



ORIGINAL ARTICLE

THE EFFICIENCY OF POWDER AND EXTRACT OF *CASSIA SENNA* PLANT AND ALUM IN INHIBITION THE GROWTH OF *ASPERGILLUS OCHRACEUS* AND *FUSARIUM* SP AND THEIR MYCOTOXINS

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Abstract: This study is aimed to investigate the effect of Senna (*Cassia senna*) powder and extract and the material of potassium sulfate and aqueous aluminum salts ($KAl(SO_4)_2 \cdot 12H_2O$) in inhibiting the growth of *Aspergillus ochraceus* and *Fusarium* sp. These fungi produce the mycotoxins accompanying the stored yellow corn and wheat grains, their efficiency in preventing the growth of the fungi and thus inhibiting the toxins secreted. It was found that the application of powder and extract of the senna plant to the plant medium of Potato Sucrose Agar (PSA), *A. ochraceus* and *Fusarium* sp at concentrations (1, 3 and 5) % led to inhibit fungal growth by (20.5, 50.7, 65.52%) and (25.55, 53.65, 67.6%) for fungi and concentrations, respectively. The alcoholic extract of the senna plant at concentrations (0.5, 1 and 2%) inhibited the growth of fungi by (60.5, 81.6, 90.5%) and (65.5, 88.1 and 93.6%) for the fungi, respectively. The alum powder and at concentrations (0.2, 0.5 and 1%) led to the inhibition rate of (70.5, 95.2, 100%) and (73.6, 100, 100%) for fungi and concentrations, respectively. Therefore, they both have a role in inhibiting and preventing fungal growth.

Key words: *Cassia senna*, Mycotoxins, *A. ochraceus*, *Fusarium* sp, Fungi, Senna plant.

Cite this article

Muneer Saeed M. Al-Baldawy, Dalal Tareq Al-Ameri, Sarah Tareq Hasan and Ali Sabah Alhasan (2020). The Efficiency of Powder and Extract of *Cassia senna* Plant and Alum in Inhibition the Growth of *Aspergillus ochraceus* and *Fusarium* sp and their Mycotoxins. *International Journal of Agricultural and Statistical Sciences*. DocID: <https://connectjournals.com/03899.2020.16.1323>