IDENTIFICATION AND PARTIAL CHARACTERIZATION OF THE ENDOGENOUS RECEPTORS OF DIOCLEINAE SUB-TRIBE LECTINS

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The lectins constitute a special class of proteins with the special propriety of interacting reversibly and specifically with carbohydrates and glycoconjugates. This ability of the lectins suggests a relevant *in vivo* biological role, but this hypothesis demands the existence of endogenous receptors. In this study, the soluble and insoluble endogenous receptors of glucose/manose-specific lectins of *Dioclea altíssima, Canavalia brasiliensis* and *Cratylia argentea* seeds have been detected and partially characterized. The lectins were extracted with 0,15M NaCl and isolated by affinity chromatography in columns of raw residues and NaOH fractions: FP 1 and FP 4, suggesting the presence of insoluble receptors. *Canavalia brasiliensis* fraction FP 1 had back greater lectin concentration. The analysis of the fractions FP 1 and FP 4 by thin-layer chromatography and liquid-gaseous chromatography showed predominance of the monosaccharide glucose and lower quantities of galactose, arabinose, mannose and xylose. As the lectins of the Diocleinae sub-tribe present high structural homology, the insoluble fractions can serve as excellent chromatographic matrices of affinity for the isolation of other lectins with the same compatible specificity. The soluble lectin receptors were extracted with 0,15M NaCl and isolated by sequenced chromatography in Sepharose-lectin and Sephadex G-50 columns. The receptors have not been capable to inhibit the hemaglutinant activity of isolated lectins, and the SDS-PAGE had shown as two proteic bands of 66 kDa and 70 kDa.

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