

EFFECT OF LECTIN PREPARATIONS FROM *MYRACRODRUON URUNDEUVA* BARK AND LEAVES ON *FUSARIUM* GROWTH

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Lectins, proteins that bind carbohydrates, can participate in plant defensive mechanisms. *Myracrodruon urundeuva* has leaves with febrifuge and antiinflammatory activities; the wood is resistant to microorganisms. This work evaluated the effect of lectin preparations from bark and leaves on *Fusarium* growth. Ammonium sulphate fractions from bark (40% supernatant, F_B) and leaves (60-80%, F_L) were obtained. Hemagglutinating activity (HA) was performed with rabbit erythrocytes; HA inhibition assay used monosaccharides and glycoproteins. F_B and F_L containing respectively, 270 µg and 625 µg of protein, were added to a Petri plate with potato-dextrose-agar medium. After, a fungal mycelium disk (*F. decemcellulare*, *F. lateritium*, *F. moniliforme*, *F. oxysporum* and *F. solani*) was disposed in the middle of plate. Negative (0.15 M NaCl) and positive (10 ppm Cercobin) controls were used. The reduction of growth halo after incubation (72 h, 28 °C) revealed antifungal activity. F_B and F_L HA were inhibited by N-acetylglucosamine and asialofetuin, respectively. F_L inhibited all fungi, mainly *F. decemcellulare* (43%±3.2). The best F_B antifungal activity was obtained to *F. solani* (35%±0.0). *F. oxysporum* growth was reduced only in 16%±2.8 with F_L and 10%±2.6 with F_B. In conclusion, lectin of different tissues from *M. urundeuva* showed distinct effect on growth of *Fusarium* species.

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Key words: *Fusarium*, lectin, *Myracrodruon urundeuva*