

Flowering Cabbage Condor, Hanabi

Crop	Flowering Cabbage
Series	Condor, Hanabi
Botanical name	<i>Brassica oleracea</i>
Plant type	Annual
Seed type	Raw
Seed count	300 seeds / gr
Germination	21°C - 4-7 days light favored
Growing	10-20°C
Optimum pH	5.8-6.2

Plug Culture: 4 weeks (288 cell tray)

Stage 1 (days 1-5) Single sow seed into a 288 plug tray filled with sterile and well drained media. Optimum temperature is 21°C. Lightly cover with coarse vermiculite as cabbage seed requires light to germinate.

Stage 2 (days 6-10) As soon as the seedlings emerge, move the plug trays to a cool and bright location with good air movement. Optimum temperature range is 15-24°C. In summer, under high temperature conditions, placing plug trays outdoors under shade cloth works well. Fertilize with 50 ppm nitrogen using a well-balanced calcium nitrate based fertilizer to strengthen the seedlings.

Stage 3 (days 11-19) Maintain optimum temperatures and fertilize with 50-75 ppm nitrogen as needed to maintain strong growth. To maximize stem length do not apply plant growth regulators.

Stage 4 (day 20) The seedlings are ready for transplanting and should have 2-3 true leaves. Do not delay transplanting to maximize stem length and prevent stretched seedlings.

Transplanting to finish: 12-13 weeks

Soil Preparation: Flowering Cabbage does best in a soil-based cut flower bed amended with well-composted organic matter. Good drainage is essential for healthy root and stem development.

Transplanting: Place seedlings upright in the bed. If the hypocotyl is stretched, bury up to the cotyledons to keep the seedlings upright and provide support.

Netting: Ornamental Cabbage Condor grows to 63-75 cm tall. One row of support netting is required for support.

Spacing: Transplant 10 x 10 cm apart to promote thin stems and lower leaf drop.

Temperature: For the first 7 weeks target temperatures between 15-24°C to promote vegetative growth. Then, once the plants reach the desired height, target the night temperature below 13°C to promote leaf coloring. A few weeks after dropping the night temperature leaf coloring begins to show.

Coloring: The plants need to have enough size before color initiation. The leaf color change is related to anthocyanins (a group of water-soluble flavonoids that impart pink to purple colors in leaves) that are always present in the leaves but are hidden by the chlorophyll, green color. When the daytime temperature is higher than 25 °C and the night temperature is greater than 15°C, the leaves of Ornamental Cabbage and Kale can synthesize chlorophyll. When the daytime temperature is under 22°C and the nighttime temperature is between 4-15°C, the synthesis of chlorophyll stops and color (anthocyanins) begins to appear.

Fertilizer: For the first 6 weeks after transplanting, fertilize at 100 ppm nitrogen using a well-balanced calcium nitrate based fertilizer. A week before

lowering the night temperature to initiate leaf color, reduce moisture and fertilize at 50 ppm nitrogen, as needed, to maintain strong growth. Excess fertilizer promotes a cabbage-like head.

Lighting: Outdoor production in full sun works best in winter in mild weather areas or cooler northern climates in summer.

Lower leaf removal: To improve aeration many growers remove the lower leaves starting when the plants reach 20-25 cm tall. Repeat 3-4 times or as needed until the top of the plant begins coloring.

Timing: Crop time from sowing ranges from 16-17 weeks

Plug stage	Vegetative growth	Coloring	Crop time
3 weeks	7 weeks	6-7 weeks	16-17 weeks

Pests: aphids, caterpillars, cut worms

Disease: botrytis, damping off and downy mildew

All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on Asian conditions such as in Japan and Sakata cannot be held responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.