Larvicidal Activity of *Myracrodruon urundeuva* Leaf Lectin (MuLL) on *Aedes aegypti* (Diptera, Culicidae)

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Aedes aegypti transmits etiologic agents of yellow and dengue fevers. Dengue outbreaks are re-emerging in Brazil. Vaccine for dengue virus is not available and vector control is essential to minimize dengue incidence. Lectins were isolated from *Myracrodruon urundeuva* bark (MuBL), and heartwood (MuHL). MuBL and MuHL showed insecticidal activity on *A. aegypti* fourth-stage larvae. A lectin was also isolated from leaves (MuLL) and in this work we evaluated the larvicidal activity of MuLL on *A. aegypti* larvae. Leaf extract (LE; 10%, w/v) was obtained after homogenization of leaf powder in 0.15 M NaCl (16 h; 4 ºC). LE was treated with ammonium sulphate and the 60-80% precipitate was chromatographed on chitin column equilibrated with 0.15 M NaCl; MuLL was eluted with 1.0 M acetic acid. Larvicidal activity of LE and MuLL on fourth-stage larvae was detected and purification of lectin promoted increment in larvicidal effect. The lethal concentrations (LC) of proteins required to kill 16% (LC_{16}), 50% (LC_{50}) and 84% (LC_{84}) of larvae in 24 h were 8.1, 10.9 and 13.7 $mg.mL^{-1}$ for LE and 0.140, 0.202 and 0.264 $mg.mL^{-1}$ for MuLL. In conclusion, the effect of MuLL on survival of *A. aegypti* larvae does indicate the potential use of *M. urundeuva* leaves for dengue control by impairment of biological cycle of the vector.

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