

ANTITUMORAL ACTIVITY OF *Cratylia mollis* SEED LECTIN (Cramoll 1,4) ON LNCaP CELLS

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Lectins are proteins (or glycoproteins) ubiquitous in nature, with carbohydrate affinities, which induce apoptosis in a wide variety of cell types. *Cratylia mollis* is a native forage from the State of Pernambuco. The lectin preparation obtained from *C. mollis* seeds, containing the molecular forms 1 and 4 (Cramoll 1,4), has shown strong binding to malignant cancer tissues (uterus, brain and mammary glands) and antitumor activity against sarcoma 180. LNCaP cells constitute a cell line isolated originally from a metastatic human prostate carcinoma. The aim of this work was to analyze the capacity of Cramoll 1,4 to induce apoptotic and necrotic LNCaP cell death. Previously Cramoll 1,4 was tested against LNCaP cells under different doses (1 µg/ml, 2 µg/ml, 2.5 µg/ml and 4 µg/ml). The lectin concentration (2 µg/ml) that showed better activity (33.4 %, by apoptosis and 23.6 %, by necrosis) was tested with different times (30 min, 60 min, 90 min and 120 min). A considerable increase of cell death was observed after 90 min (36.8 %, by apoptosis and 49.6 %, by necrosis), indicating that Cramoll 1,4 exhibited antitumor activity.

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Key words: *Cratylia mollis* lectin, LNCaP cells, antitumoral activity.