

Pinus cembra

Arolla Pine, Swiss Stone Pine, Austrian stone pine



Pinus cembra (Swiss stone pine, arolla pine) is regarded as the undisputed king of the high mountains in the Alps and the Carpathians. It, therefore, usually grows at elevations over 1,200 metres above sea level. *Pinus cembra* grows with other conifers such as *Pinus mugo* and *Larix decidua*, often extending beyond the tree line and dotted around the Alpine landscape. The Swiss stone pine was described in 1753 by Swedish botanist Carl Linnaeus. It is a large, evergreen and densely branched conifer with a pyramidal growth habit and can grow up to 35 metres tall in the wild. In cultivation, height is limited though to eighteen metres by ten metres wide. It is a slow-growing but very long-lived tree and for the most part forms a single stem.

The matt green to yellow-green, erect and upright needles of *Pinus cembra* are arranged in bundles of five, grow densely on the shoots and have a wonderful fragrance in summer. The insignificant flowers of the Swiss stone pine have a pleasant scent. The male flowers are red-brown and the female flowers are violet. The erect cones are spherical or egg-shaped, with rounded scales, a lovely purple colour in their juvenile form and brown when ripe. The seeds are large and distributed by birds or the wind and also harvested and sold as pine nuts. The bark is smooth and grey-green in juvenile trees but later becomes light brown-grey and peels off in small scales.

Pinus cembra is suitable for medium-sized and larger gardens and parks. It prefers damp, cool sites in the sun, even though it is very hardy down to -43 degrees Celsius. If these conditions are provided, it can also be planted on roofs and in containers. The Swiss stone pine has many mycorrhizal associations, helping it to become established and grow more quickly, even in very rocky sites at high elevations. It can be used as a single solitary tree or in smaller groups as an evergreen background tree.

SEASONAL COLOURS



TYPES OF PLANTING

Tree types: standard trees, feathered trees, conifers

USE

Location: park, in containers, roof garden, large garden, cemetery, traffic areas, industrial zones | **Pavement:** none

CHARACTERISTICS

Crown shape: narrow pyramidal, wide pyramidal | **Crown structure:** dense | **Height:** 15 - 18 m | **Width:** 6 - 10 m | **Winter hardiness zone:** 3A - 8A

ASPECTS

Wind: tolerant to wind | **Soil:** loess, sabulous clay, peaty, heavy clay, light clay, sand, loamy soil, all soils | **Nutrient level:** moderately rich in nutrients, rich in nutrients | **Soil moisture level:** dry, moist | **Light requirements:** sun, partial shade | **pH range:** acidic, neutral | **Host plant/forage plant:** birds, owls, small mammals | **Extreme environments:** tolerates air pollution

PLANTKENMERKEN

Flowers: raceme, discrete, standing, scented | **Flower colour:** red-brown, violet | **Flowering period:** May - May | **Leaf colour:** yellow-green, matt green, buds bright green | **Leaves:** evergreen, needles or scales, short needles, scented | **Fruits:** striking, cones | **Fruit colour:** brown, violet | **Bark colour:** grey-brown, grey-green | **Bark:** peeling, smooth, later on rough | **Twig colour:** yellow-brown, cinnamon-brown | **Twigs:** hairy, bare, vertical branches | **Root system:** deep, tap root