

Peach:

Sci. N. Prunus persica L.

Family N. Rosaceae

Introduction:

Peach, apricot, nectarine, plum, cherries, and almond are classified as (**Stone Fruit**) because of the single pit (stony seed) within their sweet, fleshy fruit. They are easy-care trees that require less pruning than apples or pears. Many people love to grow them as accent pieces due to their lovely flowers and delicious fruit.

Even today, many cultures, including Asian and Espanic, still generally prefer white peaches for their sweeter taste and lower acidity. Here in the United States however, many people prefer yellow peaches, which offer a hint of acidic flavor that balances the sweetness.

Peaches (*Prunus persica*). Trees planted in the spring can be expected to begin fruiting the following spring. When thinking about fruit production, keep in mind that these trees will not live and produce fruit in perpetuity. Peach trees in the home garden can generally be expected to produce fruit for 8 to 10 years when cared for well.

Spring is a good time to plant fruit trees, but choose your location wisely. Select a site that receives sunlight for most of the day. (When planted in shade or too close to a building, trees may not produce as much fruit). When buying your tree, ask about the characteristics of the rootstock, including: (hardiness, size, growth habit, soil requirements, disease resistance, and chill hours).

Peaches and most apricot and nectarine are **self-pollinating**, as are many varieties of plum and cherries, so a bountiful crop of fruit is possible even if you only have land for just one tree. Gorgeous spring flowers and attractive foliage qualify any of the stone fruit as an ornamental for the landscape, and since most stone fruit can be bought as both standard and dwarf trees, one can usually be found to fit almost any spot.

Common Terms:

When looking into peach varieties you may stumble across some terms to fruit and fruit trees.

Melting or Non-Melting Fruit — it refers to the fruit texture. Melting fruit is juicy, it drips, it's stringy, and it won't hold up well on the kitchen for a long period of time. Non-Melting fruits were typically used in canning and processing, but newer varieties are firm and juicy with a longer shelf life.

Freestone fruits: The pit or stone can separated from the fruit flesh easily.

Clingstone fruits: The pit or stone can't be separated from the fruit flesh easily.

Melting varieties can be either clingstone or freestone, but non-melting types are always clingstone.

Chill Hours — In order to bloom in spring, peach trees need a dormancy period in the winter with a certain number of chilling hour's nighttime temperatures between (0 and 45 °C). The exact number of chilling hours depends on the fruit tree variety, but it can be anywhere from a hundred to more than a thousand. You want to look for total accumulated chill hours as of January. If chill hours are not accumulating until later, can say February or even March, fruit will not be setting at the proper time. This can happen if there is an unusually warm winter.

Peach and Nectarine:

Peach and nectarine are the same fruit and share the same scientific name, *Prunus persica*. Their only difference lies in one gene that controls the fuzz. Whether you enjoy them fuzzy or not, you will agree that there is nothing like the taste and aroma of these fruit eaten straight from the tree.

Propagation and Planting:

To grow peaches, the first step is to choose a type that will fit with your climate. Most peach trees sold by nurseries are cultivars budded or grafted onto a suitable rootstock. Common rootstocks are 'Lovell Peach', 'Nemaguard Peach', and 'Citation'.

The rootstock provides hardiness, and budding is done to improve predictability of the fruit quality. Peach trees need full sun, and a layout that allows good natural air flow to assist the thermal environment for the tree. Peaches are planted in early winter. During the growth season, they need a regular and reliable supply of water, with higher amounts just before harvest.

Peaches need nitrogen-rich fertilizers more than other fruit trees. Without regular fertilizer supply, peach tree leaves start turning yellow or exhibit stunted growth. Blood meal, bone meal, and calcium ammonium nitrate are suitable fertilizers. The flowers on a peach tree are typically thinned out because if the full numbers of peaches mature on a branch, they are undersized and lack flavor. Fruits are thinned midway in the season by commercial growers. Fresh peaches are easily bruised, so do not store well. They are most flavorful when they ripen on the tree and are eaten the day of harvest.

Choosing and Preparing a Planting Site:

- 1. For the best fruit production, the tree should be planted in an area that receives full sun all day long. Morning sun is especially crucial because it helps to dry morning dew off the fruit.
- 2. Choose a site with well-drained, moderately fertile soil. Peach trees won't do well in areas where soil is compacted or remains consistently wet.
- 3. Soil pH should be on the slightly-acidic side, between (6 and 6.5).
- 4. Be sure to avoid planting in low areas, as cold air and frost can more easily settle there and affect the quality of your peaches.

Cultivation:

Peaches grow in a fairly limited range in dry, continental or temperate climates, since the trees have a **chilling requirement** that tropical or subtropical areas generally do not satisfy except at high altitudes. Most cultivars require **500** hours of chilling

around (0 to 10 °C). During the chilling period, key chemical reactions occur, but the plant appears dormant. Once the chilling period is fulfilled, the plant enters a second type of dormancy, the quiescence period (Eco-dormancy) dormancy due to unfavorable environmental conditions for growth, usually cold temperatures.

During quiescence, buds break and grow when sufficient warm weather favorable to growth is accumulated. Flower bud death begins to occur between (-15 and -25 °C) depending on (the cultivar and on the timing of the cold), with the buds becoming less cold tolerant in late winter. Another climate constraint is spring frost. The trees flower fairly early (in March in Western Europe), and the blossom is damaged or killed if temperatures drop below about (-4 °C). If the flowers are not fully open, though, they can tolerate a few degrees colder.

Climates with significant winter rainfall at temperatures below 16 °C are also unsuitable for peach cultivation, as the rain promotes peach leaf curl, which is the most serious fungal disease for peaches. Finally, summer heat is required to mature the crop, with mean temperatures of the hottest month between (20 and 30 °C). Typical peach cultivars begin bearing fruit in their third year, and these is varies by region.

Irrigation:

Planting a peach tree (Prunus persica) in the backyard or the home orchard is an investment in the future for up to **20 years**. Although peach trees are relatively short-lived, an abundance of nutritious fruit is produced by peach trees when specific cultural practices are observed. Irrigation is of particular importance, as adequate moisture can increase fruit size and promote tree growth.

Common Peach Tree Overwatering Problems:

Over watering easily damages peach trees' health, and may even kill the trees. Too much watering or incessant rains can lead to brown rot, a type of fungus. You

can spray peach trees with fungicide even during the spring blooming season to prevent it and the rainier it is, the more spray is necessary. When first planting peach trees, overwatering can also bog down air spaces in the soil, killing trees that are not yet established. First-year trees only need 5 to 10 gallons of water each week during the summer growing season.