EFFECT OF BORIC ACID ON FLOWERS LONGEVITY OF TWO CULTIVARS OF *Dianthus caryophyllus* L.

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ABSTRACT

This experiment was carried out at the Horticulture Department، College of Agriculture and Forestry، Mosul University- Iraq، on *Dianthus caryophyllus* L. plants cvs. Jeanne Dionis Blano (white flower) and Marie Chabaud Jaune (yellow flower)، to investigate the effect of pulsing treatments of two cultivars flowers at two concentrations of boric acid 200 and 400 mg/liter in addition to control treatment. The Factorial Experiment was conducted with Completely Randomized Design. Each treatment replicated three times with 3 flowers. The results were summarized as follows: Plants of white flowers cultivars manifested the significant results in vase life، water uptake، change in flower diameter percent after 3 days of vase life and The highest percentage of the concentration of total sugars in flower at initial stage of vase life. Flowers pulsed in 200 mg/liter of boric acid gave significant higher values of vase life 8.3 days، water uptake 17.48 cm^3، change in fresh weight percent after 3 days of vase life 108.1%، flower diameter percent after 3 days of vase life122.9% and percentage of the concentration of total sugars in flowers at initial stage of vase life 0.31% comparison with control. . In general، pulsing treatment 24h with at 200 mg/liter of boric acid gave best results of vase life of two cultivars.

Key words: *Dianthus caryophyllus* ، boric acid ، vase life.

Diyala Agricultural Sciences Journal, 7 (1):102-110.(2015). ISRA impact factor 4.758.
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