

## **Biological Evaluation of *Nigella sativa* L. Seeds cultivated in Saudi Arabia**

**Basam H. Mashat<sup>1</sup>, Ehab S. Elkhayat<sup>\*2</sup> and Shawkat M.Fathi<sup>3,4</sup>**

<sup>1</sup>Dept. of Environmental and Health studies, The Custodian of the Two Holy Mosques Institute for Hajj and Omra Research, Umm Al-Qura University, KSA

<sup>2</sup>Department of Pharmacognosy, Faculty of Pharmacy, Al-Azhar University, Assiut 71524, Egypt

<sup>3</sup>Dept. of Veterinary Medicine, College of Agriculture and Veterinary Medicine, Qassim University, P.O. Box 6622, 51452 Buriadh, Saudi Arabia

<sup>4</sup>Food Hygiene Dept., Faculty of Veterinary Medicine, Assiut University, 71526 Assiut, Egypt.

**Abstract :** Evaluation of the soluble fractions of the alcoholic extract of *Nigella sativa* cultivated in Saudi Arabia for their cytotoxic, antibacterial, antifungal and antioxidant activities were done using the brine shrimp lethality assay and mouse lymphoma (L5178Y), rat brain tumour (PC12), human cervix cancer cells lines (HELA) and colon cancer colo-205 cell lines for the cytotoxic activity. The antibacterial activity was evaluated using the gram-positive bacteria *Bacillus subtilis* 168 and *Staphylococcus aureus* ATCC 25923, gram-negative bacteria *Escherichia coli* ATC 25922, *Salmonella* ATC 25921, *Klebsiella pneumoniae* and *Pseudomona aeruginosa* ATC 49189. Meanwhile, *Candida albicans*, *Saccharomyces cerevisiae* and *Aspergillus flavus* were used for assessing the antifungal activity. Finally, evaluation of the antioxidant activity using the DPPH assay was also carried out.

**Key words :** *Nigella sativa*, cytotoxic activity, Brine shrimp assay, Antibacterial, Antifungal.

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