

CABBAGE

Cabbage (*Brassica oleracea* L. var. *capitata* L.) is considered an important part of a well-balanced diet. It is usually eaten fresh or combined with other foods.

is the most widely grown crucifer locally. It is cooked, boiled, steamed, stir fried, or consumed fresh as salad. It is a good source of Vitamin C, calcium, and fiber.

Chinese cabbage (B. rapa L. cv. group Chinese Cabbage), pechay Baguio, or wong bok is not as widely grown as the common cabbage.

Production Statistics

Cabbage is grown in more than 8,000 ha. all over the country, although two-thirds of production is concentrated in the Cordillera Administrative Region (CAR). Total production volume in 1997 is 97,000 t valued at PhP787 M. No statistics are available for chinese cabbage.

	maturity (days)	head shape	color
cabbage			
Haya	60	flat	shiny green
Resist Crown	55-60	semi-globe	green
Ramgo	50-55	round	green
Midorimaru	50-55	round	green
Scorpio	55-60	round	green
Rareball	55-60	round	green
Chinese cabbage			
Blues	55	cylindrical	light green
Mikado R-55	55	cylindrical	bright green
Nozomi	60	cylindrical	green
Super Queen	65	barrel	light green
Quiang Dao	60-65	barrel	light green
Hero	55-60	barrel	light green

Climatic and Soil Requirements

Most varieties grow well in mid and high elevations during the dry season. Some varieties also perform well during the wet season. In low elevations, some varieties perform well during the dry, cool months.

Cabbage and chinese cabbage can be planted in most soils, but clay loam to sandy loam are best.

Land Preparation

Prepare the land thoroughly by plowing and harrowing several times. In low and mid elevations, make 0.5 m wide beds. In high elevations, prepare beds 0.75-1.0 m wide.

Seedling production

Prepare 1.0 m wide seedbeds at any convenient length. One hectare would require 50-70 m² seedbed. Incorporate manure and rice hull ash or wood ash. Line sow 280 g/ha of seed in furrows across the bed 7-10 cm apart. Sow thinly to prevent damping-off. Mulch with rice hull or grass clippings. Water regularly. Provide nylon net tunnel as shade and rain barrier. Spray pesticides as needed. Expose to full sunlight one week before transplanting. Transplant seedlings four weeks from sowing.

Transplanting

Water seedbeds and gently uproot the seedlings. Transplant in rows 0.5-0.75 m apart and 0.3-0.5 m between plants. Basal fertilizer may be applied at 10 g 14-14-14/hill. Irrigate before and after transplanting.

Mulch with rice straw, rice hull or plastic mulch to prevent weed growth and conserve soil moisture. It is best to intercrop with bunching onion, bulb onion, garlic, kutsai, tomato, marigold, or other crops to minimize insect pests.

Fertilization and Weeding

Side-dress with urea (46-0-0) at the rate of 5-10 g/plant 2.3 weeks after transplanting. Repeat side-dressing at 35 or 45 days after transplanting with 10 g/hill of 2:1 mixture of 46-0-0 and 0-0-60. Fertilize only after weeding.

Irrigation

During the dry season, irrigate before transplanting. Repeat every 7-10 days for furrow irrigation and 2-3 times per week for sprinkler irrigation. Mulching helps minimize irrigation frequency.

Pest and Disease Management

Diseases/Insect Pests	Recommendations
Damping-off	Avoid overcrowding and excessive watering in seedbed; drench with Captan solution
Black rot	Spray fungicides at the onset of disease; crop rotation
Soft rot	Remove and bury infected plants; crop rotation
Diamondback moth	Avoid monocropping; remove debris of previous crop; spray with <i>Bacillus thuringiensis</i> or pesticides such as Fipronil
Cabbage looper	Spray with hot pepper/tobacco extract, or pesticides
Cabbage webworm	Spray with hot pepper extract or pesticides
Aphids	Spray with soap solution or pesticides

Harvesting

Harvest when heads are already firm. Include several wrapper leavers for protection. Discard and bury rotting heads or heap in compost pits. Treat the base of the marketable heads with lime or alum solution to prevent rotting. Avoid exposure to full sunlight.

It contains protein, carbohydrates, vitamin and different minerals which are essential body requirements. The varieties of cabbage are Succession, All Head Early, Charleston, Make Field, Exhuizen Glory, Copenhagen Market, Marion Market, Golden Arce and Early Plant Dutch. Lately, two outstanding Japanese hybrids, KY and KK have been successfully grown under lowland conditions in the country.

Cabbage grows at sea level up to 1,900 meter above sea level. It is ideally grown in well-drained clay loam or sandy loam with plenty of organic matter.

It is commonly grown at the end of the rainy season or from September to March.

HOW TO PLANT

Sow the seeds in seed boxes or in seed beds 10 cm deep, 45 cm wide and 60 cm long. The developing seedlings are fertilized with ammonium sulphate.

Plow and harrow the field twice before transplanting to reduce the soil into fine tilt. Make one meter wide plots and remove weeds. Scatter well-decayed organic matter and pulverized the soil while mixing it with the former.

Transplant only vigorous seedlings which are three (3) to four (4) weeks old and four (4) inches high. Separate them 45cm apart (square) in plots. Water and provide shade. Transplant during cloudy days or late in the afternoon in order that the seedlings will not wilt.

Cultivate and water the plants alternately before heading stage. Weeding should be done when the seedlings are about six (6) to eight (8) inches tall.

Use 250 to 300 kg of ammonium sulphate or 110 to 135 kg. Of urea per hectare to attain sufficient size. For best results, apply organic or compost fertilizer.

Spray the plants with insecticides and copper fungicides at 10 to 14 days interval to prevent the occurrence of pests and diseases.

Crop rotation, use of well-drained soil, good management practices and avoiding heavy seedlings in the seed bed help prevent the occurrence of plant diseases.