



<u>Second Article</u> (Considered single- Common with another outside the specialization- Published

Article title	Response of <i>Bougainvillea glabra</i> L. plants grown under different growing media in relation to cycocel.
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Abstract

Two pot experiments were conducted in 2010 and 2011 to evaluate the effect of different mixtures of selected growing media (peat moss, perlite and vermiculite) and CCC at the rates of 0.0, 1000, 2000 and 3000 ppm on vegetative growth, chemical composition, as well as, anatomical structure of Bougainvillea glabra L. plants. The obtained results indicated that, peat moss+ perlite (1:2) mixture resulted in significant poorest growth parameters such as plant height, number of branches, number of internodes and fresh weight of aerial parts, compared with the other mixtures of growing media. On the other side, the results clearly showed that foliar spraying with the highest concentration of CCC (3000 ppm) affected negatively or positively on plant height and number of branches, respectively. While, plants sprayed with CCC at 2000 ppm gave the highest significant values of number of internodes/ stem and fresh weight of aerial parts compared with the other CCC concentrations. Growing the plants in the mixture of peat moss + vermiculite (1:2) promoted the highest content of N, Mn, Mg, Fe and chlorophyll (a+b). While the highest values of K and Zn were obtained resulted in grown the plants in the mixture of peat moss + vermiculite by (1:1) or (2:1), respectively. The highest content of total carbohydrates and total carotenoids were observed when plants were grown in peat moss + perlite (1:2) mixture. Spraying the plants with CCC at 3000 ppm increased plant macro and micro nutrients contents, as well as, chlorophyll (a+b). The greatest reduction in all leaf blade parameters was due to growing the plants in the mixture of peat moss+ vermiculite (1:2) and spraved with CCC at 1000 ppm