

## 2. FERTILIZER SCHEDULE FOR VEGETABLE CROPS

### **Amaranthus**

Apply FYM 25 t/ha, *Azospirillum* 2 kg and *Phosphobacteria* 2 kg/ha, N 75 kg and K 25 kg/ha as basal dose.

### **Annual Moringa**

A fertilizer dose of 45:15:30 g of NPK/pit may be applied 3 months after sowing. Apply 45 g of N/pit after 6 months when the crop is in bearing.

### **Ash gourd**

Apply 10 kg FYM and 100 g of NPK 6:12:12 mixture/pit as basal and 10 g N/pit 30 days after sowing.

### **Baby corn**

Apply FYM 12.5 t/ha, NPK 75, 60, 20 kg/ha as basal, 75 kg N and 20 kg K top dressed on 25th day after sowing.

### **Beetroot**

Apply FYM at 20 t/ha and 60:160:100 kg of NPK/ha as basal and 60 kg N/ha after 30 days.

### **Bellary onion**

Apply FYM 25 t/ha, *Azospirillum* 2 kg and *Phosphobacteria* 2 kg/ha, N 50 kg, P 150 kg and K 75 kg/ha as basal dose and N 50 kg/ha as top-dressing is done at 30 days after planting. Apply Zinc sulphate as basal dose @ 50 kg/ha at the time of last ploughing.

### **Bhendi**

Apply FYM 25 t/ha, N 20 kg, P 50 kg and K 30 kg/ha as basal and 20 kg N/ha 30 days after sowing. Apply *Azospirillum* and *Phosphobacterium* each at 2 kg/ha mixed in 100 kg of FYM before sowing.

### **Bitter gourd**

Apply 10 kg of FYM per pit (20 t/ha) 100 g of NPK 6:12:12/pit as basal and 10 g of N/pit 30 days after sowing.

### **Bottle gourd**

Apply 10 kg of FYM (20 t/ha), 100 g of NPK 6:12:12 mixture/pit as basal and 10 g of N/pit 30 days after sowing.

### **Brinjal**

N 50 kg, P 50 kg and K 30 kg/ha is applied as basal dose and N 50 kg/ha 30 days after transplanting. Apply 2 kg each of *Azospirillum* and *Phosphobacteria* in the main field at the time of planting.

**Broad beans**

Apply 25 t/ha of FYM and 50 kg P and 25 kg K/ha as basal dose. 25 kg N and 25 kg of K/ha are applied between 20 - 25 days after sowing and application of another 25 kg of N is done between 40 - 45 days.

**Cabbage****Hills**

Apply 30 t/ha FYM, 90 kg N, 90 kg P and 90 kg K as basal and 45:45:45 kg NPK/ha on 30 to 45 days after planting.

**Plains**

Apply 20 t/ha of FYM, 50 kg N, 125 kg P and 25 kg K/ha along with 2 kg *Azospirillum* as basal and 50 kg N after one month of planting and earth up.

**Capsicum**

Apply FYM 25 t/ha, 40:60:30 kg NPK/ha as basal and 40 kg N/ha on 30, 60 and 90 days of planting.

**Carrot**

30 t/ha FYM and 90:90:90 kg/ha NPK are applied as basal dose and 45:45:45 kg/ha NPK after 45 days of sowing. Apply 25 kg of ZnSO<sub>4</sub>/ha as basal.

**Cauliflower****Hills**

Apply 30 t/ha of FYM and 90 kg N, 90 kg P and 90 kg K as basal dose and 45:45:45 kg NPK/ha after 45 days.

**Plains**

Apply 15 t of FYM/ha and 50 kg N, 100 kg P and 50 kg K as basal and 50 kg N after 45 days. Apply 2 kg of Departmental Vegetable micronutrient mixture without mixing with the chemical fertilizers.

**Chilli**

Apply FYM 25 t/ha, N 30 kg P 60 kg and K 30 kg/ha as basal and 30 kg N/ha each on 30, 60 and 90 days of planting. Application of potassium in the form of potassium sulphate will increase quality of pods.

**Chow chow**

Apply 250 g of urea for each vine after pruning and at the time of flowering.

**Cluster beans**

Apply FYM 25 t/ha, *Azospirillum* and *Phosphobacteria* each 2 kg/ha, N 25, P 50 and K 25 kg/ha as basal. 25 kg N/ha is applied as top dressing on 30 days after sowing.

**Coleus/Chinese potato**

FYM at 25 t/ha and NPK at 30:60:150 kg/ha are applied as basal. At the time of earthing up on 30 days after planting, apply 30 kg N/ha along with 2 kg of *Azospirillum*.

**Colocasia**

Apply 25 tonnes of FYM, 20 kg N, 30 kg P and 60 kg K/ha as basal and 20 kg N, 30 kg P and 60 kg K/ha on 45 days after planting.

**Cucumber**

Apply FYM 40 t/ha as basal and 35 kg of N/ha at 30 days after sowing.

**Curry leaf**

After each harvest 20 kg of FYM/plant is applied and mixed with soil.

**Dioscorea**

Apply FYM @ 25 t/ha at the time of last ploughing. Follow fertilizer schedule of 40:60:120 kg NPK/ha as basal. Apply 4 kg/ha of *Azospirillum* (mixed with 40 kg of soil) 30 days after planting. Apply 50 kg N and 120 kg K/ha on 90 days after planting.

**Elephant yam**

Incorporate 25 t/ha of FYM during last ploughing and apply 80:60:100 kg NPK/ha two months later.

**French beans**

Apply FYM 25 t/ha during last ploughing. 90 kg of N and P 125 kg of P/ha should be applied on one side of the ridges. For rainfed conditions of Shevaroy hills, apply as a basal dose of 62.5 kg/ha of Phosphorous as super phosphate and with another half of 62.5 kg/ha Phosphorous as FYM enriched super phosphate.

**Garlic**

During last ploughing incorporate 50 t/ha of FYM; Apply *Azospirillum* 2 kg and *Phosphobacteria* 2 kg/ha, 40:75:75 kg/ha NPK, 50 MgSO<sub>4</sub> and 1 ton neem cake as basal and N 35 kg/ha at 45 days after planting.

**Gherkin**

Apply N 150 kg, P 75 kg and K 100 kg/ha in 3 equal splits i.e., basal, three and five weeks after sowing.

**Lab lab****(a) Basal dressing for bush type**

Manures and fertilizers	Irrigated	Dry
FYM	12.5 t/ha	12.5 t/ha
N	25 kg/ha	12.5 kg/ha
P	50 kg/ha	25 kg/ha

**(b) For pandal type**

Apply 10 kg FYM per pit (20 t/ha) 100 g of NPK 6:12:12 mixture as basal and 10 g N per pit after 30 days. Apply 2 kg each of *Azospirillum* and *Phosphobacterium* per ha at the time of sowing.

**Muskmelon**

Apply FYM 20 t/ha, NPK 40:60:30 kg/ha as basal and N @ 40 kg/ha 30 days after sowing.

**Peas**

Apply FYM at 20 t/ha and 60 kg N, 80 kg P and 70 kg K/ha as basal and 60 kg N/ha on 30 days after sowing.

**Potato**

Apply 15 t/ha of FYM and 2 kg each of *Azospirillum* and *Phosphobacterium* as basal and 120 kg N, 240 kg P and 120 kg K/ha in two splits; half as basal and the balance for top dressing on 30 days after sowing. Apply Magnesium sulphate at 60 kg/ha as basal dose.

**Pumpkin**

Apply 10 kg of FYM (20 t/ha) and 100 g of NPK 6:12:12 g as basal and 10 g of N per pit after 30 days of planting.

**Radish**

Apply FYM at 25 t/ha and 25 kg N, 100 kg P and 50 kg K/ha as basal dressing and 25 kg N/ha after 30 days.

**Ribbed gourd**

Apply 10 kg of FYM, 100 g of NPK 6:12:12 g mixture as basal dose/pit and N @ 10 g/pit at 30 days after sowing.

**Small onion**

Apply FYM 25 t/ha, *Azospirillum* 2 kg and *Phosphobacteria* 2 kg/ha, N 30 kg, P 60 kg and K 30 kg/ha as basal and 30 kg N/ha on 30th day of sowing.

**Snake gourd**

Apply 10 kg of FYM, 100 g of NPK 6:12:12 as basal/pit and N @ 10 g/pit 30 days after sowing.

**Sweet potato**

Apply 25 t/ha FYM and 20:40:60 kg NPK/ha as basal and 20:40:60 kg NPK/ha after 30 days. If 20 kg/ha *Azospirillum* is applied, apply only 2/3<sup>rd</sup> dose of N. It is preferable to apply N and P in the form of DAP (Diammonium phosphate).

## **Tapioca**

### **Irrigated crops**

Apply 25 t/ha FYM and incorporate at the time of ploughing. Apply 45:90:120 kg NPK/ha as basal and 45:120 kg NK/ha on 90 days after planting during earthing up.

### **Rainfed crop**

FYM at 12.5 t/ha along with 50 kg N, 65 kg P and 125 kg K/ha is applied as basal. 2 kg of *Azotobacter* is applied as soil application at 30 – 60 days after planting on receipt of showers (2.0 kg *Azotobacter* + 20 kg FYM + 20 kg soil per hectare).

## **Tinda**

Apply FYM 10 t/ha, N 20 kg/ha as basal and N 20 kg/ha 30 days after sowing.

## **Tomato**

Apply FYM 25 t/ha, N 75 kg, P 100 kg, K 50 kg, Borax 10 kg and Zinc sulphate 50 kg/ha as basal dose and 75 kg N/ha on 30<sup>th</sup> day of planting during earthing up. Spray 1.25 ppm (1.25 mg in one lit) Triaccontanol, 30 days after transplanting and at full bloom stage to increase the yield.

## **Vegetable cowpea**

Apply FYM 25 t/ha, *Azospirillum* and *Phosphobacteria* 2 kg /ha and N 25 kg and P 50 kg/ha for irrigated crop. Apply FYM at 12.5 t/ha and N 12.5 and P 25 kg/ha for rainfed crop.

## **Watermelon**

Apply FYM 20 t/ha, P 55 kg and K 55 kg as basal and N 55 kg/ha 30 days after sowing.

## **Minor vegetables**

<b>Name of crop</b>	<b>Manures and Fertilizers</b>
Asparagus ( <i>Asparagus officinalis</i> var. <i>altilis</i> )	Basal: N 50 kg, P 10 kg and K 75 kg/ha
Basella (Green: <i>Basella alba</i> ) (Pink: <i>Basella rubra</i> )	FYM: 10 kg per pit
Butter bean ( <i>Phaseolus lunatus</i> )	FYM: 20-30 t/ha and 40:50:50 NPK kg/ha
Celery ( <i>Apium graveolens</i> )	Top dress: N: 140 kg, P: 55 kg and K: 220 kg/ha
Chakravathi keerai ( <i>Chenopodium album</i> )	Basal: FYM 25 t/ha NPK: 25-25-25 kg/ha and <i>Azospirillum</i> and <i>Phosphobacteria</i> 2 kg/ha each

Chekurmanis ( <i>Sauropus androgynus</i> )	FYM: 5 - 10 kg /plant
Chinese cabbage ( <i>Brassica pekinensis</i> )	Basal: FYM 10 t/ha, N: 90 kg, P: 125 kg and K: 100 kg/ha. Top dress: N: 90 kg/ha
Coccinia ( <i>Coccinia indica</i> )	FYM: 10 t/ha, N: 75 kg, P: 40 kg and K: 75 kg /ha
Knol-khol ( <i>Brassica caulorapa</i> )	Basal: N: 30 t/ha and Top: 180:120:100 kg NPK/ha
Lettuce ( <i>Lactuca sativa</i> )	Basal: FYM 30 t/ha, N 50 kg/ha, P 30 kg/ha and K 30 kg/ha Top: N: 50 kg/ha, P: 30 kg/ha and K: 30 kg/ha
Palak ( <i>Beta vulgaris var. Bengalensis</i> )	FYM: 25 t/ha, N: 60 kg, P: 60 kg and K: 60 kg/ha
Rhubarb ( <i>Rheum rhaponticum</i> )	Fertilizer mixture of 1:1:1
Turnip ( <i>Brassica rapa</i> )	Basal: FYM: 30 t/ha, N: 90 kg, P: 125 kg and K: 100 kg/ha. Top: N: 90 kg/ha
Winged Bean ( <i>Psophocarpus tetragonalobus</i> )	Basal: FYM: 10 t/ha, N: 40 kg, P: 100 kg and K: 25 kg/ha