

Effect of Acute Dose of Mobile Phone Radiation on Life Cycle of the Mosquito, *Culex univittatus*

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Abstract : Due to the increasing usage of mobile phone, experiments were designed to investigate the effect of acute dose exposure on the mosquito life cycle. 50 tubes (5 ml size) containing 3 ml water and a first instar larva of the mosquito, *Culex univittatus* were put between two mobile cell phones switched on talking mode for 4 continuous hours. A control group of tubes (unexposed to radiation) were used. Larval and pupal durations were calculated. Furthermore, adult emergence and sex ratio were observed for both treated and control larvae. Results indicated that the employed dose of radiation reduced total larval duration to about half the value of control. 1st, 2nd, 3rd and 4th larval durations were reduced significantly by mobile radiation when compared to controls. Meanwhile pupal duration was elongated significantly by mobile radiation when compared to control. Sex ratio was significantly shifted in favor of females in the case of radiated mosquitoes. Successful adult emergence was decreased significantly in the case of radiated insects when compared to controls. Molecular studies to investigate the effects of mobile radiation on insects and other model organisms are going on.

Keywords : mosquito, mobile radiation, larval and pupal durations, sex ratio

Conference Title : ICE 2015 : International Conference on Entomology

Conference Location : Penang, Malaysia

Conference Dates : December 03-04, 2015