

3. FERTILIZER SCHEDULE FOR SPICE CROPS

Cardamom

Apply compost 25 t/ha; 75 kg N; 75 kg P and 150 kg K/ha in two split doses during June - July and October - November.

Cinnamon

Manures and fertilizers	1st year	Annual increase	10th year onwards
FYM	-	2 kg	20 kg
N	20 g	20 g	200 g
P	18 g	18 g	180 g
K	25 g	25 g	250 g

Clove

One year old plants can be applied with FYM 15 kg, N 20 g, P 20 g, K 60 g in two splits during June - July and September - October. Every year the dosage is correspondingly increased and a bearing tree of 7 years old may be applied with FYM 50 kg, N 300 g, P 300 g and K 960 g. In addition to this apply 50 g in each of *Azospirillum* and *Phosphobacterium* should be applied one month after manuring.

Coriander

Basal

FYM 10 t/ha, 10 kg N, 40 kg P and 20 kg K for rainfed and irrigated crops.

Top dressing

Top dressing may be done at 10 kg N/ha 30 days after sowing for the irrigated crop only.

Fennel

Basal

FYM 10 t/ha, N at 25 kg and 10 kg P/ha

Top dressing

25 kg N at the time of flowering

Fenugreek

Basal

FYM 20 - 25 t/ha and N, P, K at 30:25:40 kg/ha.

Top dressing

20 kg of N at 30 days after sowing

Ginger

Basal

FYM 40 t/ha, 50 kg P and 25 kg K/ha.

Top dressing

37.5 kg N and 12.5 kg K/ha each applied on 45th and 90th day.

Mustard**Basal**

FYM 25 t N 25 kg, P 60 kg/ha

Top dressing

N 25 kg/ha

Nutmeg

Apply FYM 15 kg, N 20 g, P 20 g, K 60 g per tree during first year and FYM 50 kg, N 300 g, P 300 g, K 960 g for adult trees in two splits June - July, September - October. Apply 50 g in each of *Azospirillum* and *Phosphobacterium* one month after manuring.

Paprika

Apply 20 - 25 tonnes/ha FYM, 60, 100 and 60 kg NPK/ha as basal, 20 kg N and 20 kg K 3 weeks after transplanting. Apply 40 kg N and 40 kg K/ha 6 weeks after transplanting.

Pepper

Apply cattle manure or Compost @ 10 kg/vine just before the onset of South West monsoon. In addition 100 g of N, 40 g of P and 140 g of K per vine are applied in two split doses in the months of May - June and in September - October. Slaked lime at 500 g per vine is applied in alternate years during May - June. The manures and fertilizers are applied around the vine at a distance of 30 cm from the base and incorporated into the soil. *Azospirillum* @ 100 g/vine can be applied one month after the application of chemical fertilizers.

Turmeric**Basal**

Incorporate FYM 10 t/ha neem or groundnut cake - 200 kg/ha along with N, P and K at 25, 60 and 18 kg/ha; 30 kg/ha of Fe SO₄ and 15 kg ZnSO₄. Apply 10 kg/ha each of *Azospirillum* and *Phosphobacterium* one month after planting.

Top dressing

N, K at 25 and 18 kg/ha applied on 30, 60, 90, 120 and 150 days after planting.

Time of application	N	P	K
	(kg/ha)		
Basal dressing	25	60	18
Top dressing @ 30 Days after planting	25	25	18
Top dressing @ 60 Days after planting	25	25	18

Top dressing @ 90 Days after planting	25	25	18
Top dressing @ 120 Days after planting	25	25	18

Micronutrient application

For correcting deficiency of micronutrients especially Boron, Iron and Zinc at rhizome development stage, apply 375 g Ferrous sulphate, 375 g Zinc sulphate, 375 g Borax, 375 g of Urea in 250 lit of water/ha. Spraying twice at 25 days interval is recommended. The above micronutrients are dissolved in Super phosphate slurry (15 kg Super Phosphate is dissolved in 25 lit of water stored overnight and the supernatant solution is made upto 250 lit). In this solution, the micronutrients are added.

Ferrous Sulphate	:	375 g
Zinc Sulphate	:	375 g
Borax	:	375 g
Urea	:	375 g

Vanilla

Decomposed mulch is the main source of nutrients to Vanilla. Pruned vegetation must be dropped and applied as mulch. It is applied 2 to 3 times in a year. 40 – 60 g of N + 20 – 30 g of P + 60 – 100 g of K/vine/year are given in 2 to 3 splits. Vanilla responds well for foliar feeding. Hence 1% solution of 17: 17: 17 NPK mixture can be sprayed once in a month for boosting growth and flower production.