Abstract

The study on the effect of fenthion (Baytex 50 EC) spraying on the mosquito populations breeding in soakage pits, a common breeding site of Culex quinquefasciatus, vector of Bancroftian Filariasis in Sri Lanka was determined along with the fenthion concentration in the soakage pit water during the spraying cycles.

The total number of life stages found in the sprayed pits were significantly low compared to the unsprayed pits except on the last day of the spraying cycle. The sprayed pits also contained significantly lower numbers of life stages, larval instars and pupae, indicating that the spraying reduce the numbers of adult vectors emerging from the sprayed pits.

There was a good correlation between the days after spraying and the larval and pupal population densities in the sprayed pits as opposed to the unsprayed pits. The concentration of Fenthion (Baytex 50EC) declined approximately 1000-fold between the day of spraying and the sixth day after spraying.

Both the larvae and adults of Culex quinquefasciatus vectors showed resistance to all insecticides except to temephos and permethrin.