



## *In the Herb Garden*

*By Priscilla Jurkovich, Master Gardener*

*The herb section will highlight an herb that can be grown in the South Dakota region*



Sorrel (*Rumex scutatus*) is a perennial tangy, lemony flavored herb from the Polygonaceae family (Rhubarb, buckwheat). This family is high in oxalic acid and gives the sorrel a tangy flavor. Sorrel is hardy to zone 3 and is one of the first greens in the spring. Sorrel varieties can be wild, but can be sowed in your herb garden. Sorrel thrives in well-drained soil but can grow in sunny or partially shaded area. Propagates from seed or by dividing the roots. The stems grow up to 2 feet high and have deep roots. Harvest the outer 3-6 inch small leaves and they will continue to produce foliage similar to chard or kale. The green flowers are small and change to a reddish-brown color later. Sorrel will bolt when temperatures are high in June or July. To encourage more harvests, cut the flower stalk to the ground and a new crop of foliage will develop.



There are many varieties of sorrel, but the scutatus variety is used in French cuisine, has smaller leaves and a milder quality than some of the other sorrel varieties. The leaves can be put in soups, steamed or sautéed similar to spinach or chard or used fresh in a salad. This medicinal herb can also be used to prevent anemia, reduce pain and swelling of the respiratory tract, treat bacterial infections and is an ingredient in the Essiac herbal cancer treatment. The tannins have a drying effect to reduce mucous production in the respiratory tract

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# Green Beans

By Julie Waltz, Master Gardener Intern



The common bean is always a favorite garden vegetable. *Phaseolus vulgaris* are legumes or nitrogen fixers. This means that nitrogen from the air is ‘fixed’ or made available to the plant by *Rhizobium* bacteria on the nodules on the plant’s roots.

Garden beans can be snap, shell or dry. Snap beans are what we generally think of as green beans. They are also called string beans, although modern varieties don’t have strings. Snap beans are harvested with immature seeds and the pods are succulent and edible. They can be green, yellow, purple or striped.

Shelling beans are harvested when pods have begun to dry and the seeds are fully developed but still soft. Dry beans are harvested when the pods and the seeds are dry. Because of this, they keep a long time. They are generally fully cooked before they are eaten. Cannellini beans (kidney beans) contain toxins that are denatured when cooking and should not be eaten as sprouts or raw.

Bean plants come in three shapes. Pole beans can get up to 6 feet tall and must have a supporting structure. They flower continuously and will produce continually throughout the summer. Bush beans get about 2 feet tall and don’t need support. They may continue to produce if they are picked regularly. There are also half-runners. These are plants that can benefit from support but generally do not get more than 3 feet tall.

Plant beans in late May when the soil has had time to warm. Plant seeds about an inch deep, smaller seeds should be planted shallower. Bush beans seeds should be 4 inches apart with rows 2-3 feet apart. Beans like a pH between 6 and 7, with clay or silt loam soil. They require about 1 inch of rainfall per week. Although they have a taproot, they also have some roots that are relatively shallow so mulching will help reduce the need for watering and will help prevent weeds.

Common pests include cutworms and bean leaf beetles. There are several different root-rot pathogens as well as viruses and leaf spot diseases. The best treatment option for many of these diseases is to make sure to rotate crops every year and to remove affected plants early to prevent spread.

Source: Photo credit: Julie Waltz

<http://www.extension.umn.edu/garden/yard-garden/vegetables/growing-beans-in-minnesota-home-gardens/>

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## Garden Weeds

By Paulette Keller, Master Gardener



Ground ivy also called gill-over-the-ground, creeping Charlie and haymaids, is a perennial forb from Eurasia. The stems are 4 sided that spread out on the ground. The plant has shallow roots at the base of the plant. The leaves grow on opposite sides of the stem and are heart shaped with scalloped margins. They are an inch across and have a minty odor when crushed. The flowers are light blue to bluish purple, tubular in shape and are very small. They bloom from March to July. After blooming, a seed pod forms, which contains four smooth tan seeds. Ground ivy is often found in shaded, moist soils of lawns, gardens, wooded

hillsides, waste places, in pastures and along streams in the Great Plains states. Once ground ivy has invaded an area, it is hard to get rid of because of the numerous stolons that are formed at the base plant. Small areas of invasion can be hand pulled or raked up if the soil is damp. Larger invasions can be controlled by using a systemic herbicide such as glyphosate. Ground ivy has various uses in Europe. It is used as a tonic, astringent and diuretic. The leaves were often steep in hot beer to clarify it and improve its flavor before hops were discovered as an alternative.

[www.nps.gov](http://www.nps.gov); Weeds of the Great Plains

**Fresh homegrown tomatoes are the  
secret of the good life as we know it.  
Along with sweet corn.**

Garrison Keillor



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# HOW TO HAVE LESS WEEDS

By Nancy Torkleson, Master Gardener

## GARDENING FROM THE GROUND DOWN

Nature creates soil from the top down-leaves dropping and decaying . This takes hundreds of years.

One of the new ideas in gardening is not to till and to mow between the rows, creating a green mulch. This gives us a rabbit's eye view of plants.

Tilling the soil is necessary however, when the soil has become compacted, or when you need to change the pH of the soil. The pH of the soil (soil acidity) is out of balance. Most plants like a pH of 6 to 7. Some plants like a pH of 4 to 5 (acidic soil). A soil test is needed to determine the acidity.

Not tilling has advantages, such as not having to wait for the soil to dry. Hitchhiker seeds that are carried into the soil by animals, birds, and the wind, tend to lay dormant. Another benefit of not tilling is organic material remains on the surface, a soft landing for the rain. It tempers winter cold and the sun's heat and slows down evaporation.

A thin layer of mulch takes care of most weeds. Layering paper is a good way to keep weeds from starting. Newspaper layers of 4 overlapped is an excellent mulch. A vigorous plant may need more. Wet the paper and cover with one inch of compost. The compost must be weed free. A 100 sq. foot garden will need a 1/3 cubic yard.

Make a path to keep weeds from coming into the edge. Mulch, wood chips, stone, or plastic is a good choice.

### **An Organic, Homemade Herbicide**

**V**inegar—straight up, 5 or 6 percent household vinegar—is an effective herbicide spray that can be made more so by adding 1 tablespoon per gallon of dish detergent along with 2 tablespoons per gallon of canola oil. Vinegar is a contact killer, so it is not very effective on large weeds, where upper leaves “shade” lower leaves from the spray. Also, repeat applications are needed because only leaves are killed. Root reserves will fuel new leaf growth until, with repeated spraying (weekly early in the season, then every other week, or less), roots have no more reserves. The spray is most effective at temperatures above 70°F.

Clean up in the fall to prevent diseases and insect problems. Removing old plants can be done with a quick turn or a sharp knife. For more information WEEDLESS GARDENING BY LEE REICH

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## Things Learned This Season

I grew bug free broccoli and cauliflower with a trap crop of kale planted 15' away.

**Tried kohlrabi for the first time-- loved it!**

Best thing about the Master Gardener Class was learning why the plants I brought with me from Washington State when I moved were dying. And learning what plants flourish here that I can plant next year when we move into our new house. Steve Urich

Won two Best of Show ribbons at the Sioux Empire Fair for my yellow calla lily and coral rose--also won lots of blue ribbons

**Nyagous, pineapple noir tomato!!**

Master Gardener class made me too busy to garden!! Weeds took over

Community garden at Southern Hills was deer-free! I actually had tomatoes that didn't get their tops taken off by those deer-critters! Donna Haber

## September 2017

					1	2
					Plant ornamental kale for fall color	
3	4	5	6	7	8	9
	Labor Day	Divide perennials		Cut and dry straw flowers for winter display		
10	11	12	13	14	15	16
	Master Gardener Meeting 6:00 education time! 7:00 meeting		Fertilize your yard with 1# nitrogen per sq ft	Harvest grapes		
17	18	19	20	21	22	23
		Finish fall lawn seeding and sodding	Thin and move overgrown strawberry plants		First day of Autumn	Drain and clean rain barrels
24	25	26	27	28	29	30
	Remove fallen fruit from orchard and garden		Remove all dead vines and plants from garden		Apply a broadleaf weed killer to lawn weeds	Bring garden stepping stones in for the winter