## 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.

## BY JOHN CURTIS, F.L.S. <br> ,

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.

VOL. III.
DERMAPTERA. DICTYOPTERA. ORTHOPTERA. STREPSIPTERA. hymenoptera, part I.

## LONDON:

PRINTED FOR THE AUTHOR,
AND SOLD BY
F. ELLIS AND CO., 92 GREAT RUSSELL STREET, BLOOMSBURY;

SIMPKIN AND MARSHALL, STATIONERS' COURT ; AND
J. B. BAILLIERE, 219 REGENT STREET.

$$
182.3-1840
$$



## PIMPLA $\not \subset T H I O P S$.

Order Hymenoptera. Fam. Ichneumonidæ Lat., Leach. Type of the Genus Ichneumon manifestator Linn.
Pimpla Fab., Lat., Leach., Fallen., Panz.-Cryptus Fab.-Ichneumon Linn., Fab., Panz.
Antennc inserted in the middle of the face, approximating, long, pubescent, subsetaceous in the males, filiform in the females, composed of numerous joints (never transverse); basal joint the most robust, ovate, truncated obliquely, 2nd as long but slender, 3rd very long, 4th much shorter (1), the remainder decreasing in length to the apex, the terminal joint being longer than the foregoing (lb).
Labrum minute concealed beneath the clypeus, horny, ciliated with long hairs, producing a triangular membranous lobe beneath (2).
Mandibles small, robust, subtrigonate, slightly bent, bidentate at the apex (3).
Maxille terminated by a rounded pilose lobe, having a smaller fleshy one on the inside. Palpi long pubescent, 5 -jointed, unequal, 1st and 2nd subclavate, the latter rather longer and more robust, 3rd the longest but slenderer, 4th rather shorter, 5th scarcely longer than the basal joint and very slender (4).
Mentum oblong dilated anteriorly, the angles truncated and receiving the base of the Palpi, which are 4 -jointed, 1st and 2 nd joints obtrigonate, especially the latter, 3rd and 4th more slender, the former subclavate, the latter subconic. Lip placed far behind the mentum, membranous, hollow, deeply and acutely cleft in the centre (5).
Head transverse. Eyes remote. Ocelli large, 3 in triangle. Thorax long ovate, gibbous. Abdomen almost sessile elongated subcylindric, 8 -jointed, more linear in the male (7); more robust and truncated at the apex in the female (6); Ovipositor exserted; frequently much longer than the body; the sheath (6a) arising from the superior , angle is composed of 2 hollow lobes, externally pubescent and shorter than the Oviduct inserted beneath and formed of a rigid acute and hollow process (b) inclosing 2 other more slender rigid filaments (c) with membranous edges, apparently hollow, lanceolate and striated transversely externally at the apex. Wings with the central submarginal cell small, trigonate or rhomboidal. Legs, anterior short, posterior pair long. Coxæ, posterior very large. Tibiæ spurred at the apex. Tarsi 5 -jointed, penultimate joint minute. Claws long and bent. Pulvilli large.
Obs. the dissections are drawn from I. instigator Fab.

Æthiops Nob.-corruscator ? Linn. not of Fab.
Black, shining, minutely punctured, pubescent. Antennæ lurid at their tips. Anterior legs with the tibiæ and a stripe down the thighs ochraceous. Tarsi fuscous. Oviduct ferruginous. Wings fuscous transparent.

In the Author's and other Cabinets.

Fabricius having drawn his best character for the division of Pimpla and Cryptus from a sexual distinction (the form of the antennæ), it becomes necessary to have recourse to other parts to establish them as genera. The only difference we shall now point out is the nearly sessile abdomen of Pimpla, and the peduncled one of Cryptus, a mark which will be found sufficient to separate them.

By this arrangement the genus Pimpla will be very much circumscribed; nevertheless it will be sufficiently extensive to admit of the following sections:

> I. Ovipositor longer than the body.

* Abdomen slender.

1. P. persuasorius Linn.-Don. 15. 522.-Beginning of July; about Pine-trees near Manchester, and in a garden in Norfolk. Mr. Bracy Clark informs me that he took the females upon Pine-trees in Switzerland, and that they were not able to extricate their oviduct from the crevices in the bark where they were inserted.
2. P. manifestator Linn.-Panz. 19. 21.-Sam. 8. 4.Linnean Transactions v. 3. tab. 4.

June; upon posts, Norfolk, Kensington Gardens, \&cc.
3. P. mediator Fab. Scurra Panz. 92.6.
4. P. extensor? Fab.-Panz. 109. 11. * * Abdomen robust.
5. P. Cossivora Nob.-Bred from the pupa of Cossus ligniperda. Brit. Ent. pl. 60.
II. Ovipositor shorter than the body.
6. P. pennator? Fab.
7. P. instigator $F a b$.
8. P. spectrum (Sirex) Don. v. 7. pl. 225. not of Linn. nor Fab.-June, amongst leaves of Horse-radish.
9. P. Ethiops Nob.-Bred from the pupæ of Arctia cænosa. Brit. Ent. pl. 68.
10. P. examinator $F a b$.
11. P. accusator Fab.-Panz. 109. 12.

The above are the only species that appear to be described. It is well known that they all deposit their eggs in different larvæ; those with long oviducts in internal feeders, and the others in caterpillars of moths: many, if not all the Pimplæ when taken, emit a very foetid odour. The ovipositor is gerally considered to consist of 3 parts, but my friend Mr. Thomas Carpenter has discovered that the central part or oviduct is composed of a sheath inclosing 2 filaments; which gives strength, prevents the entrance from being closed when the oviduct is placed at a right angle with the body, and enables the insect to regulate the passage to the size of the egg: the same structure obtains in the Cynipsidæ also.

One of the plants upon which Arctia canosa feeds, Butomus umbellatus (Flowering Rush), is given with the Pimpla, which is a female.

