

## PECTINASE PRODUCTION ASSAYS FOR FUNGAL SPECIES OF BIOTHECNOLOGICAL IMPORTANCE

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Pectinases are enzymes used in food industries produced by plants, fungi and bacteria. These microorganisms can be inoculated in a medium containing agro-industrial residues from processing agricultural products, used as a carbon source to produce value-added compounds such as enzymes, ethanol, proteins, amino acids and flavor compounds. The present research had as objective to carry assays of production of pectinase for filamentous fungi and yeasts, deposited in URM Micoteca. A total of 21 strains were requested, being 12 yeasts and nine filamentous for taxonomic revision and enzymatic test. The microorganisms were inoculated in medium solid contend 1.25% citric pectin for 2 the 4 days at 25°C, in accordance with the growth of the colonies. To follow, the plates had been developed with a solution of 0.05% congo red and washed with distilled water. The strains that presented clear halos around colonies were considered producing of pectinase. Of the 12 strains of yeasts, five were positive and of the nine strains of filamentous fungi, only one produced this enzyme. In addition, the strains *Pichia ohmeri* URM 4417 and *Aspergillus niger* URM 5392 presented greater production. This characterization associated with quantitative assays we allow to determine strains that can be used successfully in food industries.

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