Purification and Partial Characterization of a Novel C-Type Lectin from the Venom of the Snake *Bothrops alternatus* (Urutu)

[1]Vilca-Quispe, A., [1 2]Ponce-Soto, L.A., [1]Romero-Vargas, F.F.,[1]Marangoni, S.

[1] Department of Biochemistry, Institute of Biology, State University of Campinas, Campinas, São Paulo, Brazil; [2] Department of Pharmacology, Faculty of Medical Sciences, State University of Campinas, Campinas, São Paulo, Brazil.

Email: *augusto_blgo@yahoo.com*

The objective was to purify and partially characterize a novel Lectin from the venom of the snake *Bothrops alternatus* (Urutu) and to evaluate their hemagglutinating activity.The total venom of *Bothrops alternatus* is diluted in bicarbonate of ammonium 0,2M and eluted in a column of molecular exclusion Superdex G 75 balanced with bicarbonate of ammonium 0,2M, under flow of 0,3 ml/min. Showed presence of three peaks denominated as Bt I, II and III and pick 3 that showed hemagglutinating activity on human erythrocytes. The PAGE-Tricine showed one electrophoresis band, indicating that this toxin was obtained with high molecular homogeneity and a molecular mass of 15 kDa, Hemagglutinating activity of novel Lectin was inhibited by EDTA or EGTA demonstrating the requirement of divalent cation. The hemagglutination of erythrocytes was inhibited specifically in the presence of D-mannose and D-glucose. This novel Lectin type-C activity Bt-III, was isolated from the venom of the snake *Bothrops alternatus* (Urutu). This protein it was characterized partially as a C-type galactoside-binding lectin with elevated hemagglutinating activity in human erythrocytes. These results very similar on with other purified C-type lectins of venom of bothropic snakes.

Keywords: C-type Lectin, hemagglutinating activity, molecular exclusion, *Bothrops alternatus.*

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