

## Growing Strawberries by Tracy Stabler

Spring brings to mind many images but the fresh strawberry is one of spring's great gifts. In this area strawberries can be grown in limited space. They grow and produce well in hanging baskets, pots, small mounds and beds. The strawberry plant is a perennial-meaning that it will grow for more than two years and continues to grow after it has fruited. There are two types: June bearing and day-neutral or "everbearers" varieties.

The June bearing are the most commonly grown in Pennsylvania. They bud in the short days of fall. The plant goes dormant in the winter and when the days grow longer in the spring, they resume their growth. The crop of berries is produced in the late spring or early summer.

The other type of strawberry is the day neutral. These varieties are not dependent on the length of daylight and therefore bear fruit throughout the growing season. Usually they have three peaks of production each year: June, mid summer and late August through frost. These plants are sensitive to hot temperatures and need to be mulched with 4 inches of straw to keep soil temperatures in a more tolerable range for the plant.

Spring is a great time to plant strawberries. They can be planted when the soil is workable. They will begin to grow at temps in the 40's. Unless the plants are already in soil, the bare rooted plants should be placed in water for one half hour prior to planting. The roots should not be allowed to dry out during the planting process. It is important to place the plant in the soil at the proper depth. The crown of the plant should be fully above the soil line, with the root system covered with soil. Strawberry plants have shallow roots and penetrate the soil approximately 6 inches deep in our area. Strawberries grow best in soil with a high organic matter content. Hill planting works well for day neutral varieties. Plants are staggered in a zig-zag fashion with 5-10 inches between plants. They are also best for container and hanging baskets. June-bearing plants are better grown 18-24 inches apart in rows 36 inches apart. The runners that the plants produce are spread in all directions around the parent plant to create more growing plants in the bed. Mulching strawberry plants with straw 4 inches deep is helpful to maintain soil temperatures and optimal moisture content. It also cushions the developing berries and protects them from some soil pathogens. Avoid

planting your strawberry plants where tomatoes had been planted. They can share similar plant diseases.

The first planting of the strawberry plant is very important for the future of the berry production. Remove the flower buds on young plants during the first year to allow the energy of the plant to be directed to root growth and establishment of a healthy leaf canopy that will fuel the plant. June bearing plants will have a bountiful crop next spring by following this method. Everbearing varieties should have the flowers removed for the first six weeks following planting to help them establish healthy root systems.

A soil test, available at the Penn State Extension, is important to do prior to planting your strawberry plants. The test will indicate the needed soil amendments for your particular garden. They can be incorporated with the compost to prepare a welcoming environment for your strawberry plants. Generally, a 5-10-10 fertilizer should be applied when runners begin to form. A 10-10-10 fertilizer is recommended in late August. Follow package directions for amount to be used for your size plot. Everbearing varieties may need more regular nitrogen application during the summer months. Let leaf size determine the need. If leaf size is larger than expected hold off on adding fertilizer.

Proper watering will dramatically affect strawberry size. During drought conditions watering will help the berries to enlarge. However, too much water will dilute the flavor of the berries making them bland. Mulching with straw to a depth of 4 inches helps conserve soil moisture and prevent overheating of the temperature sensitive plants.

A strawberry bed will produce well for 3 years. After the third season the bed will need to be renovated for June bearing varieties and totally replanted for everbearing varieties. This involves thinning the plants to one every 3-4 inches. Using the stronger runners plants and removing the older original plants after 3-4 years of life will keep your strawberry bed actively growing and producing a good crop. Mulching the bed in late November will protect the plants and help with spring yields.

Growing strawberries is a great project. The Master Gardeners of the Penn State Extension are available to help answer your gardening questions. The local hotline number is 717-840-7408.

