

# THE OCCURRENCE OF *MEGARHINUS RUTILUS* COQUILLET IN S. E. FLORIDA

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According to current literature, *Megarhinus rutilus* occurs in Georgia, Florida, and South Carolina. Relatively little has been published on the biology of this species.

While searching for *Wyeomia vanduzeei* Dyar and Knab and *Wyeomia mitchellii* Theobald at Fort Lauderdale, Florida, larvae of *Megarhinus* Robineau-Desvoidy were taken in August, 1945,

from one of the bromeliads, *Tillandsia utriculata* Linn. A surprising number of these larvae and some pupae were found when additional trips were made during September and October. In October and November of 1945, *Megarhinus* larvae and pupae were collected in Palm Beach County by the authors and R. C. Ridgway. The larvae, which are predacious, were found associated with *Wyeomia vanduzeei* and *Wyeomia mitchellii*.

One female adult was collected at Boca Raton, Florida, while resting on one of the dog fennels, *Eupatorium capillifolium* Lam. Another of undetermined sex was seen on the same plant but was not captured.

From the various collections made, a total of 26 adults were reared. Of these, 14 were males and 12 were females. The males conformed to the description of *M. rutilus* given by Howard, Dyar and Knab in that the entire second segment of the front and middle tarsi were white scaled and the basal two thirds of the third segment of the front and middle tarsi were likewise white scaled. The coloration of the thoracic stripes, which was the character used for separating the females of *M. rutilus* from *M. septentrionalis*, may not be consistent. However, of the 12 females which were reared, all had bluish thoracic stripes which conforms with Howard, Dyar and Knab's description of *M. rutilus*. These 12 adult females were compared with 4 *M. septentrionalis* that were collected in Georgia and South Carolina. The only outstanding difference noted was that the *M. septentrionalis* possessed yellowish median and lateral thoracic stripes.

The associated skins of the larvae of the 26 adults were compared with *M. septentrionalis* larvae but no significant differences were found.

No significant differences could be found when the male terminalia of *M. rutilus* and *M. septentrionalis* were studied.

It was interesting to note that while in the process of collecting larvae of *M. rutilus*, the adults of *W. vanduzeei* and *W. mitchellii* appeared in numbers large enough to make collecting uncomfortable. Both species bit readily and would be a nuisance to anyone remaining in the immediate breeding area.

Available information indicates that the larvae of *M. rutilus* are to be found in tree holes. Although innumerable tree holes have been examined by the personnel of the Palm Beach County Anti-Mosquito District, no *Megarhinus* larvae have been taken from these places. The larvae of *Culex quinquefasciatus* Say, *C. nigripalpus* Theobald and *Aedes aegypti* Linn. were taken in small numbers from tree holes as compared to *Aedes triseriatus* Say, which were found abundantly. In this area it appears that breeding of *M. rutilus* is confined almost exclusively to the air plant *Tillandsia utriculata*. Other breeding places, however, may be found with the additional studies which are being made in determining this mosquito's life history and habits.

#### References

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