

CYTOTOXICITY ASSAY OF *Parkia pendula* SEED LECTIN ON LARYNX  
EPIDERMOID CARCINOMA CELLS (HEp-2)

Coriolano, M. C.<sup>1</sup>; Rolim, H. M. L.<sup>2</sup>; Nascimento, S. C.<sup>3</sup>; Magalhães, N. S. S.<sup>2</sup>;  
Coelho, L.C. B. B.<sup>1</sup>

<sup>1</sup>Departamento de Bioquímica, Centro de Ciências Biológicas (CCB); <sup>2</sup>Laboratório de Imunopatologia Keizo Asami (LIKA); <sup>3</sup>Departamento de Antibióticos, CCB, Universidade Federal de Pernambuco (UFPE), Pernambuco, Brasil

Plant lectins are (glyco)proteins which bind specifically carbohydrates or glycoconjugates being useful tools in widespread applications. Lectins of different origins have a shot-dependent cytotoxic effect in the proliferation of melanoma cells. In this work it was studied the effect on cellular proliferation of *Parkia pendula* seed lectin, PpeL, under different concentrations (1.25; 2.5; 5 and 10 µg/ml) of larynx epidermoid carcinoma cells (HEp-2). Lectin preparation was obtained by affinity chromatography on Sephadex G-75, which had hemagglutinating activity with rabbit glutaraldehyde treated erythrocytes; protein purity was followed by polyacrylamide gel electrophoresis to acidic and native proteins (PAGE). The only peak of adsorbed material was revealed in one band under electrophoresis. The effect of EDTA on lectin activity was not dependent of Ca<sup>+2</sup> or Mn<sup>+2</sup> ions. Concanavalin A (Con A) was used as a lectin comparative pattern of glucose recognition. PpeL inhibited 50% of cellular proliferation at concentrations of 1.25 and 2.5 µg/ml. PpeL and Con A, in all used concentrations, revealed the same standard of HEp-2 proliferation inhibition. It was concluded that PpeL reduced inhibition of cellular proliferation and the found values were not considered toxic.

Keywords: lectin, cytotoxicity, carcinoma.

Supported by CNPq.