

## Henrik Sjöman and Andrew Hirons

In environments where you want trees that establish quickly and grow large in a short period of time, the Freeman's maple (*Acer* × *freemanii*) is a very interesting hybrid that delivers strong growth and excellent autumn colours.

This interesting maple hybrid was first found in cultivation in 1933 and then also discovered growing naturally in the floodplain and lowland deciduous forests of the eastern United States. The parents are red maple (Acer rubrum) and silver maple (Acer saccharinum). Both species flower in early spring (April-May), and where they grow together natural intersections sometimes occur. In general, the hybrid can be said to have a more unified, usually oval habit, which clearly differs from the broader and more abundant growth of the silver maple. The leaves are five lobed and clearly intermediate between the parents with deeper lobes than the red maple but not as deep as those of the silver maple. The leaves are similar to the undersides of the red maple leaf which are bluish-silver in colour; this gives a nice effect when it shimmers in a summer breeze. The autumn colours are usually yellow-red to purple and can vary widely between different plants, especially when seed-propagated.

In generous planting beds and park environments, Freeman's maple inherits the silver maple's ecologically competitive strategy as it invests in strong growth above and below ground in order to create an advantage over other trees and shrubs. Its root system rapidly exploits the available soil volume, quickly setting up the resource supply-chain needed for quick establishment. Perhaps the only downside to such rapid development is that on exposed, windy sites, relatively brittle long shoots can occasionally snap out. In more upright cultivars (such as 'Armstrong') branch union failure can also be attributed to a high frequency of branch unions with included bark. Therefore, visual inspection combined with judicious formative pruning of these cultivars is encouraged.

In situations where conditions are less optimal, Freeman's maple can also perform satisfactorily. It is one of the few trees that can be said to have moderate tolerance to shade, drought and waterlogging. However, as you might expect, the absolute growth rates are somewhat suppressed on more challenging sites. As with most species, tough inner-city environments are most suitable where good soil volumes (and quality) can be supplied.







A useful attribute of this hybrid is that mature trees are much more compact in their growth than the silver maple, making them valuable in street environments or more spatially constrained sites.

Another characteristic that makes Freeman's maple very valuable in urban environments is that the red maple's sensitivity to high pH seems to have been lost by the genetic cross. However, like the silver maple, the Freeman's maple is relatively short-lived and after 70–90 years it tends to decline rapidly in fitness.

## Acer × freemanii 'Autumn Blaze'

This Freeman's maple is the best known and most frequently used. It can also occur under the name 'Jeffersred'. It develops a dense crown which, as it gets older, becomes more oval in habit. It typically reaches 15-20m high and 7-10m wide. The lush, light-green leaves with a brighter underside take on a vibrant autumn colour of orange to purple-red. A nice feature of this variety is that the autumn colour lasts for a long time – first a few leaves turn as early as September and this gradually spreads throughout the crown. The tree has been used with great success in inner-city environments in southern Sweden and has shown a remarkable tolerance for urban environments.





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