

Quercus coccifera

Kermes Oak



General Information

Quercus coccifera is an evergreen shrub or a small tree with a dense crown and prickly leaves; it usually grows up to 4 metres tall, occasionally reaching 8 - 10 metres. The bole can be up to 35cm in diameter. The plant is harvested from the wild for local use as a food, medicine and source of materials. It is often grown as an ornamental, valued especially for its holly-like leaves.

Known Hazards

All parts of the plant contain tannins. Whilst tannins are found in many foods, and have a range of medicinal uses. They are usually only present in low concentrations. In some foods made from oaks (particularly the seeds), the tannin content can be quite high unless the food is treated to reduce tannin content.

Tannins are only of low toxicity and, because of their bitter taste and astringency, are unlikely to be eaten in large quantities. However, if they are taken in excess, they can cause stomach pains; constipation followed by bloody diarrhoea; excessive thirst; and excessive urination.



Edible Uses

Seed - cooked

The seed can be 12 - 30mm long

The seed is usually cooked before eating, though it can also be eaten raw. It can be eaten whole, though it is more commonly dried, then ground into a powder and used as a thickening in stews etc or mixed with cereals for making bread.

In some species, especially many of those classified as 'white oaks', the seeds are low in tannins and have a more or less sweet and agreeable flavour. The seed of most species, however, have a very bitter flavour, due especially to the presence of tannins. In these species there are various processes that can remove or at least reduce the amount of these bitter substances (although other water-soluble substances, including some minerals, will also be removed).

Tannins are water-soluble and therefore the easiest way to remove or reduce tannin levels is by soaking in water. A few different methods are listed:-

A traditional method of preparing the seed was to bury it in boggy ground overwinter and allow the wet soil to gradually leach the tannins. The germinating seed was dug up in the spring when it would have lost most of its astringency and bitterness.

Another method was to wrap the seeds in a cloth bag and place them in a stream for several weeks.

Drying the seed and grinding it to a powder before soaking speeds up the process. The fastest method is to use hot water, by cooking the powder and changing the water several times until the cooking water is no longer bitter. Alternatively, you can use cold water (which is reported to produce the best quality flour). In this case, you soak the powdered

seed in cold water for 12 - 24 hours then discard the water. Repeat this process for a number of times until the soak water is no longer bitter.

The roasted seed of many Quercus species has been used as a coffee substitute.

Medicinal

Quercus (oak) species are used in the traditional medicine of many cultures, being valued especially for their tannins. Various parts of the plant can be used, most frequently it is the leaves, bark, seeds, seed cups or the galls that are produced as a result of insect damage. A decoction or infusion is astringent, antibacterial, antifungal, antiseptic, styptic and haemostatic. It is taken internally to treat conditions such as acute diarrhea, dysentery and haemorrhages. Externally, it is used as a mouthwash to treat toothache or gum problems and is applied topically as a wash on cuts, burns, various skin problems, haemorrhoids and oral, genital and anal mucosa inflammation

Extracts of the plant can be added to ointments and used for the healing of cuts

