

Notes on the Heterogyna and Fossores
(*Hymenoptera Aculeata*)
of Somerset.

BY H. J. CHARBONNIER.

THE HETEROGYNA (Ants) are of all the *Aculeates*, excepting the Hive Bee, the most interesting and wonderful for their habits and instincts, which have been recorded in quite a voluminous literature, by Huber, Janet, Lubbock and many other writers.

Nearly all the Ants live in large communities consisting of winged males and females, and wingless workers.

The number of species is small, though there are many "races," which some consider species.

The FOSSORES, sometimes called Solitary Wasps, though themselves living among flowers, provide animal food for their larvæ, namely different kinds of insects and caterpillars, which they capture, sting and paralyze, and then store in their burrows and lay their eggs upon them.

Each species has its peculiar victims, caterpillars, spiders, flies or beetles; only a few species do not adhere rigidly to the same kind of victim.

Their habits have been studied with admirable patience and recorded in the most fascinating manner by J. H. Fabre ("Souvenirs entomologiques") and more recently some American species by those most accurate observers, Dr. G. W. and Mrs. E. G. Peckham ("Instincts and habits of Solitary Wasps").

I have adhered strictly to Somersetshire localities, and have quoted those recorded by (B), Lt. Col. Linley Blathwayt, F.L.S., F.E.S., in the *Victoria County History*; by the late

Edward Saunders, F.R.S., from Glastonbury and Winscombe;¹ and by (R), Mr. G. A. J. Rothney, from Minehead.¹ I am also indebted to Mr. W. A. Smallcombe for some of the localities given for the Ants,² and to Colonel T. Jermyn of Weston-super-Mare for one new record and several new localities among the *Fossores*.

Several records are derived from the collection of the late Mr. C. J. Watkins in the Bristol Museum.

The present list records 12 species of *Heterogyna* and 49 species of *Fossores*.

HETEROGYNA.³

FORMICIDÆ. These ants do not sting.

Formica rufa, Linn. The wood ant, very local and apparently scarce. I have seen its dome-shaped nests at Brockley; it is commoner in Gloucestershire, especially North of the Wye. Minehead (B).

Formica fusca, Latr. The brown ant, fairly common.

Lasius flavus, De G. The little yellow ant so common everywhere.

Lasius mixtus, Nyl. This is one of the races of *L. umbratus*; the type has not been recorded from Somerset, though it occurs here in Gloucestershire. Mr. Smallcombe records *mixtus* from Leigh and Long Ashton.

Lasius niger, Linn. The common little black ant.

„ *fuliginosus*, Latr. A very shining black species, it appears local. I have found it at Shepton Mallet, and it is recorded from Batheaston (B), and Minehead (R).

„ race *alienus*, Först. Steep Holm Id. May 27, 1914. (Hudd).

1. *Entomologists' Monthly Magazine*.

2. *Proceedings, Bristol Naturalists' Society*.

3. Most of the Ants were kindly identified by Mr. Horace Donisthorpe, F.E.S.

MYRMICIDÆ. These ants have a well developed sting (♀ & ♂)

Myrmica rubra, Linn. Batheaston (B).

„ *levinodis*. Common at Leigh (Smallcombe).

„ *scabrinodis*. Rare, 2 nests at Leigh (Smallcombe).
Also Clevedon (Watkins), and Steep Holm (Hudd).

„ *lobicornis*. Very rare, Leigh, May, 1914 (Smallcombe).

(These three last are races of *M. rubra*).

Myrmecina latreilli, Curt. Batheaston (B). Rare.

Tetramorium cæspitum, Linn. Batheaston (B). A very local species.

FOSSORES.

TIPHIIDÆ.

Tiphia femorata, Fabr. Burnham (B).

Pompilidæ. Mostly provision their nests with spiders.

Very active insects, black, or black with partly red abdomen.

Pompilus plumbeus, Fabr. Burnham (B).

„ *chalybeatus*, Schi. Burnham (B).

„ *cinctellus*, Spin. Minehead (R.)

„ *pectinipes*, Vde L. Clevedon (Watkins).

Salius fuscus, Linn. Freshford, in May.

„ *parvulus*, Dahl. Minehead (R).

„ *pusillus*, Schi. Minehead (R).

Agenia variegata, Linn. Mendips (Saunders). Minehead (R). Clevedon (Watkins).

Ceropales maculata, Fabr. Minehead (R).

SPHEGIDÆ.

Astutus Boops, Schr. Minehead (R). Schuckard says it provisions its nest with *Pentatoma*, but Smith has seen it carrying *Oxybelus*.

Tachytes pectinipes, Linn. Burnham (B). A rare insect. Smith has taken it carrying a grasshopper. Schuckard has frequently caught it carrying a caterpillar.

Trypoxylon figulus, Linn. Batheaston (B). Freshford, in June.

Trypoxylon clavicerum, Lep. Clevedon (Watkins). Freshford, in June.

Trypoxylon attenuatum, Sm. Clevedon (Watkins). Taunton, in June.

Ammophila hirsuta, Scop. Burnham (B). Captures spiders.

„ *sabulosa*, Linn. Minehead (B). Shapwick Heath (Jermyn).

Col. Jermyn sent me two specimens from Shapwick Heath; one of these is a most remarkable variety, having only two submarginal cells to the fore wings, instead of three. Captures caterpillars. (See Fabre and Peckham for account of their wonderful habits).

Spilomena troglodytes, Vde L. Leigh Woods. Bred from bramble stems; said to provision its nest with scale insects.

Pemphredon lugubris, Latr. Freshford, Shepton Mallet, etc., Common.

Pemphredon schuckardi, Mor. Shepton Mallet.

„ *lethifer*, Shuck. Shepton Mallet, in pierced Bramble stems, provisions with *aphides*.

Passalæcus insignis, Vde L. Batheaston (B). Freshford, in July.

Passalæcus monilicornis, Dhlb. Mendips (Saunders). Both these species may be bred from pierced Bramble stems.

Mimesa unicolor, Vde L. Taunton.

Psen pallipes, Panz. Clevedon and Taunton. Provisions with *aphides*.

Gorytes mystaceus, Linn. Batheaston (B). Captures “Cuckoo-spit.”

Nysson dimidiatus, Jur. Minehead (B).

„ *trimaculatus*, Rossi. Minehead (R).

Mellinus arvensis, Linn. Burnham (B). Leigh Woods.

„ *sabulosus*, Fabr. Burnham (B).

Cerceris ornata, Schr. Portishead, in July. Stores *Halicti* in its nest.

Oxybelus uniglumis, Linn. Burnham (B). Clevedon (Watkins).

Oxybelus mucronatus, Fabr. Burnham (B).

Both these species provision with flies.

Crabro. All this genus seems to provision with diptera except *C. gonager*.

Crabro clavipes, Linn. Batheaston (B). Shepton Mallet.

Bred from old galls of *Cynips Kollari*.

Crabro capitosus, Sch. Freshford, in July. Rare.

„ *palmipes*, Linn. Taunton, in July. Rare.

„ *elongatulus*, Vde L. Freshford and Shepton Mallet, Common.

„ *cribrarius*, Linn. Batheaston (B). Cheddar.

„ *peltarius*, Schr. Burnham (B).

„ *vagus*, Linn. Burnham (B).

„ *cephalotes*, Pz. Batheaston (B). Freshford, in August.

„ *chrysostomus*, Lep. Batheaston (B). Shepton Mallet.

„ *interruptus*, de G. Burnham (B). Minehead (Rothney).

„ *gonager*, Lep. Freshford. Very rare. Its nest was in a decayed post, and was provisioned with *Tettigona viridis*.

Crabro pubescens, Schu. Freshford. Its nest was also in decayed post and provisioned with flies.

Crabro lituratus, Pz. Minehead (R).

„ *dimidiatus*, Fab. Weston-super-Mare (Jermyn).

„ *leucostomus*, Linn. Clevedon (Watkins). September.

Entomognathus brevis, Vde L. Minehead (R).