

Determination of the Growth and Development Different Hyacinth Cultivars

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Abstract: This study was conducted to determine morphological characteristics of different hyacinths cultivars grown without fertilizing under greenhouse conditions. For this aim, Jan Bos, Carnegie, Blue Jacket, and City of Haarlem hyacinth cultivars were used. Several traits such as leaf numbers, leaf lengthiness, leaf diameter, plant height, flower diameter, floret number, floret height, floret diameter, harvest time, first bloom time, full bloom time, flower width, flower length and stem thickness etc were investigated. The obtained data were analyzed using One-Way ANOVA with three replications. In general, growing is sustainable with using minimal fertilization dozes. However, variation in flower growth and especially height may be due to greenhouse temperature and soil condition. While City of Haarlem cultivar was influenced from this limited condition, a significant reduction in size of other cultivars was observed. However, Carnegie and Blue Jacket cultivars that have the highest flower width were almost similar. Carnegie cultivar came before about of the first flowers, full of flowers, and the shortest harvest, duration was observed as the earliest cultivar. Results of the experiment reflected that varieties growing depending on short vegetation period were found sufficient without fertilization, but fertilization for improving flower quality could be required. As a result, it was concluded that statistically significant differences among cultivars were found.

Key words: *Hyacinthus orientalis* L, variety, plant development, morphological characteristics

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