Cultural Tips for Ornamental Cabbage and Kale

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Ornamental cabbage and kale are crops which can extend the fall sales season into November. Consumers will buy flowering cabbage and kale after the hardy mum season has faded. Here are some tips for producing a fall crop.

Seeding: Sow seed mid- to late July for 8" pans. If larger plants are to be produced, sow seed in June. For smaller sized containers (i.e. 4" pots) seed can be sown up to early September. Grow late-sown plants at 62° to 65°F night temperatures to achieve the proper plant size.

Containers: Seed can be sown in plug flats or cell paks (i.e. 1206s). Finishing containers of 4", 6", 8" or larger can be used.

Transplanting: Allow root system to develop before transplanting to larger containers but **do not let plants become root bound** (be especially careful in the plug). This will ruin the transplants. After transplant, water repeatedly to settle transplants into new containers and minimize stress.

Spacing: To finish the crop, plants need adequate spacing. Use 6" centers for 4" pots, 11" centers for 6" pots and 16" to 18" centers for 8" pots.

Fertilizer: Cabbage and kale respond to moderate fertilizer levels. Plants will stall if the fertilizer rate is too low or salt levels become too high. Use a 20-10-20 fertilizer and provide 200 to 300 ppm Nitrogen on a constant liquid feed basis. Start feeding as soon as the seed emerges in the plug or cell flat. Start with 50 to 100 ppm and gradually increase the rate as needed. Sodium and ammonium nitrate can burn plants, so be careful with these nitrogen sources. A slow-release fertilizer can be applied at transplant (i.e. a formulation such as a 12-10-17 will do). If salts become too high and plants stall,

leach several times with plain water then resume fertilizer schedule but at a reduced rate.

Watering: This is most critical. **Do not let plants dry out.** Maintain vigorous growth. If plants dry out, growth will stall and lower leaves will yellow and drop. This will lead to a leggy appearance. Large plants may require one to two quarts of water per day!

Disease and insect control: To control root rot, use Subdue (1 oz/100 gal) several days after transplant. Control cabbage loopers with Dipel (or another *B.t.* formulation). Use diazinon or malathion for aphids. Scout plants constantly to monitor looper activity.

Height control: Most cultivars require little or no chemical growth regulator. This is especially true if plants are properly grown. Plant growth regulator applications should be avoided on naturally dwarf cultivars. However, growth regulators are useful on naturally tall cultivars such as red and white Peacock and on early plantings.

B-Nine can be used at 1,500 ppm if height control is a problem. Apply B-Nine after transplant but before stretching occurs. Repeat several times during July and August if necessary. Late applications of B-Nine or high rate applications (2,500 ppm) will delay color development or result in plants that are too tight at time of sale.

Bonzi sprays are not effective on ornamental cabbage and kale.

Other: Grow plants in full sun. Use a weed barrier if plants are on the ground.

Saleable plants can be produced in 50 to 60 days following transplant. Once plants are exposed to cold temperatures intensive color will develop in three to five weeks.

Cultivars: The ornamental kale varieties from Takii Seed are among the most outstanding cultivars on the market. Some of the features of these cultivars are outlined in the following table.

Cultivar Name	*Color*	*Growth Habit*	*Leaf Type*
Red Peacock	Red	Tall	Feathered
White Peacock	White	Tall	Feathered
Coral Quenn	Pink	Medium-tall	Feathered
Coral Prince	White (pink center)	Medium-tall	Feathered
Red Feather	Dark Red	Very tall	Feathered
White Feather	White	Very tall	Feathered
Red Pigeon	Light Red	Dwarf	Round
White Pigeon	White (pink center)	Dwarf	Round
Pink Beauty	Pink	Dwarf, early	Round
Rose Bouquet	Bright Red	Dwarf, early	Round
White Xmas	White (pink center)	Dwarf, early	Round
Red Sparrow	Red	Dwarf	Fringed
White Sparrow	White	Dwarf	Fringed
Prima Donna	Light Red	Tall	Fringed
White Lady	All White	Tall	Fringed
Red Kamome	Red	Dwarf, early	Fringed
White Kamome	All White	Dwarf, early	Fringed
Red Chidori	Dark Red	Dwarf	Fringed
White Chidori	All White	Dwarf	Fringed