



MIRACLE FRUIT

(*Synsepalum dulcificum*)

Miracle fruit, also called miracle berry, evergreen shrub of the family Sapotaceae, grown for its mild fruits that make subsequently eaten sour foods taste sweet. It is used to sweeten palm wine and other beverages.

Origin: Tropical West Africa.

DESCRIPTION

TREE

The miracle fruit plant grows as a dense shrub or small tree, usually grow up to 15 ft in height in the wild and generally smaller when cultivated.



FLOWER

The small white flowers give rise to red drupe fruits that are about 2–3 cm (0.8–1.2 inches) in length.



FRUIT

The berry itself has a low sugar content and a mildly sweet tang. It contains a glycoprotein molecule, with some trailing carbohydrate chains, called miraculin. When the fleshy part of the fruit is eaten, this molecule binds to the tongue's taste buds, causing sour foods to taste sweet.





PLANTING CARE

Planting material : Seedlings

Planting method : Raised bed/ containers

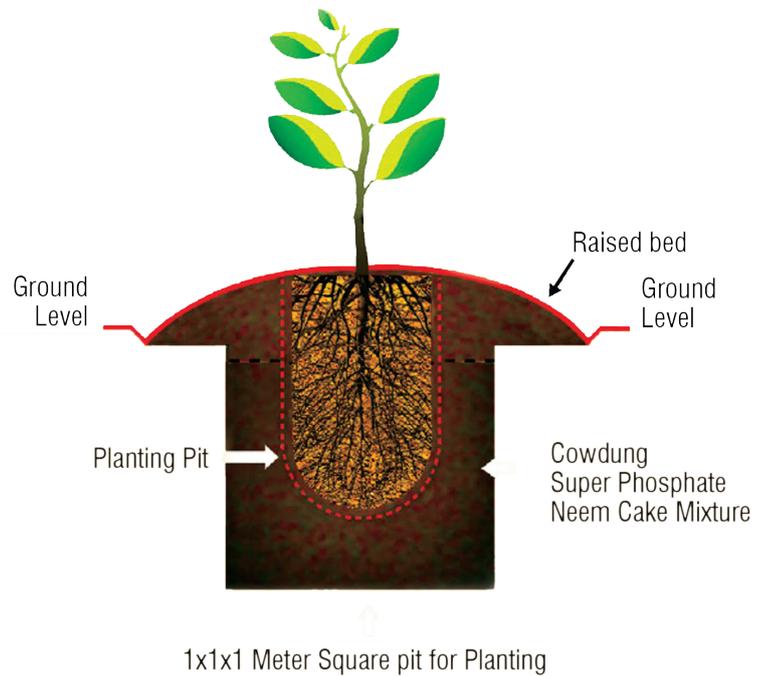
Pit size : 1 x 1 x 1x 1 ft

Canopy width : 7ft

Canopy height : 10 ft

Season : more than one season.

Ideal location : Low lands/ Plains



IDEAL GROWING CONDITIONS

- ❖ Sunlight requirement : full to partial sunlight.
- ❖ Temperature : 22- 35°C.
- ❖ Rainfall : 1200- 2000 mm.
- ❖ Relative humidity : 70-90 % RH.
- ❖ Soil pH : 5.5 to 6.5.
- ❖ Soil type : Laterite / sandy loam.
- ❖ Elevation : 0 to 2000 ft MSL.
- ❖ pH : 5.5 to 6.5.
- ❖ Pruning : yes.
- ❖ Training : yes.
- ❖ Pollination : self pollinated.





NUTRITION MANAGEMENT

| Inputs | 1st year | 2nd year | 3rd year | Frequency/stage |
|-------------------------|----------|----------|----------|-----------------|
| NPK | 50g | 100g | 150g | 2 split doses |
| Composted cattle manure | 1 kg | 2 kg | 3 kg | 2 split doses |
| Micronutrients | 10g | 15g | 20g | twice a year |
| Dolomite | 100g | 150g | 200g | before monsoon |

WATER REQUIREMENT

| Age of the tree | Quantity of water/Tree/Day |
|-----------------|----------------------------|
| 1 Years | 3 Liters |
| 2 Years | 5 Liters |
| 3 Years | 6 Liters |



PEST AND DISEASES

Leaf yellowing: Spray npk 19-19- 19 (3g/l).



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