

RECORDED
IN ANTIBIBA SPECIES OF *CALYPTOMYRMEX* EMERY (HYM., FORMICIDAE)
FROM NEW GUINEA

BY HORACE DONISTHORPE, F.Z.S., F.R.E.S., ETC.

In the December, 1948, number of the *Ent. mon. Mag* (1949, 84:281) I described a new genus of ant as *Weberidris*, with genotype *Weberidris rufo-brunnea* sp.n.

Mr. William L. Brown, Jr., the most recent authority on the Dacetini, has kindly called my attention to the fact that the insect in question is really a *Calyptomymex*, in the tribe Meranaplina, and not a Dacetine ant. This is quite correct and my new genus will have to be withdrawn. Emery (1921, *Genera Insectorum*, fasc. 174:9-11) separates the Meranoplina from the Dacetini as 'head not cordiform,' and 'head cordiform' respectively. This, however, is not always the case, as the head is heart-shaped in *Calyptomymex*, and some other Meranoplina.

This ant must now be called *Calyptomymex rufo-brunnea* Donis. and for description see *Weberidris rufo-brunnea* Donis., l.c. It differs from *Calyptomymex beccarii* Emery, also found in New Guinea, in being a little larger and darker in colour, and by the fact that there is only the apical tooth to the mandibles, whereas in *beccarii* the masticatory border is armed with five teeth.

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May 2nd, 1949.

Ceuthorhynchus rapae Gyll. (Col., Curculionidae), new to Lancashire.—In May of this year I chanced to examine a few specimens of what I had believed to be *Ceuthorhynchus assimilis* Payk. taken on wallflowers in my garden at Huyton almost two years previously, on 27th May, 1947. One of the specimens was different from the others, and proved to be *Ceuthorhynchus rapae* Gyll.; the remainder were *C. assimilis*.

Since the time of year happened to be almost the same as when I had taken the beetles, and the wallflowers were again in flower, I decided to see whether *C. rapae* would visit the garden again this year. On the fine sunny afternoon of 21st May, 1949, therefore, I spent an hour or two watching my two rather meagre clumps of wallflowers, specimen tube in hand.

One or two specimens of what looked like *C. assimilis* were taken at once on the flowers, but the beetles were on the wing and were slow to alight. During the afternoon I took in all ten specimens of *Ceuthorhynchus*, and of these six were found to be *C. assimilis* and four, (3 females, 1 male), were *C. rapae*. It may be of interest to record that all the specimens of both species were taken on yellow wallflowers only; the beetles appeared to avoid the dark red variety which formed part of each clump.

Joy (1932, *Pract. Handb. Brit. Beetles*, 1:199), gives the distribution of *C. rapae* as England, South, on *Sisymbrium officinale*. Mr. H. Britten, to whom I am indebted for confirming my determination of the species, has informed me that *C. rapae* has not previously been recorded in Lancashire.

It appears to me to be quite possible that *C. rapae* will prove to be more common and more widely distributed than has been supposed; it may very well have been overlooked in many districts owing to its association with the common *C. assimilis* to which it bears quite a close superficial resemblance.

The characters by which *C. rapae* can most easily be distinguished from *C. assimilis* in the field appear to be (a) the strongly toothed hind femora of the former insect, the latter having the hind femora simple, and (b) the more robust form of *C. rapae*.—C. F. GRIFFITH, 23 The Rooley, Huyton, Lancs.: June 26th, 1949.

The new woodboring weevil (Euophryum confine Broun) in Surrey.—On June 15th, 1949, I found a specimen of *Euophryum confine* Broun, the New Zealand woodboring weevil, on the wall of my study! I strongly suspect that it originated in the adjoining premises—an old chapel in which there is much dry rot, but it is conceivable that I brought it in on my clothes. I had examined the old timbers of an old 17th century farmhouse at Stoke D'Abernon, Surrey, earlier in the day. I am indebted to Mr. A. W. McKenny-Hughes for confirmation of the identification.—N. E. HICKIN, 'Plummers,' Blechingley, Surrey: June 20th, 1949.

[An account of the occurrences of *E. confine* in Britain is given by Buck, 1948, *Ent. mon. Mag.*, 84:152-4.—B.M.H.]

A METHOD OF ESTIMATING THE NUMBER OF LIVING ANTS IN A COLONY

BY R. C. H. SWEENEY

In the course of recent work, the writer wished to estimate the population of certain colonies of ants without first killing them; as the method outlined below was found to be reasonably accurate it may be of some interest to other entomologists.

The whole colony is taken by shovelling the nest into a cloth bag for the purpose; this is best accomplished in the winter when ants are much less active, or by first anaesthetising the ants with ether, so that it may be expected that almost the whole of the colony is taken. About 100 specimens, depending on the size of the species, are put into a separate container.

On return from the collecting area, a glass jar is weighed. This jar should have a gauze cover through which a glass tube is inserted. The approximately 100 ants previously kept separate from the main colony are now dropped one at a time through the glass tube into the jar, until exactly 100 ants are in the jar; care must be taken that the count is accurate and that no extraneous matter is introduced. The jar, with the ants inside, is now reweighed, and the weight of the jar is subtracted from the weight of the jar plus the ants, thus giving the weight of 100 ants. These ants are now returned to the main colony.

A prepared box, large enough to hold the whole colony but as small as possible, with a glass lid, moistened sand on the bottom, and a hole at one end is now connected to the bag containing the ants by means of a glass tube one end of which is inserted in the hole and the other end in the mouth of the bag. The glass lid is covered over. Eventually the ants will move into the box; they may be hastened by allowing a few drops of ether, or other substance, to fall on the bottom of the bag. This intermediate step is necessary to eliminate the original nest material.

A formicarium, previously prepared, is now weighed. The glass tube is placed between the box containing the ants and the formicarium. The ants are persuaded to move rapidly into the formicarium through the tube by putting a drop or two of ether into the other end of the box (tobacco smoke will do just as well, especially if only allowed to trickle in, as it spreads out and slowly moves forward driving the ants before it). It is as well before adding this stimulant to give the ants time to find the tube opening, otherwise they simply run round and round with no concerted effort to pass through the tube.

Once in the formicarium, the glass tube is removed and the hole closed by a cork (which was, of course, weighed with the formicarium originally). The formicarium is now reweighed, and the weight of the formicarium empty subtracted from the weight of the formicarium with the ants, thus giving the total weight of the colony. This result is divided by the weight of the 100 ants weighed separately, thus giving the numbers of 100 ants in the colony.

If the brood of the colony is large and only the numbers of adult ants is required, the immature stages may be removed while the ants occupy the intermediate box. The numbers of larvae and pupae may be determined by the same method if required.

While it is realised that this method is not absolutely accurate, it overcomes most of the difficulties involved in working out the population of a colony. The same method is less accurate when the colony is previously killed, for then the separation of the ants from the nest material and/or soil is not easily accomplished.

As an example figures are given for a small colony of *F. sanguinea* Latr.