

EFFECTS OF THE LECTINS FROM *DIOCLEAE VIOLACEAE* (DVL), *TALISIA ESCULENTA* (TEL) AND *DOLICHOS LABLAB* (DLL) SEEDS ON PHYTOPATHOGENIC BACTERIA

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Phytopathogenic bacteria may infect a broad spectrum of plant species, causing great loss in the crops. Lectins and lectin-like proteins may inhibit bacterial mobility and/or growth. The objective of this study was to verify the effect of three lectins named DVL, TEL and DLL, on different species of phyto-bacteria: *Pectobacterium chrysanthemi*, *Pseudomonas syringae* pv. *garcae*, *Bacillus licheniformis* and *Clavibacter michiganensis*. The proteins were purified through classic chromatography methods. Aliquots of 100 µL of each bacteria suspensions were inoculated into flasks containing 3 mL of LB Broth medium and 100 µg of each lectin, at different concentrations (n=3). After incubation periods (2h – 22h), the bacterial growth was compared with the control, estimated by absorbance at 620 nm. The studies showed no significant effect by DVL and DLL. However, assays using TEL, showed a decrease of 20% on *P. chrysanthemi* and 48.2% on *P. syringae*, after 4 and 8 hours of incubation, respectively. Additional studies about the interactions between lectins and bacteria, may reveal new perspectives on the potential of *T. esculenta* lectin, to be used as control agent for phyto-bacteria. Support: CNPq, FUNDECT, FINEP.