



HOME GARDEN TURNIPS AND RUTABAGAS

Douglas C. Sanders, Extension Horticultural Specialist

(Turnip green production is discussed in Horticultural Information Leaflet No. 8016, *Home Gardens Greens*.)

Turnips and rutabagas are among the most commonly grown and widely adapted root crops. They are members of the Cruciferae or mustard family and belong to the genus *Brassica*. Turnips are *Brassica rapa* and rutabagas are *Brassica napobrassica*. The two are similar in plant size and general characteristics. Turnip leaves are usually light green, thin and hairy, while the rutabagas are bluish-green, thick and smooth. The roots of turnips generally have little or no neck and a distinct taproot, while rutabaga roots are often more elongated and have a thick, leafy neck and roots originating from the underside of the edible root as well as from the taproot.

Turnips and rutabagas are cool-season crops and will make their best root growth during relatively low (40 to 60°F) temperature growing conditions. They can be grown as either a spring or fall crop; however, rutabagas require a longer growing season (90 days) and should be planted as early in the season as possible. Early maturing varieties of turnips can be ready to harvest in 40 days, while late-maturing varieties take up to 75 days.

These crops are biennials, which implies seed production during the second year. However, if an extended period of cool

weather occurs after spring-planted turnips or rutabagas are well along in development, they may form seedstalks, which halts root development and ruins successful production.

Soils—A moderately deep, highly fertile soil with pH 6.0 to 6.5 is best for growing turnips and rutabagas. A soil test should be taken and lime added as needed.

Varieties—Varieties differ mainly in color and shape of root. There are white- and yellow-fleshed varieties of both crops, although most turnip varieties are white-fleshed and most rutabaga varieties are yellow-fleshed.

Turnips

Purple Top White Globe—58 days from seed; bright purple crown, white below the crown, 5 to 6 inches in diameter, globe-shaped; leaves dark green and cut.

Just Right F₁—35 to 40 days; white root; 7 to 8 inches in diameter; flattened globe-shaped; light green leaves that are deeply cut. Use only as a fall crop.

Rutabagas

American Purple Top—90 days; deep purple crown; yellow below the crown; globe-shaped root; 5 to 6 inches in diameter with yellow flesh color; medium size, blue-green, cut leaves.

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Rutabagas

American Purple Top – 90 days; deep purple crown; yellow below the crown; globe-shaped root; 5 to 6 inches in diameter with yellow flesh color; medium size, blue-green, cut leaves.

Laurentian – 90 days; purple crown; light yellow below crown; globe-shaped roots 5 to 5.5 inches in diameter with yellow flesh; medium blue-green, cut leaves.

Fertilization – Fertilizer applications should be based on soil test recommendations. A general recommendation for turnips and rutabagas is 3 lbs of 10-10-10 per 100 ft². Apply 0.5 oz borax per 100 ft² either in the fertilizer, or spray the soluble boron source Solubar.

Planting Dates

	Spring	Fall*
Coastal Plain	Feb. 1 to Sept. 15	Aug. 1 to April 15
Piedmont	Feb. 15 to April 30	July 15 to Sept. 15
Mountains	March 1 to July 1	Aug. 15 to Sept. 15

***Note:** Rutabaga must be seeded roughly 2-½ to 3 months before heavy frost.

Stand Establishment – Multiple rows on a raised seedbed will increase production efficiency per unit of land. Seedbeds can range from 3 to 5 ft wide, depending on planting and cultivating equipment. Seed should be sown ½ inch deep, and 4 inches in row, in rows 12 to 15 inches apart, which will result in more uniform growth and greater ease of handling at harvest. Thinning is not normally necessary if planted properly, but, if needed, plants should be thinned to 3 or 4 inches apart in the row.

Pest Management

Weeds – If cultivation is used to control weeds that emerge, it should be shallow (less than 2 inches deep). For herbicide recommendations consult the current *N.C. Agricultural Chemicals Manual* or your local county extension center.

Insects – Turnip aphids, flea beetles, root maggots and wireworms are serious pests. Root maggots and wireworms

attack the roots and control requires preplant applications of the proper insecticides to the soil. Aphids and flea beetles damage the tops and a spray program may be needed to control them.

Diseases – Clubroot, root knot, leaf spot, white rust, white spot, anthracnose and alternaria are several disease problems.

Certain insects and diseases can be controlled chemically, while others may require cultural operations. Consult the current *N.C. Agricultural Chemicals Manual* or your county Extension center for specific pest control recommendations.

Irrigation – Turnips and rutabagas require an abundant supply of moisture to insure a high quality product. Most soils will require 1.5 inches of water every 7 to 10 days.

Harvesting – Turnip roots are harvested for bunching when 2 to 3 inches in diameter. Turnip leaves can be harvested as single leaves, picked one at a time, or by several cuttings of the tops, taking care to avoid growing points or by cutting all tops at one time. Rutabagas are harvested when roots are 4 or 5 inches in diameter. Harvest before the weather becomes hot, or the roots will become pithy and woody. Harvest fall crops after the first frost, which can sweeten the flavor of the roots. Mulch the growing area heavily and continue to harvest until the ground freezes.

Storage – Storage requirements are temperatures of 32 to 35°F and relative humidities of 90 to 95%.

Yields – Good average yields of turnips are 75 lbs/100 ft², while rutabagas will yield around 100 lbs/100 ft².

Steps to Successful Production of Turnips and Rutabagas

1. Select a friable, moderately deep soil.
2. Test soil for lime and fertilizer needs.
3. Lime to pH 6.0 to 6.5.
4. Choose a recommended variety.
5. Plant in time to allow harvest before weather becomes too hot or too cold.
6. Irrigate when rainfall is not sufficient.
7. Harvest before pithiness begins (about 3- to 4-inch diameter roots).
8. Store in a cool, moist place (32 to 35°F and high humidity of 90 to 95%).