Effect of plant growth regulators on flowering and yield of gladiolus (Gladiolus grandiflorus L.) cv. AMERICAN BEAUTY
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ABSTRACT
The experiment was carried at College Horticulture Nursery, Department of Horticulture, B.A. College of Agriculture, Anand Agricultural University, Anand during the year 2008-09. The treatments comprised of four growth regulators with their two levels of each viz., GA₃ (25, 50 mg/l), NAA (50, 100 mg/l), Ethrel (100, 200 mg/l) and CCC (250, 500 mg/l) including control (only water). The experiment was laid out in a Randomized Block Design with nine treatments and three replications. The results revealed that treatment of Ethrel 200 mg/l took minimum days required for spike initiation as compared to rest of the treatments. While, minimum days required for first flower opening, maximum number of spikes per plant, spike length and number of florets per spike were obtained with the application of GA₃ 50 mg/l as compared to control. Where as CCC 250 mg/l gave maximum yield of corms and cormels in terms of number and weight per plant as compared to control.

Key words: Gladiolus, Gibberellic acid, NAA, Ethrel, CCC, Regulators