



Department of Horticulture

Purdue University Cooperative Extension Service West Lafayette, IN

Rhubarb

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Rhubarb, often called pieplant, is an herbaceous perennial. The edible portion of the plant is the large tender leaf stalk harvested in late spring or early summer when other fruits are not yet ripe. Also, rhubarb may be forced into growth during the winter months for fresh use.

Homeowners should set rhubarb plants with other perennial crops along the side of the garden in an out-of-the-way place, but where the plants can receive full sun and can be cultivated. Two to three plants usually are adequate for the average family.

The leaf blades of the rhubarb plant contain oxalic acid and, therefore, are not edible, either raw or cooked. Poisoning has been reported from eating the leaf blades of the rhubarb plant.

Climate

Rhubarb grows best where summers are cool and moist, with winters cold enough to freeze the ground several inches below the surface. As long as drainage is good, rhubarb grows well throughout Indiana. Once growth starts in the spring, the climatic conditions may determine, in part, the color of the leaf stalks, particularly of the older cultivars. If the weather is cool, the stalks develop a good pink to red color which gradually fades as the weather becomes warmer. Some cultivars such as Valentine, Canada Red, McDonald, or Ruby, hold a good red color for most of the season.

Soil Preparation

A fertile, sandy loam which is well-drained is best for rhubarb. A well-drained soil will diminish the chances of crown rot. When new plantings are made, the soil should be deeply plowed or rototilled, then worked into a fairly level planting bed. Liberal applications of fertilizer should be incorporated as the soil is worked.

Broadcast fertilizer over the entire bed surface, then work it into the soil. A 1:1:1 ratio, such as 12-12-12 should be used at the rate of about 3-4 pounds per 100 square feet

of bed area (3-4 teaspoons per square foot) in the absence of a soil test. If possible, also cover the area with 2-3 inches of well-rotted manure. Then plow under or rototill the entire bed area.

Fertilizing

Each season after harvesting is completed, side-dress with 1/3 pound of ammonium nitrate per 100 square feet (1 teaspoon per 3 square feet) of bed space to encourage top growth. It is important that the plant build up a good reserve of food during the growing season. This reserve food, which is stored in the root system, improves the quality and yield of next season's early spring crop.

Cultivars

Valentine, Canada Red, McDonald, and Ruby are red-fleshed, recommended cultivars. Victoria, a green-stalked cultivar, is also recommended. Valentine tends to produce fewer unwanted seed stalks than the other cultivars. Valentine and McDonald require less sugar in food preparation than do many of the older garden cultivars. Local garden suppliers may have crowns, but will likely carry only 1 or 2 cultivars. Crowns are available through many mail-order firms.

Planting and Spacing

Rhubarb can be grown from seed, but seedlings do not breed true. They are unlike the mother plant and are generally of inferior quality. Therefore, it is best to use crowns of a known cultivar.

Rhubarb is very hardy and can be planted in the spring as soon as the ground can be easily worked and planted. Choose crowns which have at least 2 large buds. It is very important not to allow crowns to dry out before they are planted to prevent damage.

You can propagate your own plants by dividing the crown of a healthy plant, preferably in early spring before new

growth begins. Leave as many roots as possible with each division. Rhubarb divided in late fall should be protected with a winter mulch of straw or similar material after several hard frosts.

Place the crowns 3 feet apart in rows that are spaced 5-6 feet. Use shallow furrows so that crowns will be only 2 inches below the surface. Space the crowns so that each plant will have 12-15 square feet. Do not set the crowns in direct contact with the commercial fertilizer.

Cultivation

Rhubarb thrives best under clean cultivation because grass and weeds often harbor damaging insects. Each spring before growth starts, hoe or harrow the bed thoroughly, but be careful to avoid injury to the crowns. During the growing season, cultivate the row middle and hand hoe to keep the planting weed-free.

Following the first light freeze in the fall, mulch with 3-4 inches of strawy manure around the plants, but not on the crowns. More mulch can be added next spring before hot, dry weather. The mulch helps to control weeds and retain moisture. The manure is also a good source of nitrogen. As long as the bed is well-fertilized with chemical fertilizers as outlined previously, weathered (to sprout all weed seeds) wheat straw, thoroughly ground corn cobs or other materials can be used as a substitute for strawy manure.

Harvesting

For 2 years after planting, allow all leaves to grow to produce food for good crowns and roots. Harvesting before the third season reduces the stalk size and overall yield of the plants. During the third season of growth, stalks may be harvested for a 4-week period during the spring. During the following years, harvest for 8-10 weeks in spring. Allow the leaves to develop after this period so that plants can produce and store food reserves for next year's growth. Do not remove more than 2/3 of the developed stalks from any plant at one time.

Harvest rhubarb when stalks are 10-15 inches long by grasping the stalk near its base and pulling it slightly to one side. The stalk should separate easily from the plant. Trim the leaf blades from the stalk and store in a plastic bag in the refrigerator for up to 4 weeks.

Bolting (Seed Stalk Formation)

Infertile soil, extreme heat or cold, drought, or long days that expose the plants to too much light may cause bolting which is the production of seed stalks. Old plants tend to bolt more than young ones. The cultivar Valentine

seems to bolt less than McDonald, Ruby, and most green-stalked cultivars. The seed stalks should be cut out as soon as they are formed because they reduce the vigor of the plant.

Diseases and Insects

Keep beds well-cultivated because grass and weeds often harbor pests. Remove curly dock, which harbors the rhubarb curculio. Removing weeds should control the stalk borer and curculio, both of which work in the stem of the rhubarb plant.

Crown rot is controlled by using disease-free plants and planting in well-drained soil.

Follow good cultural practices to encourage abundant foliage growth after the harvest season. This is an important plant growth period because the food manufactured in the leaves is moved (translocated) and stored in the roots for the following year's growth.

Rejuvenation

Plants should be divided and reset every 8-10 years. Use a sharp spade to divide the crown leaving 3 or 4 buds undisturbed in the old location. Old plants which become thick only produce inferior, slender stems.

Forcing for Winter Use

Before the ground freezes in the fall, dig a few crowns and cover with straw or soil to keep them from drying out. After about 2 weeks of freezing weather, bring the crowns indoors, place them into crates or boxes, and work soil in around the roots until they are covered. Water the plants thoroughly. Place the crowns in a darkened cellar or cool room at a temperature of 60-65° F. As growth begins, a long stalk develops along with a very small leaf blade. Stalks can be cut in 3-4 weeks, and cutting can continue as long as the stalks are of a suitable size (about 1 month). Be sure to keep the roots moist. Ordinarily, forcing reduces the vigor of the roots to such an extent that the roots should be discarded after production.

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