# STRAWBERRIES

Spacing - High density, 18" x 4 ft. = 7260 per acre. Normal density, 2 ft. x 4 ft. = 5445 per acre.

In some forms of bed culture 10,000 to 12,000 are often planted. This is not recommended for the amateur and requires instructions beyond the scope of these notes.

Planting Instructions - In the home garden strawberries make an excellent ground cover. No soil preparation is necessary if the flowerbed is mulched with bark dust, saw dust, etc. Simply dig the plant in leaving the crown exposed at ground level. Never plant strawberries to a depth where the crown is buried. Avoid wadding the roots in the planting hole.

Fertilizing - Wait for growth to start to avoid burning the roots. Without a soil test we recommend a good balanced blend of Nitrogen, Phosphorus, Potassium, and Sulfur. The same fertilizer that works in your vegetable garden will give excellent results on strawberries. If plants don't appear to be growing well the best reference is "Hunger in strawberries", by Frank Johanson.

## CARE OF THE PLANTING

Everbearing Varieties - After planting keep all flowers picked off until June 1 - 15. This establishes a strong plant. Plants will flower and fruit the rest of the Summer and fall until a frost occurs. The original mother plants should be rouged out after the 1st or 2nd year. Treat them like an annual.

Spring Crop Varieties - Fertilize and water well the first year to promote good flower bud formation that fall. The first crop is picked the following spring.

After harvest the plants go dormant prior to summer and fall growth and fruit set. After the last berry is picked, mow the plants off with a lawn mower just above the crowns at the soil surface. The old leaves left after harvest are going to die anyway and mowing is good sanitation and helps keep fruit rot at a minimum as the planting ages.

In the fall thin runners so they are 3"-5" apart. If possible mow tops off in January or February prior to the spring flush of growth. This helps prevent fruit rot. In our area winter rains often make mowing difficult. We do it when the ground is frozen.

Disease control - When you receive plants from us they are virus free. Aphids spread virus. Rigid insect control avoids this problem. Control aphids with Diazinon. Organic gardeners may plant Rainier or Totem - these two varieties are virus tolerant. Strawberries are susceptible to Red Stele root rot. To avoid this problem, plant strawberries in a well drained area of the garden.

Where they grow

Format calls for an explanation of where strawberries will grow. Fact makes it easier to explain where they will not: in permafrost or on glaciers. The key lies in matching variety and place. Though some varieties are widely adapted, the breeding programs that have spread strawberries all across the continent have made many varieties strict homebodies.

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### Site & soil

Before planting, soil should be tilled or spaded to a depth of 8 inches or more. Heavy soils should be amended with peat or other organic matter to help drainage; good drainage is imperative. Poor soils benefit from a preplanting application of 1 pound of 10-10-10 fertilizer per 100 square feet of bed.

Subject as they are to verticillium wilt, strawberries should not be planted where eggplants, peppers, potatoes, raspberries, or tomatoes have grown within the preceding 3 years. For the same reason, beds should be moved whenever wilt shows up. Strawberries also should not be planted where lawn has grown recently; leaving grubs and competing weeds.

In hard-winter regions, strawberries are best planted toward the tops of gentle slopes with good air drainage to minimize winter-kill and frost damage to blossoms. In USDA Zones 5-7 plants should be protected against freezing in winter by thick mulch, unless the variety has proven hardy where it is growing.

## Propagating & planting

Once a bed has been stared, propagating new plants from existing ones is almost automatic for most varieties, and is required for all. However, it is best to begin with certified stock from a nursery, and to renew with nursery stock every few years. Plants in gardens tend to weaken steadily from wilts and other diseases. For consistent crops, revitalize the bed each year. Individual plants bear best in their first year, less well in the second, only weakly in the third.

Most strawberry varieties propagate by runners, long stalks that root at the tips, producing new plants. Dividing the crowns propagates varieties that produce few or no runners.

Nurseries sell bare-root plants for spring or autumn, flats or containers of them for other seasons. Roots of bare-root plants should be trimmed to 6 inches long and fanned out in the planting holes. However the plants come, they should be set with the base of their crowns at soil level (buried crowns rot), the topmost roots ¼ inch below the soil (exposed roots dry out and die).

Of the two basic planting methods for strawberry beds, the hill method produces relatively few berries, but those few are large. It is widely used for all varieties west of the Rockies, and for everbearing varieties everywhere. The matted row method yield many more, smaller berries. It is the preferred method east of the Rockies. Spacing and maintenance techniques are noted with the sketches. Strawberries will, of course, grow well in containers for anyone with limited space or meager appetite.

### Caring for the plants

Short lived, soft-tissued strawberries demand constant attention.

#### Watering

Plants need 1 to 2 inches of water per week from blossom through harvest. Schedule irrigation so the soil stays moist (every two or three days in sandy soil and dry climates, once a week in heavier soils or rainier regions). June crops may not need irrigation in areas with late spring rains. Everbearers everywhere need summer irrigation. Experts in most regions recommend mulching to help conserve water and to keep the berries clean and dry. Black plastic is the favorite.

## Fertilizing

This is where the artist surfaces in a strawberry grower. Recommended basic programs vary by region and berry type; specific programs vary by individual growers.

As starting points: For matted rows of June beaters in most of the country, apply 1 to 2 pounds of ammonium sulfate per 100 square feet just as runners start. (In small patches or for hill plantings, figure 1 teaspoon per plant.) High-nitrogen fertilizers such as ammonium sulfate are particularly recommended in regions of leaching summer rains.