

Species to Control Mosquito Larvae

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A multitude of mosquito larvae control strategies have been developed and are currently used in different parts of the world. The use of fish in mosquito control has been well-known method. The present study was carried out during the period of November 2009 to March 2011 to evaluate the larvivorous preference and predatory potential by selected fishes GIFT (Genetically Improved Farm Tilapia), *Poecilia reticulata* and *Amblypharyngodon* sp with special reference to *Aedes*, *Anopheles* mosquito larvae and fish food pellets under laboratory conditions with aims of its application in field conditions in controlling mosquito population. The test fishes were collected from Unnichai reservoir, Anti-malarian Campaign, Chenkalanda and Centre for Aquatic Resource Management Hatchery, Eastern University, Sri Lanka. The Impact of larvivorous fish on mosquito larvae was assessed by counting the larval density before and after the application of fish. Three replicates were conducted for each trial. The consumption rates of fishes were found higher towards *Aedes* larvae than *Anopheles* larvae and artificial fish pellet. Average larval consumptions of the three fish species were statistically compared by one way ANOVA at 95% confidence level. The average consumption rate was 921, 624 and 211 per day of GIFT, *Amblypharyngodon* and *Poecilia* fish respectively. GIFT with 3.5g body weight shows a greater feeding affinity for *Aedes* with the predatory index of 263. The study suggests that this fish could be used, after careful field trial, as a promising and sustainable biological control agent in mosquito-borne diseases especially in Dengue.