



## Research Paper

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# Effect of zinc and iron on growth, yield and quality of chrysanthemum (*Dendratherium grandiflorum* Tzeuleu)

■ P. KARUPPAIAH

### Author for correspondence :

#### P. KARUPPAIAH

Department of Horticulture, Faculty  
of Agriculture, Annamalai  
University, Annamalaiagar,  
CHIDAMABRAM (T.N.) INDIA  
Email : [vpkhortic@yahoo.com](mailto:vpkhortic@yahoo.com)

**ABSTRACT :** A field experiment was carried out to study the effect of zinc and iron on growth, yield and quality of chrysanthemum during 2009-2010, in Randomized Block Design comprised of sixteen treatments with three replications in the Department of Horticulture, Annamalai University, Annamalaiagar, Tamil Nadu, India. Sixteen treatments were formulated with three levels (0.25, 0.5 and 0.75%) each of zinc sulphate and ferrous sulphate individually and in combination. The control was the usual practice of the farmers. Various biometric observations on growth and physiological viz., plant height, stem girth, number of branches and leaves per plant, leaf area and chlorophyll content, flowering and yield attributes viz., number of flowers per plant, flower stalk length, flower head diameter, flower head weight, flower yield per plant and hectare and quality attributes viz., xanthophyll and carotenoid content, visual rating and shelf life were recorded. The results revealed that the treatment combination of 0.5% zinc sulphate +0.5% ferrous sulphate (T<sub>12</sub>) was found to be the best in growth, yield and quality attributes followed by 0.5% zinc sulphate +0.75% ferrous sulphate (T<sub>13</sub>) and 0.5% zinc sulphate +0.25% ferrous sulphate (T<sub>11</sub>).

**KEY WORDS :** Micronutrients, Zinc, Iron, Xanthophyll, Carotenoid, Chrysanthemum

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