

Growth, flowering and cut flower quality of spray chrysanthemum (*Chrysanthemum morifolium* Ramat) cv. V720 at different planting densities

ABSTRACT

Growth, flowering and flower quality of spray chrysanthemum (*Chrysanthemum morifolium* Ramat) cv. V720 planted at densities of 44, 56, 70, 83 and 104 plants/m² were evaluated. Stem diameter, leaf number, total leaf area, and overall plant fresh weight were reduced by 16, 7, 36 and 25%, respectively, but the leaf area index was increased by 50% at the highest planting density (104 plants/m²) as compared to the lowest density (44 plants/m²). Time taken to showing colour and harvesting, which was calculated from the beginning of short day, was delayed by high planting density. Measurement on the spray diameter showed a clear reduction at 83 plants/m², and this improved the spray form. The length of flower stalks and vase life were not affected. There was marked reduction in the number of flower stalks as well as flower number at high densities (83 and 104 plants/m²). Generally, the cultivar (V720) used in this study can be planted at high density (83 plants/m²) under lowland condition and able to produce the premium grade flowers.

Keyword: Chrysanthemum; Density; Growth; Flowering; Quality