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Title: Characterisation and inhibition effect of cetrimide on collagenase produced by Aspergillus flavus, isolated from mycotic ulcers

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Abstract:

Collagenase was found to be the most important enzyme, produced by mycotic keratitis fungi. Therefore, Aspergillus flavus collagenase enzyme has been purified by ammonium sulphate precipitation, Sephadex G25 and DEAE-cellulose chromatography; Electrophoretic analysis for the purified enzyme indicated one subunit of molecular weight of 70-90 KDa when examining on SDS-PAGE. Cetrimide (cetyl trimethyl ammonium bromide) has been tested against the purified collagenase enzyme and indicated reversible competitive inhibitor ($K_{is} = 0.15$ mg/ml) with high promising activity. Cetrimide might be used to inhibit mycotic keratitis fungi.

Key words:

Aspergillus flavus, collagenase, cetrimide, mycotic ulcers.