

عنوان مقاله:

Effect of Ni, CO, SA and Sucrose on Extending the Vase-Life of Lily Cut Flower

محل انتشار:

فصلنامه انرژی و محیط زیست ایران، دوره 3، شماره 2 (سال: 1390)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Mohsen Kazemi - Department of Horticulture Sciences, Karaj Branch, Islamic Azad University, Karaj, Iran

Atefe Ameri - Department of Horticultural Science, College of Agriculture Ferdowsi University of Mashhad, Iran

خلاصه مقاله:

In this research, the effect of different concentrations of Nickel (0, 1.5 and 2.5 mM), Salicylic acid (0, 1 and 2 mM), Cobalt (0, 1 and 2 mM) and sucrose (0, 2.5%) on flower longevity, Acc-oxidase activity, anthocyanin leakage, microbial population, water uptake and SPAD value as a measure of leaf greenness of Lily was investigated. To evaluate the effect of these treatments, a study was carried out based on the randomized complete design with five replications. Results of this experiment showed that the best treatment in extending the longevity of the flowers were solutions containing 2 mM SA, 2 mM SA+ 2.5% sucrose and 2.5mM Ni+ 2 mM SA+2 mM Co with 2.5% sucrose. SA, Ni and Co decreased the anthocyanin leakage, whereas the highest concentrations of SA, Ni and Co reduced ACC-oxidase activity. The Maximum of chlorophyll content was observed for flower kept in solution containing 2 mM SA and 2 mM SA+ 2.5% sucrose compared to the control and solution containing Ni and Co. Ni and Co treatments had no positive effect on increasing the water uptake and fresh weight of Lily. Overall, the results suggest that SA, Ni, CO and sucrose increase the vase-life by improving the membrane stability and reducing the oxidative stress damages during Lily flower senescence

کلمات کلیدی:

Lily; Nickel; Salicylic acid; Cobalt; Vase-life

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/251911>

