

Field Comparison of Insect Growth Regulator, Pyriproxyfen, Temephos and *Bacillus thurengiensis israyalensis* (Bti) against Anopheline Malaria Vectors in River Bed Pools

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River and stream bed pools are among the major breeding sites for larvae of malaria vectors in Sri Lanka. Therefore a study was carried out to select an effective and convenient method that could be used to control malaria vector mosquitoes breeding in river and stream bed pools. A small scale field trial was carried out at Kandalama irrigation settlement scheme which is situated in the dry zone of Sri Lanka using five river and stream bed pools for each treatment with five pools as controls. The treatments were insect growth regulator, Pyriproxyfen (0.01 mg/L), temephos (0.112 kg a.i./ha) and *Bacillus thurengiensis israyalensis*. The emergence inhibition of anophelines in each treatment was monitored using emergence bucket bioassays. A single application of Pyriproxyfen gave prolong inhibition of emergence of anopheline adults for up to 182 days which included 60 days, a period during which the pools had dried. But temephos and Bti inhibited emergence of adults 10 and 7 days and required 7 and 11 times applications respectively during the period of 182 days. Therefore, application of pyriproxyfen could be incorporated as an effective and convenient larval control method to control larvae of malaria vectors in river and stream bed pools of Sri Lanka.

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