

PURIFICATION OF A LECTIN FROM *PLATYPODIUM ELEGANS* SEEDS.

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Lectins are proteins or glycoproteins of non-immune origin that bind reversibly and specifically to carbohydrates. They are intensively studied in the leguminous plants, however there is no report of lectins from the genre *Platypodium*. Our objective was purify a lectin from seeds of *Platypodium elegans*. The seeds were processed and submitted to extractions in various solutions. Hemagglutinating activity (H.A.) was observed using the supernatants, obtained from the extractions, using different erythrocytes. Concentration of solved proteins was observed according to Bradford. The extract with the major H.A. was submitted to carbohydrates specificity tests with different sugars. The purification of the lectin was performed using chromatographic methods in three different columns; Chitin, DEAE-Sephacel and SP using HPLC. The fractions were analyzed regarding H.A., SDS-PAGE, and concentration. The extract with major H.A. was the saline solution. Saline extract was detected a manose-glicose binding lectin. In the chitin chromatography two active fractions were obtained and using the high concentration fraction in DEAE chromatography and sequentially in SP chromatography. Two fractions in each chromatography were obtained but just one fraction of each showed H.A. and sequentially used. The fractions analyzed by SDS-PAGE showed progressively homogeneity. Using the reported protocol was obtained a purified lectin and is opened the possibilities to future biochemical characterizations.

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