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A Possible Case of Spatial Isolation in Brine Flies of the Genus *Ephydra* (Diptera: Ephydridae)

Richard S. Zack
Kent State University

R. W. Thier
Kent State University

B. A. Foote
Kent State University

ENTOMOLOGICAL NOTES

A POSSIBLE CASE OF SPATIAL ISOLATION IN BRINE FLIES OF THE GENUS *EPHYDRA* (DIPTERA: EPHYDRIDAE)

During the summer of 1975, adults and larvae of *Ephydra riparia* Fallen and *E. cinerea* Jones were encountered in the many brine pools occurring on the property of the Morton Salt Company at Rittman, Wayne County, Ohio (Scheiring and Foote, 1973). Larvae of both species have been reported to be salt tolerant (Bayly, 1972). *E. riparia* larvae can survive in salinities up to 80°/oo (Sutcliffe, 1960), and the larvae of *cinerea* have been encountered by Nemenz (1960) in the Great Salt Lake of Utah at a salinity of 300°/oo.

At the Rittman site, brine pools of differing salinity are found. In pools which are formed from leakage from underground pipes, the salinity ranged from 12-18°/oo. In addition to these small pools there is one large pool into which sludge from the salt plant is pumped. The salinity of this pool ranged from 32-35°/oo. Although the salinity tolerance range of *riparia* seemingly would include the water of the large sludge pool, larvae and adults of this species were rarely found in or around this pool. At the same time, larvae and adults of *cinerea* were rarely found in the numerous small pools having lower salinities, although they were extremely abundant in the sludge pool. This spatial isolation was found even though the distance, about 100 meters, between the pools of differing salinities, could have been easily traversed by adults of either species. Thus, by restricting itself to pools of lower salinity, *riparia* may be ecologically isolated from the more salt-tolerant *cinerea*.

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Richard S. Zack, R. W. Thier, and B. A. Foote
Department of Biological Sciences
Kent State University
Kent, Ohio 44240.

ANAPHES (HYMENOPTERA: MYMARIDAE) REARED FROM THE EGGS OF A SHORE FLY (DIPTERA: EPHYDRIDAE)

Members of the family Mymaridae are obligate parasitoids of insect eggs, and some species attack the eggs of aquatic insects. Only one account of egg parasitism by the mymarid genus *Anaphes* on Diptera has been disclosed in the literature. Bakkendorf (1971) bred *Anaphes autumnalis* Foerster from an egg of *Tipula autumnalis* Loew.