**GROWING STRAWBERRIES AT HOME**

By Vincent Lazaneo, Urban Horticulture Advisor Emeritus, UC Cooperative Extension

**Sweet Ann:** This strawberry developed by Lassen Canyon Nursery, is a day-neutral variety which flowers and produces fruit periodically from early spring to late fall. It is a vigorous plant with few runners. The fruit is large with a long conical shape and a medium, glossy-red color. The flesh is medium firm with exceptional flavor and a good sugar/acid balance. This variety is highly disease resistant.

**In general:** Modern strawberries are hybrid varieties with roundish, medium green leaves and toothed edges. They bear white flowers that require pollination by bees to produce fruit with small seeds on the surface. The fruit turns red as it matures, softens and develops a sweet flavor. Individual plants grow 6-8” tall and up to 12” across. They propagate vegetatively by forming long runners that produce ‘daughter’ plants which root when in contact with soil. The strawberry is a perennial plant often grown as an annual. It requires some winter chilling (exposure to temperatures below 45 F) to sustain normal vegetative vigor and fruitfulness. Some varieties are short-day plants which fruit heavily in spring and to a lesser extent in fall, with little production in summer. Newer day-neutral varieties which are not as sensitive to changes in day length, produce fruit periodically from early spring to late fall.

**Where to grow:** Strawberries require a sunny location to produce sweet fruit. Plants should be grown where they will receive at least 6 hours of direct sunlight (including mid-winter). The plants grow best in rich well-drained soil that is slightly acidic (pH6-7) and low in soluble salts. To grow a few strawberry plants all you need is a sunny spot on a patio and a large container filled with potting soil. Avoid planting in so-called strawberry pots with wide pockets on the sides since plants growing near the bottom stay too wet and those on the north side may not get enough sun. Strawberries can also be grown in well-drained garden soil with a sandy to sandy-loam texture that is slightly acidic and low in salts. Soil drainage can be improved by mixing in compost and by planting in raised beds. Avoid planting on clayey or poorly drained soil since they retain excess moisture that promotes root rot.

**When to plant:** In southern California, short-day varieties are usually planted in late summer. Bare root plants of day-neutral varieties are usually planted from late October thru November. We recommend planting strawberries as soon as possible after you receive them. Bare root plants can be kept in a sealed plastic bag and stored in the refrigerator (where they will not freeze) for at least 1 week.

**Planting:** Plant strawberries in moist, prepared soil. Dig holes deep and wide enough for the roots. Spread roots in a fan shape and hold the crown so it will remain above the surface of the soil as the hole is refilled. Gently push soil around each plant checking that all roots are covered and that the crown is a little above the surface. Water thoroughly after planting to settle the soil and remove air pockets.

For strawberries grown in containers, space plants about 10” apart near the outer edge of a half oak barrel or other large container. For smaller containers, put 1 plant in a 1- or 2-gallon pot or 2-3 plants in a 5-gallon pot. Small containers require more frequent irrigation during warm weather. When planting in the garden, space plants 10-12” apart in a single row. When planting 2 rows, space plants 12” apart in each row, with 12” between rows. Stagger plants to provide more growing space.

**Soil preparation:** When strawberries are grown in containers, use commercial potting soil. Don’t use garden soil since it does not drain well and may contain disease organisms. Water the potting soil daily for several days to remove excess salts. Just before planting, mix a slow-release chemical or organic fertilizer into the soil according to label directions. Do not use animal manures which are high in salts.

When planting in the garden, dig and break up soil 8-12” deep. Remove weeds, roots and debris then mix in 1” of compost (about 1 pound per sq. ft.). Avoid manures. A pre-plant fertilizer high in phosphorus can be scattered over the soil and mixed in prior to planting. Apply 1 pound of 5-10-10 fertilizer for every 25 sq. ft. of soil or apply a complete slow-release fertilizer according to label directions. Another way to apply fertilizer is by placing a small amount below the roots when strawberries are planted. To do this, dig the hole about 1” deeper than needed for the plant roots. Place 1 tsp of 5-10-10 fertilizer or a slow-release product in the bottom of the hold and cover it with an inch of soil before planting each strawberry.

To create raised beds with better drainage, rake prepared soil into a low mound 6-8” deep. Level the top of the bed, which should be 10-12” wide for 1 row of strawberries or 20-24” wide for 2 rows. If permanent raised beds are desired, use decay resistant lumber or concrete blocks to form the edges of the bed. Orienting beds in a north/south direction will provide the best sun exposure for plants. Provide enough slope so water will not stand on top or alongside the bed.

**Care after planting:** Strawberries grow best in evenly moist soil. Do not allow soil to remain constantly wet or dry out. Push a finger into the soil near a plant to check out how moist it is below the surface.

New plants can initially be watered overhead. The best time is mid-morning so plants will dry off before night. Drip irrigation works well for strawberries once plants have formed several leaves. Drip irrigation keeps the foliage dry and helps prevent some diseases. Place a drip line or drip tape about 2” from a single row of plants with an emitter at each plant. For 2 rows of plants, place 1 or 2 drip lines in the middle between both rows. Run the drip system about twice a week, long enough to wet the planting bed thoroughly. To remove salts from the bed, sprinkle heavily at least twice during summer.

New plants need time to develop a strong root system and adequate foliage before they bear fruit. Plant growth will be stunted if fruit is allowed to develop too soon. Pinch off flowers and immature fruit on new plantings until there is a full canopy of foliage.

Removing runners as they form will increase the size and productivity of the mother plant. If new plants are desired, allow some runners to grow and root into the soil in late summer. New daughter plants can be dug up and replanted in mid-October. A chilling treatment can be provided by gently removing soil from the roots and trimming off all foliage except for 2 new healthy leaves. Place the plants in a sealed plastic bag and store them in a refrigerator for 2 weeks, then replant in the garden.

Day-neutral strawberries prefer consistent, light feeding. Apply a slow-release fertilizer periodically during the growing season or feed every monthly with a small amount of soluble fertilizer. Avoid heavy feeding in spring which can cause excessive plant growth, soft fruit and rot.

Remove weeds as soon as possible so they do not compete with the strawberry plants. Loose straw (not hay) or pine needles can be placed on the ground around the strawberries to deter weeds and keep fruit above wet soil to prevent rot. If weed block fabric is used, place it over a bed soon after planting and use a scissors to cut holes where each crown is growing. Black plastic mulch can be used if a drip line or soaker hose is placed under it for irrigation. There should be enough slope to keep puddles from forming on the surface when it rains. Plants can be covered with a floating row cover fabric to promote early growth, but it must be removed when fruit is desired so honey bees can access the flowers.

Harvest ripe fruit with the green calyx and stem attached. Store ripe fruit in the refrigerator and eat it as soon as possible. Immediately remove and discard any rotten or damaged fruit to help control diseases and pests.