



RESEARCH ARTICLE

Effect of Bulb Weight and Spraying with Gibberellic Acid on the Growth Characteristics and Percentage of Volatile Oil and Diagnosis of Oil Compounds with a GC-MS Device of the Wild Daffodil Plant, *Narcissus tazetta* L.

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In the Study was conducted during the winter agricultural season , the fabric canopy of the Agricultural Research Station / College of Agriculture / University of Basra, to determine the effect of bulb weight and spraying with gibberellic acid on the characteristics of vegetative and flowering growth and the volatile oil yield of daffodil bulbs. *Narcissus tazetta* L. Four levels of bulb weights were used, which are 30, 40, 50, and 60 grams, and three levels of gibberellin acid, which are three concentrations, which are 0, 50, 100, and the interaction between them, and the specifications of the resulting bulbs and the chlorophyll content of the leaves. A randomized complete block design (RCBD) was used. Randomized complete block design with a two-factor factorial experiment with three replications; The averages were compared using the least significant difference (LSD) at the 5% probability level, and the results can be summarized as follows: The results showed that the 60-gram bulb weight treatment was significantly superior to the rest of the treatments in most growth characteristics, including plant height, bulb weight after harvest, number of bulbs, the highest chlorophyll content in leaves, and the highest average number of roots. As for as for the floral characteristics, they differed Weights of bulbs among each other in flowering characteristics. As the weights exceeded w60 and w50 grams were significantly higher than the rest of the plants, without a significant difference between them. As for Highest bb rate the longest flower stem resulted from the treatment with 60 gm It reached 37.66 cm and also gave the highest rate The number of florets and the highest percentage of oil in the flowers. As for the highest effect of gibberellic acid, no significant effect was recorded for plant height and flower stem length, but the two treatments G50 and G60 mg l-1 were recorded. Is the best weight of the bulb after harvest, the diameter of the floret, and the number of florets in the inflorescence. The comparison treatment also outperformed the other treatments of gibberellic acid in the number of roots.

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INTRODUCTION

Narcissus tazetta L. or styrax, styrax, or faghu, or sphagnum, a genus of plants belonging to the narcissus family, Amaryllidaceae, that includes between 50 and 100 species. The plant grows from an early winter onion perennial. The original homeland of most types of daffodils is Central Asia and the Mediterranean basin, from where they moved to the Americas. The leaves are green, striped, and the bulb consists of fleshy scales and leafy bases. It appears in the winter and after rain. It is the most popular flower in the world, especially in Spain. Daffodils prefer dry soil and an environment with light sun and shade. Daffodils must be