



## Growing Day-Neutral Strawberries in Home Gardens

Unlike the common June-bearing strawberries, the day-neutral strawberries flower and produce fruit anytime temperatures are between 35° F. and 85° F. These strawberries will not produce a single “bumper crop” of berries in June, but will instead produce berries throughout the summer and as late as October in some seasons. Unlike June-bearing strawberries the day-neutral types will yield well during their first year when they are planted. Day-neutral strawberries do not send out runners profusely like the June-bearing types and therefore you will be managing the planting differently.

**Cultivar Selection:** The most successful day-neutral cultivars for growing in the Northeast are *Tribute*, *Tristar* and *Seascape*. All three are far more productive than older “ever-bearing” types such as *Ozark Beauty*. They produce small- to medium-sized fruit, topping out at about 1 inch in diameter. The excellent flavor (especially *Tristar*) makes up for the smaller sized berries.

*Tristar* produces a large amount of fruit early in the planting year, but the larger-fruited *Tribute* surpasses its production by the middle of September. *Seascape*, a cultivar from California, has the largest fruit – nearly as big as June-bearing cultivars – and is the most productive of the three. For more information on cultivars and sources of plants visit the [Nursery Guide for Berry and Small Fruit Crops](#) on the Cornell Fruit Resources web page.

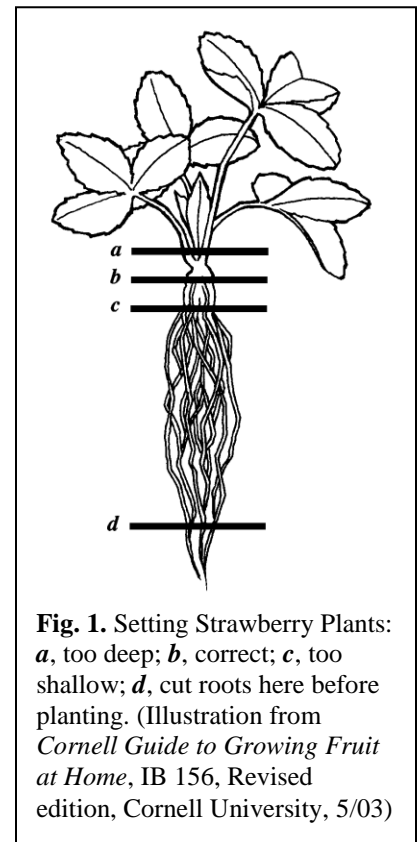
**Site Selection:** Day-neutral strawberries grow best in a sunny location on deep, well-drained, sandy loam soil with a pH of approximately 6.2. The day-neutral strawberries are also ideal for planting as “annuals” in containers. Strawberries do not tolerate extremes in pH (less than 5.5 or greater than 7.0); thus soil pH should be determined the year before planting and adjusted. Contact [Cornell Cooperative Extension - Suffolk County](#) for information on having your soil tested. Limestone and other soil amendments that are used to adjust soil pH require at least two months of warm weather to work, so plan ahead to leave enough time to amend the soil if necessary.

Plants can be productive over a broad range of soil types, but extremes should be avoided; clay soils retain moisture but are often poorly drained, and sandy soils require irrigation. The addition of organic matter such as high quality finished compost can help improve sandy or clay soils.

Adequate soil drainage is essential for healthy strawberries. Home gardeners should plant on a ridge or in raised beds if soil drains poorly or consider selecting a more suitable site. Strawberries are shallow-rooted plants and benefit from irrigation. Raised bed plantings may dry out sooner than conventional planting. Irrigation provides frost protection as well.

Before planting, find out about the soil history. It may contain troublesome pests, particularly perennial weeds or weed seeds, insects, soil-borne diseases, or nematodes. Control insects that reduce strawberry yields, such as white grubs, strawberry root weevils, or European chafers, by growing a crop other than strawberries for several years before planting. In soils where the fungus causing red stele or *Verticillium* wilt is present, plant only resistant cultivars.

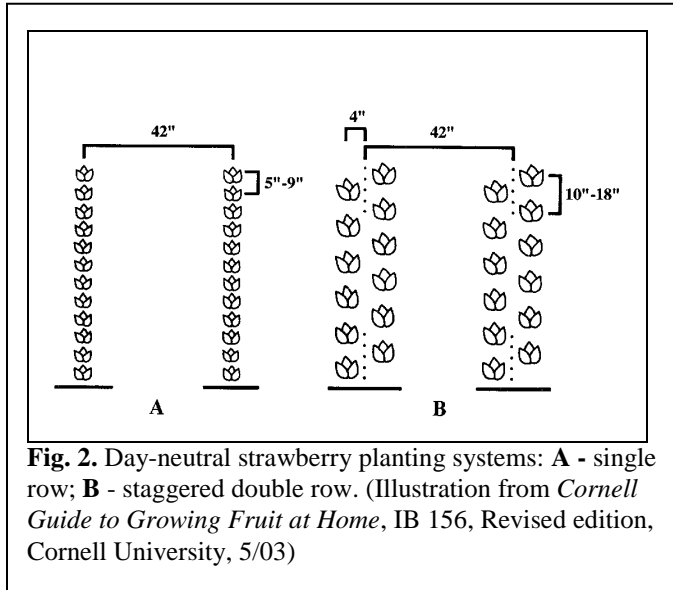
**Planting Stock:** Best results are obtained with dormant, virus-indexed plants purchased from a reliable nursery or local supplier. Be sure to spot-check plants for signs of winter injury, mold, and root rot. Plants showing signs of winter injury (golden orange-colored crown) are likely to die if the weather turns hot and dry. A heavy mold on strawberry roots and crowns is an indication of improper storage. If plants are moldy, discard them. When plants arrive, keep them in the refrigerator until you are ready to plant.



**Fig. 1.** Setting Strawberry Plants: *a*, too deep; *b*, correct; *c*, too shallow; *d*, cut roots here before planting. (Illustration from *Cornell Guide to Growing Fruit at Home*, IB 156, Revised edition, Cornell University, 5/03)

## Early Care

**Planting:** Place plants in the soil as soon as possible in the spring. Avoid exposing plants to sun and wind. Cool, cloudy weather is ideal for planting. When plants are set, the roots should extend vertically into the soil and be completely covered just to the crown level (**Fig. 1**); do not bury the crowns. It may be necessary to cut the roots back to 4 inches before setting. During the first few weeks after planting, be sure plants have adequate water. Fall planting is not recommended in the Northeast.



**Fig. 2.** Day-neutral strawberry planting systems: A - single row; B - staggered double row. (Illustration from *Cornell Guide to Growing Fruit at Home*, IB 156, Revised edition, Cornell University, 5/03)

**Cultural Systems and Runner Removal:** Day-neutral cultivars do not produce runners profusely, so attempting to establish a matted row is not practical. Plant them 5–9 inches apart in single rows that are spaced 42 inches apart. With this system remove the runners for the entire first season, which will increase yields significantly. Another option, which will reduce competition and increase yields, is a staggered double row planting system. With this system plants are spaced 10–18 inches apart, alternating them in two narrow rows that are just 8 inches apart. Space each staggered double row in your garden 42 inches apart. Both systems are illustrated in (**Fig. 2**).

**Flower and Fruiting:** Day-neutral plants produce flowers from the time of planting through frost in autumn. Fruits will form in about 30 days after flowers open. Cover the plants with 2 inches of mulch in the late fall when temperatures approach 20° F. Remove the mulch in early spring around the end of March to mid-April after the threat of severely cold weather has passed.

**Fertilization:** Plants should be fertilized with 1 to 2 pounds of ammonium nitrate per 100 feet of row at the beginning of each month from June through September the first year and May through September thereafter. Be very careful to sidedress the fertilizer and avoid contact with the leaves, especially when they are damp. Slow-release fertilizer can be used at planting instead of monthly applications of nitrogen.

## Maintenance

**Watering:** Strawberry plants should receive 1 inch of water each week, either by rainfall or irrigation.

**Mulching:** Day-neutral strawberries perform best when mulched with straw immediately after planting. Mulched plants have cleaner fruit and suffer less drought stress.

**Weed Control:** Weed control is difficult with day-neutral cultivars because they are always fruiting and there is no good time for renovation. These cultivars are also more sensitive to herbicides than June bearing strawberry plants. Planting through black plastic aids in weed control and warms the soil early, but because *Tristar* and *Tribute* are sensitive to heat, black plastic can be harmful in the summer. Black plastic can encourage a buildup of vole populations. The best approach for home gardeners is to stay ahead of the weed problem with light, frequent hand pulling, straw mulching, and cultivation.

## Harvesting

For maximum sweetness and flavor pick fruit a day or two after they are ripe. Berries picked before they are completely red will ripen, but they will not sweeten off the vine. Slightly unripe berries can be used for making jam. Under favorable conditions, expect a total yield of about one quart of fruit per foot of matted row. Immediately remove berries that do not ripen because they harbor diseases and attract insects.

For long-term storage of fresh berries, select firm berries that are not yet fully ripe, cool them immediately after harvest, and wrap in plastic after cooling. Store as close to 33° F. as possible, but be sure the berries do not freeze. Before using, allow the berries to warm inside the plastic wrap to prevent condensation from forming directly on the berries. When these steps are followed, strawberries will be of acceptable quality for several days.

Resource: *Cornell Guide to Growing Fruit at Home*. Cornell University 2003.

The *Cornell Guide to Growing Fruit at Home* may be purchased by contacting the office directly.

