RHOPTROMYRMEX WROUGHTONII, new synonymy of, and brief characterization

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Pilot Register of Zoology
Card No. 14
Issued 20 May 1964.

Insecta: Hymenoptera: Formicidae

Rhoptromyrmex Wroughtonii Forel, 1902, Rev. suisse Zool., 10: 231, worker, male. Type locality Kanara, India. Syntypes in Coll. Forel, Muséum d'Histoire Naturelle, Geneva, examined 1963.

Rhoptromyrmex Wroughtonii st. Rothneyi Forel, 1902, Rev. suisse Zool., 10: 232, worker. Type locality Bangalore, s. India. Syntypes in Muséum d'Histoire Naturelle, Geneva, examined 1963. New synonymy.

Rhoptromyrmex Wroughtonii st. Rothneyi var. Longi Forel, 1902, Rev. suisse Zool., 10: 232, worker. Type locality Garo Hills, Assam. Syntypes in Muséum d'Histoire Naturelle, Geneva, examined 1963. New synonymy.

Tetramorium wroughtoni, Bingham, 1903, Fauna Brit. India, Hym. 2: 177, worker, Bernardmyo, Upper Burma.

Tetramorium rothneyi, Bingham, 1903, Fauna Brit. India, Hym. 2: 177, worker.

Rhoptromyrmex rothneyi var. intermedia Forel, 1913, Zool. Jahrb. Syst., 36: 80, worker. Type locality Beras Tagi, 4500 ft., Sumatra. Syntypes in Muséum d'Histoire Naturelle, Geneva; examined 1963. New synonymy.

Rhoptromyrmex rothneyi st. sumatrensis Forel, 1913, Zool. Jahrb. Syst., 36: 80, fig. W, worker. Type locality Kampong Keling, near Beras Tagi, 4500 ft., Sumatra. Syntypes in Muséum d'Histoire Naturelle, Geneva, examined 1963. New synonymy.

Rhopthromyrmex (!) rothneyi subsp. leno Viehmeyer, 1914, Ent. Mitt., 3: 113, worker. Type locality Perak. Type not seen. New synonymy.

Rhoptromyrmex (Acidomyrmex) var. taivanensis Wheeler, 1930, Proc. new engl. zool. Club, 11: 103, worker. Type locality Hakumo, Formosa. Syntypes in Museum of Comparative Zoology, Harvard University, examined 1964. New synonymy.

Worker: Varying markedly by locality in width of head, petiole and postpetiole; in length and form of propodeal teeth; in distinctness of promesonotal suture; and in a tendency toward reduction of either the fine reticulate sculpture or the superimposed longitudinal costulae (rugulae). The commonest and most widespread and constant form is the one that usually received the name "rothneyi". This has the head and alitrunk densely reticulo-punctulate and opaque, overlain with conspicuous longitudinal rugulae that are most numerous on the head, where they typically form a broad, more or less crowded band of longitudinal costulae filling the space between the frontal carinae, and often extend to the sides of the head as well; the alitrunk also frequently with well-developed rugulae. The propodeal teeth of this form may vary from short and triangular to moderately long and more or less spiniform.

In the extreme "sumatrensis" form of the Sumatran highlands, the propodeal spines are very long, and the cephalic rugulae are rather widely spaced, approaching in these respects the Melanesian species R. melleus. At the other extreme is the type series of R. wroughtonii, from western peninsular India; this form has the fine reticulate sculpture reduced, so that the interrugal spaces of the head, plus areas of the alitrunk, are definitely shining. This series also has short propodeal teeth, some of them nearly rectangular, and some varying markedly bilaterally in the same individual.

Petiolar node high and rounded apically; postpetiole with a rounded anteroventral process of varying distinctness, in most samples well-developed.

Female unknown; male not studied.

Distribution: Widespread in southeastern Asia, extending to southern peninsular India and northwestward into Yunnan and the Red Basin of western Szechuan, probably occurring widely in southern China; Philippines; Formosa; Hainan Island; Indonesia west at least to Sumba; base of Cape York Peninsula, northern Queensland. Localities for material reviewed in the Museum of Comparative Zoology, Harvard University: India: R. wroughtonii types, Kanara (Wroughton). China: Mo Man Shan, near Hsin Ching, western Szechuan Prov. (W. L. Brown, Jr.). Hills around Kunming, about 2500 m, Yunnan Prov. (Brown). Ta Han, Hainan I. (J. L. Gressitt). Formosa: var. taivanensis types, Hakumo (R. Takahashi). Karenko and Rokki (Gressitt). Philippines: Baguio, 700-2000 m., Luzon (F. X. Williams). Indonesia: Fort de Kock, Sumatra (E. Jacobson) Laora, 100 m, nw. Sumba Island (K. Dammerman). Australia: Crawford's Lookout, just off Millaa Millaa-to-Innisfail Road, northern Queensland, 300-900 m (P. F. Darlington). The western Chinese and Australian records represent great extensions of the known range.

Biology: In western China, this species is moderately common in open or wooded hilly country, and can be found among rice paddies, maize fields or pastures. Nests are usually not found close together; they seem to be made most often in red or yellow clay soil, and are surmounted by a crater or heap of soil particles that varies from a simple ring to a conspicuous, irregular, multi-turreted, castle-like edifice up to 75 cm in diameter and 50 cm high. The slender towers and chimneys are washed down by heavy rains, but new ones are built up within a few days. The nests often seem to be very populous, and the workers can be seen tending aphids on nearby plants. The Queensland collection was made in rain forest.

Synonymy: The types reviewed (and the description of subsp. leno) seem to me to represent a single variable species, the extremes of which are linked by a complete range of intergrades, as Forel himself made clear.

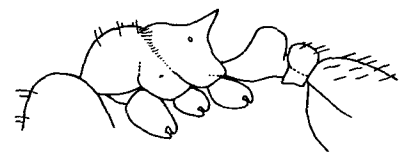

Fig. 1. Rhoptromyrmex wroughtonii, worker from Crawford's Lookout, northern Queensland

Published with the aid of a grant from the Department of Entomology and Limnology, New York State College of Agriculture at Cornell University, Ithaca, New York. Edited by W. L. Brown, Jr.