Quercus ithaburensis subsp. macrolepis (Kotschy.) Hedge. & Yaltirik.

Fagaceae

LOCAL NAMES
English (oak,quercia vallonea,valonia oak)

BOTANIC DESCRIPTION
Quercus ithaburensis is deciduous tree growing to 15 m by 13 m. Leaves alternate and simple. Male flowers have a 4-7 lobbed perianth of tepals and 4-40 stamens; usually grouped in pendulous catkins. Female flowers solitary or in small clusters; with 4-6 lobbed perianth of tepals, and one often subtended by a series of bracteoles comprising an involucre. Fruit an acorn, 'mossy' fringed, one seeded nut basically enveloped by a cupule derived from the involucre. The seed is about 4 cm x 3 cm.

BIOLOGY
Flowers are monoecious and are pollinated by wind. The seed takes 2 years to ripen. Hybridizes freely with other members of the genus.

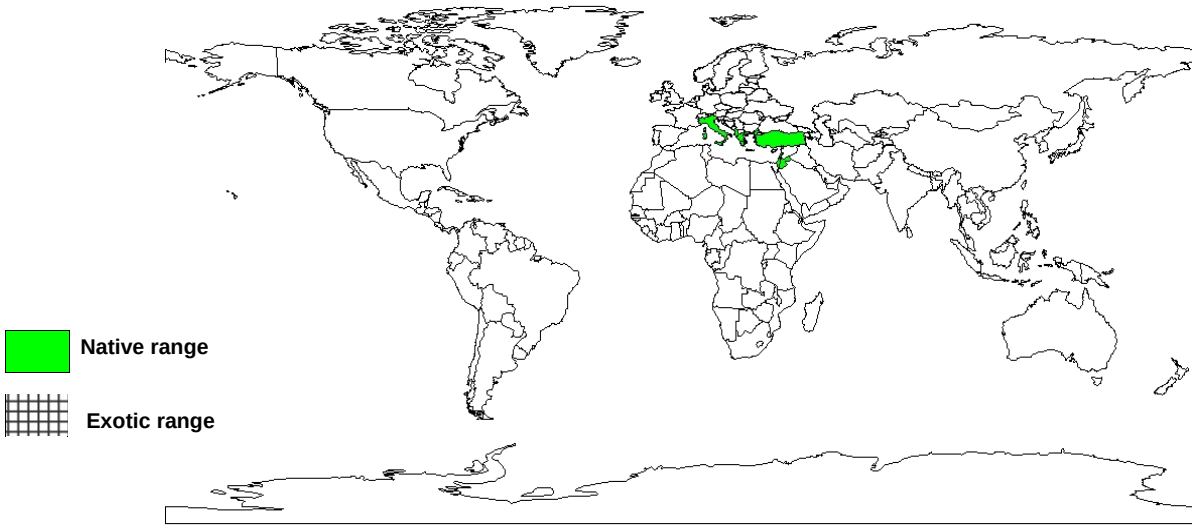
ECOLOGY
Found in open forests in the hills or as solitary trees, usually in dry soils. Young plants tolerate reasonable levels of side shade, also tolerates strong winds but not maritime exposure. Associated species include Red pine (Pinus brutia), Gall oak (Quercus infectoria) and Turkish oak (Quercus cerris).

BIOPHYSICAL LIMITS
Altitude: 0-1800 m
Temperature: 15.7ºC
- mean maximum 30ºC
- mean minimum 6ºC
Rainfall: 660 mm
Soil type: The plant prefers deep fertile, medium (loamy) and heavy (clay) soils; lime tolerant. It requires dry or moist soil.

DOCUMENTED SPECIES DISTRIBUTION

Native: Albania, Greece, Israel, Italy, Jordan, Lebanon, Macedonia, The Former Yugoslav Republic, Syrian Arab Republic, Turkey

Exotic:



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

PRODUCTS
Food: Seed is edible raw or cooked. Any bitter seeds can be leached by thoroughly washing the seed in running water. Either the whole seed can be used or the seed can be dried and ground it into a powder. Roasted seed is used as a coffee substitute. A manna is obtained from the tree.

Medicine: Galls produced on the tree are strongly astringent and can be used in the treatment of haemorrhages, chronic diarrhea and dysentery.

Tannin or dyestuff: The acorn cups contain about 45% tannin. A black dye can be obtained from acorns which can be used as an ink. Gall-like excretions on the plant are caused by damage from the insect Cynips calicis. These growths contain about 30% tannin.

Other products: A mulch of the leaves repels slugs, grubs etc, fresh leaves should not be used as these can inhibit plant growth. The flowers and fruits are mainstays for many kinds of wildlife.

SERVICES
Shade or shelter: The gnarly trunk and branches, and complicated bark structure, with many natural cavities are used as shelter by many insects and arachnids. These attract woodpeckers which, in turn, excavate more cavities that become shelter to other birds, mice, salamanders, moths, and bats. Oaks are also hosts to mistletoe clumps that produce berries which entice still other birds.

TREE MANAGEMENT
Valonia oak is intolerant of root disturbance; trees should be planted in their permanent positions whilst young.

GERMPLASM MANAGEMENT
Seeds quickly loose viability if allowed to dry out; best sown as soon as it is ripe, needs protection from mice, squirrels etc. Seeds sown in situ produce the best trees. Seedlings should not be left in a nursery bed for more than 2 growing seasons.

PESTS AND DISEASES
This species is notably resistant to honey fungus.

FURTHER READNG

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SUGGESTED CITATION

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