FIVE FRUITS
by Françoise Sergy

Plums

Plums are a stone fruit, alongside cherries, apricots, peaches / nectarines and almonds: all Prunus species, part of the rose family, the Rosaceae. They originated in Central Asia, with secondary centres in Eastern Asia, Europe and North America. Plums have the greatest diversity within the Prunus genus: there are between 19 and 40 wild plum species, depending on taxonomists views. Plums have been domesticated on all three continents. The European plum, Prunus domestica and the Japanese plum, Prunus salicina, originally from China, are the main commercial species from which many cultivars descend from. Neither species have wild progenitors: The ancestor of P. domestica is believed to be P. cerasifera, the cherry plum, widely planted today as an ornamental tree. The American plum, Prunus americana from North America, is also cultivated, traditionally by Native Americans. Botanically speaking, all stone fruits are drupes: fleshy fruits with thin skin and a central hard stone containing a seed.

Usually a reliable fruit crop, plums have a long cultivation and culinary tradition. Archeological evidence of their use has been found in Europe dating from Neolithic times. Plums are eaten fresh, tinned, dried, cooked, in preserves and desserts, and as an alcoholic drink, the latter particularly in Eastern Europe. By the time of Elizabeth I in Britain, dried plums had become so popular that the term “plum” referred to all types of dried fruits, hence the famous “plum pudding”, which now rarely contains any plums. Plums are well known for their nutritional benefits, being rich in many important vitamins, micronutrients and fibres, and their role in easing constipation is well documented. A very aromatic plum kernel oil is also made from the seed, used both as a culinary ingredient and a cosmetic product.

There are many types of plums, with many different shapes, colours and attributes, more so than other stone fruits. Dessert plums are juicy, have higher sugar content and a rich flavour, combining both sweetness and sharpness. Cooking plums are often less sweet but they respond well to being heated and processed. Other plums, such as Victoria, are suitable for both uses. Some of the main varieties are:

Victoria - A traditional English variety. The fruit is oval, orangey red or pale purple, sometimes mottled. The flesh is yellow. The stone is semi-clinging but fairly easy to remove from the flesh. It is a dual-purpose plum for both dessert and culinary use, with an intermediate sugar content. Its flavour has a good balance between sweetness and sharpness. Named after Queen Victoria, it is the most popular local plum in the UK, known for its heavy cropping and attractive colour, although it can be somewhat lacking in flavour.

Greengage - A sub-family of the European plums, gages are smaller and rounder, usually green or yellow. Originally from Italy, they have been grown in France (where they are known as Reine Claude) since the Middle Ages, coming to Britain in the 18th century. They are some of the best dessert plums, high in sugar, with a flesh both dense and juicy, and an ideal combination of sweetness and subtle sharpness. They are best suited to a slightly milder climate, therefore can be harder to find growing in Britain, unfortunately.

Damson - A sub-species, P. domestica ssp. insititia, is a cooking plum, often used for making jam or gin. Both high in sugar and very tart, the fruit is fairly small, with an oval shape slightly pointed at one end, its colour varying from dark blue to black. The stone clings to the flesh, so is usually removed only after cooking. Damsons probably originated from Britain. As well as being grown for their fruits, the trees are also planted in hedgerows or as windbreaks. Damsons are slow croppers. According to an ancient rhyme: “He who plants plums, plants for his sons. He who plants damsons, plants for his grandsons.”

Mirabelle - Varieties descended from the cherry plum, mirabelles are small round plums, dark yellow or red in colour, originally from and almost exclusively grown in the Lorraine region of North-East France. They are used for making pies, preserves, wine and liquor, but can also be eaten fresh. Their stones separate easily from the flesh. The longest *tarte aux mirabelles* in the world was made in 2006 in Nancy, France, measuring 206.31 metres or 4000 portions!

Satsuma plum - These varieties come from the Japanese plum, P. salicina, originally from China. Having been cultivated in Japan for a very long time, they reached California in the 19th century and most of the modern cultivars were bred there. The trees require a milder climate and are not grown in Britain. They are now the main plums sold fresh in UK supermarkets (imported from California, Chile, Southern Europe), largely thanks to their long storage and shelf life. They are large plums, with a round body, firm flesh, dark red skin and often very little taste, although fruits picked ripe from the tree may tell a different story...

The European plums harvest is short and they do not store well. So these fruits are only available in summer, whilst the Japanese plums season is long and they are often picked unripe to be stored and sold for several weeks. There is a price to pay (lack of taste) for this convenience. It is sad to think that so few people living in cities now have the chance of discovering the truly amazing flavour of a locally grown, ripe plum.

Cherries

Cherries are a stone fruit, alongside plums, apricots, peaches / nectarines and almonds (all Prunus species, part of the rose family, the Rosaceae). Almonds are grown purely for their seed, not their fruit. Botanically speaking, all stone fruits are drupes: fleshy fruits with thin skin and a central hard stone containing a seed.

Prunus species originated in Central Asia, with secondary centres in Eastern Asia, Europe and North America. The introduction of new stone fruits into the Mediterranean basin dates from the times of Alexander the Great (356-323 BC), who conquered Persia, then continued eastwards up to the Indus river and northwestern India. Greek settlements along the journey established parts of the trade route which became known as the Silk Road. This trade brought fruits widely cultivated in Central Asia to the Mediterranean. As a result, their Latin names often describe not where they are originally from but where the traders found them. For example, the first description of a cherry was made by the Greek philosopher Theophrastus (ca 300 BC), who named it after the town of Kerasous (now Giresun on the Turkish Black Sea), hence P. cerasus and later cherise in old French and cherry in English. However, it may be that the town was actually named after the fruit, not the other way round, and one of the cherry species (the sweet cherry) is also native to Europe. Likewise, peaches originate from China but were cultivated in Persia, hence the Latin name Prunus persica.

Cherries are divided into three main groups: the sweet cherry (Prunus avium), the ground cherry (P. fruticosa) and the sour cherry (P. cerasus), which is believed to be a natural hybrid between the first two species, where they came into contact with each other a very long time ago. The ground cherry is a shrub with sour fruits, now mainly used in hedgerows and habitat restoration. There is archeological evidence of wild sweet cherries being eaten about 5000 to 4000 BC in Switzerland, France, Italy, Hungary, Germany and England. So, despite the fruit often being considered somewhat exotic in Britain, it is actually a native tree! This reputation is largely due to cherries being an expensive fruit, both to buy and to produce commercially, and they are very seasonal. Lucky those who can taste their own home or allotment grown fruits! I am sure you will agree that eating a cherry straight from the tree is one of the biggest pleasures to be had in life...

Another group of cherry trees, the flowering cherries, famed for their beautiful flowers and ornamental value, are planted in gardens and parks all over the world, particularly in the Far East. Many of these cultivars originate from the Japanese cherry (P. serrulata) but also from the sweet cherry. Their fruits are small and unpalatable.

Edible cherries have changed little in appearance since Roman times. Their colour varies from yellow to red to black. Sweet cherries are mainly eaten fresh. Sour cherries are unpalatable but ideal for canning, freezing, cooking, drying, making jams and brandy. A traditional cherry liquor called Kirsch is very popular in Germany and Switzerland, where it is added to savoury dishes as well as desserts. The sour cherries cultivation became popular in the UK during the 16th century and the reign of Henry VIII. They remained popular until the Second World War but are now much less grown and the Morello cultivar is practically the only one still available. Hybrids between sweet and sour cherries are called duke cherries, although they are not very common nowadays. They are described as an all-purpose cherry.

Cherry trees are a demanding crop, particularly those grown for the fresh fruits market, as they are more prone to cultivation problems than sour cherries and their fruits must look perfect to attract customers. They suffer from many pests and diseases and are very prone to damage from hail storms, as well as to splitting after heavy rain. The developing fruits must be protected throughout spring and early summer, including from birds, who love them. Added to this, a fruit fly originally from Asia has recently been found in the UK, the Spotted Wing Drosophila, which is now causing havoc in unprotected cherry orchards and gardens, where it can destroy the entire crop. Unlike the native common fruit fly which only targets ripe fruits, the Spotted Wing Drosophila is attracted to underripe fruits. Orchards must be protected with expensive high tunnel structures with movable covers and netting. Once the fruits are picked, the covers must be removed, because the trees do not grow well if left covered the whole year round. Home growers can use sleeves wrapped around individual branches, a time consuming job. Pesticides are also widely used to control this pest and others.

Harvesting sweet cherries for the fresh fruits market is done by hand, a laborious job which often represents more than half of the total cost of production. In the past in the UK, the cherry season lasted only for a few weeks in summer but the arrival of new cultivars has now extended it from June to September. Once ripe, cherries do not last and so cannot be stored for long. The fresh fruits available out of season in our supermarkets are therefore flown in from the southern hemisphere, with a huge air miles baggage attached as a consequence. Because of the trees susceptibilities to pests and diseases, growing cherries organically is very challenging. However, the arrival of new, more resistant cultivars is an encouraging development.

Raspberries

Raspberries are closely related to blackberries (brambles). They share the same genus name: Rubus, a member of the rose family, the Rosaceae. There are hundreds of different Rubus species, most of them classified as brambles or blackberries, only a few as raspberries. They are native to Europe, particularly in Northern Europe, as well as to Asia and America, some no doubt descended from common ancestors. Rubus idaeus is the European red raspberry. North America's raspberries include Rubus strigosus (American red raspberry) and Rubus occidentalis (black raspberry, which tastes differently from either a raspberry or a blackberry). Many of our cultivated varieties are hybrids derived from the European and American red raspberries. Crosses between raspberries and blackberries have produced the loganberry (Rubus ursinus x Rubus idaeus, bred in California) and the tayberry (Rubus fruticosus x Rubus idaeus, bred in Scotland), among other hybrid fruits.

The first records of the European raspberry date from the time of Pliny the Elder, a Roman author and naturalist who described the fruit as coming from Mont Ida (in Greek mythology there are two mountains baring this name, one in Crete and the other in Anatolia, now Turkey), hence the Latin name Rubus idaeus. The english name raspberry is derived either from *raspise* "a sweet rose-coloured wine" (15th century), from *raspoie* of Germanic origin meaning "thicket", or from Old English *rasp* "a rough berry". The plant was not cultivated much in Britain until the 16th century, presumably because it was so common growing wild and easily picked for free.

The raspberry berry is actually an aggregate fruit, consisting of many drupelets (small drupes) produced from one single flower: A drupelet is a tiny single stone fruit (the pip) surrounded by fleshy tissue. Each berry contains many pips, which are large inside their drupelets, making it one of the fruits with the highest amount of fibres: 20% by weight. The fruit is also rich in vitamins, nutrients, antioxidants and anti-inflammatory substances such as the plant pigments flavonoids. Raspberries are considered one of the most healthy berries to include in our diet (one of the so called "super foods", alongside blueberries).

A raspberry plant produces several new shoots each year called canes (a type of suckers), growing from an extensive root system which can rapidly get out of bound in a garden or allotment if allowed to do so. Most of the cultivars are thorny, like roses and blackberries (technically speaking the thorns are prickles). There are two main types of canes: the summer varieties, which are biennial and grow straight shoots in the first year, with leaves only, before side shoots with flowers and fruits develop the second year; and the autumn raspberries which flower and fruit every year. The fruits can be red, purple or yellow, depending on the cultivars. They are absolutely delicious eaten fresh from the plant on a hot summer's day, with the sun warming the berries and enhancing their flavour. Older folks often have fond memories of picking them as children, either at home or when fruit picking on a farm, carefully navigating between the thorns in search of the most colourful and tasty berries. Nowadays, for those of us who live in or near the countryside, wild raspberries can fairly easily be found growing in woodland clearings, in soft shade. However, their fruits often lack the sweetness of the bought or home grown cultivars.

Fresh raspberries are now much more available in supermarkets and their taste has improved, particularly for those grown in the UK and harvested when they are ripe. Eating berries is now very popular (for those who can afford it) and their commercial production in the UK has increased to reflect this trend. The fruits are expensive to produce: They are very delicate, require careful hand picking and they have a very short shelf life. Those imported from outside Europe, such as the Moroccan raspberries available in January, will have been air freighted into the country. Robot harvesters are being researched and trialled but they will not replace human eyes and hands entirely. In the past, most of our raspberries were grown in Scotland, where the cool climate and long summer days are ideal conditions. Scotland is still an important producer but they are now grown throughout Britain. Innovative cultivation methods, as well as the breeding of new cultivars, have ensured a much longer local harvest season, from very early summer to late November. Altogether, berries (including raspberries) now make up 22% of all the fruits sold in this country. In 2018, the UK berry industry was worth over £1.2 billion. European raspberries imports mainly come from Spain and Poland.

Raspberries for the fresh fruits market are now often grown in pots in polytunnels, where they are dependant on irrigation and fertilisers. Also, their pollination is often done by bees bought in for the purpose, including by non-native bees which may have in the past introduced new pests and diseases to the wild population. These raspberries are very productive for a few years, after which they are removed and replaced. Such growing methods use a lot of resources, energy and labour but the results are high yields of beautiful, premium rated fruits, often tasty too! The traditional cultivation in open fields is now mostly reserved for making jams and juices. It is a much more sustainable method but one less suited to the fresh fruits market.

Quinces

Quinces originate from Central and Western Asia. From its cultivation in Mesopotamia 5000 years ago, the tree moved East and West through ancient trade routes. Named Cydonia oblonga, it is a member of the rose family (Rosaceae) and is closely related to apples and pears. Pear cultivars are often grafted onto quince rootstock in order to limit the pear's natural vigour and size. They all have pome fruits: The ovary and seeds form the core of the fruit, surrounded by a fleshy tissue. This soft flesh is the part that we eat and it has become much larger over centuries of breeding. Quinces grown in the Mediterranean and other warmer climates are often sweet enough to eat straight from the tree, whilst those grown in Europe never fully ripen on the tree and must be cooked first in order to unlock their sweetness, powerful aroma and delicious taste.

As well as their amazing golden fruit, full of character and intensely aromatic, quinces produce beautiful flowers in the spring, opening from a delicately twisted bud, with large white and pink petals set amongst the young grey-green leaves, which are covered in soft pale hairs. Trees live for a long time, gradually becoming gnarled and a bit mad in appearance, if you are lucky enough to spot one lost amongst an old orchard or hedgerow. Although once commonly planted, quinces have never been as popular as apples and pears, particularly commercially. Instead, one or two trees would traditionally have been planted amongst the other fruits. Rare are the true quince orchards and I was lucky to be able to photograph them in two locations: at the National Fruit Collection in Kent and on the farm of the preserve maker Wilkin & Sons in Essex.

The Latin name Cydonia comes from Kydonia, an ancient city-state on the island of Crete. The english name comes from Cotoneum, quince's first Latin name, later becoming cooin in Old French and quoyn in Old English (now quince). Known by the Greeks as the "Golden Apple", quinces were probably more popular in ancient times than apples and were credited with many mythical and medicinal powers, including, at various times, as an aid to digestion, an aphrodisiac and as protection against the Black Plague. In Greek mythology, the quince was known as Aphrodite's fruit, a symbol of love and fertility - could this be due to the voluptuous curves and sexy shape of the fruit, I wonder? It was believed that a new tree grew wherever she walked and since this time, quinces have been associated with wedding ceremonies and fertility traditions.

The fruit was first recorded in England around 1275, when Edward I had some trees planted at the Tower of London. They were well known by the 14th century, with cookery books including recipes for quince pies and preserves, and featured in Britain more prominently than apples until the end of the 19th century, although less so in Scotland. As quinces don't ripen fully in our climate, people must have assumed that they came from warmer regions, whilst in fact, they are native to areas of Central Asia with much colder winters, as well as long hot summers. However, to store well, quinces must be picked before the risk of frost.

An early use of the fruit, now ended, was to make marmalade. The Romans had discovered that quinces are naturally rich in pectin, which allows fruits to set when cooked and made into jam or jelly. The first recipe for a preserve arrived in Britain in the 16th century from the Continent, via the Portuguese who called it marmelada, from the Portuguese word for quince: marmelo. The preserve was made only with quinces then and was very expensive, because it contained added sugar (a luxury at the time). In the 18th century, the price of sugar dropped and over time citrus fruits (also naturally high in pectin) replaced quinces, although the name marmalade remained. By the 19th century, more soft fruits were grown and made into jams, such as strawberries, and quinces began to lose their status, with at first surplus fruits being turned into wine, then the trees becoming rarer in orchards. By the 20th century, people found them too much bother (they have to be cooked) and the traditions of preserving fresh fruits into jams and other conserves declined in the home. Quinces acquired an old fashioned reputation, almost totally disappearing from the British diet. They can now be difficult to find in supermarkets, even when in season in the autumn and winter, and they are likely to have been imported from Turkey or Morocco. For locally grown fruits, you'll have to try a farmers market.

The current downfall of quinces is a great shame, in my view! The fruits, either cooked on their own or added to dishes, both savoury and sweet, have an aroma and taste unrivalled by any other. Their natural astringency is tempered by cooking and they introduce a delicious flavour when added to apple and pear dishes. They are also ideally suited combined with meat, game and cheese, either as slices or a sauce, offering the perfect counterpoint to the fattiness of the meat. However, the dish most people will associate with the fruit, apart from quince jelly, is quince cheese, known in Spain as membrillo: a solid paste made from quince, sugar and sometimes lemon juice, which will last almost indefinitely and is traditionally eaten with cheese. For people interested in learning more about quinces, how to grow them and cook with them, I recommend "Quinces" by Jane McMorland Hunter and Sue Dunster, from The English Kitchen (2014).

Mulberries

Mulberries are the fruits of the black mulberry tree: Morus nigra, from the Moraceae, a family which also includes figs. Another tree, the white mulberry (Morus alba) is the traditional food source of the silkworm and is grown for the production of silk. However, its fruits are in no way as tasty as those of the black mulberry, so don't be fooled if you come across some dried white mulberries for sale...

Fresh black mulberries will never be sold in supermarkets, despite being one of the most delicious fruits on earth. The reason? They break down into a juicy mess as soon as you touch them and will rapidly cover you in purple sticky goo. They then start going off after only a few days. So there is no way that they could survive picking, storing and transportation. The only way to enjoy them, apart from in preserves or juices, is to have a tree nearby and a relaxed attitude (plus very rough clothes). I remember seeing a tree in my local park, before I knew what it was, and wondering why the ground underneath was completely stained pinky purple. The fruits had mostly disappeared, so what was causing this extraordinary sight? Years later, I realised the tree was a black mulberry. I am now eagerly waiting for the same spectacle to take place underneath our tree, now fifteen years old, but I will have to be patient for a good few more years... Such a prolific harvest is not about to happen yet. There are plants that make you wait years for their bounty, and the mulberry is one of them, but in this case, it is worth it!

Native to southwestern Asia (now Turkey, Iran, Syria, the Caucasus), the black mulberry is fairly long lived, although this is debated as its appearance may make it seem older than it really is. Although not native, the tree is ideally suited to our moist and cool climate, unlike the white mulberry which needs sunnier and drier conditions. The tree often grows at an angle, acquiring incredibly gnarled branches and bumpy shapes, sometimes ending up dramatically torn or growing along the ground. It often needs to be propped up to stay more or less upright. It is a slow cropper until it reaches a mature age. It can occasionally change sex, a phenomenon which a few plants are known to be able to do: Mulberries are usually "monoecious", baring both male and female flowers on the same tree and being self-fertile. In old age however, they can become "dioecious", producing only either male or female flowers. In this case another tree nearby with flowers of the opposite sex will be needed for the female flowers to produce fruits. The berries are "multiple fruits", with their joined up multiple flowers and fleshy drupelets (see raspberries) ending up forming a single berry.

Both black and white mulberries have a long tradition of being used in Chinese and Ayurvedic Medicine. Pliny the Elder, the Roman author and naturalist, mentions the tree's useful properties and the famous 1597 Herbal of John Gerard describes its bark as a vermifuge (dewormer). The fruits are rich in nutrients, particularly vitamin C, fibre and polyphenols, plant-based micronutrients known for their antioxidant and anti-inflammatory benefits. So mulberries are another type of "super-food", if only you could get hold of some...

Black mulberries were valued by the Romans for their fruits and their shade in summer. Mulberry seeds have been found in excavations of Roman settlements in London, indicating that the tree was brought to Britain from southern Europe before the 5th century AD. Monasteries and abbeys continued the tradition, often planting the tree in their infirmary gardens because of its reputation as a medicinal plant. In the 16th century, when Henry VIII abolished and ransacked the Catholic monasteries, many of the trees were destroyed. However, the Elizabethan nobility enjoyed the mulberry for its fruits and shade, and some old specimens may have survived from this era, notably at stately homes like Syon House and Hatfield House.

By the 17th century, the production of silk, originally from China, was flourishing in France and Italy, mostly using white mulberries to feed the silkworms, as they are preferred by the worms and produce the finest silk. Keen to start such a valuable industry both in England and in the American colony of Virginia, in 1607 King James I asked the English nobility to plant 10,000 black mulberries, whilst white mulberries were shipped to Virginia, which has a warmer climate. Having access to published textbooks on the subject, the King would have known that white mulberries were best for making silk but he may have decided to gamble with planting black mulberries instead, knowing that these were more suited to our climate. In both countries, this silk production failed, arguably for different reasons. It is now thought that the "wrong type of tree" was not mistakenly introduced by King James I in England to start a silk industry but the reason for his decision was not recorded. Later on in the 17th century, many French Huguenots silk weavers fled to England after the revocation of the Edict of Nantes and established a flourishing industry, using imported raw silk from China.

Many old and revered black mulberry trees are dotted around England, some truly old, some just looking so. The Queen holds the National Mulberry Collection, started in the mid-1990s and now holding 34 species and varieties. The mulberry orchard at Wilkin & Sons in Essex is pretty much unique, planted even before the company started making jams in 1885. The company is one of the few making mulberry preserve in Britain.