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Co-occurrence of predatory *Lutzia (Metalutzia) fuscana* larvae with *Aedes albopictus* (Diptera:Culicidae) larvae at Thitthagalla in Galle District, Sri Lanka

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Biological control of vector mosquitoes is a very important concept in mosquito control programmes. Predatory mosquitoes are the most important biological control agents as they usually coexist with other mosquito larvae especially in natural habitats compared to urban or semi urban habitats. A survey on predatory mosquito larvae associated with vector mosquitoes was carried out in Galle District of the Southern Province of Sri Lanka. All potential breeding habitats of *Aedes albopictus* such as domestic and peri-domestic water storage containers, cement tanks, ponds, ditches and overhead tanks were examined in 100 premises in selected sites in Thitthagalla area, Galle. The containers which were positive for predatory *Lutzia (Metalutzia) fuscana* with vector *Ae. albopictus* larvae were recorded. The container index for both species were calculated and species identification of the collected mosquitoes was confirmed in the laboratory using standard taxonomic keys for mosquito adults and larvae. Weather data during the sampling periods were also recorded. Container indices of water storage cement tanks and tyres for *L. fuscana* were 50% and 32% while the respective values for *Ae. albopictus* larvae were 50% and 72%. *L. fuscana* larvae in cement containers showed positive linear correlation with temperature ($r= 0.713$, $P<0.01$), a negative linear correlation with relative humidity ($r= -0.419$, $P<0.01$) and but no linear correlation with the rain fall ($r= -0.200$, $P>0.05$). Predatory potential of *L. fuscana* needs to be studied further for effective biological control of *Ae. albopictus* larvae in Galle district.

Keywords: *Aedes albopictus*, container index, *Lutzia (Metalutzia) fuscana*

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