Erysipelothrix rhusiopathiae Neuraminidase and its Role in Pathogenicity

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The role of the enzyme neuraminidase in pathogenicity of the bacillus *Erysipelothrix rhusiopathiae* was studied. Different substances with low and high molecular weight were tested as inducers of *E. rhusiopathiae* neuraminidase biosynthesis. It was found that macromolecular complexes induce the secretion of the enzyme. K_M values for different substrates showed that the affinity of the *E. rhusiopathiae* neuraminidase increases in parallel with the enlargement of the molecular weight of glycoproteins. Results from the rabbits skin test confirmed the role of *E. rhusiopathiae* neuraminidase as a factor of pathogenicity with spreading functions.

Key words: Neuraminidase, *Erysipelothrix rhusiopathiae*, Pathogenicity