ANTIFUNGAL ACTIVITY OF A LECTIN PREPARATION FROM *MYRACRODRUON URUNDEUVA* HEARTWOOD

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Lectins, hemagglutinating proteins that bind carbohydrates, have been considered to participate in plant defense mechanisms. *Myracrodruon urundeuva* heartwood is resistant to microrganisms. The aims of this work were to evaluate hemagglutinating activity (HA) and antifungal effect of a lectin preparation from *M. urundeuva* heartwood. Extract in 0.15 M NaCl (10%, w/v) was fractionated with ammonium sulphate and a 40-60% fraction (F_1) was obtained. F_1 HA was performed on microtitre plates using rabbit erythrocytes. HA inhibition was evaluated with monosaccharides. Antifungal activity was assayed with *Fusarium decemcellulare*, *F. lateritium*, *F. oxysporum*, *F. solani* and *F. verticiloides*. F_1 (20 µL) was added to a Petri plate in YNB medium; a fungal mycelium disk (F=0.625 cm) was then disposed in plate. Negative and positive controls were used (0.15 M NaCl and 10 ppm Cercobin). After incubation (28 ºC, 72 h) antifungal activity was evaluated by reduction of fungi growth halo. F_1 specific HA (3,181) was inhibited by N-acetylglucosamine. High percentage inhibition values were obtained to *F. solani* (70%), *F. decemcellulare* (53%) and *F. oxysporum* (51%); *F. lateritium* growth was not inhibited by F_1. In conclusion, lectin preparation from *M. urundeva* heartwood potently inhibited *Fusarium* growth.

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