

RASPBERRIES

Raspberries, in all their different colors - red, purple, yellow, black -are a close relative of the blackberry. They grow from perennial roots that produce mostly thorny stems called canes that grow tall and leafy the first year, then produce fruit the second summer. Some varieties, known as everbearing, can produce two crops on the same canes, one in the first fall and the second the next summer. Raspberry plants need cold winters, cool, moist spring weather, and a gradual transition to warmer summer temperatures.

Red raspberries are the most commonly grown. Yellow types are mutations of the red varieties. Black raspberries have blue-black fruit that is firmer and have more seeds than the more common varieties. Purple raspberries are crosses between black and red raspberries. Raspberries can grow very aggressively, and if not well tended or pruned properly, they can become weedy, overgrown, invasive, and problematic. However, with some care, they can be one of the most delicious and delightful additions to any garden.

Location: Plant in an open site in full sun, or a little late afternoon shade if you live in a hot summer climate. Pick a location with good soil drainage. Raspberries like cooler temperatures during late spring and early summer, so a heavy mulch will help maintain cooler soil and consistent moisture content.

Soil: Raspberries prefer deep, well-drained soil with a high organic matter content - the less clay the better. Sandy soils work fine, but avoid heavy clay soils if possible. Use heavy mulches to prevent weeds, keep the soil consistently moist, and maintain cooler soil temperatures. Plants are susceptible to iron chlorosis if planted in alkaline soils. Acidifying soil each year with sulfur will assist with fruit production.

Planting: Plant in early spring, after the last hard frost in cold climates. Make sure to position crowns about 1" below the surface when backfilling. Space plants 2-3 feet apart and all rows should be 8-10 feet apart. See attached bare root and container planting guide.

Water: Make sure to provide regular water throughout the growing season - usually a deep watering every 5-10 days depending on heat and sun exposure. Drip or soaker systems are preferable, but overhead sprinklers will work fine as well.

Fertilizer: Use a balanced fertilizer with micronutrients in early spring before the new growth begins to emerge to maintain consistent growth and fruit production.

We recommend Anderson's Best: That's All It Takes, Fertilome Fruit, Nut and Pecan food, or Natural Guard Organic Fruit and Citrus Fertilizer. Plan on 1 pound (about 2 cups) for a 30-foot row. A second, light application just after fruit set will help keep the plants growing and boost productivity. Some growers will apply a third application after harvest, to encourage good growth from new shoots that will be producing fruit next year. If iron chlorosis occurs, use a chelated iron supplement like EDDHA 6% Iron. Raspberries prefer a more acidic soil, so yearly or even bi-annual applications of sulfur can help maintain a lower pH and keep iron freely available to the plants.

Support: Raspberry canes are easier to grow if trained on supports, but they will grow adequately on their own with no supplementary support. Many growers set up a 5-6 foot tall trellis by sinking 3-4 inch square posts or steel t-posts every 10 feet, then attach 10 or 11 gauge smooth, galvanized wire between them at 3 feet and again at 5 feet high. For the 4 wire method, attach a crossbar at the 3 foot and 5 foot heights and space 2 wires, one on each side of the crossbar, about 6-8 inches apart. There is no need to tie the canes to the 4 wire system as the



canes grow between to 2 sets of wires. If you choose to use one wire at each height, the canes will need to be attached to the 2 wire trellis with some sort of fastener.

Pruning: Raspberry roots are perennial, meaning, once established, they will come back year after year. The canes, however, are mostly biennial - they grow the first year, and produce flowers and fruit the second, then they should be removed. When pruning raspberries, it is important to know the difference between one and two-year-old growth.

For June or summer bearing raspberries, leave the canes unpruned the first summer. In late fall or very early spring (when the canes are dormant), trim the first year's growth back to 4-5 feet tall. (See Illustration R1). Also, remove any weak, damaged or diseased canes. New growth will sprout from

the ground each spring to replace the canes that have already fruited. After harvest season, cut the two-year-old canes that just produced fruit, right to the ground, allowing the new growth to take its place.

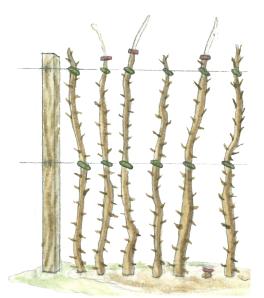
Ever bearing varieties fruit the first fall on the top third of the cane, then again in the second summer on the lower two-thirds of the cane. Cut the upper third of the cane back after harvest (See Illustration R2); cut out the lower two-thirds to the ground after the second harvest the next summer. (See Illustration R3). As an alternative, you can cut everbearing canes to the ground yearly in the fall after fruiting. You'll sacrifice the summer crop, but it encourages a heavier and extended harvest the next late summer and into fall.

Harvest & Yield: Pick fruit when berries are fully developed, have deep, mature color, and are sweet to the taste. When mature, the fruit will separate easily from the plant. Fruit can get crushed easily if piled too deep on top of each other, so harvest with a broad, shallow container to prevent damage. Anticipate 10-25 pounds of fruit per 10 feet of row depending on variety, location, and growing season.

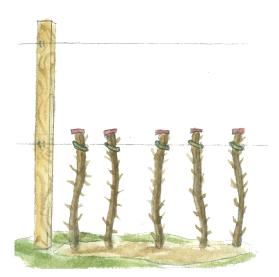
Pests: Multiple diseases attack raspberries and can severely damage your crop: botrytis, anthracnose, mildews, leaf spot, root rot and others. As needed, apply a general-purpose fungicide like Copper Soap from Natural Guard or Complete Disease Control from Monterey (both products are organic and very safe to use on edibles right up until harvest) to prevent and control disease outbreaks. The Complete Disease Control can also be applied as a soil drench in early spring and again once a month during the growing season to prevent many of the most damaging diseases (like verticillium) before they get established.

Aphids, mites, and cane borer are the most common insect pests that attack raspberries. For aphids and mites, avoid over watering, watch for telltale signs on the leaves of insect damage, and apply insecticides only as needed to control the most difficult of pests. Sevin, permethrin, and Spinosad Soap have the broadest range of control, but are the safest to use closer to harvest season.

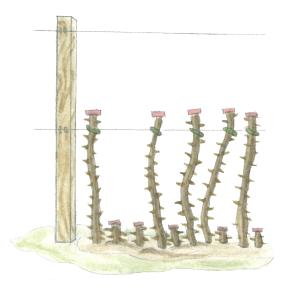
Borers can do the most amount of damage to raspberry canes and limit their production - both cane borer and crown borer are active at different times during the season and must be treated accordingly. An outbreak of crown borer can completely destroy whole patches of raspberries in one season. Treat crown borer just after bud break by drenching the soil around the canes with either Permethrin or Bifenthrin. Cane borer enter the canes in late spring or early summer around the time of fruit set and work their way upwards, damaging the circulatory system as they tunnel towards the tips, causing the tops to wilt and turn a dark green before drying up and turning brown. An application of Permethrin or Sevin just before bloom and again shortly after bloom will kill the adults as they lay eggs and as the larvae hatch. Once they are inside the canes, no insecticide will work on them. Trim off the top 12 inches and destroy the trimmings and the larvae inside.



R1 - Early Spring Thinning & Topping
Early in the second spring, before new
growth emerges, thin out any weak,
damaged or diseased canes and top the
vigorous canes back to 4-5 feet tall.



R2 - Fall Pruning of Everbearing RaspberriesAfter the Fall crop of everbearing Raspberries, cut off the top third of growth and leave the remaining canes for a summer crop next season.



R3 - Spring and Fall Pruning of Everbearing Raspberries

After the summer harvest, cut out the old canes that produced summer fruit to 1-2" above the soil line. Leave the new growth that emerged that spring and that will produce fruit the coming fall, then remove the top third of the canes after the fall harvest.

CANBY

Canby is the closest to a thornless, red raspberry you can get with only very occasional thorns. They have a robust raspberry flavor and a delicious fruity aroma. They are excellent fresh, cooked, or canned. Canby is summer bearing (June bearing) so your crop will come on all at once which will make it easier for canning purposes.

Zones: 3-8 Height: 4-6 feet Spacing: 3 feet Spread: 4 - 6 feet

Sun/Shade: Full/Part Sun **Pollinator:** Self-pollinating

Fruit: Large, firm, juicy, high capped,

bright red raspberries



CAROLINE

This is a highly productive raspberry that produces some of the largest red raspberries. Tolerant to root rot and has a high resistance to gray mold. These are very adaptable plants and can grow almost anywhere. Ripens as much as two weeks before Heritage and has very good yields. Everbearing.

Zones: 4 - 9 Height: 4 -6 feet Spacing: 3 feet Spread: 4 feet

Sun/Shade: Full/part Sun **Pollinator:** Self-pollinating

Fruit: Large, round, firm, juicy, red berries.



HERITAGE

Sets big, bright red berries on 1-year stems! Heritage is picked by gardeners for its flavor, firmness, and large fruit size. Simply mow canes after frost—they'll be back next year with extrasweet, juicy fruit. Tasty fresh, canned or frozen. Everbearing.

Zones: 4 - 8 Height: 4-6 feet Spacing: 3 feet Spread: 5 fet

Sun/Shade: Full/Part sun Pollinator: Self-pollinating Fruit: Large, dark red berries



FALL GOLD

These bright, yellow raspberries are large and very sweet making them a favorite to many growers. They are firm and more flavorful than any other everbearer available. Similar to red raspberries in all respects but color they are vigorous and extremely hardy. Fall Gold planted in the spring may yield berries as early as that same

fall. Everbearing

Hardiness: Zones 3-9

Height: Varies
Spacing: 3 feet
Sun/Shade: Full Sun
Pollinator: Self pollinating

Fruit: Yellow-Gold



POLANA

Released from Poland, Polana berries are highly productive, large, glossy in appearance, with good flavor. Canes are vigorous and grow shorter than those of Heritage. Midsummer sweetness. Polana yields a plethora of large, sweet, succulent berries on manageable plants. The glossy red conical berries are large and firm with zesty raspberry flavor. An excellent choice for all areas, especially locations with short picking seasons. Everbearing.

Zones: 3-9 Sun: Full Sun Height: 3-6 feet Spread: 2-3 feet

Pollinator: Self pollinating



PRELUDE

The Prelude starts the raspberry season. They have a rounded shape with a mild flavor. The berries are terrific fresh or frozen. They are moderately resistant to root rot and leaf spot. They have a tendency to hang towards the ground so many clusters can be missed if canes are not lifted. This is a hardy, reliable raspberry. Ripens

July-June - June Bearing

Zones: 4-8 Spacing: 3 Feet Sun: Full to partial Height: 4-5 Feet

Pollinator: Self pollinating





ROYALTY PURPLE

These are large, sweet raspberries that never fade even when cooked, frozen, or canned. They are very vigorous, cold tolerant, and resistant to insects. Royalty couples the size and vigor of purple raspberries with the quality of red. Ripens in August. June Bearing.

Zone: 4-8

Height: 4-5 Feet **Width:** 3-4 Feet

Sun: Full

Color: Purple-red Taste: Sweet



TULAMEEN

Tulameen is a high-yielding, very large fruit with a good sugar-acid balance, and a pure, strong, sweet raspberry flavor. Its fruit is one of the largest of red raspberries and has an outstanding appearance. It is a floricane (everbearing) fruiting raspberry that is extremely popular cultivar among fresh market growers. They are very robust and adaptable plants.

Zones: 4-7
Height: 5-6 Feet
Spacing: 2.5 Feet
Sun Level: Full
Color: Bright red
Taste: Good, delicious



ENCORE

Encore is an extremely winter-hardy late June bearing raspberry. The plants are adaptable and do well in varying soil conditions.

Zones: 4-7
Height: 5-6 Feet
Spacing: 2.5 Feet
Sun Level: Full
Color: Bright red
Taste: Good, delicious



BRISTOL BLACK

These canes produce large, glossy, firm, black fruit. Very vigorous, productive canes. For disease prevention, do not plant within 100 feet of other varieties. Everbearing variety.

Zones: 4-8

