

A1 ECOLOGY OF THE JAPANESE ENCEPHALITIS VECTOR
CULEX TRITAENIORHYNCHUS

F.P. Amerasinghe and N.B. Munasinghe
Dept. of Zoology, University of Peradeniya

Culex tritaeniorhynchus Giles, is well known to be an important vector of Japanese B Encephalitis in the South and Southeast Asian Region and is the only mosquito to be directly implicated in the transmission of this disease in Sri Lanka at present.¹ Although this species has been widely studied in other areas of its range, published information relating to its ecology in Sri Lanka is not available.

A study on the adult ecology of this species in the Kandy area over a two-year period (1984-86) showed *Cx. tritaeniorhynchus* to be prevalent mainly during October - December, with a smaller secondary peak of abundance in May - June. Adult females were collected most abundantly from bovid bait, with collection rates markedly higher than from other survey methods such as human bait, resting collections (indoors, outdoors) and light traps. Comparative catches showed a bovid : human biting index of 31:1 and an outdoors : indoors biting index of 3:1, indicating that the species is mainly zoophilic and exophilic in its habits. Biting activity occurred throughout the night, with peaks occurring in the hour after sunset and before sunrise.

This work was funded by the United States National Academy of Sciences through a grant from USAID.

Reference

1. Peiris J.S.M., Perera L.P., Amerasinghe F.P. and Munasinghe N.B. (1986) Studies on arbovirus infections in Kandy and Mahaweli System C areas. Proc. Sri Lanka Medical Association, 99 61