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ACHIEVING RESISTANT ROOTSTOCKS TO ROSELLINIA ROOT ROT IN IRANIAN LOCAL GREENGAGE (PRUNUS DOMESTICA SUBSP. ITALICA) GENOTYPES

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Root decay caused by *Rosellinia necatrix* is one of the most important soilborn disease of fruit trees including stonefruits. The pathogen is highly destructive so that can kill the tree at any stage. In order to achieve rootstock resistant to this pathogen, 22 greengage genotypes collected from Eastern Azarbayjan, Ardebil, Kohkiluye-Boyer Ahmad, Kerman, Tehran and Alborz provinces. The collected seeds washed and air-dryed, then stratificated at cold room set at 4-5 C. After germination, the seedling potted in plastic pots. The seedling were inoculated at the crown with three wheat grains covered with mycelia mat of *R. necatrix* Analyses of variance showed the significant difference between the genotypes for traits of survival and necrosis length of the seedling at the probability level of 1%. Cluster analysis using Ward method and calculating the Euclidean distance squares for disease severity data showed that the genotypes Ahmad Beiglu, Kohkiluye G.24 and Bijagh1 showed the most resistance reaction while genotypes Germi, Anar G.3 and Anar B1were th most susceptible ones. The first three genotypes might be considered as promising rootstocks used for future research.

Keywords: Greengage, Phytophthora, local genotypes, tolerant rootstocks