

DISTRIBUTION OF MOSQUITOES (DIPTERA: CULICIDAE)
ON THE EAST FLANK OF MAUNA LOA VOLCANO, HAWAI'I

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ABSTRACT

Through a network of sampling stations from sea level to 6000 feet (2000 m), two species of mosquitoes, Culex quinquefasciatus and Aedes albopictus, were collected from the east flank of Mauna Loa volcano. These collections expanded the altitudinal distribution for C. quinquefasciatus from 900 feet to 4500 feet (300 m-1500 m). A. albopictus was recovered only below 900 feet (300 m). Upper elevation distribution of C. quinquefasciatus was restricted to kīpukas. No difference in egg production was observed with increasing altitude during this study. Breeding sites on the east flank of Mauna Loa were primarily tree holes rather than the ground pools and large artificial containers used by this species in other areas of the South Pacific. The "mosquito-free sanctuary" above 1800 feet (600 m) noted for the island of Kaua'i does not exist on the east flank of Mauna Loa.