



# Kohlrabi

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## Introduction

Kohlrabi (*Brassica oleracea* var. *gongylodes*) is a cool-season annual cole crop that is related to broccoli, cabbage, cauliflower and Brussels sprouts. Kohlrabi originated in northern Europe in the 16<sup>th</sup> century. It forms a round globe just above the soil line with leaves emerging in a spiral from the stem. The edible portion is actually an enlarged stem, not root tissue. Kohlrabi can be eaten raw or cooked. In flavor, it is like a mild, sweet broccoli stem or turnip. Once the thick skin is peeled off, the crisp flesh can be eaten like a carrot often with a dip or in salads. It can be boiled, braised, used in soups and stews, made into home fries and even pies. In Kentucky, kohlrabi does well in the spring but is best as a fall crop.

## Marketing and Market Outlook

Kohlrabi has potential for fresh market sales in Kentucky, especially during fall and winter months. Winter storage varieties, harvested in late fall, can be sold at winter farmers markets and in winter community supported agriculture shares. Niche wholesaling, to local foodservice chefs and food retailers, may also be a potential market for kohlrabi. Providing recipes and use suggestions to customers unfamiliar with kohlrabi may help promote sales.

## Production Considerations

### *Cultivar selection*

Kohlrabi is a cool-season crop and is grown during the spring and fall in Kentucky. It does best when soil temperatures are between 55 and 75 degrees F. It can be direct seeded in the field or transplanted. For a spring crop, seeds may be planted outdoors after March 15<sup>th</sup> in western Kentucky



and March 25<sup>th</sup> in eastern Kentucky. Transplants are generally started indoors four to six weeks before transplanting. Transplants can be set around March 25<sup>th</sup> in most parts of Kentucky. For a fall crop, the latest outdoor seeding dates are August 15<sup>th</sup> for western Kentucky and July 15<sup>th</sup> for eastern Kentucky. If planted later, harvest might extend through Thanksgiving. Kohlrabi varieties are light green in color, but there are also a few purple varieties. All have a white flesh. A few very good varieties for Kentucky are listed in Table 1 (see Page 2).

### *Site selection and planting*

In Kentucky, kohlrabi does well in fertile, well-irrigated soil. The pH should be between 6.0 and 7.0 for optimum growth. Plant fresh market variety transplants 4 inches apart in the row with rows 12 to 18 inches apart on bare ground. Storage varieties of kohlrabi should be spaced 10 inches apart in-row. A starter fertilizer applied around the



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**Table 1. Kohlrabi varieties for Kentucky**

Variety	Color	Hybrid	Days to Maturity	Comments
<b>Kolibri</b>	Purple	Yes	45	Attractive purple exterior, crunchy, juicy white flesh
<b>Winner</b>	Green	Yes	57	Mild, crisp tender flesh, holds well in field
<b>Kossak</b>	Green	Yes	80	Crunchy, firm, juicy, sweet flesh, winter storage variety, did well in spring planting, little or no fiber development, harvest recommended at 8 inches in diameter

root system during transplanting is recommended. Throughout the growing season, it is important to keep soil moist; irrigate if necessary.

#### *Pest Management*

Weeds and insect pests can be problematic in kohlrabi production. For weed management, careful frequent cultivation is the most dependable option since there are few good preemergence herbicides labeled for the crop. Weed control is simplified if the kohlrabi is transplanted into plastic mulched beds and grown in double rows spaced 12 inches apart with plants 6 inches apart in the row. Damage to transplants can result from cutworms, cabbage loopers, imported cabbage worms, diamondback moth larvae, cabbage maggot, aphids, thrips and flea beetles. Early detection is critical for controlling these pests. Scouting to monitor populations can help growers determine when and how often pesticides should be applied. Several plant diseases can result in yield losses. Use disease-free seed or transplants, and rotate cole crops with other (non-cole) crops annually. Fungicide and bactericide sprays may also be necessary.

#### *Harvest and Storage*

Harvest most kohlrabi varieties when bulbs are 2 to 3 inches in diameter. Larger bulbs can be tough and woody. Cut the thin portion of the stem below the swollen stem with pruning shears, leaving the root system in the ground. Kohlrabi sold in stores is often harvested when stems are 1.5 to 2 inches in diameter and tied in bundles of three with the leaves attached. Kohlrabi is normally harvested for farmers markets when stems are 2-3 inches in diameter and the leaves are removed. The young leaves can also be eaten like cabbage or kale. Kohlrabi can be stored two to three

weeks if refrigerated properly. Storage varieties can be stored for several months at 32 degrees F and 95% relative humidity.

#### *Labor requirements*

Labor requirements for kohlrabi are similar to broccoli and cauliflower. Labor needs would be approximately 25 hours per acre for production and about 125 hours per acre for harvest and marketing. Labor needs for small-scale production will be approximately two to four hours per 100-foot row, with labor time variations depending largely on weed control methods.

#### **Economic Considerations**

Initial investments include land preparation, purchase of seed or transplants, and installation of an irrigation system. Seed for improved or unique varieties may be much higher in cost than other cole crops. Kohlrabi production in Kentucky is probably best suited for direct, niche and well-developed local markets.



Returns for kohlrabi will be highly dependent on yield and prices. Commercial-scale kohlrabi production could return \$3,235 per acre to land, capital and management based on a yield of 140 cwt. at \$0.50 per pound. Costs per 100-foot row of kohlrabi production can be in the \$20 range, with substantial variation possible depending on labor needs for weed management. Returns to land and management per 100-foot row would be about \$25 based on a price of \$1 per pound.

### **Selected Resources**

Vegetable Production Guide for Commercial Growers, ID-36 (University of Kentucky, 2018-19)  
<http://www2.ca.uky.edu/agcomm/pubs/id/id36/id36.pdf>

Vegetable Directory: Kohlrabi (University of Illinois Urban Extension)

<http://urbanext.illinois.edu/veggies/kohlrabi.cfm>

Kohlrabi, AgriLife Extension Texas A & M:

<http://aggie-horticulture.tamu.edu/vegetable/files/2011/10/kohlrabi.pdf>

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*Reviewed by John Strang, UK Extension Specialist, and Josh Knight, UK Senior Extension Associate*  
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