

USE OF THE *PENICILLIUM AURANTIOWRISEUM* AS PRODUCING OF ENZYMES WITH BIOTECHNOLOGY INTEREST

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The world demand for transformation processes in the biomass in diversified biotechnological products and of larger value it has been resulting in the use of enzymes in several industrial processes. Due to its properties catalytic degradation the protease constitutes a class of enzymes of commercial importance. The main applications of the cellulases are destined to the textile area, already the pectinases, are used mainly in the industry of food. This work accompaniment growth of the *Penicillium aurantiowriseum* and enzymatic activities with industrial importance (protease, cellulase and pectinase). The culture growth was evaluated in a soy flour medium (1.0% w/v), pH 7.2 at 28°C under orbital at 200 rpm, samples were collected each 24h during 120 hours for biomass analysis, protease, pectinase and cellulase determination activity. The best biomass production of *P. aurantiowriseum* was obtained at 96h. The enzymatic activities it was accomplished being that the protease went to enzyme of larger activity in fermented in 120 hours presenting 0.18 U/mL, being this 72% larger than the cellulotic activity in 24 hours and 89% that the pectinolytic activity in 120 hours.

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