

- Noori, I.M. 2008. Studies on seed germination, seedling growth and budding of some stone fruits( spp.). Ph.D. dissertation. College of Agriculture. University of Sulaimani. Iraq.
- Oh, M.H and S.D. Clouse. 1998. Brassinolide affects the rate of cell division in isolated leaf protoplasts of Petunia hybrid. .17:921-924.
- Paul, F. 2002. National citrus nursery workshop. Mildura. Australia.
- Reisinauer, H.M. 1978. Soil and Plant Tissue Testing in California, Division of Agriculture Sciences, University of California, Bullentin.
- Sauls, J.W. 2008. Rootstock and scion varieties. Education programs conducted by the Texas Agri. Life. Extension. <http://aggie-Horticulture.tamu.edu/>.
- Yuxin, H., F. Bao and J. Li. 2000. Promotive effect of brassinosteroids on cell division involves a distinct cyc D3-induction pathway in Arabidopsis. 24(5), 693-701.

### **EFFECT OF TREATMENT WITH BRASSINOLIDE AND FOLIAR APPLICATION OF NUTRIENT SOLUTION "AGROLEAF" ON SOME GROWTH CHARACTERISTICS OF LOCAL SWEET ORANGE SCIONS.**

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#### **ABSTRACT**

The study was conducted in the lath house of Horticulture department and Landscape gardening , College of Agriculture ,University of Baghdad during the period from April 2013 to April 2014 to study the effect of soaking bud sticks with Brassinolide {0(soaking with distilled water), 0.02, 0.04 and 0.08 mg.l<sup>-1</sup>} and foliar application by nutrient solution of Agroleaf {0(spray with distilled water ), 2.5 and 5 gm.l<sup>-1</sup>} on growth of local sweet orange transplants budded on swinglecitrumello seedling rootstocks in a factorial experiment with Randomized Complete Block Design "RCBD" with three replicates. The results could be summarized as follow:

Bud sticks soaking with Brassinolide in concentration 0.04mg.l<sup>-1</sup> and transplants spray with Agroleaf in concentration 5gm.l<sup>-1</sup> and their interaction showed the highest values in all growth characteristics represented as (percentage of bud success, leaves number, leaves area, vegetative and root dry weight, percentage of carbohydrate and nitrogen in branches and C/N ratio, while soaking bud sticks with Brassinolide in concentration 0.08mg.l<sup>-1</sup> showed the highest leaf's chlorophyll content.

**Key Words:** Brassinolide, Agroleaf, Soaking, Foliar application, Budding.