae, Dolichoderinae, Formicinae, Myrmicinae and Ponerinae were present in the samples. Fifteen genera and eight species of worker ants, namely, *Aneuretus simoni* Emery, *Anoplolepis gracilipes* Smith, *Cataulacus* Smith, *Crematogaster* Lund, *Euprenolepis* Emery, *Odontomachus simillimus* Smith, *Pachycondyla* Smith, *Pheidole* Westwood, *Pheidologeton* Mayr, *Paratrechina longicornis* Latreille, *Rhopalomastix* Forel, *Solenopsis* Westwood, *Tapinoma indicum* Forel, *Tetramorium* sp1, *Tetramorium* sp2, and *Tetraponera allaborans* Walker were identified. *Aneuretus simoni* worker ants represented 24% of the total number of ants and the numbers of *A. simoni* and other worker ants were significantly different (Chi square test, $p < 0.05$). The densities of the prominent ant genera, *A. simoni*, *Solenopsis*, *Pheidologeton*, *Pachycondyla* and *Anoplolepis gracilipes* were 7.1, 6.8, 6.5, 4.4 and 2.3 workers/ m², respectively and their densities were significantly different (Chi square test, $p < 0.05$). Worker ants of *A. simoni* were significantly more common in leaf litter associated soil (97%) than in decaying wood (Chi square test, $p < 0.05$).