

A GYNANDROMORPH OF TETRAMORIUM GUINEENSE FABR.

By

WILLIAM MORTON WHEELER

Mr. P. H. Timberlake has kindly sent to me a very interesting gynandromorph of the common tropicopolitan ant, *Tetramorium guineense* Fabr., which was collected June 19th, 1923 by Mr. E. H. Bryan, Jr. on Necker Island. Unlike the previously recorded ant-gynandromorphs, this insect is a pure example of the anteroposterior type, the head being male, the remainder of the body female, with perfectly developed wings (fig. 7a). I can detect no deviation in the structure of the head (fig. 7b) from that of the normal male. The antennae are perfectly developed and ten-jointed, and the details of the sculpture, pilosity and color of the normal male are accurately reproduced. The head of the normal female, shown in fig. 7c, is, of course, very different. The thorax, however, is precisely like that of the normal female, except that it is slightly less robust with the mesonotum a little less flattened dorsally and that the metasternal spines are undeveloped. The thorax of the male *T. guineense* is very different from that of the female, since it lacks the epinotal spines as well as the mesasternal spines, has a more convex mesonotum and mesosterna and the former has Mayrian furrows. The color is also darker and the surface much smoother and very differently sculptured from that of the female. The legs, petiole, postpetiole and gaster of the gynandromorph are precisely as in the normal female, even the sting, which is fully exerted, being of the same length and structure. The sculpture, pilosity and color are also as in the normal female, the thorax, legs and pedicel being yellowish ferruginous, the gaster very dark brown or blackish, with its extreme base and tip yellowish brown. There is every reason to assume that the internal reproductive organs are those of the normal female. The wings are whitish hyaline, with colorless veins and pterostigma, as in the normal female.

On looking over the specimens of *Tetramorium guineense* in my collection I find one male from Cagues, Porto Rico with an 11-jointed left antenna. The right antenna is broken so that the number of its joints can-

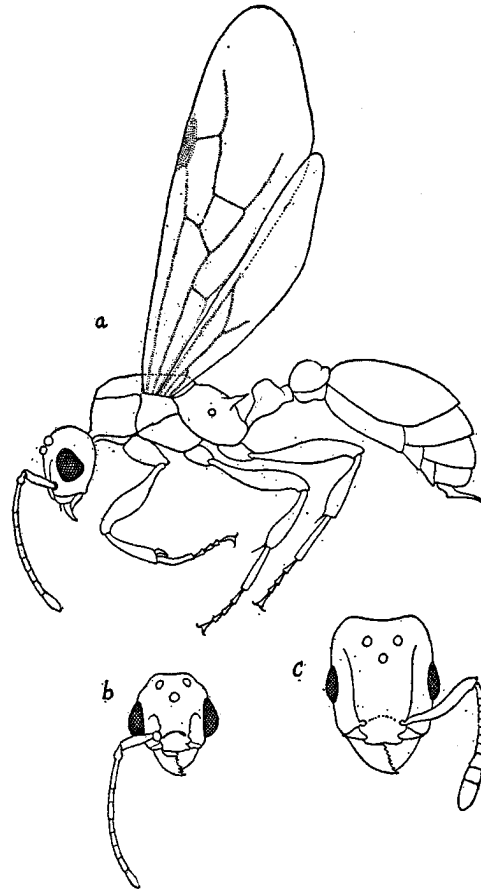


FIGURE 7. Gynandromorph of *Tetramorium guineense* Fabr.: *a*, lateral view; *b*, head of same, dorsal view; *c*, head of a normal female.

not be ascertained. This and similar specimens, which one finds occasionally in *Tetramorium* and other ant-genera, are probably to be regarded as exhibiting "intersexual" rather than gynandromorphic traits since the number of antennal joints is intermediate between the ten of the normal male and the twelve of the normal female.

COLEOPTERA

By

E. H. BRYAN, JR.

CARABIDAE

Two specimens of a small species found under rotting grass clump at edge of lagoon, Laysan Island (Fullaway). Specimens sent to Dr. E. C. Van Dyke for determination.

STAPHYLINIDAE

Medon debilicornis Wollaston

Ocean Island, April, 1923 (Fullaway).

Atheta coriaria Kraatz

Nihoa Island, June 11-15, 1923 (Bryan).

This small black species was found in abundance on bunch grass, Euphorbia, moist algae along a trickle of water in one of the valleys, and even about camp.

Two other small species of Staphylinidae, as yet unidentified, were found: one species on Midway Island, April 23, 1923 (Fullaway); the other on Laysan Island, April 11, 1923 (Fullaway).

COCCINELLIDAE

Coelophora inaequalis (Fab.)

Nihoa Island, June 11, 14, 15, 1923.

No live specimens seen, but several elytra found in bunch grass sweepings (Bryan and Cooke).

Pullus kinbergi (Boh.) (Determined by Timberlake)

Nihoa Island, June 11-15, 1923. Abundant on the Pritchardia palms, Euphorbia shrubs, Sida, Chenopodium, and bunch grass. Specimens also captured about camp. Necker Island, June 17-20, 1923, on *Sesbania tomentosa*, Lepturus, Chenopodium and bunch grass. French Frigate Shoals, June 22-26, 1923, on Lepturus, Chenopodium and Boerhaavia (Bryan). Pearl and Hermes Reef, April 27, 1923 (Fullaway). Ocean Island, April, 1923 (Fullaway).

Nephus species near **bipunctatus** (Kug.) (Determined by Timberlake)

Nihoa Island, June 13 and 15, 1923, on Euphorbia (Bryan).

CUCUJIDAE

Cryptamorpha desjardini (Guer.)

Pearl and Hermes Reef, April 27, 1923 (Fullaway). Ocean Island, April (Fullaway). Nihoa Island, June 11 to 15, 1923 (Bryan) on Pritchardia.

Silvanus surinamensis (Linn.)

Laysan Island, in corn meal (Fullaway).

DERMESTIDAE

Dermestes cadaverinus Fab.

Nihoa Island, June 11-14, 1923, from dead birds (Bryan, Schlemmer, and Cooke). Necker Island, June 15, 1923 (Judd), June 17 and 29 (Bryan). French Frigate Shoals, from dead birds, June 25-27 (Bryan). Laysan Island, April, 1923 (Ball, Fullaway, Grant). Also bred from seal's skull from Laysan Island (Bryan). This is probably the species which Dill and Bryan¹⁴ report so abundant, "the larvae of which devoured everything that was not well poisoned." It is probably also the "*Dermestes domesticus* Garm. in ganz ungeheuren Mengen vorkommend," recorded by Schauinsland.¹⁵

Lisiansky Island, May 16-17, 1923, from the grass patch at the northeast corner, and from the deserted guano camp (Grant). Pearl and Hermes Reef, April 27, 1923 (Fullaway). Midway Island, April 23, 1923 (Fullaway). Johnston Island, July 12-17, from dead birds (Bryan).

Dermestes vulpinus Fabr.

Nihoa Island, June 11-15, 1923, and Necker Island, June 18-20, 1923 from dead birds (Bryan).

D. cadaverinus and *D. vulpinus* being readily distinguished, special care was taken to note their distribution. Whereas *D. cadaverinus* was found wherever there were the carcasses of dead birds, *D. vulpinus* seemed to be confined to the high islands of Nihoa and Necker. There were no scavenger insects on Wake Island, as hermit crabs quickly cleaned all carcasses.

Labrocerus sp.

Nihoa Island, June 13-16, on Euphorbia; Necker Island, June 18, 20, 1923 (Bryan).

HISTERIDAE

Carcinops quatuordecimstriata Steph.

Johnston Island, July 12-18, 1923, from dead birds (Bryan).

¹⁴ Dill, H. R. and Bryan, W. A., Report on an expedition to Laysan Island in 1911; U. S. Dept. Agric., Biol. Sur., Bull. 42, p. 10, 1912.

¹⁵ Schauinsland, H., Drei Monate auf einer Koralleninsel: p. 102, Bremen, 1899.

ELATERIDAE

Itodacnus novicornis new species (Description by Van Zwaluwenburg.

See pp. 50-52.)

Necker Island, in dirt and loose stones (Bryan).

Monocrepidius exsul Sharp

Larva from Midway Island (Fullaway). (See p. 52.)

CLERIDAE

Necrobia rufipes De Geer

Nihoa Island, June 14, 1923, in dead bird (Bryan).

ANOBIIDAE

Lasioderma serricorne (Fab.)

Johnston Island, July 18, 1923 (Bryan).

SCARABAEIDAE

Saprosites pygmaeus Har. (Determined by Swezey.)

Ocean Island, April 1923 (Fullaway).

Psammodytes nanus De Geer (Determined by O. H. Swezey.)

Ocean Island, April, 1923; Laysan Island, April, 1923, under dead grass (Fullaway).

CHRYSOMELIDAE

Epitrix parvula (Fab.) (Determined by P. H. Timberlake.)

Nihoa Island, June 11-13, 1923, some specimens on *Pritchardia* palms, some on *Euphorbia* (Bryan).

TENEBRIONIDAE

Alphitobius piceus (Olivier)?

Laysan Island, April 11, 1923 (Fullaway). Pearl and Hermes Reef, April 27, 1923 (Fullaway). Johnston Island, July 12-18, 1923, abundant about the carcasses of dead birds (Bryan).

Smaller, glossy black species; specimens sent to Dr. E. C. Van Dyke, but as yet undetermined. Ocean Island (Fullaway); Nihoa Island, June

11-14, about camp and on the Pritchardia palms; Necker Island, June 19, 1923 (Bryan).

Tribolium ferrugineum (Fabr.)

Laysan Island, in corn meal, April 9, 1923 (Fullaway).

ANTHRIBIDAE

Araocerus fasciculatus (De Geer) (See page 64.)

Ocean Island (Fullaway). Nihoa Island, June 11-16, on Euphorbia (Bryan). Necker Island, June 16-20, 1923 (Bryan).

A larger, as yet undetermined species, Wake Island, on Sida, July 31, 1923 (Bryan).