

Study on the Propagation Methods of Jujube Tree (*Zizyphus Jujuba* Mill.) by Seed

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To study the propagation methods of jujube tree (*Zizyphus Jujuba* Mill.) all the experiments were carried out in greenhouse of Agriculture Faculty at Tarbiat Modarres University in 1998. In the case of propagation by seeds, using three kinds of seeds such as green mature, mature and one - year - old seeds, the seeds were treated by gibberellic acid (including control, 500 ml 1000 ml) for two hours and combined in three stages of stratification (without chilling, one months chilling and two month chilling). During the stratification in the all stages, moisture was optimum and temperature was at 4 °C constant. Scarification by sulfuric acid took place as another treatment. In this case the seed were treated by 98% and 50% of sulfuric acid. These experiments were carried out in a completely randomized block design with four replicates in very treatment. The mentioned treated seeds were sown in sandy soil in greenhouse. The greenhouse temperature in all of experiments was 22-25 °C. Hoeing, mechanical weeding and irrigation were made regularly.

An experiment was also designed as factorial in a completely randomized block design to the study the effect of vegetative propagation method by offsets.

In this investigation one-year - old, two-year-old and three offset were used and transplanted in October and May.

On the basis of observation one-year-old seeds treated with 50% sulfuric acid vegetated 68 days after sowing. It seems that treating of one-year-old with 50% sulfuric acid is suitable.

The results show that the best offset is two-year-old as the suitable time for transplanting is October (before winter freezing).