Prospective Studies of Latex Proteins of *Artocarpus altilis* var. *non-seminifera*

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Introduction: *Artocarpus altilis* (Parkinson) Fosberg (breadfruit) has a seedless variety called non-seminifera which all parts are used medicinally in the Pacific and Caribbean. Plant latex is a white sap, stored in the laticifer tissues and usually excreted immediately in site injury after insect herbivory. The latex of *A. altilis* is used in massages into the skin to treat broken bones and sprains; bandages on the spinal column to relieve sciatica; it is frequently employed in treatments of skin ailments and fungus diseases; diluted latex is ingesting to treat diarrhea, stomachaches and dysentery. However, this latex is poorly studied. **Objective:** The purpose of this work is investigating proteins constituents of the latex of *A. altilis.* **Material and Methods:** Latex was collect early in the morning from leaf stalk into sterile falcons with distilled water, centrifuged at 6000 x *g* for 10 min at 4 °C and the supernatant was submitted to ammonium sulfate precipitation overnight followed by new centrifugation at 6000 x *g* for 20 min at 4 °C. The precipitate (protein-rich fraction) was solubilized in distilled water and aliquots were taken for electrophoresis and hemagglutination assay, the remaining material was submitted to dialysis against distilled water and then samples were used for proteomic analysis by mass spectrometry. **Results and Discussion:** SDS-PAGE exhibited protein profile of apparent molecular weight between 20 and 60 kDa. Protein fractions agglutinated human type O^+ erythrocytes and after heating samples for 10 min at 100 ° C hemagglutinating activity was eliminated suggesting the presence of a lectin in the latex of *A. altilis*. **Conclusions:** The search for new proteins, specially lectins, is incessant due to extensive possibilities of use them. Thus, these preliminary results lead to a promising path in the study of plant proteins. The next step is the isolation and characterization of these proteins.

Palavra chave: *Artocarpus incisa*, Breadfruit, Latex
Patrocínio: CNPq, FINEP, CAPES