

## Calendar of Operations - Ginger

### January

- Dig up the rhizomes marked for seed purpose as well as dry ginger using spade.
- Stop irrigation before one month of harvest.
- Rhizomes are cleaned properly by using water. Remove adhering leaves and roots.

#### Seed Storage

- Rhizome for organic production are dipped in solution of Bordaux mixture ( 1%) or solution of *Trichodema harzianum* or for 20 minutes and drain the water.
- Rhizomes for seed purpose can be treated with mancozeb (0.3%) and quinalphos (0.075%) for 30 minutes and should be dried in shade.
- Treated rhizomes are placed in storage pits with dried sand or wooden powder. Spread sand or wooden powder of 2 cm thickness above 1 ft stored rhizomes and cover with wooden sheet.
- Stored rhizomes must be examined and rotten ones are removed at frequent intervals.

### February

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

### March

- Seedlings of ginger/turmeric may be raised using protray technology.
- The land preparation for next cultivation is done now. Clean the previous crop residues and burn, plough thoroughly and pulverize.
- Stored rhizomes must be examined at frequent interval and the pest and disease infested ones are removed.

### April

- 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.
- In the case of irrigated crop, ridges are formed 40 cm apart and plant to plant distance is 20-25 cm.
- Apply lime @ 1-2 tonnes/ha, if soil pH is <6.
- Drainage channels must be provided in between beds.
- For ginger and turmeric apply 30 t FYM/compost and 310 kg of superphosphate per hectare as basal dose and incorporate well into soil.
- In organic ginger and turmeric production, 280 kg of rock phosphate is used instead of superphosphate.
- Ideal time for ginger planting is during first fortnight of April with the receipt of summer showers.
- The healthy rhizome for planting is cut into pieces of 20-25 g with at least 1 bud and can be used for planting in the beds.

- Seed rhizomes are soaked in 0.1 % quinolphos / 0.3 % dithane M 45 for half an hour before planting. In organic production, rhizomes are soaked in GRB 35 or *Trichoderma*.
- Provide spacing of 25 x 30 cm to 25 x 25 cm and a depth of 5 cm with the viable bud upwards (recommended).
- Mulch the beds with 6 splits of dried coconut leaves/ beds (3x1 m size) or green leaves and other organic materials @ 15 t/ha after planting of rhizomes.

### **May**

- Weeds should be removed before fertilizer application.
- Apply 80 kg of urea and 40 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 ginger production.
- Mulching , fertilizer application followed by earthing up should be done
- For turmeric apply 65 kg of urea and 100 kg of muriate of potash per hectare at 45 days of planting

### **June- July**

- Weeds are removed and earthing up is done.
- Prevent water stagnation in the field.
- Apply 80 kg of urea and 40 kg of muriate of potash per hectare as second doze (90 DAP).
- Apply vermi compost @ 2 t/ha and sulphate of potash @ 100 kg/ha at 90 days of planting in organic ginger production.
- Provide green leaves in the basins (7.5 tonnes/ha) as mulching material and no mulching is needed if dried coconut leaves are used as mulch.
- For the management of shoot borer, pruning of infested shoots and spray of 0.05 % dimethoate is recommended.
- Spray 0.6 % neemgold instead of dimethoate in organic production.
- Foliar spray of Ginger micronutrient mixture @ 5 gm per liter of water can be done one week after fertilizer application
- Remove plants infested with incidence of rhizome rot or bacterial wilt
- 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 dose and the chemical in all the beds.

### **Turmeric**

- Apply 65 kg of urea and 100 kg of muriate of potash per hectare as second doze (45) DAP.
- Apply vermi compost @ 2 t/ha and sulphate of potash @ 100 kg/ha at 90 days of planting in organic turmeric production

### **August-November**

- Weeds are removed from beds.
- Second foliar spray of ginger micronutrient mixture @ 5 gm per 1liter of water can be done one week after second dose of fertilizer application
- Avoid water stagnation in the field.
- Mark healthy and pests free beds for seed rhizome for the next season.
- Apply 1 kg of neem cake mixed with *Trichoderma* in beds of organic ginger.
- Drenching may be given in beds with COC 0.2% or Metalaxyl Mancozeb after uprooting the infested clumps if rhizome rot disease is noticed.
- Mark healthy beds for collecting ginger seed rhizomes

### **December**

- Ginger 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.
- Dry ginger can be prepared by sun drying. Peel it carefully to remove the outer skin without damaging the underlying root. Try to make the pieces the same in both size and thickness to ensure uniform drying.
- Grade them and pack in polythene lined bags.
- Care must be taken to avoid moisture absorption from atmosphere while storage of dry ginger and heap bags in wooden floor and 50-60 cm away from side walls.