

## Interaction of *Streptoverticillium* sp. against few plant pathogens

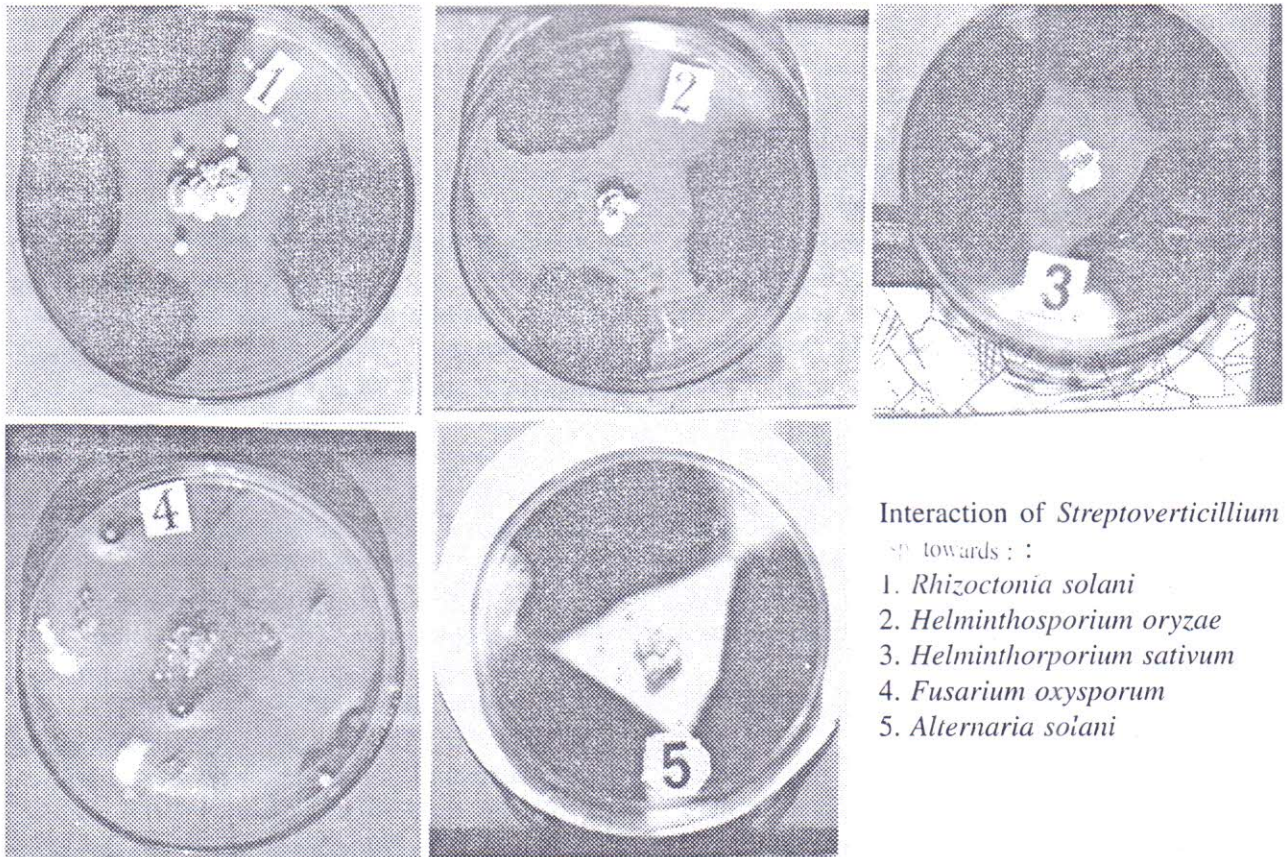
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Biocontrol was practiced for a long time by exploiting the suitable microorganisms. Reduction of disease of many crops has been reported by using antagonistic actinomycetes. A study was undertaken to investigate the antagonistic potential of *Streptoverticillium* sp. *in vitro* against few plant pathogens viz. *Rhizoctonia solani*, *Helminthosporium oryzae*, *Helminthosporium sativum*, *Fusarium oxysporum* and *Alternaria solani*.

Soil dilution of  $10^7$  -  $10^8$  concentration were prepared and plated on glycerinearginine medium and incubated for three to four days. Actinomycetes

were isolated and maintained on potato dextrose agar slants. Random individual tests were isolated and maintained on potato dextrose agar slants. Random individual tests were made by placing actinomycetes on the middle portion of the petridish and different fungal hyphal block on the three other sides on potato dextrose agar medium. The test fungi viz. *Rhizoctonia solani*, *Helminthosporium oryzae*, *Helminthosporium sativum*, *Fusarium oxysporum* and *Alternaria solani* were isolated from rice, wheat pea and wheat respectively and maintained on potato dextrose agar slants.



In plate culture a clear inhibition zones were observed in all the plates containing different fungal pathogens (Fig -1,2,3,4,5). The actinomycetes was identified as *Streptovercillium* sp. (NR7 IMI NO. B9949)

The present investigation on the interaction of *Streptovercillium* sp. with *Rhizoctonia solani*, *Helminthosporium oryzae*, *Helminthosporium sativum*, *Fusarium oxysporum* and *Alternaria solani*. On agar plate, has given an indication that all the fungal pathogens cited above are sensitive to *Streptovercillium* sp. and *Streptovercillium* sp. antagonized the growth of fungal pathogens. It may

be assumed that inhibition of growth occurred due to production of antibiotics by *Streptovercillium* sp. in the culture plate. Chattopadhyay and Sen (1998) observed that a crude antibiotic was isolated with n-butanol (pH7.0) from *Streptovercillium* sp. that was highly potent against *Macrophomina phaseolina* and other plant pathogens.

#### REFERENCE

- Chattopadhyay, C. and Sen, C. (1998) Antibiotic producing ability of *Streptovercillium* sp. *J. Mycol. Pl. Pathol.* **28** : 300-307

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