



February 2005 (pr)

HG/Garden/2005-06

Kohlrabi in the Garden

Dan Drost and Michael Johnson

Summary

Kohlrabi is a cool season vegetable that prefers a sunny location and fertile, well-drained soil. Incorporate plenty of organic matter and a complete fertilizer into the area before planting. Plant seeds $\frac{1}{4}$ - $\frac{3}{4}$ inch deep, 1-2 weeks before the last frost in the spring. Thin seedlings or transplant kohlrabi 6 inches apart in the row with rows 1 foot apart. Irrigate regularly, and avoid water or fertilizer stress during growth. Kohlrabi is the least hardy of the cabbage like vegetables. Temperatures below 45°F will cause the plant to flower. Hot weather causes the stem to become woody and tough. Control insects and diseases throughout the year. Harvest kohlrabi when the stem enlarges to 2-3 inches in diameter.



Recommended Varieties

There are many good kohlrabi varieties for sale in local gardening outlets and through seed catalogs. Most grow well in Utah. Rapid (45 days, purple skin), Grand Duke (50 days), White Vienna, and Purple Vienna (60 days) have excellent production, eating quality, and flavor.

How to Grow

Soils: Kohlrabi prefers fertile, well-drained soil rich in organic matter for best growth. Most soils in Utah are suitable for kohlrabi production.

Soil Preparation: Before planting, incorporate 2-4 inches of well-composted organic matter and apply 4-6 cups of all-purpose fertilizer (16-16-8 or 10-10-10) per 100 square feet.

Plants: Kohlrabi can be grown from seed or transplants. Seeds should be planted $\frac{1}{4}$ - $\frac{3}{4}$ inch deep and thinned to the final stand when plants have 3-4 true leaves. Plants removed at thinning can be transplanted to adjacent areas. Transplants can be used to provide earlier harvest. Transplants should have 4-6 mature leaves and a well developed root system before planting. Generally 4-6 weeks are required to grow transplants to this size.

Planting and Spacing: Seeded or transplanted kohlrabi should be spaced 6 inches between plants in the row with rows 1 foot apart. Kohlrabi grows best when temperatures do not exceed 75°F. Young plants may be damaged by hard frosts. Mature plants will flower if average temperatures during growth are less than 45°F. Transplants may be planted 1-2 weeks before the last frost date for the growing area. Seeded kohlrabi may be planted at the same time. For fall maturing kohlrabi, select early maturing cultivars and plant 50 days before the anticipated maturity date. The maturity date can be timed for 2-3 weeks after the first fall frost. High summer temperatures reduce growth, decrease quality, and cause the enlarging stems to become tough and woody. In hot areas it is best to grow kohlrabi as a spring or autumn crop.

Water: Water kohlrabi frequently, since roots are shallow. About 1-2 inches of water are required per week. Use drip irrigation if possible to conserve water. Applying mulch around the plant also helps conserve soil moisture and reduces weed growth. Moisture fluctuations will cause the stems to become tough and woody.

Fertilization: Apply 1 cup per 10 feet of row of a nitrogen-based fertilizer (21-0-0 or 34-0-0) 3 weeks after transplanting or thinning to encourage rapid plant growth. Place the fertilizer 6 inches to the side of the plant and irrigate it into the soil.

Mulches and Row Covers: Plastic mulches can help conserve water, reduce weeding and allow earlier planting and maturity, especially with transplants. Fabric covers are used to protect seedlings and transplants from frosts and insect pests. Apply organic mulches when summer temperatures increase. These will cool the soil and reduce water stress. Organic mulches such as grass clippings, straw, and newspaper also help control weeds.

Problems

Weeds: Plastic and organic mulches effectively control weeds. Be sure to control weeds when plants are small and be careful not to damage roots when cultivating.

Insects and Disease:

Insect	Identification	Control
Aphids	Green or black soft-bodied insects that feed on underside of leaves. Leaves become crinkled and curled.	Use insecticidal soaps, appropriate insecticides, or strong water stream to dislodge insects.
Cabbage Worms and Loopers	Worms and loopers are light to dark green. Adult loopers are gray or brown moths while cabbage worms are white butterflies. Worms and loopers chew holes in leaves and hide in kohlrabi leaves.	Control worms and loopers with appropriate insecticides or biological measures.
Flea Beetles	Small black beetles that feed on seedlings. Adults chew tiny holes in cotyledons and leaves. Beetles can reduce plant stands or may kill seedlings.	Control beetles with appropriate insecticides at seeding or after seedlings have emerged from the soil.

Harvest and Storage

Kohlrabi should be harvested when the stems reach 2-3 inches in diameter. Larger stems tend to be tough and woody. The young leaves can also be eaten like cabbage or kale. Kohlrabi can be stored for 2-3 weeks at 32°F and 95% relative humidity. When prepared, the outer skin is peeled off and the inner flesh is eaten raw or cooked. Kohlrabi tastes like turnips with a texture like water chestnuts.

Productivity

Plant 3-5 feet of row per person for fresh use and an additional 5-10 feet of row for storage or processing purposes. Expect 50-75 lbs per 100 feet of row.

Nutrition

Kohlrabi has no fat, and is a good source of fiber and potassium.

Frequently Asked Questions

Some of my kohlrabi is tough and woody. Is that normal? Kohlrabi should be harvested when the enlarged stem is 2-3 inches in diameter, otherwise it will become woodier as it continues to grow.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions.

Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities.

This publication is issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle Cockett, Vice President for Extension and Agriculture, Utah State University.