

INSECTICIDE ACTIVITY OF LECTIN PREPARATIONS FROM
MYRACRODRUON URUNDEUVA TISSUES ON *NASUTITERMES* (ISOPTERA,
TERMITIDAE)

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Lectins, carbohydrate recognition proteins, are involved in plant defensive mechanisms against herbivorous. *Myracrodruon urundeuva* (aroeira) has a hard and imputrescent wood; febrifuge, antirheumatic and antiinflammatory activities were detected in leaves. *Nasutitermes* are termites that attack edifications and plants. The aim of this work was to evaluate the insecticide effect of lectin preparations from *M. urundeuva* tissues. Ammonium sulphate fractions (F) were obtained from bark (40% supernatant, F_B), heartwood (40-60%, F_H) and leaves (60-80%, F_L). Hemagglutinating activity (HA) was evaluated with rabbit erythrocytes. HA inhibition assay was performed with monosaccharides and glycoproteins. *Nasutitermes* (16 workers and 4 soldiers) were transferred to vessels (4.0 x 5.5 cm) containing a paper disk soaked with 1 mL of fractions. NaCl (0.15 M) was used as negative control (NC). Assays were made in triplicate. F_B and F_H HA were inhibited by N-acetyl-glucosamine. HA of F_L was mainly inhibited by asialofetuin. After 48 h, survival rate for workers was 75%±6.2 in NC; contact with all fractions resulted in death of all workers. Soldier survival rate of 100% was observed in NC. All soldiers died after 24 h of F_B and F_H contact; F_L induced 100% of mortality (48 h). In conclusion, *M. urundeuva* tissues showed insecticide activity against *Nasutitermes*.

Supported by: CNPq and CAPES.

Key words: aroeira, insecticide activity, lectin, *Nasutitermes*.