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.

Bellaray 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/ha of FYM 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**

<table>
<thead>
<tr>
<th>Manures and fertilizers</th>
<th>Irrigated</th>
<th>Dry</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYM</td>
<td>12.5 t/ha</td>
<td>12.5 t/ha</td>
</tr>
<tr>
<td>N</td>
<td>25 kg/ha</td>
<td>12.5 kg/ha</td>
</tr>
<tr>
<td>P</td>
<td>50 kg/ha</td>
<td>25 kg/ha</td>
</tr>
</tbody>
</table>
(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 Azatobactor is applied as soil application at 30 – 60 days after planting on receipt of showers (2.0 kg Azatobacter + 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) Triacontanol, 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

<table>
<thead>
<tr>
<th>Name of crop</th>
<th>Manures and Fertilizers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus (Asparagus officinalis var.altilis)</td>
<td>Basal: N 50 kg, P 10 kg and K 75 kg/ha</td>
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<tr>
<td>Basella (Green: Basella alba) (Pink: Basella rubra)</td>
<td>FYM: 10 kg per pit</td>
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<tr>
<td>Butter bean (Phaseolus lunatus)</td>
<td>FYM: 20-30 t/ha and 40:50:50 NPK kg/ha</td>
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<tr>
<td>Celery (Apium graveolens)</td>
<td>Top dress: N: 140 kg, P: 55 kg and K: 220 kg/ha</td>
</tr>
<tr>
<td>Chakravathi keerai (Chenopodium album)</td>
<td>Basal: FYM 25 t/ha NPK: 25-25-25 kg/ha and Azospirillum and Phosphobacteria 2 kg/ha each</td>
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<tr>
<td>Plant Name</td>
<td>Nutrient Requirements</td>
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<td>----------------------------------</td>
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<tr>
<td>Chekurmanis (Sauropus androgynus)</td>
<td>FYM: 5 - 10 kg/plant</td>
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<tr>
<td>Chinese cabbage (Brassica pekinensis)</td>
<td>Basal: FYM 10 t/ha, N: 90 kg, P: 125 kg and K: 100 kg/ha. Top dress: N: 90 kg/ha</td>
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<tr>
<td>Coccinia (Coccinia indica)</td>
<td>FYM: 10 t/ha, N: 75 kg, P: 40 kg and K: 75 kg/ha</td>
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<tr>
<td>Knol-khol (Brassica caulorapa)</td>
<td>Basal: N: 30 t/ha and Top: 180:120:100 kg NPK/ha</td>
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<tr>
<td>Lettuce (Lactuca sativa)</td>
<td>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</td>
</tr>
<tr>
<td>Palak (Beta vulgaris var. Bengalensis)</td>
<td>FYM: 25 t/ha, N: 60 kg, P: 60 kg and K: 60 kg/ha</td>
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<tr>
<td>Rhubarb (Rheum rhaponticum)</td>
<td>Fertilizer mixture of 1:1:1</td>
</tr>
<tr>
<td>Turnip (Brassica rapa)</td>
<td>Basal: FYM: 30 t/ha, N: 90 kg, P: 125 kg and K: 100 kg/ha. Top: N: 90 kg/ha</td>
</tr>
<tr>
<td>Winged Bean (Psophocarpus tetragonalobus)</td>
<td>Basal: FYM: 10 t/ha, N: 40 kg, P: 100 kg and K: 25 kg/ha</td>
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