EVALUATION OF SUNFLOWER GENOTYPES TO STEM ROT CAUSED BY SCLEROTINIA SCLEROTIORUM UNDER FIELD CONDITIONS

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ABSTRACT

Stem and root rot caused by *Sclerotinia sclerotiorum* is the most important devastating disease of confectionary sunflowers in West Azarbayjan province of Iran particularly Khoy area. To evaluate reaction of confectionary and oilseed sunflowers against the disease, 76 genotypes including both types were inoculated by the pathogen at grain filing stage. The isolate 302 collected from the infected area (Khoy) and mass produced, was used for the experiment. Seven millimeter mycelial plugs of PDA medium including 3-day-old culture of the pathogen were put on injured site of the individual plants at 40 centimeter height. A small piece of wet cotton and two layers of Parafilm for maintaining moisture and fixing the fungal plug were employed for all treatments. The lesion length of inoculated stems was measured seven and 14 days post inoculation. The results of data analysis demonstrated significant differences of lesion length and single head yield between the genotypes. Line S53 with mean 63 millimeter lesion length and S6B with 13 millimeter lesion length demonstrated the most and least progress and infections, respectively. The local land races of confectionary sunflower including Shamshiri and Badami were more susceptible in comparison with Pestei ones against the disease.

Key Words : confectionary sunflower, *Sclerotinia sclerotiorum*, reaction.