

Confirmation of Aedes taeniorhynchus in Oklahoma

by

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ABSTRACT. A single female collected in 1971 confirms the presence of Aedes taeniorhynchus (Wiedemann) in Oklahoma. This species was also collected from inland localities in Arkansas, Louisiana and Texas.

During the 1971 Venezuelan equine encephalitis epizootic in Texas a U. S. Army sponsored surveillance program resulted in the collection, identification and processing of 501,992 mosquitoes comprising 51 species from Arkansas, Louisiana, Oklahoma and Texas (Eldridge et al. 1972). Although most of these specimens were pooled for virus isolation attempts, infrequent specimens were pinned and retained for further study. Included among the latter was a single female of Aedes taeniorhynchus (Wiedemann) from Oklahoma.

Hill et al, (1958) first reported taeniorhynchus in Oklahoma from Fourth U. S. Army collections made in Comanche and Oklahoma counties. More recent studies (Parsons 1965; Carpenter 1968; Parsons and Howell 1971) have cited this record, but Carpenter (1970) could not find the specimens which Hill et al. identified and suggested that further collections be made to confirm this state record. The female reported here confirms the Hill et al. (1958) record. This specimen was collected by CPT. David J. Boethel and SP5 Richard E. Shaver on August 11, 1971, in a CDC light trap supplemented with dry ice, at the northern edge of Ardmore, Carter County, Oklahoma. Dr. Alan Stone, Systematic Entomology Laboratory (USDA), Smithsonian Institution, examined this specimen in late 1971 and confirmed its identity. The specimen is now deposited in the Smithsonian Institution, USNM collection, and bears the following label: "Carter Co., Okla., 11 Aug. 1971, CDC light trap, V-MC-38-223."

Aedes taeniorhynchus is generally associated, in North America, with salt marshes adjacent to the Atlantic and Gulf coasts. Apparently this species is also able to utilize brine pools associated with oil drilling operations as a larval habitat, which probably explains its presence in Carter County, Oklahoma. Other inland specimens of taeniorhynchus were collected during the survey near El Dorado, Arkansas, Shreveport, Louisiana and Grandfalls (Ward Co.), Texas, all oil producing areas. Since arbovirus activity has been detected in taeniorhynchus (Hodapp et al. 1966; Sudia et al. 1971) the population levels of this species in oil producing areas bear watching.

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