# BRITISH ENTOMOLOGY;

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.

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## PEZOMACHUS HOPEI.

ORDER Hymenoptera. FAM. Ichneumonidæ.

Type of the Genus, Mutilla acarorum Linn.

Pezomachus Grav., Curt.—Gelis Thun.?—Cryptus Fab.—Ichneumon

Fab., Oliv., Panz .- Mutilla Linn., Schr.

Antennæ scarcely so long as the body, subfiliform, pubescent, composed of 19 joints in some females, basal joint the stoutest and oval, 2nd the smallest, subglobose, 3rd the longest, remainder decreasing in length but becoming gradually thicker and quadrate beyond the middle, terminal joint elongate-conic (1 portions of the base and apex).

Labrum inserted under the clypeus, transverse, somewhat semicircular, with a few bristles on the margin, and a membranous pubescent triangular lobe beneath, a little attenuated at the

apex (2).

Mandibles short, elongate-trigonate, bifid at the apex (3).

Maxillæ terminated by 2 rounded lobes, the internal one ciliated with very short hairs, the other larger and pilose. Palpi long, pilose and 5-jointed, basal joint clavate, 2nd and 3rd a little longer, the former the stoutest, 4th a little the shortest, 5th the size of the 3rd, subfusiform (4).

Mentum elongate obovate. Lip small, cordate and striated. Palpi rather short, pilose and 4-jointed, first 2 joints obtrigonate, 3rd smaller subglobose, 4th the longest and subconic (5).

Head transverse, broader than the thorax (1 \* the face): eyes lateral prominent and ovate, coarsely granulated: oeelli 3 in triangle on the crown of the head. Thorax long and narrow, with a suture across the middle in the apterous females (T); collar very small in the winged species, and the scutellum distinct. Wings often wanting, always imperfect, shorter than the thorax, bristly, nervures strong, superior with only 2 basal cells (9). Abdomen ovate, not longer than the head and thorax, but broader in the females, with 6 joints visible, attached by a peduncle, sometimes funnel-shaped (T a): ovipositor stout, shorter than the abdomen. Legs appearing long, especially the hinder pair: tibiw, anterior with a spine, the others spurred at the apex: tarsi 5-jointed, basal joint the longest, 4th sometimes cordate (8, a fore leg).

The dissections were drawn from I. vagans Oliv.

Hopei Grav.—Curt. Guide, Gen. 504. 291b.

Female ferruginous red, clothed with very fine short pubescence; head black, antenna black above, excepting the first five joints which are entirely rufous, and the tip of the 7th and 3 following are white above: wings shorter than the thorax, having no areolet; scutellum distinct, metathorax with a small tooth at each angle; hinder margin of the 4th abdominal segment and the following black, the 6th bearing a broad white band above: ovipositor black, castaneous at the apex; tips of hinder thighs and tibize black.

In the Author's and other Cabinets.

Pezomachus is a remarkable group of the Crypti, being either apterous or having only rudimentary wings. From Gravenhorst's description and figure of one of these, it appears that they vary in their neuration, and the genus therefore requires further investigation in order to form at least natural sections, and from the very great dissimilarity in the structure of the thorax and the form of the penultimate joint of the tarsi, two genera probably might be established, in which case Thunberg's name of Gelis would very well apply to one of them.

The Pezomachi are equally curious in their economy, for although like the rest of the Ichneumonidæ they are parasitic, they do not seem to be attached to any particular group, if the statements made be correct. I have heard of their being produced from Spiders' eggs and from the larvæ of Curculio plantaginis, and Linnæus says one species in its perfect state lives upon Acari. The two that I have bred, P. festinans Fab. and P. vagans Oliv., hatched from the cocoons of two species of Microgaster, and with the latter appeared another parasite, a species of Hemiteles, and Mr. Haliday in the Ent. Mag. mentions two, so that 3 or 4 different Ichneumonidæ were produced from the same cocoons. The most remarkable fact however relating to these little animals is the great apparent excess of females; I have in my own cabinet upwards of 20 species, and only know the male of one (P. festinans), and Mr. Haliday says he has seen hundreds of the female of P. fasciatus, yet he never met with a male.

For a list of the species I must refer to the Guide. They are found in spring, summer and autumn where reeds abound, in sandy districts, in the flowers of Syngenesious plants, amongst grass &c., and in winter in moss and under stones. The species figured I swept into my net last August, off some bushes of Sweet Gale in the Isle of Arran, as we were ascending Goatfeld, and I had met with it twice before in Norfolk: the male

has not been discovered.

The Plant is *Urtica pilulifera* (Roman Nettle), from Lowestoft Denes, Suffolk.