

## Growing Dayneutral Strawberries in the Home Garden

Dayneutral strawberries are uniquely different from June-bearing types and older everbearers such as ‘Ozark Beauty’ or ‘Superfection’. Dayneutrals have the capacity to flower and fruit continuously when temperatures are moderate because of their insensitivity to day length, which normally controls flower initiation. In northern climates, June bearers form flower buds during the short days of autumn, and these buds complete development and open during early spring. Dayneutrals form flower buds under any day length, and will continue to grow as long as temperatures remain above 35° and below 85° F.

‘Tribute’ and ‘Tristar’ are two dayneutral cultivars that were specifically bred for the northeastern United States. Other cultivars such as ‘Selva’, ‘Fern’, ‘Hecker’, ‘Aptos’, and ‘Brighton’ are adapted to the West. Because of their hardiness, productive nature and superior fruit quality, dayneutrals have rapidly replaced double-cropping everbearers. However, everbearers are still available for those who wish to grow them.

### • Pre-Plant Decisions.

**Site selection.** (Year 1) Dayneutral strawberries grow best in a sunny location on a well-drained, sandy loam soil with a pH of 6.2. However, they can be productive over a broad range of soil types. Strawberries are not tolerant to extremes in pH (less than 5.5 or greater than 7.0), so test the soil the year *prior* to planting.

The shallow root systems of dayneutrals make it imperative that the soil has a good water holding capacity. A pre-plant cover crop will increase the organic matter content of the soil and improve its water holding capacity. A nearby water source is beneficial during dry spells, and these strawberries will require 2 inches of water per week. Dayneutrals respond well to black plastic and raised bed systems that tend to retain moisture and reduce weed competition.

Because plants are small, they are not competitive with weeds. Eliminate perennial weeds such as dandelion or quackgrass before planting. A site that has previously been cultivated would be preferable to a new one, but only if tomatoes, potatoes, peppers, eggplants, raspberries or strawberries have *not* been grown there before. These crops will leave certain diseases in the soil that will adversely affect strawberry growth, although ‘Tribute’ and ‘Tristar’ are somewhat resistant to these diseases.

**Soil preparation.** (Year 1) Always prepare the site at least one year prior to planting. This includes modifying the pH with lime or sulfur if necessary, fertilizing with manure or with two pounds of 10-10-10 for every 150 square feet, and working organic matter (compost, sawdust, peat moss, etc.) into the top four inches of soil with a rototiller or shovel. Deeper cultivation is not recommended. A soil test will provide more specific recommendations for pre-plant fertilization.

### • Maintenance.

**Nutrition.** Dayneutrals benefit from a continuous supply of nitrogen and potassium. Additional phosphorus is not necessary, provided an adequate supply has been incorporated prior to planting. At the beginning of each

month, from June through September, apply 1.4 lbs. of actual nitrogen per 100 feet of row. In the second year, fertilize at the beginning of May as well as the above months. If you suspect your soils are low in other nutrients, a leaf analysis and soil test will give specific recommendations for supplemental fertilization.

**Pests.** Weeds are often a major problem in dayneutral planting. This type of strawberry tends to be smaller and less competitive than June bearers. Good pre-plant preparation is essential for good weed control. Black plastic mulch will reduce the weed growth except in the immediate area of the plant and the aisles. Hand weeding near the plants is necessary. A clean, thick layer of mulch in the aisles reduces weed growth greatly.

The biggest insect pest problem is the tarnished plant bug. Populations of this insect increase during the summer, and a preferred food is the strawberry flower. Failure to control this pest will result in nubby berries in 20 to 30 days.

The greenish nymphs actually do most of the damage to flower parts. These can be monitored by shaking the flower clusters over a white saucer and counting the nymphs. Control measures are warranted if more than two nymphs are observed per foot of row, and must be applied every 10 days.

Gray mold is the disease problem that plagues dayneutral strawberry growers. Because berries are continuously present, the disease tends to increase during the season. Remove moldy berries from the planting, and protect flowers every 10 days to 2 weeks with a fungicide, especially after rainy periods.

‘Tribute’ and ‘Tristar’ are susceptible to leaf spot but partially resistant to leaf scorch and mildew. However, these diseases will not present a major problem in annual crop plantings.

**Mulch.** Cover dayneutral strawberries with 2 to 3 inches of straw near Thanksgiving to protect them during winter. Remove mulch as soon as it thaws the following spring. It is not recommended to carry dayneutrals over to a third year.

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