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## **A Gynandromorph of *Aphaenogaster fulva* subsp. *aquia* Buckley (Hymenoptera: Formicidae).**

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(Plate VI).

The following is another in a long list of ant sex mosaics, descriptions of which have appeared from time to time in the literature<sup>1</sup>.

The specimen in question was taken early in July, 1937, a few inches from the entrance to a nest of *Aphaenogaster aquia*, in Jackson, Ohio.

Description (Plate VI, figs. 2, 5): length, 4.0 mm.

Resembling a typical worker of *Aphaenogaster aquia*, from which it differs in the following particulars:

1. Head, excluding mandibles, about as broad as long, broadly rounded behind.

2. Clypeus smaller than in the worker, less convex, and not extending as far back between the frontal carinae which are lower and closer together.

3. Eyes very large, oval and convex, closer to the mandibular border than in the worker; ocelli well developed.

4. Mandibles shaped as in the worker, but somewhat feebler; more heavily developed than in the male.

5. Left antenna 12-jointed as in the worker, right antenna 13-jointed as in the male, but the joints of both proportioned as in the male; funiculi short, reaching scarcely half the distance to the posterior border of the head, thickened, strongly incrassated at their tips.

6. Thorax stouter and shorter than in the worker, showing traces of having borne wings; the sutures of pro- and mesonotum, scutellum and pleurae distinct.

<sup>1</sup>Wheeler, W. M. Concerning some ant gynandromorphs. *Psyche* 38, pp. 80-85, 1931. Mosaics and other anomalies among ants. Harvard Univ. Press 1937.

Epinotum, petiole, postpetiole, gaster, legs, pilosity, sculpture and color as in the worker.

The specimen resembles a worker body bearing an extraordinarily male-like head. But contrary to what would be expected in a blastomeric mosaic, none of the characters are pure male; the eyes are more flattened than in the normal male; the frontal carinae longer; the antennae heavier, especially the scapes, and one antenna comprising 12 instead of 13 joints; the mandibles and head more robust. All of the differences are suggestive of the female sex. The differences in the thorax are rather more like the queen in appearance, and may be correlated with the development of wings. In general, the composition of the specimen would seem to be most easily explained by the theory of intersexes as recently extended by Whiting<sup>2</sup> to certain ant mosaics.

PLATE VI. *Aphaenogaster fulva aquia*. Fig. 1. Head of male, Fig. 2. Head of gynandromorph, Fig. 3. Head of worker, Fig. 4. Thorax of male from the side, Fig. 5. Thorax of gynandromorph<sup>1</sup> from the side, Fig. 6. Thorax of worker from the side.



### Diptera of Michigan.

"A List of the Diptera or Two-winged Flies of Michigan", critically compiled as to nomenclature, authority and distribution, is nearing completion by the undersigned. The list already totals over 2100 species, with several large families still in the hands of specialists. In order that the published list may be as complete and as informative as possible, the cooperation of specialists, student, collectors, and institutions is earnestly invited and deired. Any pertinent information, records or material will be welcomed and duly acknowledged.—GEORGE C. STEYSKAL, CURTIS W. SABROSKY, Dept. of Entomology, Michigan State College, East Lansing, Michigan.

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<sup>2</sup> Whiting, P. W. Anomalies and caste determination in ants. J. of Hered. 29: pp. 189-193. 1938.