

conditions. Thus it is possible for vegetation (i.e. *D. spicata*) and mosquito production to occur at lower elevations in these remote areas than it would be in areas which are more accessible to tidal water.

The fact that the evaluation of mosquito production potentialities by use of physical indexes may be complex in character, further emphasizes the value and significance

of vegetation as a general indicator of mosquito breeding sources.

SUMMARY. Observation of tidal action in sloughs on Little Tybee Island, Georgia indicate that elevation levels alone are not infallible indicators of the frequency or extent of tidal flooding in an area. Hydraulic action and marsh flora are factors of importance in influencing mosquito production at the same or different elevations.

THE DISCOVERY OF *CULEX ERYTHROTHORAX* DYAR IN TEXAS

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Culex erythrothorax Dyar was found for the first time in Texas during intensive mosquito collecting in the western part of the State in 1953 and 1954. The collecting was done in an irrigated area of the Southern High Plains in connection with encephalitis and irrigation-mosquito studies conducted jointly by the Communicable Disease Center, U. S. Public Health Service, and the Texas State Department of Health. During the two years, approximately 400,000 mosquitoes, representing 6 genera and 18 species, were taken in the light trap and evening biting collections. Among these mosquitoes were specimens of a golden-brown, dark-legged *Culex* which appeared distinct from all the species previously reported from Texas. The male genitalia of these *Culex* were comparable to those of specimens of *C. erythrothorax* Dyar furnished by the Bureau of Vector Control, California State Department of Public Health. Dr. Alan

Stone, U. S. National Museum, who examined genitalia slides of the west Texas specimens, also identified the species as *C. erythrothorax*.

C. erythrothorax was represented in the light trap material by a total of 84 adult specimens (Table 1). It was not present in the light trap collections taken at Hale Center, Hereford, and Kress in 1954, but one female was taken in a light trap at Abernathy on September 3 of that year.

In 1953, between August 5 and October 13, 12 *C. erythrothorax* were taken in twelve 15-minute biting collections at Lubbock, and 2 specimens were taken in ten 15-minute biting periods at Plainview. In 1954, only one *C. erythrothorax* was taken in ninety-eight 15-minute biting collections, all made in Plainview and vicinity.

In 1953, 8,000 fourth-instar larvae were identified from collections made in various habitats in the vicinity of Lubbock and Plainview. Among these larvae were 2 of *C. erythrothorax*, both collected on October 21 from permanent seepage pools along Yellow House Creek, near the eastern

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TABLE I.—Light Trap Collections of *C. erythrothorax*

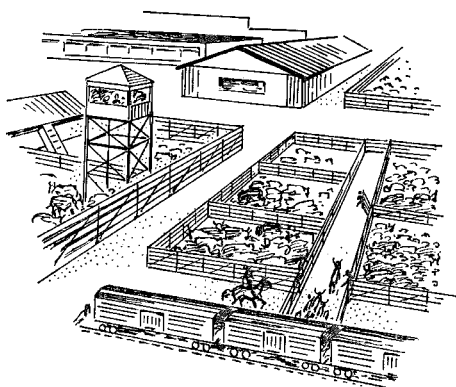
Locality	Year	Males	Females	Inclusive dates	No. of light traps	Periods of trap operation
Lubbock	1953	10	19	8/ 8-10/13	3	8/ 4-10/31
Lubbock	1954	9	13	6/27-10/ 4	1	4/26-10/28
Plainview	1953	2	18	8/ 9-10/17	2	8/ 4-10/31
Plainview	1954	4	9	5/ 8-10/18	5	4/27-10/28

outskirts of Lubbock. This breeding place, which contained luxuriant growths of both *Typha* and *Scirpus*, was located immediately adjacent to the site at which the biting collections in Lubbock were made. No larva of *C. erythrothorax* was found in the 1954 collections, which included 36,000 fourth-instar larvae from representative habitats in Plainview and vicinity, and 6,000 from Hereford and vicinity.

C. erythrothorax is reported from several localities in California by Freeborn and Bohart (1951, Bull. Calif. Insect Survey

1(2): 56), who also cite records from Mexico, Idaho, Nevada, and Utah. The west Texas collections therefore represent a considerable eastward extension of the known range in the United States.

SUMMARY AND CONCLUSION. *Culex erythrothorax* Dyar is reported for the first time from Texas. In view of the extensive mosquito collections made in west Texas during 1953 and 1954, and the small numbers of *Culex erythrothorax* taken, it appears that this species is rare in that area.

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