

INFLUENCE OF WATER AND KINETIN ON THE GROWTH AND FLOWERING OF CARNATION

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ABSTRACT

Two field experiments were conducted to evaluate the effect of water regimes and kinetin spraying on growth , flowering and chemical composition of Dianthus Caryophyllus Cv . white sim .

Number of branches per plant , length of flower stem , fresh weight of leaves and flower stem were considerably increased by water regime E (2155 m³ / feddan) . Water regime C (3310 m³ / feddan) gave the maximum number of flowers per plant while water regime D (4310 m³ / feddan) produced the largest diameter and heaviest fresh weight of flower .

Kinetin at 200 ppm produced the best growth characters as (number of branches , length and fresh weight of flower stem , number and diameter of flowers) . while kinetin at 100 ppm gave the heavier fresh weight of leaves and flower .

Water regime (C or D) with kinetin at 100 ppm produced the best flowering characters of carnation plants . This results is economically valuable .

Chemical analysis of leaves , showed higher carbohydrate percentage due to water regime (D) plus kinetin at 100 or 200 ppm .