



***Rubus* species**

Raspberries, Blackberries & more

The *Rubus* family is the 2020 International Herb of the Year. Members belong to the Rosaceae family, which is considered to have up to 700 species, plus all the hybrids. The main ones referred to here are blackberry (*Rubus fruticosus*) and raspberry (*Rubus idaeus*). There are many others available to us and there is a general constancy of features over them all. Many of the hybrids have been developed to create improved varieties for commercial production, e.g. to improve fruit size, flavour, growth habits, and convenience of picking and transporting.

Most of these species and varieties, often called brambles, have woody stems and, like roses, they have a variety of prickles; some fine and bristle-like, some vicious thorns, and everything in between. They vary in size to dwarf and compact, shrubby canes to trailers growing to 3 metres or more. Some are evergreen, though many are deciduous; most of them are self-pollinating. Generally, they are easy to grow if given a good, loamy, free-draining soil, preferably neutral pH to alkaline, but can tolerate slightly acidic soils. They prefer full sun or part-day sun to get good fruiting. Their flowers are usually white to pink. The flowers are followed by the fruits. Each fruit is a cluster of drupelets, as this image shows.

Some of the other commonly known species or hybrids include: tayberry (*Rubus fruticosus* x *Rubus idaeus*); loganberry (*Rubus* x *loganobaccus*); boysenberry – believed to be a hybrid between *Rubus idaeus*, *Rubus aboriginum*, *Rubus fruticosus* and *Rubus* x *loganobaccus*; dewberry – varieties of blackberries originating in North America and northern Europe; marionberry – a blackberry hybrid. There are so many more – they are able to hybridise, meaning more different and usually delicious and nutritious fruits being developed.

Fossilised remnants of a number species have been found in mid-eastern Europe dating back to the middle Miocene period, recognisable to species growing now.

Blackberry - *Rubus fruticosus*

Identification & Cultivation: This very well-known plant can easily become a noxious and invasive one. There are hybrid varieties that are thornless, which makes picking much easier and safer.

Parts Used: Leaves, shoots, roots and fruit.

Harvesting: Pick young leaves through the growing season prior to fruit harvest. Pick the fruit, as it ripens. The roots are harvested in winter and the young shoots in spring.

Energetic Character: Dry, astringent and generally cooling.

Constituents: Very similar to raspberry – see below.

Medicinal uses: From a review of the medicinal benefits of blackberry, Verma et al. (2014) state that it is “antimicrobial, anticancer, antidiarrheal, antidiabetic, antidiarrheal, and a good antioxidant... and that it contains gallic acid, villosin, and iron; fruit contains vitamin C, niacin (nicotinic acid), pectin, sugars, and anthocyanins and also contains of berries albumin, citric acid, malic acid, and pectin.”



Pouto blackberry flower

Photo: Koanga Institute



Loganberry

Photo: Koanga Institute

Other Uses: Fibre can be processed from the stems, which can be utilised for weaving or twine. The fruit can be used for dyeing, from pink to bluish purple, depending on the number of berries used, with alum as a mordant.

Raspberry - *Rubus idaeus*

Identification & Cultivation: Raspberries, commonly known as red raspberries or European raspberries, originate from Europe and Northern Asia. There is also an American species, *Rubus strigosus* – the American red raspberry. These two species can hybridise.

Identification: They are a deciduous, rambling, thorny shrub 1-2 m in height that freely suckers new growth from its rootstock. The “canes” are usually prickly. Its leaves are pinnate with 3-7 toothed leaflets, green above with white underneath. Raspberry flowers are white and form in clusters, blooming in spring followed by delicious juicy red fruit, ripening during summer. There are autumn fruiting varieties, which bear fruit right into early winter, which is a great bonus in the garden.

Cultivation: Raspberries are propagated from a piece of root stock with a new cane, or a growth shoot. They are best grown in rows to facilitate easy harvesting. They grow best in good, fertile, loamy soil and in full sun; fruit quality is best with adequate moisture. If they don't get enough water when the fruit is developing, they can be 'dry' – just the seeds with no delicious juicy flesh. Each cane lives two years; in the first year it grows, in the second year it fruits and then dies off as the plant becomes dormant into winter.

In winter, remove the old canes that have just fruited. Raspberry bushes grow best with a cold winter, though there are some varieties that suit growing in warmer climates.

Because they are such a soft fruit, like other *Rubus* fruit, they are very easily damaged when being transported, hence they are often picked not-quite-ripe, and therefore they will not have as good a flavour as freshly picked ripe fruit. They don't last long either. Once ripe they quickly deteriorate and in a very short time they will have grown their own 'little mink coat' (covered in mould). If you can't use the fruit promptly, freeze them.

Companion Planting: Raspberries grow well with tansy (*Tanacetum vulgare*), which itself can be invasive in the garden. (Tansy flowers, though, have been traditionally used in tansy cake, which is delicious, and the plant is a wonderful natural insecticide. Place it in animal bedding to deter fleas and around ant nests and entrance points that ants invade, your home and, particularly, your cupboards.)

Raspberries don't grow well near blackberries and vice versa. Don't grow potatoes near your raspberry bed, as they tend to be more susceptible to blight, which can be very destructive to your crop.

Parts Used: Leaves and fruit.

Harvesting: Pick the leaves through the growing season prior to fruit harvest. Pick the fruit as it ripens.

Energetic Character: Leaves – dry, astringent and generally cooling. Fruit – sweet, nutritious and slightly astringent.

Constituents:

Leaves: Flavonoids, carotenoids (including lutein), proanthocyanidins, anthocyanins, tannins (including gallotannins, ellagitannins), polypeptides.

Minerals: calcium, iron, magnesium, manganese, phosphorus, potassium, selenium, and tin. **Vitamins:** A, C, some Bs, niacin and folic acid. Volatile oils, organic acids and phenols.

Fruit: Vitamins: A, B, C and E, fruit sugars, fruit acids, minerals, flavonoids, rutin, lutein and volatile oils.

Therapeutic Actions:

Leaves: Astringent (tannins), nutritive, diuretic, laxative, digestive stimulant, uterine tonic.

Fruit: Diaphoretic, nutritive, diuretic, laxative, cleansing.



Raspberry
Photo: Koanga Institute



Raspberry
Photo: Karina Hilterman

Medicinal Uses:

Internal: The leaves have been traditionally used in pregnancy to strengthen the uterus and to aid childbirth. If miscarriage has been a problem, take infusions prior to conception. If a patient has never used raspberry leaf prior to pregnancy, start taking in the second trimester (can be stimulating to the uterus) to ease childbirth and tone the uterus post-partum. It is useful for easing painful periods and for treating leucorrhoea. Also, use for gastrointestinal problems, diarrhoea, gastro-inflammation, and as a mouth wash for gum and ulcers – and gargle for sore throats. Raspberry leaf helps control heavy menstrual bleeding (due to the high tannin content). It is best to take it as a strong infusion. The fruit is very nutritious and assists with the wellbeing of your body and is considered to be excellent for assisting eye health (the lutein and flavonoids are particularly effective). There is some research that indicates it may have antiviral properties. Good medicine is rarely as delicious!

External use: Infusion for stomatitis (inflammation of the mouth and cracks in the lips). Also use infusion as a wash for wounds, burns, varicose ulcers, sore eyes and conjunctivitis.

Dosage:

Infusion: Two handfuls of dried leaves per 1 litre water. Refrigerate. Drink 1-3 cups daily. In pregnancy, start with 1 gram dried herb per cup of water then gradually increase to 2 grams per cup, 1 cup 2 x daily.

Tincture: 4-8ml daily (30-40 ml weekly).

Wash or compress: Use infusion. Can be stronger if more astringency is needed.

⊗ **Contraindications and Cautions:** Leaves – don't use during first trimester if there is any risk of miscarriage (see medicinal uses).

"The fruit is good to be given to those that have weake and queassie stomackes." 1597 – John Gerard (1545-1612), English herbalist.

Cosmetic & Other Uses: Raspberry leaf infusion can be used as a skin wash, utilising its astringent properties to tone and tighten enlarged pores and assist with drying oily skin. Raspberry fruit can be used for dyeing.

Culinary Uses: Can you think of anything more delicious than eating luscious, juicy ripe raspberries fresh from the canes, warmed by the sun? Or a dish of freshly picked raspberries and whipped cream with some finely shredded mint on a summer's day? They are an excellent taste combination with chocolate. There are so many ways to use and enjoy raspberries.

History & Mystery: Some of the folk names of raspberry include raspbis, hindberry, bramble of Mount Ida, hindlebeer (Saxon), hindebar (Danish), braamboss (Dutch), hundbur (German), batos, and Idaia (Greek).

Raspberry canes used to be hung at doors and windows for protection, especially after a death, so the departed spirit cannot return. The fruit are considered to be "a love-inducing" food. It seems to assist in the 'passion' that may lead to the conception of a child and ease the delivery. A traditional use for child birth, taken internally; also pregnant women carried raspberry to alleviate the pains of pregnancy and childbirth.

The fruit was especially used in the past for digestive disorders and in combination with slippery elm to clean and heal wounds. According to Mrs Maud Grieve (1858-1941), "Raspberry syrup dissolves the tartar of the teeth." If you were wondering about the origin of the name *Rubus idaeus*, this is it. *Rubus* meaning 'red', and *idaeus* meaning 'belonging to Ida', here is the story... They say that the fruit was originally white and when the lovely nymph named Ida was picking the fruit to feed to baby Jupiter, she pricked her fingers on the thorns and her blood coloured the fruit.

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Thanks to the Koanga Institute for images: www.koanga.org.nz

Advisory Note: This text is given as a general guidance. If any adverse reactions occur or symptoms persist, please contact a qualified medical herbalist or medical doctor immediately.

References

VERMA, R., GANGRADE, T., PUNASIYA, R. & GHULAXE, C. 2014. *Rubus fruticosus* (blackberry) use as an herbal medicine. *Pharmacognosy Review*, 8, 101-4., Plants For A Future; <https://pfaf.org/user/Default.aspx>