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### Distribution of mosquito species in Jaffna District

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Mosquitoes are the major contributors to vector bone disease transmission in Sri Lanka. They prevail in all parts of the island and are adapted to breed in different breeding sites. *Culex tritaeniorhynchus*, *Aedes aegypti* *Anopheles culicifacies* and *Culex quinquefasciatus* are the most important primary vector species along with some secondary vector species reported so far. During the last 12 months 728 suspected cases were reported in Jaffna out of the total 30,291 reported dengue cases in Sri Lanka. In this background a survey was carried out in 4 major administrative divisions viz Valigamam, Vadamarachchi, Thenmarachchi and the Islands in Jaffna district from November 2011 to November 2013. Collection techniques such as cattle baited net, cattle baited hut, hand collection, exit window trap, ovitrap and larval collection were used to collect mosquitoes. Adult and larval stages of the collections were identified using standard keys. *Ae.aegypti* and *Ae. albopictus* were collected in both brackish water (1-18ppt) and fresh water (0 ppt) containers and ovitraps. *Ae.vitatus* larvae were collected only in fresh water containers. Larvae of *Lutzia fuscana*, *An. subpictus*, *An. barbirostris*, *An. culicifacies*, *An. Varuna* and *Culexsitiens* were collected in fresh and brackish water bodies in different salinity range (2-68ppt). Larvae of *Toxorhynchites* sp *An. vagus*, *An. annularis*, *An. pallidus*, *An.nigerrimus*, *An. barbumbrosus*, and *An. varuna* were collected only in fresh water bodies. Among the anopheline mosquitoes collected *An. subpictus* (83.5%), *An. Culicifacies*(3%), *An.vagus*(0.3%), *An. pallidus*(2%), *An. nigerrimus*(6%), *An. annularis*(4%), *An.jamesi*(0.6%), *An. peditaeniatus*(0.3%), *An. barbirostris*(1%), *An. tessellatus*(0.3%), and *An. varuna*(3%) were recorded. *Armigeres subalbatus*, *subalbatus*(100%) was the only species among *Armigeres* group, Among the Culicine mosquitoes *Culex quinguefasciatus*(4%), *Culex sitiens*(49%), *Culex tritaeniorhynchus*(6%), *Culex gelidus*(1%), and *Culex fascocephala*(40%) were recorded. Other predatory species such as *Toxorhynchites*(1), *Lutziafuscana*(2) were also collected. Among the total collections *An. subpictus* (83.5%) was the predominant in anophlione species and *Culex*