

The Plantsman's Choice
Presenting promising urban trees

Black walnut

A beautiful
park tree as
a complement
to ash

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Walnut trees have historically been predominantly represented in urban situations by the common walnut (*Juglans regia*), which has long been cultivated for its tasty nuts. However, there are several more species within the genus that are cultivated as ornamental trees for English conditions. One of the foremost is the black walnut (*Juglans nigra*), which can probably be classified as one of the most beautiful ornamental trees with fantastic seasonal qualities.

Large and high-yielding trees with compound leaves occur mainly in our parks in the form of common ash (*Fraxinus excelsior*), but in the wake of ash dieback, which has resulted in a drastic reduction in ash plantings, the black walnut can be seen as an excellent alternative because of its similar appearance.

The black walnut originates from eastern North America – from south-eastern Canada in the north to Florida in the south. The western outposts of the species extend to Minnesota and Texas. The black walnut is usually found in rich and humid valleys where it can develop into impressive trees of almost 50m in height. In these rich systems, it is usually found as individuals with other large-scale species such as red maples (*Acer rubrum*), American limes (*Tilia americana*), tulip trees (*Liriodendron tulipifera*) and cucumber trees (*Magnolia acuminata*). The black walnut behaves somewhat as a pioneer species where it establishes in disturbed young sites, e.g. abandoned fields, and with its impressive growth it comprises the first woodland stage in many east American forests. The main consumers of the nuts are squirrels, helping the black walnut to spread.

The growth and structure of the black walnut clearly differ from other hardy walnut species. It is the species that has the greatest tendency to develop a single stem, even in open grown positions where other walnut species develop into wide-growing multi-stemmed trees. When young it has a conical crown, which eventually changes to a wide, rounded habit. In cultivation it grows to 18–22m high. The bark develops a coarse structure early and is initially light brown but becomes more black-brown with age. The leaves are 30–50cm long and are composed of 13–23 short-cut small leaves. The leaves are clearly aromatic when you rub them between your fingers.

One of the most important qualities of the species is the autumn colour, which is a beautiful golden yellow. Even in the summer, the foliage provides a pleasant quality with a leaf structure that doesn't give too dense shade and is beautiful to experience from underneath – a perfect tree to have a picnic under! The fruits usually sit alone but sometimes occur in groups of two to three. They are round or slightly pear-shaped and are highly aromatic when touched.

The black walnut deserves to be used more widely because in appearance, size and site requirements it can provide an alternative to our disease-impaired common ash. However, it is important to bear in mind that the species can be difficult to establish and is sensitive to drought before it is fully established; some planning is thus required before planting.

It is important to buy trees with a well-assembled root system, which means container-grown trees are recommended. The transport and handling of black walnut are also important to consider since a dehydrated root system after a long journey can jeopardise the tree's establishment. In winter, the root system is also very sensitive to cold temperatures if the tree is above



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Black walnut showing vivid autumn colour.

ground before planting. A tip is to invest in bigger trees of the species since young trees often have few and long branches and a sparse branch structure, and thereby give a limited volume compared to larger and older trees. After planting, generous maintenance with thorough watering is necessary before the trees can fully establish on site.

Based on experience, the black walnut needs generous rooting space, which makes the species suitable for park environments, but if generous rooting spaces are available in inner-city environments it would be interesting to use it there since the species performs even better in warm microclimates, putting on more growth and showing more vivid autumn colours.



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