

EFFECT OF AGRICULTURAL PRACTICES ON ROOT ROT  
AND WILT OF SESAME IN FAYOUM  
BY

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ABSTRACT

Root rot-wilt complex disease of sesame (*Sesamum indicum* L.), caused by *Macrophomina phaseolina* and *Fusarium oxysporum* f. sp. *sesami* is considered the most destructive disease of sesame crop all over the world as well as in Egypt. The effect of some cultural practices, i.e. method and date of sowing, number of irrigations, NPK fertilization and soil amending by means of agricultural sulphur and farmyard manure on the incidence of this disease were investigated under field conditions in Fayoum Governorate. The infection percentage and disease index as well as seed yield were estimated. The obtained data proved that the lowest values of infection percentage and disease index were recorded in the following treatments; sowing date of the 10<sup>th</sup> June, sowing method: hills over furrows, one irrigation during the growing season and NPK (65, 200 and 50 kg/fed., respectively) fertilization and adding agricultural sulphur (125 kg/fed.). These treatments had significantly reduced the infection percentage and disease index. At the same time, it has significantly increased seed yield as compared with the control.

Key words: Root rot-wilt, *Fusarium oxysporum* f. sp. *sesami*, sesame, agricultural practices.

INTRODUCTION