SUGGESTED FERTILIZER PRACTICES FOR STRAWBERRIES

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Strawberries are a choice fruit crop for many home gardeners. The low-growing plants are reliable and quick to produce. Strawberries should be planted in full sun for maximum yield. June bearers provide a delicious supply of fruit from late spring through early summer, while day-neutral types produce berries throughout the summer.

The strawberry is a shallow-rooted perennial. Often, more than 75 percent of its root system can be found in the top 6 inches of soil. Because of this, strawberries are quite sensitive to both excess water and drought conditions. They grow best when planted on fertile, well-drained soils that contain at least 6 percent organic matter. Organic matter should be incorporated into sandy soils to increase moisture retention.

Sites that stay wet may not be suitable for strawberries unless raised beds are constructed. Water saturated soils prevent necessary oxygen from entering the root zone, and roots may die. Diseases, especially red stele, are more likely to occur under these conditions, as well. Avoid growing strawberries where tomatoes, potatoes, peppers, eggplant, raspberries or strawberries were recently grown. The insect and/or disease problems carried over may cause substantial damage to strawberry plantings.

SIX MONTHS TO ONE YEAR BEFORE PLANTING

Strawberries prefer a slightly acidic soil with a pH ranging from 6.0 to 6.3. If it is necessary to adjust the soil pH, apply the amount of ground limestone recommended on the soil test report. Generally, it is advisable to use a dolomitic limestone that contains both calcium and magnesium, especially if the soil has below optimum magnesium levels. If soil test magnesium levels are above optimum, a calcitic limestone can be substituted. Build up the organic matter levels by additions of peat moss, compost, well-rotted manure or other available materials.

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sulfate (0-0-43) at a rate of 3/4 lbs. (1 1/2 cups), or greensand (0-0-7) at a rate of 10 lbs. (14 cups), per 100 square feet. If soil test results for phosphorus are below optimum, apply superphosphate (0-20-0) at the rate of 1 1/4 lbs. (2 1/2 cups), triple superphosphate (0-46-0) at the rate of 1/2 lbs. (1 cup), or bonemeal (1-11-0) at the rate of 2 lbs. (6 cups) per 100 square feet. Incorporate all necessary amendments thoroughly to a depth of 6 to 8 inches. Retest the soil before planting.

Boron is one of the most commonly deficient micronutrients in strawberry plantings. If boron was not added to the soil in the past 3 to 4 years, an application of borax (10-12 % boron) may be beneficial. Mix 3/4 of an ounce of borax into a gallon of water. Shake well, and distribute over 100 square feet of the area designated for the strawberry bed. Do not overapply because excess boron can cause plant injury. Soils regularly amended with compost or natural organic fertilizers generally contain sufficient boron for strawberries.

**YEAR OF PLANTING**

About two weeks before planting, incorporate 2 lbs. of 5-10-10 (or equivalent) for each 100 square feet of planting bed. Six to eight weeks after the first fertilizer application, apply one pound of 5-10-10 (or equivalent) per 100 square feet; spread the fertilizer in a 6-inch band on each side of a row of strawberry plants. Repeat this rate again in late August. Brush or wash off any fertilizer granules that land on the foliage to avoid leaf injury.

**FRUITING YEAR**

Avoid the use of nitrogen fertilizer the spring before harvest as it may result in large, soft berries; excessive vegetative growth; and increased susceptibility of plants and fruits to diseases. However, if plants are a light shade of green and are not growing well, an application of 1/2 lb of 5-10-10 (or equivalent) per 100 square feet may be beneficial. June-bearing strawberry plantings are renovated after harvest. Cut back leaves, thin plants and remove weeds. Then, apply 1 to 2 lbs. of 10-10-10 (or equivalent) per 100 square feet. It is important that plants receive at least 1 inch of water per week following fertilization to encourage strong, healthy new growth and to avoid salt injury. In years of adequate moisture, either from natural rainfall or supplemental irrigation, fertilize strawberry beds again in late August with 1/2 lbs. 10-10-10 (or equivalent) per 100 square feet. Do not fertilize after August 31st. This postharvest fertilization is repeated each year after harvest and renovation. Proper cultural practices should keep June-bearing strawberries productive for at least 3 to 5 years.

**FERTILIZERS FOR DAY-NEUTRAL STRAWBERRIES**

Day-neutral strawberry varieties can produce fruit throughout the summer so they require a steady supply of nutrients for optimum growth and development. Apply one pound 10-10-10 (or equivalent) per 100 square feet in mid-June, mid-July and again in late August.

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