A NEW SPECIES OF PROBOLOMYRMEX FROM JAVA.

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In a collection of Javanese ants kindly sent me by Dr. K. Dammerman I find four workers of an interesting undescribed species of the little known Ponerine genus Probolomyrmex, which Mayr in 1901 (Ann. k. naturhist. Hofmus. Wien 16, p. 2) based on the worker of a species, *filiformis*, taken by Dr. Hans Brauns at Port Elizabeth, Cape Colony. More recently, Mann (Psyche 30, 1923 p. 16, fig. 2) has described and figured the deälated female of another species, *boliviensis*, from Rurrenabaque, Bolivia. Owing to the difference in caste, he was doubtful of the generic allocation of his specimen, but Emery's figures of the type, in the "Genera Insectorum" (Ponerinæ 1910, Pl. 2, figs. 10, 10a) show that the Bolivian species is a true Probolomyrmex. The finding of a third species in Indonesia now shows that the generic distribution in Africa and South America cannot be used as evidence of former geological connection between these continents, but that Probolomyrmex, like Discothyrea, Centromyrmex, etc., must be regarded as a genus of archaic, tropicopolitan, relict species, and perhaps as the remains of a formerly cosmopolitan group. The rather pale color and complete absence of eyes in the worker and the very small eyes and ocelli in the female, show that the Javan form, as well as the other two species, are hypogæic in habit like all the other Proceratiini (Proceratium, Sysphincta, Discothyrea, Prodiscothyrea and Escherichia).

Probolomyrmex dammermani sp. nov.

Worker. Length 2-2.5 mm.

Head subelliptical, one and one-half times as long as broad, slightly narrower in front than behind, with evenly rounded, feebly convex sides and slightly concave posterior border; in profile rather convex dorsally, with straight gular surface, with-

out any traces of eyes or ocelli. Mandibles very small, narrow and convex, with four minute, indistinct, oblique teeth. Clypeus as in *P. filiformis*, projecting forward and concealing the mandibles and with a median ridge formed by the coalescence of the frontal carinæ which terminate posteriorly in a short bifurcation. Frontal groove absent. Antennæ stouter than in *filiformis*, the scapes reaching to about the posterior fifth of the head; first funicular joint not longer than broad; joints 2-10 decidedly

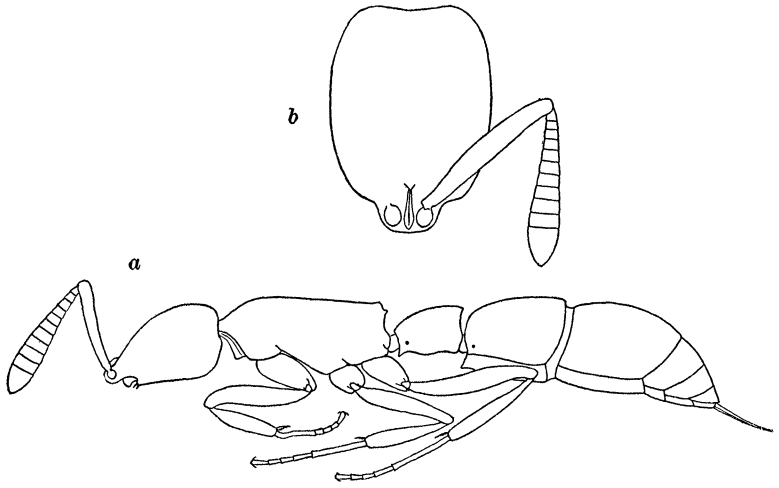


Fig. 1. *Probolomyrmex dammermani* sp. nov. worker. *a*, profile view; *b*, dorsal view of head more enlarged.

broader than long, gradually increasing in width apically, the penultimate joint more than twice as broad as long, the terminal joint glandiform, not more than one-third longer than broad and scarcely as long as the three preceding joints together. Thorax shaped much as in *filiformis*, long and narrow, without sutures, the dorsal outline even and straight, except anteriorly where it is feebly convex. Prosternal angles sharp; epinotal declivity perpendicular and concave, on the sides sharply marginate and distinctly dentate. Petiole elongate, laterally compressed, from above nearly twice as long as broad, about one-fourth broader behind than in front, and with feebly rounded sides; in profile nearly one and one-half times as long as high,

highest behind where it is concavely truncated; the dorsal surface convex, rising evenly to the posterior truncation, the ventral surface convex in the middle, at the anterior end with an acute tooth which is directed forward. Postpetiole strongly constricted off from the first gastric segment, one and one-fourth times as long as broad, narrowed anteriorly, evenly convex dorsally and laterally, its anteroventral protuberance rather sharply angular in profile. First gastric segment as long as the postpetiole, longer than broad. Sting very long and slender. Legs long.

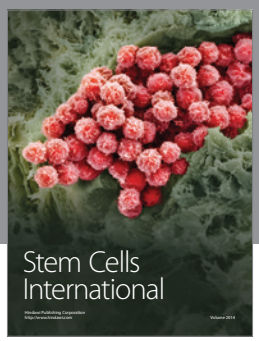
Nearly opaque throughout, legs scarcely more shining; very densely, finely and evenly punctate, the head and thorax somewhat more distinctly.

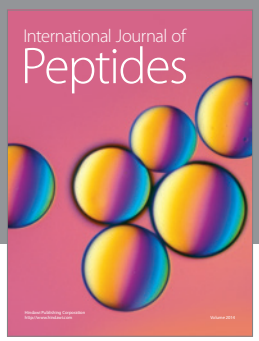
Hairless; pubescence white, extremely fine, forming a delicate bloom, most distinct on the thorax and abdomen.

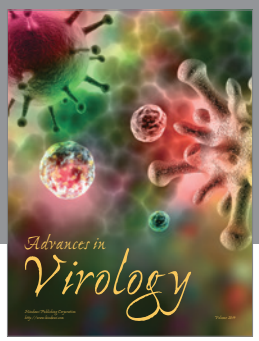
Clear ferruginous red, the head in some specimens a little paler than the thorax; anterior portion of head, clypeus, mandibles, antennæ, legs and gaster beyond the first segment reddish yellow.

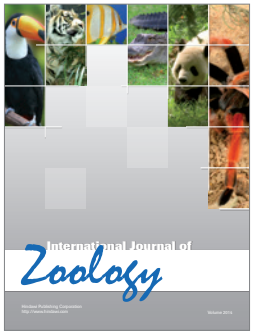
Described from four specimens taken Dec. 18, 1922 by Dr. Karl Dammerman at Buitenzorg, Java.

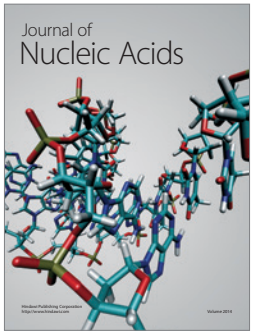
This species is smaller than *P. filiformis*, which measures 3 mm.; its antennal funiculi are decidedly thicker, with broader joints, the epinotum is distinctly dentate and the ventral portion of the petiole has no lamella and its anterior tooth is directed forward instead of backward. The female *P. boliviensis* Mann resembles the Javan species in its smaller size (the female measures only 2.8 mm.), in the shape of the antennal funiculi and the ventral portion of the petiole, but the dorsal portion of the latter is higher and has a very different outline in profile, the postpetiole is shorter than the first gastric segment and the color is more brownish red. This last character, however, may be peculiar to the female.

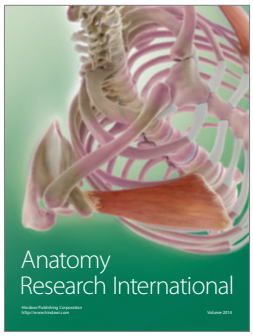


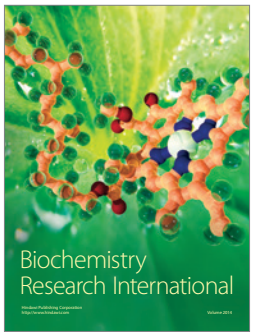


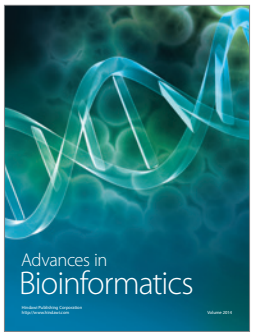


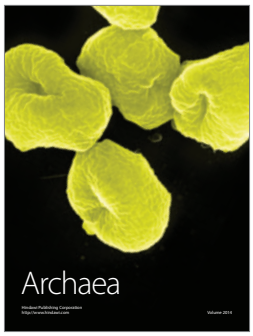


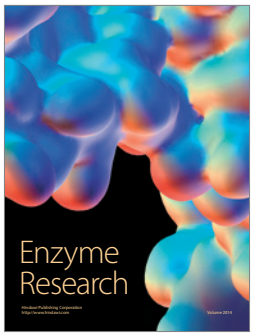


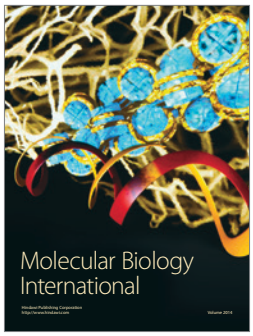












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