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# STRAWBERRIES IN THE HOME GARDEN

E. Barclay Poling,  
Extension Horticultural Specialist

## INTRODUCTION:

Strawberries are a welcome addition to any home garden. They are relatively easy to grow, require a minimum of space, and virtually no chemicals are needed. From as few as 25 transplants to start a matted row, a berry yield in excess of 50 pounds can be achieved one year after planting. Strawberries require a site that is open to direct sunlight most of the day. Try to avoid very low-lying areas prone to spring frosts, and you should definitely plan to purchase a white spunbonded row cover to protect open strawberry blossoms from spring frosts/freezes. The same cover may be used for bird control during harvest.

Berries not eaten fresh can be readily frozen or preserved. Besides being an excellent dessert fruit, strawberries are a good source of vitamin C as well as being low in calories (1/2 cup fills an adult's daily need for vitamin C and equals about 25 calories).

## VARIETY SELECTION:

There are many strawberry varieties available, but it is best to select only varieties adapted to the climatic conditions found in your area. Start with disease-free certified plants from a reliable nursery. It is not a good practice to use your own plants or your neighbor's plants to set a new patch. Generally two to three varieties will be needed to extend the ripening season over a four to five week period. Everbearing varieties, Ozark Beauty and Superfection, and newer Dayneutral varieties, Tristar and Tribute, have generally not performed well in North Carolina.

It is recommended that you speak to your Cooperative Extension Agent and/or the North Carolina Department of Agriculture for a listing of anthracnose-free nurseries. For the mountain and piedmont areas, choose red stele resistant varieties, Earlglow and Sunrise, in soils where this disease is present.

## SOIL TESTING AND PLANTING:

It is best to test the soil four to six months before planting. If the pH is too low, raise it to the level suggested by the soil test with dolomitic lime. Strawberries require a soil pH in the range of 5.5 to 6.5. The soil should be worked into a fine mellow condition for planting. Wait one year before planting strawberries in ground in which grass sod has been grown.

Soil analytical services provided free of charge by the N.C. Department of Agriculture provide information on soil pH, dolomitic lime requirement, available phosphorus, potassium and magnesium levels, percentage humic matter, and total nitrogen content. However, there is no satisfactory analytical method for determining the amount of nitrogen in the soil sample that is immediately available for plant growth. The percentage humic matter and total nitrogen content give indications of overall soil fertility and this can be a useful guide to nitrogen availability. Essentially, you should follow the test recommendations for adjusting soil phosphorus (P) and potassium (K) before planting. If no soil test has been made, broadcast about 4 pounds of 10-10-10 fertilizer for each 100 feet of row 2 to 3 weeks before planting strawberries.

First season fertilizer - if new plants appear light green and are not growing well, sidedress with nitrogen (N) about one month after planting. Apply either 1 1/2 pound ammonium nitrate per 100 feet of row, or about 5 pounds 10-10-10 per 100 feet of row. A topdress application of ammonium nitrate at 1 1/2 pounds per 100 feet of row should be made again in late August. When topdressing strawberry plants, apply the fertilizer evenly and be sure to brush all fertilizer off the leaves to protect from fertilizer burn. The late August N application is necessary to promote good flower bud development in the fall. Very light coastal soils need additional N again in late January. The rate suggested at this time is 3/4 pounds ammonium nitrate, or 2 1/2 pounds 10-10-10 per 100 feet of row.

Second season fertilizer - prior to mowing the strawberry foliage at renovation (see Renovation), broadcast 3 to 4 pounds of a complete fertilizer (e.g. 10-10-10) or 1 1/2 pounds ammonium nitrate per 100 feet of row. Follow the same recommendations indicated for the first season fertilizer program in late August and again in late January (for sandy coastal soils). Prior to renovation, a second soil sample can be taken to furnish more exact recommendations for the summer and fall growing period.

Organic fertilizers - many of these if properly used are perfectly satisfactory. Dried Blood (12-14% N) is of course organic and immediately available. It leaves an acid reaction. Bone Meal contains 20-24% phosphoric acid, acting slowly, while steamed bone meal acts more quickly. Wood ashes can be used for supplying potash. For those who wish more information contact your County Cooperative Extension Office.

## MULCHING:

Key Objectives - in western N.C., the foothills and upper piedmont, a mulch is applied in the early winter, preferably after the ground has frozen for the first time, to prevent the soil from freezing and thawing and heaving of the plants. Also, when growth begins in the spring, a mulch of straw or pine needles on the ground helps to keep the berries clean as they ripen, conserves the moisture in the soil and is an excellent means for controlling weeds.

**EASTERN CAROLINA AND CENTRAL PIEDMONT** - Apply pine needles or grain straw in February. Scatter lightly over plants and in middles between rows.

**WESTERN CAROLINA, FOOTHILLS AND UPPER PIEDMONT** - In December, broadcast sufficient pine needles or grain straw in the middles and around the plants to protect crown. Use a light application on top of the plants at the higher elevations after the ground has frozen. This will prevent heaving of the plants and protect them from cold, drying winds when there is no snow cover.

## IRRIGATION:

Strawberry plants have a shallow root system and cannot stand severe drought. If drought comes during any of the following "critical" times, irrigate enough to wet the soil 6 to 8 inches deep once a week:

1. When plants are set and during dry periods following setting;
2. Just before harvest and during harvest when berry size appears to be suffering;
3. After renovation, as needed, to encourage new runner plant;
4. In late August, September, and early October when fruit buds are forming the next season's crop;
5. Irrigation, if used properly, can also help prevent frost injury to blossoms in spring (check with your

to achieve control of pests.

STRAWBERRIES  
Month-by-Month Guide

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Month	Tasks to be performed
January	Order new plants. Apollo requires another variety. February Plant (CP); fertilize (CP) old beds; apply mulch (CP, P); 2 weeks prior to new planting apply fertilizer plus lime.
March	Plant (P, WNC) certified plant; MR space 2 x 4 ft; Frost protect blossoms (CP)
April	Remove mulch covering (WNC); cultivate/water/frost protection; control pests. Frost protect blossoms.
May	Water if dry; nets for birds; harvest each 2 days; new plants remove blossoms; training of runners/hoeing.
June	Harvest (P, WNC); runner training; pest control; water if dry; renovate old beds after fruiting.
July	Pest control; fertilize as needed; water and cultivate.
August	Pest control; water if dry; fertilize in mid-August; check for mites.
September	Fertilize in mid-September; pest control; water liberally; thin to 6 plants per square foot; soil test for fertilizer and nematodes.
October	Water if dry; prepare new land; need ph greater than 5.8.
November	Locate mulch supply.
December	Broadcast mulch after ground has frozen (WNC).

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