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#### **Cultivation of turmeric in orchard**

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## **Introduction**

Turmeric has special importance as a spice and in providing attractive colour to various food items. There is no substitute for the taste you get from it, so curcumin and waspi rolls are found in the village in April. It is used in vegetable lentils, meat, fish, egg, pickle and Ayurvedic medicine, cosmetics. Iran Libya Japan United Arab Republic of England America and Saudi Arabia are the main countries of Riyadh. Turmeric is mainly cultivated in Andhra Pradesh, Maharashtra, Orissa, Tamil Nadu and Bihar, 55.11% of India's total production is produced in Andhra Pradesh.

# **Climate**

Hot bottle climate is best for turmeric production. It can be successfully grown under trees for trees in a shady place or orchard. An average temperature of 20-to-30-degree centigrade temperature and about 15 mm of annual rainfall is suitable for turmeric.

#### **Varieties**

Narendra Haldi – 18, Coimbatore-1, Narendra Haldi-1, Narendra Haldi-2, Swarna, Roma, Rajendra Sonia, Pratibha, Prabha etc. are local species and Baruasagar and Padrauna are local species.

# **Soil and Preparation**

Good sandy loam land is suitable for turmeric production. In shallow lands, there is no yield, after deep ploughing in April-May, 3-4 ploughing should be done with indigenous plough or cultivator, so that the soil becomes full and the villages get enough opportunity to develop the entire field in agricultural work. For convenience, beds of 4 x 3 meters should be divided and drainage drains should also be used.





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#### Soil Refinement

To protect against the disease, land should be treated with Trichoderma, for this, mixing 2.5 kg per hectare of cow dung well, covering it with sacks that have fallen in a shady place and making light moisture, keep sprinkling water on the sacks for five-six days. After a day, spread it evenly in the sack and mix it in the field at the time of final farewell.

### Sowing Time and method

The suitable time of turmeric is from May to June, one or two eyes should be sleeping in each knot used in sowing, the distance from row to ripening should be 45 cm and the distance from plant to plant should be 20 cm, sowing should be done in flat land in normal land. Whereas in heavy land it is done at 15 cm high.

## Seed rate and treatment

12 to 15 quintals of healthy bales are required for one hectare, soaking it in water for 24 hours and covering it with a sack makes sprouts more quickly and 30 minutes before sowing by carbendazim 1%.

## **Manures and Fertilizers**

For good yield, at the time of ploughing the field, from 25 to 30 January, cow dung should be mixed evenly in the soil. Apart from this nitrogen, phosphorus, potash (100:80:100) kg per hectare is required. Therefore, 1/3 quantity of Nitrogen should be mixed with full quantity of Phosphorus and Potash in the field before sowing, remaining quantity of Nitrogen should be given in two parts in equal quantity on 50 and 75 days of sowing.

## Weeding and earthing

For good vegetative growth in the initial stage of the crop and to maintain proper bio communication to the roots, interaction should be done from time to time so that proper development of the plants can take place, for this two-three body hoeing should be done and sowing turmeric for the first time. After 50 to 60 days or after the onset of rain, soil is applied to the plants by hoeing lightly and after 40 days for the second time, after hoeing again, the soil is offered.





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#### Irrigation

To maintain proper moisture in the field, three to four irrigations are necessary before the rainy season. In the absence of rain, light irrigation should be done at an interval of 10 days, during the rainy season, good drainage system should be made, otherwise the crop gets destroyed due to the outbreak of Biglan.

# **Digging and yield**

Turmeric crop is ready in 270 to 300 days, the leaves of the plants start turning yellow and wither, that is the right time for digging. While digging, it should be kept in mind that in one hectare, under favourable conditions, about 200 to two and a half hundred quintals of fresh turmeric are obtained in lumps. On drying, one-fifth of fresh turmeric is obtained dry turmeric.

# Turmeric Make it ready

To prepare commercial turmeric from raw turmeric, the following process has to be done.

# **Boiling**

After drying the fresh turmeric, after cleaning the soil etc. with water, spread the knots in the shade for three to four days and dry them. According to convenience, mix 100 grams of sodium carbonate or bicarbonate in 100 litres of water in a pan, iron or earthen pot and mix raw turmeric in it and keep the water in the vessel 10 cm above the surface of turmeric. Keeping the upper part of the vessel covered with turmeric leaves, the turmeric is cooked till it becomes soft, at this time a special kind of smell comes out with Dubey, then it should be understood that the turmeric is cooked well, only two times in a chemical wash once prepared. Bar turmeric should be used in people.

# **Drying**

Bloated turmeric should be spread on mats or stones in the form of 6-8 cm thick, they start standing completely in 10-15 days, the knots should be covered at night.

# **Polish**

After dry turmeric turns discoloration, it becomes necessary to polish it. Dry turmeric is stirred a lot by adding a little turmeric powder in a rotating drum or the songs are kept in sacks.

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#### **Dyeing**

The outer surface of the songs is dyed either dry or wet to produce attractiveness in turmeric. For polishing process, to keep one quintal of dry songs, 2 kg of ground turmeric, 50 grams of sodium bicarbonate and 50 ml of hydrochloric acid should be mixed in the solution and they should be dried again after the knots are completely colored.

### Insect and disease control

#### **Shoot borer**

The larvae of this insect pierce the suit and eat it, for its control, three sprays of Monocrotophos 0.05% are done during the outbreak between July and October.

## **Tuber rot**

The disease is caused by a fungus called jaundice, due to which the affected tubers completely rot, proper care should be taken to control the drainage and the seed should be treated with 0.25% Ridomil solution for 40 minutes or 0.3% Mancozeb for 30 minutes.

## Leaf Spot

Oval spots are found on the leaves, photosynthesis does not take place from the affected leaves, for its control, Mancozeb 0.3% solution should be sprayed from June to September.