COMMON NAME: European larch  
SCIENTIFIC NAME: *Larix decidua*  
FAMILY: Pinaceae

**Mature size:** Height: up to 70 feet. Spread: 25 feet wide or wider at maturity. The top three European larches on Colorado’s Champion Tree Registry are all over 70 feet tall and 45 feet wide.

**This tree in Colorado:** The European larch is an under-utilized conversation piece in Colorado. It functions very effectively in larger landscapes as specimens or groupings. Like the majority of trees, it performs best in acidic, established soils. Once established, the larch requires only moderate moisture, making it an easy fit for most manicured landscapes. The European larch should be transplanted when dormant, as planting during the growing season can result in severe shock. There are no significant diseases of larches present in Colorado and few elsewhere. One precautionary note: although the European larch requires a sunny location, it languishes in heat and should not be sited in areas that will receive reflective heat; it is best in established areas with larger trees (a cooler micro-climate).

**Hardiness:** Zones 3A to 6. Quite cold-hardy and needs to be protected from reflective heat.

**Growth rate, form, and size:** Larches grow quickly in comparison to most other conifers and can gain two feet of height in a growing season. This tree will be gracefully pyramidal with drooping branchlets in its youth, and it becomes more rigid and open as it reaches maturity.

**Foliage:** Sprays of single needles cluster along the branches, emerging as a bright green in spring, turning deeper green and finally yellow or orange in fall. A deciduous conifer — its fall color can be spectacular. It will drop its needles in the fall and regrow them in the spring like a deciduous tree.

**Flowers and cones:** The European larch flowers in the spring, with flower color varying from red to yellow and green. The fruit produced is a 1” long cone and is nearly round.

**Bark:** The bark is thin and scaly on young trees, becoming deeply fissured on older trees. The color typically varies from a cinnamon brown to a dull gray brown.

**Cultivars:** Finding this tree in nurseries takes some searching in Colorado. As the tree is infrequently planted here, few nurseries carry quantities of the tree. There are a few cultivars in production — all selected based on physiological quirks within the genetic diversity of the European larch — but they are extremely rare in commerce.

**Landscape value:** This tree should either be planted as a single specimen tree or in symmetrical groupings. When planted near other trees, it can become lop-sided because of its shade intolerance and tendency to self-prune.

**Information sources:**
Michael Dirr, *Manual of Woody Landscape Plants*
Michael Dirr, *Dirr’s Hardy Trees and Shrubs*
Edward F. Gilman, *Trees for the Urban and Suburban Landscapes*
Botanica’s *Trees & Shrubs*
Image 1. Photos of European larch trees throughout the seasons. This tree drops its needles in the fall and puts out new needles in the spring. Photo credit: https://hort.extension.wisc.edu/articles/european-larch-larix-decidua/

Image 2. Photos of European larch needles. The far right photo is the dried needles on the ground after they have fallen from the tree. Photo credit: https://hort.extension.wisc.edu/articles/european-larch-larix-decidua/
COMMON NAME: Swedish whitebeam
SCIENTIFIC NAME: Sorbus intermedia
FAMILY: Rosaceae

Mature size: Height: up to 35 feet. Spread: up to 25 feet

This tree in Colorado: A naturally occurring hybrid, this beautiful accent tree features interesting leaves that turn yellow and orange in fall; showy clusters of white flowers in spring and red berries in fall. It likes well drained soil and is resistant to disease

This is a relatively low maintenance tree, and is best pruned in late winter once the threat of extreme cold has passed. It is a good choice for attracting birds and bees to your yard. It has no significant negative characteristics.

Hardiness: Zones 4-8

Growth rate, form, and size: This tree does best in full sun to partial shade. It prefers to grow in average to moist conditions, and shouldn't be allowed to dry out. It is not particular as to soil type or pH. It is somewhat tolerant of urban pollution. Consider applying a thick mulch around the root zone in winter to protect it in exposed locations or colder microclimates. This particular variety is an interspecific hybrid.

Swedish Whitebeam is a deciduous tree with a more or less rounded form. Its average texture blends into the landscape. It has a low canopy with a typical clearance of 4 feet from the ground, and should not be planted underneath power lines. It grows at a fast rate, and under ideal conditions can be expected to live for 50 years or more.

Foliage: The leaves of Swedish whitebeam are ovate, 3-5 inches long and 2-3 inches wide and unevenly lobed. The leaf underside has a slight layer of gray, short, woolly hairs that give the leaf a silvery appearance. It has dark green foliage throughout the season and then the serrated oval leaves turn an outstanding orange in the fall.

Flowers and fruit: Swedish whitebeam features showy clusters of white flowers held atop the branches in mid spring. The orange fruits are held in abundance in spectacular clusters from early to late fall and are eaten by birds.

Bark: The bark is gray-black and almost smooth.

Cultivars: The Swedish whitebeam is a triple hybrid, the result of cross-breeding between three species: common mountain-ash (Sorbus aucuparia), whitebeam (Sorbus aria), and wild service-tree (Sorbus torminalis).

Landscape value: This tree does well in parks and in landscapes. It is native to Scandinavia and the Baltics and is considered a natural hybrid.

Informational sources:
http://www.tree-guide.com/swedish-whitebeam
https://plants.tagawagardens.com/12130017/Plant/1721/Swedish_Whitebeam/
Image 1. Comparing twigs and buds of Swedish whitebeam and Oak. Twig on the left is a Swedish whitebeam – note the thicker stem and buds close to the stem. Twig on the right is an oak. Note the skinnier stem and the buds sticking out from the twig.
Image 2. Photo of flowering Swedish whitebeam, not at mature size. Photo from: www.gardenia.net/plant/sorbus-intermedia

Image 3. Photo of leaf and fruit in the fall of Swedish whitebeam
COMMON NAME: Pecan  
SCIENTIFIC NAME: *Carya illinoinensis*  
FAMILY: Juglandaceae

**Mature size:** Height: 70-80 feet. Spread: 40-60 feet

**This tree in Colorado:** It does best in full sun to partial shade. It is very adaptable to both dry and moist locations, and should do just fine under average home landscape conditions. It is not particular as to soil pH, but grows best in rich soils. It is somewhat tolerant of urban pollution. This species is native to parts of North America. There are numerous specimens located in Delta and Grand Junction. The literature states that the tree needs well-drained loamy soils but the soil where the Colorado specimens are growing is clay-like and alkaline.

This tree can grow very large, so plant in a place that can handle a tree this size and do not plant it beneath power lines. This is a high maintenance plant that will require regular care and upkeep, and is best pruned in late winter once the threat of extreme cold has passed.

**Hardiness:** Zones 5 to 9.

**Growth habit:** Tree has an irregular rounded crown as a mature tree. Native to the eastern and southern states it is found growing as a native tree in Eastern Kansas and throughout central Texas. There are no native pecan stands in Colorado.

**Foliage:** Dark green pinnately compound leaf that is 12 to 18 inches long. The narrow lance-shaped leaflets are 3 to 6 inches long on a pale green petiole. It can turn a yellow-gold color in the fall.

**Flowers:** Male and female flowers are borne on the same tree in catkins. Flowers are not showy in appearance.

**Fruit:** A nut contained in a four-winged husk. As fruit matures the husk turns dark brown in color. The nut has a dark brown thin shell and can have a sweet seed inside. Seed production begins once the tree is 20 years old.

Pecan trees are monoecious: they have separate male and female flowers on the same tree. Pollen is not released when flowers are receptive, so pollination within and between the same cultivars is limited. Planting different cultivars of pecans will increase the potential for pollination.

**Bark:** The bark is brownish gray and slightly furrowed on mature trees.

**Twigs:** On young branches light gray to brown in color eventually turning gray with maturity.

**Insects and diseases:** Have not observed significant pests other than aphids on Colorado specimens.

**Landscape value:** This tree species has a substantial taproot, which make transplanting larger saplings a difficult proposition. Any attempts to establish this tree should be done when the trees are seedlings. Preferably less than two years old.

Commonly called hardy pecan, is a large deciduous lowland tree that is the largest of the hickories.

**Information sources:**
Michael Kuhns, Trees of Utah and the Intermountain West (Utah State University Press, 1998)  
Fire Effects Information System, USDA Forest Service  
https://plants.ces.ncsu.edu/plants/carya-illinoiensis/  
http://plants.tagawagardens.com/12130017/Plant/73/Pecan
Image 1. Pecan tree, not at mature size

Image 2. Pecan leaf and nut
**COMMON NAME:** Chinquapin oak or Chinkapin oak  
**SCIENTIFIC NAME:** *Quercus muehlenbergii*  
**FAMILY:** Fagaceae

**Mature size:** Height: up to 60 feet. Spread: up to 60 feet.

**This tree in Colorado:**  
It has a high canopy with a typical clearance of 7 feet from the ground, and should not be planted underneath power lines. As it matures, the lower branches of this tree can be strategically removed to create a high enough canopy to support unobstructed human traffic underneath. It grows at a medium rate, and under ideal conditions can be expected to live to a ripe old age of 300 years or more; think of this as a heritage tree for future generations.

This tree should only be grown in full sunlight. It is very adaptable to both dry and moist locations, and should do just fine under average home landscape conditions. It is not particular as to soil type or pH. It is quite intolerant of urban pollution, therefore inner city or urban streetside plantings are best avoided. Consider applying a thick mulch around the root zone in winter to protect it in exposed locations or colder microclimates. This species is native to parts of North America. It will require occasional maintenance and upkeep, and is best pruned in late winter once the threat of extreme cold has passed. It is a good choice for attracting birds and squirrels to your yard.

**Hardiness** Zones 4 to 6

**Growth habit:** Deciduous shade tree with a pyramidal growth pattern as a young tree, becoming more rounded as the tree matures. With enough room on an optimal growing site it can grow to a height of 60 feet and a spread of 60 feet at maturity.

**Foliage:** Deep forest green and lustrous upper leaf surface with a white and slightly fuzzy lower surface. Leaf margins are coarsely toothed. Foliage can turn a coppery-bronze in the fall.

**Flowers:** Male and female flowers found on the same tree and are not very showy.

**Fruit:** Elliptical shaped acorn up to one inch long with the cap covering a third to a half of the fruit. The acorn is sweet and relished by wildlife, however it can be messy if planted over a sidewalk.

**Bark:** The main trunk is gray in color with a somewhat flaky habit.

**Twigs:** Young branches are smooth and light brown.

**Insects and diseases:** No major pest problems observed on this tree.

**Landscape value:** This is a full sun tree that is somewhat tolerant of alkaline soils and there are only a handful of oaks that will tolerate Colorado’s clay alkaline soils. The closest this tree grows naturally to Colorado is eastern Kansas. This is a rare oak for the Colorado landscape that is now being planted more and more. The state champion Chinkapin oak is in Denver with a trunk diameter over 30 inches and a height of 60 feet.

**Special note:** The Chinkapin oak was selected as the 2009 Urban Tree of the Year by the Society of Municipal Arborists (SMA). The SMA is a national organization of over 1,300 municipal arborists and urban foresters.

**Information sources:**
Michael Dirr, Manual of Woody Landscape Plants
http://plants.tagawagardens.com/12130017/Plant/379/Chinkapin_Oak
Image 1. Chinquapin oak, not at mature size

Image 2. Chinquapin oak leaf
Image 3. Left image is of an oak twig and buds. Right image is of an oak twig and newly opened leaves. The leaves will continue to expand and darken in color as they mature.
COMMON NAME: Bur oak
SCIENTIFIC NAME: *Quercus macrocarpa*
FAMILY: Fagaceae

**Mature size:** Height: up to 60 feet. Spread: up to 60 feet

**This tree in Colorado:** Bur oak is the mighty oak of the plains states. It is in the white oak group, meaning that the leaves are without bristle-tipped lobes and the fruit matures in one season. Bur oak is often thought to be native to Colorado, but Harrington’s Manual of the Plants of Colorado does not include it. It is a stalwart tree for plains communities even though it grows slowly. More and more communities are planting it as a street tree.

Bur Oak will grow to be about 60 feet tall at maturity, with a spread of 60 feet. It has a high canopy of foliage that sits well above the ground, and should not be planted underneath power lines. As it matures, the lower branches of this tree can be strategically removed to create a high enough canopy to support unobstructed human traffic underneath. It grows at a slow rate, and under ideal conditions can be expected to live to a ripe old age of 300 years or more; think of this as a heritage tree for future generations.

This tree should only be grown in full sunlight. It is very adaptable to both dry and moist locations, and should do just fine under average home landscape conditions. It is not particular as to soil type or pH. It is somewhat tolerant of urban pollution. This species is native to parts of North America.

This tree will require occasional maintenance and upkeep, and is best pruned in late winter once the threat of extreme cold has passed. It is a good choice for attracting birds and squirrels to your yard.

**Hardiness:** Zones 2 to 8.

**Growth habit:** Large tree, weakly pyramidal, more oval. Grows to heights of 60 feet or more. If grown in the open, it has an impressive structure.

**Foliage:** Alternate, simple; oblong to obovate; 6” to 10” long, 3” to 5” wide; margins with 5-9 rounded lobes; dark green and glabrous above, pale and hairy below. The leaves can turn a coppery-bronze color in the fall.

**Flowers:** Male and female flowers found on the same tree and are not very showy.

**Fruit:** An acorn nut. Short stalked. Over 1/2 is covered by a fringed cap. Matures in one season. It can be messy if planted over a sidewalk.

**Bark:** Thick; gray-brown; deeply furrowed and ridged.

**Information sources:**
Michael Dirr, Manual of Woody Landscape Plants
Michael Kuhns, Trees of Utah and the Intermountain West
http://plants.tagawagardens.com/12130017/Plant/378/Bur_Oak

Photos:
Image 1. Bur oak, not at mature size

Image 2. Bur oak leaf
Image 3. Left image is of an oak twig and buds. Right image is of an oak twig and newly opened leaves. The leaves will continue to expand and darken in color as they mature.