

Food of *Anopheles culicifacies* and *Anopheles varuna* larvae in a dry zone stream in Sri Lanka

There have been no previous studies on the natural food of larval anopheles mosquitoes in Sri Lanka. The present study investigated the larval food of *Anopheles culicifacies* and *An. Varuna* (vectors of malaria in the country) breeding in a dry zone stream habitat in the Huruluwewa watershed, Anuradhapura District, North Central Province. Larvae were collected from streambed pools during July 1998. A fluorochromatic stain 4,6 diamidino-2-phenylindole (DAPI) was used to stain the larval gut contents. Quantitative estimates of different categories of food types were made by analyzing the gut contents of 33 *An.culicifacies* (13 second instars, 20 fourth instars) and 50 *an varuna* (19 second instars, 31 fourth instars). Detritus was the most frequent food type, with mean percentage occurrence ranging from 79.9-94.1 in *An. Culcifacies*, and 77.2-79.9 in *An varuna*. Other food types included bacteria (cocci, rods), filamentous algae, diatoms and desmids. Detritus ranged from 6.8×10 to 1096.6×10 per gut, bacteria from 0 to 105.5×10 , filamentous algae from 0 to 3.9×10 , desmids and diatoms from 0 to 3.7×10 in the two species, there were statistically significant differences in the proportions of detritus, cocci, and diatoms in the guts of *An. Culicifacies* instars.