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OPTIMIZATION OF NUTRITIONAL CONDITIONS FOR PRODUCTION OF HERBICIDAL SECONDARY METABOLITES BY ASPERGILLUS BREVIPES EFFECTIVE AGAINST PARTHENIUM HYSTEROPHORUS L.

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ABSTRACT : Five different media and five different carbon sources were used to determine their effect on herbicidal toxin production by *Aspergillus brevipes* that induces chlorosis and necrosis in leaves and shoots of *Parthenium hysterophorus*. CFCF of Richard broth exhibited maximum phytotoxicity followed by Czapek Dox and Coon's media as indicated by bioassay with *Parthenium* shoot. Starch nutrient broth exhibited appreciable phytotoxicity while oat meal broth failed to induce any appreciable phytotoxicity. The best carbon source for phytotoxin production was sucrose followed by glucose and starch.

Keywords : Fungi, nutrient medium, phytotoxin, weed