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ORNAMENTAL KALE (Brassica oleracea)

A cold-hardy annual, Ornamental Kale is prized for its attractive, late-season color and performance in arrangements. They mature into compact, uniform heads with thick, blue-green or dark green round or fringed leaves. The centers of the heads have bright and contrasting colors in creamy white, purple-red, or pink, depending on the variety. The long vase life and premium price-per-stem make these cut-flower kales a favorite of florists.

SITE SELECTION:

Ornamental Kale can be grown wherever nighttime temperatures become sufficiently cool — dropping to 50°F/10°C for three or four weeks toward the end of the plant's maturity. It is best to take this into consideration to decide if your climate's temperatures are cool enough for the plants to best achieve their color.

Plants should be grown in full sun in rich, moist, well-drained soil with a pH between 6.0 and 7.0. Like most *Brassicas*, Ornamental Kale is a heavy feeder, requiring adequate supplemental fertilizer. Cease fertilizing when cool nighttime temperatures occur and color change begins. Continued fertilization after this point will delay color change.

To ensure constant and even soil moisture, drip irrigation is recommended. Ornamental Kale should receive the equivalent of 1 inch to 1½ inches of rain per week. Laying white-on-black mulch over the drip irrigation helps control weeds and keeps the soil cool.

> Johnny's trial of ornamental kales at the end of the season. The plants are fully grown, with straight stems ideal for using in arrangements.

SUPPORT:

Provide horizontal netting to prevent plants from falling over as they may become top-heavy and produce curved stems. Drive stakes in the ground along the row every 8-10 feet; most varieties only grow to 3 feet tall, so 4-foot tall stakes are sufficient. Position the netting on the ground prior to transplanting. This allows the net to be used as a spacing grid to achieve a 6-inch by 6-inch spacing, encouraging flower-sized heads at the time of maturity. Plants can be spaced as close as 4inches by 4 inches for smaller heads and thinner stems. Spacing more than 6 inches apart produces heads that are too large for cut-flower use. By adjusting the plant spacing, you can change the head size for your market needs. Raise the net higher up the stakes as the stems lengthen.



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GERMINATION:

Seeds will germinate within 10–14 days when maintained at a temperature of 70°F/21°C.

TRANSPLANTING:

The most common way to grow Ornamental Kale is to start it indoors. Sow directly in 50- or 72-cell plug trays or cell packs 4–6 weeks before planting out. Cover the seed with ¼ inch of soil. After germination occurs, maintain the temperature at 60°F/16°C for 3–4 weeks. Harden off the plants one week prior to planting out.

When the plants have developed 2–3 true leaves, transplant to the field. Plant the seedlings deeply, up to their cotyledons, and press the soil around the plants to ensure stronger, straighter stems. Seedlings must be planted out 1-2 months before the first fall frost, and will begin to show color once temperatures drop below 50°F/10°C. The best color develops when the plants have been exposed to at least two weeks of temperatures below 50°F/10°C.

DIRECT SEEDING:

Sow 3 months before the expected fall frost, 2 seeds every 6 inches, ¼ inch deep. Thin to one plant every 6 inches. Sow Ornamental Kale early enough to allow enough time for stems to elongate.

STRIPING LEAVES:

As plants grow in height, remove the lower foliage, allowing only upper, actively-growing leaves to remain. When the plants are approximately 10–12 inches tall, remove the leaves by placing your hands around the stem and pushing down. Repeat three or more times during the growing season. Be sure to strip the leaves prior to harvest to allow the wounds in the stem time to close up. This creates a better presentation and reduces insect pressure. Remove any debris from the field. Stripping the foliage isn't crucial to the end result but you will get a more attractive flower head.



Shown left to right: Strip the leaves by first grasping the stalk firmly at the base of the head. Next push down on the stalk until the leaves begin to break.

PESTS AND DISEASES:

The pests and diseases that afflict other Brassica crops, such as broccoli and edible kale, also affect Ornamental Kale. The most common of these are aphids, flea beetles, cabbage loopers, and root maggots. The best insect pest control on young plants is the use of fabric row covers, which prevents the insects' access to the plants. When row cover needs to be removed for weeding or other maintenance it is often an optimal time to spray some sort of insect control. Control flea beetles with an azadirachtin, such as AzaGuard[®], or pyrethrin, like PyGanic[®]. Cabbage worms can be controlled with a formula containing *Bacillus thuringiensis*, like Dipel[®] DP.

To control diseases, adhere strictly to a preventative program that includes long crop rotations with non-cruciferous crops, clean starting mixes, and strict sanitation practices.

HARVEST:

Cut stems when they reach 24 inches in length and the flower head is 4–6 inches across or at your desired flower size. Remove all but one or two layers of green leaves, leaving the colored center. Dunk the heads in cool water to remove any field debris.

While edible, the flavor of Ornamental Kales is undesirable so it is best to use them only for ornamental purposes. REV 12/18/2015 PH, RC, HA

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