

Carya cordiformis

Bitternut hickory, Swamp hickory, pignut hickory, yellow-bud hickory



Carya cordiformis (bitternut) comes from Eastern North America and Southern Canada. The bitternut is found growing there along riverbanks and in mixed deciduous forests: from low-lying flood plains to higher elevation woodland, with, amongst others, *Acer saccharum* and *Tilia americana*. It is the fastest growing and most common *Carya*. The crown of *Carya cordiformis* is oval and attains an ultimate height of fifteen to twenty-five metres, approximately ten to fifteen metres wide, and becomes more open and broader with maturity.

The leaves are composite pinnate and comprised of seven to nine lanceolate leaflets with finely serrated margins, changing colour to a spectacular golden yellow in autumn. The slender, yellow-brown twigs have characteristic sulphur yellow buds. *Carya cordiformis* blooms in May, bearing green-yellow catkins that hang down. The small, heart-shaped nut produced is encased in a husk with four ribs which splits open when the nut is ripe. Unlike those of the other *Carya*, these nuts are extremely bitter and not edible. The young bark is smooth and grey but develops shallow ridges or furrows as it ages.

The bitternut grows on all soil types but prefers damp, well-drained soils. Also tolerant of drought since the tree sends out deep roots. Grows best in full sun to partial shade but in the early years will take shade. As a relatively narrow tree with an upright main trunk, the bitternut can be used as an avenue tree but is also a great choice in parks, and *Carya cordiformis* can even be used as an alternative in the landscape for the ash.

TYPES OF PLANTING

Tree types: standard trees, feathered trees, multi-stemmed trees, characteristic trees

USE

Location: avenue, park, central reservation, large garden, cemetery | **Pavement:** none

CHARACTERISTICS

Crown shape: flattened spherical, ovoid | **Crown structure:** semi-open | **Height:** 15 - 25 m | **Width:** 10 - 15 m | **Winter hardiness zone:** 5B - 9B

ASPECTS

Wind: tolerant to 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:** birds, small mammals | **Extreme environments:** tolerant to dryness

PLANTKENMERKEN

Flowers: catkins, discrete, pendulous | **Flower colour:** yellow-green | **Flowering period:** May - May | **Leaf colour:** dark green, underside pale green | **Leaves:** deciduous, ovoid, lanceolate, polished, slightly hairy, serrate, pinnate, composite | **Autumn colour:** yellow | **Fruits:** striking, small, nut, husk | **Fruit colour:** green | **Bark colour:** grey | **Bark:** smooth, later on rough | **Twig colour:** yellow-brown | **Twigs:** bare, vertical branches | **Root system:** deep, extensive, tap root

