

Rutabaga *Brassica napobrassica*

Entry posted by Yvonne Kerr Schick, Hamilton Horizons student in College Seminar 235 Food for Thought: The Science, Culture, and Politics of Food, Spring 2008.



Photo from the University of Florida website.

Scientific Classification¹

Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Order: Brassicales
Family: Brassicaceae
Genus: *Brassica*
Species: *Napobrassica*

Binomial Name

Brassica napobrassica

Etymology and History

The word “Rutabaga” comes from the Swedish “*rotabagge*,” which means *root ram*, *baggy root*, *thick root* and *ram’s foot*.² The preferred name for Rutabaga in Europe is *Swede* or *tumshie* and *neep* in Scotland. In America, it’s known as the Swedish turnip, yellow turnip, and Canadian turnip. The common name in Sweden is *kålrot* or cabbage root.³ The rutabaga is thought to be the result of a cross between a turnip and a cabbage. The rutabaga was cultivated in Bohemia prior to 1650,⁴ and was introduced to England and Scotland from Holland (where it was called the *turnip-rooted cabbage*). In the 17th century in Southern Europe it was first eaten and raised as animal fodder.⁵ Today the rutabaga is grown in the states of Washington and Oregon. It is a major export of Canada, where it is called the *Canadian Turnip*.

¹ Wikipedia Foundation, Inc., website: <http://en.wikipedia.org/wiki/Rutabaga>.

² Wikipedia website and Bird and Ingram, p. 15.

³ Wikipedia website.

⁴ Scribner, Charles, *Encyclopedia of Food and Culture*, New York, 2003, p. 295.

⁵ Vegetable Paradise website: <http://www.begparadise.com/highestperch4.html>.

Botanical Description

The rutabaga, a biennial plant (grown as an annual) that produces seeds during the second year of growth,⁶ belongs to the cabbage family, has similar foliage and suffers from the same pests and diseases as cabbages. They are believed to be a cross between a cabbage and a turnip.⁷ The rutabaga is a root vegetable, grown for its softball-sized bulbous, golden flesh and edible leaves. It has a well-defined central taproot and minimal secondary roots. It looks like a turnip, but has ridges on its neck and turns purple towards the crown.⁸ It has smooth, waxy leaves that are medium green to blue-green in color. The rutabaga is propagated by seed and takes four to seven days to germinate. It will germinate in soil temperatures between 45°F – 85°F.⁹



Illustrated are the seed pods, the dried pods on a stalk and the flowers of the rutabaga. Photos from The Carrot and Other Root Vegetables, by Millicent E. Selsam, 2003.

History of Rutabaga in Early 19th Century America

Rutabagas were introduced to 19th century America when European immigrants brought it here. It was grown as a garden vegetable and as animal fodder as early as 1806. Before 1800 all vegetable seeds were imported from Europe and gardeners began saving seeds for the following year's crop. They also used their own seeds to trade for local seeds. Shakers were known for selling seeds in "papers," and after 1830 seed catalogs and mail orders became popular.¹⁰

⁶ Ashworth, Suzanne, *Seed to Seed: Seed Saving and Growing Techniques for Vegetable Gardeners*, Seed Savers Exchange, Inc., Iowa, 2002, p. 40.

⁷ Bird, Richard and Christin Ingram, *Growing Root Vegetables: A Directory of Varieties and How to Cultivate them Successfully*, Anness Publishing Lit., London, 2003, p. 14.

⁸ Local Harvest website: <http://www.ocalharvest.org/rutabagas.jsp>.

⁹ Cornell University website: <http://www.gardening.cornell.edu/homegardening/scened5c9.html>.

¹⁰ Kline, Roger A., Robert F Becker, and Lynne Belluscio, *The Heirloom Vegetable Garden: Gardening in the 19th Century*, Cornell Cooperative Extension Information Bulletin 177, 4-H Leaders' Guide L-10-13, New York State College of Agriculture and Life Sciences, a Statutory College at the State University at Cornell University, Ithaca, New York, p. 2.

By 1850 all seeds were commercially produced and usually reliable. The biennial crops, such as the rutabaga, presented problems for seed producers because they were easily cross-pollinated and had to be isolated for pure seed production.

Specific Rutabaga Varieties for 1812 Garden

The only varieties of rutabaga listed in early 1800 seed catalogs are the *cabbage turnip* and *turnip rooted cabbage*, which would refer to rutabagas. The listings are from the “Seeds and Plants for the Kitchen Garden” in several seed catalogs all published by William Booth in Baltimore in 1810.¹¹

The modern Victory Seed Catalog lists the variety, Purple Top Yellow as one that grew in the early 1800’s and was replaced with an improved strain, American Purple Top in the 1920’s.¹²

Cultivation of the Rutabaga

Climate Requirements:

Rutabagas are both cold hardy and drought tolerant. They should be planted in late May or early June in an open, sunny area. The soil temperature should be at least 50°F for germination. Their roots grow the most during periods of low temperature.

Soil/Moisture Requirements:

Soil should be moderately deep and fertile. They require good drainage and soil should be kept moist during the growing season. Soil pH should be around 6.0-7.0 and fertilizers can be applied when seeds are planted. Nitrogen and organic materials added to soil will be beneficial.¹³ If the soil is too acidic, lime can be added, and as much organic material as possible should be added to make the soil moisture-retentive.¹⁴



Seeding:

Rutabaga seeds should be planted one-half inch deep, and the rows should be approximately 15 inches apart. The plants should be thinned in early summer to nine inches apart.¹⁵

¹¹ U.S.D.A. Nursery and See Trade Catalog Collection website:
<http://www.nal.usda.gov/speccoll/collect/nursery.html>.

¹² Victory Seed Company, *Descriptive Catalogue of Rare and Interesting Seeds*, Victory Seed Company, Oregon, 2008, p. 31.

¹³ Purdue University website: www.hort.purdue.edu/newcrop/afcm/rutabaga.html.

¹⁴ Bird and Ingram, p. 52.

¹⁵ Bird and Ingram, p. 52.

Life Cycle:

Rutabagas are biennial and produce seeds during the second year of growth. Their flowers are capable of self-pollination.¹⁶ They are easily cross-pollinated and are eager to cross with other varieties of rutabagas, some turnip varieties and all varieties of winter rape.¹⁷ Sometimes caging is necessary to guarantee seed purity.

Seed germination takes from five to 15 days. According to the Federal Germination Standard in commercially grown seeds there are approximately 9,000 seeds per ounce and germination rate is 80%.¹⁸

During the second the plants grow seed stalks three foot tall or taller. If care is taken to store them in a cool, damp cellar after being dug up the previous year, they can be replanted for seed harvest. They have many flowers and form seedpods. When the seeds mature the pods shatter on the stalk if they have not been handpicked. The seeds will remain viable for up to five years if stored properly.

If the rutabaga is being grown for its root, they are planted in the spring and harvested in the fall. They can be left in the ground over winter, except in extremely cold places.

Insects/Pests:

Rutabagas are susceptible to flea beetles while plants are tender and young and during the second year of growth. Covering the row is recommended until they grow strong or flower.

Like other vegetables in the *Brassicaceae* family, they are susceptible to the white cabbage butterfly and aphids.¹⁹

Companion Plants:

Hairy vetch and rutabagas are excellent companions. Aphids will stay off rutabaga leaves (and turnip leaves) because vetch shelters ladybugs, which feast on aphids. Wood ashes around rutabagas will control scab.²⁰

Nutritional Aspects

*1 Cup of raw, cubed Rutabaga*²¹

50 Calories;

1.68g Protein;

11.4g Carbohydrate;

0.28g Total Fat;

3.5g Fiber;

Rutabagas are a good source of vitamins A and C, and have traces of vitamins B1 and B2. They contain potassium, calcium, folacin and magnesium. They are low in

¹⁶ Ashworth, p. 49.

¹⁷ Ashworth, p. 49.

¹⁸ Ashworth, p. 49.

¹⁹ Riotte, Louise, *Carrots Love Tomatoes: Secrets of Companion Planting for Successful Gardening*, Storey Publishing, Mass., 1975, p. 27.

²⁰ Riotte, p. 27.

²¹ Vegetable Paradise website.

calories and high in fiber. Rutabagas are 90% water and their chief nutrient is carbohydrates.



(Photo from flickr.com)

Culinary

Rutabagas are considered the “under-appreciated root crop” because they are an uncommon vegetable in the United States. They are a great-tasting vegetable with a delicate sweetness and a hint of both cabbage and turnip flavors. They have a more substantial and robust flavor than the turnip. Young roots are especially tender and pleasant to taste.

Rutabagas can be eaten raw (grated in salads), cooked (steamed, boiled or baked) and are particularly good in soups and stews. They are easy to prepare and are very versatile – they have great flavor and are very nutritious. The color deepens during cooking.

Rutabagas in the Rough (Recipe)²²

4 large rutabagas

1/4 t. salt

Water

1 T. extra-virgin olive oil

Dash of nutmeg

Salt and pepper to taste

Peel rutabaga with a vegetable peeler and cut into chunks. Put them in a 4-quart saucepan and add salt and about two inches of water to cover roots. Cover saucepan and bring to a boil over high heat.

Turn heat down to medium and cook for 12-15 minutes, until fork tender. Drain reserving cooking liquid. Using a potato masher, coarsely mash rutabagas in the saucepan, adding cooking liquid for moisture.

Add olive oil and nutmeg and season to taste with salt and pepper. Transfer to serving bowl and sprinkle with a dash of nutmeg. Garnish with a sprig of fresh sage or herb of your choice. Serves 6.

²² Vegetable Paradise website.

Medicinal

Like other crucifers, rutabagas are high in antioxidant and anticancer compounds.²³ The American Cancer Society recommends an increase in cruciferous vegetables to fight against cancer.

In the past, the root has been used for a diuretic and an emollient. The juice from the roots can be used in treatment of bronchial catarrh and for chronic coughs.²⁴ When added to salt, the powder from rutabaga seeds is folk remedy for cancer. When applied with camphor, the oil from the seeds can be a remedy for stiff joints and rheumatism.²⁵

Caution should be used because the over-consumption of cruciferous vegetables may lead to hypothyroidism. Goiters may develop because dietary imbalances of thiocyanate-containing foods (like rutabagas) inhibit thyroid iodide transport.

Ritual Significance of Rutabagas

Swedes (rutabagas) and turnips were among the early jack o'lanterns or *tumshie* lanterns (originating in Ireland). Previously fires were carried in skulls.²⁶ *Tumshie* lanterns were an ancient symbol of a damned soul.²⁷ Many countries celebrated ceremonies with fire, which was considered to be a gift from the underworld.²⁸ Among these the Celts celebrated the festival of *Samhain* and the Russians celebrated *Sviatki*.

During the Celtic celebration rowdy groups of children, known as *guisers*, would prowl the streets in hideous masks to scare off ghosts and demons. The children would carry *jack o'lanterns* which were hollowed out rutabagas or turnips. They would hold glowing coals to lead them through the dark. The name jack o'lantern is based on a legend of a blacksmith named Jack, who was believed to mortgage his soul to the demons of the underworld. He would find his way by carrying a large rutabaga that contained a glowing coal through the underworld. The rutabaga and turnip were abandoned as the lantern when the pumpkin was introduced.²⁹



Photos by Michael Sengers

²³ Floridata website: http://www.floridata.com/ref/t/bras_nap.cfm.

²⁴ Plants for a Future website: http://www.ibiblio.org/pfaf/cgi-bin/arr_html?Brassica+napus+naporb...

²⁵ Plants for a Future website.

²⁶ Jared Solomon, Hamilton College, Class of 2006, Halloween poster.

²⁷ Wikipedia website.

²⁸ Jared Solomon poster.

²⁹ Advanced Rutabaga Studies Institute website: <http://members.tripod.com/~rutabagas/history.html>.

Miscellaneous Rutabaga Information

- There are three popular subspecies of rutabagas. Napobrassica are grown for their roots and Pabalaria are grown for their foliage (Siberian Kale and Hanover Salad). The rape varieties are grown as an oil seed – for birdseed and animal forage.³⁰

- The rape seeds contain edible oil which is sometimes used as a luminant, a lubricant and in soap making.³¹

- The rutabaga can be served in a variety of ways including mashed with potatoes or carrots and cut up in soups and stews. They are prepared by washing and peeling as you would with a potato.

- Each November Swiss families celebrate the *Rabeliechtli* festival and children carry lanterns carved from rutabagas. Sculptures are also created from rutabagas.³²

- The town of Cumberland, Wisconsin celebrates a yearly Rutabaga Festival.

- In Ithaca, New York, the International Rutabaga Curling Championship takes place annually (at the Farmer's Market).³³

- The word “rutabaga” is also a specific mutation type in fruit flies (resulting in mental impairment).³⁴

Additional References

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University of Florida/IFAS, U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, Institute of Food and Agricultural Sciences, Florida A. & M. University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Larry Arrington, Dean: <http://edis.ifas.url.edu?MV127>

³⁰ Ashworth, p. 43.

³¹ Plants for a Future website.

³² Advanced Rutabaga Studies Institute website.

³³ Wikipedia website.

³⁴ Wikipedia website..