



Buxus sempervirens

Buxus sempervirens, the common box, European box, or boxwood, is a species of flowering plant in the genus *Buxus*, native to western and southern Europe, northwest Africa, and southwest Asia, from southern England south to northern Morocco, and east through the northern Mediterranean region to Turkey. *Buxus colchica* of western Caucasus and *B. hyrcana* of northern Iran and eastern Caucasus are commonly treated as synonyms of *B. sempervirens*.

Description

Buxus sempervirens is an evergreen shrub or small tree growing up to 1 to 9 m (3 to 30 ft) tall, with a trunk up to 20 centimetres (8 in) in diameter (exceptionally to 10 m tall and 45 cm diameter). Arranged in opposite pairs along the stems, the leaves are green to yellow-green, oval, 1.5–3 cm long, and 0.5–1.3 cm broad. The hermaphrodite flowers are inconspicuous but highly scented, greenish-yellow, with no petals, and are insect pollinated; the fruit is a three-lobed capsule containing 3–6 seeds.

Distribution and habitat

The species typically grows on soils derived from chalk, limestone, usually as an understorey in forests of larger trees, most commonly associated with European beech (*Fagus sylvatica*) forests, but also sometimes in open dry montane scrub, particularly in the Mediterranean region. Box Hill, Surrey is named after its notable box population, which comprises the largest area of native box woodland in England.

The species is locally naturalised in parts of North America.

Cultivation

In Britain, three burials of the Roman era featured coffins lined with sprays of the evergreen box, a practice unattested elsewhere in Europe.

Box remains a very popular ornamental plant in gardens, being particularly valued for topiary and hedges because of its small leaves, evergreen nature, tolerance of close shearing, and scented foliage. The scent is not to everyone's liking: the herbalist John Gerard found it "evill and lothsome" and at Hampton Court Palace Queen Anne had box hedging grubbed up because the odor was offensive, Daniel Defoe tells.

Several cultivars have been selected, including 'Argenteo-variegata' and 'Marginata' with variegated foliage; such "gilded box" received a first notice in John Parkinson's *Paradisi in Sole Paradisus Terrestris* (1629). 'Vardar Valley', a slow-growing particularly hardy semi-dwarf cultivar, was selected in 1935 by the American botanist Edward Anderson in the upper Vardar valley and sent to the Arnold Arboretum for evaluation.

Timber

Slow growth of box renders the wood ("boxwood") very hard (possibly the hardest in Europe) and heavy, and free of grain produced by growth rings, making it ideal for cabinet-making, the crafting of flutes and oboes, engraving, marquetry, woodturning, tool handles, mallet heads and as a substitute for ivory.

The English engraver Thomas Bewick pioneered the use of boxwood blocks for engraving.

Other uses

The leaves were formerly used in place of quinine, and as a fever reducer.

Buxus sempervirens is a medicinal plant used to treat many diseases. It contains steroidal alkaloids as for example Cyclobuxine. It also contains flavonoids.

B. sempervirens wasn't known for its medical use until the beginning of the 1600s. After this it was found that the leaves (containing alkaloids, oils and tannin), the bark (containing chlorophyll, wax, resin, lignin and minerals) and the oil from the wood had a medical effect. It then was used to treat gout, urinary tract infections, intestinal worms, chronic skin problems, syphilis, hemorrhoids, epilepsy, headache and piles but also had the reputation of curing leprosy, rheumatism, HIV, fever and malaria. For treating malaria it was used as a substitute for quinine, but because of the side effects and the fact that there are better medicinal alternatives than *B. sempervirens* it is normally not used any more to treat these diseases.

Homoeopathy still made use of the leaves against rheumatism, HIV and fever by brewing tea from them. In Turkey, where the plant is called Adi şimşir, this tea (one glass a day) is still consumed for antihelminthic, diaphoretic, and cholagogue purposes. Also, the leaves from *B. sempervirens* were used as an auburn hair dye.