



## Knolkhol

(*Brassica oleracea L. var. gongylodes L.*)

Season	Open cultivation in Dry season (Dec. - March)
Variety	Super Star, White Vienna, Early White Vienna
Soil	Well drained organically rich sandy loam soils, light soils hasten maturity
Sowing time	Staggered sowing at 10-15 days interval is advisable during November to January months
Seed rate	600 - 800 g /ha; 15 beds of 7 m length x 1 m width for one hectare area
Nursery management	Select well drained open space. Make the soil fine tilth and mix 10 kg FYM or 5 kg vermicompost per square meter. Raise beds (1 m width and 5-7 m length) to 20 -30 cm with proper drainage facility. Seedlings can be produced in Pro-trays. Ensure seed treatment with Bavistin or Thiram @2g/kg of seed. Sowing should be done in 5 cm apart lines and at a depth of 1 -2 cm. The lines should be closed with fine FYM. After sowing the seed, cover beds with dry grass or rice straw till germination for rapid and good germination. Regular watering, drainage and disease - pest management should be done. Keep the nursery protection shelter in 'ready to use mode' to avoid damage from heavy rains. Irrigate nursery on alternate day during last week for proper hardening of seedlings.
Spacing	Single row: 30 -40 cm X 20-25 cm Double row bed system: 60 cm (40 cm x 25 cm) + 40 cm (between beds)
Transplanting	Transplant 4-5 weeks old seedlings on raised beds. Make 8-10 cm pit at prescribed distance and apply mixture of recommended dose of FYM, DAP, MOP and close half of pit. Seedlings should be planted in remaining half pit in evening hours. Give water immediate after planting.
Irrigation	Frequent irrigation needed in initial days, later on it can be done at 3 days interval. Furrow or drip irrigation is better. Mulching with plastic, dry grass, rice straw is suggested for good quality knobs.
Intercultural operations	Weeding at 10-15 days interval is necessary. Avoid damage to leaves while field practices
Manuring	20 t/ha
Fertiliser	Apply 40kg Nitrogen, 80 kg Phosphorus, and 60 kg Potassium per hectare as basal dose. Apply the remaining 40 kg N/ha after 30 -35 days of planting.
Disease and its control	Use net house for avoid pest attack. Grow maize as barrier crop, mustard as trap crop. Spray Neem formulations; spray monocrotophos or cypermethrin @ 1 ml / litre of water at 15 days interval. Use light traps and pheromone traps.
Harvesting	Knobs or tubers are ready for harvest after 50 to 60 days of transplanting when they attain 6-8 cm size.
Yield	100 - 150 quintals/ha; depending on variety and crop season
Potted knolkhol technology	Developed to grow knolkhol in roof tops, stairs, kitchen gardens and area with problem soils. It provides bags with suitable growing media (Cocopith + Vermicompost+soil), variety (Super Star) and pitcher or drip irrigation system.