Plant Profiles: HORT 2242 Landscape Plants II

Botanical Name: Larix decidua

Common Name: European larch

Family Name: Pinaceae – pine family

General Description: Larix decidua has cones and needle-like foliage, so when the needles turn yellow in autumn and fall off, homeowners become alarmed! It might look like an evergreen but European larch is a deciduous conifer. Other trees in this category include *Metasequoia* (dawn redwood) and *Taxodium* (bald cypress). European larch is a central European species introduced into the United States during the colonial period. A large, broad spreading tree, it prefers cold climates, moist soils and full sun. It is not tolerant of heat, drought or pollution. The straight species needs a lot of room to grow but there are a variety of interesting cultivars useful on smaller sites.

Zone: 3-6

Resources Consulted:

Davis, Becke. "ILCA Presents-Deciduous Conifers: In a Class by Themselves." *Landscape Contractor* June 2003: 29-36. Print.

Dirr, Michael A. Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, *Propagation and Uses.* Champaign: Stipes, 2009. Print.

Creator: Julia Fitzpatrick-Cooper, Professor, College of DuPage

Creation Date: 2014

Keywords/Tags: Pinaceae, tree, conifer, cone, needle, deciduous, larch, European larch



Whole plant/Habit:

- Description: Larix decidua has a loose pyramidal habit. It is easy to indentify by its irregular broad spreading branches and drooping branchlets.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: November 28, 2008
- Image File Name: european larch 1080733.png



Bark:

- Description: The mature bark is dark gray and scaly exposing a cinnamon inner bark.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: January 24, 2008
- Image File Name: european_larch_0144.png



Branch/Twig:

- Description: The horizontal branches covered in cones and the drooping branchlets are great identifying features.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: November 28, 2008
- Image File Name: european_larch_1080730.png



Branch/Twig:

- Description: The young stems are yellowish, grooved and glabrous. The older stems are gray with distinctive short spurs.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: January 24, 2008
- Image File Name: european_larch_0148.png



Bud:

- Description: There are two kinds of buds on European larch. Younger stems have rounded, brown buds spirally arranged on the stem. Also notice the yellowish grooved stem.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: February 5, 2014
- Image File Name: european_larch_1260932.png



- Description: Older stems develop short shoots called spurs. Notice the "rings" on these spurs representing short, compressed internodes. A bud that will bear a cluster of needles is located at the tip of the spur.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: February 5, 2014
- Image File Name: european_larch_1260931.png



Flower:

- Description: European larch is a member of the Pinaceae family. Though not true flowers the reproductive structures on larch are often referred to as such. Larches are monoecious; producing male pollen cones (photo on left) and separate female seed cones all on the same plant. The yellow male pollen cones burst open when the foliage begins to emerge in spring.
- Image Source: Paul Wray, Iowa State University, Bugwood.org
- Image Date: Unknown
- Image File Name: 0008095-SMPT.jpg



Flower:

- Description: The female cone emerges a rich rosy purple color which is a welcome sight in spring! This ornamental feature is even more noticeable on dwarf cultivars since branches bearing these cones are at eye level and therefore more noticeable.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: March 20, 2012
- Image File Name: european_larch_1350421.png



Flower:

- Description: If you look closely at this image you will see yellow male pollen cones, purple female cones emerging, spurs with fresh green foliage beginning to flush and clusters of cones from previous years. Early spring is an exciting time to view larches!
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: March 20, 2012
- Image File Name: european_larch_1350431.png



Cone:

- Description: The purple female cones of spring change from green to brown as they mature. They persist for several years on the tree and are useful as an identification feature.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: June 22, 2008
- Image File Name: european_larch_1606.png



Cone:

- Description: The cones of European larch are upright on the stem. The scales have a slight pubescence and are not reflexed.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: January 24, 2008
- Image File Name: european_larch_0148b.png



Leaf Number/Attachment:

- Description: Leaf number and attachment is a little hard to describe as they can be in clusters of 30-40 on the spurs, or on the young shoots they may arise single or also in clusters (more typical). Regardless, if you see short spurs with clusters of needles – it is a larch. Do not confuse spurs with the fascicles on *Pinus*.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: August 29, 2008
- Image File Name: european_larch_3106.png



Leaf Number/Attachment:

- Description: The needles are a bright, fresh green in spring.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: March 20, 2012
- Image File Name: european_larch_1350420.png



Leaf Number/Attachment:

- Description: Foliage is a muted dark green during summer.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: June 22, 2008
- Image File Name: european_larch_1607.png



Leaf Number/Attachment:

- Description: In autumn the needles of European larch turn a golden yellow. Remember this tree is deciduous. The needles will fall off!
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: October 31, 2008
- Image File Name: european_larch_1070677.png



Winter interest:

- Description: The horizontal branching pattern of Larix decidua is especially noticeable with new fallen snow
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: December 31, 2009
- Image File Name: european_larch_1160084.png



Winter interest:

- Description: The large number of cones creates textural beauty in the winter landscape.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: December 31, 2009
- Image File Name: european_larch_1160086.png

Special ID feature(s):

- Description: The irregular, broad spreading branches, drooping branchlets, and persistent cones make European larch an easy plant to identify in any season!
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: November 28, 2008
- Image File Name: european_larch_1080733b.png