

SCIENTIFIC NOTES

A GYNANDROMORPH OF *Aedes taeniorhynchus*
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Relatively little information has been published on gynandromorphs of mosquitoes as they occur in nature. A specimen of *Aedes taeniorhynchus* (Wiedemann) was collected by W. D. Sudia in a CDC Miniature light trap near Everglades, Florida. This specimen (Fig. 1)

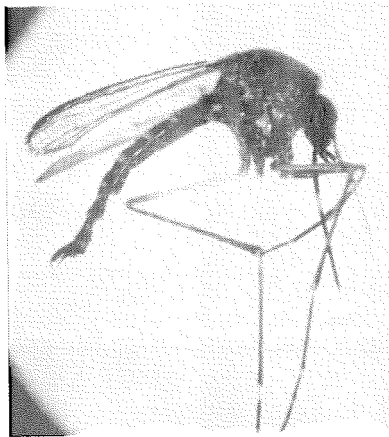


FIGURE 1.

agrees very well with the definition of a gynandromorph proposed by Dr. George B. Craig of Notre Dame (as presented at the March 1964 meeting of the American Mosquito Control Association in Chicago, Illinois): "An individual of a bisexual species which exhibits the characters of each sex in certain parts of its body; often male on one end and female on the other." Craig believed that such sexual differences occur in the tissues and are due to differences in genetic composition of the cells in the two parts of the body of the same mosquito. He felt that such individuals may result from the fertilization of an egg by two sperms, one male-determining the other female-determining.

The head of the specimen is definitely female with two normal short palps, threadlike antennae and a banded proboscis characteristic of female *Ae. taeniorhynchus* (Fig. 1). The abdomen

shows typical male characters including well formed, normal male terminalia (Fig. 2). The



FIGURE 2.

photographs indicate that the specimen is similar in many respects to the gynandromorph of *Aedes taeniorhynchus* described by P. T. M. Lum (*Mosquito News*, Vol. 20, No. 3, pp. 314-315, 1960). Lum stated in his article "The finding of only three gynandromorphs among thousands of mosquitoes reared and studied in the Vero Beach, Florida, laboratory . . . exemplifies the rarity of detecting one individual in a large colony. The absence of gynandromorphs in light trap collections at the laboratory raises the question that they may not be attracted to light and may well have unconventional behavior patterns."

Over a period of many years CDC investigators have studied and identified thousands of specimens of *Aedes taeniorhynchus*. This is the first gynandromorph identified in light trap collections.

The photomicrographs were made by CDC photomicrographer, John P. Gust, Jr.

NEW RECORDS OF NEW MEXICO MOSQUITOES

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Following a flash flood on the afternoon of June 15, 1964, which inundated 2500 acres of Salt Cedar (*Tamarix gallica*) marshes along the Pecos River in the vicinity of Artesia, New Mexico, the authors collected a number of larvae of the species *Aedes thelcter* Dyer. *Aedes thelcter*

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has not previously been reported from New Mexico, now the fourth state in the U. S. to report the species. Fourth instar larvae were collected on the 6th day following the flood.

Found breeding in the flooded area in conjunction with *Aedes thelcter* were: *Psorophora discolor*, *P. confinnis*, *P. cyanescens*, *P. signipennis*, *Aedes vexans*, *A. dorsalis*, and *A. sollicitans*. *Psorophora ciliata* were taken in light traps at the same location but no larvae were recovered.

Areas were flooded at this time that had not held water in years, which may account for the fact that the species had not been recorded earlier.

The *Psorophora cyanescens* which were collected, while not constituting a new state record were the first recorded for Eddy County and the southernmost portion of New Mexico.

Artesia lies in the Pecos River valley at an elevation of 3380 feet and is within the Lower Sonoran zone.

In June, 1959, the senior author collected *Aedes pallatus* (Coquillett) larvae from mountain meadow bogs (elevation 10,500 feet) at the Philmont Scout Ranch in Colfax County, New Mexico and these also constitute a new state record. Larvae were abundant in the bogs at the time of collection.

Identification of *A. thelcter* was confirmed by

Mr. Fred Harmston, USPHS Greeley Field Station, Greeley, Colorado.

References

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GYNANDROMORPHISM IN *Culex tarsalis* (COQUILLET)

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A gynandromorph of *Culex tarsalis* was taken in a mosquito light trap at Yuma Proving Ground, Arizona, on 9 September 1964. The specimen has typical female antennae, palpi and proboscis, and typical male genitalia.