## FURTHER GYNANDROMORPH ANTS FROM IRELAND.

By Horace Donisthorpe, F.Z.S., F.R.E.S.

In August, 1945, Mr. Desmond P. Walls took some 50 gynandromorphs in a single nest of Myrmica sabuleti Meinert, on a small island near Dublin. These I described [Entom., 79:121-31, Pl. I (1946)] and subsequently exhibited at a meeting of the Royal Entomological Society of London. Mr. Walls has now given me some ants from a colony of Myrmica scabrinodis Nylander, taken at Red Rock, Howth, on August 11, 1948. These consist of 8 gynandromorphs and a few normal workers. Like the 50 specimens mentioned above, these are all mixed gynandromorphs, or femalemale mosaics. The former specimens tended rather to lean towards the male aspect, whereas the present specimens lean towards the female: not a single specimen has an antenna with 13 joints. These 8 specimens bring the total number of described gynandromorphs up to 126. They are as follows:

(1) Chiefly ♀, colour chiefly yellow with a few dark patches;

legs yellow, ⊊.

Head intermediate in shape, right mandible, clypcus and part of head blackish: antennae 12-jointed, left scape we right scape shorter, curved, lateral tooth small. Thorax chiefly in shape, with some black patches, but sculpture much less marked: fore wings only partly developed: epinotal spines we but slightly shorter. Petiol. 3, slightly blackish: post-petiole with less sculptured: gaster chiefly 3 in shape, blackish. 3 genitalia not present. Sting invisible.

(2) Colour chiefly yellow with a few black patches; legs intermediate with some of the femora and tibiae partly blackish.

Head chiefly ?, part of right mandible, clypcus, and a few patches blackish; sculpture less strong. Thorax chiefly ?, but sculpture less strong; black patches on mesonature scutchlum etc. wing pads developed; right epinotal spine longer than left and slightly curved inwards at apex. Petiolc and post-petiole., but sculpture less strong; quisice intermediate, somewhat blackish. Generalia, or string not visible. Intermed wanting.

(3) Yellow with blackish patches: legs chiefly 3, partly yellow, partly blackish; left posterior tibia considerably swotlen in middle.

Head intermediate, left arkenna 12-jointen, rather short scape swollen and clavate, right antenna wanting. Thorns intermediate with scalpture less strong than in normal of wing part on left side developed; epinotum with a spine on left, on right a triangular

projection is present, sharper and longer than normal 3 tubercle. Petiole and post-petiole intermediate, but smoother and darker than in normal  $\mathcal{Q}$ ; gaster intermediate in shape, partly blackish; right stipes exserted.

## (4) Chiefly yellowish with black patches.

Head somewhat intermediate, chiefly  $\supseteq$  in shape but much less strongly sculptured than in normal  $\supseteq$ ; part of left mandible, elypens, and patches on disc of head blackish. Legs chiefly yellow intermediate; antennae 12-jointed,  $\supseteq$ . Thorax  $\supseteq$  in shape, but with some black patches, and much less strongly sculptured. Petiole and post-petiole  $\supseteq$ , but much less strongly sculptured: petiole blackish: gaster somewhat intermediate in shape; sting, or  $\supseteq$  genitalia invisible.

(5) Yellow, with a number of black markings on head, body and legs.

Head chiefly  $\hat{\varphi}$  in shape, but much less strongly punctured; antennae 12-jointed; left scape somewhat curved and thickened to apex, right shorter and considerably swollen at apex. Thorax chiefly  $\hat{\varphi}$ , but much less strongly sculptured; magrian furrows slightly indicated; left epinotal spine wider at base and a little shorter than in normal  $\hat{\varphi}$ , right spine a little shorter than normal. Petiole and post-petiole  $\hat{\varphi}$ , but much less strongly sculptured, gaster  $\hat{\varphi}$ , no sting visible. Left fore ving partly developed.

## (6) Yellow, with a number of black spots and patches.

Head chiefly in shape, less strongly sculptured: antenantial 12-jointed; scapes slightly thicker, and left a little more curved than in normal ?. Thorax chiefly? but less strongly sculptured: right fore wing partly developed: mayrian furrows slightly indicated: left epinotal spine broader at base, and more pointing outwards than in normal? right consisting of a short, sharp projection, long a than m normal? tubercle. Gaster somewhat intermediate. Seenitalia half exserted. When dissected out, typical ? genitalia present.

## (7) Pale yellow, with some black spots and patches.

Head chiefly 1, but much less strongly punctured; antenna 12-jointed; right scape normal, left shorter, bent, and swollen at apex. Thorax, spines, petiole, and post-petiole 2, but much less strongly sculptured; gaster but somewhat darker. String nor visible.

(8) Pale yellow: with a few black patches: gaster darker.

Head mostly  $\mathcal Q$  but narrow, and with left side partly excavated from frontal carina to near temple: left eye situated in cavity; antennae 12-jointed; scapes shorter than in normal  $\mathcal Q$ , curved and hent. Thorax, petiole and post-petiole mostly  $\mathcal Q$ , but much less strongly sculptured; gaster intermediate. Significantly exserted. When dissected out, typical Significant genitalia and a part of a developed sting present.

DANAUS PLEXIPPUS ON SKYE. While bird-watching on the lower slopes of Beinn na Caillich, Skye, at 2.30 p.m. on June 4 last, I was attracted by the flapping sound of what I took to be a bird, and discovered to be a large butterfly. It was flying strongly in a N. or N.W. direction with slow beats but making good speed (10-15 m.p.h.?), at a height of about 3 feet or so from the ground. I gave chase, and noticed a general coloration similar to a rather dark Monarch Butterfly. However, I was soon outstripped, as it did not settle; I was able to follow it with my field glasses for a considerable distance until it eventually disappeared from sight behind some cottages on the outskirts of Kyleakin (W. Skye), still flying north. The sky was very overcast, but there was no rain and the atmosphere was clear. The wind direction was northerly, and light to moderate: it had been like this for over a week. I have not seen a Monarch Butterfly elsewhere alive, but am quite well acquainted with most of the British Lepidoptera. Although identification in this case cannot be quite certain. I feel that there is no reasourble doubt NONWELLER: 4. Alexandra Close, Netley Street, Farmborough. Hants, December 27, 1948.

Coenonympha tullia at Flowers. In early July last year this species was fairly common on heathery slopes and an extensive peat moss near Stromness. Orkney, flying with Pieris napi and Polynomatus icaras over a plentiful growth of ragged robin, ladies smock, marsh marigold, bird's-foot trefoil, orchis and thistle. All these flowers seemed to be entirely ignored, but the butterfly was rather partial to the dark purple blossows of marsh (i), as foll, which grew abundantly among club rush in the wettest parts of the moss, and more than once was found so that on the set of the last necrods: S. B. Hodgson (1). Westmer land Rosel, flattaces, January 5, 1949.

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