

ANTITUMORAL ACTIVITY OF *Cratylia mollis* SEED LECTIN (Cramoll 1,4) ON LNCaP AND WALKER TUMOR 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. A seed lectin preparation obtained from *Cratylia mollis* (Cramoll 1,4), native forage from the State of Pernambuco, has shown strong binding to malignant cancer tissues. The aim of this work was to analyze the capacity of Cramoll 1,4 to induce LNCaP and Walker tumor cell death. Treatment of LNCaP cells with 4 µg/ml Cramoll 1,4 for 4 h promoted 60,3 % of apoptosis and 24,6 % of necrosis; Walker cells under the same conditions induced 42 % of apoptotic cell death. Cramoll 1,4 promoted ROS production by NADPH oxidase and increase of cytosolic free Ca<sup>2+</sup>, in both cell lines. In conclusion, Cramoll 1,4 exhibited antitumor activity by increasing cytosolic calcium and consequently ROS generation by NADPH oxidase.

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