

# *Alnus cordata*

## Italian alder



*Alnus cordata* (Italian alder) is a deciduous tree from the *Betulaceae* family, which occurs naturally alongside *Fagus sylvatica*, *Pinus nigra* and *Quercus cerris* in the southern Apennines of Italy and the north-eastern mountains of Corsica. From there, the species has spread to other parts of Europe and North America as an ornamental and landscape tree. This alder is considered a relict species from the Tertiary period because of its similarities to *Alnus subcordata* and other oriental alders. Under favourable conditions, the tree can reach a final height of ten to fifteen metres, with a width of four to eight metres, depending on its location and age. It develops a pyramidal, semi-open crown.

The Italian alder has heart-shaped, leathery, shiny dark green leaves that are approximately five to twelve centimetres long. They often remain on the tree from April to December, giving the tree structure even in late autumn. Around February or March, the male and female catkins appear before the leaves bud: the male catkins are yellow-brown and pendulous, while the female catkins are green, erect and more compact. After flowering, the characteristic alder cones develop, which remain on the tree from autumn until late winter and later release the seeds, which are dispersed by the wind. The bark is initially smooth and grey-brown, with grooves developing on older trees. Twigs are light brown and bare.

Unlike many other alders, *Alnus cordata* is relatively resistant to drought, hardening and sea winds, making it suitable for urban planting and coastal areas. The tree is not particularly picky about soil type, as long as it is moist and well-drained. It tolerates light lime, loam and clay soils and also grows on poorer soils, where it can add nitrogen to the soil via symbiotic bacteria in its roots. As a heliophilous species, it is a true sun worshipper that can contribute to both biodiversity and a pleasant urban climate in avenues, green verges, squares, parks and gardens.

### SEASONAL COLOURS



### TYPES OF PLANTING

**Tree types:** standard trees, feathered trees, multi-stemmed trees, trees for climbing, woodland planting stock

### USE

**Location:** street, avenue, square, park, central reservation, large garden, traffic areas, industrial zones, countryside, windbreak, coastal area | **Pavement:** none, open, sealed | **Planting concepts:** Landscape planting, urban planting

### CHARACTERISTICS

**Crown shape:** pyramidal | **Crown structure:** semi-open | **Height:** 10 - 15 m | **Width:** 4 - 8 m | **Winter hardiness zone:** 6A - 9B

### ASPECTS

**Wind:** tolerant to wind, slightly tolerant to coastal wind | **Soil:** loess, sabulous clay, peaty, light clay, sand, loamy soil | **Nutrient level:** low in nutrients, moderately rich in nutrients, rich in nutrients | **Soil moisture level:** very dry, dry, moist, wet | **Light requirements:** sun, partial shade | **pH range:** acidic, neutral, alkaline | **Host plant/forage plant:** birds | **Extreme environments:** tolerant to salt spray, tolerant to dryness

### PLANTKENMERKEN

**Flowers:** catkins, striking | **Flower colour:** yellow-brown, yellow-green, green | **Flowering period:** February - March | **Leaf colour:** dark green, buds pale green, underside pale green | **Leaves:** deciduous, cordate, leathery, polished, sticky, serrate, Nitrogen fixing | **Fruits:** striking, cones | **Fruit colour:** black | **Bark colour:** grey-brown | **Bark:** slightly furrowed | **Twig colour:** brown | **Twigs:** bare | **Root system:** shallow, fine roots