

Study of physiological characters and effects of dwarf making of two local varieties (Azayesh and Gamialmasi) on apple cultivars

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The dwarf root stocks because of their role on increasing of yield, better using from planted area and decreasing of expenses of fruit production are very important, specially in apple production. In order to obtain dwarf vegetative rootstock in Iran, two local cultivars of apple (Azayesh and Gamialmasi) were studied in respect of dwarfing effects, propagation method, compatibility of rootstock with scion, morphological and phenological traits and they were compared with improved dwarf rootstock (B9, M9, MM106), in the Kaboutarabad Agricultural Research Station in Esfahan, during 3 year since 1997.

The results of this study showed that : mound and trench layering with suitable bed are the best method for vegetative propagation of two local cultivars, and also they are compatible with climatical conditions and scion of commercial apple cultivars.

Azayesh and Gamialmasi have similar traits with improved dwarf rootstock and therefore they can apply as dwarf rootstock for propagation of apple cultivars.