

The effect of different commercial nutrient solutions on yield and quality of two gerbera (*Gerbera jamesonii* L.) cut flower cultivars grown in soilless culture system

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Abstract

This research was carried out to investigate the effects of different commercial nutrient solutions on growth and yield of gerbera (*Gerbera jamesonii* L.) cut flowers in open soilless culture system. The experiment was set up in a completely randomized factorial design with three nutrient solutions (S1: Schreurs, S2: Florist and S3: Research Station for Floriculture and Greenhouse Vegetables, RSFGV) and two gerbera cultivars (Red “Stanza” and Yellow “Double Dutch”). Results showed that minimum days to the first flower bud appearance (38.2 days) and days to the first flower harvest (58.5 days) were obtained from Red cultivar supplied with the S3 nutrient solution. The highest number of leaves (12.3 leaves/plant), stalk length (52.2 cm), stalk fresh weight (38.4 g) and number of flowers (291 stalks/m².yr) were obtained from Red cultivar supplied with the S3 solution, while maximum vase life (11.4 days) was obtained from Yellow cultivar supplied with the Schreurs nutrient solution. Based on the results, RSFGV nutrient solution (S3) can be recommended as a basic nutrient solution for commercial gerbera cut flower production in hydroponic.

Keywords: Stanza, Schreurs, Florist, Nutrition, Vase life.

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