

## **Effect of growth regulators on growth, flowering and yield of chrysanthemum (*Chrysanthemum morifolium* Ramat.) cv. ‘IIHR-6’ under middle Gujarat conditions**

**S.R. PATEL, N.S. PAREKH, A.B. PARMAR\* AND H.C.PATEL**

Department of Horticulture, B.A. College of Agriculture, Anand Agricultural University, ANAND (GUJARAT) INDIA

### **ABSTRACT**

A field experiment was carried out at the College Nursery, B. A. College of Agriculture, Anand Agricultural University, Anand during *Kharif* to *Rabi* season of the year 2007-2008 to study the “Effect of growth regulators on growth, flowering and yield of chrysanthemum (*Chrysanthemum morifolium* Ramat.) cv. ‘IIHR-6’ under middle Gujarat conditions”. Nine treatment combinations comprised of three levels of growth regulators *i.e.* GA<sub>3</sub> (50, 100 and 150 ppm), CCC (250, 500 and 750 ppm) and MH (250, 500 and 750 ppm) with control (water spray) were tried in Randomized Block Design and replicated three times. Significantly maximum plant height (87.20 cm), plant spread (E-W 24.73 cm and N-S 24.96 cm) and number of branches per plant (18.57) were obtained in treatment T<sub>3</sub> GA<sub>3</sub> 150 ppm. The treatment GA<sub>3</sub> 150 ppm gave significantly minimum days required for first flower initiation (108.33 days) and 50% flowering (116.00 days). Significantly maximum flower diameter (8.76 cm), flower weight (5.93 g) and shelf life of flowers (8.00 days) were obtained in the treatment GA<sub>3</sub> 150 ppm. Number of flowers per plant (48.30), flower yield per plant (170.77 g) and flower yield per hectare (12.65 t) were found significantly maximum in the same treatment.

**Key words** : Growth regulators, Chrysanthemum, GA<sub>3</sub>, Growth, Yield