

RESEARCH PAPER

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## *In vitro* antifungal activity of plant extracts (Sterilized and unsterilized) against *Macrophomina phaseolina* (Tassi) Goid. cause stem canker of pigeonpea [*Cajanus cajan* (L.) Millsp.]

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### ABSTRACT

The present paper reports the antifungal activity of plant extracts (5 % Concentration) from seven plant species viz., *Bougainvillea spectabilis*, *Zingiber officinali*, *Datura stramonium*, *Curcuma longa*, *Ocimum sanctum*, *Hibiscus bombycideron*, *Tegetes erecta*. Antifungal activity was tested against *Macrophomina phaseolina*. All plant extracts (sterilized and unsterilized) exhibited considerable distinction in radial mycelial growth of tested pathogen. Overall, *Curcuma longa* appeared significantly the most effective and suppressed the radial mycelial growth (sterilized plant extract, 47.13% and unsterilized plant extract, 48.28 %) of the *Macrophomina phaseolina*. However, *Ocimum sanctum* exhibited minimum inhibition (sterilized plant extract, 25.29 % and unsterilized plant extract, 22.99 %) against *Macrophomina phaseolina*. It may be concluded from the present investigation that *Curcuma longa* can be utilized for the management of *Macrophomina phaseolina*.

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