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Most productive and prevalent breeding habitats of *Aedes aegypti* and *Ae. albopictus* (pupae) in the Kandy and Nuwara Eliya districts of Sri Lanka

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Breeding habitats of *Aedes aegypti* and *Ae. albopictus* in the Kandy and Nuwara Eliya districts were studied from April 2006 to April 2007. Surveys of *Aedes aegypti* and *Ae. albopictus* immatures were carried out in 101 localities in the Divisional Director of Health Services (DDHS) areas of Akurana, Doluwa, Gampola, Gangawatakorale, Hanguranketha, Kundasale, Medadumbara, Nawalapitiya, Pathadumbara, Pathahewaheta, Poojapitiya, Tumpane, Udunuwara, Werallagama, Yatinuwara and in

the Kandy Municipal Council area. During each survey, all potential indoor and outdoor breeding habitats of *Ae. aegypti* and *Ae. albopictus* were examined. *Aedes* larvae and pupae, 10 of each, were randomly collected from each mosquito immature positive habitat by dipping, pipetting or straining (if a particular habitat had < 10 larvae/ pupae, all larvae/ pupae were collected). Larvae and emerged adults from pupae were identified using larval and adult identification guides. Twenty two (22) types of container habitats were positive for *Ae. aegypti* and *Ae. albopictus* larvae. Of these 14, were positive for *Ae. aegypti* and or *Ae. albopictus* pupae. Pupal container index (percentage of containers positive for *Ae. aegypti* and / or *Ae. albopictus* pupae) of different types of container habitats were: metal ware (11.59%), unprotected plastic tanks (8.33%), roof gutters (7.14%), tyres (5.69%), polythene bags/sheets (3.85%), ornamental ponds (2.97%), coconut shells (2.67%), refrigerator trays (1.87%), water storage barrels (1.73%), clay pots (1.48%), water storage cement tanks (1.41%), tins (0.75%), leaf axils (0.72%) and discarded plastic containers (0.60%). However, water storage cement tanks (35.09%), water storage barrels (18.45%), discarded plastic containers (15.43%), refrigerator trays (7.13%), clay pots (5.40%) and tyres (4.91%) constituted the majority (86.41%) of potential breeding sites of *Ae. aegypti* and *Ae. albopictus.* Management of mostly prevalent and pupae positive containers would reduce the adult *Ae. aegypti* and *Ae. albopictus* density and consequently the dengue and dengue haemorrhagic fever incidence in the Kandy and Nuwara Eliya districts.

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