IMMOBILIZATION OF *BAUHINIA MONANDRA* LEAF LECTIN (BMOLL) ON SEPHAROSE CL-4B (BMOLL-SEPHAROSE) AND ITS EVALUATION FOR GLYCOPROTEIN PURIFICATION

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Plant lectins, a heterogeneous group of carbohydrate-binding proteins, differ from each other with respect to molecular structures and biological activities. A galactose-specific leaf lectin has been highly purified from *B. monandra* (BmoLL). The present study describes a simple immobilization protocol of BmoLL on Sepharose CL-4B (BmoLL-Sepharose) and its evaluation to isolate glycoproteins. The lectin was immobilized on CNBr-activated Sepharose and BmoLL-Sepharose was analyzed for binding of fetal bovine serum glycoproteins, asialofetuin and ovalbumin (0.5 mg) as well as glycoproteins from egg white crude extract and hog thyroid crude homogenate (0.5 ml). Chromatography was performed by application of samples into a 1 ml lectin column, at room temperature; fractions (1 ml) were collected. Unbound material was washed with 0.01 M citrate-phosphate buffer, pH 6.5, containing 0.15 M sodium chloride (selected buffer) until baseline absorbance readings. Adsorbed fractions were eluted with 0.05 M galactose in selected buffer followed by 1 M sodium chloride. No protein peaks were obtained with 0.05 M galactose but, after this previous stage, glycoprotein elution was performed with 1.0 M sodium chloride. BmoLL-Sepharose was efficient to adsorb bioselectively asialofetuin and ovalbumin as well as glycoproteins from fetal bovine serum, egg white and hog thyroid. Thus, BmoLL affinity matrix can be used to isolate glycoconjugates.

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