

*Five new Species of Ant (Formicidæ) from various Localities.* By HORACE DONLSTHORPE, F.Z.S., F.R.E.S., etc., Department of Entomology, British Museum (Natural History).

Subfamily MYRMICINÆ.

✓✓ *Rhopalothrix (Rhopalothrix) kokodensis*, sp. n. = *peruviana*

♀. Reddish brown, antennæ and legs not lighter; wings dusky. Whole body sprinkled with numerous white decumbent scales and with scattered erect clavate hairs; tibiæ and tarsi covered with large white semi-decumbent clavate hairs.

*Head* triangular, closely covered with large shallow punctures, except a small space between the temples and between the ocelli and posterior margin of head, which is smooth and shining; posterior border deeply emarginate; *mandibles* triangular, with a large tooth at apex and base and numerous small teeth along the masticatory border between them; *clypeus* transverse, widely emarginate anteriorly, slightly convex on disc; *frontal area* rather indistinct; *frontal furrow* fine but well marked; *frontal carinæ* widely separated and divergent, ending in a lobe covering the deeply excavated *scrobes*; *antennæ* 7-jointed, *scape* dilated, broadest at base, nearly as long as *funiculus*; *funiculus*: first joint short, a little broader than second, second to fifth gradually getting broader, last joint long and pointed, about as long as the four preceding joints taken together. *Thorax* large and massive; *pronotum* transverse, with prominent blunt posterior angles; *mesonotum* narrowed anteriorly, broadest at base, rather deeply impressed in centre, longitudinally striate and punctate, *scutellum* convex,

gibbose; *metanotum* very narrow and transverse; *epinotum* armed with two teeth, both the dorsal surface, which is separated from the declivity by a suture, and the declivity smooth and concave. *Petiole* with a long peduncle and a small rounded high node posteriorly; *post-petiole* transverse, much broader than petiole, emarginate anteriorly, rounded posteriorly, with a deep central furrow, separated from gaster by a deep suture; *gaster* short-oval, first segment long, shining, and covered with numerous small shallow punctures. *Wings* with one long cubital cell and a long closed radial cell; *pterostigma* thin, long, and not clearly marked.

Long. 5.3 mm.

♂. Blackish brown, antennæ and legs light brown.

*Head* triangular, rugosely sculptured, high at vertex, hollowed out between antennal carinæ, posterior border emarginate, and margined; *clypeus* large, emarginate anteriorly, spreading out into a lobe on each side; *mandibles* small, triangular, with a sharp tooth at apex and a few little teeth on masticatory border; *antennal carinæ* standing out like a pair of short blunt horns; *frontal furrow* somewhat smooth and shining; *eyes* large, placed at sides of head; *ocelli* moderate; *antennæ* very long, 13-jointed, *scape* triangular, about as long as broad at base, first joint of *funiculus* small and rounded, following joints elongate and covered with short decumbent hairs. *Thorax* rugosely sculptured, *pronotum* transverse, rounded posteriorly, posterior angles somewhat prominent; *mesonotum* large, convex, somewhat quadrangular; *scutellum* large, rounded, and narrowed posteriorly, standing out above the metanotum; *epinotum* and *petiole* much as in the ♀, but rugose; *post-petiole* and *gaster* also much as in the ♀, but very finely and closely coriaceously punctured and somewhat shining. *Wings* as in ♀. *Legs* long.

Long. 3.9 mm.

Type and allotype in the British Museum (Nat. Hist.).

Described from one female and seven males taken by Miss L. E. Cheesman at Kokoda, Papua, at an elevation of 1200 ft., in April 1933, and six males taken in the same place in September 1933.

The genus *Rhopalothrix* Mayr is divided into two subgenera, *Octostruma* Forel, with 8-jointed antennæ in the

worker and female, and *Rhopalothrix* sensu str., with 7-jointed antennæ in the worker and female. The former occurs in Central and South America and the latter in tropical South America, New Guinea, and Australia. The males do not appear to have been described before.

Subfamily DOLICHODERINÆ.

♣ *Tapinoma menozzii*, sp. n.

♂. Subopaque, lighter or darker chocolate-brown; mandibles, clypeal foveæ, and articulations of the joints yellowish; funiculi of antennæ and tarsi of a somewhat lighter yellow; pubescence whitish, very fine and short, more apparent on scapes and gaster; short decumbent yellow hairs on mandibles, a few longer yellow hairs on anterior margin of clypeus, a few short, suberect, bristle-like hairs scattered on body.

*Head* extremely finely punctured, narrowed in front and behind, not as broad as long, broadest a little behind eyes, sides and posterior angles rounded, posterior border distinctly emarginate; *mandibles* smooth, shining, with a few scattered fairly large punctures, *masticatory border* with a number of small sharp teeth, the apical ones somewhat longer, apical one longest and sharpest; *clypeus* transverse, anterior border feebly emarginate and margined, convex on disc, extending only slightly between the insertions of the antennæ; *frontal area* indistinct; *eyes* large, situated on the anterior half of the head; *antennæ* long; *scape* when bent back reaching beyond posterior corners of the head by a fifth of its length; *funiculus* thickened towards apex, first joint as long as the two following taken together, longer than second but shorter than third, third to eighth of about equal length, ninth and tenth a little longer, last joint as long as the two preceding taken together. *Thorax*: *pronotum* transverse, broader than the rest of the thorax, more distinctly punctured than head, *pro-mesonotal* suture distinct; *mesonotum* and *epinotum* more punctured than pronotum; *meso-epinotal* suture deep; *epinotum* convex, *declivity* longer than dorsal surface, gradual, rather flat; *petiole* longer than broad, flat; *gaster* oval, overhanging the petiole, very finely punctured. *Legs* long.

Long. 3·7 mm.

Type in British Museum.

Described from eight workers taken by Dr. G. Arnold in the Chirinda Forest, Rhodesia, in December 1935.

Subfamily *FORMICINÆ*.

♂♂ *Camponotus (Myrmamblys) andrewsi*, sp. n.

♀. Reddish yellow; gaster black, with apex of segments narrowly yellowish, legs lighter yellow. Head and thorax very finely reticulately punctured, gaster with very fine, close, transverse striation. Body clothed with very short, sparse, not very apparent, decumbent pubescence, and a few scattered long erect hairs, especially on epinotum and scale.

*Head* subquadrate, broadest behind eyes, posterior angles rounded, posterior border straight, sides slightly rounded, gradually narrowed to anterior border; *mandibles* very finely punctured with a number of scattered larger punctures, armed with five teeth; *cheeks* margined at anterior border, extending as far forward as the anterior border of the clypeus; *clypeus* large, convex, well defined, anterior border straight, margined, then slanting back to clypeal foveæ, a *carina* is faintly indicated; *frontal area* very small, not distinctly defined; *frontal furrow* very faint and narrow; *frontal carinæ* long, parallel behind; *antennæ* moderate, inserted well before centre of carinæ, *scape* long, reaching beyond posterior corners of head by about a quarter of its length; *eyes* large, placed above, behind centre of head. *Thorax* narrowing to base; *pronotum* large, broader than rest of thorax, rounded in front and sides, flat on disc; *suture* between *metanotum* and *epinotum* depressed; *epinotum* rounded and raised anteriorly, concave on disc, the *declivity* abrupt, concave, and shorter than dorsal surface of epinotum; *scale* thick, bluntly pointed above, anterior surface convex, posterior surface concave. *Gaster* oval, pointed at apex, about as long as thorax and petiole taken together. *Legs* long.

Long. 4·7 mm.

♂. Brownish yellow, gaster and epinotum somewhat darker; eyes, ocelli, and vertex of head black, legs and

antennæ lighter yellow. Sculpture, pubescence, etc., as in ♀.

*Head* small, *mandibles* small but well developed, *clypeus* as in ♀; *eyes* large and prominent; *ocelli* large and prominent, *scale* rather low, transverse and somewhat thick, rounded above and at sides; *gaster* long; *genitalia* exerted. *Wings* transparent, with pale yellow veins and stigma.

Long. 4.3 mm.

Holotype (♀) and allotype (♂) in British Museum

Described from a soldier and male taken by Mr. C. W. Andrews on Christmas Island in March 1898 and December 1897. Although not taken together the similarity in the general structure (apart from the usual differences) and puncturation etc. show these insects to belong to the same species. This is an addition to the list of ants published in my paper on the ants of Christmas Island (*Ann. & Mag. Nat. Hist.* (ser. 10) xv. pp. 629-635, 1935), bringing the total up to twenty species.

♂♂ *Camponotus (Myrmophyma) mussolinii*, sp. n.

♀. Black, insertion of the antennæ, femora, coxæ, basal margins of segments of gaster, anterior border of pronotum and spurs brownish yellow; antennæ, tibiæ, and tarsi brown.

*Head* clothed with long yellow decumbent pubescence, more distinct on clypeus and cheeks, and with a double row of seven long, erect, yellowish-white bristle-like hairs, reaching from centre of vertex of head to within the frontal carinæ; another double set occurs along the sides and the anterior border of the clypeus. The dorsum of the pronotum is covered with a dense mass of long erect white hairs, and the sides and ventral surface are clothed with decumbent yellowish pubescence. The erect white hairs on the mesonotum are not so dense as on the pronotum, and the epinotum and scale are furnished with similar white erect hairs standing out in all directions. The gaster is covered with rather long, fairly dense, silky white pubescence pointing towards apex, which is shorter and sparser on sides and ventral surface; a row of erect white bristle-like hairs extends across the centre of the segments, and another near apex of the same.

The sculpture of the whole body consists of a fine coriaceous puncturation which renders the surface rather dull, except on the base of the first segment of the gaster, which is bare, shining, and very finely transversely striate.

*Head* long and narrow, longer than broad, broadest behind eyes, emarginate posteriorly, posterior angles rounded, sides straight, narrowed from eyes to anterior border; *clypeus* large, triangular, convex in middle, anterior border emarginate in centre, *keel* only noticeable at base; *frontal area* triangular, well defined; *frontal furrow* very narrow and fine, reaching from frontal area to vertex of head; *mandibles* massive, shining, with some large scattered punctures present, and armed with five or six teeth; *antennæ* long, *scape* when bent back reaching beyond posterior border of the head for about half its length. *Thorax*: the dorsal surface viewed in profile not quite continuous, there being a distinct angle between mesonotum and epinotum; *pronotum* with anterior border very finely margined; *epinotum* rounded and convex above, *declivity* gradual and slightly concave; *scale* large, thick, high, bluntly pointed above, anterior surface convex, posterior surface flat. *Gaster* moderate, somewhat narrow. *Legs* long, *femora* and *tibiæ* compressed, the latter furnished with a double row of spines beneath.

Long. 8.6 mm.

Type in British Museum.

Described from three workers taken by Miss L. E. Cheesman at Kokada, Papau (1200 ft.), in May 1930.

The soldier would be a somewhat considerably larger insect, judging by other species in the subgenus (*C. (M.) æneopilosus* Mayr, etc.), and not such a hairy creature.

The subgenus *Myrmophyma* Forel, as emended by Emery, consists of some thirty-eight species, and is confined to Australia, Tasmania, and New Guinea.

√√ *Echinopla silvestrii*, sp. n.

♀ (dealated). Black, legs and antennæ red, mandibles dark red in centre, teeth and base black, anterior and posterior femora blackish at base, gaster with a slight æneous tint.

Whole body clothed with long yellow outstanding hairs. A grey decumbent pubescence occurs which on the head is thickest on clypeus and posterior border. On the pronotum and epinotum it forms a very thick dense matted pile, giving the appearance of two distinct grey bands.

Head, thorax, and petiole covered with very deep impressed, rugose, irregular punctures, giving a general spongy effect; gaster with similar punctures which are, however, smaller, closer together, less deep, and less rugose.

*Head* transverse, broadest just behind eyes, temples and posterior border rounded; *mandibles* massive, triangular, strongly longitudinally striate, and with large scattered punctures, armed with five strong teeth, the apical one being the longest and sharpest; *clypeus* transverse, convex, and with a narrow raised anterior border, slightly emarginate in centre; a raised ridge or keel is present between the strongly arched *frontal carinæ*; *eyes* very prominent; *ocelli* present, rather deeply inserted; *antennæ* stout and rather long, *scape* when bent back reaching beyond posterior border of head. *Thorax*: *pronotum* very transverse, anterior border rather strongly crenulate, anterior angles pointed, posterior border overlapping and encircling mesonotum; *mesonotum* slightly transverse, flat on disc; *scutellum* very transverse, flat, rounded anteriorly and posteriorly, narrowed and pointed at sides; *metanotum* very transverse, thin and narrow; *epinotum* transverse, anterior border concave, sides and posterior border rounded; *declivity* flat, longer than dorsal surface. *Petiole* very transverse, furnished with three long sharp spines on each side, the centre one being the longest; *gaster* rather flat on disc, first segment covering all the others, slightly transverse, with a raised, finely margined, sharp rim at base. *Legs* rather stout.

Long. 8 mm.

Type in British Museum.

Described from a single dealated female taken by Miss L. E. Cheesman at Kokoda, Papua (1200 ft.), in April 1933.

The genus *Echinopla* occurs in the Nicobar Isles, and extends in Malaya to New Guinea and Queensland.