Validation of Aedes larval surveillance against Aedes ovitrap surveillance in monitoring Aedes aegypti (linnaeus) and Aedes albopictus (skuse) populations in a Colombo suburb.

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The objective of the study was to introduce a new technique to monitor dengue vector breeding and to compare this technique with that in current use in Sri Lanka. The study was carried out from 15 th July 1995 to 15 th October 1995 in the Dehiwala Medical officer of health area. The study showed that the ovitrap surveillance technique was more sensitive and more cost-effective than larval surveillance in detecting aedes breeding both in indoors and outdoors, in houses in a dengue transmission area in Sri Lanka. This indicates that the former technique has a higher predictive value as a warning signal in dengue epidemics for use in control programs. However, the larval surveillance is of value as it showed the types of container habitats and as such is important in health education programmes for the prevention of aedes breeding. Results also showed ae. albopictus to be the predominant species in Colombo suburbs. Thus vector competence studies to define the vectorial capacity of this species for dengue transmission under local conditions is indicated.