

DRAGON FRUIT A NEW INTRODUCTION IN THE INDIAN MARKET

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Like any other sector, agriculture sector also offers very good returns to those who apply some innovation and do research about the market. Until the recent past dragon fruit was an alien term to the Indian fruit market and now it is taking over the markets by storm. Dragon fruit is an herbaceous perennial climbing cactus widely known as Pitaya, has recently drawn much attention of Indian growers due to its attractive colours and rich antioxidant properties. Dragon fruit is a native of South America and is introduced in India in late 1990s and area under its cultivation is growing gradually. Farmers in the Indian states like Andhra Pradesh, Telangana, Tamil Nadu, Karnataka, Maharashtra, West Bengal and Andaman Nicobar islands have already started its cultivation and area under this crop in these states is less than 500 ha. Majority of the fruits available in the Indian markets are imported from countries like Vietnam, Malaysia, Thailand and Srilanka. Given the high amount of fibre, magnesium, antioxidants and as well as the extremely low calorie content, it has got a huge demand in domestic and international markets. Keeping its huge demand in mind, it could be a potential money spinner in the coming days ahead.

Generally there are three fruit types in dragon fruit based on their colour, they are white flesh with pink skin, pink flesh with pink skin and white flesh with yellow skin. Out of the three types, pink flesh with pink skin is widely popular, huge in demand and highly remunerative compared to other two.



CULTIVATION

One of the major merits of this crops is that it can grow in the extremes of temperatures up to 40 degree °C and best suited for the tropical climate with a good annual rainfall. Care should be taken during summers when temperatures go beyond 42 degree °C. Growing intercrops like castor, drumstick will help to reduce the effect of heat during summer. It can be grown on almost all soils which have good drainage capacity. There are two methods of growing dragon fruit, the first is the use of seeds and the second is using a cutting from the plant sampling. Seeds take a time of three years before the plant is large enough to be used so farmers generally opt for the cutting method. The length of the sapling should be 20 cm and it should be cut from the mother plant and left in the shade for 5-7 days before being planted in the field. Many farmers who are cultivating the crop have started selling saplings at a cost of Rs 50 per sapling. Poles are used to train the plants on them and are allowed branch at the top of the poles with the help of a circular ring. These poles should be of 7 foot length and 2 feet is allowed into pits. Poles are erected at a distance of 10 feet between the rows and 8-10 feet between poles in the rows. With 450 – 500 poles can be erected in one acre land. Four plants are planted at each pole on four sides of it, which amounts to 1600-2000 plants per acre. Planting should be done during monsoon.

MANAGEMENT

Cultivation of dragon fruit demand very less management. This crops attracts very less pests and diseases and hence cost of management is very minimal. Supplying farm yard manure twice year and 50-100 gm of urea is very much sufficient. Farmers cultivate this crop in organic manner to fetch good returns. Two litres of water per day is sufficient for each plant and irrigating through drip system is highly preferable.

PRUNING

The Dragon fruit plants are fast growing vines and produce more thick dense of branches during the initial stage. The lateral buds and branches should be pruned to grow towards stands. Once vines reach up to the top of the stands the branches are then allowed to grow. The removal of tip of main stem is done to allow growth of new shoots to grow laterally and climb at the ring to form an umbrella like structure of vines where flowers will emanate and develop into fruits which would induce lateral branching. This pruning referred as structural pruning or making a structure on the trellis. The well grown vine may produce 30 to 50 branches in one year and may be more than 100 branches in-four years.





HARVESTING

The plant start yielding after 10-12 months from the date of planting and the fruit maturity could be optimized with the change of fruit epicarp color from green to red. Proper time of harvesting was found after seven days of color transition. The plants yield the fruits in the months between June to September, and harvest could be done three to four times in a month. The fruit weight ranges between 250 – 500 grams, and the average yield from the single post is realized about 30 to 35 kgs from the three years old planting. Present farm gate price is around Rs 200 per kg.

EXPENDITURE AND YIELD

Cultivating dragon fruit per acre may go up to Rs 5 Lakh (Including pole setup, plants, labour, drip and other management expenses). Though it may look expensive but crop can give yielding up to 25-30 years. Though crop starts to give fruits after one year, remunerative yields start from third year onwards with 4-6 tonnes per acre with proper management and yields goes on increasing as it attains umbrella shape at the top of the pole. Farmers can cover entire expenditure in first 2-3 harvestings and rest harvestings up to 25 years can be considered as profits.

MARKETING

Though the fruits are less common in rural areas and small towns, it has a very good market in big towns and cities considering its nutritional values. The current farm gate price is around Rs 180-200 and in the retail market it is fetching around Rs 280-300. The price of this fruit may come down a bit, if more farmers grow it. As per the experience of farmer who are growing it, confidently say that even Rs 50 – 60 per kg would be a remunerative price.

CONCLUSION

Dragon fruit consumption in India is increasing day by day, especially among the urban elite. Many farmers are very interested in growing the crop and capture the existing demand. Though the per kg price of the fruit bit high and chances of price dip in the coming future is very obvious as many farmers started cultivating it.

