The efficacy of water extract of the sugar apple seed (Annona squamosa, L) as a larvicide against Aedes aegypti mosquito

JURNAL KEDOKTERAN YARSI 13 (1) : 056-060 (2005)

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ABSTRACT Mosquito-borne disease controle with chemical insecticide until now is still used although the risk to environmental polution and insect resistance is still high. WHO recommended to develop botanical insecticide vector control. The aim of this study is to assay the effect of water extract of sugar apple seed as larvicide against Aedes aegypti mosquito. In this study, the efficacy as a larvicide, applying several series of concentration (%) of the water extract of the sugar apple seed extract (WESAS) which were exposed to the larvae of Aedes aegypti for as long as 24 hours and the percentage of the mortality rate was examined by counting the larvae and analyzed according to the Lethal Concentration 50 (LC50) conducting the probit analysis. The LC50 and LC90 (%) as larvicidal effects of water extract of the sugar apple (Annona squamosa L) showed a percentage of as high as 1.02% and 1.08% respectively. As a conclusion could be drawn that WESAS, indeed had a larvicidal effect on Ae. aegypti.