

APRICOT

Sci.N: Prunus armeniaca L.

Family N: Rosaceae

Origin and distribution:

Apricot, a drupe native of Armenia, though known to the Chinese since 2000 to 3000 B.C., is also grown in the warmer regions of the Himalayas. The Himalayan regions full of apricot trees of inferior quality growing in semi wild state. These are for value of the seeds because the kernel is eaten like almonds. The trees may be medium to large in size.

As a Mediterranean crop, apricots grow well where spring and summer are warm and plenty of water is available. Apricots are stone fruits, similar to plums, cherries, almond and peaches. They can be grown from that stone or pit, but when we use the stone of these trees for propagation, when they grow and it produce fruit not true to the parent.

Description:

The apricot is a small tree, 8-12 m (26-39 ft) tall, with a trunk up to 40 cm (16 in) in diameter and a dense, spreading canopy. The leaves are ovate, 5-9 cm (2.0-3.5 in) long, and 4-8 cm (1.6-3.1 in) wide, with a rounded base, a pointed tip, and a finely serrated margin. The flowers are 2-4.5 cm (0.8-1.8 in) in diameter, with five white to pinkish petals; they are produced singly or in pairs in early spring before the leaves. The fruit is a drupe similar to a small peach, 1.5-2.5 cm (0.6-1.0 in) diameter (larger in some modern cultivars), from yellow to orange, often tinged red on the side most exposed to the sun; its surface can be smooth (botanically described as: glabrous) or velvety with very short hairs (botanically: pubescent). The flesh is usually firm and not very juicy. Its taste can range from sweet to tart. The single seed is enclosed in a hard, stony shell, often called a "stone" or "kernel", with a grainy, smooth texture except for three ridges running down one side.



Apricot trees are small and spreading, with broad ovate leaves that have pointed tips. The leaves are bright green in colour and are held erect on the twigs. The self-pollinated flowers are white in full bloom and borne singly or doubly at a node on very short stems.

Cultivation and uses:

History:

The origin of the apricot is disputed; it was known in <u>Armenia</u> during ancient times, and has been cultivated there for so long that it is often thought to have originated there.^[7] An archaeological excavation at <u>Garni</u> in Armenia found apricot seeds in a <u>Chalcolithic</u>-era site.^[8] Its scientific name *Prunus armeniaca* (Armenian plum) derives from that assumption. For example, Belgian <u>arborist</u> Baron de Poerderlé, writing in the 1770s, asserted, "*Cet arbre tire son nom de l'Arménie, province d'Asie, d'où il est originaire et d'où il fut porté en Europe* ..." ("this tree takes its name from Armenia, province of Asia, where it is native, and whence it was brought to Europe ...").^[9]A large variety of apricots, around 50, are grown in Armenia today.^[7]

Apricots have been cultivated in <u>Persia</u> since antiquity, and dried ones were an important commodity on Persian trade routes. Apricots remain an important fruit in modern-day <u>Iran</u>.^[citation needed]

Egyptians usually dry apricots, add sweetener, and then use them to make a drink called *amar al-dīn*.^[citation needed]

In England during the 17th century, apricot oil was used in <u>herbalism</u> treatments intended to act against tumors, swelling, and <u>ulcers</u>.^[14]

In the 17th century, <u>English settlers</u> brought the apricot to the <u>English colonies</u> <u>in the New World</u>. Most of modern American production of apricots comes from the seedlings carried to the West Coast by <u>Spanish</u> missionaries. Almost all U.S. commercial production is in <u>California</u>, with some in <u>Washington</u> and <u>Utah</u>.^[15]

Cultivation practices:

Apricots have a chilling requirement of 300 to 900 <u>chilling units</u>. A dry climate is good for fruit maturation. The tree is slightly more cold-hardy than the <u>peach</u>,



Deciduous fruit production 6th lect. Theory – 2022 / Horticulture Dept.

tolerating winter temperatures as cold as $-30 \,^{\circ}\text{C}$ ($-22 \,^{\circ}\text{F}$) or lower if healthy. They are hardy in <u>USDA zones</u> 5 through 8. A limiting factor in apricot culture is spring <u>frosts</u>: They tend to flower very early (in early March in western Europe), meaning spring frost can kill the flowers. Furthermore, the trees are sensitive to temperature changes during the winter season. In China, winters can be very cold, but temperatures tend to be more stable than in <u>Europe</u> and especially <u>North America</u>, where large temperature swings can occur in winter. <u>Hybridization</u> with the closely related <u>Prunus sibirica</u> (Siberian apricot; hardy to $-50 \,^{\circ}\text{C}$ ($-58 \,^{\circ}\text{F}$) but with less palatable fruit) offers options for breeding more cold-tolerant plants.^[16] They prefer well-drained soils with a pH of 6.0 to 7.0.

Apricot cultivars are usually <u>grafted</u> onto plum or peach rootstocks. The cultivar <u>scion</u> provides the fruit characteristics, such as flavour and size, but the <u>rootstock</u> provides the growth characteristics of the plant. Some of the more popular US apricot cultivars are 'Blenheim', 'Wenatchee Moorpark', 'Tilton', and 'Perfection'. Some apricot cultivars are self-compatible, so do not require pollinizer trees; others are not: 'Moongold' and 'Sungold', for example, must be planted in pairs so they can pollinate each other.

Hybridisors have created what is known as a "black apricot" or "purple apricot", (*Prunus dasycarpa*), a hybrid of an apricot and the cherry plum (*Prunus cerasifera*). Other apricot–plum hybrids are variously called <u>plumcots</u>, <u>apriplums</u>, <u>pluots</u>, or <u>apriums</u>.

Nutrition:

In a 100-gram amount, raw apricots supply 48 <u>Calories</u> and are composed of 11% <u>carbohydrates</u>, 1% <u>protein</u>, less than 1% <u>fat</u>, and 86% water (table). Raw apricots are a moderate source of <u>vitamin A</u> and <u>vitamin C</u> (12% of the <u>Daily</u> <u>Value</u> each).

Dried apricots[edit]

Main article: Dried apricot

Dried apricots are a type of traditional dried fruit. The world's largest producer of dried apricots is Turkey.^[22] When treated with sulfur dioxide (E220), the color is vivid orange. Organic fruit not treated with sulfur dioxide is darker in color and has a coarser texture. When apricots are dried, the relative concentration of nutrients is increased, with vitamin A, vitamin E, potassium, and iron having Daily Values above 25% (table).



Pollination:

Apricot are generally self-fruitful but at the flowering time bees and insects are less active and therefore fully open flowers may be dusted with a camel hair brush to insure pollination and setting of fruits.

Aside from the need for hand pollination all apricots are self compatible so there are no other pollination issues. Any variety can grow and fruit on it's own without the need for a pollinating partner which is so often the case with other types of fruit tree.

Additional watering

Is always beneficial as Apricots hate being dry at the roots. If you can be prepared to undertake a regular watering regime during the growing season it will encourage healthy growth and strength in the tree which will make it less likely to succumb to illness and die back. Fruiting will also be encouraged and the size of the fruits will be greater as well as the weight of the crop. Soak the soil with a hose, applied at the roots, in early Morning. May to September is the key period to apply extra irrigation. You may wish to set up an automatic watering system that will ensure you can maintain a regular supply if water without giving yourself a lot of extra work.

Planting Apricots

Prepare a hole large enough to take the roots. Apricots are vigorous growers and you may find the root system larger than that of other tress. Set the tree to the same depth as it was at the nursery previously – examination of the stem should reveal the soil mark still identifiable and this will tell you how deeply it was set in the ground before. In any event the grafting point should sit above the soil level and the roots buried in not less than 2" of soil. Firm in very well. Even if it is winter time water the tree in lightly. This settles the soil around the roots and the weight of the soil will then force out any air pockets that may have been around the roots; you want the soil to be in close contact with the roots below ground. You can at this point provide an additional mulch up to 2" deep around the trunk of the tree. Composted or finely ground bark chippings are good, as is sawdust or very well rotted manure. Mulching is good for all fruit trees but it is particularly valuable to Apricots because not only does it protect them from drying out in Spring [to which Apricots are more prone than other trees] it also helps insulate the roots from severe frost. So at whatever time you are planting your trees a good mulch is invaluable straight after planting.

Soil preparation for Apricot trees

The apricot favours well drained soil but doesn't like to be too dry especially in the summer. Providing a happy medium between the two will be key to success and it is up to you to judge the type of soil you already have and influence the structure as much as you can. Too light or sandy then pep it up with lots and lots of organic rich material. Too weighty or sluggish then alleviate it with lots of grit, sharp sand and leafmould.

The soil should be well cultivated and friable; double dig it over if it has not been cultivated before. Clear away all perennial weeds because the last thing you want is added competition from them when your trees are in settled, and growing. If possible prepare the soil in the late Summer or early Autumn before planting that Winter. This isn't an essential and won't be practical if you think of planting during the summer from



container grown stock, but it is beneficial especially in eradicating weed growth because you can rid the first crop and then wait for the second growth phase [which so often happens] and remove those as well and then your area will be really nice and clean.Plus the soil you have dug over will have settled and become more firable. Add some fertilizer to get them off to a really good start – growmore is good and the trees also seem to favour a light dressing of nitro-chalk.

THE ULTIMATE GUIDE TO GROWING APRICOTS

Apricots must be the most desirable of all the fruit trees to grow and often appear as number 1 one of the wish list. But they are also unquestionably the least hardy of all the fruit trees that may be grown in the UK so planting Apricot trees requires some thought and planning. Which is not to say they don't take frost, they most certainly do but severe conditions and prolonged winter cold will se them back or may even lead to death.

Another important reason to afford your tree the most sheltered aspect you have is that of inscets and pollination. Apricots are very early flowering, infact they are the first of all the fruit trees to begin to open their blossoms, by far. The pretty pale pink flowers appear on the naked branches often at the end of February or early March and of course the weather is far too unpredictable then to offer reliable pollination and this is the most common cause of poor fruit set or inadequate pollination or frost damage to the flowers, or both. There tends to be a dearth of flying insects around that early so be prepared to hand pollinate some flower trusses, go around from one flower to another dabbing pollen with a soft haired brush. And if possible protect the flowers from frosts with horticultural fleece.

So where to site your precious apricot tree? If you live in London or the South of the country or the west of Scotland probably you will be fortunate enough to grow your Apricot as a free standing bush tree. This is certainly the easiest method and the heaviest yields will be obtainable. But elsewhere you should be looking at a sunny south or west facing wall or fence [other aspects are unsuitable] or you can think about growing on in a container on a sunny patio or in a sheltered corner. You can of course all cultivate Apricots in a greenhouse. The good thing about container growing is that it often induces earlier fruiting as well!

Apricots aren't troubled greatly by disease but they can sometimes succumb to unknown causes. They get dieback which becomes more progressive or they just suddenly 'keel over' and die. Which isn't meant to be off putting to your dream of growing and harvesting your own apricots. But it should serve as a useful pointer in giving your trees the best possible start and the best possible position because this will make it much less likely to happen as if the trees are healthy, growing strongly and well looked after they will be better able to withstand attacks from unknown causes.







