Decatur Tree Species List

The **Decatur Tree Species List** is intended to support, site planning and design activities for tree conservation and establishment, and tree maintenance planning and decision-making. In the list trees are arranged alphabetically by the tree's common name with the "genus" listed first. For example, red maple is listed as "Maple, Red" (maple is the genus name). The Latin name is also listed for more definitive species identification. In some cases, the commonly planted variety or cultivar of the species has also been included apart from the species.

Key to Symbols and Tree Species Characteristic Descriptions

TREE CHARACTERISTIC	DESCRIPTION and ENTRY CHOICES	
Species Common Name	Entered with genus common name first, then species, then	
	cultivar if applicable. For some species an alternate common	
	name is included in parentheses.	
Latin Name	Genus, species, and variety or cultivar; always italicized or	
	underlined.	
CANOPY AREA FOR DEVELOPMENT CODE		
Square Feet of Canopy	The total area projection of the crown onto the ground in square	
	feet as typically achieved in urban situations with less than	
	optimal growing conditions.	
Parking Lot Canopy Tree	Trees approved for planting in parking lots.	
	1 = trees that will project significant shade, intercept enough water,	
	substantially filter out pollutants, and survive the conditions within a	
	parking area to the extent they could be considered a "canopy" tree.	
	2 = the same as 1, except these trees are ONLY appropriate for	
	large, expanded tree islands or landscape strips, swales, or moist soil	
	conditions with plenty of rooting space.	
Canopy Size Category	Very Small - 150 square feet with a 12 foot crown diameter	
	The minimum open soil surface area is 25 sq. ft.	
	Small – 250 square feet with a 15 foot crown diameter	
	The minimum open soil surface area is 100 sq. ft.	
	Medium – 500 square feet with a 25 foot crown diameter	
	The minimum open soil surface area is 225 sq. ft.	
	Large – 1,000 square feet with a 35 foot crown diameter	
	The minimum open soil surface area is 400 sq. ft.	
RECOMMENDED USES		
Level of Use	The level of use that the tree should receive.	
	P = Plant New Trees and Conserve Existing Trees	
	C = Conserve Existing Trees	
	L = For Limited Planting or Conservation Only	
	N = Do Not Plant	
Large Landscape Areas	Recommendations on the site situation where the tree may be	
Road Frontages – Street	planted and/or conserved; locations where the tree would adapt	
Road Frontages – Yard	well.	
Parking Lots		
Plazas and Downtown	O = tree to avoid; not suitable	
Settings	Blank = may or may not be suitable	
Riparian Zones and	x = good choice	
Drainage Areas	XX = excellent choice	
Utility Corridors		

TREE CHARACTERISTIC	DESCRIPTION and ENTRY CHOICES	
PHYSICAL CHARACTERISTICS		
Height Class in Urban Conditions	Height class (ground to tip of leader or tallest branch) of a mature tree commonly achieved in urban situations with less than optimal growing conditions. S = Small: 15-25 feet	
	M = Medium: 25-40 feet	
	L = Large: 40 feet and taller	
Crown Class in Urban Conditions	The width of the crown (at its widest point) commonly achieved in urban situations with less than optimal growing conditions.	
	VS = Very Small (150 square feet with a 12 foot crown diameter)	
	S = Small (250 square feet with a 15 foot crown diameter)	
	M = Medium (500 square feet with a 25 foot crown diameter)	
	L = Large (1,000 square feet with a 35 foot crown diameter)	
Mature Crown Form	General shape of the tree crown (leaves and branches) when	
	fully leafed out.	
	Irregular Multi Stommod	
	Oval (Columpar)	
	Dvar (Columnar)	
	Fyrannual Rounded	
	Spreading	
	Upright (Vase)	
Typical Range of Mature	Typical range of height of tree in feet from ground to hud at tip of	
Tree Height	leader or tallest branch under various conditions.	
Typical Range of Mature	Typical range of spread of branches in feet at the widest	
Crown Width	diameter across the crown under various conditions.	
Leaf Type	Persistence and type of leaf on the tree. Deciduous trees lose	
	their leaves in the fall.	
	DB = Deciduous Broadleaf	
	DC = Deciduous Conifer	
	EB = Evergreen Broadleaf	
	EC = Evergreen Conifer	
Leaf Texture	Relative size and appearance of leaves.	
	F = Fine	
	M = Medium	
	C = Coarse	
Fall Leaf Color	The typical color of the tree's fall foliage.	
	EV = evergreen	
	BR = bronze or brown	
	MA = maroon	
	MU = multi-colored: maroon, red, orange, yellow	
	OR = orange	
	RE = red	
	YE = yellow	
	I = insignificant color change	

TREE CHARACTERISTIC	DESCRIPTION and ENTRY CHOICES	
PHYSICAL CHARACTERISTICS (continued)		
Flower Color	For trees with showy flowers, indicates the typical flower color.	
	B = blue	
	L = purple	
	M = multiple colors: white, pink, purple, red, or others	
	P = pink	
	R = red	
	W = white	
	Y = yellow	
	I = insignificant flowers: small with an unremarkable color	
Flowering Time	For trees with showy flowers, the general season of blooming for	
	the species.	
Wildlife Value	Indicates with an "X" if the tree produces flowers (nectar) or	
— • • • • • • • • • • • • • • • • • • •	fruits that are consumed by insects, birds, or mammals.	
Excessive Litter	Indicates with an "X" if the tree produces large or hazardous	
	leaves, fruit, or other litter.	
ENVIRONMENTAL CHARACTERISTICS AND TOLERANCES		
Native Tree	Indicates whether or not the tree is found naturally	
	<u>-</u>	
	Y = Yes	
Growth Rate	Typical rate of growth under urban conditions.	
	S = Slow: 1/2 to 1-1/2 feet/year	
	M = Moderate: 1-1/2 to 2-1/2 teet/year	
Augus us Life Cuser	F = Fast: 2-1/2 to 3+ feet/year	
Average Life Span	The average life span (useful service life) of the species when	
	growing under average urban conditions. A free is at the end of	
	unacceptable and cannot be improved or when the tree is no	
	longer an asset due to its appearance or condition	
	S = Short: less than 25 years useful service life	
	M = Moderate 25 to 40 years useful service life	
	$I = I \text{ arge}^{\circ}$ 50 years or greater useful service life	
Net Effect on Air Quality	The net monetary effects in cents attributable to the species on	
	air quality: listed as a benefit (positive) or cost (negative).	
	Includes the species net effect on ozone, sulfur dioxide, nitrogen	
	dioxide, particulate matter (PM10), and carbon monoxide.	
Soil Moisture	The typical soil moisture conditions for the species in its native	
	habitat.	
	H = Hydric: wet and may be occasionally flooded for short periods	
	M = Mesic: moist but moderately well- to well-drained	
	X = Xeric: dry and very well-drained	

TREE CHARACTERISTIC	DESCRIPTION and ENTRY CHOICES
ENVIRONMENTAL CHARAC	TERISTICS AND TOLERANCES (continued)
Drought Tolerance	Tolerance of the species to infrequent rain, low soil moisture, full
	sun, and high temperatures.
	Low = not tolerant to drought conditions
	Moderate = tolerant to mild drought conditions; moderately tolerant to
	severe drought conditions
	High = very tolerant to mild to severe and prolonged drought
	conditions
Preferred Soil pH	Relative soil acidity or alkalinity preferred by the species. In
	many cases, a range of pH preference is given if it was available.
	In other cases, a general level is given. A pH of 7.0 is neutral, a
	pH of less than 7.0 is acidic, and a pH of greater than 7.0 is
	aikaline.
	$\frac{dC}{dC} = \frac{dC}{dC} $
	si ac = slightly actuic (0.0 to 7.0)
	nu = neutral (7.0)
	SI aI = SI aIKaIII a (7.0 to 8.0)
	dl = dikalifie (0.0 10 0.3)
Light Poquiromont	The amount of sunlight the species profess or will telerate
Light Requirement	Trees that are typically found in the understory or are
	characteristic of late forest successional states prefer shade or
	at least partial shade, while trees that typically form the
	overstory or are characteristic of early successional stages
	prefer full sun.
	FS = Full Sun
	PS = Partial Shade
	SH = Shade
Construction	The broad tolerance of the species in its home range to
Tolerance/Limitations	construction damage, and the limitations that constrain a
	species tolerance to damage.
Tolerance	P = Poor
	M = Moderate
	G = Good
Limitations	I = physical injury, wood compartmentalization and decay
	P = pest complications, including chronic and acute attacks
	S = soil conditions, including aeration and water availability
	C = limited climatic tolerances, including native range, hardiness, and
	micro-climate change
	A = all of the limitations described above
Urban Tolerant Tree	Based upon other characteristics and tolerances to urban
	conditions; an "A" indicates the species is suitable for planting
	under tough" urban conditions.