

MIDGE-FLIES BITING BUTTERFLIES

by DAVID L. BAUER

Late one hot August afternoon while collecting in Black Canyon on Mingus Mt., Yavapai Co., Arizona; I came upon a milkweed vine on whose flowers the butterflies were feeding in considerable numbers. They were so absorbed in their feeding that I had a chance to look the specimens over for imperfections before clamping the lid of the killing jar over them. While thus examining the various species I noticed a specimen of *Mitoura siva* Edwards, which appeared to be an aberration with black spots on the undersurface of the secondaries, so I eagerly captured it. But when I had it in the killing jar where I could see it better, I noticed that some of the spots had disappeared, and a quick second look proved the remaining black spots to be midge-flies biting the butterfly on the larger veins of the wing.

This discovery aroused my interest so I captured several other specimens of *Mitoura siva* which had these small flies biting them. The skipper *Cogia hippalus* Edwards was also captured, but no specimens of midges were seen on them, perhaps because of the spotted dark coloring of the undersurface of the secondaries. When the jar was emptied fourteen of these small midge flies were found, preserved, and sent to Dr. WILLIS W. WIRTH at the U. S. Department of Agriculture, Insect Identification Office.

Dr. WIRTH identified them as a species of "no-see-ums" or "punkies" belonging to the family Heleidæ. All the specimens sent were females of an unnamed species of the genus *Forcipomyia* since described as a new species by Dr. WIRTH (1956: p.361). In a letter concerning midges biting butterflies, Dr. WIRTH mentioned that records of such are scarce.

There are a number of records for Europe, but the above record of midges biting *Mitoura siva* is the first record for North America. However, there are records of the caterpillars of the Papaya Sphinx being bitten in Florida by *F. erucidida* Knab, and the midge *F. crudelis* Knab has been taken sucking blood from caterpillars in Mexico.

About a week after the midges were found sucking the blood of *Mitoura siva*, they were also found sucking blood from the wings of *Philotes enoptes dammersi* Comstock & Henne taken in the canyon above Jerome, Arizona. This last locality is also on Mingus Mt., but about five or six miles from the first locality in Black Canyon.

Then while butterflies were being collected in Mexico during 1954 a specimen of the butterfly *Pyrrhogyra otolais neis* which was captured

at Tamazunchale, San Luis Potosi, had two midges feeding from the veins on the upper surface of the hind wings. Since these midges remained on the wings when the specimen was killed, the butterfly and the midges were sent to Dr. WIRTH for identification. After studying these two specimens (also females), Dr. WIRTH found them to be another unnamed *Forcipomyia* and described them as *F. mexicana* Wirth (1956: p.361).

These little midges make an interesting sideline for observation and study by lepidopterists. Anyone collecting Lepidoptera or other insects on which these midges are feeding should contact Dr. WILLIS W. WIRTH, as he is very interested in obtaining specimens and records of hosts.

ACKNOWLEDGEMENTS

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References

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P. O. Box 582, Heppner, Oregon, U. S. A.

SOME INTERESTING BUTTERFLY RECORDS FROM ONTARIO

Erora læta (Edw.) was taken at the end of May 1960 once again in Ontario, after a long time. A fact which makes the whole matter still more interesting is that this find was in Algonquin Park, 45. 35° N, near the northern limits of the beech tree.

The other records concern *Feniseca tarquinius* (Fabr.) and *Melitæa harrisii* (Scud.), both taken at the end of May resp. June 1960 on the shore of a lake near Sudbury. They were taken there a long time ago when Canadian lepidopterology was at its beginning, in the days of C. J. S. BETHUNE and J. FLETCHER (near 1880). Their old specimens are still well preserved in the Canadian National Collection in Ottawa; the recent ones are in the American Museum of Natural History in New York.

J. C. E. RIOTTE, P. P., 278 Bathurst St., Toronto 2-B, Ont., CANADA