

Betula nigra DURA-HEAT

DURA-HEAT River Birch



Betula nigra DURA-HEAT (black birch DURA-HEAT) was selected in Georgia, United States, because of its superior tolerance to drought and heat compared to the species. DURA-HEAT generally remains somewhat smaller than the species, reaching an ultimate height of approximately nine to twelve meters and a width of eight to ten meters. The crown is broadly pyramidal in shape with a semi-open branching structure. The cultivar usually grows as a multi-stem tree, creating a natural and graceful silhouette.

The leaves of *Betula nigra* DURA-HEAT are slightly smaller but glossier, thicker, and darker green than those of the species, giving the tree a refined appearance. In autumn, the foliage turns yellow. The leaves often remain on the tree well into late autumn, long after many other trees have shed theirs due to stressful conditions such as heat or drought. DURA-HEAT flowers in early spring with characteristic catkins: the male catkins are long and pendulous, while the female catkins are shorter and upright. These are followed by small clusters of winged nutlets. The exfoliating bark is one of the greatest ornamental features of this selection, displaying a warm blend of creamy white, pale pink, cinnamon brown, and gray, peeling away in thin curls and providing year-round visual interest. The twigs are reddish brown, slender, and marked with fine lenticels.

Betula nigra DURA-HEAT is an excellent choice for parks, large gardens, urban green spaces, and water-related projects. Thanks to its improved heat and drought tolerance, it is particularly well suited for use in urban settings and climate-sensitive environments. Like the species, it performs best in moist, acidic, and well-drained soils, but DURA-HEAT tolerates temporary drought better and is therefore more broadly adaptable. It grows most optimally in full sun to light shade and is fully winter hardy. With its exfoliating bark, compact crown, and low susceptibility to pests, black birch DURA-HEAT is both a functional and aesthetically valuable tree choice.

TYPES OF PLANTING

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

USE

Location: avenue, park, central reservation, in containers, roof garden, large garden, cemetery, bioswale | **Pavement:** none, open | **Planting concepts:** Climate planting, urban planting

CHARACTERISTICS

Crown shape: wide pyramidal | **Crown structure:** semi-open | **Height:** 9 - 12 m | **Width:** 8 - 10 m | **Winter hardiness zone:** 4A - 9B

ASPECTS

Wind: tolerant to wind | **Soil:** loess, sabulous clay, heavy clay, sand, loamy soil | **Nutrient level:** moderately rich in nutrients, rich in nutrients | **Soil moisture level:** moist, wet | **Light requirements:** sun, partial shade | **pH range:** neutral | **Host plant/forage plant:** butterflies | **Extreme environments:** tolerant to dryness, tolerates heat, tolerant to short-term flooding

PLANTKENMERKEN

Flowers: catkins, discrete | **Flower colour:** brown, green | **Flowering period:** April - May | **Leaf colour:** dark green | **Leaves:** deciduous, rhomboid, thick, leathery, serrate | **Autumn colour:** yellow | **Fruits:** striking, catkins | **Fruit colour:** yellow-brown | **Bark colour:** cinnamon-brown | **Bark:** peeling, slightly furrowed | **Twig colour:** red-brown | **Twigs:** bare | **Root system:** compact, highly branched

