HS509

UNIVERSITY OF FLORIDA
IFAS EXTENSION

# Strawberries In The Florida Garden[1]

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Strawberries are very popular in Florida home and market gardens. They also provide a multi-million dollar crop for the state's commercial producers. Strawberries may be grown in gardens throughout all areas of the state, with the hill system being the method of culture most successful. Container culture is also popular.

## PLANT CHARACTERISTICS AND CLIMATIC RESPONSE

The strawberry plant is perennial by nature, but is grown as an annual in Florida. The plant goes through a cycle of vegetative growth, flower formation, fruit production, then runner development. The cycle is delicately balanced and is easily upset.

Strawberry plants are set in the garden in the fall (October-November); following early vegetative growth, the cool nights and short days of the winter stimulate the plant to produce flowers; following the last killing frost of spring (December-January in frost-free areas) flowers are formed which develop into fruits ready for harvest in about a month. Berry production and harvesting continue throughout the spring; upon the onset of warm weather and longer days, the plants cease to produce berries and begin to form runners which take root and become new plants. All plants are usually destroyed at this time; however, the new runner plants could be removed from the mother plant and reset to produce more runner plants themselves. Such vegetative growth would continue until winter and the onset of the fruiting portion of the cycle. It is best not to save one's own runner plants since these might be infected with problem causing disease or nematodes.

The leaves will withstand cold weather, but flowers and fruit may be injured or killed by frosts or freezes. By protecting early blossoms, you might obtain early fruit. If plants lose their flowers and early fruit due to cold, a later crop will develop with return of milder weather.

## SOIL REQUIREMENTS

Well-drained, moist but not wet, sandy soils with a good quantity of organic matter are best suited for strawberry production, but most all soil types are acceptable. The organic peats and mucks are least desirable. Rockland culture is possible.

Step 1.Before making the beds, broadcast fertilizer over the plot and spade or disk in. The amount to apply is shown in Table 1.

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Step 2.Then prepare the bed, applying more fertilizer in a **single, narrow band** in the middle of the bed four to eight inches deep. Do not apply fertilizer in bands directly under the plants, as salt burn may occur (foliar wilting).

## MULCHING

For best results, strawberries should be mulched, although this is not absolutely necessary. While straw and other natural organic materials may be used, *black polyethylene plastic* mulch has proven best.

Use 1 to 1 1/2 mil plastic in a width that will completely cover top and sides of bed. Apply the plastic just before planting. Be sure the bed is formed properly, is firm, fertilized and very moist.

Place soil on the edges of the plastic to hold in place. Cut slits or holes at the proper intervals in which to insert plants.

## SETTING PLANTS

When receiving your young plants from the nursery for setting, take care to keep the roots from drying out and being damaged. Plants received before you are quite ready to set may be kept well-wrapped in a refrigerator for a few days, or you may "heel them in" individually into a V-shaped trench for a few hours.

Follow these steps when setting plants in the garden row:

1. Buy certified, disease-free plants.
2. Keep plants moist before planting.
3. Set plants in moist soil.
4. Spread roots out in fan-shape; do not double or crumple up.
5. Set them at the correct depth. Do not cover crown, and do not leave tops or roots exposed.
6. Pack the soil around the roots firmly, then sprinkle with water. Overhead sprinkling keeps the tops from drying out until the roots can get established.

## VARIETIES

Since strawberries are very sensitive to such climatic conditions as day length and temperature, it is important that you select a variety adapted to Florida conditions. All of the following have proven themselves here and are suggested for gardens throughout the state.

Florida 90— This older variety produces a large, vigorous plant that yields heavily over a long period of time; fruits are large, red, pointed berries of good eating quality.

Tioga — This plant is very large and vigorous, with big, dark-green glossy leaves; fruits are very large, firm, wedge-shaped berries of medium quality. The plant is susceptible to leafspot.

Sequoia— This variety produces a big, vigorous plant; the fruits are large, wedge-shaped, of high quality, but somewhat soft when ripe.

Florida Belle— This is a good variety for Florida gardeners due to its anthracnose disease resistance, good yields, and large fruit size. Plants are upright; fruits are blunt conical, red, with an occasional white shoulder.

Other Varieties— Dover, Tufts, Douglas, Oso Grande, Chandler, Selva, and Sweet Charlie.

**NOTE:** The "Everbearing" varieties of strawberries are not well suited for Florida. The varieties suggested above bear fruit early and continuously over a 3-month or more period of time.

### Planting Dates

North Florida: October 1 - November 15

Central Florida: October 1 - November 15

South Florida: October 1 - November 15

## BED PREPARATION/FERTILIZATION

The two-row bed, covered with black plastic mulch is most popular. First, broadcast and mix some fertilizer (see Table 1 ) into the soil, then make up a bed 6-8 inches high and 24 inches wide. Then make a furrow 6 inches deep in the bed's center. Band more fertilizer (see Table 1 for amount) into this furrow and cover with soil. After watering the bed thoroughly, you are ready to cover with plastic and set your plants.

## IRRIGATION

All of the common irrigation techniques used in Florida gardens work well with strawberries. Where overhead sprinkling is used in conjunction with plastic mulch on very sandy soils, punch a few holes in the plastic with a rake to allow good wetting of the soil beneath. Newly set plants will benefit from overhead sprinkling for two or three days. Sprinkling fills in the soil around the roots and keeps the tops from drying out.

Trickle irrigation is extremely well-adapted for use with strawberries. To avoid leaching the fertilizer, do not place the trickle lines directly over the fertilizer band. Where fertilizer deficiencies occur, soluble fertilizer may be applied through lines beneath the plastic.

## PEST PROBLEMS

Pests on strawberries in the garden include insects, diseases, nematodes, weeds, birds and animals.

Insects— The most common insect pests affecting strawberries in the garden are: pameras, flower thrips, spider mites, white grubs, cutworms, slugs, and snails. See "Florida Vegetable Gardening Guide" for suggestions on pest control.

Diseases— Leafspots, stem spotting, plant blight, and fruit rots are often encountered by gardeners. Anthracnose is one of the worst diseases in Florida gardens. Spraying and dusting may be beneficial using approved fungicides. Plant a resistant variety.

Other Pests— Soil solarization prior to setting plants is the best methods of ridding the soil of nematodes.

Nets may be placed over garden to prevent birds from pecking the fruit.

Weeds are best eliminated by mulching with black plastic or straw. Herbicides are not suggested for home gardeners to try.

## GROWING STRAWBERRIES IN BARRELS

See this topic elsewhere, in MR-74-14 , "Growing Strawberries in Barrels", Horticultural Sciences Department.

## HARVESTING AND STORING

Strawberry fruits are very perishable. Pick them when they are dry and properly ripened. Immature berries do not ripen later and over-ripe ones are soft and rot easily. After picking, keep them cool, as near 32°F as possible. Commercially, strawberries are sold in a "flat" which weighs 10 lbs. and contains 24 pints. The normal harvest period runs December - May.

**Table 1.**

**Table 1.** Fertilizer Amounts

| | lbs. 6-8-8/100 sq. ft.* | | |
|---|---|---|---|
| Soils | Broadcast | Band | Sidedressings |
| Sands & Clays | 2à lbs. | 2à lbs. | Probably not needed, except where not mulched |
| Marl & Rockland | 2 lbs. | 2 lbs. | Probably not needed, except where not mulched |
| Organic | 1 lb. | --- | --- |

*In the first season, and particularly on marl and rockland soils, a complete mixture or minor elements should be included with the fertilizer.