

## CHAPTER - I

### ORIGIN AND DEVELOPMENT OF GRAPE

#### FARMING IN INDIA

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## CHAPTER - I

### ORIGIN AND DEVELOPMENT OF GRAPE FARMING IN INDIA

#### 1.1 INTRODUCTION :

The grape (*Vitis vinifera*) the species to which most of the cultivated varieties of grapes belong is a native of Asia having originated in the region of USSR to Iran, Afghanistan and Asia-minor in the Near East.

#### 1.2 INDIA :

Grape is believed to have been introduced in to India from Afghanistan and Iran about 1300 A.D.<sup>1</sup> Viticulture roused the enthusiasm of the Moghual emperors and in the early sixteenth century vine-yards rapidly spread in North India.

In 1832 grape was introduced into Madras by a French Priest at Melpatti and Michaelpatti villages.<sup>2</sup> It was introduced into Mysore (Karnataka) during the same period. Since then grape cultivation became more and more popular in South India.

#### 1.3 MAHARASHTRA :

As the frontiers of the Moghal rule extended West wards, grape culture advanced along and gradually spread to Ahmednagar, Daulatabad, and Jalna regions of Maharashtra.

Concerted efforts were made in Maharashtra and Mysore to rehabilitate the grape cultivation. In 1921 Ganeshkhind Fruit



Research Centre was established at Pune for promoting horticulture.

Maharashtra Rajya Draksha Bagayatdar Sangha was established in Baramati in 1940. Later it was shifted in 1969 to Pune. Now it has three branches i.e. in Sangli, Nasik and Solapur. From 1972 area under grape cultivation has been increasing gradually. Total area under cultivation of grape in India was near about 12000 hectares and in Maharashtra near about 6000 hectares.<sup>3</sup> The Sangha contributed much in increasing area and solving the problems related with grape cultivation and marketing.

The development of selection 7 by Dr. Cheema in Maharashtra in 1928 and Anab - e - shahi firstly introduced in Hyderabad by Mr. Abdul Bequer Khan from West Asia about the year 1890, sparked off a wave of unprecedented enthusiasm for extension of viticulture in these states.

After 1940, many varieties of grapes i.e. Daluki, kali Shaebi, Pandhri Shaebi were brought from abroad. Shri. Gole has established "Adarsh Godreja Mala" in 1930 near Nasik and Planted various varieties of grapes.

In 1950 Gopalkrishnan, Director of Horticulture, Maharashtra Government, made great efforts to popularise grape cultivation in Maharashtra. The establishment of Agricultural University at

Rahuri in 1968, accelerated research and development in grape cultivation. Social and Political personalities like Ravasaheb Gaikwad, Raobahdoor Boravake, Annasaheb Shembekar made tremendous efforts for the spread of grape cultivation in Maharashtra.

#### 1.4 SANGLI DISTRICT :

In Sangli District, first attempt in grape cultivation was made by Shri. Pachure a rich farmer of village Nandre in 1958. He used the seeds of varieties of Bokari and Phakadi. The area of grape cultivation in Sangli District has been spreading particularly in the Tasgaon Taluka which has become now the main centre of grape cultivation and grape research. In Sangli District the emphasis is on Thompson seedless with scientific method of cultivation. In 1972, "Vaidnanik Drakshkula" was established in Sangli District at Borgaon. The branch of Maharashtra Rajya Draksha Bagayatdar Sangha in Sangli was established in 1978, named as Draksha Bhavan later. This helps the grape growers for adoption of grape cultivation and controlling of the diseases and guidance for highyields with standardised methods. The efforts of this organisation have resulted in the further spread of grape cultivation and better marketing organization.

#### 1.5 TASGAON TALUKA :

In the year 1960 Dagadulal Dhanaraj Bothara a rich farmer and trader started the grape cultivation in Tasgaon who brought

seed plants from Nipani from Shri. M.C.Mehata. First he cultivated the variety of Bokari in one acre with kniffen method. He was inspired mainly by Shri. Pachure of Nandre, Bhawe of Soni Padgaon and some others like Kirolskar and Budhagaonkar from adjoining villages.

Later in the year 1965-66 another farmer Shri. Ganpati Shankar Mhetre of Tasgaon started grape cultivation with selection 7 and Bokari Varieties. He is popularly called as Aaba, since it was because of him that Tasgaon Taluka has become a grape taluka. Shri. Vasantrao Arve of Borgaon first introduced the variety of Thompson seedless in the same year (1965 - 1966). In 1968 planting of Thompson seedless became successful on a commercial basis. In 1977 Vasantrao Arve developed "Tas-A-Ganesh" a new variety of grape. Now he is popularly called as "Anna".

#### 1.6 PRESENT STATUS :

Among fruits, grape occupies the first position in the world in terms of area and production. Grapes are not only served as a table fruit in the millions of houses all over the world but also are greatly valued for their wine-making qualities thereby gaining enormous commercial value. In India grape is grown in tropical, subtropical and temperate zones mainly for table purpose. Grape is a highly remunerative crop and its successful culture calls for thorough knowledge, skill and experience.

Besides, heavy investment, it requires constant attention and carefull nursing. Growing grapes has become successful even on very light soil thus providing gainful employment for a large number of rural population all-round the year.

Approximately, an area of 1200000 hectares is under the grape cultivation in the world. Area under grape cultivation in India is only 12000 hectares i.e. 0.1% of the world area. 50% of the total area under grape cultivation in India is in Maharashtra. Detail information about grape cultivation in India is given in Table No. 1.1.

TABLE NO.1.1

SPREAD OF GRAPE CULTIVATION IN INDIA

<u>Sr.No.</u>	<u>States</u>	<u>Area(hectares)</u>	<u>%</u>
1.	Maharashtra	6000	
2	Karnataka	2500	
3.	Andhra Pradesh	1500	
4.	Tamil Nadu	900	
5.	Panjab	400	
6.	Haryana	400	
7.	Rajasthan	100	
8.	Gujarat	100	
9.	Others	100	
- - -	<u>Total</u>	<u>12000</u>	<u>100</u>

SOURCE : Dr. B.G.Bhujbal, Draksha Bag Continental Prakashan 1988,  
P.2,3.

District wise grape cultivation in Maharashtra is given in Table No. 1.2.

TABLE NO.1.2

SPREAD OF GRAPE CULTIVATION IN MAHARASHTRA

Sr.No.	District	Area (hectares)	%
1.	Sangli	1100	
2.	Nasik	1500	
3.	Solapur	1200	
4.	Pune	800	
5.	Osmanabad	600	
6.	Ahmednagar	300	
7.	Others	500	
Total		6000	100

SOURCE : Dr. B.G.Bhujbal, Draksh Bag. Continental Prakashan 1988  
P. 3.

1.7 TYPES OF GRAPES<sup>4</sup> :

On commercial basis grapes are classified into four classes.

1. WINE GRAPES :

Wine grapes are those which can be made into wine of acceptable quality. Wines are classified into table or dry and sweet or dessert. Wine grapes are not commonly cultivated in our country. Around Bangalore, a dessert type of wine is being made from Bangalore blue variety.

2. TABLE GRAPES :

Table grapes are those which are used fresh. They are attractive in appearance, possess good eating and keeping qualities and withstand transportation. Almost all the grapes grown in India are eaten fresh.

3. RAISIN GRAPES (Bedana Grapes) :

Raisins are essentially dried grapes. However, a distinction is sometimes made between raisin and dried grapes because the dried product varies greatly with different varieties and with different methods of drying. A good <sup>raisin</sup> variety should be seedless, ripen early in the season and yield a product of soft texture, a marked pleasing flavour, little tendency to stick together in storage. Thompson seedless, muscut of Alexandria and black corinth are almost exclusively used in commercial production of raisin.

4. UNFERMENTED JUICE GRAPES :

For making of sweet unfermented juice, the grapes should not lose characteristic natural flavour during processing. Grape juice is produced in our country on a limited scale.

In the following paragraphs a brief description of the important varieties found successful in various parts of North India and Maharashtra is given.



1. BHOKRI :

Bhokri was at one time by far the most popular grape in Maharashtra and Hyderabad. It is still widely grown. The vines are vigorous and highly productive. It bears large compact, cylindrical bunches, the berries are medium, roundish green with a thick skin and large seeds; the flesh is fairly sweet and juicy. The crop ripens early in June. It's chief drawback is its susceptibility to diseases like downy mildew, anthracnose and dead arm.

2. CHEEMA SAHIBI( Selection 7) :

This variety was evolved by Dr. G.S.Cheema and is a distinct improvement on Bhokri. The vines are productive, the clusters large and compact, the berries large, whitish green and thin skinned, flesh sweet and of good quality. It is more resistant to downy mildew than Bhokri. The chief fault of selection 7 is that it ripens late towards the end of June.

3. THOMPSON SEEDLESS :

Thompson Seedless originated in Asia Minor and was first grown in California by William Thompson near Yuba City in 1872. It is also known as Oval Kishmish in Central Asia, Sultana in Australia and South Africa. It is highly esteemed as a table grape in California and is the principal grape variety.

The variety is distinguished by its large, heavily shouldered erect long, cylindrical and well filled clusters. The berries are medium size, ellipsoidal, seedless assuming a light golden colour on ripening. The vines are vigorous and give a moderately average yield of 12500 Kilograms per hectare.

4. ANAB-E-SHAHI :

It was first introduced in Hyderabad by Mr. Abdul Bequer Khan from West Asia about the year 1890. For many years it remained as a horticultural curiosity in the hands of a few enthusiasts who jealously guarded it as a prized possession. Anab-e-shahi has done well in some areas of Punjab.

5. GULABI :

The vine is medium in growth, hardy and fairly productive, the clusters are cylindrical and loose, the berries round, purple in colour, with a thick skin; flesh soft, sweet, pleasing with a characteristic rose aroma. The variety resembles the well known Muscat Hamburg. This variety has given consistently good yields in Lucknow.

6. PERLETTE :

It has been introduced from California and is grown on a commercial scale in Punjab. It has done well in Kanpur and Lucknow. No grape is so much admired in the market today as perlette. It is a seedless grape distinguished by its conical,

shouldered and very compact bunches. The berries are whitish green, spherical and medium in size. The flesh is soft and mildly flavoured. The vines are highly productive with an average yield of 20000 Kilograms per hectare.

7. BANGLORE PURPLE :

This variety was first grown in 1947 - 48 at Padegaon, later on it was adopted by the Ganeshkhind Horticultural Research Centre and a number of farmers in Baramati area. This variety gives satisfactory yields in hotter areas. The grapes of this variety are large and round. On ripening they assume black colour. They are full of juice containing 17% Sugar and 0.9% acidity. The bunches are of medium size. The average yield per hectare of this variety is around 15000 Kilograms.

8. KALI SAHEBI :

This is a variety which is cultivated on a smaller scale, but almost in all regions. Per hectare yield of this variety is around 16000 Kilograms. The grapes of this variety are ellipsoidal and large. On ripening the fruit becomes dark blue or black. It contains 18% sugar and 0.6% acidity. As the fruit are strongly attached to the berries and stem, they can stand transportation and storage.

9. PANDHARI SAHEBI :

Qualitatively, this is a better variety of grape. The fruit are large and bunches heavy. The sugar percentage is 19%

and acidity only 0.6%. Per hectare yield of this variety is however, on the lower side, i.e. 10,000 Kilograms.

10. TAS-A-GANESH :

Tasgaon Vaidnyanik Sheti Seva Draksha Kul Pvt. Ltd., Tasgaon developed a new variety in 1981 which is now known as Tas-A-Ganesh.

Shri. Vasantrao Arve of Borgaon took up keen observation of grape orchards of Thompson seedless. It was found that some plants of Thompson seedless were totally of a new variety. This was first observed in 1975. The individual berries of the clustre were more elongated than Thompson seedless. The dealers and consumers preferred those berries and as such received premium price. A four acre plot of this variety was cultivated first in 1979 and all the vines bore fruits. All these vines produced markedly elongated berries. This new variety was named as Tas-A-Ganesh in 1981.

11. SONNAKA :

Shri. Nanasaheb Kale of Nanaj (Solapur District) took up observation on grape orchards of Thompson seedless. Here again this new variety was developed from Thompson seedless. Berries of Sonnaka are more elongated than Tas-A-Ganesh. The clusters are loose. This variety was named "Sonnaka" in 1982.

### 1.8 GRAPE AS A NUTRIENT :

Grape is fairly good source of minerals like calcium, phosphorus, iron and vitamins like B<sub>1</sub>, B<sub>2</sub>. It's juice is mild laxative and acts as a stimulant to kidneys. It has got considerable importance in human food. Grapes are also used to prepare medicines, wine and kismish. According to Shri. Archoied<sup>5</sup> chemical analysis of grapes is as under.

#### GRAPE CONTENTS

Items	Percentage
Water	85.5
Proteins	0.8
Fats	0.4
Fibrous material	3.0
Carbohydrates	10.2
Calcium Hydroxide	0.03
Phosphorus	0.02
Iron	0.4

#### OTHER ASPECTS

Calorific value	45
Vitamin A in 100 gram units	15
Vitamin B in 100 gram units	40
Nicotinic Acid in 100 gram units	0.3
Riboflavin in 100 grams units	10
Vitamin C in 100 grams units	3

SOURCE : Dr. B.G.Bhujbal Draksh Bag Continental Prakashan 1988  
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