The Plantsman's Choice

Turkish hazel

A well-known but often misunderstood tree

Henrik Sjöman and **Andrew Hirons**

Turkish hazel (*Corylus colurna*) has become an increasingly common feature of our towns and cities in recent decades. The species is represented by beautiful park trees as well as elegant street trees. Unfortunately, you will also see many failed plantings of Turkish hazel, in part due to a lack of knowledge about the species.

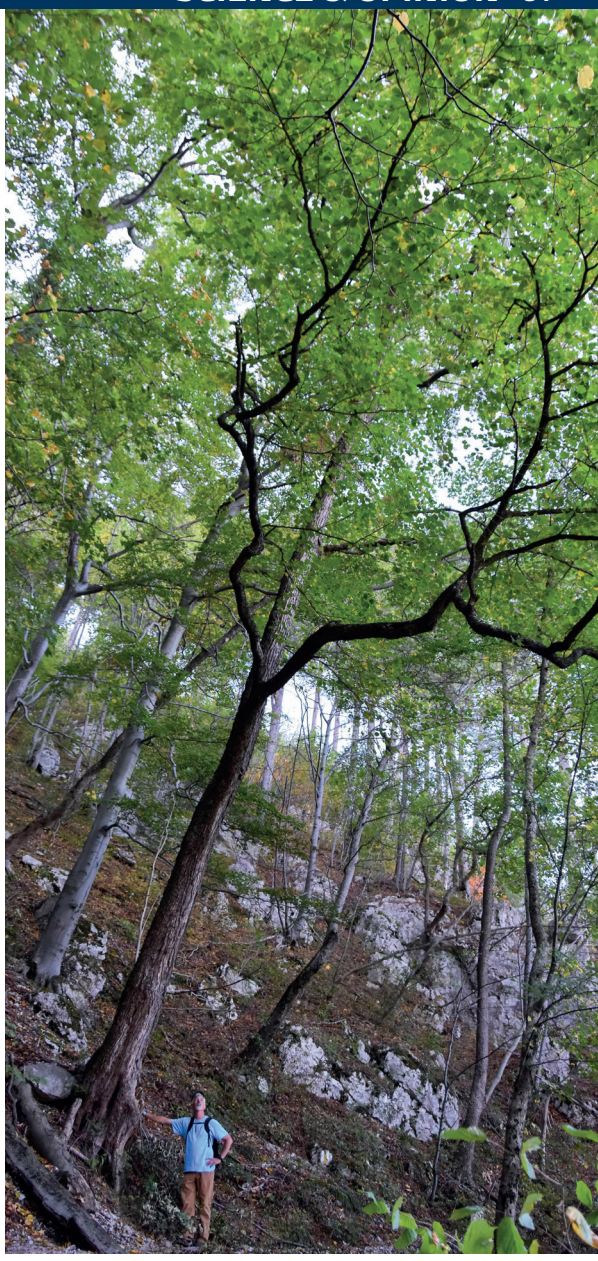
There are large variations in the growth of the Turkish tree hazel: you can find both narrow-growing trees (below) and more broad-growing individuals (above).

The natural distribution of Turkish hazel is a little uncertain. In Europe, it grows wild from the Balkans eastwards through northern Turkey to northern Iran via the Caucasus, and then eastwards into central Asia. Here, though, its eastern distribution is poorly defined, so the full extent of its range is difficult to determine. In the Balkans, the Turkish hazel is found growing on steep slopes in summer-warm forest systems together with *Carpinus betulus, Carpinus orientalis, Sorbus torminalis* and *Cornus mas*. The species is most successful on calcareous soils where it can grow to over 20m high, at least 5m higher than the average cultivated tree.

The species' growth varies greatly, from relatively narrow and tapered, to very broad-crowned trees that strongly resemble an open-grown oak. Precise selection is therefore desirable in order to be able to predict a tree's final size and shape. However, in general the species has a clear tendency to develop a distinct single main trunk, from which the branches grow at almost a right-angle. The leaves are ovoid and around 10cm long. These cast quite a deep shade, so mature trees are very effective at reducing local temperatures in warm summer months. In autumn the leaves yellow, but it is fair to say that they fall short of the spectacular display seen in some of their compatriots. The hazelnuts of the species are assembled in large eye-catching fruit cups with constellations of four to seven nuts in one fruit body.

Descriptions of the species' tolerance to different site conditions differ widely between different sources. Established trees of Turkish hazel are relatively drought tolerant and thus good for street environments where generous planting pits are offered. The species also has a good tolerance for air pollution and windy conditions. It is found naturally competing well on calcareous soils, so it does well on soils with a high pH which are commonly found in inner-city environments. The crown structure of the Turkish hazel, with its dominant single trunk and almost horizontal lower branches, makes it very suitable for wide road environments where it is possible to gradually raise the tree's crown to gain more space for traffic. However, one thing that may make the species unsuitable for some urban environments is that it is very sensitive to road salt. The fruit may also cause something of a seasonal nuisance on paved sites in autumn.

The Turkish hazel has slow growth – below as well as above ground. This means that it takes time for trees to get their root system into surrounding soil volumes and thus fully establish after planting. Therefore, always plan for careful, long-term aftercare to ensure successful establishment. Also, the purchase of high-quality trees which have been diligently pruned before being root-balled or those that have been carefully container grown is necessary to help secure effective establishment. If possible, avoid handling this species as a bare root.



Wild Turkish hazel on a steep slope in south-western Romania.

Today, there is a good supply of Turkish hazel in the market, even in larger sizes. Before purchasing, you should always check how the trees look. Larger trees have an elegant strength with a strong form, whilst the young can be sparse and rather underwhelming. Therefore, if your budget allows, trees that are larger than 18–20cm in trunk diameter should be chosen to ensure that you receive more than a leafy stick.

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