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AN ASYMMETRICAL GYNANDROMORPH OF
CEROTOMA FACIALIS (COLEOPTERA: GALERUCIDAE)

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There is a marked sexual dimorphism in beetles of the genus *Cerotoma*. The female has cylindrical antennal segments; a smoothly convex frons that lacks lobes and subantennal pores, and that is usually dark in color; relatively slender protibia with spurs; nearly cylindrical protarsi I without pads; and is somewhat larger than the male. The male has depressed and enlarged antennal segments III and IV; a white, concave frons with various lobes, elongate setae, and subantennal pores (a pair of pit-like openings underneath the dorsal lobe); rather swollen protibia without spurs; and enlarged protarsi I with ventral pads. Only males of Nearctic *C. trifurcata* (Forster) lack the modified antennae and the concave, lobed faces characteristic of all of the other Neotropical species of the genus. Unfortunately, *C. trifurcata* is the genotype of *Cerotoma*.

My examination of several thousand specimens of *Cerotoma* for a study of variation in the genus has disclosed only one specimen that shows mixed secondary sexual characteristics. This is one of a series of *C. facialis facialis* Erichson collected from cowpea (*Vigna sinuensis*) near Palmira, Valle de Cauca, Colombia, on 5 February 1960 by agronomist Eduardo Idrobo. The specimen has all black (rather than tan to dark brown) markings, a "clear" (one or more spots absent) elytral pattern, and a commissural suture that is 3.65 mm long. The markings and pattern are common in the deme of this species from this region. The length is small for a female but near average for a male of this deme for this season of the year.

The antennae, protibia, and protarsi of the specimen are typically female and no trace of an aedeagus was found in the terminal abdominal segments. The right side of the face is also black and smoothly convex as in the typical female. The left side of the frons is white and concave as is typical of the males of the species. The dorsal lobe of the male side of the face is well defined but small. It is a simple arch that extends only one-half way across the face, of course, and lacks the characteristic form for the species. The subantennal pores and lateral lobes of the face are full-sized and well-formed. The face is illustrated in Figure 1. The specimen was dead and dry when received, and no examination of soft organs or observations on behavior were possible.

The cause of the gynandromorphism in this specimen is unknown. As noted by Oliver and Delfin (1967), gynandromorphs can be produced by different means. Whatever the cause, it apparently affected only the left side of the face of an otherwise normal female. The specimen has been deposited in the Entomological Museum of Michigan State University. The striking sexual dimorphism of *Cerotoma* is shared by species of several related genera. Gynandromorphs are rare and an intensive search through the Diabroticina could reveal more material for studies of this phenomenon.

LITERATURE CITED

- Oliver, H. H., and E. D. Delfin. 1967. Gynandromorphism in *Dermacentor occidentalis* (Acari: Ixodidae). *Ann. Entomol. Soc. Amer.* 60:1119-1121.

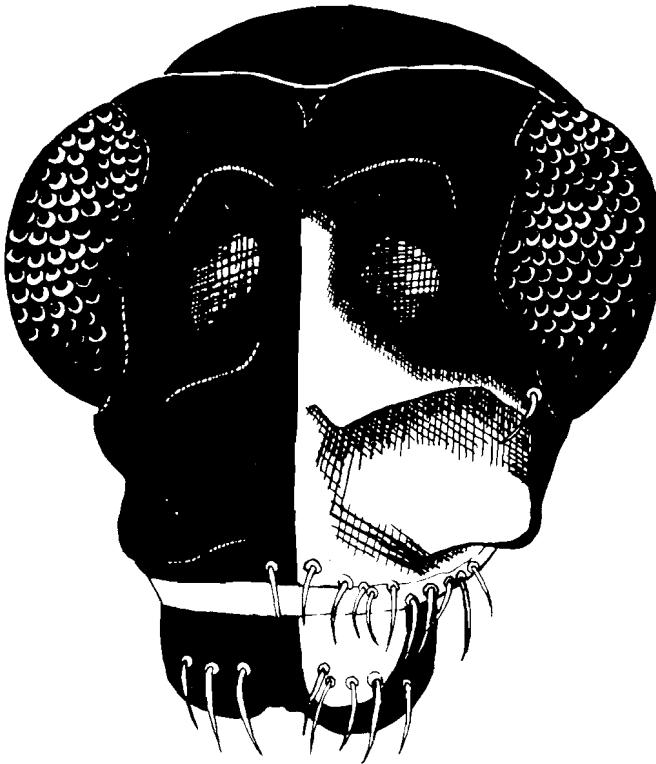


Figure 1. Anterior view of the head of a partial gynandromorph of *Cerotoma f. facialis* Erichson. The black side has female, and the white side has male characteristics.