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The accumulation of proteins with chitinase activity in the culture liquids of the parent and mutant *Serratia marcescens* strains grown in the presence of mitomycin C

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Abstract

The study of the accumulation pattern of extracellular proteins with chitinase activity in the parent *Serratia marcescens* strain Bú 211 (ATCC 9986) grown in the presence of mitomycin C and its mutant strain with the constitutive synthesis of chitinases grown in the absence of the inducer showed that chitinase activity appeared in the culture liquids of both strains at the end of the exponential phase (4 h of growth) and reached a maximum in the stationary phase (18-20 h of growth). The analysis of the culture liquids (12 h of growth) by denaturing electrophoresis in PAAG followed by the protein renaturation step revealed the presence of four extracellular proteins with chitinase activity and molecular masses of 21, 38, 52, and 58 kDa. © 2002 MAIK "Nauka/Interperiodica".

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Keywords

Chitinase, Induction, Mitomycin C, *Serratia marcescens*