

## Strawberries Through the Whole Growing Season

Strawberries are the first locally-produced fruit of the year to ripen. Harvest frequently begins as early as the first week in June and extends for 4 to 5 weeks into early July, depending upon variety selected, your location, and the system selected for winter protection. Harvest of the traditional June-producing strawberries is limited to this time period because these strawberries are photoperiodic, and produce flowers only during the short days in September and October. Flowers produced at that time remain dormant over the winter, and then develop rapidly when the weather warms the following spring. The annual fruiting cycle starts all over again when days shorten in the fall.

Scientists a few years ago discovered strawberries growing high in the Wasatch mountains in Utah that flowered and fruited profusely, regardless of the length of day. They were called dayneutral strawberries because of their ability to flower regardless of the length of day. The quality of these strawberries was improved over time using conventional plant breeding techniques to the point where dayneutral varieties are now available that have very good flavor. Because they have the ability to produce high quality fruit from early June to the first killing frost in the fall, these dayneutral strawberries are a viable option for anyone looking for a near continuous supply of strawberries over the course of the growing season.

**Planting Systems** - Dayneutral strawberries can be grown as an annual crop or as a multi-year crop. Figure 1 illustrates the relative yield of dayneutral strawberries the year of planting and the second year after planting. Dayneutral berries produce fewer runners than standard June-bearers, so higher densities are required. Plants are set as early in the spring as possible in single rows 6 inches apart or in double rows set off center 9 inches apart. The distance between rows will be determined by personal convenience or the space required for cultivation equipment, but 3 to 4 feet should be more than adequate under most circumstances. Dayneutral strawberries perform well when planted in black plastic or under a traditional mulch system such as weed-free straw. Black plastic or mulch serves to control weeds, and perhaps more importantly, conserve moisture. Planting as early in the spring as possible is suggested so that plants can get well established while the soil is still moist and cool.

Dayneutral plants may be considered for planting on patios or in hanging baskets. Not only are they attractive but they can serve as a source of strawberries and a conversation piece.

**Soil Preparation** - Good site preparation is necessary for successful strawberry production. Cover cropping and the incorporation of a substantial amount of organic matter into the soil the previous year are important keys to success. Adjustment of soil pH to near 6.5 and correction of nutrient deficiencies are important prior to planting. Some recommend placement of a slow release nitrogen-containing fertilizer as a band under the area where plants will be placed.

**Care after Planting** - The flower stalks should be removed during the first 6 weeks after planting, thus allowing the plants to become well established. Remove runners regularly, since runners can not root through the mulch. Dayneutral strawberries should receive a monthly application of nitrogen fertilizer, applied either as a side dressing or as a liquid application. Periodic watering may be necessary if the weather is dry even though mulch is used. Harvest will begin about 10 weeks after planting. Peak production will occur in late August to early September, but plants continue to bear fruit until frost.

**Pests** - The biggest pest challenge in growing dayneutral strawberries is tarnished plant bug (TPB). This pest kills a portion of the flower while feeding, resulting in a strawberry that is small and has a hard knobby end with a concentration of seeds. Populations of TPB increase during the summer. Typical controls include the use of insecticides, but a more sustainable approach may be to trap out TPB with white sticky traps strategically placed within the row.

**Two-year System** - Plants can be carried over for a second cropping year. In this case, mulch (typically weed-free straw) should be placed over the plants as they become dormant in mid to late November. The June crop of dayneutral strawberries is not as large as traditional June-bearing strawberries but it is substantial enough to be worthwhile. In the second year there is a 6-week break in production in the middle of the summer before the fall fruiting cycle begins. Do not renovate dayneutral strawberries in the second year since they do not respond well to mowing leaves off after the June harvest. Usually dayneutral strawberries are not carried over for a third fruiting season. Plants produce multi-crowned heads that result in reduced berry size.

**Varieties** - Dayneutral strawberries are generally not as large as June-bearing strawberries but fruit quality is considered at least as good.

- Tribute. This variety has medium size fruit with good quality. Plants are vigorous and productive and produce runners. In general this is the most dependable of the day neutral types in New England.
- Tristar. This variety produces medium to small, very flavorful berries. It is less vigorous than Tribute, lower yielding, but slightly better quality. This is a good choice for patio gardens and hanging baskets.

---

*UMass Extension Agriculture and Landscape Program 4/12*