2S Albumin from Seeds of *Passiflora edulis f. flavicarpa*: Antimicrobial Activity Against Yeasts

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In the last years many works have been demonstrated the activity of antimicrobial peptides isolated from different plant species against yeasts, which have been utilized as model to the study of different cellular processes. Recent results from our laboratory showed that the 2S albumins, inhibit fungal growth and glucose stimulated acidification of the medium by Fusarium oxysporum and Saccharomyces cerevisiae cells (Agizzio et al., 2003). The aim of the work was to investigate whether 2S albumins from passion fruit seeds have antimicrobial activity against different yeast species. Initially proteins were extracted and purified accordingly to Agizzio et al. (2003). An anion exchange chromatography was employed and resulted in two different fraction named D1 and D2. The D1 fraction showed the presence of only one proteic band with sequence homology to 2S albumin. The D1 fraction was then submitted to biological activity tests in the presence of the yeasts Saccharomyces cerevisiae, Candia tropicalis, Pichia membranifaciens, Candida parapsilosis and Candida guilliermondii. It was possible to observe that in the utilized concentrations, the 2S albumin was able to inhibit the growth of the yeast C. parapsilosis. Assays to determine morphological alterations and membrane permeabilization will be done.

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