

#### Introduction

- An attractive, delicious and highly nutritive fruit.
- Ranks 2<sup>nd</sup> next to plums among the stone fruits in India in area, production and popularity.
- Asia and Europe are the largest producer.

# **Origin & Distribution**

- Originated in Western China.
- States: J & K, H.P., Uttrakhand. Also grown to a limited extent in North eastern hills.
- In India, plum occupies an area of 2,530ha with a production of 11,090 tonnes.
- In H.P., area under plum is 3,175 ha and production is 2,768 MT.

## **Botany**

Botanical Name: Prunus armeniaca

Family: Rosaceae

#### **Recommended Cultivars**

High hills

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Early	Mid	Late					
Kaisha, Nugget	Suffaida, Charmagaz	-					
Mid hills							
New Castle, Earl Shipley	y Shakarpara	-					

**Dry Temperate Zone:** 

Drying type varieties like Charmagaz, Suffaida, Shakarpara and Kaisha.

#### **Climate**

- Generally grown in low and mid hills of the state (1000-1600 m a.m.s.l).
- Chilling requirement is 700-1200 chilling hours.
- Areas having moderate summer temperature are good.
- Thrives satisfactorily under low atmospheric humidity.
- Annual rainfall of about 100 cm is sufficient.
- Select North eastern aspect.
- Excessive cold and hails are not desirable during flowering to fruiting.

#### Soil

- Deep, fertile, well drained loamy soils are considered best.
- In Kinnaur region of the state where apricots grow in large stands, the soils are sandy, well drained but not very fertile.

#### Rootstocks

- Wild apricot seedling rootstocks.
- Wild peach for sandy and dry conditions or
- Plum for heavy soils and wet conditions.

### **Propagation Method**

- Tongue grafting: January
  – February
- Cleft grafting: January
  – February (Top working method)
- T- budding : May- June

### **Planting**

- Distance: 6x6m
- Time: December February. Early planting is desirable

# **Training and Pruning**

- Open Center or Modified Central Leader System of training.
- In New Castle apricot, 25-30% thinning of shoots + 1/3 heading back of shoots should be done.



**Modified Central Leader** 

### **Orchard Soil Management**

- Atrazine or Diuron @ 4.0 kg/ha is effective in controlling weeds for 4-5 months in plum orchards.
- Oxyfluorfen @ 0.5 kg/ha or Diuron @ 2.0 kg/ha is effective in plum nurseries.
- The herbicides should be applied in the month of April as preemergence to weeds.
- For post-emergence, application of gramoxone @ 2 L/ha or glyphosate @ 800 ml/ha (700 L water is sufficient for one hectare) is used in orchards.
- To conserve soil moisture, mulching of dry grass or hay 10-15 cm in thickness in the tree basin should be done.
- In orchards, where herbicides and mulching are used, 20 to 50 per cent economy in the use of nitrogen can be made and soil application of N, therefore, should be adjusted accordingly.

### **Manure and fertilizers**

Age of tree (years)	FYM (kg)	CAN (g)	N (g)	SP (g)	P <sub>2</sub> O <sub>5</sub> (g)	MOP (g)	<b>K</b> <sub>2</sub> <b>O</b> (g)
I	10	280	70	220	35	165	100
2	15	560	140	440	70	335	200
3	20	840	210	660	105	500	300
4	25	1120	280	880	140	670	400
5	30	1400	350	1100	175	835	500
6	35	1680	420	1320	210	1000	600
7 & above	40	2000	500	1560	250	1170	700

### Method of fertilizer application

- Apply FYM during Dec.- Jan. along with P and K
- Apply half N in spring before flowering and remaining half N one month later, if irrigation facilities are available.
- Under rainfed conditions, N fertilizer should be applied in one lot about 15 days before bud brake.
- Apply 4/5 N through soil and 1/5 through foliage to get better response.
- Spray 0.1 % (1g/1 L water) boric acid before flowering to check the incidence of blossom blast or after petal fall is given to overcome boron deficiency.

#### **Pollination**

All cultivars are self- fruitful and hence can be planted in solid blocks to obtain commercial crops.

## Irrigation

2-3 irrigations in summers are beneficial.

## **Harvesting & Yield**

- Season is May to July.
- New Castle cultivar requires 84±4 days from full bloom to maturity.
- For marketing of fresh fruits, harvest the fruit when the colour changes from green to yellow and loose flesh firmness slightly depending upon the cultivar.
- For freezing, canning and drying, harvest fully ripe fruits.
- All fruits do not ripe at same time so many pickings are required.
- Handle the fruits carefully to avoid cuts and bruises.
- Yield: 50-80 kg per tree.

## **Grading and Packing**

Grade	Fruit size(mm)
Special	42 and above
Grade I	36-42
Grade II	Below 36

Extra padding may be given for tight packing.

## **Storage**

 Apricots can be stored for 1-2 weeks at a temperature of 0°C with 85-90% relative humidity