Evaluation of Antagonistic Biocontrol Agents Isolated from Maize Phyllosphere against *Exserohilum turcicum*

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ABSTRACT

Maize is the third most important cereal crop in India after rice and wheat. Diseases play an important role in the yield losses in maize. Among the diseases, the Turcicum leaf blight, caused by *Exserohilum turcicum* is the most destructive and prevalent disease affecting the yield by the reducing photosynthetic ability. As the use of fungicides may harm the environment, the present study was carried out focusing on the biological control of the disease. Pathogen may be controlled by different microbes that exist along with it. The term epiphyte is used to denote the phyllospheric organisms which are isolated from the maize using selective media. Ten isolates of *Bacillus*, *Pseudomonas*, Actinomycetes and Methylotrophic bacteria are obtained from two different loca tions. The antagonistic potential of these bacteria is evaluated by dual culture technique *in vitro*. Among various isolates of bacteria, *Bacillus* (B 19003), *Pseudomonas* (P 19001), Actinomycetes (A 19002) have shown a good antagonistic potential. Different microscopic observations like formation of chlamydospores, granulation of hyphae were recorded.

Keywords: *Biocontrol,Exserohilum, Isolation, Maize, Phyllosphere.*