

عنوان مقاله:

Effect of Arbuscular Mycorrhiza on Growth and Physiological Behavior of PHL-C Rootstock

محل انتشار:

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تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

PHL-C is one of the dwarf sweet cherry rootstocks which is a hybrid between *P. avium* L. × *P. cerasus* L. Direct rooting of sweet cherry rootstocks is difficult which can be solved by using in vitro propagation. Transfer of plantlets from in vitro to ex vitro limit the use of micro propagation, because of weak root systems and low survival rates. This study was conducted in order to select the best biohardening agents in order to improve the growth of PHL-C dwarf rootstocks in Khorasan Razavi Agriculture and Natural Resources Research and Education Center. Three arbuscular mycorrhizal fungi (AMF) strains, *Diversispora epigaea*, *Rhizophagus intraradices* and *Rhizophagus fasciculatus*, were used as in vitro raised PHL-C plantlets. Results showed that plantlets inoculated with *Diversispora epigaea* gave the highest leaf area, root diameter, root surface and phosphor concentration. *Diversispora epigaea* was more effective in improving most of the growth and physiological attributes of inoculated tissue culture raised plantlets of PHL-C.

However, the highest total root length (۴۱۱۳ mm) was found in *Rhizophagus fasciculatus* inoculated plantlets

کلمات کلیدی:

Arbuscular Mycorrhizal Fungi, PHL-C, Rooted plantlets

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