

Laboratory Evaluations of Insect Growth Regulator, Pyriproxyfen against *Culex pipiens molestus* and *Culex pipiens molestus* (Diptera, Culicidae) Larvae

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The granular formulation of 0.5% pyriproxyfen (Sumilarv[®]) was tested on evaluation of activity of emergence inhibition against *Culex pipiens molestus* and *Cx. pipiens pallens* at a laboratory. The laboratory experiment for mortality of mosquito larvae to pyriproxyfen was conducted in polyethylene aquaria. Ten liter water in each aquarium (20 liter in volume) without a lid was prepared in a photoperiod (14L:10D) and a temperature ($26 \pm 1^\circ\text{C}$) controlled insect rearing room. Emergence inhibition rates at concentrations of 0.01, 0.05 and 0.1 ppm were from 56% to 57% against *Cx. pipiens molestus* in one week after treatment whereas the rates were 69% in 4 weeks after treatment and 96% in 6 weeks after treatment at 0.1 ppm. In the test of *Cx. pipiens pallens*, mortality rates at the same concentrations were from 73% to 81% in one week after treatment whereas the rates were 72% in 4 weeks after treatment and 91% in 6 weeks after treatment at 0.1 ppm. However, treatment of pyriproxyfen at the concentrate rate of 0.1 ppm did not produced 100.0% emergence inhibition rates against two *Culex* species throughout test period.