PURIFICATION OF A LECTIN FROM ALBIZIA LEBBECK SEEDS.

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Lectins are proteins or glycoproteins of non-immune origin that bind reversibly and specifically to carbohydrates. They are responsible for the recognition of glycans inside and outside their hosts. Our objective was to purify partially a lectin from seeds of Albizia lebbeck. The seeds were processed and submitted to extractions in a solution of NaCl 0.15M. The extract was centrifuged, the supernatant was dialyzed against distilled water, centrifuged again and the second supernatant was lyophilized. Hemagglutinating activity (H.A.) was observed using the lyophilized material against rabbit erythrocytes. The purification was performed using ions exchange chromatographic methods in two different columns. First a chromatography was performed on a DEAE column using the lyophilized material. And the second was performed using the DEAE fraction with H.A., on a SP column in a HPLC. The fractions were analyzed regarding H.A. and SDS-PAGE. The DEAE fraction with H.A. was submitted to carbohydrates specificity tests with different sugars. The DEAE fraction with H.A. was the non-retained fraction and showed lactose specificity. The SP fraction with H.A. was the retained fraction. The fractions analyzed by SDS-PAGE showed a pure fraction. The obtained results open the possibilities to a biochemical and structural characterization of a lectin from Albizia lebbeck's seeds, the first lectin from the Tribe Ingeae.

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