

Role of Banana Special in improving productivity of Banana in Siddanur village of Davanagere district

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Background:

Banana is one of the important fruit crops of the district. Substantial number of farmers are growing banana crop. The district has 2,167.2 ha. area under banana with total production of 60075 t. and average productivity of the district is 27.72 t/ha. Farmers are spending more than required money on fertilizers. It is of great concern that each farmer is spending 60-70 % of cost of production only on fertilizers. KVK has conducted a survey on banana area and cost of production of crop in the Siddanur cluster of Davanagere taluk. Survey revealed that farmers are applying fertilizers indiscriminately. No farmer is aware of recommended dosage of fertilizers for banana. The role of micronutrients was known to very few farmers. Indian Institute of Horticultural Research, Hesaragatta, Bengalooru is producing micronutrient spray mixture "Banana special" for banana and made it available for our KVK to conduct FLD on the said technology

KVK intervention:

Spray schedule details:

Taralabalu Krishi Vigyan Kendra selected Siddanur cluster for FLD on use of banana special and Mr. Basavanagowda M.G., SMS (Horticulture) was deputed for the same during 2008-09. As a part of FLD, group meetings, trainings, field visits and field day were conducted. An exposure visit was organized for the group to precision farming area at Dharmapuri district to know the precision farming activities and direct interaction with practicing farmers.

In Siddanur and Kandanakovi villages of Davanagere (tq) twelve farmers were selected for the demonstration on use of banana special, six farmers under grandnaine and six farmers under yelakki bale variety. Foliar application of Banana special was undertaken as per schedule and observations were recorded. Foliar spray schedule includes six sprays at 5, 6, 7 and

8th month of planting. Fifth spray on emerged bunch and sixth spray was given one month after bunch emergence. The spray concentration should be 5 grams per liter water. For the better results of spray, one shampoo and one lemon liquid should be mixed in 20 liters of spray solution.

Effect of the technology among demonstrated farmers:

	G9	Yelakki
Demo Production (Average)	533.9 q/ha	225.9 q/ha
District Productivity (Average)	277.2 q/ha	-
Local check	400.1 q/ha	162.2 q/ha
Per unit expenditure	Rs. 1,40,510-00	1,26,549-00
Gross income	Rs. 3,73,730-00	3,38,850-00
Net income	Rs. 2,33,220-00	2,12,301-00
BC ratio	2.65	2.67

- **Suitability in the existing farming / cropping systems:**

There is micronutrient deficiency observed among all the plots selected for demonstration. So, the technology is suitable to the area under study.

- **Acceptance of the technology by the farmers:**

Farmers have accepted the technology, as it increases the productivity of the crop. It also provides the benefit of reducing the cost of production particularly of fertilizers.

- **Horizontal spread :**

12 families directly and 50 families indirectly have realized the importance of banana special application. More than 550 kg of banana special has been sold through our KVK.

- **Substitution or replacement of commodities:**

The technology substituted the excess use of fertilizers for the crop.

- **Social impact:**

Formation of Siddanuru Bale Belegarara Sangha (Siddanuru Banana Growers Association) after the successful demonstration of Banana special technology

- **Marketing channels:**

The Banana Growers Association has been linked with **SAFAL** market, Bengalooru. Farmers were taken to **SAFAL** market during the exposure visit arranged by KVK. They are selling the produce to wholesale merchants as well as **SAFAL** market.

- **Establishment of units:**

The success of banana special technology led to the formation of Siddanuru Bale Belegarara Sangha and Sri Done Siddeshwara Vegetable Growers Association. These two Common Interest Groups (CIGs) are supported by NABARD for many agricultural activities. The Vegetable Growers Association has established **vegetable nursery unit** at Siddanuru and selling vegetable seedlings. There is a plan to multiply tissue culture banana seedlings in future.

To encourage organic farming vermicompost units were established and produced compost is being used for the crops. Demonstrations on **Vegetable special**, another product from IIHR, Bengalooru for vegetables were taken up in Siddanuru cluster during past two years.

- **Linkage with development organizations:**

In collaboration with IIHR, Bengalooru, we had conducted farmers scientist interaction for our banana growers. FLD Farmers shared their experiences of using this technology with the gathered scientists and other farmers.

- **CD developed, if any:**

A documentary study on use of banana special by our SMS (Horiculture) was telecasted in Annadata programme of E-TV Kannada.

- **Places and addresses of the farmers concerned or persons who could be contacted:**

Post intervention survey schedule and testimonial from the farmers are enclosed.

- **Publications printed:**

1. The case study was presented as poster presentation on **use of banana special to increase bunch weight in banana** by Mr. M.G.Basavanagowda, SMS (Horticulture), Dr. Pradeep H.M. (Soil Science) and Dr. Devaraja T.N. (Programme Coordinator) at National conference on horticulture biodiversity in eve of Swadesh Prem Jagruthi Sanghosti 2010, Bangalore.
2. The Yashogathe of technology was published in Janathavani, Davanagere local news paper.

It is clear that there was a 33.44% increase in productivity of G9 variety and 39.27% in case of yelakki bale. Demonstrated technology helped in increasing the bunch weight and shelf life, there by fetching good market price and increased income to farmers. This resulted in purchase of more than 200 kg of Banana special by other than demonstrated farmers in Siddanur cluster.

Frontline demonstration on use of Banana special in Banana helped farmers in micro nutrient management in Banana. These farmers formed “Siddanur Bale Belegarara Sangha” to help themselves in production and marketing of Banana. 12 farm families directly and 50 farm families indirectly had understood the importance of application of micro nutrients in Banana production. This inturn will help all of them to produce better quality and quantity of banana in a given area. Therefore, our intervention has resulted in increased farm income per unit area with good agriculture practices.

Evidence:

The success of this intervention was measured through pre and post assessments (12 No.s) While selecting the farmers for this programme, their family survey was conducted. The data was collected on a prescribed format and the post intervention data was collected on the same format to assess the difference of improvement.