mm, in each of the remaining flasks. Eighty-four to 125 pupae were placed in each flask and the number of adult mosquitoes that emerged was recorded.

Significantly, more adult mosquitoes (94.8%) survived in flasks containing emergence discs than in those containing pieces of cork (14.6%). Additional tests using 40-60 and 150-200 larva per flask, had adult survival averages of 92.6 percent and 91.2 percent respectively.

Emergence discs have small areas that resist the movement of surface water, thus increasing the stability of the water-air interface. They also increase the amount of surface area for emerging adults. Thus allow pupae to be more evenly distributed over the surface, thereby permitting a larger number of pupae per flask.

References Cited


*Aedes australis* (Coquillett) and *Wyeomyia smithii* (Coquillett) in Pennsylvania.

(NEW STATE RECORD)

William Wells and Victor McGlennon Pennsylvania Department of Health, P.O. Box 69, Harrisburg

Brown (1948) listed 37 species of mosquitoes as occurring in Pennsylvania and Carpenter (1947) added 3 more to the list bringing the total to 36. Although Rutschke, Mooney, and Vanderburg (1948) noted *Wyeomyia smithii* on their list of Pennsylvania mosquitoes, there was never any reference to location or distribution within the State. The authors have not found any in the collection at State College. The addition of *Aedes australis* and *Wyeomyia smithii* brings the present total of mosquito species in Pennsylvania to 42.

April 17, 1963, six 3rd instar larvae of *Aedes australis* were collected from a small woodland pool one and one-half miles northeast of Sharon, Pennsylvania, at Western Reserve. April 26, three more 4th instar larvae of this species were collected from the same area and three fourths of a mile farther west. A female was taken in a midmorning biting collection. The larvae were associated with larvae of *Aedes vexans*, *Aedes stimulans* and *Aedes canadensis.*

A light trap operated in this vicinity from May 28 through July 28, failed to capture any adults of *Aedes australis.*

On May 28, 1963 the junior author located a privately-owned stagnatous bog on Route 318 about two miles southwest of the Borough of Mercer. This area is probably one of the largest breeding places in the State. Pitcher plants (*Sarracenia purpurea*), are very abundant in it. On May 25, fifteen and and 3rd instar larvae of *Wyeomyia smithii* were collected from the leaves of these pitcher plants and taken to Sharon where six were reared to adults, five were preserved at 4th instar, and four were lost. Of the six reared to adults, all were females.

Mr. Richard Stotel of the Bucks County Mosquito Control Commission has also collected larvae of *Wyeomyia smithii* from a small pitcher plant area at Bowman's Hill Wildflower Refuge in Bucks County. However, as late as June 20, 1963 it was not possible to collect specimens from this area due to lack of rainfall.

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