Prunus cerasifera

**Europe in Europe: distribution, habitat, usage and threats**

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**Prunus cerasifera** Ehrh., known as cherry plum, is a small shrubby tree with intricate and occasionally spiny branches, which produces plum-like edible fruits. This plant is native to Balkans extending its range to Black Sea and Asia Minor. It is a frugal species, easily adaptable to a large variety of sites. It grows in the forest edges, open woodlands and disturbed sites. It is principally cultivated as an ornamental plant with several different varieties in foliage and bud colour, and secondly for fruit production. This species is resistant to several plum diseases and some varieties are used as rootstock in grafting other fruit species and cultivars of genus Prunus. For the same reason it can become a potential reservoir of diseases, such as Shkarka or plum pox virus, affecting the production of stone fruits of more economic importance (apricots, plums, peaches).

The cherry plum (Prunus cerasifera) is a deciduous shrub or small tree reaching 8-10 m tall. It has an erect and bushy habit, with numerous intricate, fine, and occasionally spiny branches. Young twigs are hairless and glossy. The bark is purple brown, with thin scales, with horizontal orange lenticels, fissured with age. The leaves are alternate, elliptical, ovate or obovate, 3-7 × 2-5 cm, with crenate saw-toothed margins, hairless and glossy above, hairy on the veins beneath. The flowers are hermaphrodite and appear in March-May slightly before the leaves, usually solitary, 2-2.5 cm wide, or about 1.5 cm long pedicels. The sepals are 2.5-5 mm long with finely glandular saw-toothed margins. The petals are white, occasionally slightly reddish. The fruits are 2-3 cm wide, plum-like, globose, ripening to red or yellow with a smooth endocarp.

**Importance and Usage**

It is considered, probably together with the blackthorn (Prunus spinosa), to be one of the ancestral lineages leading to the cultivated European plum (Prunus domestica). Unique fruits are used in sour soups, ripe fruits are eaten fresh or used to make non-alcoholic or fermented and distilled alcoholic beverages. Anthocyanin composition, phenolic content and antioxidative activities of wild red and purple varieties of the cherry plum were tested and show potential for being developed into a source of healthy fruit drinks due to their high antioxidant activities of wild red and purple varieties of the cherry plum. The fruit peel could be used as a resource to extract natural pigments. This species is of great importance for horticultural breeding. Genetic studies identified cherry plum genotypes that are highly resistant to all root-knot nematodes of the genus Meloidogyne. Furthermore, these genotypes are resistant to the expression of root crown gall consecutive infection by Agrobacterium tumefaciens. Cherry plum is an important pest of hops Humulus lupulus. It is commonly cultivated as an ornamental tree for its colourful flowers blossoming in spring. It is also cultivated as an overwintering host species for the damson hop aphid, Phoradendron humuli. The cherry plum is a natural host of plum pox virus, the causal agent of Shkarka disease, a serious economic threat for the production of temperate stone fruits, such as apricots, plums and peaches.

Plants as an ornamental tree, it becomes a potential reservoir of this virus.

**References**

17. B. G. Sutherland, R. Cero, Applied Genetics 166, 169 (2011).