

Checklist of Ant (Hymenoptera: Formicidae) Species from Nyungwe Tropical Rain Forest, South- Western Rwanda

Abstract

Tropical rain forests are inhabited by a wide range of plant and animal diversity. However, little is known about the diversity of ant (Hymenoptera: Formicidae) species in these areas. To fill the gap, a study has been conducted in seven sites inside Nyungwe National Park, a tropical rain forest located in South-Western Rwanda. Data have been collected in October 2021 through a quick sampling using pitfall traps, arboreal traps, baiting, Winklers, and hand searching of nests in leaf-litter, soil, rotten and fallen wood, and under stones. Collected ant specimens have been identified to subfamily, genus and species levels by using the identification keys. Names of species have been confirmed after comparing the findings with the specimens housed at the Royal Belgian Institute of Natural Science (Brussels, Belgium) and at Kiko Gomez's personal collection (Barcelona, Spain). A total of 7 subfamilies, 28 genera and 74 species were sampled. The subfamily Myrmicinae had more genera and species compared with other subfamilies. Further, 9 genera and 43 species were collected in Rwanda for the first time, while 13 species were potentially undescribed ant species. High number of species has been sampled in the sites located in secondary forest at Karamba (53 species) and Pindura (33 species). We recommend intensive sampling in other locations of Nyungwe tropical rainforest and in the rest of Rwanda mountain tropical rain forests to get a clear view on the diversity of ant species in Rwanda.

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