ACTIVITY OF EXTRACT FROM *MYRACRODRUON URUNDEUVA* HEARTWOOD AGAINST FOURTH-STAGE LARVAE OF *AEDES AEGYPTI*

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Aedes aegypti is the vector of diseases as dengue and yellow fever. Plants are potential sources of natural compounds to control insects. *Myracrodruon urundeuva* heartwood is resistant to insects. Plant lectins, proteins that bind carbohydrates, are involved in plant defensive mechanisms. This work aimed to evaluate larvicidal effect on *A. aegypti* fourth-stage larvae (L4) of an extract from *M. urundeuva* heartwood containing lectin. Saline (0.15 M NaCl) extract (10%, w/v) was evaluated for protein concentration and hemagglutinating activity (HA). Inhibition of extract HA used N-acetyl-glucosamine monosaccharide. Larvicidal concentrations of proteins in extract required to kill 10% (LC_{10}), 50% (LC_{50}) and 90% (LC_{90}) of larvae within 48 h were determined. Dilutions of extract stock solution were prepared to provide a working concentration range. Triplicate assay was carried out for every sample concentration in a final volume of 20 mL, each with 20 L4 larvae. Extract showed high protein concentration (25 mg/mL) and HA (titer of $32{,}768^{-1}$). HA was inhibited by N-acetyl-glucosamine (titer of $1{,}024^{-1}$). LC_{10}, LC_{50} and LC_{90} were 53%, 59% and 66%, respectively. Previous evaluation revealed total absence of alkalis and terpenoids and presence of polyphenols (leucoantocianidins and proantocianidins). Thus, larvicide activity may be related with presence of lectin; larvicide effect of isolated lectin is in progress.

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