

## **The Effect of Plant Growth Regulators on the Vegetative and Reproductive Growth of Bedding *Fritillaria Imperialis* L.**

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*Fritillaria imperialis* L., is one the most attractive Iranian plants that decorates central and west mountains of different provinces of Iran but still it is not used as ornamental plant, and little information exist on cultural methods. Development of a novel product increase the possibility of success in world market because novelty is an important component of marketing strategy.

The bulbs were selected and marked in their natural site when their above soil level foliage were dried, pulling up the bulbs from nature. The bulbs were treated with different concentrations of gibberellin ( $GA_3$ ), 2- naphthalen acetic acid (2-NAA), indol 3 butyric acid ( $I_3BA$ ), indol 3 acetic acid ( $I_3AA$ ), and naphthalen acetic acid (0, 250, 500, 1000, 2000 and 4000 ppm) prior to planting. Treatments were arranged in a randomized complete block design (RCBD) with 3 replicates, each with four bulbs and at Agricultural Research farm of Tarbiat Modarres University and the effect of plant growth regulators on the vegetative and reproductive growth of *Fritillaria imperialis* L. were carefully considered.

Treated plants show more improvement quality and quantity characteristics than control and 2-NAA at a concentration of 1000 ppm produced longest length of stem and flower stem and increased number of flowers.