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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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Tab. by J. Curtis June 1. 1835

CALLIMOME SUBTERRANEUS.

ORDER Hymenoptera. FAM. Cynipidæ Lat.

*Type of the Genus, Ichneumon Bedeguaris Linn.*CALLIMOME Spin., Walk., Curt.—Torymus Dal.—Misocampus Lat.—
Diplolepis Fab.—Cynips Fab., Lat.—Ichneumon Linn., DeG.,
Fab., &c.*Antennæ* geniculated, considerably longer than the head and inserted a little below the middle of the face, in a cavity receiving the 1st joint, pubescent and 13-jointed, basal joint long, 2nd short, somewhat obconic, 3rd saucer-shaped, 4th stout oblong, the remainder decreasing in length and becoming a little transverse, the 3 last forming a compact compressed ovate-conic mass (1 ♂, 4 basal joints); longer in the female, 3rd joint subglobose, 4th elongated (1 ♀).*Mandibles* subtrapezate, truncated and trifid at the apex, and a little hairy outside (3).*Maxillæ* terminated by a large ovate lobe, very hairy at the margin. *Palpi* longer than the maxillæ, 4-jointed, 3 first joints of equal length and oblong, 4th long, subfusiform and clothed with long hairs (4).*Mentum* long and narrow, ovate at the base, attenuated to the apex. *Labium* as long as the mentum, a little dilated at the base and apex. *Palpi* not longer than the lip, pilose and triarticulate, 1st joint obconic, 2nd shorter, subquadrate, 3rd as long or longer than the 1st and conical (5).

Head transverse, face orbicular-trigonate: eyes lateral, ovate: ocelli 3 on the crown of the head forming a depressed triangle, the lateral ones remote. Thorax elongate-ovate; collar semiovate; scutellum large convex and subovate. Abdomen attached by a small portion only of the base, short, slightly depressed, and terminated by an acuminated process in the male, more compressed and 7-jointed in the female, basal joint large, apex truncated and furnished with an Ovipositor, generally as long as the insect (A side view). Wings, superior ample, rounded, with a nervure, uniting with the costa near the middle, and continued towards the apex, forming a very short obtuse branch midway; inferior wings short and narrow. Legs, hinder pair the longest and stoutest (8 †): coxæ all large: trochanters small: thighs short and a little incrassated: tibiæ simple, furnished with a single spur, excepting the posterior, which have a pair at the apex: tarsi slender and 5-jointed, basal joint long, 4th small: claws very much bent: pulvilli rather large.

SUBTERRANEUS Curt. MSS.—Guide, Gen. 646.

In the Author's Cabinet.

SOME of these Insects I breed in vast quantities from the beautiful moss-like balls attached to the branches of the Dog-rose, called Bedeguar, and known in some parts of England by the

name of "Robin's Pincushions;" they are easily bred by placing the galls under a tumbler, and are beautiful objects for the microscope, for in elegance of form and beauty of colouring they can scarcely be surpassed. These mossy excrescences are supposed to be entirely formed by *Cynips Rosæ*, and our insects are said to feed on their larvæ, and most skilful parasites they must be, for in breeding them I have often obtained nothing but the Callimome, and it is very remarkable that from multitudes of the galls of the Wild Carrot I never bred any other insect than the *C. Dauci*.

In the Stockholm Transactions for 1820, and a subsequent vol., a synoptic table and descriptions of the species will be found; in the 1st vol. of the Ent. Trans. Mr. Walker has described 61 species, and 18 were recorded in the Guide.

3^a. *subterraneus* Curt. *B. E. pl.* 552. ♀.

Minutely shagreened; deep blue, head and thorax with rather large but shallow punctures, the latter variegated with violet; antennæ black, basal joint ferruginous, except at the tip; mouth and abdomen ferruginous-ochre; back black with a cupreous or violet tinge, excepting a band near the base, apex green; ovipositor ferruginous, sheaths pubescent and black above, tips whitish; superior wings with a pale yellow brown oval space on the disc; nervures piceous: legs and tips of coxæ, excepting the posterior, ferruginous-ochre; hinder tibiæ piceous, ferruginous towards the apex; tarsi ochreous, tips piceous. *Male* smaller, antennæ entirely black, and the abdomen without an ochreous band near the base.

Bred by Mr. E. A. Johnson from galls of the Beech-tree, formed by the larvæ of *Cynips aptera*, on which they are parasitic.

5. *Geranii* Curt. ♀ $1\frac{1}{2}$ line long, ovipositor $1\frac{1}{2}$ line; beautiful green, head rather cupreous; antennæ black, basal joint, excepting the tip, ochreous: abdomen with an ochreous band near the base, legs of the same colour, hinder coxæ green, ochreous at the tips and their tibiæ brownish towards the base: nervures yellowish brown.

Bred from the gall of a native Geranium.—J. C.

12. *Arundinis* Curt. ♀ Length $1\frac{1}{2}$, ovipositor $1\frac{2}{3}$: bright shining green; head aureous or cupreous, antennæ black, basal joint beneath ochreous, with a spot of the same near the base of the abdomen: legs yellow-ochre, coxæ green outside, faint in the anterior pair, base of tarsi whitish-ochre, tips brownish; nervures ochreous.

Middle of August on rushes, Blackgang Chine.—J. C.

15. *Dauci* Curt. ♀ $1\frac{1}{2}$ line, ovipositor $\frac{2}{3}$; green, antennæ black, basal joint straw colour beneath: legs whitish-ochre, thighs, excepting the tips, green, hinder tibiæ violaceous-black, except at the base and tips, apex of tarsi blackish, especially the posterior.

I observed, the middle of August, at the back of the Isle of Wight, vast numbers of the umbels of *Daucus Carota* producing galls; they contained bright orange-coloured larvæ, from which I bred a great number of this insect of both sexes the following September.

The Plant is *Rosa spinosissima* (Burnet Rose).