



## **Study effects of IBA and wastewater on rhizogenesis grope var: askari**

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Since life of all the living beings, especially humankind is related to water and the trend population growth has caused the unreasonable consumption of underground water sources that can bring about irretrievable consequences. Therefore, returning wastewaters (sewage water) to the cycle of water consumption can decrease the pressure on these sources, besides that can be considered as a worthwhile nutrition and water sources. Reasonable and consistent use of this wastewater requires performing regional researches and analyzing every aspects of this issue. In this direction and to evaluate the effect of wastewater on grape-slip (cutting) rhizogenesis, in order to obtain a way for using wastewater in vineyard, an experiment in a completely Randomized Block Design in the research station of Bahonar University of Kerman in 1385 was accomplished. This experiment included two factors: A, B that A with five levels but B with four, as follows: Treatment A: Percentage of wastewater mixture ( $a_1 = 0\%$ ,  $a_2 = 25\%$ ,  $a_3 = 50\%$ ,  $a_4 = 75\%$ ,  $a_5 = 100\%$ ). Treatment B= IBA hormone ( $b_1 = 0\text{ppm}$ ,  $b_2 = 500\text{ppm}$ ,  $b_3 = 1000\text{ppm}$ ,  $b_4 = 1500\text{ppm}$ ). During this experiment some characteristics such as: the number of roots, dry and wet weight of roots and branchlets (twigs). Root and twigs lengths and the weight of primary slip, both in dry and wet condition were evaluated. With regard to the results, use of wastewater on grape rhizogenesis had some positive effects and it is recommended to carry out more thorough researches, especially in relation to pistachio nurseries.

**Keywords:** Wastewater, Grape cutting, IBA

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