

BEING

ILLUSTRATIONS AND DESCRIPTIONS

OF

THE GENERA OF INSECTS

FOUND IN

GREAT BRITAIN AND IRELAND:

CONTAINING

COLOURED FIGURES FROM NATURE

OF THE MOST RARE AND BEAUTIFUL SPECIES,

AND IN MANY INSTANCES

OF THE PLANTS UPON WHICH THEY ARE FOUND.

BY JOHN CURTIS, F.L.S.

HONORARY MEMBER OF THE ASHMOLEAN SOCIETY OF OXFORD, OF THE IMPERIAL AND ROYAL ACADEMY OF FLORENCE, OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, ETC.

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DERMAPTERA. DICTYOPTERA. ORTHOPTERA. STREPSIPTERA. HYMENOPTERA, PART I.

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PROCTOTRUPES AREOLATOR.

ORDER Hymenoptera.

FAM. Proctotrupidæ.

Type of the Genus, Ichneumon gravidator Linn.

PROCTOTRUPES Lat., Hal., Curt.—Codrus Jur. Esen.—Bassus Fab. Antennæ inserted in the middle of the face, remote, not so long as the body, filiform, or slightly thickened towards the apex, pubescent, 13-jointed, basal joint elongate-ovate, stout, 2nd small, cup-shaped, 3rd the longest, the remainder gradually decreasing in length, the apical joint a little longer than the penultimate, the apex somewhat conical (1).

Labrum transverse, semiovate, hairy (2).

Mandibles rather slender, slightly curved, not very acute (3).

Maxillæ terminating in a short irregular hairy divided lobe, dilated externally. Palpi 5-jointed? longish and hairy, basal joint short, indistinctly articulated, 2nd long stoat and clavate, 3rd similar but a little longer, 4th the longest clavate, slenderer than the preceding, 5th rather shorter and attenuated (4).

Mentum oblong, rounded at the base. Labium very short and rounded. Palpi moderate, hairy, clavate, triarticulate, basal joint longish, 2nd short, 3rd stout, elongate-obovate (5).

- Head short and broad, face suborbicular : eves lateral prominent and oval: ocelli 3 in triangle. Thorax narrower than the head and very long: collar compressed: scutel semiglobose: metathorax long narrow and rounded behind. Wings pubescent, iridescent: superior with a large stigma and a very small marginal areolet, or a somewhat triangular cell; costal and subcostal nervures parallel, a discoidal cell and 2 longitudinal nervures are also faintly traced (9); inferior wings nerveless. Abdomen as long as the thorax and a little thicker, attached by a short thick petiole, 6-jointed, ovateconic, the apex furnished with 2 short appendages in the male, attenuated in the female; ovipositor considerably shorter than the body, incurved (7) composed of 2 strong sheaths, ciliated and slightly hooked at the apex (a), inclosing a slender lanceolate sheath (b), which contains 2 values (c), that are curved and pointed, and these are confined by the apex of the sheath which forms a cap, into which they fit, besides these there is a long broader membranous filament with a rib in the centre (m). Legs rather slender, hinder long: coxæ, hinder with a spur at the internal apex : thighs slightly clavate : tibiæ simple, spurred at the apex : tarsi long slender and 5jointed, basal joint the longest and stoutest, 4th not much shorter than the 5th : claws rather long and slender : pulvilli distinct.
- AREOLATOR Hal.—Curt. Guide, Gen. 575, no. 6.—ephippium no. 17. Shining piceous-black, disc of thorax and scutel rufous: metathorax clothed with pale hairs, rugose, with a ridge down the middle: petiole short, dilated towards the apex, striated as well as the base of the following segment; ovipositor incurved, half as long as the abdomen, ferruginous; antennæ much shorter than the body, brown, 4 or 5 of the basal joints ochreous: wings yellowish, a little fuscous towards the apex, costal nervures and stigma piceous, marginal areolet elongate-trigonate, the other nervures faint; legs ferruginous-ochre, tips of tarsi fuscous.

IT was the opinion of Latreille and Esenbeck that Proctotrupes is allied to Helorus (pl. 403), and Mr. Haliday considers that it connects Diapria (Psilus) and Ceraphron (pl. 249). I must confess I expected to find it related to Cynips, and being unable to enter upon its affinities, I shall pass on to an examination of the ovipositor, which offers some peculiar characters. In the Ichneumonidæ this organ is either porrected or elevated, but in Proctotrupes it is deflexed. Like that family, however, it has 2 sheaths inclosing a compound oviduct composed of 3 pieces, as shown in Pimpla (pl. 214. f. 6), but in Proctotrupes these are acuminated, and the lateral ones have their points securely fixed in the central one, the apex of which forms a cap for them: the most remarkable part of the structure, however, is an additional valve a little longer than any of the others, rather broad and membranous, with a thickened rib down the middle, the apex rounded (fig. m.): never having seen more than 5 pieces in any ovipositor including the sheaths, I cannot at present determine its functions.

I rejoice to see that Mr. Haliday has commenced publishing Monographs on the Oxyuri, as they will enable those engaged in the study of these minute Hymenoptera to derive every advantage from his elaborate investigations. The following sections and species form his 1st fasciculus.

A. Metathorax rugose. Both sexes winged.

B. Claws of anterior feet with appendages.

1. niger Panz. 85. 9? 2. ater Escn. 2. 359. 8.

3. ligatus Esen. 359.9.-basalis, minor, monilitor of Guide, vars.

4. brevicomis Guide, 575. 14. 5. longicornis Esen. 358. 7.

B.B. Claws entire. C. Petiole conspicuous.

D. Sides of prothorax roughish.

6. gravidator Linn.—campanulator Fab.—Ahr. 5. 16. brevipennis Lat.? Gen. Crust. 4. pl. 13. f. 1.

7. gladiator Hal. p. 10. n. 7. 8. bicolor Hal. 10. 8.

D.D. Sides of prothorax very smooth.

E. Scutel of mesothorax smooth.

- 9. elongatus Hal. 11. 9. 10. pallipes Jur. pl. 13. gen. 46 9.
- 11. viator Hal. 12. 11. 12. curtipennis, Guide, 575. 8.

13. calcar Hal. 12. 13. 14. fuscipes Guide, 575. 10.

E.E. Scutel of mesothorax bisulcated.

15. areolator Hal.—Curt. B. E. pl. 744. ♀.—ephippium Guide n. 17.

This is the most variable of all the species, the thorax being sometimes piceous. Mr. Walker gave it me many years since. C.C. Petiole concealed.

16. aculeator Hal. 14. 16.

17. Laricis Hal. 14. 17. On larch-trees infested with Aphides.

18. parvulus *Esen.* 360. 10. Females gregarious in boleti, infesting the larvæ of Mycetophila in the autumn.

A.A. Metathorax smooth.

19. apterogynus Hal. 15. 19.

The plant is Picris hieracioides, Hawkweed Ox-tongue.