

SCREENING OF A SOIL BACTERIUM FOR BIOLOGICAL CONTROL OF PATHOGENIC FUNGI

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Abstract: Twenty-two bacterial isolates were obtained by serial-dilution agar plating method and screened for their antagonistic potential against *Fusarium udum* and *Aspergillus flavus* by dual-culture assays. Out of these isolates, only one bacterium, strain S1 was found to show antifungal activity against the test pathogens. Culture-filtrate paper disc assays also revealed antagonistic potential of the isolated bacterium. The bacterium was found to be non-pathogenic when tested on blood-agar medium. Thus, the isolated bacterium could be effectively implemented for controlling the diseases caused by *F. udum* and *A. flavus*, instead of using the hazardous chemicals and pesticides, which pose potential threat to both human and animal health as well as the environment.

Key words: *Aspergillus flavus*, Biological control, *Fusarium udum*, Microbial antagonism.

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