Detection and Nest Density of *Aneuretus simoni* Emery 1893 (Formicidae, Aneuretinae) in Meethirigala Forest Reserve after nine years of its discovery in 2014

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Aneuretus simoni, a species Critically Endangered globally and Endangered locally, is the sole extant species of the family. It forms nests in substrates on the forest floor. In 2014, it was discovered in the Meethirigala Forest Reserve in Gampaha District and a survey on its presence, percentage nest abundance and mean nest density in three localities revealed that *A. simoni* was a dominant, resident species with the mean nest density ranging from 0.2 to 0.8 m^{-2} at 57 m elevation of the forest. The occurrence and nest density of the species were reassessed in the Forest Reserve, nine years after its initial discovery, on 22 September, 2023, in a locality at 57 m elevation, using two standard methods. Twenty-five, honey baits were placed at 4 m intervals along a 100 m transect, checked each bait after one hour using a field microscope, and *A. simoni* workers were identified. Also, ants crawling on the ground, in the soil, and beneath leaf litter were collected using a wet paint brush, and identified. Worker ants of the species were observed by both methods. On February 10, 2024, the nest density of *A. simoni* was investigated by laying 20 quadrats within each of two 100 m^2 plots at the same elevation. Number of *A. simoni* nests within each quadrat was counted, and the nest density of the species was calculated. The mean nest density observed in this study, 0.4 nests m^{-2}, falls within the range of nest densities recorded in the region in 2014. Rain prevailed during both surveys, with 27 - 29 °C air temperatures. Nest density of present study indicated that *A. simoni* is still a resident species with a continuous survival in the surveyed region.

Keywords: *Aneuretus simoni, Biodiversity Sri Lanka, Meethirigala Forest Reserve.*

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