LIQUID-LIQUID EXTRACTION OF A LECTIN FROM *CRATAEVA TAPIA* BARK WITH AOT REVERSED MICELLES

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Lectins comprise a structurally versatile group of proteins and glycoproteins. Its binding specificity to carbohydrates can be used to isolate specific glycoproteins. The aim of the present work was to evaluate the extraction and back-extraction of a lectin from *Crataeva tapia* bark purified by ionic exchange chromatography (CrataBL) using the reversed micelles system of AOT / isooctane, looking for further application to crude extract (CE). On protein extraction, agitation contact time, ionic strength, temperature, aqueous phase pH and surfactant concentration were investigated. On back-extraction, pH and ionic strength of aqueous phase with 5 % of butanol were also evaluated. From extraction step was obtained 100% and 70% of protein content for CrataBL and CE, respectively, with 5 min of phase contact, 30 mM NaCl, citrate/phosphate buffer, pH 5.5, 27 °C and 5 mM AOT. From back-extraction step a protein recovery of 45.25% (CrataBL) and 80 % (CE). The optimal conditions for lectin purification from crude extract led to a protein and activity recovery yield of 56% and 80%, respectively. The obtention of 100% pure lectin preparation was confirmed by PAGE and gel permeation chromatography. These results clearly indicate the efficiency of reversed micellar systems in lectin purification.

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