



Effect of foliar application of bio-stimulants on growth, yield and flower quality of chrysanthemum (*Dendranthema grandiflora* Tzvelev.)

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Abstract:

An experiment was conducted to study the effect of bio-stimulants on growth, flowering, yield, quality and economics of chrysanthemum under fan and pad greenhouse at Department of Horticulture, College of Agriculture, Shivamogga during 2017-18. The experiment was laid out in RCBD with thirteen treatments viz., T1- Humic acid 0.5%, T2-Humic acid 0.6%, T3-Biovita 0.5%, T4-Biovita 0.6%, T5-Recharge 0.5%, T6-Recharge 0.6%, T7- Spic cytozyme 0.2%, T8-Spic cytozyme 0.4%, T9-Vipul 0.2%, T10-Vipul 0.4%, T11-Boron 0.1%, T12-Boron 0.2% and T13-Control replicated thrice. Among the different bio-stimulants treatments application of Spic cytozyme @ 0.4% at 30, 60, 90, 120 and 150 days after transplanting resulted in significantly higher plant height (89.04 cm) and internodal length (2.44 cm), while biovita at 0.6% recorded maximum number of leaves (143.43), stem girth (8.18 mm), number of primary branches (11.47), number of secondary branches (24.98), leaf area (5245.33 cm²/plant), leaf area index (5.80), leaf area duration (122.60), stem dry weight (15.06 g/plant), leaf dry weight (24.84 g/plant), flower dry weight (6.16 g/plant), total dry matter accumulation (45.37 g/plant), crop growth rate (0.000897 g/m²/day), relative growth rate (0.009760 g/g/day) and net assimilation rate (0.0129800 g/dm²/day), minimum number of days for first flowering (100.00), 50 per cent flowering (112.33) and maximum duration of flowering (65.82), maximum



number of flowers per plant (95.57), flower yield per plant (511.93 g), flower yield per square meter (5.63 kg), flower yield per hectare (56.30 t/ha), sucker yield per plant (9.99), individual flower weight (7.87 g), flower diameter (6.92 cm), stem length (46.89 cm), vase life (22.99 days), shelf life (11.07 days) and benefit to cost ratio (3.92).

Biography:

B Hemla Naik is currently working as a Shivamogga, India

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