



FRUITS & VEGETABLES

Strawberries for the Home Garden no. 7.000

by H. Hughes, J.E. Ells, G. Schweitemann, J. Reich¹ (10/09)

Quick Facts...

Strawberries are classified as June bearing, everbearing or day neutral.

They should receive full sun at least eight hours every day.

They adapt to nearly all areas of Colorado, even high elevations.

Strawberry beds generally are kept for three years.

Strawberries require at least eight hours of full sun each day of the growing season to produce at their maximum capability. Because a strawberry planting will remain in the same location for multiple years, locate them in an area that does not interfere with the annual garden cultivation.

When strawberries are planted after sod, grubs, which have been feeding undetected on the sod roots, divert their attention to the strawberry roots. Because there are fewer strawberry roots, a sizable grub population may cause severe damage. After a year out of sod, the grub population declines and strawberries may safely be planted.

The gardener generally has no choice as to soil type; however, a sandy loam soil with a southern exposure is ideal. Strawberries like a loose, moderately fertile soil. Before planting, work in 4 bushels of organic matter, 1 pound of nitrogen (N), 1 pound of phosphate (P_2O_5) and 1 pound of iron chelate per 1,000 square feet. In general, do not add more than 4 bushels of fresh manure or more than 8 bushels of decayed manure. If you add more than 4 bushels of raw organic matter such as straw and sawdust, also add 1/4 to 1/2 pound of nitrogen for each bushel in excess of four.

Varieties

Strawberry varieties are classified as June bearing, everbearing or day neutral. June-bearing varieties tend to produce the most flavorful, aromatic berries. However, if their flowers are damaged by a late spring frost, they will produce a much reduced crop or no crop at all. In most areas of Colorado, June-bearing varieties actually ripen in July. Recommended June bearers (one crop) for this area are Guardian, Kent, Honeoye, Redchief, Delite, Jewel, Mesabi, A.C. Wendy, Cabot and Bloomiden.

Everbearing strawberries typically provide two main crops each year, with small amounts of fruit produced between the main crop in June and a lighter crop in late summer or early fall. For Colorado, everbearing strawberries are recommended for the home gardener because they tend to be very reliable producers. If a late spring frost kills the first flowers, you will still get a crop in late summer or fall. Some of the more common everbearing varieties are Ogallala, Fort Laramie and Ozark Beauty. Ogallala and Fort Laramie are recommended for Colorado because they are more hardy.

Day neutral varieties are similar to everbearers, but flower and fruit more consistently over the summer. Recommended day-neutral varieties include Tribute, Tristar and Fern.

Many gardeners plant everbearing, day-neutral and June-bearing types in order to extend harvest over the longest possible season.

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Planting

There are two systems used for strawberry culture: the matted row, used with June-bearing strawberries, and the hill system, used with everbearing or day neutral varieties.

Having two people plant means less stooping.

In the matted row system, space the plants 2 feet apart in rows 4 feet apart. These plants are allowed to produce runners to fill in the row. Leave a pathway 1 1/2 feet wide between rows. Remove or relocate runners that root in this pathway or within 5 inches of an established runner.

With the hill system, space plants 1 foot apart in three rows that also are 1 foot apart, with 3 feet between each set of three rows. Remove all runners as they develop.

Select certified plants over non-certified ones. They have been certified to be free from insects and diseases. Unpack plants and plant right away or heel them in a trench as a temporary location until they can be set out in the garden.

Transplant in the late afternoon to reduce wilting due to heat stress. Discard plants with dark roots or that look unhealthy. Remove flower buds, runners and damaged leaves before planting. The usual planting method is to drive a spade into the soil, push the handle away to open up the soil, fan out the roots of the plant, and place the plant in the opening so that the soil level is even with the crown. While the plant is held with one hand, remove the spade with the other. Allow the soil to fill in the hole and tamp it down gently. It is important to water each plant immediately after planting. This practice will help avoid transplant shock and the water can be used to settle the soil in around the roots without compacting the soil by pushing on it. Much stooping can be avoided if two people are involved in this operation. Watering each plant individually at planting, rather than sprinkling the plants when finished, will help to avoid forcing wilted leaves into the soil.

Remove the first blossoms to produce a stronger plant that will bear more fruit.

Cultivation

After planting, keep weeds down by hoeing. If the planting is large enough, consider an herbicide such as Dacthal. Apply this compound according to label instructions.

Remove the first blossoms that form on a new planting at least once on the hill system and twice on the matted row system. This diverts the resources of the plant into producing a strong plant and, in the case of the matted row system, more runners. Stronger plants bear more fruit than those allowed to fruit early. Later in the season, there will be some fruit to enjoy on the everbearers or day neutral varieties.

About July 1, fertilize the crop with 1 pound of nitrogen per 1,000 square feet. This may be obtained from 5 pounds of a 21-0-0 formulation. If the fertilizer is broadcast, drag the foliage with a sack to dislodge the fertilizer and then water. Repeat this process again in September. Nitrogen applied before fruiting results in soft fruit and is not recommended.

Generally, keep a strawberry bed for three years. Remove it as soon as it ceases to bear in the fall, or leave it until spring. If the matted row system is used and the plants are still insect and disease free, plant a new bed in late August by carefully removing good, healthy, rooted runners and using them for planting the new bed. If the hill system is used where no runners are permitted, or if the plants are not healthy, order new plants in time for planting a bed in the spring, preferably in a different location.

Keep the soil damp until the first fall frost, then withhold water to help harden off the plants for winter. A final November watering helps prevent winter-kill from drying.

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Insects and Disease

Strawberries are remarkably free from most insects and diseases in Colorado. Occasionally, an insect problem arises, such as crownborers, leafhoppers, aphids, earwigs, slugs or tarnished plant bugs. Malathion is a good standard home insecticide to control aphids, leafhoppers and quite a few other sucking and chewing insects. Use Sevin to control earwigs and beetles. Control crownborers with a soil-applied insecticide. Control slugs with commercially prepared baits available at most garden centers. Do not spray plants when in flower -- pollinating insects may be harmed.

Disease problems occur less frequently than insect problems. Usually, the disease is controlled by removing the diseased plant or plant part. However, if it is widespread, other measures must be taken. In the case of systemic diseases, such as yellows (virus) or red stele (vascular), nothing can be done except to remove diseased plants. However, if a fungus develops on the foliage, spray the plants with a fungicide, such as Captan. Bacterial diseases on strawberries are not important in Colorado.

For more information, see Fact Sheet 2.931, *Strawberry Diseases*.

Leave the caps on the plant if the berries will be eaten or preserved right away.

Harvesting

Pick strawberries every other day during the peak of the season. It is poor practice to let fruit rot on the vine, so pick even the rotted fruit. If berries are eaten or preserved immediately, harvest only red-ripe fruit and leave the caps on the plant. If the fruit will not be used for a few days, harvest the berries, caps and all, while still pink.

Mulching

Protect strawberries over the winter, generally with a straw mulch applied about December 1. By then, cold weather has inhibited growth and the soil is cold. Distribute the mulch over the plants to a depth of 1 to 2 inches. Hold it in place with weighted boards or piles of soil. This mulch prevents the plant from losing moisture to drying winter winds. It also prevents root damage caused by alternate freezing and thawing of the ground.

Leave the mulch on as long as possible to restrain plant growth in the spring. Early spring growth produces early flowers subject to damage by adverse weather. Therefore, check the plants under the mulch in March for new growth. When growth begins, part the mulch to allow sunlight to reach the foliage. As the plants continue to grow, gradually remove the mulch, leaving as much as possible as a soil mulch to keep the fruit off the ground. Rake the mulch back over the plants to protect them in case of a late spring frost. Remove soon after the frost danger is over.

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¹H. Hughes, Colorado State University professor; J.E. Ells, Colorado State University Extension vegetable crops specialist and associate professor (retired); and G. Schweitemann, former student; horticulture and landscape architecture. 2/93. Reviewed by J. Reich, Extension horticulture agent, Boulder County. 10/09.