

*Ants from the Colombo Museum Expedition to Southern India, September–October 1938.* By HORACE DONISTHORPE, F.Z.S., F.R.E.S., etc.

[Plate II.]

THE ants in this collection comprise some thirty-eight forms, including eight new species and one new variety. Some of the species are found in Ceylon, others in Burma, and the whole collection is of considerable interest.

### Subfamily Ponerinæ.

1. *Diacamma rugosum* Le Guill., var. *jerdoni* Forel, Rev. Suisse Zool. ii. p. 401 (1903); [*sculptum* Bingham, Faun. Brit. Ind., Hym. ii. p. 80 (1903).]

Five ♀♀. Nadungayam, 200 ft., Malabar, S. India, 16–22. ix. 38.

*Distribution.*—Ceylon; widely distributed in India.

2. *Pachycondyla (Bothroponera) tesserinoda* Emery, Ann. Mus. Stor. Nat. Genova, ix. p. 368 (1877).

Four ♀♀. Dohnavur, 350 ft., Tinnevely District, S. India, 30. ix. and 1. x. 38.

*Distribution.*—Ceylon, S. India, Assam, Burma.

3. *Pachycondyla (Bothroponera) henryi*, sp. n.

♀. Dark brown, mandibles, antennæ, lobes of frontal carinæ, posterior border of segments of gaster narrowly, and legs reddish, tarsi and apex of antennæ lighter, teeth of mandibles black. Clothed with long outstanding and short decumbent yellow hairs. Sculpture consisting of large shallow punctures, space between more or less rugose and marked with fine small punctures.

*Head* large, subquadrate, broader than thorax, posterior angles rounded, posterior border slightly emarginate; *mandibles* large, triangular, finely striate, and with larger and smaller punctures, masticatory border armed with seven blunt teeth, the apical one longer and more pointed; *clypeus* narrow, with a medial carina, anterior margin bluntly pointed in centre; *frontal carinæ* large, lobes well developed; *frontal furrow* short, but rather wide and deep; *antennal fovæ* large and deep; *antennæ* long, stout, *scape* not reaching posterior border of head; first joint of *funiculus* if anything shorter than second, last joints thickened to apex, last joint somewhat flat, bluntly pointed, longer than the two preceding taken together;

eyes moderate, oval, somewhat convex. *Thorax* narrowed to base; *pronotum* convex, rounded in front and at sides, *pro-mesonotal* suture distinct; *meso-epinotal* suture wanting; *epinotum* unarmed, gradually sloping to base, no marked angle between dorsal surface and declivity. Node of *pedicel* simple, unarmed, convex, rounded anteriorly and at sides; *gaster* narrowed to base, the constriction between the first and second segments very marked, the puncturation of the last segments not nearly so coarse as that of the rest of the body.

*Long.* 11 mm.

This distinct species comes nearest to *tesserinoda*, but besides being considerably larger the sculpture is entirely different.

Described from two workers. Dohnavur, Tinnevely District, S. India, 30. ix. 38.

Type in B.M. (N.H.).

I have named this species in honour of Mr. G. M. Henry, who captured the ants of this expedition.

4. *Euponera* (*Mesoponera*) *melanaria* Emery, Ann. Soc. Ent. France, lxii. 260, note (1893).

♂ (undescribed). Brownish yellow, eyes black, antennæ except scape and first joint of funiculus dark brown, covered with long outstanding and short decumbent yellow hairs, shining, very finely punctured.

*Head* about as long as broad, rounded behind eyes, posterior border slightly emarginate, with a narrow raised margin; *mandibles* short, reduced, bluntly pointed; *clypeus* convex, rounded anteriorly; *clypeal foveæ* round, deep; *suture* between clypeus and frontal area distinct; *frontal area* large, flat, triangular, finely but distinctly defined; *frontal carinæ* very short, round; *antennæ* long, 13-jointed; *scape* short, slightly longer than broad; *funiculus* with 1st joint very short, transverse, considerably shorter and somewhat narrower than scape; the rest of the joints longer than broad, of about equal breadth, last joint slightly longer than the preceding; *eyes* large, kidney-shaped, situated on each side of the head; *ocelli* moderate, oval, placed on vertex of head. *Thorax* convex, narrowed in front and behind, broadest just before insertion of the wings; *pronotum* transverse, furnished with a short, finely margined neck, dorsal surface convex, sides encircling the mesonotum; *meso-*

*notum* very convex, broad oval, sides and front rounded, a short pointed carina extends from centre of anterior border ending in a rather broad short furrow; *mayrian furrows* wanting; *parapsidal furrows* narrow but distinct; the mesonotum and scutellum are divided by a short transverse furrow; *scutellum* convex and prominent; *metanotum* narrow, transverse, somewhat raised; *epinotum* long, sloping, no angle between dorsal surface and declivity. *Petiole* furnished with a rather high node, straight posteriorly, sloping anteriorly, armed beneath with a projection toothed at apex and base; *gaster* short, oval, constriction between *post-petiole* and second segment well marked; *pygidium* armed with a long, sharp, curved spine; *cerci* well developed; *genitalia* prominent; *stipites* large, curved, bluntly pointed; *sagittæ* sharply pointed. *Wings* iridescent, *veins* and *pterostigma* light brown; two *discoidal*, two *cubital cells* present; *radial cell* long, closed, slightly appendiculate.

*Long.* 6.3 mm.

Described from a single specimen, Nadungayam, 200 ft., Malabar, S. India, 16-22. ix. 38. Male type in B.M. (N.H.).

5. *Cryptopone testacea* Mots., Bull. Soc. Nat. Mosco, xxxvi. p. 15 (1863), ♀; Emery, Ann. Soc. Ent. France, 1893, p. 240, ♀.

Seven winged ♀♀. Nadungayam, 200 ft., Malabar, S. India, 16-22. ix. 38.

*Distribution.*—Ceylon.

♂ (undescribed). Yellow, eyes black, pubescence, sculpture and colour much as in ♀.

*Head* across eyes about as broad as long, slightly narrowed posteriorly, posterior angles rounded; *mandibles* small, much reduced, pointed at apex; *clypeus* convex, anterior border rounded; *clypeal foveæ* very small, round; *cheeks* very short; *frontal carinæ* very short, round, with a small shallow hollow between; *frontal furrow* short; *antennæ* missing; *eyes* large, somewhat kidney-shaped, situated at sides of head, anterior border very close to posterior border of clypeus; *ocelli* round, prominent, not close together. *Thorax* not broader than head together with eyes, narrowed posteriorly; *pronotum* transverse, margined and furnished with a neck anteriorly, sinuate on each side; *mesonotum* convex, oval, slightly broader than long,

with a short median furrow anteriorly; *mayrian furrows* very indistinctly indicated; *scutellum* convex, subquadrate; *metanotum* transverse, slightly prominent; *epinotum* rounded, not showing an angle between dorsal surface and declivity; *node* of *petiole* rather high, thick, rounded at apex, anterior surface sloping, posterior surface straight; *gaster* long, slightly curved, without a constriction between *post-petiole* and second segment, but the suture very distinctly defined; *hypopygium* armed with a short, sharp, curved spine; *cerci* developed; *genitalia* indistinct. *Legs* long, slender, all the tibiae furnished with one pectinate spur. *Wings* as in the ♀, but shorter, iridescent, *pterostigma* and *veins* yellow, one *discoidal*, two *cubital*, and one long, closed, *radial cell* present.

*Long.* about 5 mm.

Described from a male. Dohnavur, 350 ft., Tinnevely District, S. India, 5. x. 38.

I believe this to be the male of *Cryptopone testacea*; though larger, it agrees fairly well with Wheeler's descriptions of the males of two species of *Cryptopone* from Java and Borneo respectively.

♂ type in B.M. (N.H.).

It is doubtful if Emery's worker belongs to the same species as Motschulsky's female. The length of the former is only 2.5 mm., whilst that of the latter is 5 mm. and over. In all the known species of *Cryptopone* the female is very little larger than the worker. Bingham [Faun. Brit. India, Hym. ii. p. 105 (1903)] incorrectly gives the length of the worker as 6 mm.

6. *Leptogenys (Lobopelta) processionalis* Jerdon, Madras Journ. Lit. Sci. xvii. p. 118 (1851).

One ♂, 11 ♀♀. Tenmalai, 500–800 ft., Travancore, S. India, 11–17. x. 38.

*Distribution.*—India, Ceylon.

7. *Anochetus mordax*, sp. n.

♀. Brownish yellow, disc of head, pronotum, and petiole yellowish brown, mesonotum and epinotum varying from black to blackish brown, legs yellow, eyes black; shining; clothed with not long, scattered, outstanding yellow hairs; scape of antennae pubescent.

*Head* chiefly smooth and shining, across the eyes about as broad as long, posterior border deeply excised, posterior angles bluntly rounded, sides of head sinuate before the

rounded prominence below eyes and more gradually so behind the same; *mandibles* about as long as two-thirds of the head, with a few scattered small punctures on upper surface, armed with three pointed apical teeth, the lower one being the longest, the middle one, which is situated on the lower tooth near to the junction of that with the upper tooth, is much shorter than the other two, a row of extremely small denticules, or little tubercles, extends along the inner margin of the mandibles below the apical teeth; *clypeus* concave anteriorly, slightly convex posteriorly, anterior margin roundly excised, anterior angles terminating in a blunt point, narrowed and extending in a point which is finely longitudinally striate, between the frontal carinæ; *frontal carinæ* and *vertex* of head finely longitudinally striate, the striæ of the latter oblique at sides; *antennal furrow* broad; *eyes* large, round-oval, prominent, with a few curved striæ round inner sides; *antennæ* long, *scape* extending a little beyond posterior angles of head, all the joints longer than broad, first joint considerably longer than second, last joint a little longer than the two preceding taken together. *Thorax* long, narrow; *pronotum* not as broad as head, but considerably broader than rest of thorax, convex, rounded and finely margined at sides, narrowed in front to form a neck which is transversely striate, sides of disc longitudinally striate; dorsal surface of *mesonotum* transversely striate, sides smooth; *epinotum* transversely striate, dorsal surface considerably longer than declivity, the latter rather abrupt. *Scale of pedicel* high, unarmed, rounded at apex, anterior surface slightly concave, sloping, posterior surface flat; *gaster* long oval, smooth and shining, narrowed behind, constriction between 1st and 2nd segments marked.

*Long.* 7 mm.

Described from 11 workers. Dohnavur, 350 ft., Tinnevely District, S. India, 30. ix. 38.

Type in B.M. (N.H.).

This species does not fit into the tables of either Forel [Journ. Bombay Nat. Hist. Soc. xiii. pp. 58-60 (1900)] or Bingham [Faun. Brit. India, Hym. ii. pp. 39-40 (1903)]. Of the species described since it comes nearest to *A. gracilis* Karawajew from Java [Knowia, iv. p. 286 (1925)], but the construction of the apical teeth of the mandibles is quite different, etc.

*Note.*—In Bingham's table (*l. c.*) he gives for *A. yerburyi* Forel: "Pro-, meso- and metanotum punctate, not striate," and in the description, "Head . . . faintly longitudinally striate. . . . The meso- and mesonotum transversely striate"!

#### Subfamily **Pseudomyrmicinae.**

8. *Sima rufonigra* Jerd., Madras Journ. Lit. Sci. xvii.\* p. 111 (1851).

One del. ♀, 2 ♂♂. Trenmalat, 500–800 ft., Travancore, S. India (♀); Dohnavur, 350 ft., Tinnevely District, S. India, i. x. 38 (♂♂):

*Distribution.*—Continental India, Ceylon, Sumatra.

9. *Tetraponera nigra* Jerd., Madras Journ. Lit. Sci. xvii. p. 112 (1851).

One del. ♀. Dohnavur, 350 ft., Tinnevely District, S. India, i. x. 38.

*Distribution.*—Continental India, Ceylon.

#### Subfamily **Myrmicinae.**

10. *Pheidole* (*Pheidole*), sp. ?

Ten ♂♂. Dohnavur, 350 ft., Tinnevely District, S. India, 30. ix. 38.

It is quite impossible to name the workers of *Pheidole* species unless a soldier be present also.

11. *Myrmicaria brunnea* Saunders, Trans. Ent. Soc. Lond. iii. p. 57 (1841).

Eight ♂♂. Nadungayam, 200 ft., Malabar, S. India, 16–22. ix. 38, and Dohnavur, 350 ft., Tinnevely District, S. India, 30. ix. 38.

*Distribution.*—India, Ceylon, Sumatra.

12. *Crematogaster* (*Acrocœlia*) *brunnea* Smith, subsp. *subnuda* Mayr, Verh. Zool. Bot. Ges. Wien, xxviii. p. 682 (1878).

Three ♂♂. Dohnavur, 350 ft., Tinnevely District, S. India, 30. ix. 38.

*Distribution.*—India, Assam, Burma.

\*In the 'Genera Insectorum' the volume is incorrectly given as "15."

13. *Crematogaster (Acrocoelia) rothneyi* Mayr, Verh. Zool. Bot. Ges. Wien, xxviii. p. 685 (1878).

One ♀. Dohnavur, 350 ft., Tinnevely District, S. India, 1. x. 38.

*Distribution*.—India.

14. *Monomorium (Holcomyrmex) glabrum* André, Spec. Hym. Europe, ii. p. 345 (1883).

Four ♀♀. Dohnavur, 350 ft., Tinnevely District, S. India, 1. x. 38.

*Distribution*.—The whole of India, Ceylon and Burma.

15. *Monomorium (Holcomyrmex) scabriceps* Mayr, Verh. Zool. Bot. Ges. Wien, xxviii. p. 672 (1878).

One ♀. Dohnavur, Tinnevely District, 350 ft., S. India, 8. x. 38.

*Distribution*.—India.

16. *Meranoplus levis*, sp. n.

♀. Head, thorax, antennæ, legs, first joint of pedicel, and anterior margin of gaster very narrowly, yellowish red, eyes and teeth of mandibles black, club of antennæ brown, post-petiole reddish brown, bordered with black, gaster very dark brown, almost black. Head, thorax and petiole mostly smooth, shining, clothed with longer and shorter outstanding yellow hairs, thicker on the gaster.

*Head* slightly longer than broad, narrowed in front, sides rounded, sinuate before posterior angles, posterior angles pointed, posterior border truncate, vertex, with a few faint longitudinal striæ; *mandibles* triangular, closely longitudinally striate, armed with four sharp teeth; *clypeus* flat, with a few longitudinal striæ, a narrow carina on each side ends in a small sharp tooth at corners of anterior border, which is margined and truncate; *frontal area* indistinct; *frontal carinæ* pointed, widely separated, continued to form a margin above the large wide, shallow, smooth antennal grooves; *antennæ* fairly long, 9-jointed, with a 3-jointed club; *cheeks* with several raised longitudinal ridges; *eyes* moderate, round-oval, prominent.

*Thorax* transverse; *pro-mesonotal shield* transverse, convex, covered with a number of faint oblique longitudinal striæ, narrowly margined anteriorly, sinuate before the short, pointed, anterior angles, posterior angles armed with a rather long pointed spine, posterior border margined; *epinotum* concave, margined at sides, armed with two long

thin sharp spines; *petiole* flat, transverse, margined; *post-petiole* globose, margined, slightly narrowed posteriorly, covered with a network of raised ridges; *gaster* heart-shaped, anterior border excised and narrowly margined, sculpture of anterior portion consisting of finely raised longitudinal ridges and very fine punctures.

*Long.* 4.3 mm.

Described from two workers, Dohnavur, 350 ft., Tinnevely District, S. India, l. x. 38.

Type in B.M. (N.H.).

This very distinct species is chiefly distinguished by its mostly smooth surface.

There are four specimens of this species in the B.M. from Ceylon: "S. P. Hambantota, T. B. F., 6 & 7 Feb. '09. Ceylon, T. B. Fletcher, 1909—137."

17. *Meranoplus carinatus*, sp. n.

♀. Head, thorax and legs black, cheeks yellow above, petiole and post-petiole yellowish brown, gaster brownish yellow with dark markings, clothed with longer and shorter outstanding curved yellow hairs, thicker on gaster. Sculpture of dorsal surface of head and thorax consisting of longitudinal raised ridges, or carinæ, which form a network and enclose larger and smaller, round, shallow punctures.

*Head* triangular, narrowed in front, broadest behind, posterior angles round, prominent, posterior border slightly but widely excised; *mandibles* massive, triangular, covered with numerous fine raised ridges, armed with four strong teeth; *clypeus* concave before anterior border, which is truncate, smooth and shining, with scattered punctures, thicker at the sides; *frontal area* transverse, triangular, smooth and shining; *cheeks* with strong longitudinal raised ridges; antennal grooves wide, deep, smooth and shining anteriorly, striate posteriorly; *antennæ* missing; *eyes* large, convex, round-oval; *ocelli* moderate. *Thorax* triangular, broadest across anterior angles, dorsal surface flat, anterior angles pointed; *suture* between mesonotum and scutellum narrow but deep; *scutellum* transverse, triangular; *epinotum* armed with two short, broad, but pointed teeth, *dorsal surface* shorter than declivity, longitudinally striate, *declivity* somewhat concave, very smooth and shining. *Petiole* with a rather high node, bidentate at apex, anterior surface slanting,



smooth and shining, posterior surface shorter, smooth and shining in centre, striate at sides, sides of petiole with shallow round punctures enclosed in raised ridges, armed beneath with a narrow projection, ending in a short blunt tooth anteriorly, projecting forward; *post-petiole* with sculpture similar to but stronger than that of petiole, globose, rounded at sides and in front, margined behind, armed beneath with a short sharp tooth projecting downwards; *gaster* oval, somewhat deeply excised anteriorly, the very long first segment covered with moderate, shallow, round punctures. *Wings* wanting.

*Long.* 8.5 mm.

Type in B.M. (N.H.).

Described from a dealated female. Amarambalam Forest, 500–1500 ft., Malabar, S. India, 20. ix. 38.

This distinct species does not agree with any known description, nor does it belong to any of the workers described for these regions.

18. *Cataulacus latus* Forel, Hist. Nat. Madagascar, xx. p. 145 (1891).

One del. ♀, 6 ♂♂. Tenmalai, 500–800 ft., Travancore, S. India, 11–17. x. 38.

*Distribution.*—Bengal, Burma, Tenasserim.

#### Subfamily Formicinæ.

19. *Anoplolepis longipes* Jerd., Madras Journ. Lit. Sci. xvii. 3. 122 (1851).

Two ♂♂. Tenmalai, 500–800 ft., Travancore, S. India, 11–17. ix. 38.

*Distribution.*—Warm parts of Asia; imported into the tropics by commerce, and becoming a cosmopolitan species.

20. *Ecophylla smaragdina* F., Syst. Ent. p. 828 (1755).

One del. ♀, 7 ♂♂. Dohnavur, 350 ft., Tinnevely District, S. India, 1. x. 38.

*Distribution.*—India, Indochina, Ceylon, Sonde Isles.

21. *Camponotus (Tanæmyrmex) angusticollis* Jerd., Madras Journ. Lit. Sci. xvii. p. 120 (151).

One large ♂. Siruvani-Muthikolam, 1700–3000 ft., Coimbatore District, S. India, 23–26. ix. 38.

*Distribution.*—India.

22. *Camponotus (Tanæmyrmex) barbatus* Rog., sub. sp. *taylori* Forel, Journ. Bombay Nat. Hist. Soc. vii. p. 241 (1892).

One ♂. Tenmalai, 500–800 ft., Travancore, S. India, 11–17. x. 38.

*Distribution*.—India.

23. *Camponotus (Tanæmyrmex) variegatus* Smith, Cat. Hym. Brit. Mus. vi. p. 19 (1858).

Two large ♀♀. Dohnavur, 350 ft., Tinnevely District, S. India, 1. x. 38.

*Distribution*.—Ceylon, Burma, Singapore.

24. *Camponotus (Tanæmyrmex) compressus* F., Mant. Ins. i. p. 307 (1787).

Thirty-two (♀♀ and ♂♂). Shencotta, S. India, 11. x. 38; Dohnavur, 350 ft., Tinnevely District, S. India, 1. x. 38.

*Distribution*.—India, Ceylon.

25. *Camponotus (Myrmosericus) rufoglaucus* Jerdon, Madras Journ. Lit. Sci. xvii. p. 124 (1851).

Thirty ♂♂. Dohnavur, 350 ft., Tinnevely District, S. India, 8. x. 38.

*Distribution*.—India, Ceylon, Assam, Burma.

26. *Camponotus (Myrmosericus) rufoglaucus* Jerdon, subsp. *paria* Emery, Ann. Mus. Stor. Nat. Genova, xxvii. p. 513 (1889).

Two ♂♂. Nadungayam, 200 ft., Malabar, S. India, 16–22. ix. 38.

*Distribution*.—India, Ceylon, Assam, Burma, Siam.

27. *Camponotus (Orthonotomyrmex) sericeus* F., Suppl. Ent. Syst. p. 279 (1798).

One del. ♀, 25 ♂♂. Tuticorin, S. India, 18. x. 38. This was probably a young colony, as none of the workers are large enough to be called soldiers. Sixty (♀♀ and ♂♂). Dohnavur, 350 ft., Tinnevely District, S. India, 30. ix., 1 & 8. x. 38. Some of these soldiers, and also workers, possess blood-red heads, = var. *sanguiniceps* Donis.

*Distribution*.—Tropical Africa, Egypt, Arabia, India, Indochina, Ceylon.

28. *Camponotus (Orthonotomyrmex ?) puniceps*, sp. n.

♂. Head, thorax, pedicel, coxæ and trochanters reddish pink, antennæ and spurs reddish yellow, anterior pair of legs brownish red, posterior pairs of legs and gaster black.

*Ants from Southern India.*

Clothed with long outstanding golden hairs, head and thorax with silvery pubescence which does not obscure the puncturation, gaster with rather close decumbent golden hairs or pile. Anterior tarsi furnished with rather close golden bristles beneath, posterior pairs with not so close reddish bristles above and beneath, posterior tibiae with a row of black bristles or spines beneath.

The puncturation of the head, body and legs is similar to that of *sericeus*, being of a close granular nature.

*Head* slightly shorter in proportion to its breadth than in *sericeus*. Meso-epinotal *suture* deeper and more marked; *epinotum* excised in centre of basal border, posterior angles bluntly pointed, sides strongly ridged, the surface beneath the ridges being considerably hollowed out; *pedicel* furnished with a scale rather than a node, apex narrowed and rounded, anterior surface slightly concave and sloping, posterior surface upright, slightly convex; *gaster* as in *sericeus*.

*Long.* 8.5 mm.

Described from nine workers. Dohnavur, 350 ft., Tinnevelly District, S. India, l. x. 38.

Type in B.M. (N.H.).

This handsome species comes quite close in general appearance to *C. (O.) sericeus* F., but the epinotum and pedicel are quite different.

It does not agree with Emery's interpretation of the subgenus *Orthonotomyrmex*, for the scale is not low, nor has it the form of a round node. On the other hand, it does not fit into any of the other subgenera, in which he says the scale is thick or thin but never nodiform.

It does not seem practical to make a new subgenus for this insect.

29. *Polyrhachis (Campomyrma) exercita* Walker, Ann. Mag. Nat. Hist. (3), iv. p. 370 (1859) = *clypeata* Mayr, Verh. Zool. Bot. Ges. Wien, xii. p. 683 (1862); Donisthorpe, Ann. Mag. Nat. Hist. (10) ix. p. 575 (1932).

Eleven ♂♂. Dohnavur, 350 ft., Tinnevelly, S. India, l. x. 38. All these specimens have dark legs.

*Distribution.*—India, Ceylon.

30. *Polyrhachis (Myrmotherinax) thrinax* Roger, Berl. Ent. Zeits. vii. p. 152 (1863).

Seventeen ♂♂. Nadungayam, 200 ft., Malabar, S. India, 16-22. ix. 38.

*Distribution*.—S. India, Bengal, Ceylon, Burma, Java.

31. *Polyrhachis (Myrmotherinax) thrinax* Roger, var. *mucronis*, var. n.

In this variety the central spine on the petiole is simple instead of being bimucronate as in the typical form. *paratype to bimucronate!*

Seven ♀♀. Nadungayam, 200 ft., Malabar, S. India, 16-22. ix. 38.

32. *Polyrhachis (Myrmhopla) tibialis* Smith, Cat. Hym. Brit. Mus. vi. p. 63 (1858).

Two ♂♂, one w. ♀. Tenmalai, 500-800 ft., Travancore, S. India, 11-17. x. 38; 1 ♂, Nadungayam, 200 ft., Malabar, S. India, 16-22. ix. 38.

*Distribution*.—India, Burma.

33. *Polyrhachis (Myrmhopla) tibialis* Smith, var. *parsis* Emery, Ann. Mus. Stor. Nat. Genova, xl. p. 717, nota (1901).

One ♂. Nadungayam, 200 ft., Malabar, S. India, 16-22. ix. 38.

*Distribution*.—S. India, Ceylon.

34. *Polyrhachis (Myrmhopla) binghami* Forel, Journ. Bombay Nat. Hist. Soc. viii. pp. 25, 33 (1893).

Three ♂♂. Tenmali, 500-800 ft., Travancore, S. India, 11-17. ix. 38.

*Distribution*.—Burma.

35. *Polyrhachis (Myrma) illaudata* Walker, Ann. Mag. Nat. Hist. (3) iv. p. 373 (1859); Donisthorpe, Ann. Mag. Nat. Hist. (10) ix. p. 576 (1932)=*mayri* Roger, Verz. Formicid, p. 7 (1863).

Two ♂♂. Nadghāni Ghaut, Gudalur District, 3000 ft., S. India, 21. ix. 38.

*Distribution*.—S. India, Bengal, Ceylon, Indochina, Sonde Isle.

36. *Polyrhachis (Myrma) latispinosa*, sp. n.

♀. Black, clothed with close decumbent golden hairs, slightly more silvery in colour on head and thorax, and with long outstanding golden hairs. *Pronotal spines* long, sharp, pointing forwards; *epinotum* armed with very bluntly

pointed teeth; *scale* armed with four teeth, those on the upper lateral angles short, broad, but sharply pointed, those on the sides shorter and sharper. The space between the two upper teeth is produced in the centre into a very blunt, short, rounded tooth or projection, posterior surface of scale convex and somewhat rugose, anterior surface flatter and less rugose.

Wings yellow, pterostigma and veins yellowish brown.

*Long.* 10 mm.

Described from a winged female. Tenmalai, 500–800 ft., Travancore, S. India, 11–17. x. 38.

Type in B.M. (N.H.).

37. *Polyrhachis (Myrma) duodentata*, sp. n.

♀. Similar to *latispinosa* in size, colour, sculpture and clothing.

*Pronotal* spines the same; *epinotal* teeth somewhat sharper; the four teeth on the scale sharper and thinner, the space between the upper teeth produced in centre to form two short, small teeth.

*Wings* as in *latispinosa*.

*Long.* 10 mm.

Described from a winged female. Nadungayam, 200 ft., Malabar, S. India, 16–22. ix. 38.

Type in B.M. (N.H.).

These two species are very similar in appearance, and come near to *illaudata* Walker. They differ in not possessing long teeth or spines on the upper lateral angles of the scale, nor is the space between these teeth truncate as in that species. The *epinotal* teeth are more distinct (those of *illaudata* being distinctly rounded); the golden colour is not so deep; they are a little smaller and the gasters are less voluminous. From *proxima* Roger and *intermedia* Forel, besides not having the long teeth or spines on the upper lateral angles of the scale, they differ in not having the side teeth bimucronate. They are much too large to be the female of *convexa* Roger, which is similarly clothed, etc., in the worker.

38. *Hemioptica scissa* Roger, Berl. Ent. Zeits. vi. p. 240 (1862).

Fifteen ♂♂. Tenmalai, 500–800 ft., Travancore, S. India, 11–17. x. 38; Dohnavur, 350 ft., Tinnevely District, S. India, 8. x. 38.

*Distribution.*—Ceylon.

FIG. 1.

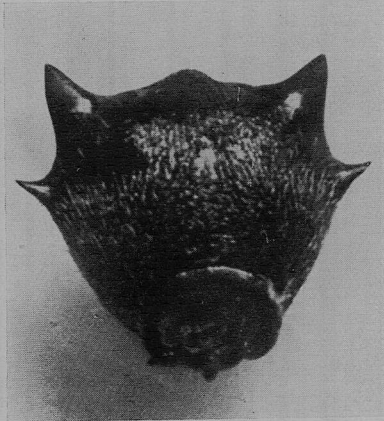


FIG. 2.

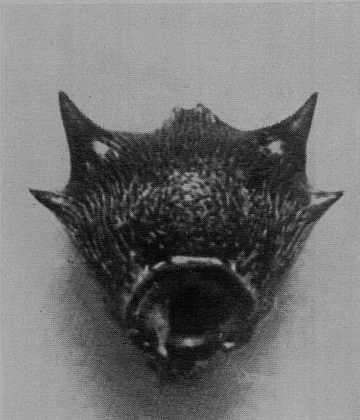


FIG. 3.

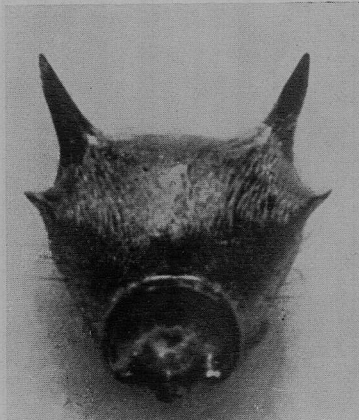


Fig. 1.—Scale of *Polyrhachis (Myrma) latispinosa*, sp. n., posterior view.

Fig. 2.—Scale of *Polyrhachis (Myrma) duodentata*, sp. n., posterior view.

Fig. 3.—Scale of *Polyrhachis (Myrma) illaudata* Walker.