



**DIVERSITY OF ANT FAUNA AND STATUS OF *Aneuretus simoni* Emery**

**IN SELECTED FOREST AND AGRICULTURAL LANDS**

**IN RATNAPURA DISTRICT, SRI LANKA**

BY

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### Abstract

A study on the ant fauna was carried out in the Ratnapura District. Worker ants were sampled from "Pompakelle", Gilimale Forest, Sinharaja forest and selected agricultural lands to determine the ant community composition and to identify the habitats of *Aneuretus simoni* Emery. Ants were collected from ten study sites in Pompakelle and Gilimale forest in 2004. Sampling ants from ten study sites in Sinharaja forest and selected agricultural lands was carried out in 2005. Each forest was visited once a month and collection of ants was done over four consecutive days in each month and on six occasions per year. Daytime sampling of ants was carried out along ten 100 m transects by honey and canned-fish baiting, leaf litter and soil sifting, hand collection, pitfall trapping and mini-Winkler extraction. Honey baits at 1 m height on trees, and honey-baited pitfall traps on the ground, were set overnight. Air and soil temperature, depth of leaf litter and soil moisture during sampling were recorded on each occasion. All the methods except beating were used in Gilimale forest for collection of ants. Beating, traps on trees, canned fish bait were not used in Sinharaja forest. Litter sifting was not possible in agricultural lands.

Worker ants belonging to eleven Subfamilies, forty-six genera and fifty four morpho species including *Aneuretus simoni* were recorded from the Ratnapura district. Values for species richness recorded from "Pompakelle", Gilimale forest, Sinharaja forest and agricultural lands were 39, 39, 41 and 28, respectively. *Aneuretus simoni* Emery was found in "Pompakelle" Gilimale forest and Sinharaja forest and its relative abundance ranged from 1% -5% in these forests. *Aneuretus simoni* was not observed in agricultural lands. *Protanilla* sp. was the only new record among ant species observed during this study. Conservation status of *Aneuretus simoni* was changed critically endangered to endangered (EN) in the 2012 red list.