

<http://www.grit.com/farm-and-garden/spinach-varieties-zm0z12jfznem.aspx>

## **Spinach, by Lawrence Davis-Hollander, ©2015**

Spinach is a garden essential that provides an abundance of fresh and cooked greens early in the season. Although several plants are variously referred to as “spinach,” including New Zealand Spinach (*Tetragonia tetragonoides*), Malabar Spinach (*Basella alba*), Amaranth (*Amaranthus* spp.), Mountain Spinach or Orach (*Atriplex hortensis*), “true” Spinach is *Spinacia oleracea*, botanical Latin for “this one’s edible.”

### **Ancient Origins of Spinach**

While different spinach varieties are grown worldwide in a range of temperate climates, its center of origin is Southwest Asia, around present-day Iran and Iraq to Central Asia. It probably was domesticated from a wild spinach *Spinacia tetandra*. Cultivated before the 7th century in the Sassanid (Persian) Empire, it reached China from Nepal in 647, where it was known as the *persian green*, and spread to Japan. It reached Italy via invading Saracens in 827 and diffused more slowly northward, reaching Spain by the 11th century, and the rest of Europe in the Middle Ages. Its first Western appearance was in 1485 in a German cookbook, and it was not planted in England until 1568.

In 1804, three types of spinach are listed in America in Philadelphian Bernard McMahon’s broadside catalog, and spinach was certainly grown earlier. Thomas Jefferson cultivated spinach at Monticello in 1809 and 1812. It did not see a large increase in popularity until much later in the 19th century. Spinach consumption by children received a boost in the 1930s with the advent of Popeye the Sailor.

### **Which Spinach? Prickly, Crinkly or Smooth?**

The two main types of spinach are characterized both by seed and leaf type: the crinkle leaf type, or savoy, and the smooth-leaved variety, especially used in commercial processing. A range of intermediate leaf types, sometimes known as semi-savoy, are also available.

Spinach seeds are generally referred to as round – which is relatively smooth – or prickly, with seeds that are sharp and pointed borne in a capsule with several spines. If you have ever tried removing the seeds of prickly spinach from the stalk by hand, you quickly learned why it is called prickly. It hurts. Spinach is a dioecious plant, meaning male and female flowers are borne on different plants.

Spinach is a member of the Amaranthaceae, a family populated by such edible notables as beet, chard and quinoa, plus orach and the tasty weed, lamb’s-quarters. Leaves and stems of many of these plants are characterized by low concentrations of calcium oxalate. Consumption of too much calcium oxalate can lead to the formation of kidney stones or reduce the body’s ability to

uptake minerals and vitamins. Some plants such as skunk cabbage or jack-in-the-pulpit, both members of the Arum family, have very large concentrations making the plant poisonous and creating an intense and sometimes long-lasting burning sensation when chewed. Taro (*Colocasia esculenta*) is an edible Arum widely cultivated in the wet tropics for its foliage and tubers, which contain high amounts of calcium oxalate and must be specially treated before consumption.

### **Choose Heirloom Spinach Varieties**

While heirloom spinach doesn't have any distinct advantage over some of the modern hybrids, two varieties are readily available that perform well in the home garden. The first is the aforementioned Prickly, and the other is Viroflay or Monstrueux de Viroflay, or monstrous, referring to its ability to produce large leaves.

Prickly spinach forms relatively triangular to somewhat oblong and smooth shaped leaves. It is excellent for both fall and spring sowing and was considered the preeminent winter spinach as it does well with shorter day length. Several selections of Prickly spinach were available in the 19th century, and there doesn't seem to be a notable difference between seed offered today. Viroflay has relatively smooth to somewhat crinkled leaves that are rounded to slightly pointed and up to 10 inches long. Plants are reputed to grow more than 2 feet in diameter. I have never seen such monstrosities, but in great soil it is quite possible. It is a French heirloom introduced around 1880.

Unlike some hybrid types, I have found these heirloom vegetables to have a tendency to bolt sooner. This is a relatively small difference since all spinach tends to bolt as early summer temperatures and day length begin to increase.

### **Avoid Bolting**

Less-than-ideal cultivation techniques may cause spinach to bolt more quickly and develop smaller leafy rosettes whether you grow modern or heirloom spinach varieties. One of the keys to producing big, leafy spinach is excellent soil fertility and a rich, moist soil. I've found that placing a large amount of compost or composted manure directly under your seeding rows can greatly benefit their growth, even if you cannot alter your entire garden. If your soil's fertility is not optimal, granulated organic fertilizer can boost growth but is not a replacement for rich soil.

A key mistake is following the directions on the seed packet to sow the seeds close together and then not thinning plants, or waiting until they've got too much growth; four leaves and it is time to thin. Plants seem to "know" when they are planted too close. If you wait too long to thin, some plants never grow to full-sized plants. Correct spacing is crucial; 2 inches or so isn't bad, and 4 to 6 inches will produce larger growth.

Spinach does not like to be shaded at all. In less-than-optimum light locations, shading appears to elongate growth, may contribute to faster bolting, and certainly results in smaller plants. Most seed packets suggest planting spinach as soon as the soil can be worked. This may work in a warm climate, but in the north where the ground has been solidly frozen for several months, my

experience is that spinach will just sit there for several weeks before germinating. I have sown seed on March 20 that does not reach maturity any faster than spinach planted a couple of weeks later.

Succession sowings can prolong the season a few weeks, but much seems to depend on your location and how warm a spring you have. Cooler locations near the ocean, or in mountain areas, for example, can certainly prolong the ability of spinach to withstand bolting. Late summer plantings – August and September – can produce a modest harvest of leaves in the fall, and will overwinter for an early crop. If you can protect with row cover, sow in a cold frame or greenhouse, or mulch with straw, you may be able to harvest leaves throughout the winter, depending on your location.

### **Harvesting Spinach**

To harvest, the whole plant is usually pulled, although you can pick individual leaves and thus prolong your yield by continually pinching back the central flowering stalk and harvesting leaves as they form. This is somewhat labor intensive, but if you have more time than space, it may be useful.

Whatever spinach varieties you choose, you'll find the labor worthwhile when food made with fresh spinach adds variety, nutrition and color to your plate.