

## General Growing Information from Nourse Farms

### Growing plants successfully requires five important elements:

- A sunny, weed-free location. Plants should have a minimum of a half-day of sun-light exposure for optimum growth. Use appropriate weeding techniques to keep plantings clean.
- Soil pH should be between 6.0-6.8 and organic matter of at least 2-3% for best growth. It is a good idea to sample your soil before planting to know your soil pH and native fertility. Contact your local Cooperative Extension office for information on taking soil samples and for assistance in interpreting test results.
- Crop Rotation: Avoid planting strawberries or raspberries in soils where previous crops have included strawberries, raspberries, potatoes, tomatoes, eggplants or peppers. These crops may harbor the soil pathogens Verticillium, Phytophthora and nematodes that may affect your new plants.
- Irrigation: Maintain proper moisture levels throughout the season, most importantly, during the establishment period.

Please note; if you are planting in raised beds it is imperative that you provide drip irrigation. Overhead irrigation is not sufficient to maintaining proper moisture. It is important to plant as early as possible in the spring. *Snow or an occasional frost will not hurt the newly planted plants* (except for green tissue culture plants—see tissue culture section). Natural spring rains are the best for getting your plants off to the best start. Irrigation, if available, will help with late spring plantings. Fall planting of small fruit plants is not recommended for the majority of the Northeast and the Midwest. With any planting method, two factors are critical: depth of planting and soil compression. Plants will fail to flourish if roots are too deep or too shallow and if the soil is not packed firmly around the roots.

- It is important to keep roots cool and moist, not soaked, until you plant. When your plants arrive, check the roots for moisture, lightly sprinkle them with water if needed, close the bag or box, and store in a cool place.

- **Plant as soon as possible after receipt of your plants.**

These plants are dormant, and a light frost will not hurt them. It is best to have the site prepared and ready to plant prior to receipt of your plants. If you are not able to plant right away, store your plants in a cool location. **DO NOT FREEZE!** Small orders can go in the crisper of your refrigerator. Large orders should go into a cooler set at 28-32° F. Do not store more than seven days, the sooner you plant the more successful you're planting.

## Avoid Common Planting Mistakes

### General Strawberries

- Plants will fail to flourish if roots are too deep or too shallow.
- Take care that soil is packed firmly around the plant roots.
- Do not plant near wild plants or near plants whose origins are unknown.
- Maintain adequate moisture levels throughout plant establishment.

**Water well 1-3 times a week, not every day!** • All plants need adequate soil moisture once planted. Water plants well, continue weekly watering (unless it rains) until your new plants begin growing. Maintain good moisture until plants are established.

**Do not water every day!**

- Avoid fertilizer burn. Hold off on fertilizing until plants are established.
- We advise you to plant all the roots of the plant without cutting the roots.

### Brambles

- Caution should be taken to prevent the roots from being planted too deep.
- Plant green tissue culture plants only after danger of frost has passed.
- Do not mulch brambles beyond the first year.
- Do not mow down summer-bearing raspberries; they fruit on 2 year-old canes.

## Raspberries, Blackberries & Tissue Culture Plants

Brambles have the same general requirements as strawberries- well-drained soil and full sun.

### Answers at a Glance

- Spacing: For raspberries, unless otherwise noted, 18"- 24" for reds and yellows; 20"- 24" for blacks. Blackberries should be planted 3'- 4' apart. Between rows, 8'- 12' is recommended depending on machinery.
- pH: 6.5 - 6.8
- Irrigation: Soak in water using Agri-gel™(root dip) for 1- 2 hours just prior to planting. Water thoroughly after planting. Maintain good moisture until plants are established, with 1"- 2" rainfall or equivalent each week throughout the season.
- Fertilization: Prior to planting, thoroughly incorporate 1/2 - 3/4 lb. of 10-10-10 per 100 sq. ft. Commercial growers should use 500 lbs. per acre. An additional 1 lb. of 10-10-10 per 100 sq. ft. can be applied again in July or August, and in following years, in the early spring.
- Weed Control: Regular cultivation around plants is necessary during the growing season. Because raspberry root systems are shallow, be careful not to cultivate more than an inch deep. Mulching during establishment can also help control weeds. Please consult a local extension service for recommendations on chemical controls.

**Planting Tip:** We suggest soaking the plants for up to 2 hours prior to planting and keep the plants in a pail of water as you plant. We also suggest the use of a product such as Agri-gel™ (root dip) to prevent roots from drying. When planting bare root plants, use a hoe to make a trench 2" deep the length of the bed. Spread roots along the bottom of the trench and cover immediately. Take care while planting to keep roots at the 2" level. This will promote suckers to develop from the roots. Set nursery mature and bare root canes 1-2 inches deeper than they were in the nursery. The soil line around the stem will indicate their nursery depth. Care should be taken that the hole is wide enough to allow the entire root system to be covered. Spread the roots out in the trench and set at about 2 inches deep. **Caution should be taken to prevent the roots from being planted too deep.** The fine root system should not be allowed to dry during the planting process. This can happen very quickly on a warm, spring day. **Special Note: New growth on raspberries may not appear for 4-6 weeks.** The cane portion of the plant may never leaf out. Check for root development by gently digging 2-3 inches out from the cane of the plant. **During this establishment period, maintain good soil moisture until plants are well established.** Do not water every day, 1-3 times per week is sufficient.

### Fertilization

For optimum growth and production, thoroughly incorporate light amounts of fertilizer prior to planting. Home gardeners should incorporate 1/2-3/4 lb. per 100 square feet of 10-10-10 fertilizer. Commercial growers should use 500 lbs. per acre of 10-10-10 or make applications according to soil tests. Additional applications may be necessary according to weather and/or leaching conditions.

### Trellises and Training

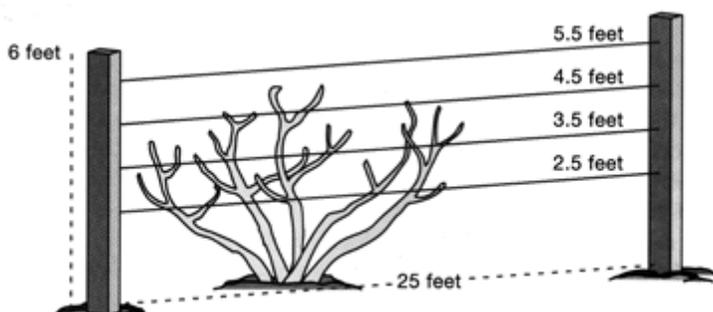
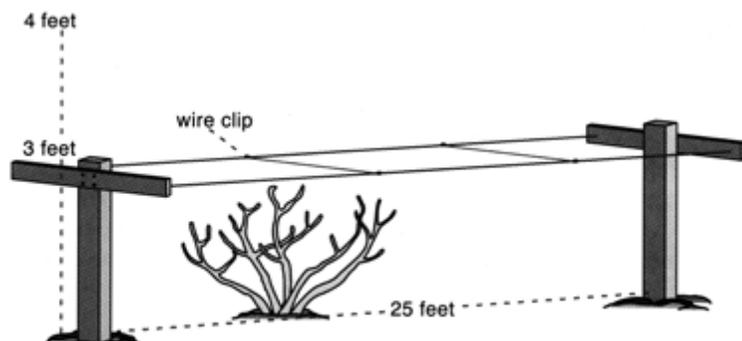
**We suggest that all brambles be supported by a trellis.** A trellis keeps canes upright and fruit off the ground, makes picking much easier, and maintains good aeration throughout the planting which helps with disease control.



#### DIAGRAM 1

Summer Raspberry Trellis  
Top wire 48"-52" tall

We have been successful using a T-bar trellis for raspberries that supports 2 wires 12" apart at 3' - 4' above the ground (Diagram 1). Some varieties which are taller such as Canby, Taylor, and Lauren might benefit from a T-trellis with two T-bars —one at 3' and one at 4'.



**DIAGRAM 2**

**Black Raspberry & Blackberry Trellis T-Trellis4-Wire**

Blackberries and black raspberries are best trained to a four-wire trellis (Diagram 2). The laterals are wrapped around the wires.

**Pruning**

Fall Bearing (Primocane Bearing, Ever Bearing)

These varieties can have two crops. The largest is borne in the late summer and in fall on the tips of canes that grew throughout the summer. A second crop is then carried lower on those same canes early the next summer. To have two crops, the planting must be pruned as a summer bearer (follow the summer bearer instructions). Most everbearers will produce the best crop if not allowed to fruit in early summer. To treat these plants as fallbearers, mow off all the canes after the canes have lost their leaves in very late fall, or *wait until early spring in colder areas*. Be sure to cut the canes as closely as possible to the soil surface, leaving as little stub as possible above the ground. The new, strong canes that grow again that summer will bear an abundant fall crop. Summer Bearing Raspberries These varieties carry one crop of berries on the over-wintering canes during the summer months. For best yields prune out the canes that carried fruit directly after harvest. Thin remaining new growth to 6-8 strong, healthy canes per running foot of row.

## Black Raspberries and Purple Raspberries

Black raspberries and purple raspberries break buds from their crown region in the hill and send out few, if any, suckers. Prune plants to 4-6 canes per hill. Both of these types of raspberry plants respond well to a process called tipping, where the 1-year old canes are pinched back as they reach a height of 5-6 feet in July through August. This practice encourages fruiting lateral branches to break from the main cane and keeps plant height in check. Laterals, in turn, can be headed back in the spring to 10-15 inches. Pinching back laterals prunes away winter damaged buds and can help increase berry size.

## Blackberries (Thornless & Semi-erect)

Some type of trellis support is recommended (see diagram 2). A 3-4 wire trellis works best for this type of plant. Tip 1st year canes when they reach 5 feet high in midsummer. Canes that fruited can be removed anytime after they have been harvested. Thin the remaining canes to 8 canes per running yard of row. If grown in a hedgerow, thin canes to 6-8 canes per hill. Wrap the laterals around the wires before Mid-September, before canes become woody and brittle.

Sometimes thornless blackberries are managed by tying them to a stake. In the staked-hill system, the canes are wrapped around a stake 2 inches in diameter, tied in 2 to 3 places, and cut off to the height of the stake at 5-6 feet above ground level. The plants are set 5-8 feet apart in every direction and restricted to a clump. This is an easy to system maintain and can be an attractive addition to the home garden landscape. A trellis or staking is highly

recommended for the semi-erect, trailing blackberries in order to keep the fruit clean and minimize cane breakage



## **Raspberry and Blackberry Plants**

- Caution should be taken to prevent the roots from being planted too deep.
- Avoid planting in soils where tomatoes, potatoes, peppers, eggplant, or raspberries have previously been. These crops may harbor soil pathogens, which may affect your new plants.
- Plant green tissue culture plants only after danger of frost has passed.
- Do not mulch brambles beyond the first year.
- Do not mow down summer-bearing raspberries; they fruit on 2 year-old canes.

## **General**

- Plants will fail to flourish if roots are too deep or too shallow.
- Take care that soil is packed firmly around the plant roots.
- Do not plant near wild plants, or near plants whose origins are unknown.
- Maintain adequate moisture levels throughout plant establishment. Water well 1–3 times a week, not every day.
- Avoid fertilizer burn. Hold off on fertilizing until plants are established.
- We advise you to plant all the roots of the plant without cutting the roots.