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INTRODUCTION

Rosa is a one of the more favorites cut flowers in the world with a lot of variety. They are growths in moderate zones of northern hemisphere. Rosa propagated with cutting, seed and grafting in the world. The common method rose planting in developed countries is hydroponic system and then We decided investigation effect of different concentration of IBA (indole butyric acid) on root induction for the best growth in greenhouse conditions.

## MATERIALS AND METHODS

we had preparation of cuttings with three nodal and one leave Dolsevita cultivar of rosa and then treated by different concentration of IBA (0,500,1000,2000 mg/lit). After that cuttings cultures in coco pit and perlite medium. All cultures were placed in greenhouse of Islamic Azad University of khorasgan(Isfahan) with foger system and  $22^{\circ c}$ . The experiment design was arranged in a randomized complete block design with three replications. After six week we were investigation number of root, length of roots, callus and percentage of rooting.

## **RESULTS AND DISCUSSION**

Results showed treatment of cutting by IBA increased induction of roots in Dolsevita cultivar of rosa. Fiona Perry in 1997 showed Indole-butyric acid (IBA) was found to be the most effective auxin in stimulating rooting of cuttings of all three species(*Conospermum mitchellii*, *Conospermum patens and C. mitchellii*). The best treatment for most numbers of roots was obtained in 1000 ppm and treatment with 2000 ppm concentration of IBA significantly increased the length of root per cutting compare to control. Also Results showed that the highest percentage of rooting belonged to treatments IBA with 1000 and 2000 mg/lit.

Keywords: cutting , ccopit , perlite, Indole-butyric acid.

## **REFERENCES:**

- M. H. Azimi, Z. Hamzehi, A. Fathi Hafashjani, F. Bakhteyari and S. Salehi. 2013. Study of Seasonal Variation on the Cut Rose Flower Yield under Greenhouse Conditions. International Journal of Agronomy and Plant Production. Vol., 4 (6), 1173-1177.
- Fiona Perry.1997. Effects of auxin treatment, cutting type and air and root zone temperatures on cutting propagation of eastern species of *Conospermum* and *Persoonia* with potential horticultural value School of Botany, La Trobe University, Report to the Australian Flora Foundation.



