



**ORNAMENTAL CABBAGE & KALE CULTURE**  
GRIFFIN GREENHOUSE AND NURSERY SUPPLIES, INC.  
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Potting Media – Due to the time of year this crop is produced and the high water requirement of cabbage and kale, water retention needs to be considered when selecting a soil-less media. Mixes that are too coarse may prove difficult to keep watered properly. The pH should be adjusted to between 5.7 and 6.2.

Container Sizes - Most are grown in an 8 x 5 pan, or a container with a similar soil volume. Pots down to 6" azalea can be used but culture is more difficult. Watering and growth regulator use increase with smaller sizes.

Planting - Stretched seedlings can be planted deep, but be careful not to bury the growing tip.

Watering - Avoiding extremes is important; constantly waterlogged soil invites root rot, while under-watering can check the plants and encourage lower leaves to yellow and drop off.

Fertilization - Water quality is important in choosing a fertilizer program. Griffin can test your water to help you determine an ideal fertilizer program. Please contact the Griffin Morgantown office to set up a test. Fertilizer program options:

- A) Slow Release - Nutricote® 13-13-13 (100 Day) or Osmocote® Pro 15-9-12 (5-6 month) is recommended. An 8x5 pan requires 4 teas. per pot of the Nutricote®, or 1 TBLS of the Osmocote®. 6-6 ½" pots require 1 TBLS of Nutricote®, or 2 teas of the Osmocote. Slow release fertilizer is favored when irrigation is from overhead sprinklers.
- B) Liquid Feed - Constant feed at 200 ppm until weather cools and color begins. Then reduce to 100 ppm. If feed levels are allowed to drop off too far yellow leaves followed by leaf drop may occur. For most water sources, a rotation of 2 applications of 20-10-20, followed by 1 application of 15-0-15 is recommended.

Ornamental Cabbage and Kale are subject to tip burn during hot and humid weather. This is a calcium problem related to poor transpiration during typical summer weather conditions. Foliar applications of 2 Tbls. per gallon of 15-0-0 or 15-0-15, sprayed with CapSil® (surfactant) @ ½ teas per gallon, greatly reduces damage from tip burn. Sprays should be made once a week when conditions favor tip burn. Schedule applications

during morning or evening hours to avoid phytotoxicity from the sprays.

Crop Timing - Seeds should be sown the last week of June, or the first week of July. Plugs (288-512 size), should be planted mid to late July, and larger cells (70-195) late July or the first week of August.

Insects – Aphids, cabbage loopers and whiteflies are the most prevalent insect pests. Cabbage looper control is outlined below. For all other insect problems consult, “Insecticide and Fungicide Options” bulletin for current year, free to Griffin customers.

Cabbage loopers-

Dipel® DF- 2 teaspoons per gallon as a foliar spray. Apply when caterpillars are small for best results. Reapply every 7 days or after significant rains. 4 hr REI.

Acephate 97 UP® - 3/4 teas per gallon as a foliar spray. No visible residue. 24 hr REI

Conserve® - 1/2 teas per gallon as a foliar spray. No visible residue. 4 hr REI

#### Growth Regulators –

If your crop may be used for any food uses, you may not use growth regulators of any kind on it. Bonzi®, at 30 ppm (2 Tbls./gallon) is highly recommended for height control. Spray the crown so that the Bonzi® begins to run down the stem. Apply when the leaves cover the top of the pot, and repeat at 2-3 week intervals as needed. Cabbage typically requires multiple applications, while Kale (except Peacock type) may require only one. Bonzi® applications do not delay color up. **Note:** One spray of Bonzi® at 20 ppm during the time they are in cell packs helps keep plants from stretching in the flats. 1 ppm Bonzi® drenches can be used when the plants have nearly covered the top of the pot.

B-Nine® at 5,000 ppm may be used as a foliar spray, but it is not as effective or as long lasting as Bonzi®.

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