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Extend the Harvest with Hardy Vegetables

Most avid gardeners are saddened by the end of the growing season and, with it, the supply of fresh vegetables from the garden. If you are among those individuals, then next year you might want to consider planting several vegetables that can be harvested late into the fall or, in certain cases, throughout the entire winter. Root crops such as turnip, rutabaga, parsnip, salsify and Jerusalem artichoke fall into that category. November is not too early to start planning next year's vegetable garden.

Turnip (*Brassica rapa* subsp. *rapa*) is by far the most popular of the afore-mentioned vegetables. Turnip is a member of the *Brassicaceae* (mustard) family and is thought to be native to India where there is good evidence that it was grown as early as 1500 B.C. Later, it was used as a food source by the Greeks and then by the Romans. Because of its ease-of-growth and usefulness, it soon became widespread throughout Europe and Asia.

Jacques Cartier is credited with introducing turnip to the Americas when he planted it in what is now Canada in 1541. It was a staple among early colonists and adopted as a food source by Native Americans who grew it widely.

Turnip is a very versatile vegetable with both the root and the leaves being edible. In fact, in certain areas of the world the leaves (turnip greens) are more prized than the roots. Both tops and roots are good sources of vitamin C. Additionally, turnip greens are high in vitamin A, vitamin K, folate, and calcium. As a winter crop, the roots are most important and are said by some to improve in flavor as the weather turns colder.

Rutabaga (*Brassica napus* var. *napobrassica*) is similar to turnip and a very close relative of it. Rutabaga (also called Swedish turnip or swede) is a natural cross between turnip and cabbage. Reference was first made to it in 1620 by Swiss botanist Gaspard Bauhin who found it growing in the wild in Sweden. Genetically, it is considered to be an allopolyploid. The latter are plants containing the he-

reditary information of two or more species. In the case of rutabaga it contains the 20 chromosomes found in turnip along with the 18 found in cabbage.

Both turnip and rutabaga are cool-season vegetables that make their best root growth at relatively low (40 to 60 0F) temperatures. At our latitude, turnip normally is seeded in late summer for a fall crop. However, because of its longer maturity rutabaga is (perhaps) best seeded in June. A deep, fertile soil with a pH of between 6.0 and 6.5 is ideal. Since both require rather high levels of fertility, the addition of a garden fertilizer along with organic matter is recommended.

Harvest of turnips and rutabagas begins in late fall or early winter as soon as the roots become large enough to use. Both can be allowed to remain in the garden until the soil begins to freeze. When the latter occurs, roots should be harvested and stored in a cool, damp location. Rutabagas normally are dipped in wax to keep the root from drying out.

Parsnip and salsify are root crops which are planted in the spring. Parsnip (*Pastinaca sativa*) is a member of the *Umbelliferae* family making it closely related to carrot. Salsify (*Tragopogon porrifolius*) belongs to the *Asteraceae* family, one of the largest in the plant kingdom. Both are biennials.

Parsnip is thought to be native to Eurasia. It was used as a food source since antiquity but probably first cultivated by the Greeks and Romans. The latter considered the

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plant to have medicinal value. Parsnip is a relatively new vegetable to the United States having been introduced in the 19th century. It prefers a good garden loam; clay soils and stony ground often result in short, misshapen roots. Exposure to cold temperatures tends to improve the sweetness of the parsnip's root. The root can be allowed to remain in the garden throughout the winter since they can be frozen solid without injury. The food value of parsnip exceeds that of any other vegetable other than potato. It contains significant amounts of vitamins and minerals and is a good source of dietary fiber as well.

Salsify is thought to be native to the Mediterranean region. Its name is from the old Latin word *solsequium*, which means "sun follower". Cultivation began in Europe in the 1600s and (later) was introduced into North America, where it now often can be found growing in the wild. The long, slender root of salsify is thought by many to taste of oysters which accounts for its occasional common name of oyster plant.

Salsify requires a long growing season (approximately 120 days) and should be seeded outdoors in very early spring or, preferably, grown from plants started indoors. Additionally, it prefers a deep, friable soil with good water-holding capacity. Adequate moisture and high fertility are needed for good quality roots. Like parsnip, salsify roots may be left in the ground throughout the winter and dug as needed.

Jerusalem artichoke (*Helianthus tuberosus*) is another garden vegetable that can prolong the harvest season. Like

parsnip, it is a member of the *Asteraceae* family and is grown for its elongated tubers that usually measure about 2-3 inches in length. In spite of its name, the plant has no relationship to Jerusalem and is not a type of artichoke. A native to North America, Jerusalem artichoke was cultivated by Native Americans long before the arrival of the first Europeans. It became a staple of early colonists and was taken to Europe by the French explorer the French explorer Champlain.

The tuber of Jerusalem artichoke (which tastes like water chestnut) contains about 10 percent protein and very little starch. Instead, the plant substitutes inulin (not be confused with insulin) as a carbohydrate storage compound. It can be used raw in salads, pickled or prepared like potatoes. A perennial, Jerusalem artichoke is propagated via seed stock tubers planted similar to the way potato is planted. The plant is easy to grow and is adapted to a wide range of soils, although heavy, poorly-drained soils should be avoided. Since the mature tuber does not store well, it should be left in the soil until it begins to freeze. After that, a thick layer of straw mulch will help to prolong harvest.

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December Gardening Calendar

Houseplants

- **Weeks 1-4:** Water houseplants with tepid water. Cold tap water may shock plants.
- **Weeks 1-4:** Be sure newly purchased indoor plants are well protected for the trip home. Exposure to icy temperatures for even a few moments may cause injury.
- **Weeks 1-4:** Overwintering geraniums like bright light and cool temperatures. Keep soils on the dry side.
- **Weeks 1-4:** On cold nights, move houseplants back from icy windows to prevent chilling injury.
- **Weeks 2-4:** Holiday poinsettia plants do best with sun for at least half the day and night temperatures in the 50's or 60's. Keep plants away from drafts, registers and radiators and let the soil should dry only slightly between thorough waterings. Be sure to punch holes in decorative foil wraps to prevent soggy soil conditions.
- **Weeks 1-4:** Hairspray works well to keep seed heads and dried flowers intact on wreaths and arrangements.
- **Weeks 1-4:** If you plan to have a live Christmas tree, dig the planting hole before the ground freezes. Mulch and cover the backfill soil and the planting hole to keep them dry and unfrozen. When you get the tree, store it outdoors in a cool, shady, windless area until the last minute and mulch the roots to prevent cold injury. Don't allow the tree's roots to become dry and spray the needles with an anti-transpirant to reduce moisture loss. Set the tree up in your coolest room. Don't keep the tree indoors for more than one week and plant outdoors promptly.
- **Weeks 1-4:** Be sure the root zones of azaleas and rhododendrons are thoroughly mulched. Any organic material will do, but mulches made from oak leaves, shredded oak bark, or pine needles are preferred.
- **Weeks 1-3:** Christmas trees hold needles longer if you make a clean, fresh cut at the base and always keep the trunk standing in water.
- **Weeks 1-3:** Only female holly trees bear the colorful berries. There must be a male tree growing nearby for pollination, if fruits are desired.
- **Weeks 1-3:** Hollies may be trimmed now and the prunings used in holiday decorations.

Miscellaneous

- **Week 1:** Apply mulches to bulbs, perennials and other small plants once the ground freezes.
- **Week 1:** All power equipment should be winterized before storage. Change the oil and lubricate moving parts. Either drain fuel systems or mix a gas stabilizing additive into the tank.
- **Week 1:** Clean and oil all garden hand tools before storing for winter.
- **Week 1:** If you feed rabbits corn or alfalfa, they may leave fruit tree bark unharmed.

Gardening Calendar supplied by the staff of the William T. Kemper Center for Home Gardening located at the Missouri Botanical Garden in St. Louis, Missouri. (www.GardeningHelp.org)