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FALSE GYNANDROMORPH OF *ATTACUS ATLAS* (LEPIDOPTERA: SATURNIIDAE)

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ABSTRACT.– An apparent female antenna on a male of *Attacus atlas* was found under magnification to be an aborted male antenna. The existence of true gynandromorphs of this species is reported.

KEY WORDS: *Actias*, antennae, Asia, *Attacus*, gynandromorph, Malaysia, Oriental, sexual mosaic.

Gynandromorphs, specimens exbibiting female and male characteristics, are rare among Lepidoptera, and when they are reared or collected, should be reported in a publication. When a specimen has exclusively male features on one half and female on the other, it is termed a bilateral gynandromorph. When a gynandromorph lacks such symmetry, it is generally referred to as a sexual mosaic.

Last year Terry W. Taylor donated to the Denver Museum of Natural History a specimen of *Attacus atlas* (Linnaeus) (Saturniidae) (Fig. 1) which appeared to be a male having a female antenna. It was collected in Perak, Malaysia in November 1991. Examination of the antennae under magnification revealed that the supposed female antenna was structurally a male antenna which simply had shorter pectinations. In Saturniinae, male antennae have numerous long sensilla trichodea, whereas those of females have shorter and sparser sensilla chaetica (Liu and Okui, 1992).

Two remarkable specimens of *Actias luna* (Linnaeus) (Saturniidae) were described by Brown (1975). The first was a male with an atrophied antenna which appeared to be a female antenna, and it also had a normal third antenna arising from the prothorax. A female collected at the same locality a few days later had a tibia and tarsus arising from the head in place of its right antenna. Brown did not consider the male to have a female antenna, but it was evidently the same kind of aberration as the *A. atlas* from Perak cited above. When male specimens are encountered that appear to have female antennae, it is important to verify the "sex" of the antennae by comparison to normal antennae under magnification.

In a study by Peigler (1989) in which thousands of specimens of the genus *Attacus* were examined in museums, no gynandromorphs were found. Balvers (1981) reported a gynandromorph of *A. atlas* from Java. I was recently informed of the existence of four additional gynandromorphs of *A. atlas* in the Milwaukee Public Museum (A. M. Young, pers. comm.). The four gynandromorphs include two bilateral and two that are not bilateral, all from Taiwan, collected in 1967 and 1968. I requested information from that institution because it contains the James R. Neidhoefer collection which includes many gynandromorphs of Lepidoptera.

Fig. 1. *Attacus atlas*, male from Perak, Malaysia, with a narrow antenna resembling those of females.

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