

Birch trees in the parks of Timisoara

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Abstract The species of *Betula* genus are relatively frequent in the streets and green areas of Timisoara. There are many parks in the town where you cannot find this species in greater or smaller numbers. It was quite common on the streets of the town in the past too, probably because it was one of the nice decorative trees. Though it is never used for rows on the sides of the streets, you can still find it in many places. Generally speaking birch is a usual presence in the green spaces of Central Europe, though replaced nowadays in many places with other, sometimes more expensive species.

Key words

Park, trees, *Betula pendula*, Timisoara, Birch

Betula L. genus (Birch)

Betula is a deciduous tree extending to the far northern regions of the globe as well as lower-latitude mountains of the northern hemisphere, birches are among the most admired of all trees as landscape subjects despite having fairly inconspicuous flowers and fruits. Their appeal lies in their sparkling white to pinkish brown trunks, combined with vivid green spring foliage and delicate tracery of winter twigs. The short, broad, serrated leaves mostly turn gold in fall (autumn) before dropping. Their fast early growth, yet fairly modest final height, are added advantages for use in gardens or streets. In nature, birches often grow in dense stands rather than scattered among other trees.

Cultivation: To grow birches successfully, a climate cool enough for at least the occasional winter snowfall is needed. Birches are shallow-rooted and will need watering during dry periods. They grow best in full sun or dappled shade in deep, well-drained soil, but some adapt to poorer, shallower, even boggy soil. Propagation is normally from the small winged seeds, produced in vast numbers from the cylindrical female catkins.

Betula pendula Roth

(*Betula alba* L.), (*Betula verrucosa* Ehrh.)

Silver Birch, White Birch

The common birch of northern Europe, the silver birch is also one of the most elegant species, with smooth gray-white bark and fine arching branchlets bearing small shimmering leaves. It is the most widely cultivated birch, ideal as a wind-break and generally trouble free in terms of pests and disease. It reaches around 9-15m in temperate climates; however, in Scandinavia it can reach 21-24 m and is an important timber tree there. Many cultivars have been named, including 'Purpurea' with rich, dark purple leaves, 'Laciniata' with deeply incised leaves and weeping branches; 'Tristis' with an erect trunk but weeping

branchlets; and 'Youngii' with growth like a weeping willow and no leading shoot, requiring it to be grafted on a standard.

Justitiei Park (Park of Justice) is situated in the center of Timisoara, near the town hall, in an area surrounded by large boulevards and on one part by the river Bega. The park has nice old trees of different species, while the grassy areas are smaller in size. There are some monuments too. The total surface of the *Betula pendula* tree crowns is 170m². There are 12 individuals belonging to this species in the park. The ages of the trees are between 5 and 20 years. Their average height is 5m. The diameter of the tree crowns is between 1 and 3m. The trees are situated mainly in the neighbourhood of the Hydroelectricity Faculty building and in the central parts of the park.

Copiilor (Childrens) Park is situated in Timisoara on the bank of the river Bega near the center of the town. It has nice old trees of different species and used to have playgrounds for children. There are 42 *Betula pendula* trees in the park. They are aged between 20 and 30 years. The height of the trees is between 2 and 15m. The diameter of the tree crowns is between 5-6m. The total surface of the tree crowns is 304m. The birch trees are located in different parts of the green space, mainly near the river bank and the County Hall.

Centrul Civic (Civic Center) Park, is situated in the center of Timisoara, behind Bega Store House. The green space appeared forty years ago, when the region was rebuilt after the demolition of an old building. There are 50 *Betula pendula* trees in the park. The trees are 20 to 40 years old, 10 to 14m high. The total surface of the crowns is 850 m². The diameter of the crowns is between 3 and 5m. The trees were planted all over the green space, mainly in the central parts. When the park was created 40 years ago the tree species were mixed equally in the whole area. Civic Center Park is

rather a transit area than a place where people come to walk in their free time.

Alpinet Park is situated on the bank of the river Bega, in central town. It is not a great green space, but it has a nice design, and contains many species of trees and shrubs. There are 7 *Betula pendula* individuals in the park. The total surface of the tree crowns is 190m². The trees are aged between 20 and 40 years. The height of the trees is 9 to 18m. The diameter of the tree crowns is between 3 and 7 m.

Central Park, (Parcul central) is probably the oldest park in Timisoara, with a history of 150 years. It is situated in the center of the town near the orthodox cathedral. Its central part is geometrical and monumental, while the rest is more natural. There are statues, flower beds, fountains and pergolas in the park. No *Betula Pendula* trees exist in the park.

Birch trees can be found all over the town on the sides of lanes, in parks, in alleys. They represent a common species in Timisoara. *Betula pendula* trees have ecological and especially esthetic value.

Results and Discussions

Betula pendula is an important species, present in many green spaces of Timisoara. The trees contribute a lot to the outlook of certain urban areas. There are few trees which are very old and have a great visual and ecological value, while most of them others are young. The species is present in most of the important parks of Timisoara, and can be found in some streets also. Their number and importance are variable. The individuals are sometimes concentrated near building, even on small green areas, and private properties, but cannot be found in rows along alleys. The study shows that they are present in nearly all green spaces, in quite great numbers, disposed in little groups or isolated, especially in the newly rebuilt little parks of the town. *Betula pendula* traditionally belongs to the usual sight of Central European towns, not only to the north of the continent. The plants adapt relatively easily in different

conditions. Birch trees are considered very decorative in certain urban areas. Silver birches have a great ecological amplitude, to which is added a great capacity of seed regeneration and the quality of a fast growing species in young years. It is one of the most important pioneer species of our woods. In different zones of its habitat, birch have a uniform ecological behaviour. As a result in our country climate and soil ecotypes a few. We can enumerate the following : Plain birch, High altitude birch, Relative dry soil birch, Peatland birch.

Conclusions

1. *Betula pendula* is present in nearly all the parks of Timisoara, in greater or smaller numbers, as well as on many streets. Still we must observe that the species is less present in old central parks of the town, compared to newly rebuilt green areas.
2. The trees have ages between up to 80-100 years and according features, but mostly are young. They have ecologic and esthetic value.
3. Ornamental and cultivars and hybrids are rarely seen, but *Betula pendula* are nowadays appreciated in green species.

References

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Betula pendula – Birch

