Egypt.J.Appl. Sci; 18 (6) 2003 83-97

FACTORS AFFECTING DAMPING-OFF, ROOT ROT DISEASES AND OIL CONTENT OF SUNFLOWER UNDER FAYOUM CONDITIONS.

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Key words: *Helianthus annuus* L., tillage damping off, root rot, oil content, irrigation.

ABSTRACT

Damping off and root rot diseases causing considerable damage and looses in seed and oi yields. Eight fungal species were isolated from naturally infection of sui flower seedlings which obtained from different treatments during 2000 ind 2001 seasons. The effect of some cultural practices i.e. tillage sy stems (four tillage treatments) and irrigation intervals (three irrigation intervals) on the incidence of these diseases were investigated under field conditions in Fayoum Governorate.

The percentage of solated fungi from natural infection of seedlings was 2.5 to 52% *Fusariu n* sp. was detected in all treatments having the highest frequency follow ed by *Pythium debaryanum*, *F. oxysporum*, *F. solani*, *Rhizoctonia solani*, *Verticillium albo-atrum*, *V. dahliae* and *Alternaria* sp. Total coun t of fungi was recovered from zero tillage with irrigation every 9 days ind exhibited higher level of fungi than other treatments . The obtained data proved that the lowest values of infection percentage were recorded in the following treatments, conventional tillage process and irrigation every 15 days. These treatments had significantly reduced the infection percentage. Also, it has significantly increased seed yield and seed oil content.