

Effect of Two Trypsin Inhibitors from *Adenantha pavonina* and *Inga laurina*  
Seeds on the Development of Growth of the Yeast

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In recent years several antifungal proteins and peptides have been found in different species of plants and typically are linked to plant defense mechanism. In this study, we investigated the APTI and ILTI biological activities against yeast. These trypsin inhibitors are present in *Adenantha pavonina* and *Inga laurina* seeds. These proteins were extracted with phosphate buffer, pH 7.6, followed by ammonium sulphate precipitation, ion-exchange chromatography on DEAE-Sepharose and affinity chromatography on Trypsin-Sepharose. Cells of *Candida albicans*, *Candida tropicalis*, *Candida parapsilosis* and *Saccharomyces cerevisiae* were incubated in Sabouraud agar containing APTI or ILTI (125 and 250 µg/mL). The assay was performed in cell culture plates (96 wells) for 40 h at 37°C. Optical density determination was measured from 5 to 5 hours in an ELISA reader, at 660 nm. All experiments were done in triplicate. ILTI (250 µg/mL) slowed the growth of all assayed yeasts besides promoting the pseudophyphae formation in *C. parapsilosis*. Nevertheless, APTI did not affect the any yeast growth. These results suggest that ILTI may have a role in plant defense strategy against pathogens. Supported by: FUNDECT, FINEP, Capes and CNPq. Keywords: Antifungal activity, antifungal protein and plant toxin.