

*Aesculus hippocastanum*

[Synonyms : *Aesculus castanea*, *Aesculus hippocastanum* forma *memmingeri*, *Hippocastanum aesculus*, *Hippocastanum vulgare*]

**HORSE-CHESTNUT** is a deciduous tree. Native to the Balkan peninsular, the eastern Mediterranean and to the Himalayas, it has small fragrant, deep pink or yellow blotched at base, white or pink flowers with projecting stamens.

It is also known as *Agriokastania* (Greek), *Armonit hasusim* (Hebrew), *Balkaninhevokastanja* (Finnish), Buckeye, *Castagna amara* (Italian), *Castagna di cavallo* (Italian), *Castagno amaro* (Italian), *Castagno d'India* (Italian), *Castanheiro-da-Índia* (Portuguese), *Castaña de Indias* (Spanish), *Castan porcesc* (Romanian), *Castanwydden y Meirch* (Welsh), *Castogne à poulöin* (Channel Islander-Guernsey), *Châtaignier de cheval* (French), *Châtaignier de mer* (French), *Châtaignier des chevaux* (French), *Chât'nyi à j'va* (Channel Islander-Jersey Norman-French), Chestnut, Common horse-chestnut, Conker tree, European horse-chestnut, *Falso castagno* (Italian), *Gemeine Rosskastanie* (German), *Gewöhnliche Rosskastanie* (German), *Hästkastanj* (Swedish), *Heste Kastanie* (Danish), *Hestekastanje* (Danish), *Hevoskastanj* (Finnish), *Hipokaŝtano* (Esperanto), Indian chestnut, *Ippocastano di cavallo* (Italian), *Jírovec mad'al* (Czech), *Kashtan konskii* (Russian), *Kaŝtan* (Czech), *Kastane* (Turkish), *Koňský kaŝtan* (Czech), *Ma li zi* (Chinese), *Maronie* (Japanese), *Marron d'Inde* (French), *Marronnier* (French), *Marronnier blanc* (French), *Marronnier commun* (French), *Marronnier d'Inde* (French), *Marronnier faux châtaignier* (French), *Marron sauvage* (French), *Ou zhou qi ye shu* (Chinese), *Paardekastanje* (Dutch), *Pagaŝtan konský* (Slovak), *Pu* (Punjabi), *Qi ye shu* (Chinese), *Rosskastanie* (German), *Seiyō tochi no ki* (Japanese), Spanish chestnut, *Vanlig hästkastanj* (Swedish), White horse-chestnut, *Wilde kastanje* (Dutch), and *Wilde Paardekastanje* (Belgian, Dutch); and in flower language is said to be a symbol of 'do me justice' (blossom), and luxury.

Warning – the seed (fruit) is poisonous. It can cause nerve damage, dilated pupils, diarrhoea, vomiting and muscle weakness – and in very large doses it can cause paralysis, coma and death. The leaves and seeds are poisonous for some animals.

*Hippocastanum* is derived from Greek *hippo-* (horse) – some say because of the leaf-scars on its smaller branches which resemble tiny horses' hooves (even to the seven nail marks of the shoe) – and Latin *castanea* (horse-chestnut tree of Virgil (70-19 BC) the Roman poet) components.

The horse-chestnut was introduced to Britain in the early 17<sup>th</sup> Century (possibly 1615 when seeds are understood to have arrived in France from Istanbul) and a tree planted in 1664 is said still to survive in Surrey, west of London. This species became the focus of a short-lived, relatively recent English custom. In 19<sup>th</sup> Century Victorian times the Sunday before Ascension Day in the Christian calendar was called Chestnut Sunday and on this day apparently families would find their way to such places as the Botanical Gardens at Kew or Bushey, near London, where they could admire the chestnut trees in full bloom.

The seed inside the fruit is well known to little boys in Britain as a 'conker' ie. conqueror. Threaded with a string, one 'conker' is swung against another (held still and suspended) in an attempt to crack it. The conker that survives becomes a 'oner'. From the mid-

19<sup>th</sup> Century to the 1940s it was familiar in some parts of England under the name 'oblionker'. (Some authorities have claimed that this sport succeeded a variation played with snail shells or winkles. Thus, they suggest, the name 'conker' could be derived from the word 'conch'.) It should be mentioned that enthusiasm for this challenge has not been limited to little boys. Their fathers have also taken part in the fun and from the 1960s have competed in World Conker Championships as well as various events run at village fêtes or charity fund raising activities.

Today the horse-chestnut is often found growing near houses as, in the past, it was thought to be a gnat repellent. Some people have claimed that the fruit have moth repellent qualities and hang them, fresh and whole, amongst clothing.

The tree was used widely in the East as a source of horse and cattle fodder. In this connection it should be mentioned that when the horse-chestnut first entered western Europe in the early 16<sup>th</sup> Century many were under the impression that the seeds would provide a useful horse medicine, apparently a theory held by the Turks at that time. (It seems that they added a meal made with horse-chestnuts to the fodder if a horse was suffering from wind.) Horse-chestnut has also offered food for deer, and for pigs. Today it is recognized that domesticated animals, including horses, find the bitter tasting seeds indigestible – although in the wild creatures such as squirrels, and deer feast on them without undue problem.

The seed, after boiling to remove tannin, has been a source of bread flour which was mixed with wheat or rye flour during times of food shortage. As the starch is accompanied by other substances not easily digested by human beings it has generally been resorted to only in times of hardship.

More recently, during the 1<sup>st</sup> and 2<sup>nd</sup> World Wars, the nuts were harvested to make acetone for the manufacture of explosives. During the 2<sup>nd</sup> World War Britain harvested 1,500 tons and collections were organized by many different groups, including the Boy Scouts and Women's Institutes. The fruit were also used at one time for a soap substitute (the seed contains potash) - and some authorities have said that the nuts have also offered an invaluable source of glucose. Today oil from the fruit is an ingredient used by the toiletry industry in bath oils

Historians have also noted that during the 2<sup>nd</sup> World War the inhabitants of Guernsey, one of the English Channel Islands then occupied by the Germans, used the dried leaves as a substitute for tobacco (*Nicotiana tabacum*).

In addition to furniture, boxes and charcoal, the lightweight soft wood has been made into artificial limbs, packing cases, cutlery and wagons. It has also been pulped for paper.

The fruit of the horse-chestnut, if begged or stolen and then carried upon one's person, was once believed to be a protection against rheumatism. This may be more than superstition however. One of horse-chestnut's fascinating qualities, shared with only a few other plants, is that it is believed to be slightly radioactive when fresh. Some authorities have contended therefore that it may help to relieve pain purely by its touch on the affected area.

The greyish-brown branch bark contains a drug which absorbs ultra-violet rays. Today as a result of this the bark can be an ingredient in suntan oil.

Horse-chestnut's smooth and shiny, reddish-brown seeds were sent to the New World by the English botanist and naturalist, Peter Collinson (1694-1768). They were received by his American peer, John Bartram (1699-1777) in 1746 and subsequent correspondence between the two men indicates that the tree first bloomed in its new surroundings in about 1763. The North American Iroquois Indians came to use powdered root for treating some lung disorders and, as was the custom among some tribes with fetid buckeye, the Shinnecock and Mohican tribes both came to invest the nuts with the power of easing

rheumatism if they were carried in a pocket.

Medicinally, the bark was a traditional internal treatment for intermittent fevers and intestinal worms and externally for ulcers. Herbalists also used to recommend the fruit for treating piles, rectal complaints, backache, neuralgia and rheumatism (for which a tincture of flowers could also be prescribed). Today horse-chestnut can be used for treating piles, varicose veins, frostbite and rheumatism.

It is the birthday flower for 1<sup>st</sup> October.