A note on the larvicidal efficacy of saponin constituted crude extracts of plant and animal origin against Aedes aegypti l.

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Abstract

Natural products of plant and animal origin are preferred over synthetic insecticides due to their eco-friendly nature. The use of natural products and their derivatives are being advocated for the control of insect vectors of human diseases. The crude extracts of the fruits of Sapindus emarginatus (a medicinal plant) and the skin of Holothuria atra (a nonedible sea cucumber) were tested under laboratory conditions against Aedes aegypti, a vector of dengue and chikungunya, for their larvicidal properties. Bioassay experiments carried out with crude extracts of S. emarginatus and H. atra revealed LC 50 values of 92.9 and 68.82 ppm respectively. Both crude extracts showed positive result for the presence of saponin. This preliminary study suggests that not only plant but also animal sources can be effectively used to produce less expensive and safe compounds to control mosquito vectors in Sri Lanka.

Author keywords

Aedes aegypti; Holothuria atra; Larvicide; Sapindus emarginatus; Vector control

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