# PURIFICATION OF THE LECTIN FROM TARO (*Colocasia esculenta*)

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Lectins are proteins or glycoproteins possessing at least one non-catalytic domain which binds specifically and reversibly to mono or oligosaccharide, including or not agglutinating activity or glycoconjugates precipitation. Lectins can be found in the animal and plant kingdom and in microorganisms playing different functions, according to the place they are located. Some lectins display interesting biological activities, as the activation of the cell cycle in lymphocytes. It has been reported the existence of storage proteins with lectin activity in tuberous plant species, like taro. On a previous work we have shown that taro crude extract agglutinates hamster erythrocytes and stimulates the proliferation of mouse B lymphocytes, *in vivo* and *in vitro*. The aim of this research was to purify the protein fraction from the crude extract responsible for the induction of cellular proliferation. Taro tubers were homogenized with PBS containing 0.5M NaCl. The extract was precipitated with ammonium sulfate(10-70% w/v), dialyzed and applied onto a DEAE-Sephacel column. Proteins were eluted using a linear gradient of increasing NaCl concentration in Tris-HCl. A unique protein band with 12KDa was observed after SDS-PAGE 15%, with presented agglutinating activity for hamster erythrocytes. Works are in progress to characterize the protein structure and investigate its mitogenic activity against mouse B and T lymphocytes.

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