• An attractive, delicious and highly nutritive fruit.
• Ranks 2\textsuperscript{nd} 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 2,530 ha 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

<table>
<thead>
<tr>
<th></th>
<th>Early</th>
<th>Mid</th>
<th>Late</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaisha, Nugget</td>
<td>Suffaidha, Charmagaz</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

### Mid hills

<table>
<thead>
<tr>
<th></th>
<th>Early</th>
<th>Mid</th>
<th>Late</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Castle, Early Shipley</td>
<td>Shakarpara</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

### Dry Temperate Zone:

Drying type varieties like Charmagaz, Suffaidha, 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
• 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 pre-emergence 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

<table>
<thead>
<tr>
<th>Age of tree (years)</th>
<th>FYM (kg)</th>
<th>CAN (g)</th>
<th>N (g)</th>
<th>SP (g)</th>
<th>P$_2$O$_5$ (g)</th>
<th>MOP (g)</th>
<th>K$_2$O (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>10</td>
<td>280</td>
<td>70</td>
<td>220</td>
<td>35</td>
<td>165</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>560</td>
<td>140</td>
<td>440</td>
<td>70</td>
<td>335</td>
<td>200</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>840</td>
<td>210</td>
<td>660</td>
<td>105</td>
<td>500</td>
<td>300</td>
</tr>
<tr>
<td>4</td>
<td>25</td>
<td>1120</td>
<td>280</td>
<td>880</td>
<td>140</td>
<td>670</td>
<td>400</td>
</tr>
<tr>
<td>5</td>
<td>30</td>
<td>1400</td>
<td>350</td>
<td>1100</td>
<td>175</td>
<td>835</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>35</td>
<td>1680</td>
<td>420</td>
<td>1320</td>
<td>210</td>
<td>1000</td>
<td>600</td>
</tr>
<tr>
<td>7 &amp; above</td>
<td>40</td>
<td>2000</td>
<td>500</td>
<td>1560</td>
<td>250</td>
<td>1170</td>
<td>700</td>
</tr>
</tbody>
</table>
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.
<table>
<thead>
<tr>
<th>Grade</th>
<th>Fruit size (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special</td>
<td>42 and above</td>
</tr>
<tr>
<td>Grade I</td>
<td>36-42</td>
</tr>
<tr>
<td>Grade II</td>
<td>Below 36</td>
</tr>
</tbody>
</table>

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