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**CHARACTERIZATION OF ANTI-FUNGAL PROPERTY OF SEED COAT  
LEACHATES OF *JATROPA CURCAS* L.**

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**ABSTRACT**

New spectrums of fungal infections are increasing due to losses associated with them. The dependence on synthetic agrichemicals including antimicrobials in agriculture is undoubtedly important but not sustainable for the sake of the environment in the long run. Therefore, it makes necessary to discover new natural antifungal compounds to treat fungal infections. The research on seed coat leachates as anti-fungal agent has been accelerated in recent past due to its importance in controlling fungal diseases in seed coats. A large number of microorganisms are commonly associated with the seed coats of various plants. The composition of the substance present on the surface of the coat is believed to govern the presence or absence of some microorganisms. Keeping all these facts in view, a study was planned with the objective to characterize the seed coat leachates of *Jatropha Curcas* for controlling seed borne diseases and to avoid environmental pollution.

The growth of internally seed borne fungi viz., *Aspergillus flavus* link & *Aspergillus terreus* Thom, and externally seed borne fungi viz., *Aspergillus niveus* Blotch, *Cladosporium herbarum* (Pers.) Link & *Rhizoctonia solani* Kuhn was observed at different time points viz., 3, 6 and 9 days by measuring colony diameter (mm) of these fungi on Czapek's Dox agar medium in the presence of seed coat leachates. *A. Flavus* and *A. terreus* showed fairly good growth in the presence of the leachates however, exophytic fungi present on the surface of seed coat viz., *A. niveus*, *Cladosporium herbarum* and *Rhizoctonia solani* showed very slow and little growth.