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Grow Your Own RHUBARB

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Rhubarb is one of the popular early perennial vegetable crops. It is a brightly colored, highly flavored vegetable that is low in calories and high in vitamin C and calcium. You can grow rhubarb in your home garden or as a farm crop for market. You also may place rhubarb roots in a heated shed and "force" them to get the long, tender stalks for winter and early spring use. Hothouse rhubarb is in season January to March; field rhubarb April to June.

Rhubarb originally came from China and Russia, where the fleshy roots were used medicinally. It was introduced into Europe about 1608 and became a common vegetable in America early in the 18th century. Washington and Oregon currently are among the largest producing areas.

The underground portion of rhubarb is composed of a large, woody rhizome with fibrous roots. The edible portion of this plant is the stalk, which grows from buds found on the crown near the surface of the soil. With good care, the stalks of most varieties grow to a large diameter and length in a rather short time.

Leaves of the rhubarb plant are inedible, due to a high concentration of oxalic acid and soluble salts.

Rhubarb is quite hardy; the leaves withstand temperatures as low as 35°F without damage. The woody rhizome and crown will stay in frozen or very cold, dry soil for months without any damage from cold or desiccation. Rhubarb sells better and brings higher prices in the early spring months when there is less fresh produce on the market. The low temperatures of spring aid the development of the pink pigment so desirable in this crop. High temperatures result in green petioles, which are less desirable.

Propagation

Seed stalks occasionally grow from rhubarb crowns. Some varieties form seed stalks yearly while others seldom produce them. Growers usually cut seed stalks off as they appear. The seed is used mainly by plant breeders, since the plant is cross-pollinated and seedlings seldom resemble the parent strain. When allowed to develop, the seed stalks grow several feet high and are covered with white flowers. The seed matures by the first of July.

Propagation from seed is not recommended, due to possible variations in type resulting in poor quality.

Vegetative propagation by division of the crowns is the common and best method of rhubarb propagation. Large vegetative buds are found on the upper portion of the crowns; you can cut each crown into several divisions, with a large bud on each piece. Divide the crowns when the plants are dormant. Five- or 6-year-old crowns should yield 8 to 10 good-quality pieces. Plant the pieces as soon after division as possible, but you may store them under dry, cool conditions for a few weeks.

The number of years you may harvest a rhubarb planting depends on a number of factors, but usually productivity declines after 5 or 6 years, and it is then time to replant.

An older, unproductive rhubarb field often may be rejuvenated by plowing or cutting a section with buds from each side of the crown. This keeps the planting young and allows crowns to continue growing for several more years. A planting may be kept productive this way for 15 to 20 years.

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Soil

A deep, rich, well-drained, sandy loam is ideal for rhubarb production. A sandy soil with southern exposure produces the earliest crop, while production from heavier soils usually is delayed. Light soils require more fertilizer and water than heavier soils. A slight to medium acid soil is desirable for this crop. Due to rhubarb's high water requirement, the soil needs to have plenty of organic matter to help hold the moisture for the growing plants.

Fertilizer

In order to produce large, high-quality stalks, heavy applications of fertilizer are necessary. If manure is available, incorporate 25 to 35 tons per acre in the soil before planting. Follow this with a manure mulch each fall.

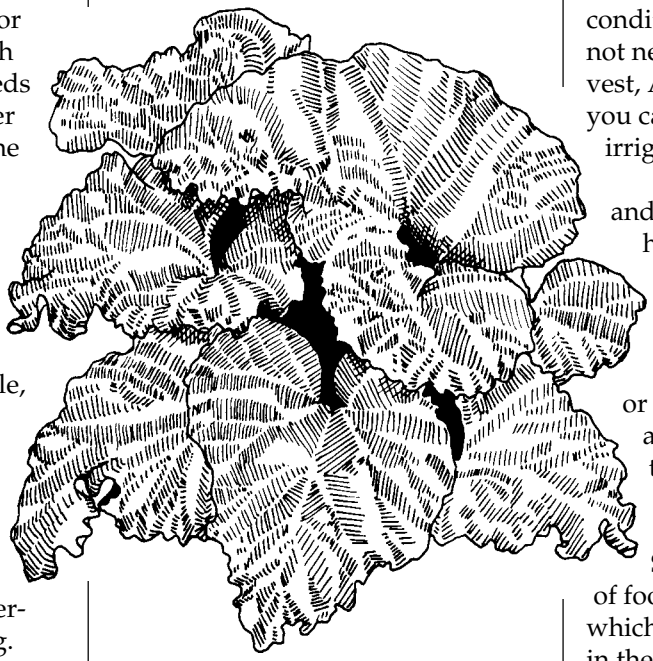
If manure is not available, apply 800 to 1,000 pounds per acre of 16-8-8 or similar commercial fertilizer in the early spring. Apply 200 to 300 pounds of a fertilizer such as ammonium nitrate after harvest, to stimulate regrowth and good crown and root development. The spring growth comes mainly from reserves stored in the roots the previous season.

Varieties

Several named varieties of rhubarb are available for planting. The leading variety for outdoor production is Crimson (sometimes referred to as Crimson Cherry or Crimson Wine). Grown both for fresh market and processing, it is a vigorous-growing variety that produces bright red stalks. The internal color of the stalk also is red.

The varieties grown for indoor forcing are Victoria and German Wine. Victoria is an older variety, with long, round stalks with smooth ribs. When grown outdoors, the internal stalk color is green; externally this variety develops a pink speckling on a light green stalk. The pink color is more intense at the bottom and fades to a solid green near the top of the stalk.

German Wine is similar to Victoria but is slightly more vigorous and more intense in color, typically with a darker pink speckling on a green stem. When Victoria and German Wine are forced inside darkened sheds, they produce brightly colored red stalks. Victoria tends to produce an excess number of seed stalks when grown outdoors.



Other varieties occasionally grown in Oregon are Riverside Giant, a green variety; and Valentine, Canada Red, and MacDonald, all red varieties.

Planting

You can plant rhubarb in the spring and late fall, but where the winters tend to be severe it's best to wait until the spring. Fertilize and work the soil deeply and thoroughly before planting. Space plants 2 to 3 feet apart in rows about 5 feet apart. When growing crowns for forcing, place rows 5 to 6 feet apart to allow use of heavy equipment to lift and remove crowns from the field. Plant the top of the crown 1 to 2 inches below the surface. Pack the soil around the newly planted division so that there are no air pockets that might allow the young plants to dry.

Irrigation

Rhubarb is a very hardy vegetable and can withstand drought conditions well. Irrigation usually is not necessary during spring harvest, April through May. However, you can obtain the best yields by irrigating fields beginning about 2 to 3 weeks after harvest and continuing until the rhubarb has regrown. Maturity of the second crop usually occurs in early to mid-July, at which time you may harvest the field again and regrow it, or leave it unharvested and allow it to go dormant through the remainder of July or August. The slow decline of fields during August and September allows the storage of food reserves in plant roots, which encourages early dormancy in the fall and strong, vigorous growth the following spring.

Harvesting

Wait until at least the second year after planting to harvest your first stalks. Market gardeners usually wait 2 or 3 years between planting and harvest to allow development of good color. Pull the stalks by grasping the stalk down near the crown. A slight twist and side pull loosens the stalk without breaking or injuring the primary bud. It's important to avoid bud damage, because each bud will produce several stalks.

A normal cropping season lasts about 8 weeks. Rhubarb grown for processing often is harvested in May and again in July. All stalks of sufficient size are removed in a single harvest of the field. For fresh market sales, rhubarb is pulled selectively at weekly intervals in order to encourage production of a

specific-size stalk with uniform color.

If you harvest in the July–August period, the rhubarb's maturity may be delayed the following spring. Late-summer harvest also may reduce yield the following year.

Indoor forcing

You may force rhubarb crowns for a spring crop maturing during the January-to-March period. Make your plantings with this use in mind. The best forced crop comes from crowns from which no stalks have been removed. The time for digging the crowns for forcing varies with the variety and the amount of cold induction it has received. Victoria usually is lifted in early December; German Wine in January. Forcing is done in a darkened building with the crowns placed side by side, usually on earth floors. Leave walkways about every 6 feet to allow room for care and harvesting of the crop.

Keep the crowns moist and the temperature around 58 to 62°F. Provide ventilation to prevent fungus growth that might easily start under warm, humid conditions. The stalks grow rapidly and have a delicate pink color when forced in a warm, dark room. The greatest production comes from 2- to 3-year crowns that have grown vigorously in the field. Forced rhubarb stalks are very tender; exercise care in harvesting to prevent breakage of stalks and damage to buds.

The crop is ready to harvest about 30 days after forcing is begun or when the stalks are 18 inches or longer. The stalks are trimmed and packed, usually 15 pounds per box.

Yields vary from 6 to 14 pounds of rhubarb per crown. After you complete harvest, haul the spent crowns out of the shed and dump them. These crowns are weakened and depleted from being forced; it is not advisable to split these crowns for plants to establish new fields.

Two-year-old crowns normally are used, and you must plan a rotation schedule to provide sufficient quantity of crowns to fill your sheds yearly.

In the home garden

Home gardeners often maintain a few hills of rhubarb at the side or back of the garden area so they may enjoy this fine vegetable each spring. Due to its tolerance of cold, rhubarb is one of the earliest vegetables to be harvested in the spring. Because of its bright red stalks and large green leaves, it is an attractive plant for your garden.

You can accomplish early outdoor production by covering hills with plastic, straw, or strawy manure, held in place by some type of framework. Clear plastic gives the best results. When covering the crown with plastic, secure the edges by digging a 4-inch deep ditch around the crown or along the row, keeping about 12 inches away from the crown. Cover the crown with 2-mil-thick plastic, allowing about 10 inches slack in the plastic covering the dormant crown, to allow room for petioles to lift the plastic as they grow. Cover the edges of the plastic with soil to hold it in place, or bend wire hoops over the row to support the plastic.

Cut ¼-inch ventilation holes in the plastic as the rhubarb begins to grow. When stalks push tightly against the plastic, you may cut an opening to allow leaves to expand through. Harvest may begin as soon as stalks are of sufficient size.

Mature crowns covered in early February will produce usable rhubarb about 10 days early. You may use black plastic, but your yields will be lowered. However, your rhubarb stalks will be a bright red color and leaves completely yellow due to the exclusion of light.

If you have an area suitable for indoor forcing, you could grow a few extra hills for even earlier production and use. Dig these crowns in early January and discard after forcing. Crowns that are covered in place with straw or plastic may be recovered yearly and need not be discarded.

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