

From the ANNALS AND MAGAZINE OF NATURAL HISTORY,
Ser. 11, vol. viii. p. 199, *September* 1941.

Descriptions of new Ants (Hym., Formicidæ) from various Localities. By HORACE DONISTHORPE, F.Z.S., F.R.E.S., &c., Department of Entomology, British Museum (Natural History).

Subfamily CERAPACHYINÆ.

Tribe CERAPACHYINI.

Cerapachys antennatus Smith ?

♂. Shining black, mandibles, apex of gaster, post-petiole beneath at base, trochanters, knees, tarsi, and antennæ more or less, reddish. Clothed with longer and shorter outstanding yellow hairs.

Head triangular, narrowed in front, posterior angles rounded, posterior border margined, widely but not deeply excised, covered with a network of raised ridges; mandibles well developed, marked with a few larger and smaller shallow punctures; *masticatory border* unarmed; *clypeus* moderately convex, anterior border margined, rounded; *frontal carinæ* short, convergent behind, sharp, soldered to clypeus, not covering insertion of antennæ, enclosing a small, round, rather deep pit; *eyes* large, prominent, round-oval; *ocelli* large, situated on top of head; *antennæ* 13-jointed, pubescent, *scape* as long as the first three joints of the funiculus taken together, *funiculus* with first two joints short and of about equal length, the rest of the joints broader and longer, increasing in length and breadth to apex, last joint long, pointed, about equal in length to the two preceding taken together. *Thorax* longer than broad, slightly narrowed in front, more so behind, broadest just before insertion of wings; *pronotum* transverse, truncate and margined anteriorly, posterior border widely and deeply excised, embracing the mesonotum, smooth and raised in centre at base, sides straight, furnished with raised longitudinal ridges; *mesonotum* moderately convex, smooth and shining, with a few shallow scattered punctures; *mayrian furrows* very distinct, wide, deep, punctured; *præscutellum* transverse, hollowed out on each side, forming raised rounded rims at sides, in the middle there is a transverse depression, deeper at each side, the centre portion furnished with three longitudinal raised ridges; *scutellum* not very convex, more or less smooth and shining, with a few scattered shallow punctures; *metanotum* narrow, transverse; *epinotum* transverse, smooth and shining in centre, sides with raised ridges, forming a network of large round punctures, *declivity* abrupt, round, flat, with a sharp raised rim round edges, finely transversely striate; a row of large, round oval, fairly deep punctures extends between the *episternite* and the *epimeron* of the mesonotum. *Petiole* longer than broad, narrowed behind middle, furnished with longitudinal raised ridges, apex very finely transversely striate, beneath a narrow wedge-shaped ridge extends, bluntly toothed anteriorly, the tooth pointing downwards; *post-petiole* (=first segment of

gaster) smooth and shining, longer than petiole, longer than broad, narrowed in front and behind, broadest behind middle, furnished beneath anteriorly with a narrow tooth projecting forwards, constriction between post-petiole and second segment of gaster very marked; *gaster* smooth and shining, second segment longer and broader than post-petiole, sides narrowed in front and behind middle. No *cerci* present; *genitalia* concealed; *subgenital lamina* strongly forked. *Wings* slightly dusky, iridescent, *pterostigma* and *veins* brown, fore wing with one *discoidal cell*, one large closed *cubital cell*, and *radial cell* short, closed.

Long. 7 mm.

Type in B.M.

Described from a male taken by G. E. Bryant in Borneo, Mt. Matang, W. Sarawak, December 16th, 1913.

In my opinion the above-described ant is the male of Smith's *Cerapachys antennatus* ♀ [Journ. Proc. Linn. Soc. Lond. Zool. ii. p. 74 (1857)].

Type locality: Sarawak, Borneo.

Smith suggested that his *C. oculatus* ♂ (*l. c.*) might be the male of *antennatus*. The size, however, is too small, and the colour wrong, etc.

Wheeler re-described *antennatus* ♀ [Bull. Mus. Compar. Zool. lxiii. p. 45 (1919)] from Kuching, Borneo, which is near to Matang Mountain, Bryant's locality.

Wheeler further described a new *Cerapachys*—*C. bryanti* (*l. c.* p. 47)—a small castaneous species taken by G. E. Bryant, also on Matang Mt., and sent to him by myself.

In the 'Genera Insectorum,' cxviii. p. 8 (1911), Emery gives a short diagnosis of the male of *Cerapachys* which he says he has taken from Forel's description of *C. aitkeni* [Journ. Bombay Nat. Hist. Soc. xiii. p. 332 (1900)]. This agrees quite well with our male, with the exception that no mayrian furrows are said to be present. In a large ant from Muong You in the British Museum, which was named by Wheeler "*Cerapachys* sp. ♂," the mayrian furrows are very distinct. The general structure of this large male is similar to that of our species, with the exception that the radial cell is long and open.

It would thus appear that the males of species of *Cerapachys* vary in these two points.

Subfamily *PONERINÆ*.Tribe *PLATYTHYREINI*.*Platythyrea ceylonensis*, sp. n.

♀. Black, mandibles, legs and antennæ reddish brown, articulations of legs, apex of scape and funiculus lighter, last two segments of gaster, and apex of other segments narrowly, reddish yellow, with the usual pruinose surface, which is grey in colour, and small scattered punctures.

Head oblong, broadest just behind eyes, posterior angles rounded, posterior border excised in middle; *mandibles* triangular, slightly curved downwards, apical tooth blunt, masticatory border with a number of indistinct small blunt teeth; *antennæ* moderate, *scapes* not extending beyond posterior angles of head, joints of *funiculus* gradually increasing in breadth to apex, last joint pointed; *clypeus* convex, anterior border rounded, posterior border rather indistinctly defined; *frontal area* ill-defined; *frontal furrow* faint, almost extending to base of head, with two small shallow pits, one situated before middle, the other near base; *frontal carinæ* sinuate behind the not very prominent lobes; *eyes* large, oval, rather flat, situated at sides of head a little before middle. *Thorax* long, narrowed to base; *pronotum* ample, convex, anterior angles rounded, posterior border rounded; *pro-mesonotal suture* very distinct; no *suture* present between mesonotum and epinotum, which are together longer than pronotum; *dorsal surface* of *epinotum* excised at base, with posterior angles armed with a short pointed tooth, *declivity* abrupt, slightly concave, faintly transversely striate; *node* of *petiole* longer than broad, convex, sides rounded and narrowed to base; *gaster* long, narrowed to apex, second segment considerably longer than first (*i. e.*, *post-petiole*); *pygidium* furnished with a small bunch of longer and shorter fine yellow hairs; *sting* exerted.

Long. 6.5 mm.

♀. Similar in colour and appearance to the ♂. The sculpture is a little stronger, the teeth to the epinotum shorter and blunter, and the sting longer. The *ocelli* are very small and inconspicuous. The *suture* between the pronotum and mesonotum is very distinct, the *sutures* between the *mesonotum* and *præscutellum*, and *scutellum*

and *metanotum* are fine but distinct, *suture* between *metanotum* and *epinotum* stronger; the *scutellum* is not very clearly defined.

Long. 7 mm.

Type and ♀ type in B.M.

Described from a worker and a dealated female taken by Dr. Thwaites in Ceylon. Registered number 67. 25. This insect comes near to a little group of small species of *Platythyrea*—*sagei* Forel (India), *pusilla* Emery (Amboina), *subtilis* Emery (Borneo), *wroughtoni* Forel (India), etc.

It is larger, however, than any of them, and differs in structure, etc.

The only other species of this genus known to occur in Ceylon is *P. thwaitesi* Donisthorpe [Ann. & Mag. Nat. Hist. (s. 10) viii. p. 496 (1931)]; also taken by Dr. Thwaites.

Subfamily MYRMICINÆ.

Tribe CREMATOGASTERINI.

Creमतogaster (Rhachiocrema) aculeata, sp. n.

♀. Head, thorax and antennæ slightly reddish yellow, legs, petiole and post-petiole pale yellow, gaster jet black, with a slight violet reflexion, teeth of mandibles red, eyes black, smooth and shining, clothed with a few scattered outstanding yellow hairs.

Head subquadrate, posterior angles rounded, posterior border sinuate; *mandibles* slightly longitudinally striate, triangular, masticatory border armed with four moderately sharp teeth; *clypeus* convex, anterior border straight, posterior border rounded, with a rather distinct longitudinal carina on each side and a few faint lines in centre; *eyes* round, convex, not very large, with rather coarse facettes; *antennæ* 11-jointed, with a distinct two-jointed club; first joint of *funiculus* about as long as (and somewhat wider than) the next two taken together, last joint of *club* about twice as long as the one preceding it. *Thorax* considerably contracted in middle; *pro-mesonotum* rather flattened, with no suture between; *mesonotum* with a distinct longitudinal ridge on each side at base; *suture* between mesonotum and epinotum deep; *epinotum* with dorsal surface slightly concave and wide, armed with two

long thin sharp divergent spines, which are almost straight. *Petiole* narrowed in front, broadest just before base, *node* with posterior corners slightly raised; *post-petiole* a little shorter than petiole, narrowed anteriorly and rounded posteriorly; *gaster* short oval, with apex considerably curved upwards.

Long. 2.7 mm.

Type in B.M.

Described from a single worker taken by Miss L. E. Cheesman in Dutch New Guinea, Cyclops Mountains, Sabron, 2000 ft., July, 1936.

This distinct species differs from *paradoxa* Emery, and *wheeleri* Mann, in colour, the shape and structure of the spines, etc. It is decidedly smaller than the former, and slightly larger than the latter. *C. (R.) paradoxa* has a black head, and *C. (R.) wheeleri* is all black except the mandibles, funiculi, and tarsi, which are yellow. The petiole in *paradoxa* is considerably longer than in either *wheeleri* or *aculeata*.

I am not very happy about the subgenus *Rhachiocrema*. Mann [Bull. Mus. Comp. Zool. lxiii. p. 318 (1919)] created it for the reception of *Crematogaster (Orthocrema) paradoxa* Emery from New Guinea, and his new species *C. (R.) wheeleri* from the Solomons, which he made the type. His diagnosis consists of—"the enormous development of the epinotal spines and the elongate pedunculate structure of the petiole and the elongate 12-jointed antennæ with the 2-jointed funicular club." *C. paradoxa* has an 11-jointed antenna, and although Mann describes and figures *wheeleri* with a 12-jointed antenna, I am not aware of any other species of *Crematogaster* in the world with this number. The length of the antennæ and the petiole are longer in *paradoxa* than in the other two species, and it would seem that the only reliable character is the long epinotal spines.

Tribe SOLENOPSISINI.

Liomyrmex froggatti Donis., subsp. *major*, subsp. nov.

♀. This insect is closely allied to the typical form from New Guinea, and is probably a local race of the same. It is larger (10.7 mm. as against 9.2 mm.), the petiole is distinctly less transverse and the pubescence and out-

standing hairs are sparser. Otherwise it agrees quite well with *froggatti* in colour, structure, etc.

Long. 10.7 mm.

Type in B.M.

Described from a deälated female taken by Dr. Stephenson in the Philippine Islands, Registered number 47. 22.

We described *L. froggatti* in 1940 [Ann. & Mag. Nat. Hist. (s. 11) v. pp. 40-45, 3 text-figs. (1940)] and gave a list of the known species and their localities. The other known species from the Philippines, *L. tagalanus* Menozzi, is quite different in colour, structure, etc.

Subfamily DOLICHODERINÆ.

Tribe TAPINOMINI.

Technomyrmex gilvus, sp. n.

♀. Pale yellow, teeth to mandibles red, eyes black, very finely punctured and clothed with very fine yellow pubescence.

Head oblong, narrowed in front and behind, broadest behind middle, posterior angles rounded, posterior border sinuate; *mandibles* long, triangular, masticatory border armed with a number of small sharp teeth, the apical one, the one before and the third from it being the longest; *clypeus* moderately convex, posterior border rounded, anterior border excised, with a rather sharp tooth at each side of excision; *frontal area* and *furrow* absent; *frontal carinæ* short, widely separated; *eyes* large, oblong oval, with rather coarse facets; *antennæ* long, 12-jointed, *scape* long, extending beyond posterior border of head by about one-sixth of its length, *funiculus* gradually increasing in thickness to apex, all the joints longer than broad, first joint longer than second, last joint as long as the two preceding taken together; *maxillary palpi* long, 6-jointed; *labial palpi* 4-jointed. *Thorax* and *petiole* typical in size and shape; *gaster* long oval; *cloacial opening* apical. *Legs* long.

Long. 3 mm.

Described from 14 specimens taken by Miss L. E. Cheesman on herbage, Papua, Kokoda, 1200 ft., iv.1933.

Type in B.M.

As far as I am aware this is the only entirely yellow species of *Technomyrmex*.

Subfamily FORMICINÆ.

Tribe MELOPHORINI.

Notoncus rodwayi, sp. n.

♀. Dark brown, legs lighter, cheeks, apex of scapes and base of joints of funiculi reddish; mandibles reddish yellow, teeth black. Clothed with longer and shorter widely scattered yellowish outstanding hairs, pubescence yellow, very sparse.

Head subquadrate, slightly narrowed in front, posterior angles rounded, posterior border widely and very slightly excised; *mandibles* triangular, long, crossed at tips, with larger and smaller shallow punctures, chiefly near masticatory border which is armed with 5 teeth, the apical one very long and pointed, the 4th longer than those preceding it, the 2nd longer than 1st and 3rd; *clypeus* large, triangular, convex, finely longitudinally striate, with a sharp longitudinal carina in centre, anterior border emarginate in centre; *frontal area* distinctly defined, finely longitudinally striate; *frontal fovæ* rather deep; *cheeks* finely obliquely striate; rest of head finely longitudinally striate; *frontal carinæ* moderately raised, divergent, slightly sinuate at base; *eyes* large, round oval, moderately convex, placed behind centre of sides of head; *ocelli* small, situated near posterior border of head; *antennæ* moderate, *scape* extending beyond posterior border of head by about its width at broadest part, *funiculus* thickened to apex, 1st joint about as long as the two following taken together, last joint narrowly pointed, about as long as the two preceding taken together. *Thorax* longer than broad, slightly narrowed to base; *pronotum* transverse, the anterior portion concave, produced into a neck, finely transversely striate, anterior angles projecting and bluntly pointed; *mesonotum* subquadrate, convex, finely but distinctly longitudinally striate; *præscutellum* very narrow; *scutellum* prominent, longitudinally striate; *metanotum* narrow, transverse, finely transversely striate; *epinotum* transversely striate, *dorsal surface* convex, considerably shorter than the declivity, furnished on each side at base with a small blunt tubercle, *declivity* fairly abrupt, flat. *Scale of petiole* rather high, narrow, excised at apex, forming a short sharp tooth on each side, sides excised beneath these.

teeth and with a short blunt tubercle on each side at base of excision, anterior surface concave, posterior surface convex; *gaster* smooth and shining, long oval, broadest near base of 1st segment.

Long. 8 mm.

Type in B.M.

Described from a dealated female taken by F. A. Rodway, New South Wales, Nowra, September, 1924.

This distinct species does not agree with the descriptions of any of the known species.

In the 'Genera Insectorum' (1925) the wings are said to be unknown. In two winged females of *N. gilberti* Forel, in the British Museum, the *veins* and *pterostigma* are light yellowish brown; one *discoidal cell* and one *cubital cell* are present and the *radial cell* is closed. This also agrees with Viehmeyer's description of the wing of *N. politus* [Ent. Mitt. xiv. p. 39 (1925)].

Tribe CAMPONOTINI.

Camponotus (Myrmophyma) flavocrines, sp. n.

♀. Black, mandibles (except at the base, and all the teeth of the masticatory border except the apical one) and dorsal surface of *gaster* (except the two apical segments) yellow. Clothed with long pale yellow outstanding hairs, pointing forwards on head and thorax, and backwards on petiole and *gaster*; and with very fine short decumbent yellow hairs, which are longer and closer on head and thorax. A tuft of long yellow decumbent hairs is present on the pronotum. The whole body is finely reticulate.

Head longer than broad, viewed in profile it is bent downwards at right-angles at the insertion of the antennæ, viewed in front the cheeks appear to be almost straight, the top of the head is flat, and the eyes are placed on each side where the angle commences; sides of head behind eyes rounded to posterior angles, the latter rounded and the posterior border sinuate; *mandibles* large, triangular curved, punctured, armed with six strong pointed teeth, the apical one very long and curved; *clypeus* large, triangular, anterior border sinuate on each side, longitudinally raised in middle, giving the appearance of a carina, bluntly pointed at apex; *frontal area* not distinctly defined; *frontal carinæ* with sharp raised edges, convergent

in front, divergent and sinuate behind; *antennæ* long, *scapes*, when bent back, extending beyond pro-mesonotal suture. *Thorax* viewed from the side forming a regular arch, narrowed to base; *pronotum* rounded and margined anteriorly; *pro-mesonotal suture* very distinct; no *suture* between mesonotum and epinotum; *epinotum* without an angle between dorsal surface and declivity. *Petiole* furnished with a small node rounded above and bluntly pointed beneath; *gaster* short oval. *Legs* long; *femora* and *tibiæ* compressed, the latter spined beneath.

Long. 8.6 mm.

Type in B.M.

Described from a worker taken by W. Stalker in British New Guinea, Madew, St. Joseph River, 2000-3000 ft., 1909-22.

Camponotus (Myrmosaulus) singularis Smith,
var. *rufomaculatus*, var. n.

Head red, thorax black, except several patches of red on the pronotum (less noticeable in the ♂), and the mesonotum mostly red; gaster, legs and antennæ black, clothed with greyish-yellow pubescence, and fine long pale yellow outstanding hairs.

Long. ♂ 16 mm.; ♀ 12.5 mm.

♂ and ♀ types in B.M. Coll.

Described from a soldier and a worker taken by Dr. B. M. Hobby in Borneo, Sarawak, in a clearing at the foot of Mt. Dulit, at the junction of the Rivers Tinjar and Leck, 11, x. 1933.

This variety differs from the typical form in being less pubescent, and the pubescence not having a golden tint; in having red patches on the thorax, and the upper surface of the node of the petiole more strongly sculptured.

There are a number of workers of *singularis* in the British Museum, none of which show any trace of red on the thorax.

The type locality for *singularis* is Java; it has also occurred in Sikkim, Indo-China, Sumatra and Borneo.

Polyrhachis (Myrma) moorei, sp. n.

♀. Black, covered with a pale slightly yellowish-grey pubescence and clothed with a few pale yellow outstanding hairs, more abundant on last three segments of

gaster, above and below. The sculpture of the whole body is very finely reticulate.

Head longer than broad, narrowed in front of eyes and rounded behind, posterior angles bluntly rounded, posterior border slightly projecting in middle and sinuate on each side; *mandibles* long, triangular, armed with five sharp strong teeth, rather strongly longitudinally striate and punctate; *clypeus* large, triangular, not very convex, anterior border projecting, slightly sinuate in middle; *frontal area* very indistinct; *frontal furrow* fine, extending between the frontal carinæ about as far as base of lobes; *frontal carinæ* rather close together, edges raised and sharp, sinuate in front and behind, forming not very prominent lobes; *eyes* very prominent, situated considerably behind centre of sides of head; *antennæ* long, *scape* extending beyond pro-mesonotal suture, all the joints longer than broad, first joint as long as the two following taken together. *Thorax* margined at sides, narrowed to base; *pronotum* transverse, not very convex, anterior angles armed with a triangular, sharply-pointed, not very long tooth projecting outwards; *pro-mesonotal suture* fine but distinct; *mesonotum* transverse, about half as long as pronotum, sides rounded, forming an angle at junctions with pro- and epinotum; *meso-epinotal suture* indistinct above; *epinotum* with dorsal surface longer than the declivity, rather flat, armed on each side at base with a small sharply-pointed tooth projecting forwards; *declivity* concave; *gaster* short oval.

Long. 6.3 mm.

Type in B.M.

Described from a worker taken by Dr. A. Moore, Philippine Is., Luzon, Baguio, 17. ii. 1920.

"Site—under a stone, Waterfall Valley, Baguio."

"Eggs, larvæ, pupæ and adult ants."

This insect comes in the *zopyrus* group, consisting of rather small species of *Myrma*.

It is very like *punctillata* Poger, from Ceylon, in appearance, sculpture, etc., but in the latter ant the centre teeth of the *petiole* are considerably longer than those at the side.

Polyrhachis (Cyrtomyrma) rastellata Latr.,
var. *semi-inermis*, var. n.

♂. Black, shining, articulations of scape, palpi, apex of trochanters and base of femur narrowly, extreme tip of

antennæ, spurs and claws reddish yellow. Clothed with a few outstanding pale yellow hairs, and very short, fine, sparse, decumbent little yellow hairs. The sculpturation consists of the usual fine reticulation and small punctures.

The *head* is narrower and not so massive as in the typical form, more narrowed in front, not so broad and more abruptly rounded behind eyes; *mandibles* less massive. *Thorax* narrower, not so robust, more rounded in front and narrowed behind, *shoulders* quite round; *pro-mesonotal* suture less deep and broad, no trace of *meso-epinotal* suture; *epinotum* entirely unarmed. The *scale* of the *petiole* is considerably narrower than in *rastellata*, the sides are straight, and there are no teeth to the external angles; two extremely small, short, pointed teeth are present in middle of upper border, another close together, the space between being slightly sinuate.

Long. 6 mm.

Type in B.M.

Described from two workers taken by Dr. A. Moore, Philippine Is., Luzon, Baguio, 28. ii. 1920.

“Site—empty cell in back of nest found in tree.”

This variety comes in our group with the shoulders rounded and the *epinotum* unarmed.

The scale is unlike that of any other *Cyrtomyrma* known to us; or of any of the scales figured in our paper on *Cyrtomyrma* [Ann. & Mag. Nat. Hist. (s. 11) i. pp. 246–267, 16 text-figs. (1938)].