A Preliminary study of Culex mosquitoes attracted to a turtle in Trinidad, W.I.

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DURING the course of investigations into a possible outbreak of equine encephalitis on a horse farm located in the Cumuto-Wallerfield area, Trinidad, W.I., a "galap" turtle, *Rhinoclemmys punctularia* (Daudin) was collected. *Rhinoclemmys punctularia* is distributed in northern South America, east of the Andes (Pritchard 1979). In Trinidad, it is widely distributed throughout the island with numerous collections occurring in the Aripo-Wallerfield area and Guayaguayare Forest (Underwood 1963, Chadee et al. 1983-1984).

Turtles have been known to harbour both eastern and western equine encephalomyelitis (EEE, WEE) viruses in Northern America (Crans and Rockel 1968, Nolan et al 1965) and numerous mosquitoes have been collected from turtle baits (Crans and Rockel 1968, De Foliart 1967, Haynes 1961, Haynes 1965). In addition, Nolan et al. (1965) and Haynes (1965) reported Aedes canadensis Theobald feeding on the Painted turtle, Chrysemy's picta (Schneider) and on the Eastern Box turtle, Terrapene carolina (L) in Maryland and Southern Illinois.

During the present study, mosquitoes were collected from the woodlands bordering the horse farm during August 1983. The vegetation consisted of Moriche palms (Mauritia setigera (L), cocorite palms (Maximiliana caribaea) and fatpork (Chrysobalanus icaco) fringing the farm in association with a heavy undergrowth of the sedge, Scleria bractaeda (Beard 1946).

On 8 August 1983, the turtle was collected and was subsequently exposed for 24 hours in a Trinidad No. 17 trap (Davies 1971) on the 9 August 1983. All mosquitoes collected were aspirated into mosquito jars and transported to the Caribbean Epidemiology Centre for identification. The collections were as follows:- Trinidad 13 of Culex declarator Dyar and Knab, Cumuto-Wallerfield. 10 vii.1983. D.D. Chadee, 10 Culex corniger Theobald, same data. All specimens were unengorged and were deposited in the Insect Reference Collection at the Caribbean Epidemiology Centre (CAREC).

The collection of Cx: corniger in the turtle-baited trap is interesting as this species was not previously collected from reptilian hosts. Aitken et al (1968) reported the collection of two adult Cx. corniger from Bush Bush Forest, Trinidad, W.I. but not from the traps with the two reptilian baits — Turpinambis sp. and Ameiva ameiva (L). One possible reason for our collections in this area may be related to the habitat preferences of Cx. corniger and Cx. declarator, for existing collection records indicate that these species appear to favour open to partially shaded areas. Culex corniger has been collected attacking man at 1300 hours in the Turure Forest, Trinidad, W.I. (Heinemann et al 1980). These preliminary observations show that Cx. corniger and Cx. declarator may be attracted to turtles though there is no record, yet, that they engorge. Culex corniger and Cx. declarator have been found naturally infected with Venezuelan equine encephali-

tis in the neotropics (International Catalogue of Arboviruses 1975) so disease transmission from turtle to man is a distinct possibility. However, further study on the reptilian-vector relationship is suggested.

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