

Title Comparative analysis of conventional farming system with precision farming system in marigold (*Tagetes erecta* L.)

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Abstract

An investigation was carried out in African marigold (*Tagetes erecta* L.) hybrid 'L3' at the Botanic Gardens, Department of Floriculture and Landscaping, Horticultural College and Research Institute of Tamil Nadu Agricultural University, Coimbatore, during two seasons (April-July and November-February) during 2009-2010. The study aimed at comparing precision farming system of marigold with conventional farming system. In precision farming system, 75% TRD (Total Recommended Dose) was combined with three biostimulants viz., panchagavya 3%, humic acid 0.2% and sea weed extract 0.25%. Conventional system (Farmer's practice) was taken as control. During the two seasons, among the treatments compared, application of 75% RDF (Recommended Dose of Fertilizers) along with humic acid 0.2% recorded the maximum plant height (34.27 and 32.86cm at 30 DAT), (67.41 and 64.88cm at 45 DAT) and (84.19 and 80.12cm at 60 DAT), number of branches (8.79 and 8.17 at 30 DAT), (17.41 and 17.53 at 45 DAT) and (19.71 and 19.75 at 60 DAT), dry matter production (41.61 and 40.35g at 30 DAT), (51.52 and 50.52 at 45 DAT) and (62.42 and 61.42 at 60 DAT), number of flowers (60.26 and 62.29), individual flower weight (17.36 and 16.47g), flower yield per plant (1.02 and 1.05 kg), flower yield per hectare (52.02 and 51.45 tonnes) and xanthophyll content (1.69 and 1.66 per kg) during first and second season respectively.