

**Original Article****Bunch Feeding technique in Banana For higher fruit yield****Dr. G. Chandra Mohan Reddy*, Dr. T. Susila and Dr. G. Rajeshwari***College of Horticulture, Dr. YSR Horticultural; University, AP CARL Campus, Pulivendula, YSR Dist. Andhra Pradesh***Corresponding author: swatichaudhary1722@gmail.com**Received: 15/01/2024**Published: 30/01/2024***Introduction**

Banana (*Musa acuminata* L.) is the leading fruit crop in tropical and subtropical regions of the world. It is a staple food of millions of people across the globe, irrespective of their commercial status. Banana is native of India and is widely grown in tropical, subtropical and coastal region of India. Banana is the second most important fruit crop in India next to mango. In India banana and plantain are widely grown in both tropical and subtropical regions comprising Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Orissa, Bihar, eastern U.P., West Bengal, Assam and North eastern states with considerable socioeconomic and cultural importance. In the recent years, there has been a growing recognition of the importance of banana and plantains as house hold food, nutritional and social security in many parts of the world. In India, there has been a significant increase in terms of area, production and productivity in the last two decades. Its year round availability, affordability, varietal range, taste, nutritive and medicinal value makes it the favourite fruit among all classes of people. It has also good export potential.

Banana is a heavy feeder of water, nutrients and requires continuous supply of nutrients and water in large quantities for its growth, development and good yield. Any limitations in the supply of nutrients and water leads to drastic reduction of bunch size, poor filling and development of finger is often reported in all most all cultivars importance (Jeyakumar *et al.*, 2010). Banana plant is supplied with nutrients through soil, foliar spray, de-navelling (removal of male inflorescence for nutrient diversion) and post-shoot feeding of nutrients through the distal stalk-end of rachis and bunch spray of various nutrients and growth regulators to achieve higher yields. Usually after shooting the rate of nutrient uptake from the soil decreases hence there is a less scope for soil application of nutrients after shooting, therefore direct application of nutrients through distal stalk and direct bunch spraying may help in increasing the yield and quality of banana. Hence direct application of nutrients to Banana plants through distal stalk end (bunch feeding) and direct spray of nutrients or growth regulators on bunches are important post-shoot bunch management practices to increase the yield and fruit quality.

The most important nutrients for plant growth, development, and quality fruit production are potassium and nitrogen. Denavelling does not allow the food to flow in undesirable sink section due to which the fruit size increases. To achieve high yields, the banana plant is supplied with nutrients via soil and foliage, de-navelling (removal of male inflorescence for nutrient diversion), and post-shoot feeding of nutrients via the distal stalk-end of the rachis. The plant's nutrient status and the unrestricted flow of nutrients to the developing bunch influence bunch size and fruit quality during fruit development. In the bunch feeding technique the nutrients are directly feed to the denavelled end of stalk by packing them in the bio degradable bags. Banana bunch feeding is a simple and low-cost method to get higher yield of banana crop. The direct way of supply of nutrients to the bunch helps in availability of nutrients to growing bunch.

Inputs required: Cow dung, urea, Sulphate of potash, plastic bag and water.

Method of preparation and stage of the crop to perform: When the crop reaches the stage of bunch getting 8-10 finger sets are emerged and after emerging and finger sets are prominently grown, the lower side bunch sets start falling down, during which stage with sharp knife the bunch should cut slantly at the lower end by leaving 10-15 cm above.

In plastic bag the abovementioned inputs with respective quantity mixed thoroughly and tied to the cut portion, due care should be taken that cut portion should merged in the cow dung slurry. Nutrient feeding through distal end was confirmed using radio tracers.

Blending 15 gram of (approximately 7.5g Of Urea) and 7.5 gram of Sulphate of Potash dissolved in 100 ml of water in 500 gram of fresh cow dung and applying the slurry to the De-Navelled Stalk-End of bunch soon after fruit set. About 10-15cm long Rachis are available after the last hand to tie the plastic bag with a strong string. Experimentally it was found that by this technique the bunch weight increased by 60-67% over the untreated bunches.

