

## IN-VITRO STUDIES ON COMPATIBILITY BEHAVIOR AMONG MICROBIAL INOCULANTS

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**Abstract:** The present study was conducted during 2017-19 at Department of Plant Pathology and Agricultural Microbiology, Post Graduate Institute, M.P.K.V., Rahuri-413722. All the microbes have to prove effective in colonization of the plant roots for efficient function under natural soil conditions. Compatibility between the PGPR microbes to colonize the root system without inhibiting each other is a pre-requisite for success of using multiple microbes in a crop field. In our study, among the different microbes tested for their compatibility in culture growth, the all species of bioinoculants were found to compatible the growth of other species as evident from the no zone of inhibition observed in the plates. All other microbes viz: *Trichoderma viride*, *Pseudomonas fluorescens*, *Azotobacter chroococcum* and *Bacillus polymyxa* on NA media were compatible with each other. These results have made us to choose the best two candidate bacteria for further studies.

**Keyword:** Bioinoculants, Compatible, PGPR microbes

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