

Kermes or Holly Oak belongs to *Fagaceae* family along with 1,050 species around the world. The best-known group of this family are the oaks, genus *Quercus*, that comprises about 600 species of both evergreen and deciduous trees and shrubs.

Oaks are distributed in Europe (27 species), North Africa, Asia, North America, and west shores of South America. Two more indigenous oak species are found in Cyprus, the endemic Golden Oak (*Q. alnifolia*) been designated as the national tree of Cyprus and the Cyprus Oak (*Q. infectoria* subsp. *veneris*). Moreover a number of alien species, such as *Q. ilex*, *Q. macrolepis* and *Q. macrocarpa*, have been introduced and used in parks all over Cyprus.



Description

Kermes or Holly Oak is an evergreen broad leaf shrub or small tree up to 10 m high. Its bark is grey, at first smooth, vertically fissured with age. Young shoots are at first subglabrous or pubescent becoming brownish glabrous at maturity. The buds are ovoid 3-4 mm long. The leaves are alternate, simple, with lamina variously shaped, leathery, bright green above, glabrous or thinly hairy below, margins usually spinose-dentate. The petioles are up to 5 mm long. The flowers are



unisexual and the male catkins solitary, axillary, pendulous, greenish-yellow. The female flowers are usually solitary and axillary. Flowers appear in March to May. The fruit is a nut (acorn), with rounded apex, 15-30 x 8-15 mm, brown; Cupule usually 20-30 mm in diameter covered with loosely adpressed or distinctly recurved scales. Ripening period is between October and November of the second year after flowering.



Distribution - Habitat

Found in maquis and pine forests at Akamas, Troodos and Pentadaktylos mountain range and at Karpasia. It is more common at Fyti, Kannaviou, Panagia and Chrysorrogiatissa at Pafos district and at Pachna, Limnati, Agios Mamas and Kalo Chorio (Lemesos) areas. The species thrives in altitudes between 100 and 1300 m. It is also native to Turkey, Syria and Palestine.

History

According to historical evidence **Kermes or Holly Oak** is the Theophrastos "Prinos" (ο Πρίνος) and this is why Gennadios uses the name Δρυς η πρίνος (*Oak the Prinos*). A red dye of ancient origin (Kermes) is derived from the dried bodies of the females of a scale insect in the genus *Kermes*, primarily *Kermes vermilio*. The insects live on the sap of certain trees, especially Kermes oak. The English common names crimson and carmine are derived from the word *kermes*.

Uses – Ecological Importance



It can be used as an ornamental species. It is a vigorous, dry tolerant plant with dense, dark green foliage that can be used very effectively in landscape architecture. The species thrives in all types of soils, and it is used in roadside plantations, parks and gardens with very impressive results. Moreover, it recovers easily soon after a forest fire, protecting wildlife and the soil from erosion. It has an excellent quality of hard

wood especially for the construction of agricultural instruments as well as firewood and for charcoal production. The root bark was traditionally used in tanning. The leaves and flowers, especially the younger ones in spring, the shoots and the fruits are toxic to humans and animals.



Nursery propagation is done using seeds soon after their ripening in November since they quickly lose viability. Young pot plants are available from all forest nurseries in Cyprus as well as from a number of private ones.

Protection and management

Kermes Oak is protected by the Cyprus Forest Law and a special license from the director of the Department of Forests is needed to fell down a tree.

In Cyprus there is a number of giant Kermes Oak such as: the 700 years old tree at Panagia Theoskepasti (at Kalopanagiotis village) which is of a very rich historical and religious interest. Its dimensions are: 3,85 m trunk girth and 17 m height. Other large valuable trees include the one at Melini village and the groups of Kermes Oak at Chrysorrogiatissa Monastery, Platys valley, Polemidia National Forest Park and Xyliatos valley. All the above trees and much more are under continuous monitoring, conservation and protection by the Department of Forests.



TREE OF THE YEAR 2014

Kermes or Holly Oak

Quercus coccifera L. subsp. *calliprinos* Holmboe



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