

ANTIFUNGAL EFFECT OF BMOLL (*BAUHINIA MONANDRA* LEAVES) AND CLAVELL (*CLADONIA VERTICILLARIS* LICHEN) LECTINS ON *FUSARIUM* SPECIES

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Lectins are carbohydrate recognition proteins with important applications in biological and biotechnological researches. Antifungal effect of BmoLL and ClaveLL pure lectins were evaluated on *Fusarium* species. BmoLL (purified from *Bauhinia monandra* leaves) and ClaveLL (isolated from *Cladonia verticillaris* lichen) were applied on petri plate surfaces containing 10 ml of Yeast Nitrogen Base (YNB) agar medium; a fungal mycelium disk containing different *Fusarium* species (*F. solani*, *F. oxysporum*, *F. moniliforme*, *F. decemcellulare*, *F. lateritium*, *F. fusarioides* and *F. verticiloides*) was placed in the middle of plates. Lectin buffers and Cercobin constituted the negative and positive control, respectively. Plates were incubated at 28 °C for 72 h and fungi growth halos were measured. BmoLL inhibited strongly the growth of *F. solani* (72.5 %) and *F. lateritium* (57.15 %); *F. fusarioides* (27.8 %), *F. moniliforme* (24 %) and *F. verticiloides* (14.3 %) were less inhibited. ClaveLL showed antifungal activity to *F. verticiloides* (20 %), *F. fusarioides* (17.4 %) and *F. moniliforme* (11.1 %). The lectins, fungal growth inhibitors from different *Fusarium* species, will be evaluated with other fungal species parasites from plants and humans.

Keywords: lectin; antifungal activity; *Bauhinia monandra*; *Cladonia verticillaris*; *Fusarium*.