

SOME GYNANDROMORPH ANTS AND A POSSIBLE PTERERGATE FROM IRELAND.

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

SOME time ago Mr. Desmond Walls sent me 50 gynandromorphs from a single nest of *Myrmica sabuleti* Meinert from Ireland. (1946, *Entom.*, 79 : 121). He has now sent me a few more gynandromorphs, and what may be a pterergate, from Ireland, which are described below. All, unless otherwise stated, were taken at Red Rock, Howth, 8-9.viii.46.

Myrmica scabrinodis Nyl. Pterergate (?).

In this specimen the thorax is somewhat intermediate between ♀ and ♂. There is no *praescutellum* present, and the *scutellum* is only faintly indicated, but the *metanotum* is present. The spines of the *epinotum* are more those of a ♂. The head is that of a ♀. Four wings are present, those on the right side being short and narrow stumps, but they could hardly be called only vestiges. The wings on the left, though not fully developed, are of quite normal length.

Wheeler defines a pterergate as follows: "The pterergate is a worker, or soldier, with vestiges of wings on a thorax of the typical ergate, or dinergate form." In *British Ants* I amended this by adding: "the thorax being either that of the normal worker, or somewhat approaching that of the female." This covers the above insect, except that the wings cannot possibly be called vestiges.

Myrmica laevinodis Nyl. Mixed gynandromorph.

Colour intermediate; legs and antennae lighter, but some of the femora dark. Head chiefly ♀, but darker; right eye smaller than left; antennae ♀, 12-jointed. Thorax chiefly ♀; right spine of *epinotum* shorter than left. Gaster chiefly ♂. Genitalia partly exerted; right *stipes* longer than left. Wings and legs chiefly ♀.

Glendolough: north slope of valley, 7.viii.46.

Myrmica rubra L. (*ruginodis* Nyl.). Mixed gynandromorph.

Colour intermediate; head and gaster darker. Head chiefly ♂; antennae 12-jointed; right eye slightly smaller than left. Thorax partly ♀, partly ♂; no *scutellum* present; striae on *mesonotum* slanting from right to left; right spine on *epinotum* normal ♀, left spine much shorter, transverse striae between spines only visible on right side. Petiole, postpetiole and gaster intermediate. Genitalia partly exerted; *stipites* uneven. Legs ♀. Wings only partly developed.

Myrmica scabrinodis Nyl. Mixed gynandromorph.

Colour chiefly dark; pale yellow with black patches. Head chiefly ♀; antennae 12-jointed on right, 13-jointed on left; scapes stout, clavate, short, not as long as the first 4 joints of the funiculus.

Thorax, petiole, postpetiole, gaster, legs and wings chiefly ♂; *mayrian furrows* well developed. *Genitalia* partly exerted, right *stipes* a little longer than left.

Myrmica scabrinodis Nyl. Mixed gynandromorph.

Colour intermediate; pale yellow with darker patches. *Head* intermediate; *antennae* on right 13-jointed, on left 12 jointed; right *scape* stout, about as long as the first 4 joints of funiculus, left *scape* longer, but shorter than normal ♀, curved at apex, base with normal ♀ lateral tooth. *Thorax* intermediate; *mayrian furrow* slightly indicated on left, more strongly on right; spines on *epinotum* long and sharp. *Petiole, postpetiole* and *gaster* intermediate. *Genitalia* not exerted. *Wings* poorly developed.

1. *Myrmica sabuleti* Meinert. Mixed gynandromorph. Almost entirely ♂.

Head with a few small yellow patches; *antennae* 12-jointed, but *scapes* ♂; *funiculi* more or less ♀; right funiculus with a 4-jointed club, the last joint being partly divided, the left with a 3-jointed club. *Legs and wings* ♂. *genitalia* partly exerted, *stipites* slightly unequal.

2. *Myrmica sabuleti* Meinert. Mixed gynandromorph.

Colour mostly yellow with dark patches. *Head* and *antennae* chiefly ♀; left *eye* larger than right; *antennae* 12-jointed; *scapes* considerably shorter than normal ♀, but with lateral tooth; left *scape* curved at apex, right clavate towards apex. *Thorax* intermediate; left *mayrian furrow* more strongly developed than right; teeth to *epinotum* normal ♂. *Petiole, postpetiole* and *gaster* somewhat intermediate. *Genitalia* partly exerted, right *stipes* slightly longer than left. *Legs and wings* chiefly ♂.

3. *Myrmica sabuleti* Meinert. Mixed gynandromorph.

Colour mostly dark, with light patches. *Head* intermediate, chiefly ♂; *antennae* 12 jointed, right *scape* ♂, left with lateral tooth, but considerably shorter than in normal ♀. *Thorax* chiefly ♂; *mayrian furrows* fairly well indicated; teeth to *epinotum* ♂. *Petiole, post-petiole* and *gaster* chiefly ♂. *Genitalia* partly exerted, left *stipes* shorter than right. *Legs and wings* chiefly ♂.

4. *Myrmica sabuleti* Meinert. Mixed gynandromorph.

Colour yellow and black in patches. *Head* intermediate; *antennae* 12-jointed; both *scapes* shorter than in normal ♀, but with lateral tooth developed, right *scape* longer than left. *Thorax* somewhat intermediate; left *mayrian furrow* slightly developed, right not present; right tooth of *epinotum* ♂, left long and sharply pointed, but not as long as normal ♀ spine. *Petiole, postpetiole* and *gaster* chiefly ♂. *Genitalia* partly exerted, right *stipes* considerably longer than left. *Wings* on right side ♂, those on left only slightly developed. *Legs* intermediate.

5. *Myrmica sabuleti* Meinert. Mixed gynandromorph.

Mostly ♂. Colour dark with yellow patches. Head mostly ♂; right eye considerably larger than left; antennae 12-jointed; right scape about normal ♂, left considerably shorter. Thorax chiefly ♂; mayrian furrows developed; tubercles of epinotum about normal ♂. Petiole, postpetiole and gaster mostly ♂. Genitalia partly exerted. Legs and wings ♂.

THE VERRALL ASSOCIATION OF ENTOMOLOGISTS.—A notice in regard to the revival of the "Verrall Supper" at the Holborn Restaurant on January 13 next has been posted to all who were subscribers to the Association in 1939, possibly not always to the correct address. If any such subscriber does not receive the notice will he please communicate with the Hon. Sec., J. E. COLLIN, Raylands, Newmarket, Suffolk.

THE MIGRATION OF *CELERIO LINEATA LIVORNICA* IN EUROPE IN 1946.—The following may be added as a postscript to my article under the above title (1947, *Entom.*, 80: 249. I hear from a correspondent in Switzerland, Dr. R. Loeliger (Zürich, Susenbergstrasse 20), leader of a group of young and adult entomologists, who, since 1946, have observed the migrations of butterflies and moths in Switzerland, that the flight of *Celerio livornica* was seen in that country from July 15 to August 12, 1946. About 150 reports of all parts of the country were sent in, from Geneva in the west up to the lake of Constance in the east; and it can be concluded that this moth has not been observed in such quantities since 1818, when it was said to have occurred in similar numbers. The moths did not fly only by thousands, but by millions, as several observers stated. Especially in the high valleys of the Alps they could be seen in numbers of hundreds and hundreds together, and not only at dusk but also in full daylight, in the morning or at 14 to 16 o'clock in the afternoon, humming in the flowery meadows of the valleys. They seemed to be very hungry. Alpinists observed them up to heights of 4000 metres (12,000 feet), as they passed the high Alps from south to north in rapid flight. It is therefore supposed that they belonged to a second generation coming from somewhere in Italy. Nearly all the females proved to be sterile, and no larvae were found after the large flight. With the cold weather on August 12 they suddenly disappeared altogether. The greatest density of the flight was stated to have occurred on July 28 to August 4. (Mrs.) V. M. MUSPRATT; Aicé Choko, St. Jean de Luz, Basses Pyrénées.

LYSANDRA CORIDON IN SOMERSET.—With reference to the recent letters in the *Entomologist* relating to the above it may be of interest to mention that *Lysandra coridon* occurs fairly commonly in at least two separate localities in this part of north Somerset. In one of these localities *Lysandra bellargus* also occurs sparingly.—C. S. H. BLATHWAYT: "Amalfi," 27, South Road, Weston-super-Mare, Somerset.