SCIENTIFIC NOTES

Aedes thibaulti IN MARYLAND *

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Aedes thibaulti Dyar and Knab has been reported from Cape Henry, Virginia, and from Ellendale Swamp, Delaware (Bickley, 1957). It is reasonable to assume that this species should be present in the section of Maryland which lies between these two locations. However, there is no record of this species having been collected in Maryland prior to this report.

On April 27, 1961, a number of 4th instar larvae and pupae were collected from a hole under the root system of a partially uprooted tree in Dublin Swamp, Somerset County, Maryland. At first, dipping in this hole produced only *Aedes canadensis* larvae but when the samples were taken from the darkest portion of the hole *A. thibaulti* larvae were found. Three adult males were reared from this collection confirming identification of the larvae.

A second collection of this species was made on the same date in a swamp about two miles east of the first site. This time the larvae (2nd and 3rd instar) were found in a large tree hole which was nearly a foot in diameter and extended slightly below the surface of the surrounding terrain.

A third collection of a single adult male was made May 21, 1961, from a resting box in a swamp six miles southwest of Salisbury, Wicomico County, about thirteen miles west of the first site.

During a second visit to the areas in Somerset County, *Culiseta melanura* larvae were found associated with this species at both of the breeding sites. This association has been reported by Shields and Lackey, 1938.

Literature Cited

BICKLEY, W. E. 1957. Notes on the distribution of mosquitoes in Maryland and Virginia. Mosquito News 17:22–25.

SHIELDS, S. E. and LACKEY, J. B. 1938. Conditions affecting mosquito breeding with special reference to *Aedes thibaulti* Dyar and Knab (Diptera, Culicidae). Jour. Econ. Ent. 31:95–102.

* Miscellaneous Publication Number 431, Contribution Number 3262 of the Maryland Agricultural Experiment Station, Department of Entomology. [Project H-73-a].

UNUSUAL LARVAL MOSQUITO RECOVERIES FROM FIRE BARRELS

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Among the most important container mosquito breeding habitats around seaports such as Brownsville, Texas, are the barrels of water maintained for fire protection in cotton warehouses. These fire barrels are checked regularly for the presence of vector species, particularly *Aedes aegypti*, and control measures are applied as needed. *Aedes aegypti* may be produced in large numbers in such containers in the absence of control measures. Although the predominant species taken is *Culex pipiens quinquefasciatus*, we are continually impressed by the number of different species found.

Diverse aquatic habitats are likely to harbor characteristic species of mosquitoes; some are limited to a single peculiar breeding environment, while others are found in a great variety of aquatic situations. The ecological distribution of larvae in nature results largely from adult oviposition habits, rather than from inability of the larvae to develop normally in water with a wide range of physical and chemical properties (Bates, 1949). We have previously collected *Culex salinarius, C. coronator, C. tarsalis, C. p. quinquefasciatus, Culiseta inornata, Anopheles quadrimaculatus, A. crucians,* and *A. pseudopunctipennis* from fire barrels in Brownsville, Texas. These adults lay their eggs directly on water surfaces and the presence of their larvae in artificial containers of this type is not surprising. However, our recent recovery of three species of flood-water mosquitoes from fire barrels in a cotton warehouse is deemed of sufficient interest to report. On Oct. 6, 1960, six larvae of *Aedes sollicitans* and two of *Aedes taeniorhynchus* were taken from three fire barrels. A large number of the barrels were also breeding *C. p. quinquefasciatus*. Only a sample of the *Aedes* present was taken for determination. On Oct. 20, four *Aedes sollicitans* and one *Psorophora confinnis* were dipped from a single barrel. Three *Aedes sollicitans* larvae were obtained during a third visit Oct. 24. All were third or fourth instar.

These *Aedes* and *Psorophora* species normally oviposit on moist soil, with the embryos developing to the point of hatching and entering a resting stage until reactivated by flooding. This adaption to temporary ground water would normally pre-

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