

5 Star Tree Cultivars
A Rating from USDA Zone 5a

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Field evaluations of landscape plants is conducted in the Longenecker Gardens within the University of Wisconsin Arboretum-Madison. Over 2000 taxa of trees, shrubs and vines are represented in this 50 acre garden. Acer and Malus are the largest tree collections. Of rolling terrain, soils are well-drained silt loam and sandy loam of about pH 6.7. Trees are evaluated for winter hardiness, environmental adaptability and aesthetic value.

Acer x freemanii (A. rubrum x A. saccharinum) - Freeman maple. These hybrids combine the aesthetic values of the red maple with the fast growth rate and broader environmental adaptability of the silver maple--including greater tolerance of alkaline soils.

'Armstrong' - previously considered a cultivar of A. rubrum, it is a fast-growing narrow, upright tree with no autumn coloration.

'Autumn Blaze' - the most outstanding red autumn coloration of existing cultivars.

Acer platanoides 'Emerald Queen' - among the Norway maple cultivars with a broad oval form, it consistently develops the best autumn coloration and the leaves are held "crisply" with their leaf blades parallel to the ground.

Acer rubrum 'Autumn Flame' - develops red autumn color 10 days before 'Red Sunset' and 20 days before 'October Glory' resulting in earlier defoliation and hence, greater winter hardiness. A staminate cultivar with relatively small leaves, only cutting propagated stock should be planted.

Acer saccharinum 'Skinneri' - Skinner's cutleaf silver maple - develops a stronger central leader and wider branch angles than other cultivars. Its shredded leaves provide a pleasing texture--an attractive tree to consider for use on less-than-ideal urban sites.

Acer saccharum 'Green Mountain' - Green Mountain sugar maple - a fast-growing, scorch-resistant cultivar with excellent red-orange autumn color. 'Legacy' - possesses the same attributes as 'Green Mountain', but has a much denser crown.

Alnus glutinosa 'Pyramidalis' - Pyramidal European alder - few other columnar trees remain as narrow with maturity, it is also adaptable to infertile and ill-drained soils.

Amelanchier laevis - Alleghany serviceberry - a taller-than-broad tree with flowers that appear before the smooth bronze leaves emerge in spring. Fall color is terra-cotta orange.

'Cumulus' - when grafted onto Sorbus understock produces a non-suckering upright-growing small tree with orange autumn coloration.

'Prince Charles' - a multi-trunked small tree with showier flowers.

Amelanchier x grandiflora 'Strata' - Strata apple serviceberry - strong horizontal branching habit results in a mature size of 30'x30'. Large flowers tinged with pink, fade to white.

'Princess Diana' - Princess Diana apple serviceberry - develops the brightest scarlet autumn color of any serviceberry.

Betula nigra 'Heritage' - Heritage river birch - selected for its lighter tan bark color. Vegetative propagation makes it more expensive than seedling grown river birch.

Betula platyphylla var. japonica 'Whitespire' - Whitespire Japanese white birch - its origin from the southernmost portion of its natural range in Japan results in its greater tolerance of heat and hence its greater resistance to bronze birch borer. It was named for its narrow pyramidal form and white bark. It should be vegetatively propagated.

Celtis occidentalis 'Prairie Pride' - Prairie Pride hackberry - selected for its strong central leader development and its resistance to witches' broom, it is probably a hybrid of C. occidentalis x C. laevigata.

Cercis canadensis "Columbus Strain" - Columbus strain of Eastern redbud - identified as the most winter hardy seed strain through laboratory and field tests. The original Columbus, WI tree was brought from northern Indiana over 100 years ago.

Crataegus viridis 'Winter King' - Winter King hawthorn - offers resistance to rust, ascending branches, near thornlessness, small, persistent red fruits and silver bark that exfoliates with age.

Fraxinus americana 'Autumn Purple' - Autumn Purple white ash - originated on the University of Wisconsin-Madison campus, it is still unsurpassed for its long-lasting, brilliant orange-maroon autumn coloration.

Fraxinus pennsylvanica 'Patmore' - Patmore green ash - good central-leader development and very glossy leaves.

Gleditsia triacanthos inermis - thornless honeylocust.

'Imperial' - lower-growing, round-headed tree with wide branch angles.

'Skyline' - good central-leader development, exceptional autumn coloration and resistant to leafhoppers and plant bugs.

Magnolia x loebneri 'Leonard Messel' - early pink flowers on a broadly pyramidal tree - more reliably hardy than M. x soulangiana.

Malus - ornamental crabapples - selection should be based on resistance to apple scab and on fruiting, rather than flowering qualities. Annual bearing cultivars with highly colored, persistent, tiny fruits that do not create a littering problem should be chosen.

'Adams' and 'Indian Summer' - pink to red flowers and persistent red fruits.

'Donald Wyman' and 'Red Jewel' - white flowers and persistent red fruits.

'Bob White' and 'Winter Gold' - white flowers and persistent yellow fruits.

'Red Barron' and 'Sentinel' - upright growth habit.
'Weeping Candied Apple' and 'White Cascade' - weeping habit.

Phellodendron amurense 'Macho' - Macho corktree - a staminate tree with ascending branches.

Pyrus calleryana - callery pear - noted for early white flowers, late autumn coloration and tolerance of heavy clay soils, it is marginally hardy in zone 5a. The following have proven to be most winter hardy:

'Autumn Blaze' - horizontal branching with early-developing red-orange autumn coloration.

'Rancho' - upright branching habit with early-developing red-maroon autumn coloration.

Syringa reticulata 'Ivory Silk' - Ivory Silk tree lilac - a straight-trunked, summer-flowering, small-scale tree with potential for street planting beneath overhead utilities.

Tilia cordata 'Chancellor', 'Greenspire', and 'Tures' have strong central-leader development, well-spaced branches and formal crowns.

Tilia x euchlora 'Redmond' - Redmond linden - a vigorous, glossy-leaved linden with a narrow, pyramidal crown.

Ulmus x 'Regal' - Regal elm - of the recent Dutch elm disease-resistant hybrid introductions, Regal develops a strong central leader and wide branch angles. An upright-growing street tree of rapid growth.

Ulmus americana 'Liberty' - Liberty American elm - a group of highly D.E.D.-resistant elms selected at the University of Wisconsin-Madison and presently held by the Elm Research Institute. Hopefully one or more of the American Liberty elms will be registered or perhaps patented so that they will be available for production by commercial nurseries.