Iranian Journal of Horticultural Science and Technology 18 (4):413-424 (2017)

Effect of Arbuscular Mycorrhizal Fungi Symbiosis on Photosynthetic Pigments and Absorption of Some Nutrient Elements in Three Seedling Rootstocks of *Prunus* Genus

F. Hoseinzadeh Talaie and M. Esna-Ashari[1*]

In order to the study of symbiosis between the mycorrhizal fungi and three seedling rootstocks of *Prunus* genus, an experiment was conducted based on the completely randomized design with three replications. Treatments included seedling rootstocks at three levels (*Prunus Amygdalus*, *Prunus mahaleb* and *Prunus persica*) and mycorrhizal fungi of *Glumus* genus at five levels (*G. mossea* + *G. hoi*, *G. intraradices* + *G. hoi*, *G. mossea* + *G. intraradices*, and a mixture of all three fungi, plus a non-inoculation treatment as control). The highest root colonization percentage (34.41%) belonged to the mixture of *G. intraradices* + *G. hoi* that was significantly different from the control. Mycorrhizal fungi had a little effect on the concentration of photosynthetic pigments in all three seedling rootstocks. Inoculation of mycorrhizal fungi had a significant effect on the absorption of Cu, Fe, Zn, Mg, P and K showing their increase compared to the control. The highest absorption of P and K was observed in *Prunus mahaleb* treated with the mixture of three fungi and *G. hoi* + *G. intraradices* respectively. Mycorrhizal treatments had no significant effect on Mn absorption. The seedlings were significantly different in terms of element absorption but the amount and the trend of this differences were not similar for the various elements.

Keywords: Colonization, Cu, Fe, K, Na, Mg, P, Zn.

1. Former M.Sc. Student and Professor, Department of Horticultural Sciences, Bu-Ali Sina University, Hamedan, Iran, respectively.
* Corresponding author, E-mail: (m.esnaashari@basu.ac.ir).

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[DOR: 20.1001.1.16807154.1396.18.4.5.4]