



Exotic Fruit Production and Their Future Scope in India

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Introduction

The term exotic is referred to as something foreign in an interesting ways. Recently there has been growing consumer interest in “exotic” terminology currently used to refer to “mysteriously different” or “unusual” fruits due to anecdotal claims of their medicinal values and purported health benefits. Exotic fruits are that which are not native and that are cultivated outside, available at their place of origin. Some exotic fruits are tropical. The term “exotic fruits” is used mostly in developed countries, referring mostly to some tropical fruits that are unknown to the consumers of the developed countries or many of them.

They have grown in popularity over the past few years as more specialty and traditional grocery stores have increased and diversified their offering of these ‘unusual’ fruits. Some of the exotic fruits grown in India are: Carambola (Star Fruit) Dragon fruit, Mangosteen, Elephant Apples, JapaniPhal (Persimmon), Kiwi, Rambutan, Water Apple, Longan, Tree Tomato and Lataqua.



Japani Phal: Also known as the Persimmon and was introduced to India by the European settlers, though it was a native of China. Grown in the Himalayan region, especially Jammu and Kashmir, Uttarkhand and Nilgiri Hills. The

distinctive feature of the fruit is that it resembles a tomato, physically. Japani Phal has a number of health benefits as it is packed with vitamins and minerals. The completely ripe fruits can be soft, tasty and sweet. Very rich in Vit. C, carbohydrates and potassium.

Bilimbis : Belongs to carombola family. Very rich in oxalic acid and Vit C. Bilimbis are related to the star fruit and are bright green when



raw. They become tender and soft as they ripen and become yellowish and glossy in appearance. Bilimbis have a tangy and acidic taste so they are soaked in salt water for a while before consumption. The fruit can be used to make pickles and jams. It's grown mainly in Goa, Karnataka, Maharashtra, Tamil Nadu and Kerala.

Elephant Apple (Dillenia): Belongs to dilleniaceae family. Originated in Indonesia and grown in Meghalaya, Assam and Eastern India. Spreading tree with beautiful white fragment flowers toothed leaves and globose fruit with small brown





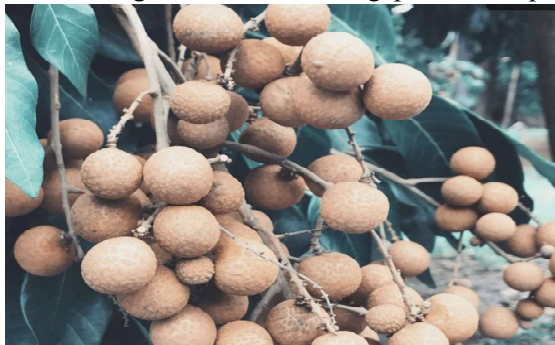
seeds..fruits are cooked to make pickle and chutney. Juicy pulp is aromatic but very acidic.

Water Apple (*Syzygiumjambose*) : Belongs to myrtaceae family. Native to India and



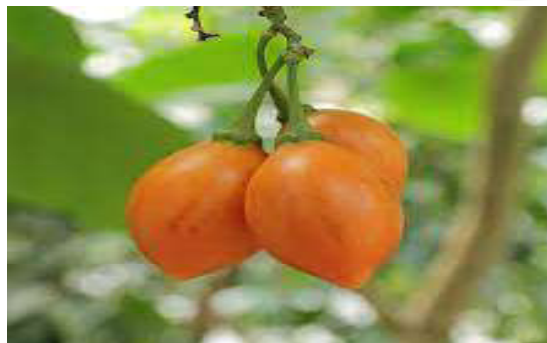
Malaysia. Commonly cultivated in india south easterbasia and Indonesia. White or pink pulp with milf fragment are crisp or spongy. Generally the fruits are seedless. Tree height range from 3 to 10 m with short crooked trunk and non-symmetrical open crown. Prefers to warm and humid climate with rainfall distributed throughout the year.

Longan (*Dimocorpus*) belongs to sapinadaceae family, native to Southern China and hills of Assam and Meghalaya. Required cool climate for growth and flowering, prefers soil ph



6 to 6.5 and sensitive to acidic soil condition. In India, West Bengal and Bihar is a prominent longan growing state. Tree is erect 9 to 12 m in height and 8 m in width, heavily foliaged branches.

Tree Tomato (*Cyphomandra*): Belongs to solanaceae family. Native of south America. Perennial shrub producing red tomato like fruit used for making chutney. Grown as backyard



venture crop Meghalaya, Mizoram, Manipur, Nagaland and other part of South India. A small tender 2 to 3 m tall tree bears prolifically egg shaped berries with pointed and in cluster near the young shoots. skin color deep purple, blood red, orange or yellow. The inside pulp of fruits is light orange and seed is black.

Lutqua (*Baccaurea*): Belongs to Euphorbiaceae. Native to southern china, Thailand and Cambodia to Malacca and



occasionally cultivated in Malaya and Thailand. Distributed in sub Himalayan tract mainly on eastern side from Nepal to Sikkim, Darjeeling hills and Arunanchal Pradesh to assam, Tripura and Meghalaya. Semi evergreen tree small to medium in size upto 10 m in height. Yellowish ripe fruits are edible which turn into ivory to yellowish or pinkish buff. Fruits are available in market during may-july. Pulp is whitish and occasionally deep pink near seeds. Taste varies from acid to sweet.

Pulasan (*Nephelium*): Belongs to sapinadaceae family. Native to south East Asia. Also known as hairy litchi. In India it has potential



in Kerala, Tamil Nadu and part of Karnataka. An evergreen dioecious tree reaching 9 to 14 m with a short trunk and a wide rounded crown. Ultra tropical species which only thrives well in humid regions between 110 to 350 m MSL.

Exotic Indigenous Fruits in The North-eastern Region of India

Northeast India is known for its diverse nature of soil, climate, and topography. This region is rich in diversity of many fruits. The present study deals with the identification, botanical domestication and popularization of wild exotic edible fruits consumed by the people of Northeast India.

Sohiong is a wild growing fruit found in temperate Himalayan regions. It is quite common in the East Khasi hills, West Khasi hills and Jaintia hills of the Indian state of Meghalaya. Sohiong fruits are delicious and consumed fresh. These are also made into jam and Jelly. Not only a squash is also made from these fruits. Wine made from Sohiong is much like the wine made from grapes and is gaining in popularity.

The high calorific values and mineral content of Sohiong make it an important fruit of the Khasi region.

Sohphie, known as *Myricaesculenta* in scientific lexicon, is common in Dikhow Valley of Assam and Khasi and Jaintia hills in Meghalaya. Though also found in Uttarakhand, the fruit is much smaller here and has a different taste altogether. In Meghalaya, sohphie marks

the arrival of spring. Till the end of summer, it is enjoyed by tourists and locals for its crunchiness and juiciness. But the fruit perishes fast and must be consumed within two to three days. People store it as pickles.

Exotic Fruits Advantages

It will bring a refreshing change in your platter. You can experience your exotic tropical holiday sitting at home relishing these exotic fruits. Huge amounts of funds are invested for scientific research on exotic fruits and their health benefits. Exotic fruits fill up the shops during off-season for fruits. For example, local apples are generally available during the winter season, while imported apples are always available and are eventually becoming more popular.

Exotic Fruits Disadvantages

a. Nutrition Loss : The longer fruit spends on a truck or in a storage container before being delivered to you, the greater the loss of vitamins, minerals, and other nutrients. The moment the fruit is picked or cutlets enzymes begin decomposing or feeding on the precious nutrients.

b. Early Harvest : To prevent over-ripening during the transport and export the fruits regularly to meet the demand, the exotic fruits are plucked before they mature completely. Simple way, they are harvested before the time. This will make the fruit devoid of many nutrients. So, no benefits in having such fruits.

c. Additives & Preservatives: Many additives are added to give vibrant color and shining glare to the fruits. Many chemicals are used to preserve these fruits from getting spoiled during transportation. Once fruits reach the destination they are again processed with many chemicals to artificially ripe them. These chemical treatments are very harmful to our health.

d. Not Pocket Friendly: Exotic fruits are very expensive as a lot of money is invested in Transportation, Storage, Preservation, and Processing before it reaches to supermarkets



Cultivation of Exotic Fruits Like Rambutan, Mangosteen Popular in Western Coast

Cultivation of exotic fruits such as rambutan and mangosteen is becoming popular in the western coast, particularly Kerala and Karnataka. even years ago, when chartered accountant and planter Renny Jacob cut down rubber trees and planted rambutan, a fruit of Malay-Indonesian origin resembling lychee, in his four-acre land in Kanjirappally in the heart of rubber-growing Kottayam. Currently, the entire production of rambutan in Kerala is getting sold in weeks, indicating people are looking beyond traditional fruits. The retail price of the fruit ranges from Rs 200 to 250 per kg and rises once it reaches the markets of Mumbai and Delhi. "Earlier, we used to import rambutan from Malaysia".

Most of these trees live for 100 to 150 years. As a result of the increased production, the wholesale price of rambutan dropped slightly from Rs .150 to Rs. 130 per kg this year and could fall further, given the increased production. Mangosteen, pulasan, durian, dragon fruit are other exotic fruits that have caught the fancy of enterprising farmers. Of these, only mangosteen has attained some kind of popularity in the urban markets, selling between Rs. 300 and 400 per kg. The fruit is economically viable for the farmer even at a cheaper price as the cost of production isn't much. It hardly requires pesticides and can start bearing fruits from the third year with some manuring and pruning.

The Flourishing Business of Exotic Fruits in India

As consumers in India are becoming more health-conscious and are searching for satiating options for their nutritional needs, the business of exotic fruit market in India is witnessing growth with increase in imports as well as local farmers attempting a home-grown produce. For instance, while avocados are a great source of Vitamins C, E, K and B-6, the sweet and tangy kiwis are

loaded with nutrients like Vitamins C, K, E, folate and potassium. Both these exotic fruits are packed with antioxidants and are a good source of fibre too. Local fruit vendors in Indian cities selling pink dragon fruits, haired rambutan, creamy avocados, mangosteen and more is not a rare sight today.

India's annual import of exotic fruits is gradually growing over the years. Fresh fruit imports to India are pegged at 4,00,000 tones annually and valued at roughly INR 40 billion, according to customs data. The exotic produce is priced higher and commands a premium of 50 pc or more over local fruits. For example, imported avocados are priced between INR 200 and INR 400 per piece. The exotic fruit market which has Rs. 3,000 croresize also brings with it a plethora of opportunities. It is estimated that 3,50,000 metric tons of fruit is imported into India on a year on year basis. Apples lead this estimated import with 66 per cent of market share. India's annual import of exotic fruits is gradually growing over the years.

Fruits like dragon fruit – a superfood that is almost entirely imported from South-east Asia, is witnessing a sharp increase in demand since 2014 in India. Its potential has led many farmers in the states like Himachal Pradesh, Karnataka and Kerala to cultivate the crop locally to meet the rising demand. In Kerala, farmers are quick to latch on to what they believe would be the next big lucrative produce. They have tried growing cocoa and vanilla and now rambutan is piled high along the highways. The farmers of the state are also increasingly tying up with retail chains so that their produce can be marketed outside their state at higher prices, but low enough to compete with the imported ones.

According to recent figures, India's annual import of exotic fruits is gradually growing. As per reports, the kiwi fruit import has been growing by 25 percent annually, along with other fruits showing a 15 per cent increase. It is thanks to more affluent and well travelled Indian consumers that the



importers and retailers are witnessing a surge in demand for the exotic produces.

The Growth of Exotic Fruit Business in India

The business of exotic fruits is largely influenced by the ever-evolving consumer habits and the abundant health benefits they carry. A lot of consumers are adopting plantbased foods and incorporating nutritious exotic fruits in their daily food habits due to their wonderful flavour and myriad health benefits. Farmers from Himachal Pradesh to southern states in Kerala and Karnataka are showing interest in the cultivation of exotic fruit varieties to earn good returns. In fact, they are directly supplying to restaurants, enabling chefs to whip up exciting dishes every day. The demand for exotic fruits is not only witnessed in metro cities, but also in tier II and III cities such as Nagpur, Kanpur and Raipur. The exotic produce is priced higher and commands a premium of 50 per cent or more over local fruits.

Future Prospects

The government plans to introduce exotic varieties of apples, almonds, walnuts, grapes and date palm in India by importing seeds and saplings to help local growers and reduce imports. The government has decided to import original planting material to promote cultivation of exotic varieties. National Seeds Corporation has been appointed as the nodal agency, which will import seeds, saplings and rootlets for further propagation in India. We have received demand from Himachal Pradesh, Arunachal Pradesh, Uttarakhand and Jammu & Kashmir. Private companies have been importing at individual level but government will import

planting material for the first time. The programme, initially for three years, will be fully funded by central government under the Mission for Integrated Development of Horticulture.

Conclusion

With the westernisation of Indian society and the growing health conscious-customers, the demand for imported fruits has shown an uptick in the country over the last couple of years. Exotic fruits become scarce and costlier, as bottlenecks in transportation emerge. In order to bring down the prices and enable consumers to relish the health benefits of exotic fruits, a lot of enterprising farmers are taking up the cultivation of these fruits in their backyard or farms to meet the new and growing demand. Exotic fruit market is sure to grow further and bring a plethora of opportunities as lot of consumers are adopting plant-based foods and incorporating nutritious exotic fruits in their daily food habits due to their wonderful flavour and myriad health benefits.

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