

CAULIFLOWER

Brassica oleracea L. var *botrytis*

Variety:

Early: Early Kunwari, Pusa Katki and Pusa Deepali.

Mid: Improved Japanese, Pusa Synthetic, Pusa Snowball and Main Crop Patna.

Late: Snowball-16, Pusa Snowball K-1 and Hissar-1.

Description:

Early Kunwari: Plant short, bluish green leaf with waxy bloom, small to medium curd, tends to grow loose faster, hemispherical with even surface.

Pusa Katki: Plant medium; bluish green leaf with waxy bloom; curd small to medium.

Pusa Deepali: Plant medium tall, leaf short erect, waxy, green, curd medium compact, white, self-blanching uniform, well protected by leaves, riceyness is almost absent, maturity 100-120 days.

Improved Japanese: Plant tall, erect, leaf bluish green, not incurved, curd large, compact, white, maturity 90-95 days.

Pusa Synthetic: Plant erect, leaf nos 24-28, varying in colour, curd medium, somewhat creamy white to white compact, maturity 130 days, yields 225 q/ha.

Pusa Snowball: Curd medium sized, solid and of attractive snow white colour.

Snowball-16: Plant short, 24 to 28 outer leaves, upright greyish green, incurved, curd medium, compact, snow white and self-blanching, maturity 90 days.

Pusa Snowball K-1: Plant spreading, outer leaf 24-28 nos., self-blanching, snow white, maturity 90-95 days, resistant to black rot.

Soil:

Well drained sandy loam for early and well drained loam to clay loam for mid and late varieties. Optimum pH- 6.0-7.0

Seed bed preparation and seedling raising:

Early cauliflower seedlings can be successfully raised under poly tunnels.

Refer to “Procedure for Nursery Raising of Transplanted Vegetable Crops”:

Field Preparation:

Land should be prepared to a fine tilth and FYM or compost to be applied. It is advisable to apply slaked lime every 3 years according to the soil test result. Lime should be applied at least 30 days before planting.

Seed rate:

400 g/ha for early season crop (53.3 g/bigha)

300 g/ha for mid season crop (40 g/bigha)

400 g/ha for late season crop (53.3 g/bigha)

8-10 g of seeds should be sown per sq.m.

Time of sowing:

1. **Early:** From mid July to first week of August (Matures by October).
2. **Mid:** From first week of September to last week of October (Matures by Dec - January).
3. **Late:** Up to the first week of November (Matures by Feb - March).

For North Bank Plain Zone:

Early – Last week of August

Late Mid – First week of November

Late – Last week of November

Spacing: (Row to Row x Plant to Plant):

Early: 45 cm x 45 cm

Mid: 60 cm x 60 cm

Late: 45 cm x 45 cm

Manures and Fertilizers:

FYM @ 10 t, N 80 kg, P₂O₅ 60 kg and K₂O 60 kg/ha (1.3 t FYM, 23.5 kg Urea, 50.4 kg SSP, 13.6 kg MOP/bigha). Half of N and full doses of FYM, P₂O₅ and K₂O should be applied as basal and the remaining half of N to be top dressed at 30 days after planting (during earthing up). For the kitchen garden, half of N and whole of P₂O₅ and K₂O may be applied by ring method around the plant at 15 days after planting and the other half of N at 30 days after planting.

Apply either 8 kg of Borax (1.1 kg/bigha) or 6 kg of Boric acid (0.8 kg/bigha) powder per ha along with basal fertilizers or spray 0.2-0.3% Borax (@ 1.6-2.4 kg/800 ltr/ha) against browning in boron deficient soils.

To prevent deficiency of molybdenum, apply Na or NH₄-molybdate @ 1-2 kg/ha along with basal fertilizers or irrigation water. Foliar spray of NH₄-molybdate 0.01- 0.1% @ 200-300 g/ha is also recommended. Foliar spray with commercial micronutrients formulation may be done.

For Hill Zone

- (i) Apply boron 3000 ppm (3g/ lit) as foliar spray 30 days after transplanting @ 650 lit spray solution/ha. Boron content in Borax is 11.3% and the Boric acid 17.5%

(ii) Apply commercial micronutrient formulation in two splits at 30-45 days after transplanting as per recommendation.

Interculture:

1. **Irrigation:** A light irrigation immediately after transplanting to be given and subsequent irrigations whenever required. In total five irrigations are sufficient.
2. **Weeding:** First weeding at 20 days and the second at 40 days after transplanting

Plant Protection:

- (1) **Caterpillars and other leaf eaters:** Spray chlorantraniliprole 18.5 SC @ 1ml/3ltr of water. Apply Emamectin benzoate 5 SG @220 g/ha. Spray Flubendiamide 39.35 EC @0.1%.
- (2) **Field-cricket, cutworm, red ants and other soil insects:** Apply Clothianidin 50 WDG @ 80 g a.i./ha.
- (3) **Black rot:** Drench the soil with 100-200 ppm solution (0.1-0.2g/ltr) of Agrimycin or Streptomycin after transplanting.

Harvesting:

Cauliflower is harvested when the curds obtain proper size.

Yield:

150-175 q/ha for early and mid and 175-200 q/ha for late crop **Seed yield:** 25-40 q/ha

SEED PRODUCTION OF EARLY CAULIFLOWER

Variety: Pusa Katki

Time of Sowing: Second fortnight of July

Benefit: Cost Ratio: 5.16