

PRODUCTION OF PECTINASE FROM *ASPERGILLUS NIGER* BY USING SOME FRUIT PEELS

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ABSTRACT

Ten filamentous fungi isolated from a growaste samples .Three isolated were of high productivity for pectinase enzyme compared with other isolates , depending on diameter of clear hydrolyzed zones on the medium plates containing commercial pectin as sole carbon source , this isolates were *Aspergillusniger* (A₂),closely followed by *Aspergillus* sp.(A₁) and *penicillum* sp.(P₁) . The three isolates also produced pectinases with different a growastes (Orange peels , Apple peels , Banana peels)as the sole carbon source ,*Aspergillusniger*(A₂) was the best isolate for pectinase production on the medium containing orange peels as the sole carbon source . Peak pectinase activity of 675 and 370 u/mg protein was respectively obtained by solid – state fermentation (ssf) and submerged fermentation (smf) for *A.niger*(A₂) .Solid – state fermentation yielded higher levels of pectinase activity than the submerged fermentation . The strain of *A.niger*(A₂) have good prospect for pectinase production ,and the orange peels is a good low – cost fermentation substrate for pectinase production by the investigated isolate

Key words: pectinase, *Aspergillus niger*