

P003 Kinetic properties of the neutral protease produced by *Aspergillus oryzae* on oranges wastes media
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A neutral protease is produced by fermentation of oranges wastes media by *Aspergillus oryzae*. Media are enriched with corn-steep liquor and adjusted to a pH 6. 2635 units of the protease activity and 15.42 g of biomass are obtained after 52 hours cultures. The enzyme is separated from the extracellular medium by ammonium sulfate precipitation, dialysis and chromatography on Sephacryl S-200. The active fraction issued is corresponding to 40 % of yield and 16 of purification. Study of the kinetic properties of the partially purified protease shows that the enzyme is a metalloenzyme; the inhibition constant with EDTA is $25 \cdot 10^{-4}$ M. Their optimal pH is 7 and their optimal temperature is 40°C, with a half life equal to 8 min in 60°C. The better substrate is the casein, the K_M is 7.13 g/l and the V_m is 93.16 $\mu\text{g/ml/min}$. The enzyme is inhibited by the iron and the mercury; it is activated by the cobalt, the calcium, the manganese and the nickel.