TAMARIND

Dr. P. K. Yadav
Professor and Head

Introduction

- **Botanical Name:-** *Tamarindus indicus linn.*
- **Family:-** Fabaceae
- **Origin:-** Eastern Tropical Africa
- **Ch No.:-** 2n = 24
- **Plant part used:-** Pulp & Seeds
- **Local Name for Tamarind in India:-** Imli (Hindi, Punjabi)
  Amli (Gujarati)
  Tamber (Kashmiri)

Cont.....

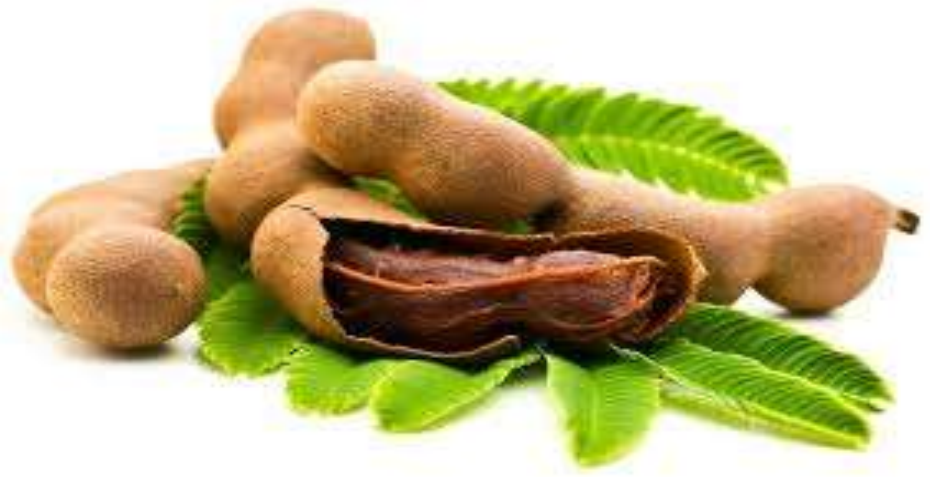
- Bihar, Orissa, Karnataka, AP, MP, Kerala, UP, Maharashtra, TN are major Tamarind growing states in India.
- Tamarind is grown most in TamilNadu and Andhra Pradesh.
- India is the largest producer in the world and it is the only country produces a commercial crop i.e. Tamarind.
- It is popularly known as **Indian date.**

Properties

- Tamarind is one of the ingredients that is being use in Indian curries, sauces for sweet and sour taste.
- Tamarind is sweetish an its pulp has laxative properties. Tender leaves, flowers and seeds are used as vegetables in India.
- Tamarind seed oil(Kernel oil) which is used in paints and varnishes.
- Tamarind wood also used for multipurpose like in tool handles, agricultural tools.

It is a most important multipurpose tree –

- One tree produce 150 - 250 kg. fruits annually with 30 - 35 % pulp, 11 – 30 % shells and fiber, 30 – 40 % seeds.
- Leaves are an important source of food and herbal medicine.
- Seeds are a cheap source of protein.

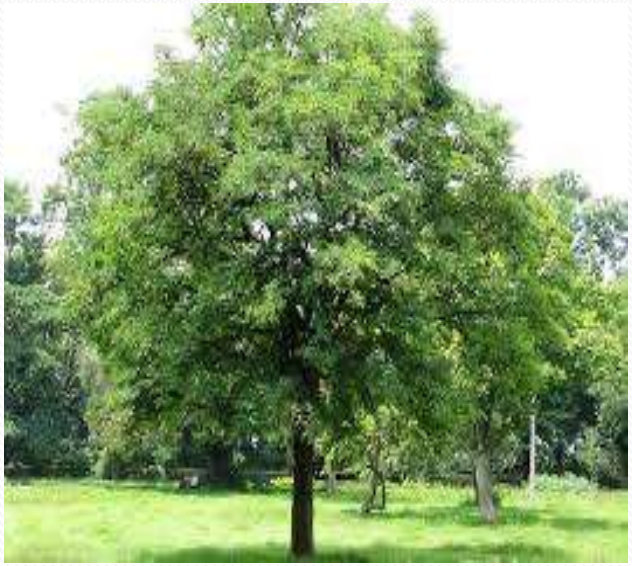


Health Benefits of Tamarind:-

- Tamarind supports digestive health.
- Tamarind is good for heart.
- Tamarind is a good source of iron, hence, it improves good blood circulation.
- Tamarind may aid in nerve function.
- Tamarind aids in weight loss.
- Tamarind also helps in controlling diabetes.

Plant Description:-

Tamarind is a perennial plant. It is a long- lived, medium growth, bushy tree, which attains a maximum crown height of **12-18** meters. The crown has an irregular, vase- shaped outline of dense foliage. The evergreen leaves are alternately arranged and pinnately compound. The leaflets are green elliptical ovular and less then **5** cm. in length.



Climate Requirement:-

This can survive in any kind of climatic conditions from 0-46 °C.

It grows well in semi arid tropical regions with an average annual rainfall of 5-15 cm. Generally the optimum elevation of tamarind is 1000 meter above the MSL. Tamarind tolerates the soil PH of 4.5 to 9.0.

Soil Requirement:-

Tamarind plants grow well in deep loamy, well- drained or alluvial soils. Tamarind plants are tolerant to saline and alkali soils. Tree will not tolerate heavy cold and wet soil.

Varieties

PKM 1

Early variety; average yield is 270-300kg pods/tree; pulp content 40%.If the plants are spaced at 10m × 10m, they produce yield of 25 tonnes of pods/ha.

Urigam

A local variety; very long pods; sweet pulp.

DTS-1

It is a sweet red type variety, USA, Bangalore.

Yogeswari

Pulp is red, Forest Dept. of Karnataka.

No. 263

Fruit Research station, Aurangabad(Mah.)

Cultivation Practices

Propagation:-

Seed propagation, grafting and budding are practiced for propagating tamarind plants.

Raising of Seedlings :-

Nursery beds are prepared and seeds are directly sown at a spacing of 20–25cm apart. Irrigation is done soon after sowing and seeds start germinating within a week. Seedlings are regularly watered until they reach four months old. Seedlings may be raised in polythene bags also.

Transplanting of Seedlings:-

Four month old seedlings are transplanted in the main field.

Planting:-

Ideal time for planting tamarind seedlings in the main field is June–November. Pits of **1**m × **1**m × **1**m size are dug in the field at a spacing of **10**m × **10**m. Seedlings are placed in the pit without disturbing the rootball and pit is then covered with a mixture of farmyard manure @ **15**kg/pit and top soil. Regular watering is done until plants get established in the field.

Manures and Fertilizers in Tamarind Farming:-

Generally, It requires good amount of well rotten farm yard manure(FYM) (Cow dung or any organic matter). This can be applied while preparing the soil or land. Apply **200:150:250** gm. Of NPK per tree along with **2** kg of neem cake.

Irrigation in Tamarind Farming:-

Irrigation should be carried out as soon as the seedling are transplanted in the main field. Depending on the soil moisture holding capacity, watering should be supplied. Water does not require in rainy season.

Harvesting and Yield:-

Seedling plants start yielding in 8–10 years after planting. Grafts and budded plants start yielding in 4–5 years after planting. Harvesting is done during December–April. Average yield is 30 tons of pods/ha.

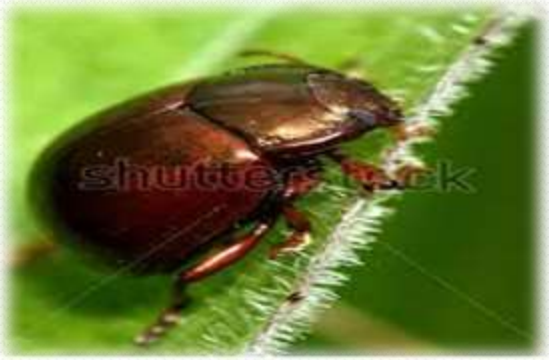
Plant protection:-

- **Pest:-**

1. Leaf caterpillar:-

Leaf caterpillar can be controlled by spraying Quinalphos 25 EC 1 ml/lit. or Monocrotophos 36 WSC 2 ml/lit.

2. Storage beetle:-



Storage beetle can be controlled by spraying Quinalphos **25** EC **1** ml/lit. at the time of fruiting season.

- **Diseases**

1. Powdery mildew:-

Powdery mildew can be controlled by spraying Dinocap 1 g/lit.