

Antifungal Activity of *Citrullus colocynthis* against *Fusarium oxysporum*, *Alternaria alternata*, *Macrophomina phaseolina* and *Colletotrichum musae*

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#### ABSTRACT

Four important plant pathogenic fungi were subjected to evaluate the antifungal potentiality of *Citrullus colocynthis*. It was recorded that the growth of *Fusarium oxysporum*, *Alternaria alternata*, *Macrophomina phaseolina* and *Colletotrichum musae* were significantly ( $P < 0.01$ ) reduced by extract of *C. colocynthis* obtained by various solvents (water, acetone, ethanol, methanol and chloroform). Ethanolic extract gave the most promising results against all tested fungi. *M. phaseolina* was observed to be highly sensitive to the ethanol extract and zone of inhibition was 26.5 mm. Ethanolic extract rendered highest the percent growth reduction of *M. phaseolina* (41.67%). The growth *F. oxysporum*, *C. musae* and *A. alternata* were reduced by 37.2%, 35.67% and 28.935% respectively by the ethanolic extract of *C. colocynthis*. GC-MS analysis of crude extract showed that the major components of the crude extract were l-(+)-Ascorbic acid 2,6-dihexadecanoate (94.2%), Eicosanoic acid (92.3%) and 2-Heptadecenal (91.8%).

**Keywords :** Antifungal activity, *Citrullus colocynthis*, Plant pathogenic fungi, GC-MS.