



Calendar of Operations

TURMERIC



ICAR-Indian Institute of Spices Research

Kozhikode - 673012, Kerala, India



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Published by

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Citation

Dr. C.K Thankamani, S.Hamza, K.S Krishnamurthy, R.Praveena (Eds. 2018) Calendar of Operations for Turmeric, ICAR - Indian Institute of Spices Research, Kozhikode, Kerala, India.

March 2018

Financed by: ICAR-Indian Institute of Spices Research, Kozhikode

No: of Copies 1000
Cover Design: Sudakaran A

Printed at

KT Printers, Mukkan

Calendar of Operations - Turmeric

January

- Dig the rhizomes marked for seed purpose using spade.
- Stop irrigation one month before harvest.

Seed rhizomes are cleaned properly using water. Remove adhering leaves and roots.

Seed Storage

- Rhizome for organic production is dipped in Bordeaux mixture 1% or solution of *Trichoderma harzianum* or *T. viride* for 20 minutes and drain the water and dry in shade.
- Rhizomes for seed purpose can be treated with mancozeb (0.3%) and quinalphos (0.075%) for 30 minutes drain the water and dry in shade.
- Treated rhizomes are placed in storage pits with dried sand or sawdust. Spread sand or sawdust at 2 cm thickness, over that seed rhizomes spread to a height of 30 cm and cover with wooden sheet with holes.
- Stored rhizomes must be examined and rotten ones are removed at frequent intervals.

February

- Stored rhizomes must be examined at frequent intervals and the pest and disease infested ones are removed.

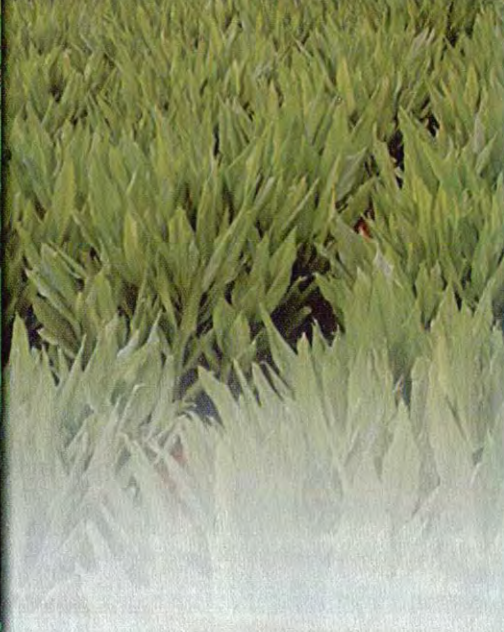
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| <p>March</p> | <ul style="list-style-type: none"> • Seedlings of turmeric may be raised using protray technology • The land preparation for next cultivation should be done during March. Clean the previous crop residues and plough thoroughly and pulverize. • Stored rhizomes must be examined at frequent intervals and the pest and disease infested ones must be removed. |
| <p>April</p> | <ul style="list-style-type: none"> • Apply lime @ 1-2 tonnes/ha, if soil pH is <6. • Beds can be prepared for planting rhizomes after the receipt of summer showers. Beds of 1m width, 25cm height and of convenient length may be prepared • Drainage channels must be provided in between beds. • In the case of irrigated crop, ridges are formed 40 cm apart and plant to plant distance may be 25 x 25 cm. • Seeds rhizomes are soaked in 0.1 % quinalphos / 0.3 % Mancozeb for half an hour before planting • Apply 30 t FYM/compost and 310 kg superphosphate per hectare as basal dose and incorporate well into soil during land preparation • In organic turmeric production, 280 kg of rock phosphate is used instead of superphosphate. |

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| | <ul style="list-style-type: none"> • Ideal time for turmeric planting is during first fortnight of April with the receipt of summer showers. • The healthy rhizome is cut into pieces of 20-25 g with at least 2 buds and used for planting. • In organic production, rhizomes are soaked in GEB 17 or <i>Trichoderma</i> solution before planting in the beds. • seed rhizomes must be soaked in 0.1% quinalphos / 0.3 % mancozeb for half an hour before planting. • Mulch the beds with green leaves and other organic materials @ 15 t/ha after planting of rhizomes. • Fertilizer application, mulching followed by earthing up should be done. |
| <p>May</p> | <ul style="list-style-type: none"> • Weeds should be removed before fertilizer application. • Apply 65 kg of urea and 100 kg of muriate of potash per hectare at 45 days of planting. Apply ash @ 1t/ha and compost @ 2 t/ha after 45 days of planting in organic turmeric production. • Weeding, fertilizer application, mulching and earthing up should be done. |

June - July

- Weeding may be done depending on weed intensity.
- Prevent water stagnation in the field.
- Apply 65 kg of urea and 100 kg of muriate of potash per hectare as second dose, 90 days of planting.
- Apply vermi compost @ 2 t/ha and sulphate of potash @ 100 kg/ha at 90 days of planting in organic turmeric production.
- Provide mulches in the basins after fertilizer application.
- An integrated schedule is recommended for the management of shoot borer, including pruning of infested shoots and spray of with 0.05% dimethoate.
- Spray 0.6% neemgold instead of dimethoate in organic production.
- Foliar spray of Turmeric micronutrient mixture @ 5 gm per 1 liter of water can be done one week after fertilizer application
- Remove plants infested with incidence of rhizome rot if any
- Once the rhizome rot disease is located in the field, remove affected clumps and drench the affected and surrounding beds with mancozeb 0.3% or 0.3% captafol or 0.125% metalaxyl mancozeb which checks the spread of the disease.
- To avoid spread of this disease to other beds, drenching must be done with the same chemical and the dose in all the beds.

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| August-September | <ul style="list-style-type: none"> • Weeds are removed from beds. • Second foliar spray of Turmeric micronutrient mixture @ 5 gm per 1 litre of water can be done one week after second dose of fertilizer application • Apply 1 kg of neem cake mixed with <i>Trichoderma</i> in beds of organic turmeric. • Avoid water stagnation in the field. • Drenching may be given in beds with COC 0.2% or Metalaxyl Mancozeb after uprooting the infested clumps if rhizome rot disease is noticed. |
| October-November | <ul style="list-style-type: none"> • Mark healthy and pests free beds for seed rhizome for the next season |
| December | <ul style="list-style-type: none"> • Turmeric can be harvested when leaves start drying. • Stop irrigation in beds one month prior to harvest. • Dig up rhizomes using a spade, remove adhering soil, roots and leaves. Wash well with clean water. • The cleaned rhizomes after preserving for seeds should be cured by boiling in water till frothing and the dried in sun or mechanical dryers and finally should be polished before marketing. • Grade them and pack in polythelene lined bags. |
| | <ul style="list-style-type: none"> • Care must be taken to avoid moisture absorption from atmosphere while storage of dry turmeric and heap bags in wooden floor and 50-60cm away from side walls. |



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