



## *Castanea sativa* Sweet chestnut, Spanish chestnut



*Castanea sativa* (Sweet Chestnut) is a large, deciduous tree, native to the South of Europe, Asia Minor, Caucasus and North-Iran, and introduced to the rest of Europe. Naturally it is occurring on seasonally humid hillsides, although it can be quite adaptable to dry conditions. In its native range it grows together with *Quercus frainetto*, *Ostrya carpinifolia* and *Carpinus orientalis*. Described in 1768 by the English botanist, Philip Miller. Develops a large, rounded, subglobose crown to twenty five metres wide and thirty metres high. Mature specimens can reach a very old age.

*Castanea sativa* is a monoecious tree: the male flowers are long, creamy white catkins with a peculiar odour in June-July, while the female inconspicuous flowers are developing in globular and very prickly fruits. The nuts are falling during October and can be harvested by humans or eaten by birds and small mammals. The leaves of the sweet chestnut are oblonged, coarsely toothed on the edges, shiny green most of the season, than turning beautiful yellow-rusty brown during autumn. The sweet chestnut can develop a single trunk which could get enormous if its left on its own for centuries. The bark is beautiful grey and smooth on young trees, but will get characteristic twisting fissures that will make this tree even more dramatic.

The sweet chestnut is only suitable for large parks, gardens, estates and countryside where there is lots of space to develop into a majestic specimen. Only acidic, light loamy soils are suitable for it to grow happily. Heat is tolerated and drought moderately. This tree has an amazing shared history with human civilization and it has been used for centuries for multiple purposes.

### TYPES OF PLANTING

**Tree types:** standard trees, half-stem trees, multi-stemmed trees, trees for climbing, shade trees, characteristic trees, fruit trees, woodland planting stock | **Topiary on stem:** vase, multi-stem umbrella

### USE

**Location:** park, central reservation, roof garden, large garden, cemetery, countryside, ecological zone | **Pavement:** none | **Planting concepts:** food forest, Eco planting, Landscape planting, Prairie planting

### CHARACTERISTICS

**Crown shape:** rounded, flattened spherical | **Crown structure:** dense | **Height:** 25 - 30 m | **Width:** 20 - 25 m | **Winter hardiness zone:** 6A - 11B

### ASPECTS

**Wind:** tolerant to wind | **Soil:** loess, sabulous clay, light clay, sand, loamy soil | **Nutrient level:** rich in nutrients | **Soil moisture level:** moist | **Light requirements:** sun, partial shade | **pH range:** acidic, neutral | **Host plant/forage plant:** bees, butterflies, birds, small mammals, humans, nectar value 5, pollen value 5 | **Extreme environments:** tolerant to dryness

### PLANTKENMERKEN

**Flowers:** catkins, striking | **Flower colour:** cream-yellow | **Flowering period:** June - July | **Leaf colour:** buds bronze, green | **Leaves:** deciduous, lanceolate, big, polished, dentate | **Autumn colour:** yellow | **Fruits:** striking, edible, large, husk | **Fruit colour:** brown, green | **Bark colour:** grey | **Bark:** furrowed | **Twig colour:** red-brown | **Twigs:** bare | **Root system:** deep, extensive