# CULTIVATION PRACTICES OF BAEL

## INTRODUCTION

- Family- Rutaceae
- Origin- Woody tree native of INDIA.
- Uses-
- 1.It is used for medicinal purposes due to the presence of marmelosin.
- 2. Mature fruits are use to cure diarrohea, hepatitis & good for heart & brain .
- 3.It have anti inflammatory &wound healing properties.

## Climate & Soil

- It requires sub tropical climate where summer is hot & dry, winter is mild.
- It can withstand low temperature upto -7 degree celsius.
- Wild strain bears relatively smaller fruits and has been described separately under the title "WILD HIMALAYAN BAEL".
- A well drained, sandy loam soil is ideal.
- It can withstand sodicity also.

## **VARIETIES**

### INSTITUTION

- G.B.Pant university of agriculture and technology
- Central Institute Of Subtropical Horticulture
- Central Horticulture Experiment Station
- Narendra Dev
   University of Agriculture
   And Technology

#### **VARIETIES**

 Pant Aparna ,Pant Shivani ,

Pant Sujata ,Pant Urvashi

- CISH B-1,CISH B-2
- Goma Yashi
- Narendra Bael-5,7,9



NB-5



**Pant Aparna** 

## **PROPOGATION**

- Bael is usually propogated by seed.
- Fresh seeds are sown in june.
- Patch Budding is ideal method with 90% success rate.
- June July is ideal time for budding.
- Stem cutting, Air layering, Grafting can also be used.

## **PLANTING**

- Bael plants should be planted at a distance of 8m x 8m (budded plants) or 10 m x 10 m (seedlings).
- Pits of 90 cm x 90 cm x 90 cm size are dug & filled with a mixture of top soil +25 kg FYM & 50 gm gamma BHC up to a level of 6 cm from the ground level.
- Irrigate the pits to let the soil settle down.
- Feb March or July Aug is time for planting.

## **Training & Pruning**

- Young plants are trained with the help of stakes so that they can grow straight.
- To provide good framework of the individual tree, the tip of main stem should be removed at a height of about 1m. Select only 4-6 well spaced branches.
- Pruning in bael is normally not done.
- Dead, diseased, weak & crossing branches are pruned off.

## MANURE & FERTILIZER

- Apply 10 kg FYM ,50 gm N ,25 gm P , 50 gm K / plant to one year old plant.
- This dose should be increased every year in the same proportion up to the age of 10 years.
- FYM applied in May .
- Half dose of N ,full dose of P & half dose of K should be given just before flowering.
- Remaining half dose of N& K should be given in last week of August.
- Irrigation must be given immediately after it.

## IRRIGATION

- Basin system providing more uniform distribution of water should be used for irrigation of young plants.
- Irrigation at monthly interval should be given after the rainy season.

## **HARVEST & YIELD**

- Fruits take about 11 months to ripen.
- These are harvested with fruit stalk when colour changes to yellowish green.
- A fully grown tree produces from 400-1000 fruits depending upon the cultivar.

## **PESTS & DISEASES**

- More than a dozen insects have been found feeding on bael.
- Phyllocnistis citrella ,Papilio demoleus are the important insects which can be easily controlled by use of insecticides .
- Citrus Canker, Gummosis, Bacterial Shot hole can be controlled by mancozeb, Bavistin Spray.

## **STORAGE**

 It can be stored for about 3 months at 9 degree celsius & 85-90 % relative humidity

## PHYSIOLOGICAL DISORDERS

- Fruit drop and cracking in bael before ripening are main problems.
- Growth regulators 2,4-D, GA ,2,4,5-T with various concentration check fruit drop at a reasonable extent.
- Cracking can be minimized by maintaining proper moisture upto full growth or maturity of fruit.
- Chilling injury (appearance of brown spots on the fruit surface) develop during storage of fruits below 9 degree celsius.

## 7HAMX YOU

