

## **ORIGINAL ARTICLE**

## THE EFFECT OF PATHOLOGICAL FUNGUS *ALTERNARIA ALTERNATA* ANATOMICALLY ON THE LEAVES OF THE DATE PALM KHADRAWI CULTIVAR

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Abstract: The results of this study showed the ability of the fungus *Alternaria alternata* to cause infection on the leaves of the date palm of the fungus-pollinated Khadrawi cultivar. Also, the study showed the susceptibility of the fungus *A. alternata* on the secretion of the enzyme cellulase and phenol oxidase as their enzymatic activity space is 5.8 and 6.5 mm, respectively. The results of histological dissection in the affected leaves also indicated the effect of fungus *A. alternata* in affected leaf tissues and the presence of decomposition of cell walls compared to tissues that have not shown symptoms of infection.

Key words: Date palm, Alternaria alternata, Cellulase enzyme, Phenol oxidase enzyme, Histopathology infection.

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