

GROWING STRAWBERRIES

TYPES: June bearers set buds in the short days of autumn which stay dormant till spring. Flowers open May-June, fruit appears 4-6 weeks later. Long summer days initiate runners which sprout daughter plants.

Everbearing fruit June-July, again in the fall, produce few runners; buds are initiated by long summer days and warmth.

Day neutrals set fruit all season independently of day length and are sometimes incorrectly called 'everbearers'. There are few runners.

SITE: Must be well drained and must not have been planted for the last 3 years to other strawberries, raspberries, blackberries, potatoes, tomatoes peppers or eggplants as all are susceptible to verticillium wilt. A sunny warm location produces the best flavour. The bed will remain productive for about 3 years.

SOIL & PREPARATION: Loam or well-drained loamy clay produces best flavour. Incorporate a 3-4" (7.5-10.0 cm) layer of well-rotted manure or compost to depth of 8" (20 cm) a month or more before planting. The optimum pH is 5.5-6.5 but coastal soils may be around 5.0 so should be limed the previous fall or two months prior to planting. Dolomite lime which offers both calcium and magnesium is recommended. To raise the pH one point in 100 sq. ft. (9.3 sq. m), dig 2.75 lbs (1.25 kg) into loamy sand, 7.75 lbs. (3.5 kg) into loam, 10.5 lbs (4.8 kg) into loamy clay.

PLANTING DESIGNS: Use raised beds for good drainage. June bearers are suited to a matted row system, plants set 18-20" (46-50 cm) apart in rows spaced at 3-4' (0.9-1.2 m). Plantlets sprouting from runners are allowed to root and form a matted row 18" (46 cm) wide. Raised rows work well for everbearers and day neutrals with few runners. Plants are placed at 12-15" (30-38 cm) apart in double or triple wide rows 1.5-2' (0.4-0.6 m) apart. Runners are removed.

PLANTING: Use certified disease-free stock. Keep plants moist before planting, water in well afterwards. Dig a hole large enough so roots can reach almost straight down with just a slight spread. Set the midpoint of the crowns at ground level. Everbearers and day neutrals may be mulched with black plastic.

FERTILIZING: Before planting and not within one month of liming, incorporate 2 lbs (0.9 kg) of 4-10-10 for every 100 sq. ft. (9.3 sq. m) At planting use a starter fertilizer like 0-10-10 or 10-52-10. After 6 weeks a high nitrogen fertilizer may be used, either a liquid formulation or a dry preparation in bands 2-3" (5-7.5 cm) out and deep on either side of the row. In late summer established plantings may be treated with 1-1.5 lbs (0.5-0.7 kg) /20-20-20/100 sq. ft.

WATERING: Plants require 1-1.5" (2.5-3.8 cm) of water weekly but must not become waterlogged. Overwatering encourages diseases and formation of soft, poor quality fruit and leaching of nutrients.

PRUNING: In the year of planting remove all blossoms from June bearers forming before July 1 and from everbearers and day neutrals remove all runners every 2-3 weeks. Thin runner plants of June bearers to about 5 per sq ft (0.09 sq m) remove all runners forming after September 1.

PESTS & DISEASES: Root weevils - larvae feed on roots, adults notch leaves
Wireworms - destroy crowns
Spider mites - whitish flecking of upper leaf surfaces
Leaf rollers - larvae feed on young unopened leaves and web them together
Leather jackets (crane flies) - larvae feed on roots, crowns, leaves
Slugs - eat holes in fruit
Strawberry mites - puckered leaves, stunted plants, deformed fruit
Tarnished plant bug - deformed fruit (catfacing), also caused by boron deficiency
Black root rot - roots blacken and rot in heavy wet soils
Red stele root rot - core (stele) of root is bright red inside, then turns brown and dies
Powdery mildew - powdery fungal growth on underside of leaves, fruit powdered
Fruit rot - blossoms and berries
Viruses - often infect within 2-3 years, spread by aphids, tarnished plant bugs, plants decline

VARIETIES

RS = red stele FZ = freezing FR = fresh P = processing PM = powdery mildew V = virus diseases

June bearers:

Totem - major variety grown in B.C., uniformly red inside, FZ, FR, P, most resistant to fruit rots, fair tolerance V, winter hardy

Hood - 4-5 days before Totem, good yield, sweet, red flesh, large. FR, P. Tolerant PM, susceptible to V, good winter tolerance

Sumas - 3-4 days before Totem, high yield, fruit susceptible to rots, V tolerant, RS resistant

Shuksan - 2-5 days later than Totem, good yield, large, bright red, good resistance to fruit rot, FR, FZ, P. RS resistant, more susceptible to V and PM than Totem, susceptible to verticillium and common leaf spot

Rainier - 4-5 days later than Totem, high quality, excellent flavour, bright red flesh, FR, FZ, P. More susceptible to root rots than Totem

Everbearers:

Fort Laramie - sweet, scarlet, firm, medium size

Quinault - fair flavour, crimson, light inside, poor for FZ, P; good FR

Day neutrals:

Tristar - high quality, good flavour, deep red, small-medium, firm, size decreases by end of second year

Hecker - good flavour and quality, dark reddish-orange, medium size

Selva - good flavour when ripe, attractive, firm, large

By Barbara Nyland of the BC Fruit Testers Association, compiled from:

Berry Production Guide 2002-3 BCMAFF; Home & Garden Pest Management Guide 2001 BCMAFF; Growing Strawberries in your Home Garden 1993, B. Strik Oregon State U Extension Service; UBC Guide to Gardening in British Columbia