

PURIFICATION, PARTIAL CHARACTERIZATION AND EVALUATION OF *Parkia pendula* SEED GUM AS PHAGOCYTTIC MODULATOR *in vitro*.

Gadelha de Carvalho, M.M.S.¹, Bezerra, S.¹, Silva, N.H.², Beltrão, E.I.C.^{1,2},
Carvalho-Júnior, L.B.^{1,2}

¹ Laboratório de Imunopatologia Keizo Asami, LIKA – UFPE; ² Departamento de Bioquímica, CCB – UFPE, RECIFE, PE, BRASIL. 50670-910.

Parkia pendula (Fabaceae) is a plant with pan tropical distribution found in The Atlantic Forest, Northeast of Brazil and Brazilian Rain Forest. Its seeds produce a gum, when hydrated with water. Natural plant gums are source of polysaccharides which many are pharmacologically considered active molecules having anticoagulant, antiviral activities and immune modulators. In this work *Parkia pendula* seed gum (PpeG) was extracted, purified, partially characterized and evaluated regarding its *in vitro* phagocytic capacity on leukocytes. Purification was performed using ethanol precipitation. PpeG was partially characterized by analyses of its elementary contents, infrared spectrometry and plate chromatography. According the results PpeG contained only carbon and hydrogen. Infrared spectrum showed a typical polysaccharide profile as those reported for cellulose. Plate chromatography revealed the presence of arabinose, xylose, fructose and galactose. In addition, phagocytic ability was PpeG concentration dependent (up to 0,250 mg). These results indicate promising applications for these polysaccharides in medical and biological research related to therapeutics.

Acknowledgment: CNPq

Key-words: *Parkia pendula*, gum, phagocytosis