

## **Antifungal Activity of Free Fatty Acids Methyl Esters Extracted from Citrullus colocynthis L., Linum usitatissimum L., Nigella sativa L. against Toxigenic Aspergillus**

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**Abstract :** The aim of the present work was aimed at evaluating antifungal effect of crude esters and their corresponding FAMES isolated from *Citrullus colocynthis* L., *Linum usitatissimum* L. and *Nigella sativa* L. seeds against two toxigenic fungal strains namely *Aspergillus flavus* and *Aspergillus ochraceus*. The results of the antifungal activity performed radial growth on solid medium (PDA; potatoes dextrose agar) showed that the crude esters and their corresponding FAMES have exhibited against the two strains tested. Overall, FAMES have provided an antifungal effect more efficient than that of crude esters. Inhibition of *Aspergillus ochraceus* has been labeled with percentages ranging from 13.33 to 26.61% by crude esters, While FAMES inhibition was ranged between 27.33 to 41.13%. However, the inhibition observed against the *Aspergillus flavus* was varying from 14.68 to 18.59% by crude esters compared with the inhibition percentages ranging from 21.5 to 33.45% by the FAMES. The antifungal potency of esters oils seeds of the studied plants may be an alternative for consideration by the authorities interested, due to serving the public health, in reducing the fungal enormous peril.

**Keywords :** *Citrullus colocynthis* L., *Linum usitatissimum* L., *Nigella sativa* L., FAMES, antifungal activity, *Aspergillus flavus*, *Aspergillus ochraceus*

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