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## STUDY OF IMPORTANT FRUITS IN MAHARASHTRA

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### Abstract :

*Mango undoubtedly deserves to be the national fruit of India. In area, production, nutritive value and popularity of appeal, no other fruit can compete with it. It occupies the same position in India as is occupied by the apple in temperate climates and grapes in sub tropical areas. In India, mango fruit is the part and parcel of the life, being connected with all phases right from cradle to grave and occupies a pre-eminent place amongst the fruit crops grown in India and has been repeatedly acclaimed as the "King of fruits". The Moghul emperor Babar called it the choicest fruit of Hindustan. The greatest tribute to this esteemed plant was paid by emperor Akbar (1556-1605) who established the 'Lakh Bag' (a mango orchard having 100000 plants) in Darbhanga (Bihar) when large orchards of fruit trees were unknown. In Ain-e-Akbari a masterpiece of Persian literature written by the great chronicler Abul Fazal (1590 A. D.) during the reign of Emperor Akbar, the varieties, cultivation and quality of mangoes have been discussed in detail.*

### KEYWORDS :

Fruits, Mango, King of fruits, Lakh Bag, Pomegranate.

### INTRODUCTION :

The mango is one of the most ancient fruits of India. It was established in India in the pre Christian era. Its cultivation in India is estimated at more than 4000 to 6000 years old. We find some references in the Ramayana and the Mahabharata about the forests and mango gardens. Mango has exercised a great spell on the Indian mind through the ages and the tree has been described as Kalpavriksha or the wish grating tree. Its common vernacular name Aam means 'the common'. It is not only common throughout India, but it is also the fruit of the common people.

Mango is found in several other countries but in no other country does it enjoy the status as it does in India. India is the only country where truly wild forests of mango are found in Assam and the adjoining Chittagong Hills. No other country can surpass India in the number of mango varieties and the richness of their flavours. The climate of India is ideally suited to its cultivation and it is found growing in every nook and corner of the country except at altitudes above 3000 feet.

In many parts of India mango is the mainstay of the people during the fruiting season. It is one fruit, which almost everyone get enjoyed. The juicy sucking varieties are consumed in large quantities. Mango is also made into pickles, preserves, mango powder (Amchur) and chutneys of all sorts. Ampapad, mango fool, are the other products of mango.

It is an outstanding source of vitamin A and a good source of vitamin C. A good variety of mango

contains over 20 per cent of TSS total soluble solids (sugars). The acid content of ripe dessert fruit varies from 0.2 to 0.5 per cent and the protein content is about 1 per cent. mango is also considered to have some medicinal properties. The ripe fruit is fattening, diuretic and laxative. The smoke of the burning leaves is supposed to cure hiccups and some throat trouble and the kernel is effective against diarrhea and asthenia. Baked and sugared pulp is given to patients of cholera and the plague. The bark is a source of resins and gum and also use for tanning of leather. The wood is used for many purposes. Thus the mango tree is fully utilised in India.

### MODERN DAYS MANGO

Mango is the third largest cultivated fruit in the world in terms of both area and production after bananas and citrus fruits. The total area under mango in the world recently estimated at around 12 lakh hectares and total production at 18 millions tonnes. The Asian region alone contributes about 78 per cent to the global output.

India is the largest producer of mango in the world with an annual output of about 10 million tonnes and share of about 60 per cent in the total world production. Apart from India, the other major producers of mango in the world are Mexico, Pakistan, Indonesia, Thailand, Brazil, Haiti, Zaire, Madagascar and Tanzania. Mango is also grown to a small extent in Egypt, Venezuela and Shrilanka.

More than 1000 varieties of mango are cultivated in India, each differing in size, shape, colour, texture and taste. Alphanso and Pairi varieties of Maharashtra are the priced among them and Dasherri and Langra of Uttar Pradesh and Punjab, Maldha of West Bengal, Romani of Tamil Nadu and the Bangana palli and Malgoba of Andhra Pradesh. The other important varieties include Vathua, Totapuri, Fajli, Jahangir, Neelam, Chausa, Sapheda and Rataul. The share of production in total is as follows.

Dasherri	8 per cent
Banganapalli	7 per cent
Langra	4 per cent
Alphanso	2 per cent
Pairi	1.5 per cent

Out of a total 3.2 million hectares of land under fruits. Mango occupies nearly 38 per cent of the area. Andhra Pradesh is the largest producer of mango in India, it is followed by Uttar Pradesh, Bihar, Karnataka, West Bengal and Tamil Nadu. The Union Government is implementing various schemes to boost the production of mango in association with state governments of various states. The schemes includes rejuvenation of old orchards, expansion of area and provision of improved and quality planting material for the cultivation of mango.

Mango is propagated through seed or by vegetative means through inarching, budding, grafting and gootee. The planting is usually carried out during monsoon. A liberal dose of manure and irrigation is required for vigorous growth of the plant. The plant starts bearing flowers and fruits in 5 to 7 years and reaches its peak production in about 17 years. The life spans of the tree is about 50 years. The harvesting season of mango varies with variety and location. Generally mango season is mostly running from February to June every year.

### ALPHANSO MANGO

Alphanso is the belt table variety of mango produced in India. It is known by different names in different regions of the country such as Badami, Gundu Patnam Jathi, Khader, Kagdi Hapus, etc. It is in much demand in the gulf countries on account of its excellent quality and flavour. It is canned in the form of pulp and slices. In the Gulf, medium sized mangoes are preferred, while in India large sized mangoes are preferred. The medium sized mangoes are about 25 per cent cheaper than large sized when sold by a dozen. The Alphanso mango is mostly grown Devgad, Vengurla in Sindhudurg district and Rajapur and Ratnagiri of Maharashtra state. A small quantity of Alphanso is produced in Gujarat state. The main market for Alphanso mangoes is in Mumbai both for domestic as well as export supplies. This mango starts arriving in the Mumbai market in the last week of March every year although the main marketing season starts from Gudi Padwa, at the beginning of April. The demand for mangoes in the Gulf countries is at its highest during holy months of local festivals.

## POMEGRANATE

Pomegranate (*Punica granatum* L.) is an ancient and important fruit. It has been mentioned in records dating back to 3500 B.C. Pomegranate belongs to the smallest botanical family, Punicaceae and is a delicious table fruit. Pomegranate is a plant of sub tropical dry region, which thrives best under semi arid and arid type of climate. High vapour pressure deficit owing to high temperature and low humidity reduces the quality of fruits. However, high humidity coupled with high temperature makes the plant susceptible to different biotic agents. Fluctuation in atmospheric moisture also causes cracking in fruits and reduce the quality.

## VARIETIES

The popular varieties of pomegranate are 'Ganesh' and Muskat in Maharashtra, Bassein seedless in Karnataka, Dholka of Gujarat, Kabul Red and Velloodn in Tamil Nadu and Jalore seedless and Jodhpur Red of Rajasthan. Besides, some promising selections have also been developed. G 137, a selection from Ganesh and P 23 and P 26 from Muskat have been recommended for Maharashtra. 'Jyoti' developed as a chance seedling from Bassein seedless is doing well in Karnataka and Yereaud 1 and Co 1 are seems promising in Tamil Nadu. 'Ganesh' the popular variety of pomegranate was developed by Dr. Chima in 1946 at Pune by crossbreeding of Alandi and Muskat. But 'Ganesh' variety realised all over after 1980 when Solapur district commercially planted it. Other hybrid varieties like Mridula, Arakta, Bhagwa and Rubi developed from Rahuri MPKV after 1995. They having soft and dark red, sweet arils, which can be used for anardana.

### Area, Production and Yield of Mango and Pomegranate in Maharashtra

Year	Mango			Pomegranate		
	Area (Ha)	Production (MT)	Yield (MT/Ha)	Area (Ha)	Production (MT)	Yield (MT/Ha)
1973-74	12100	-	-	800	-	-
1978-79	15100	-	-	700	-	-
1986-87	17800	-	-	1700	-	-
1989-90	18038	108228	6.0	6424	38544	6.0
1991-92	49873	275980	5.5	9093	66302	7.29
1992-93	54574	327380	5.99	10773	107090	9.94
1994-95	64936	361129	5.5	17883	164836	9.2
1995-96	78221	380130	4.8	17381	146229	8.4
1996-97	65496	196488	3.0	31549	189294	6.0
1997-98	65496	65496	1.0	31549	126196	4.0
1998-99	110000	196900	1.8	32013	136375	4.3
1999-2000	147206	500500	3.4	40970	409700	10.0

Source : National Horticulture Board, Data Box and Directorate of Horticulture, Maharashtra State

## AREA AND PRODUCTION OF MANGO AND POMEGRANATE

As stated earlier, the climate and soils are more favourable for development of fruit crops in the state. Maharashtra's more and more land is coming under fruit crops. Therefore it is forecasted that Maharashtra will be the land of fruit crops alone.

According to map account for districtwise distribution of Mango and Pomegranate fruits for the year 1989-90. In 1989-90 mango production was 108228 tonnes and area was 18038 hectares. Sindhudurg district was highest district in area and production. Ratnagiri district ranks second in area and production.

The total area of pomegranate was 6424 hectares in 1989-90 and production was 38544 tonnes. Solapur district was the first in both area (1844) and production (11064). Ahmednagar stood second position with area of 1178 hectares and 7068 tonnes of production.

## CONCLUDING REMARKS

Fruit culture is an important part of horticultural science. Fruits play an important role in human life. Fruits are also important for the point of money earning, India is second largest fruit producer country

in the world. Maharashtra state in India is popular and pioneer for production of various fruits. Alphonso mango and pomegranate are important fruits of Maharashtra state. These fruits are not only popular in India but in abroad too. Alphonso mango is a traditional fruit used for export, but now-a-days pomegranate is an emerging fruit in India's horticultural export grown in Maharashtra state. In recent days, Maharashtra state has great opportunity to grow quality fruits and the state can earn foreign exchange from global markets with changed environment of world market under WTO regime.

#### Therapeutic Properties of Some Fruits and Vegetables

Fruit/Vegetable	Active ingredient	Against physiological disorder/diseases
Carrot Tomato Sweet potato	$\beta$ -carotene	Cancer
Onion, Garlic	Allicin	Coronary diseases
Citrus fruits	Vitamin C Limonoids Folate, Fibre	Cancer
Grapes and grape wine	Flavonoids	Coronary diseases
Cruciferous vegetables	Glucosinolate	Cancer
Broccoli	Glucosinolate	Cancer
Jamun Bitter gourd	Cheratin	Diebetics Diebetics

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