

Populus tremula
aspen, common aspen, Eurasian aspen, European aspen, quaking aspen



Populus tremula (aspen, European aspen) is native to Europe, North Africa, and Asia. This distribution largely overlaps with the natural range of *Populus nigra*. *Populus tremula* is a true pioneer species, yet it can still reach an age of around 100 years. Because its native range is so extensive, the species shows considerable variation in growth form. It may appear as a large shrub, a multi-stemmed tree, or as a single-stem tree reaching 25 to 30 meters in height. Most commonly, the aspen has a conical habit that later becomes loosely ovate, ultimately reaching around ten to twenty meters in height and five to ten meters in width.

The most recognizable feature of *Populus tremula* is its round to broadly ovate leaves. They are dark green with a lighter green underside and have wavy, coarsely toothed margins. The petiole is long and laterally flattened, causing the leaves to tremble at the slightest breeze. This constant fluttering produces a characteristic rattling sound that gives the species its name. *Populus tremula* has a yellow to deep orange autumn color. The trunk is straight and whitish gray with smooth bark that gradually becomes darker and more furrowed with age, beginning at the base. Male and female trees exist, each bearing pendulous silver gray catkins from late March to early April. Female trees produce cotton-like seeds that are dispersed by the wind.

Populus tremula is a very resilient species with minimal soil requirements. It tolerates temporary drought and waterlogging, as long as these conditions are not permanent. As a pioneer species, it is highly light demanding. Due to its size and its tendency to produce root suckers, it is unsuitable for planting in paved areas. Instead, this entirely wind-resistant species thrives best in parks and natural landscapes. Because of its low-quality wood, the European aspen is rarely planted for forestry purposes.

SEASONAL COLOURS

jan feb mar apr mei jun jul aug sep okt nov dec

TYPES OF PLANTING

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

USE

Location: park, central reservation, large garden, traffic areas, industrial zones, countryside, ecological zone, windbreak, bioswale, coastal area | **Pavement**: none | **Planting concepts**: Landscape planting, Solid planting

CHARACTERISTICS

Crown shape: ovoid | **Crown structure**: semi-open | **Height**: 18 - 25 m | **Width**: 8 - 12 m | **Winter hardiness zone**: 2A - 7B

ASPECTS

Wind: tolerant to wind, slightly tolerant to coastal wind | **Soil**: loess, sabulous clay, peaty, heavy clay, light clay, sand, loamy soil, all soils | **Nutrient level**: low in nutrients, moderately rich in nutrients, rich in nutrients | **Soil moisture level**: dry, moist, wet | **Light requirements**: sun, partial shade | **pH range**: acidic, neutral, alkaline | **Host plant/forage plant**: butterflies | **Extreme environments**: tolerant to salt spray, tolerant to dryness, tolerates air pollution, tolerant to short-term flooding

PLANTKENMERKEN

Flowers: catkins, pendulous | **Flower colour**: pale grey | **Flowering period**: March - April | **Leaf colour**: grey-green, underside felty white | **Leaves**: deciduous, orbicular, dentate | **Autumn colour**: yellow, golden yellow, dark yellow, yellow-orange, orange | **Fruits**: discrete, catkins, pappuses, capsules | **Fruit colour**: yellow-brown, grey | **Bark colour**: grey | **Bark**: smooth, later on rough | **Twig colour**: grey-brown | **Twigs**: bare | **Root system**: deep, shallow, extensive, central root, root suckers, roots push up surface,