

# GROWING RHUBARB

Rhubarb, *Rheum rhaponticum*, is a herbaceous perennial, and a member of the buckwheat plant family. A popular vegetable, it is sometimes known as the “pie plant.” Rhubarb is grown for its edible petioles (leaf stalks) which are tart and used for making jams, jellies, and especially pies. The leaves of rhubarb are large and showy in the garden, but they are inedible because of oxalic acid and oxalate content which can cause poisoning.

When a hard frost or freeze occurs in the early spring, rhubarb, which emerges very early in the spring, is commonly damaged. Gardeners can help protect plants by covering them. Floating row covers, sheets, blankets, straw or tarps provide some degree of insulation. However, if temperatures fall in the lower to mid-20 degree range, these protective covers reach their limitations, and damage is likely.

In response to freezing temperatures, the oxalic acid in the leaves will translocate (move) to the rhubarb stalk. Once frozen, the leaf tissue will initially appear “water soaked” and then wilt, and eventually it will blacken along the edges or where tissue was damaged. Once the plant experiences a damaging freeze, the stalks should not be eaten, and injured leaves and stalks should be removed from the plant. Eventually a new set of leaves will emerge, and no permanent



damage is done to the plant. A mature plant should yield another crop of stalks within four to six weeks.

## Choosing Varieties

When choosing varieties, consider (stalk) color, plant size, stalk thickness and length, flavor, and seed stalk formation tendency. Older varieties tend to have more greenish stalks, while more recent introductions have more red or pink in the stalks. Deep red color tends to be favored by gardeners, but green varieties tend to be more productive. It is often assumed that red-petiole rhubarb is sweeter than the green-petiole types, but petiole color does not determine sweetness.

Rhubarb plants can be obtained at garden centers in the spring; but, the selection may be limited. For a wider selection, consult mail order nurseries. Here are a few examples of commonly available varieties:

- ‘Tilden’ – good red color, spreading
- ‘Victoria’ – good vigor, long stalks, green w/pink speckling, many seed stalks.
- ‘Valentine’ – medium vigor and good red petiole color, few seed stalks.
- ‘MacDonald’ – fair pink-red color; produces many thin, tender stalks, moderate seed stalks.
- ‘Crimson’ – red color throughout stalk, thick petioles

*Continued on next page*



## Growing Requirements

Rhubarb is best adapted to cool summer regions, but it can be grown anywhere in Illinois. Rhubarb thrives in deep, well-drained, fertile loam soils. It performs poorly in heavy, poorly drained, or excessively wet, low sites.

Growth is improved by adding ample organic matter to soils, and plants prefer a slightly acidic pH of 6.2 to 6.8. Based on soil test results, phosphorus and potassium (potash) levels should be adjusted to “high” levels before planting, and lime should be added, if needed, to reach the appropriate pH.

A full-sun location is best, but rhubarb can tolerate some afternoon shade.

## Planting

Buy new plants (crowns) or divide the crowns from older plants. Older crowns are divided and planted in the early spring. Cut crowns into pieces with two to three buds each. Plant crowns as soon in the spring as the soil can be worked.

The site should be weed-free and worked deeply by hand-spading to 8 to 10 inches. Follow this with broadcasting 2 to 4 pounds of 13-13-13 fertilizer per 100 square feet of bed area, and incorporate by roto-tilling. Additionally, before setting crowns, add a handful of slow-release rock phosphate fertilizer into the bottom of each planting hole.

In heavy soils, make a raised planting area, 4 to 6 inches high, for better drainage.

Space plants 2 to 3 feet apart in the row, and if you are planting more than one row, make rows 4 to 6 feet apart. Set roots in holes 6 inches deep, with the crown buds just below the soil surface, no more than 2 inches deep. Firm the soil and water.

Carefully monitor new plantings for moisture as they become established.

## Fertilizing, Mulching, and Watering

High nutrient levels favor vigorous and heavy growth in rhubarb. For second-year and older plants, make applications of 1 to 2 pounds of 13-13-13 per 100 square feet prior to spring growth, or use an equivalent of nitrogen-only fertilizer.

Straw mixed with manure as a partially composted product can be effectively used as a winter mulch, providing some nutrients to the plants. When manure is used, cut chemical fertilizer rates by 25 to 50 percent.

Rhubarb is a cool-season plant, and growth is best when temperatures are below 90°F.

Mulching with straw or some other organic matter can help keep the soil cool, reduce moisture loss, and improve root and plant growth. Rhubarb should receive supplemental watering (1 to 2 inches per week

with rainfall) during dry summer periods.

## Weed and Pest Control

Control weeds by shallow cultivation or mulching, and the large leaves will help shade the soil for weed control.

Rhubarb curculio and crown rot can be problems in rhubarb. The rhubarb curculio insect can be partially controlled by eliminating curly dock weeds in nearby areas and by targeted insecticide spraying when these insects are observed. Crown rot can be prevented by selection of a site with a good, well-drained soil and/or planting on raised beds to improve internal and surface water drainage. Buying and planting clean, healthy crowns is also important to reduce disease potential.

## Other Culture Tips

Keep in mind, during the summer and early fall, new buds are formed for the next season's crop. Therefore, it is important to keep the plant healthy until it dies back naturally from frost in the fall. After this natural die-back, the rhubarb crowns become dormant for the winter. After a period of needed cold temperatures in the winter, the plants will break dormancy the following spring.

Occasionally, plants will send up seed stalks (bolt) during the

*Continued on next page*



growing season. These seed stalks should be removed so that the plant is not expending unnecessary energy. Bolting is induced by stress, age, and variety. The large, green-stalked varieties seem most susceptible, as are older plants. Infertile soil, heat, cold, day-length, or drought may also cause plants to bolt. The flower stalks should be cut out while they are still small.

The average planting can last many years but may require dividing and re-planting at 5 to 8 years of age to keep plants productive and vigorous. Division can also help inhibit seed stalk formation.

Using a spade, dig and lift the oldest plants first. Trim off any dead or damaged portions. Cut the crown into sections, each with a healthy piece of root and at least one or two good buds. Plant these pieces back in a newly prepared bed as noted in the previous section.

## Harvesting and Storing

Harvest rhubarb as follows:

**Planting Year:** No harvesting

**Year 2:** light harvest, 3 to 6 stalks per plant

**Year 3:** Harvest 4 to 6 weeks.

**Established Plantings:** Harvest 8 to 10 weeks or even longer if the plant is growing vigorously.

Quality is highest and fiber lowest in the cool, early spring. However, a well cared for planting can be utilized throughout the summer months.

Select new, fully-sized stalks and harvest by pulling and slightly twisting the petiole or stalk from the base of the plant; trim off leaf blades. Leaf tissue should **never** be eaten. Leave it in the garden.

Some gardeners prefer to cut the petiole off using a sharp knife. But, this is not a preferred harvest method because it can provide a place for rot to occur

at the base of the plant—where the partial petiole stem is left attached. Never remove more than 1/2 of stalks at any one harvest, and always leave at least 10 to 12 stalks. This will help the plant to recover and build reserves.

As noted, avoid harvesting and eating frost-damaged plants, which may appear water-soaked, wilted, or limp. Usually, outer leaves are damaged the most, and any obviously damaged leaves should be removed and discarded, or composted. Eventually, new inner leaves will form on the plant, providing a later harvest.

Harvested stalks may be stored for two to four weeks at 32° and 95 percent relative humidity. But, quality for culinary use or freezing is best when rhubarb is first harvested.

Author: Tony Bratsch, Horticulture Educator, University of Illinois Extension

University of Illinois • U.S. Dept. of Agriculture • Local Extension Councils Cooperating  
 University of Illinois Extension provides equal opportunities in programs and employment.

*The information in this fact sheet is for educational purposes only. References to commercial products and trade names do not constitute endorsement by the University of Illinois and do not imply discrimination against other similar products that are not listed. 2009*