

consideration in this revision, which attempts to provide a definitive statement of the known taxonomic and biological facts concerning this peculiar and interesting genus.

## II. Genus *Probolomyrmex* Mayr

*Probolomyrmex* Mayr, 1901, *Ann. naturh. Hofmus. Wien* 16 : 2-3. Type species: *Probolomyrmex filiformis* Mayr, 1901, *t.c.* 3, ♀. Type locality: Port Elizabeth, South Africa. Monobasic.  
*Escherichia* Forel, 1910, *Zool. Jahrb. Syst.* 29 : 245-6. Type species: *Escherichia brevirostris* Forel, 1910, *t.c.*, pp. 246-7, ♀. Type locality: Ghinda, Ethiopia. Monobasic. syn. n.

### (1) Synonymy

As predicted by W. L. Brown (1952), study of the holotype of *Escherichia brevirostris* shows it to be unquestionably referable to *Probolomyrmex*, thus establishing the above synonymy. Moreover, *brevirostris* is almost certainly a senior synonym of the Ugandan *P. parvus* Weber (*see* p. 355). The single known *brevirostris* worker is a perfectly typical *Probolomyrmex*, except for its well developed compound eyes. Separate generic status on the basis of this character would be completely unjustified.

### (2) Characters of the genus

#### Worker

Known for all species except the South American *P. boliviensis* Mann.

Small sized monomorphic ponerine ants. Head longer than broad, its maximum width less than 0.5 mm. Clypeus and anterior part of frons produced forwards as a narrow subrectangular shelf bearing the exposed and closely approximated antennal insertions, which are separated by a thin, vertical lamella formed by fusion of the frontal carinae. Mandibles small, elongate-triangular, obscured in facial view by frontoclypeal process; each with an acute apical tooth followed by a series of small denticles, the anterior one of which may be enlarged. Labrum transverse, its anterior border with a deep median cleft. Palpal formula, maxillary 4: labial 2. The 3 basal maxillary palpomeres about subequal in size (1-1.5 times longer than broad), the apical one longer (3-5 times longer than broad). Labial palpomeres subequal in length, about 2.5-4 times longer than broad. Eyes lacking, except in the unique holotype of *P. brevirostris* (Forel), in which they are well developed, with about 14 facets. Antennae 12-segmented; apical portion of scape with the flexor surface more or less concave in cross-section, receiving the folded funiculus; the latter slightly incrassate but without a distinct segmental club, its second joint sometimes strongly transverse, apical joint about as long as the 3 preceding together.

Body and legs slender. Mesosomal<sup>1</sup> sutures virtually lacking, represented only by weak ventro-lateral traces, as shown in the accompanying figures. Propleura inflated, projecting ventrally. All tibiae with a single pectinate spur; pretarsal claws simple, lacking a median tooth. Declivitous face of propodeum margined on each side by a low obtuse carina, which is usually bluntly dentate above. Petiolar node narrow, strongly arched above, higher behind than in front, with an evenly curved anterodorsal profile and an almost vertical posterior face. The latter usually quite strongly concave in side view and enclosed laterally and dorsally by a low carina. A moderate constriction between first and second post-petiolar segments. Second post-petiolar segment (abdominal IV) with its tergite and sternite fused laterally to form a tubular structure (as usual in ponerine ants). Sting well developed.

Sculpturation with 2 basic components: dense fine shagreening and associated large scattered punctures, latter often weakly incised and rarely lacking. Pilosity very reduced, limited to a few minute bristles on underside of frontoclypeal shelf, some long stout hairs on mandibles and a few fine ones about openings of metapleural glands. Pubescence very fine and short, essentially absent in some species, moderately abundant in others. Colour pale yellowish- or reddish-brown.

Because of the extreme structural reduction of *Probolomyrmex*, taxonomic discrimination of the species is almost entirely dependent on characters of dimensions and proportions, especially those of the head, antennae and node, and sculptural details.

<sup>1</sup> The term "mesosoma" is here used for thorax + propodeum (*see* Michener, C. D., 1944, Comparative external morphology, phylogeny and a classification of the bees (Hymenoptera). *Bull. Amer. Mus. nat. Hist.* 82: 167).