

Soaking of Seeds



- Soak the seeds in water for 10 hours with PROGIBB (GA3) (Not Mandatory).

Fungicide Treatment



**Add fungicide like Mancozeb (Indofil M-45[®]) @ 2gms /ltr of water
– Not Mandatory**

Seed treatment with insecticide



Treat the seeds with imidachloprid (Gaucho[®] 70WS) @ 10 gms/kg of seeds, as per the method suggested by the manufacturer.

Rooting Media



Sand + red earth + organic manure (1:1:1)



**Polythene cover should have proper drainage.
Cocopeat layer of atleast 2-3 cm at the top**



Sow the seeds in a polythene bag containing rooting media at a depth **not more than 1cm. TOP LAYER SHOULD HAVE COCOPEAT ONLY**

Sprouted seedlings





Seedlings (Plantlet of 15-20 cms height with 6-8 leaves) will be ready for transplanting in about 50 – 60 days.



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Quality seeds for quality lives

- **PAPAYA SEEDS HAVE A TENDENCY TO LOSE THEIR VIABILITY VERY FAST.**
 - **THEREFORE, IT IS STRICTLY ADVISED TO SOW THE SEEDS IMMEDIATELY ON RECEIPT.**
 - **DO NOT STORE THE SEEDS.**
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Preparation of pit for planting



Dimension of the pit 40 x 40 x 40 cms.

Preparation of pit for planting(contd.)

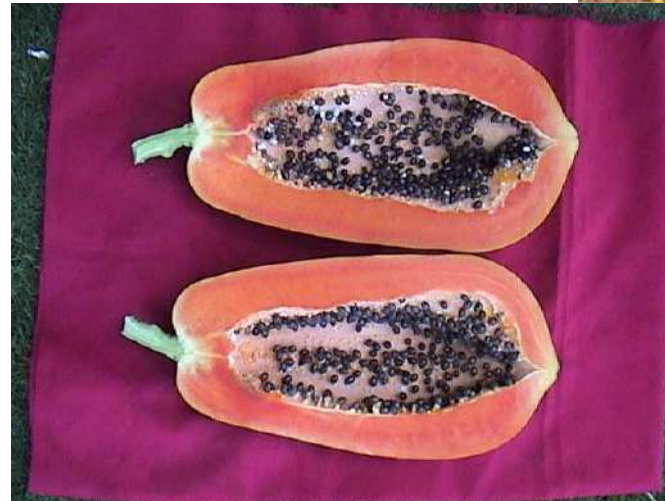


Fill the pit with sand, red earth and organic manure in equal quantities

Fruits from female plant



Fruits from hermaphrodite plant



Male plant

(WHICH IS NOT THERE IN OUR PRODUCTS)



Non yielding, but helps for pollination.

Nutrients

- Requirement of nutrients per plant(N:P:K)
- N - 250 gm
- P₂O₅ - 250 gm
- K₂O - 500 gm
- FYM -10-15 Kilo.
- The above fertilizer should be given in 6 split doses (once in 2 months).

Spray micronutrient formulations containing Calcium, Magnesium, Sulphur, Boron, Manganese, Iron and Zinc.

IRRIGATION

- Papaya responds well for better water management as it has a shallow root system.
- Lack of water hinders the papaya growth and it also causes flower or fruit abortion.
- The soil should not be allowed to become too dry.
- However it cannot withstand water logging.
- Depending on the plant age, soil type, temperature, wind and light, plants are irrigated once in 8-10 days during winter and once in 5 days during summer.
- Accordingly a plant requires 15-40 liters of water per irrigation.



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PLANT MAINTENANCE

- Weed control : Eliminate weeds as they compete for** nutrients, light and water, and can harbor pests, diseases and also vectors of diseases.
- **Bud removing : Auxiliary shoots or buds have to be cut** off as they absorb nutrients.
 - **Shedding of leaves : Older leaves should be eliminated,** they can act as source for pests and diseases.
 - **Fruits removing : When 2-3 fruits grow in the same** pedicel, it is recommended to keep only one fruit. Care should be taken while removing the extra fruits in the pedicel.
 - **Supporting : Staking should be provided when the bearing** is more and heavy.



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Diseases.

- **Damping-off**
- **Collar rot or Stem rot**
- **Anthracnose**
- **Powdery mildew**
- **Alternaria spot**
- **Ring Spot Virus of papaya**
- **Leaf Curl Virus of papaya**
- **Mosaic Virus of papaya**

Damping Off



- **Causal organism: *Pythium aphanidermatum* and *Phytophthora parasitica***
- **Causes rotting of seedlings in the nursery.**
- **Sterilization of the rooting media with 2.5 % formaldehyde solution and covering it with polythene sheets for 48 hours, 15 days before sowing of the seeds can prevent this.**
- **Drenching the seedlings with Ridomil-MZ ® 0.1 % or Captan gives good protection.**

Collar rot or Stem rot



Causal organism: *Pythium aphanidermatum*

Phytophthora parasitica

Water logging and bad drainage are the major contributing factors for this disease.

Causes considerable damage to the crop.

Drenching the soil with Ridomil-MZ[®] 0.1 % + Bavistin[®] 0.1% gives good protection.

Anthracnose



Causal Organism: *Colletotrichum gloeosporioides*

It affects the leaves, flowers and fruits, as a result they drop off prematurely.

It can be managed by spraying carbendazim 0.1 % or difolaton 0.2 %

Powdery Mildew



Causal Organism: *Oidium caricae*

It attacks the leaves, affected leaves dry and drop off.

**It can be managed by spraying wettable sulphur 0.2%
or triademefon 0.05%(Bayleton[®])**

Alternaria spot



**Caused by *Alternaria alternata* Affects fruits.
It can be managed by spraying chlorothalonil
0.2% or iprodione 0.2 %.**

Ring Spot Virus of Papaya



Symptoms: Top leaves begin to have yellow mosaic in the leaf blade and green oily streaks appear on the stem and petiole of younger leaves.

This ring spots appear on flowers and fruits.



Can cause production loss between 5-100% depending on the age in which the plant is effected.

Transmitted by aphids.

Management of Ring Spot Virus



- **When raising the seedlings cover the nursery with nylon mesh of suitable size.**
- **Keep the plots free of weeds which may harbor the vectors**
- **Planting fodder sorghum in thick rows as border crop which attracts vectors.**
- **These border plants can be treated with systemic insecticides to prevent the vectors.**
- **Marigold cultivation along with Papaya as trap crop.**
- **Control of vectors like Aphids by proper chemicals**

Leaf Curl Virus of papaya



Symptoms: Curling of leaves

- It can cause considerable damage.
- Transmitted by whiteflies.
- It can be prevented by spraying systemic insecticides

Papaya Mosaic Virus



Symptoms: Leaves show a mosaic pattern.

- **It can cause considerable damage.**
- **Transmitted by aphids.**
- **It can be prevented by spraying systemic insecticides**

Aphids



- **Act as vectors of papaya ring spot virus and mosaic**
- **Suck the sap and cause sooty mould**
- **Spray systemic insecticides – Monocrotophos 0.15% or Confidor® 0.05%.**

WHITE FLIES



- Suck the sap
- • Transmits papaya leaf curl virus
- • Spray Confidor[®] 0.05%, or Triazophos 0.15%.

Red Spider Mites



- **Suck the sap**
- • **Spray Vertimac 0.04%, Fenzaquin 0.15% or**
- **Dicofol 0.25%.**

HARVEST



- **Right time to harvest fruits**
- **When the fruit color turns from dark green to light green forming yellow streaks.**
- **Cut the fruits along with 5 to 10 mm long pedicel.**
- **Before shipping wrap the fruits with paper**



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THANK YOU
