

1. INTRODUCTION

The application of some biofertilizers (microbial fertilizers) as biocontrol agents is considered to be of extreme importance due to their positive dual effects on plant growth (Red, 1990, Reddy *et aL*, 1991, Gowily *et aL*, 1993, El Shanshoury, 1994).

The use of fungicides are the most desirable means of disease control as they are expensive, cause environmental pollution and may induce pathogen resistance (Larson, 1987).

Rhizoctonia solani, are presently understood, cause different types of diseases to wide variety of plants over large part of the world and under divers environmental conditions

Hassouna *et aL*, (1998) studied the effect of *Azospirillum* brasilense, *Azotobacter chroococcum; Klebsiella pneumonia* KPR on the growth promotion and biocontrol of *Fusarium oxysporum*, *Rhizoctonia solani*, *Pythium* sp. which cause diseases of cucumber in Egypt. The mixture of them reduce damping off by 56%, increase emergence by 4%, shoot and root dry weight by 30 and 80%, respectively.

Jizba and Prokinova (1998) reported that the macrotetrolide compounds isolated from *Streptomyces globisorus* ENN increase the growth of cucumber seedlings.

The objectives of this study were to evaluate the effect of most active microorganisms isolated from different localities, cultivated with different crops on the growth and production of cucumber (as one of cucurbetaceae) and biological control of root-rot disease.