

Breeding of *Anopheles culicifacies* in cemented tanks of ornamental fishes

Anopheles culicifacies is the major vector of malaria in Sri Lanka. This species is well distributed in dry zone and most parts of the intermediate zone but rarely found in wet zone. It readily breeds in river/ stream margins and bed pools, rock pools, hoof prints and shallow wells.

An out break of malaria was reported from Handapanagala, Padukka about 35 km away from Colombo during latter part of 1998. Larval surveys were carried out to identify the responsible malaria vector in this area from December 1998 to March 1999.

Over 1000 cemented tanks (in varied sizes of 0.5 X 0.5, 1 X 1, 2.25 X 2.25, 3 X 5 m) and over 30 mud ponds in different sizes had been used for ornamental fish (Mostly Guppies and few other species) breeding in this area. Five hundreds and eighty dips were taken from tanks having fish and 375 from the tanks without fish. Larval density of early and late instars in cemented tanks with fish was 3.97 and 0.69 per 100 dips respectively.

Similar figures in cemented tanks without fish were 469 and 3.2. One hundred percent of identified larvae from tanks with fish (Other than Guppies) and 78 % from tanks without fish were *An.culicifacies*. Total larval density collected from paddy fields and rock pools were 35.7 and 30.0 per 100 dips respectively. From identified larvae of these collections 3.2% and 29.4% were *An.culicifacies*. *An.culicifacies* was not found from other breeding places.

Major breeding place for *An.culicifacies* in this area were cemented tanks. Rock pools and paddy fields were also important breeding places.