BREVIORA
Museum of Comparative Zoology
CAMBRIDGE, MASS. DECEMBER 15, 1965 NUMBER 237

A NEW SPECIES OF THE ANT GENUS DACETINOPS FROM SARAWAK

BY ROBERT W. TAYLOR
Biological Laboratories, Harvard University

The singular myrmicine genus Dacetinops Brown and Wilson was discovered only ten years ago. The original series included twelve workers and three dealate females collected by Edward O. Wilson in rain forest at the lower Busu River, near Lae, N. E. New Guinea. These specimens were described as D. cibdella by W. L. Brown and E. O. Wilson (1957), and a larva collected with them was characterized by G. C. and J. Wheeler (1957).

A second species, described below, has recently come to hand among material collected in Sarawak by Professor A. E. and Mrs. Eleanor Emerson. This significant and unexpected record robs Dacetinops of its apparent status as a New Guinean endemic. In the light of this discovery it would not be surprising if the genus was found to be more widespread in the Indo-Australian area.

DACETINOPS CONCINNA new species

Type locality. SARAWAK: Kapit District, Third Division, Nanga Tekalit Camp, 1° 38' N, 113° 35' E, January 29, 1963, A. E. and E. Emerson.

The holotype and paratypes were taken together in a dead log on the floor of virgin upland rain forest at an elevation of about 180 meters. Nanga Tekalit was a remote field camp established by the Chicago Natural History Museum, situated about 70 miles above Kapit on the Batang Balleh—Sungei Mengiong River system in western Sarawak.

1 Research supported by U. S. National Science Foundation Grant No. GB 1634.
Type deposition. Holotype, two paratypes, and fragments of a third, all workers, deposited in the Museum of Comparative Zoology (type No. 31171).

Description. The 3 intact type specimens have the following dimensions (holotype cited first). The parameters of measurement and the abbreviations are those of Brown (1953); measurements are given in millimeters: TL 4.8, 4.5, 5.0; HL 1.15, 1.12, 1.22; HW 1.02, 1.01, 1.09; CI 88, 90, 89; ML 0.35, 0.34, 0.38; MI 32, 30, 31; WL 1.47, 1.42, 1.57; petiole L 0.49, 0.45, 0.52; index of cephalic depression 59, 60, 59.

Form of head and mandibles as shown in Figure 2. Mandibles longer and more slender than in D. cibdella; outer borders distinctly concave; inner borders with about 15 very small, obtuse, backwardly directed teeth; apical tooth largest, more acute than remainder, which increase slightly in size towards the base. Antennal funiculus slightly incassate, lacking a segmentally differentiated club. Palpal formula: maxillary 2, labial 2, structural details of palomeres as in cibdella (Brown and Wilson, 1957, fig. 2). Antennal scrobes as in cibdella; longitudinal dividing carinae feeble; upper scrobe margins more broadly lamellate, almost completely obscuring posterior parts of scrobes in frontal view. Eyes proportionately larger and more convex, maximum diameter in holotype about 0.17 mm. Occipital lobes well developed.

Mesosomal profile (Figure 1) indented at metanotal area. Pronotal dorsum not margined anteriorly, submarginate at the sides. Propodeal structure and dentition as in cibdella, bases of teeth separated by slightly less than twice their length. Propodeal spiracles directed posterolaterally, placed well back on sides of propodeum, not as far back as in cibdella. Petiolar node longer than in cibdella, its dorsal profile more broadly and evenly arched. Postpetiole less transverse, subcircular in dorsal view. Gastric structure generally as in cibdella; first segment relatively narrow, elliptical in dorsal view, about 0.8 X as broad as long.

Yellowish white spongiform material developed on petiole, postpetiole and gaster, its distribution as in cibdella, the festoons less massive; tergal postpetiolar blocks separated from sternal mass on each side.

General sculpture consisting of very coarse longitudinal costulation, with a tendency towards reticulation due to the costular crests being slightly irregular in outline, and to the development of weak transverse ribs in the inter-costal grooves. Reticulation more distinct on posterior part of frons, occipital lobes, and especially
*Dacetinops concinna* sp. n., holotype worker. Fig. 1, mesosoma, petiole and postpetiole in lateral view. Fig. 2, head in frontal view; sculpture omitted, and only hairs nearest the periphery shown.

on front of pronotum and postgenal areas of cranium; these parts also with a finely shagreened microsculpture superimposed on the costulae, which are generally smooth and shining elsewhere. About 10 costulae cross the cranium at its broadest point. Costae of mesosomal dorsum less cleanly cut than in *cibdella*; 4 distinct median ones along pronotal dorsum, with weak traces of another at the edge on each side. Sides of mesosoma coarsely and somewhat irregularly rugose.

Propodeal declivity smooth and shining, with several weak transverse carinae. Petiole and postpetiole moderately coarsely rugo-reticulate. First gastric segment moderately shining, with fine reticulate microsculpture; its basal half with about 10 sharp
straight longitudinal costae, the median four or five strongest, those at extreme sides almost vestigial and more closely spaced. Mandibles smooth and shining. Antennae very finely shagreened. Antennal scrobes and coxae coarsely shagreened. Remaining leg segments finely shagreened, and with fine irregular longitudinal striae.

Long whitish body hairs extensively developed, proportionately longer than in cibdella (0.12–0.65 mm) but similarly distributed; many on head (particularly its margins), mesosoma and nodes occupying positions homologous to those of cibdella. Shorter erect to suberect hairs on legs and gaster, finer subadpressed ones forming a pilosity on underside of head, anterior faces of fore-coxae and tip of gaster.

Color almost exactly as in cibdella, deep reddish brown, mandibles, antennae, and legs dark yellowish brown.

Discussion. D. concinna is readily distinguished from D. cibdella by numerous characters, most of which are apparent on comparison of the published descriptions and figures of the two species. Nonetheless these ants constitute a compact and clearly delimited genus, and the generic diagnosis of Brown and Wilson requires only slight modification at this point. The statements concerning the antennal club structure, the mesosomal profile, and the mandibular shape and sculpturation need qualification, but these are minor matters.

REFERENCES

Brown, W. L., Jr.

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(Received 15 September, 1965)