

RESEARCH PAPER

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Studies on shelf-life of *Streptomyces* spp. in different carrier materials

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SUMMARY :

Inoculation of bioinoculants in crop cultivation is performing vital role in sustainable agriculture. It is well known that the carrier-based bioinoculants are being very effective as carrier determines the shelf-life of the inoculant. Hence, the selection of superior carrier is very crucial for maintaining shelf-life of the inoculant for the periods of storage and for better performance in the field use. In the present study, the population of *Streptomyces violaceusniger* was assessed at ten days interval in different carrier materials. The population of *S. violaceusniger* and *Streptomyces exfoliates* were observed at the end of 30 d. In addition, the talc based formulation was found to be highly suitable carrier to deliver both *S. violaceusniger* and *S. exfoliatus*. The results clearly revealed that the cell densities of *S. violaceusniger* and *S. exfoliatus* were high in the nutrient medium supplemented with glycerol when compared to nutrient broth alone.

KEY WORDS : Shelf-life, *Streptomyces* spp.

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