

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 ZnSO₄/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 MgSO₄ 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 2/3rd 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 30th 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

Name of crop	Manures and Fertilizers
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