## EFFECT OF BEST PLANT BIO-REGULATORS AND MICRONUTRIENT FOR GETTING HIGHER FRUIT SETTING IN MANGO (MANGIFERA INDICA L.) CV. AMRAPALI

## Rajeev Kumar, V.K. Tripathi, Saurabh Tomar\*, Mahendra Chaudhary and Ram Jeevan

Department of Horticulture, Chandra Shekhar Azad University of Agriculture and Technology Kanpur 208002 (U.P.) India Email: <u>chaudhary.csa@gmail.com</u>

Received-02.12.2018, Revised-20.12.2018

**Abstract:** An investigation was carried out on 19 years old plantation of mango (*Mangifera indica* L.) cv. Amrapali at C.S.A.U.A.&T., Kanpur (U.P.) India, during the year 2013-2014. In all, 15 treatments foliar application of plant bioregulators and micronutrient were tested in RBD design replicated thrice. The result concluded that pre-harvest application of  $GA_3$  (40 ppm) +  $ZnSO_4$  (1.0%) results in significant decrease in fruit drops, increase in fruit retention. The application of NAA (40 ppm) +  $ZnSO_4$  (0.5%) results in significantly increase the number of fruits set per plant and minimum fruit set under control.

Keywords: Mango, GA<sub>3</sub>, NAA, Zinc sulphate, Fruit drop

## REFERENCES

**Bhowmick, N. and Banik, B. C.** (2011). Influence of pre-harvest foliar application of growth regulators and micronutrients on mango cv. Himsagar. *Indian Journal of* Horticulture **68** (1): 103-107.

**Burondkar, M.M., Jadhav, B.B. and Chetti, M.B.** (2009). Post-flowering morpho-physiological behavior of Alphonso mango as influenced by plant growth regulators, polyamine and nutrients under rainfed conditions. *Acta Hort.*; 820 : 425-432.

**Davenport** (2007). Reproductive physiology of mango. Braz. J. Plant Physiol. **19** (4): 363-376.

Krisanapook, K., Phavaphutanon, L., Kaewladdakorn, P. and Pickakum, A. (2000). Studies on fruit growth, levels of GA – Like Substances and CK- Like substances in fruits of mango cv. Khiew Sawoey. *Acta Horticulturae*, 509 : 694-704.

Kumar, R., Kumar, P. and Singh, U. P. (2008). Effect of foliar application of nitrogen, zinc and boron on flowering and fruitingof mango (*Mangifera indicaL.*) cv. Amrapali. *Environment and Ecology*, **26** (4B): 1965-1967. **Notodimedjo, S.** (1999). Effect of GA3, NAA and CPPU on fruit retention, yield and quality of mango (cv. Arumanis) in East Java. *Acta Horticulturae*, 509: 247-255.

**Singh, V.K. and Tripathi, V.K.** (2010). Efficacy of GA<sub>3</sub>, boric acid and zinc sulphate on growth, flowering, yield and quality of strawberry cv. Chandler. *Progressive Agriculture*, **10** (2): 345-348.

Tripathi, V.K. and Shukla, P.K. (2006). Effect of plant bioregulator on growth, yield and quality of strawberry cv. Chandar. *J. Asian Hort.*, **2** (4): 260.

Tripathi, V.K. and Shukla, P.K. (2010). Influence of plant bio-regulators, boric acid and zinc sulphateon yield and fruit characters of strawberry cv. Chandler. *Prog. Hort.* **42** (2): 186-188.

Vashistha, K., Yadav, A.L., Singh, H.K. and Yadav, D.K. (2010). Effect of foliar spray of nutrients on fruit drop, yield and quality attributes of mango fruit (*Mangifera indicaL.*) cv. Amrapali. *Plant Archives*, **10** (1): 359-360.

Yadav, I. S. (1997). Mango research in India in the past 50 years. *Indian Horticulture*, 42 (2): 10-17.