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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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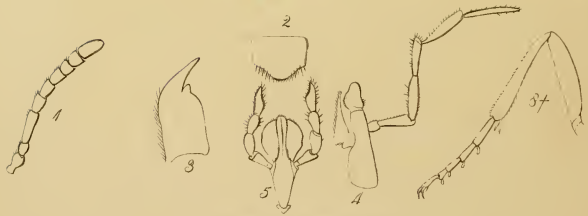
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ATHALIA SPINARUM.

The Turnep Saw-fly.

ORDER Hymenoptera.

FAM. Tenthredinidæ.

*Type of the Genus, Tenthredo spinarum Fab.*ATHALIA *Lea., St. Farg., Curt.*—*Hylotoma Fab.*—*Allantus Jur., Klug.*—*Tenthredo Linn., Fab., Panz.*

Antennæ inserted near the middle of the face, short and clavate, stoutest in the female; 10-jointed, basal joint chalice-shaped, 2nd shorter obovate, 3rd long, slightly clavate, 4th not longer than the 1st, the following decreasing in length, terminal joint the stoutest, ovate, never so long as the 3rd (1).

Labrum subquadrate, the anterior margin being considerably produced in a bow, forming rounded angles on each side; ciliated and pilose (2).

Mandibles, one rather smaller than the other in the female, the apex forming a curved claw, with a small tooth inside in one (3), merely notched in the other, hairy outside.

Maxillæ elongated, terminated by a somewhat ovate leathery lobe, with a long lanceolate internal one very pubescent on the inside. *Palpi* long pubescent and 6-jointed, basal joint the shortest, the remainder nearly of equal length and clavate, 3rd less attenuated at the base, 6th the slenderest, slightly fusiform (4).

Mentum elongate obovate. *Palpi* short, attached to the anterior angles, 4-jointed, pilose towards the apex, joints nearly equal, 1st clavate-truncate, 2nd more ovate, 3rd obovate, 4th a little the longest, ovate-conic, the apex excavated on the inside. *Lip* large suborbicular, trilobed, centre lobe narrow (5).

Head *transverse*: eyes *oval*: ocelli 3 *in triangle*. Thorax *globose*.

Abdomen *short subcylindric*. Wings, superior *with 2 marginal and 4 submarginal cells*. Legs *rather short*: tibiæ *clavate, all having a pair of acute unequal spurs at the apex*: tarsi *rather long and 5-jointed, the 4 first having appendages at the apex beneath*: claws and pulvilli *small* (8 † *hind leg*).

Larvæ *with 6 pectoral, 14 abdominal and 2 anal feet*.

SPINARUM *Fab.—Curt. Guide, Gen. 464. 2.—Centifoliæ Panz. 49. 18.*

Bright orange; antennæ and head black, underside of the former, excepting the base and apex, dull yellow: labrum and palpi yellow: thorax black above, with the collar and a conical space before, the scutel, and a spot on the postscutel reddish-orange: wings and nervures yellowish at the base, costa and stigma dark brown; tarsi whitish, tips of tibiæ and of all the tarsal joints black, the apical one entirely black, as well as the claws and the tip of the ovipositor. In the *male* the 2 basal joints of the antennæ are yellow beneath, and more or less so above.

In the Author's and other Cabinets.

ATHALIA nearly resembles *Hylotoma* and *Selandria*, but is distinguished from both by its antennæ, which are more clavate than the latter and have more joints than the former. Dr. Leach described them as 10-jointed, but in the species figured the males have only 9 joints (fig. 1.), and in the females an 11th joint is indicated. Six species are recorded in the Guide as British, and the one before us is well deserving our attention from the injurious habits of its larva.

The *T. spinarum* is stated by Fabricius to be destructive to turneps, and the *T. centifoliæ* of Panzer is undoubtedly the same species.

In walking through the turnep-fields last year the most casual observer must have noticed the mere skeletons which the leaves often exhibited, the fibres only remaining, the membrane being consumed by larvæ called Blacks by the farmers. From the middle of August to the 20th of October, at which time they were full-grown, I observed them feeding on the leaves of the turneps; they often varied considerably in stature, and the bulb was evidently reduced in size through their agency. The larvæ or caterpillars when full-grown are sometimes green, but generally of a lead or slate colour, being black before changing their skins, and always appearing darker when rolled up: they form an oval horny cocoon either amongst the leaves on the ground or under the clods of earth, where they become pupæ. The fly appears principally in August and September, but I have found them as early as the 29th of March, and as late as the middle of October. I first observed these flies in abundance in a potato-field at Battersea, and afterwards in a field near Heron Court; but last year they were distributed over the whole country, after an absence in many places, I was informed, of upwards of 30 years; they have appeared again this year, and Mr. R. Taylor and myself, in a botanical excursion last August, saw the flies coming out of the ground in myriads in a ploughed field near Bristol, where potatoes had apparently been grown.

The *flies* do not appear to be attached to any particular plant; whether the *larvæ* will attack any other than the English turnep I cannot determine, but it is a remarkable fact that they will not touch the Swedes. I believe it is not difficult to destroy them, for if they are brushed off the leaves it seems they are unable to crawl upon the ground and recover their station; they consequently perish unless they are full-grown at the time: but as there is a constant succession from August till near November, the operation of drawing a hurdle or something over the turneps ought to be repeated at intervals during that period. Wet, also, is said to destroy the blacks, and ducks turned into the fields clear them off rapidly and grow fat upon them.

The full-grown larva is represented feeding upon the turnep, *Brassica Rapa*.