## EFFECT OF GA3 AND NAA ON GROWTH AND FLOWERING OF OKRA (ABELMOSCHUS ESCULENTUS L.) CV. GUJARAT OKRA- 2

## Dalpat Singh\* and J.R. Vadodaria

College of Horticulture, Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinar -385 506 (Gujarat). Email: dalpatsingh1988@yahoo.com

## Received-25.04.2017, Revised-15.05.2017

**Abstract:** A field experiment was conducted at Horticulture Instructional Farm, Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar during the *Kharif* season 2012, respectively to study the effect of GA<sub>3</sub> and NAA on growth and flowering of Okra. Growth parameters like plant height and stem thickness (90 DAS), average length of interned and leaf area per plant (60 DAS) and number of nodes per plant and flowering parameters like days taken for initiation of first flower, days taken for flower initiation to edible maturity, days taken for sowing to first picking and days taken for sowing to last picking were analyzed. The experiment consisted of 16 treatments combination involving two growth regulators with four levels each (0, 25, 50 and 75 ppm). GA<sub>3</sub> and NAA (75 ppm) was found to be the most effective in increasing more stem thickness (1.95 cm), average length of interned (4.98 cm), Minimum days taken for flower initiation to edible maturity (5.88) and days taken for sowing to first picking (115.38). Treatment combination of  $(g_3n_2)$  increasing plant height (85.96 cm) and leaf area per plant (2427.86). Were as maximum number of nodes per plant (18.34) found combination with (g\_3n\_3) and minimum days taken for initiation of first flower (42.09) and days taken for sowing to first picking (49.10) was found treatment combination of  $(g_0n_1)$  respectively.

Keywords: Okra, GA<sub>3</sub>, NAA, Growth, Flowering

## REFERENCES

**Arora, S. K, Dhankar, B. S. and Sharma, N. K.** (1990). Effect of cycocel and NAA on vegetative growth flowering fruit set and incidence of YVM in okra. Research and Development Reporter, 7 : 123 – 129.

**Dhage, Avinash, A, Nagre, P. K, Bhangre, K. K. and Anand, Kumar Papu** (2011). Effect of plant growth regulators on growth and yield parameters of okra. The Asian journal of Horticulture, 6 (1): 170-172.

**Hussaini, M. G. B. and Babu, K.** (2004). Effect of plant bioregulators on yield and yield attributes of bhendi cv. Arka Abhay. Orissa Journal of Horticulture, 32 (1): 108-109.

**Singh, Jaymala, Singh, B. K, Singh, A. K, Panwar, Meenakshi and Singh, Bhagat** (2012). Effect of foliar spray of GA<sub>3</sub> and IBA on plant characters and yield of okra. Environment and Ecology, 30 (4): 1351-1353.

**Singh, Laxman, Dhaka, R. S. and Mukherjee, S.** (2005). Effect of nitrogen, phosphorus and gibberellic acid on vegetative growth and yield of okra under semi-arid conditions. Haryana Journal of Horticulture Sciences, 34 (1/2): 166-167.

**Patil, D. R. and Patel, M. N.** (2010). Effect of seed treatment with GA<sub>3</sub> and NAA on growth and yield of okra cv. GO-2. Asian Journal of Horticulture, 5 (2): 269-272.

**Syed, Asghar, Hussain, S. A, Ali, Nawab, Asghar, S. and Ali, N.** (1997). Effect of exogenous growth regulators on growth, flowering and yield of okra. Sarhad J. of Agric., 13 (5): 449-453.

**Tyagi, A K, Kumar, Sandeep, Kumar, Vikki and Khan, Amzad** (2008). Response of growth regulators on the growth and yield of okra. Plant Archives, 8 No. pp. 411-412.

\*Corresponding Author

Journal of Plant Development Sciences Vol. 9 (5): 509-511. 2017