

# **Staggered Planting of Pineapple With Induction of Chemical for Better Harvest**

## **Background & Objectives**

Tripura is known for quality pineapples, mostly the “Queen” & “Kew” varieties. The organoleptic and other properties of both the varieties are very unique and ideal, for table and processing purposes respectively. However, there has also been the problem of lower productivity and seasonal glut in traditional system of cultivation, often depressing the market and interest of the grower.

In order to overcome these shortcomings, a project was undertaken for block plantation of pineapple through staggered planting and induction of chemical in about 500 ha area, involving 570 growers of the state with assistance from Rashtriya Krishi Vikas Yojana (RKVY) scheme with total investment of Rs. 4.30 crores for a period of 3 years (2008-09 to 2010-11).

The main objectives of the programme were:

- ✓ Making pineapple available in the market for at least eight months in a year
- ✓ Increasing existing productivity levels from 15.00 MT to 20.00 MT or more,
- ✓ Assuring better price-realization to growers.



## **Intervention**

In order to calibrate reaching the specified vegetative stage for application of chemical and initiation of flowering in successive months, the planting of ground sucker (average 300 gm in case of Queen and 400 gm in case of Kew) was done in successive months starting from February to November, instead of the traditional practice of planting in the months of September and October. Staggered planting has almost assured reaching of a vegetative stage of 35-40 leaves in about 8-9 months, which is the ideal time for application of chemical; this is done successively in the blocks planted one after another.

The chemical solution has been earlier standardized in the Horticulture Research Centre, Nagicherra, Tripura, and is prepared with Ethrel, 25 ppm (6.25 ml/ 100 lts. of water) in conjunction with 2% Urea and 0.04 % Sodium Carbonate. A dose of 50 ml/plant is applied for each pineapple plant that has reached the desired stage of 35-40 leaves, successively, to ensure flowering, subsequent fruiting and full maturity in about 5-6 months. This chemical induction has assured about 90% fruiting in plants, as against 50% in untreated traditional practice.



## **Outcome**

After following the process in the targeted area, average 21.46 MT/ha of productivity of pineapple was achieved in all the districts. Normal annual yield without staggering is between 18.50 – 19.50 MT/ha.

This has resulted in additional production of 1095.20 MT in the first year (2008-09), 2013 MT in 2009-10 and 2931 MT in 2010-11. The average price realization of fruit has also increased due to avoidance of glut in peak production season (May-July) and also on account of continued availability of the fruit even in the off-season (September - March) factors that have ensured a better market for pineapple. The average price during June –July without staggering was on an average Rs 2/kg; escalated price in off-season is now Rs 6/kg. Moreover, the income from fruits continued in second and

third season as well from the ratoon crop that brought the Cost Benefit ratio to 1:33. With an average annual return of Rs 1.176 lakh per ha, Pineapple growers are happy and willing to expand cultivated areas, wherever possible.