

Dragon Fruit: A Wonder Crop

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SUMMARY

Dragon fruit is gaining popularity for its nutritious and medicinal value. Dragon fruit area and production is increase day by day in the world and India because of its demand in market. Its cultivation is possible even marginal degraded land because of its low water requirement. In addition to this, the requirement of plant protection measures is less as compared to other horticultural crops. Thus it may regarded as fruit of 21st century and because of its increasing popularity, further research for better management is needed.

INTRODUCTION

Dragon fruit (*Hylocereus undatus*) commonly known as Pitaya, genus *Hylocereus*. It's belonging to the family Cactaceae. It is a beautiful night blooming flower that is knowing as “Noble Woman” or “Queen of the Night”. The crop is hardy and can survive in any type of climatic condition favorable for flowering and fruiting and soil condition provided with good drainage. In general, they produce fruits quickly and few diseases and pests are encountered at the present time. Dragon fruit if adopted in water scarce region can prove to be an asset to small holders as well as entrepreneur farmers. It is a fast return perennial fruit with high yield, as regular bearing brings steady income to the growers. Dragon fruit even under dry conditions gives better fruit yield with higher economical returns as that of other fruit crops. Beside high initial establishment cost due to cement poles and trellies, it's becoming very much demanding amongst the farmers because of its very high return.

Importance of Dragon Fruit

Market approach:

- Increasing demand and wider popularity among the society
- Retention of maximum fruits
- Higher market price per unit as compared to other fruit commodities
- Minimum risk of pest and diseases

Medicinal and Nutritious approach:

- Healing of wounds and cuts
- Control blood sugar level
- Improves appetite
- Good source of Vitamin C which boosts up immunity
- Improves eye site
- Controls WBC and helps in quick recovery against Dengue
- Improves memory Cradle

(Chavhan *et. al.*, 2020; Rao and Sasanka, 2015)

Origin and Distribution of Dragon Fruit

Dragon fruit is native of Mexico and Central and South America (Britton and Rose, 1963; Mizrahi, *et. al.*, 1997) and is extensively cultivated in large countries in the world. Vietnam is largest producer of dragon fruit in the world. Cultivation of dragon fruit in rural area is one of the fastest growing segments within agricultural sector in India today. The table.1 & 2 shows dragon fruit is growing locations in world and India.

Dragon Fruit Growing Countries in the World:

- | | | |
|-----------|---------|------------|
| • Vietnam | • China | • Ecuador |
| • Taiwan | • India | • Columbia |

- Philippines
- Thailand
- Malaysia
- Sri Lanka
- Australia
- Israel
- America
- Mexico
- Nicaragua
- Guatemala
- New Zealand
- Japan

Dragon Fruit Growing States in India:

- Gujarat
- Karnataka
- Maharashtra
- West Bengal
- Tamil Nadu
- Kerala
- Orissa
- Bihar
- Andaman & Nicobar

Soil and Climate:

Dragon Fruit could be grown in wide range of soil types provided it is well drained. However, the most ideal soil type is rich in organic matter and slightly acidic. Since the area to be used is sub-marginal, organic fertilizer will be applied to patch up the lacking amount of organic substances in the soil (Nangare, *et. al.*, 2020)., Dragon fruit plants prefer sandy loam with high organic matter and grow well in soil having good drainage (Karunakaran, *et. al.*, 2019). Dragon fruit requires warm climate thus it grows well in semi-arid. Optimum temperatures for growth are 20-30 °C but withstand upto 38-40 °C, with good relative humidity levels. Temperature range more than 40 °C causing sunburn injury. In high radiation areas, overhead shading is often installed, which also helps reduce extremely high temperatures, which can limit flowering and fruit set. The reported rainfall requirement of dragon fruit is 1145- 2540 mm/year (Karunakaran, *et. al.*, 2014).

CONCLUSION

Dragon fruit cultivation is possible even marginal degraded land because of its low water requirement and epiphytic or xerophytic nature. The dragon fruit can be cultivation in semi-arid and rainfed areas. Apart from this, its ability with stand water to some extent made this crop to as hardy fruit crop. Indian climate is suitable for the dragon fruit cultivation hence; it's rapidly growing in the India.

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