



CULTIVATION PRACTICES OF VEGETABLES

A. BRINJAL (*Solanum melongena* L)

Varieties:	CO1, CO2, MDU1, PKM1, PLR1, PLR(B)2, KKM1, PPI1, VRM1, COBH1 and COBH2
Soil	Well drained soil rich in organic matter with pH of 6.5-7.5.
Season of sowing	December–January and May–June.
Nursery bed preparation	Apply FYM10kg, neem cake 1kg per square metre before sowing. Area required for raising seedling for planting 1.0 ha is 100 sq.m
Seed rate	Varieties:400 g/ha Hybrids:200 g/ha
Seed treatment	<ul style="list-style-type: none">👉 Treat the seeds with <i>Trichoderma viride</i> @ 4g/kg or <i>Pseudomonas fluorescens</i> @ 10 g / kg of seed.👉 Treat the seeds with <i>Azospirillum</i> @ 40 g/400 g of seeds using rice gruel as adhesive.👉 Irrigate with rose can. In raised nursery beds, sow the seeds in lines at 10 cm apart and cover with sand.👉 Transplant the seedlings 30–35 days after sowing at 60 cm apart in the ridges
Field preparation	Thoroughly prepare the field with the addition of FYM @ 25 t / ha and form ridges and furrows at a spacing of 60 cm. Irrigate the furrows and transplant 30-35 days old seedlings at 60cm apart on the ridges.
Spacing for varieties	Varieties:60x60cm Hybrids:90x60cm

Mulching	Mulch with black LDPE sheets of 25 micron thickness and bury both the ends into the soil to a depth of 10 cm.
Weed control	Apply Pendimethalin 1.0 kg a.i. / ha or Fluchloralin 1.0 kg a.i / ha as pre- emergence herbicide, followed by hand weeding once at 30 days after planting
Manuring	Apply 2 kg each of Azospirillum and Phosphobacteria in the main field at planting. Varieties <ul style="list-style-type: none"> • Basal dose: FYM 25t/ha, NPK 50:50:30kg/ha. • Top dressing: 50 kg N/ha on 30^s day of planting or during earthing up. Hybrids • Basal dose: FYM 25t/ha, NPK 100:150:100kg/ha. • Top dressing: 100 kg N/ha on 30th day of planting or during earthing up.
Irrigation	After establishment of seedlings, irrigate at weekly intervals.
Harvesting	👉 Harvest can be done 55–60 days after transplanting. 👉 Fruits are harvested attender stage at 4–5days intervals.
Yield	Varieties: 25 to 30 t/ha Hybrids: 60-80 t/h

B. TOMATO (Solanumlycopersicum)

Varieties:	PKM1, CO.1, CO.2, CO.3, (Marutham)and Paiyur1
Hybrids	COTH.1, COTH2 and TNAU Tomato Hybrid CO 3
Soil	Well drained loamy soil rich in organic atter with a PH range of 6.5 - 7.5
Season of sowing	May-June and November–December
Nursery bed	Apply FYM 10 kg, Neem cake 1 kg, enriched Superphosphate 100

preparation	g and Furadon 10 g per square meter before sowing.
Seed rate	Varieties:300-350g/ha Hybrids:100-150g/ha
Seed treatment	Treat the seeds with Carbendazim 2 g per kg of seeds 24 hours before sowing. Sow in lines at 10cm apart in raised nursery beds and cover with sand.
Field preparation	Plough the land to fine tilth Thoroughly prepare the field with the addition of FYM@ 25t/ ha and form ridges and furrows at a spacing of 60 cm. Apply 2 kg/ha of Azospirillum and 2 kg/ha of Phosphobacteria by mixing with 50 kg of FYM.
Spacing for varieties	PKM1, COTH2, TNAU Tomato Hybrid CO3: 60x45 cm CO3:45 x 30 cm
Mulching	Mulch with black LDPE sheets of 25 micron thickness and bury both the ends into the soil to a depth of 10 cm
Weed control	Apply Pendimethalin 1.0kg a.i./ha or as pre-emergence herbicide, followed by hand weeding once at 30 days after planting.
Micro nutrient spray	Foliar spray of ZnSO ₄ @0.5 per cent thrice at 10 days interval from 40 days after planting. Spray 19:19:19+Mn @1% at 60 days after planting.
Irrigation	After establishment of seedlings, irrigate at weekly intervals.
Manuring	Varieties: Basal dose: FYM25t/ha, NPK75:100:50kg/ha Hybrids: Basal dose: FYM25t/ha, NPK50:250:100kg/ha

Duration	110-115 days from transplanting (135-140days from sowing)
Harvesting	Tomatoes are harvested twice a week when the plants are about three months old.
Yield	Varieties: 30-40t/ha Hybrids: 80-95t/ ha

C. BHENDI (*Abelmoschus esculentus*)

Varieties:	MDU1, Arka Anamika, Arka Abhay and Parbhani Kranti
Hybrids	CO3, COBh H1
Soil	It is adaptable to a wide range of soils from sandy loam to clayey loam.
Season of sowing	Planting can be done during June-August and February
Preparation of field	Plough the land 4-5 times and apply FYM10 kg, during last ploughing. Form ridges and furrows at 45 cm apart.
Seed rate	Varieties: 8.0 kg/ha Hybrids: 2.5 kg/ha
Seed treatment	Seed treatment with <i>Pseudomonas fluorescens</i> @10 g/kg of seeds and again with 400 g of <i>Azospirillum</i> using starch as adhesive and dried in shade for 20 minutes.
Sowing	Sow three seeds per hill at 30 cm apart and then thin to 2 plants per hill after 10 days.
Spacing	Seeds are sown at a spacing of 45x30cm
Irrigation	Irrigation is done at weekly intervals.

<p>Application of fertilizers</p>	<p>Varieties</p> <p>Basal dose FYM @ 25t/ha, N@20 kg, P@ 50 kg and K@30 kg/ha as basal and 20 kg N/ha at 30 days after sowing</p> <p>Hybrids</p> <p>Basal dose FYM @ 40t/ha, N@100 kg, P@100 kg and K@100 kg/ha as basal and 100 kg N / ha 30 at days after sowing.</p>
<p>Weed Control</p>	<p>Spray Oxy flour fen at 0.15 kg a.i./ha or Fluchloralin at 1.0 kg a.i./ha or Metolachlor at 0.75 kg a.i./ha as pre-emergence application on third day after sowing.</p> <p>Herbicide application should</p> <p>Be integrated with one hand weeding on 30days after sowing.</p>