

# Sweet Chestnuts

## *Castanea sativa*

These days, we tend to take Sweet, or Spanish Chestnuts, *Castanea sativa*, for granted, a mid-winter treat to enjoy at *Christmas in July* celebrations. However, chestnuts are quite remarkable. Botanically, they are *true nuts*, but they are very different from other familiar nuts, being much more like what we think of as a *fruit*. They are large and very nutritious and have low levels of fats and high levels of carbohydrates. The fact that they can grow in rocky mountainous regions totally unsuitable for grain production means that they were not just a winter treat, but an important staple for many cultures.



Chestnuts have not been particularly well known in Australia until relatively recently. They are now rapidly growing in popularity, partly due to our recognition of the health benefits of the nuts. Most Australian chestnut production is centred in north-eastern Victoria, but there are also chestnut farms in the Blue Mountains and Orange regions of NSW, in South Australia's Adelaide Hills, in south-western WA and Tasmania. Australia's crop of less than 1,500 tonnes is insignificant compared with the world

total chestnut production of over two million tonnes, mainly out of China.

Chestnuts grow into handsome, shapely, deciduous trees and are widespread across Europe and elsewhere in the northern hemisphere. They originate from southern Europe and western Asia, and probably survived the last Ice Age in



southern European refugia. They can live to exceptional ages (500 - 600 years) and there is a famous chestnut tree on the volcanic slopes of Mount Etna in Sicily – the *Hundred-Horse Chestnut*, (Castagno dei Cento Cavalli) – supposedly 2,000 to 4,000 years old.

Like so many of our food trees, the earliest *human use* of chestnuts is difficult to determine but pollen has enabled chestnut use to be traced back to ancient times, about 2100 – 2050 BC, in Turkey, Greece and Bulgaria. Chestnuts have been grown for thousands of years



### Sweet Chestnut – *Castanea sativa*

Map: Giovanni Caudullo

■ Probable native range

■ Introduced and naturalised

[https://upload.wikimedia.org/wikipedia/commons/2/23/Castanea\\_sativa\\_range.svg](https://upload.wikimedia.org/wikipedia/commons/2/23/Castanea_sativa_range.svg)



as a staple crop in many of the mountainous regions surrounding the Mediterranean where the land is unsuitable for cultivation of cereal crops. Charred chestnuts were found near Naples in a villa destroyed by the eruption of Mount Vesuvius in AD 79, although by and large, the Romans disliked chestnuts. It was not until the Christian era that an appreciation grew for their value both for food and timber. Botanically, chestnuts are classified as true *nuts* which are (usually) edible kernels protected by hard shells that don't split open on maturity. The edible kernels of chestnuts are enclosed within hard shells that are in turn protected

within spiny burrs. They can be baked, boiled, steamed, roasted and even eaten raw. Chestnut flour can be baked into bread and cakes. Their sweetness is mostly derived from fructose, they are cholesterol-free and best of all, gluten-free. In Galicia, in northwestern Spain, pigs are fed on chestnuts to produce an exceptionally high-quality ham and similarly, in England's New Forest, for a certain number of weeks each year, pigs are allowed to forage for chestnuts, acorns and beech nuts in an ancient practice known as *pannage*.





*Aesculus hippocastanum* – Horse Chestnut – Prague 2024. Photo: B. Atwell

Despite its name, *The Hundred-Horse Chestnut* from Sicily isn't a *Horse Chestnut*. Horse Chestnuts (*Aesculus hippocastanum*) are a totally unrelated species in another family, the Sapindaceae. Sweet Chestnuts, *Castanea sativa*, belong in the Beech Family, Fagaceae. Horse Chestnuts are toxic, inedible and have compound leaves that are very different from the simple leaves of Sweet Chestnuts.

Helgi Library. 2022. Which country produces the most chestnuts? <https://www.helgilibrary.com/charts/which-country-produces-the-most-chestnuts/#:~:text=Total%20chestnut%20production%20reached%20%2C131%2C241,of%20406%2C777%20tonnes%20in%201984.>

Santos MJ, Pinto T, Vilela A. 2022. Sweet chestnut (*Castanea sativa* Mill.) Nutritional and phenolic composition interactions with chestnut flavor. *Physiology Foods*: 14;11(24):4052. Doi: 10.3390/foods11244052.

Simpson J. 2016. Chestnut industry expansion. NSW Department of Primary Industries Primefact 1435, second edition. Specialty & Fine Food Fair 2024. [Discover the Chestnut-Fed Pork Range by Coren - Speciality & Fine Food Fair 2024 \(specialityandfinefoodfairs.co.uk\)](https://www.specialityandfinefoodfairs.co.uk)

Wikipedia: [https://en.wikipedia.org/wiki/Castanea\\_sativa](https://en.wikipedia.org/wiki/Castanea_sativa)

Wikipedia: [https://en.wikipedia.org/wiki/Hundred\\_Horse\\_Chestnut](https://en.wikipedia.org/wiki/Hundred_Horse_Chestnut)

Wikipedia: [Pannage - Wikipedia](https://en.wikipedia.org/wiki/Pannage)

Alison Downing, Brian Atwell, Karen Marais, Kevin Downing *and with thanks to Elizabeth and Robert Hodsdon*



**MACQUARIE**  
University  
SYDNEY · AUSTRALIA

