

The Formicidæ (Hymenoptera) taken by Major R. W. G. Hingston, M.C., I.M.S. (ret.), on the Mount Everest Expedition, 1924. By HORACE DONISTHORPE, F.Z.S., F.E.S., &c.

THE following list of ants taken by Major Hingston on this expedition includes the names of twenty-two species, of which four are new to science. There are six species of Ponerinæ, one Doryline, six Myrmicinæ, and nine Formicinæ. In the Formicinæ two species—*Formica exsecta*, Nyl., and *Formica picea*, Nyl.—are found in Britain. Perhaps the most interesting of the four new species is *Acanthomyops* (*Chthonolasius*) *hingstoni*, which I have named in honour of its discoverer. Most of the species are well-known Indian insects. According to Major Hingston, the ants found at the higher elevations are exceedingly lethargic and sluggish in their movements.

PONERINÆ.

1. *Lobopelta diminuta*, Smith.

11 ♂ ♀, Sikhim, Rongli Chu, 3000 ft., 29. iii. 24.

2. *Odontoponera transversa*, Smith.

1 ♀, Sikhim, Rongli Chu, 3000 ft., 29. iii. 24.

3. *Diacamma sculptum*, Jerd.

6 ♂ ♀, Sikhim, Kalimpong, 4000 ft., 27. iii. 24; 3 ♂ ♀, Sikhim, Gantok, 5000 ft., 5. iv. 24.

4. *Ectomyrmex javanus*, Mayr.

7 ♂ ♂, Sikhim, Kalimpong, 4000 ft., 27. iii. 24; 2 ♂ ♂, Sikhim, Pedong, 6000 ft., 28. iii. 24.

5. *Bothroponera rufipes*, Jerd.

1 ♂, Sikhim, Rongli Chu, 3000 ft., 29. iii. 24; 4 ♂ ♂, Sikhim, Singhik, 4000 ft., 23. iv. 24.

6. *Brachyponera nigrita*, Emery.

6 ♂ ♂, N. India, Darjeeling, 7000 ft., 1-10. iii. 24.

*DORYLINÆ.*7. *Dorylus orientalis*, West.

20 ♂ ♂, N. India, Darjeeling, 5000 ft., 11-20. iii. 24.

*MYRMICINÆ.*8. *Pheidole latinoda*, Roger.

2 ♀ ♀, N. India, Darjeeling, 5000 ft., 14. iii. 24.

9. *Pheidole jucunda*, Forel.

11 specimens, ♀ ♀ and ♂ ♂, N. India, Darjeeling, 5000 ft., 14. iii. 24.

10. *Myrmica rugosa*, Mayr.

15 ♂ ♂, N. India, Darjeeling, 7000 ft., 1-10. iii. 24.

11. *Myrmica everesti*, sp. n.

♂. Dark brown, head and gaster except apex almost black, coxæ, mandibles, articulations of the legs and antennæ, and apex of gaster reddish. Body furnished with sparse, scattered, yellow hairs.

Head strongly longitudinally striate, temples and occiput reticulated; *mandibles* longitudinally striate, masticatory margin with terminal tooth long and curved, second tooth shorter but distinct, the rest indistinct; *clypeus* with anterior border produced and pointed, entirely longitudinally striate; *frontal area* smooth and shining; *scape of antennæ* reaching beyond posterior margin of head, *funiculus* with a distinctly 4-jointed club. *Thorax* strongly reticulate, longitudinally striate at sides; *epinotal spines* very short, sharply pointed,

very slightly curved inwards, very shining between the spines, but distinctly though finely transversely striate. *First node of pedicle* rugosely punctured above, longitudinally striate at sides, with a distinct tooth or spine projecting forward at its base beneath; *second node* rugosely longitudinally striate, broader but shorter than first node, rounded at sides, with a very blunt projection at its base beneath. *Gaster* oval, very shining; *sting* strong.

Long. 4.5–5 mm.

This species comes near to *M. smythiesi*, Forel, but is darker and slightly more robust; the antennæ are shorter and stouter, the spines shorter and more curved. The spines are about the same length as those of *M. tibetana*, Mayr, but are broader at the base and more curved. The whole of the insect is much more rugose than *tibetana*, the space between the spines being smooth in the latter.

Described from five ♂♂ taken by Major R. W. G. Hingston at Jelap La (Tibetan side), at a height of 12,000 ft., on April 1st, 1924 (Everest Expedition).

Type and paratypes in the British Museum Collection.

12. *Myrmica specularis*, sp. n.

♂. Red-brown, head and gaster black, apices of mandibles, articulations of legs and antennæ, base of thorax including the epinotal spines and the space between, the nodes anteriorly and posteriorly reddish; covered with stiff scattered white bristles.

Head somewhat square, rounded behind, *front* longitudinally striate with a few cross-striæ, *temples*, *cheeks*, and *occiput* rather strongly reticulate; *mandibles* longitudinally striate, with several transverse striæ towards the apex; *clypeus* convex, rounded in front, both longitudinally and transversely striate; *frontal area* smooth and shining; *scape of antennæ* evenly curved at base, *funiculus* with 4-jointed club.

Thorax strongly reticulate, longitudinally striate at sides; *spines* long, strong, and sharply pointed, pointing backwards, but slightly curved downwards, space between smooth and shining. *First node of pedicel* high, with a strong tooth beneath pointing forwards, punctured and somewhat reticulate above; *second node* shorter and in profile not so high as first node, slightly less punctured, with somewhat deep longitudinal pits. *Gaster* smooth and very shining.

Long. 6–6.5 mm.

The spines are more divergent than in *M. rugosa*, Mayr,

the apex of the clypeus is not pointed, the nodes of the pedicel are broader and not so closely sculptured, and the insect is not so dark in colour.

From *M. ruginodis*, Nyl., the present species differs in its much darker colour and more robust form, and in the space between the spines being smooth. The head is much more strongly reticulated, the body generally is more coarsely sculptured, and the bristles are stronger, longer, and more numerous.

Described from eight ♂♂ taken by Major R. W. G. Hingston in Tibet, Gautsa, at a height of 13,000 ft., on April 5th, 1924 (Everest Expedition). There are also ten specimens in the British Museum Collection taken at Khamba Jong, Sikkim, 15-30. vii. 03, at a height of 15,000-16,000 ft. (Tibet Expedition, 1903), which agree quite well with the above species with the exception of being not quite so dark.

Type and paratypes in the British Museum Collection.

13. *Aphænogaster tibetana*, sp. n.

♂. Black, shining, covered with scattered yellowish-white bristles.

Head and *thorax* longitudinally striate and reticulate, but smooth, not shagreened between the raised lines. *Mandibles* longitudinally striate and punctured, masticatory margin armed with nine teeth, the terminal tooth being large, the second and fourth moderate, the third small, and the rest very small; anterior border of *clypeus* emarginate in middle, longitudinally striate at sides, and smooth in middle; *frontal area* and *antennal hollows* smooth. *Epinotal spines* short, sharp, and pointing outwards, space between the spines smooth. *Nodes of pedicel* and *gaster* smooth and shining.

Long. 5 mm.

Described from 17 ♂♂ taken by Major R. W. G. Hingston in Tibet, Kampa Dzong, at a height of 14,500 ft., on April 30th, 1924, and 27 ♂♂ taken in Tibet, Tasam Rongshar Valley, at a height of 12,000 ft., on June 20th, 1924.

Type and paratypes in the British Museum Collection.

FORMICINÆ.

14. *Formica exsecta*, Nyl.

22 ♂♂, Tibet, Shekhar, 14,500 ft., 8. vii. 24.

15. *Formica picea*, Nyl.

1 del. ♀, 24 ♂♂, Tibet, Yatung, 10,000 ft., 1-3. iv. 24.

16. *Acanthomyops* (*Chthonolasius*) *hingstoni*, sp. n.
(See below.)

17. *Camponotus paria*, Emery.

1 ♂, 2 ♀ ♀, Sikhim, Kalimpong, 4000 ft., 27. iii. 24.

18. *Camponotus badius*, Smith.

30 ♂ ♂ and ♀ ♀, N. India, Darjeeling, 5000 ft., 11-20. iii. 24.

19. *Camponotus nicobarensis*, Mayr.

1 ♂, Sikhim, Kalimpong, 4000 ft., 26. iii. 24.

20. *Camponotus wasmanni*, Emery.

1 ♀, Sikhim, Kalimpong, 4000 ft., 27. iv. 24.

21. *Polyrhachis dives*, Smith.

1 ♀, Sikhim, Kalimpong, 4000 ft., 27. iii. 24.

22. *Polyrhachis mayri*, Roze.

1 ♀, Sikhim, Kalimpong, 4000 ft., 26. iii. 24; 4 ♀ ♀, Sikhim, Gantok, 5000 ft., 3. iv. 24; 4 ♀ ♀, Sikhim, Singhik 4000 ft., 23. iv. 24.

Acanthomyops (*Chthonolasius*) *hingstoni*, sp. n.

♀. Reddish yellow, mandibles redder, teeth of mandibles and eyes black; whole body finely shagreened but shining, furnished with scattered, long, yellow hairs, and covered with fine, short, decumbent, yellow pubescence.

Head square, sides straight, posterior border straight when seen from front, slightly excavate when seen from behind; *mandibles* massive, finely striate, masticatory margin furnished with eight blunt teeth; *clypeus* ample, convex, subcarinate, slightly longer than broad, anterior border somewhat rounded in centre, and slightly crenulate; *frontal area* conspicuous though indistinctly defined; *ocelli* distinct; *frontal furrow* well marked, reaching median ocellus; *eyes* normal; *frontal carinæ* well marked; *antennæ* long, *scape* slightly curved at base, when bent back reaching beyond margin of head by nearly half its length, *funiculus* gradually thickened to apex, with all the joints longer than broad; *maxillary palpi* only 5-jointed (joints 5 and 6 evidently fused together); *labial palpi* 4-jointed.

Thorax broad; *prothorax* ample, rounded; *meso-epinotal furrow* well marked; *epinotum* rounded above, as high as mesonotum when seen in profile, basal declivity abruptly slanting, somewhat concave. *Scale* high, longer than broad, oval, pointed at apex, narrow at apex when viewed in profile, posterior surface straight, anterior surface slightly concave.

Gaster ample, rounded. *Legs* long, *femora* and *tibiæ*, especially posterior ones, compressed, *tibiæ* without outstanding hairs.

Long. 6–6.5 mm.; all nearly uniform in size.

This species comes nearest to *A. (C.) umbratus*, Nyl., from which it differs in being somewhat larger and in not possessing outstanding hairs on the *tibiæ*, in the scale being pointed at the apex and not slightly excavate, and in having 5-jointed instead of 6-jointed maxillary palpi (in which it differs from all the rest of the genus). The colour is more reddish yellow, and the hairs on the body are distinctly longer and more abundant.

Described from sixteen ♂♂ taken by Major R. W. G. Hingston at Darjeeling, N. India, at a height of 5000 ft., on March 14th, 1924 (Everest Expedition).

Type and paratypes in the British Museum Collection.