

Siberian Larch: An Underutilized Species

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Forestry professionals throughout the plains promote species diversity for tree plantings as a means to reduce susceptibility to invasive and naturally occurring pests and pathogens. This recommendation often prompts the question: 'So what trees should I plant?'

One such underutilized tree for the northern plains is Siberian larch (*Larix sibirica*). As the name implies the species is native to western and central Russia making the species cold hardy to zone 1a. Unlike North American larch species, Siberian larch is far more tolerant of the higher pH soils found in the Great Plains. Although a conifer (cone bearer), larch is a deciduous tree that sheds its needles every autumn. Because of this attribute, the species will never suffer from winter burn; a common problem of conifers in the northern plains. The species is one of the first trees to break bud in the spring. The soft delicate looking needles are 1 to 2 inches long and turn bright yellow to orange in the fall. The species exhibits medium to fast growth and may grow up to 3 feet a year once established on good soils. The species is broadly pyramidal and can reach a height of 40 to 50 feet when mature. Larch has few disease or insect pest problems in our region. Minor defoliation caused by larch casebearer (*Coleophora laricella*) has been noted in the past but outbreaks do not seem common. These attributes make the species an excellent choice for windbreaks or as a landscape shade tree.

In addition to cold hardiness, good growth rate, attractive fall color, and few pest issues, the species is very drought tolerant. The drought tolerance of this species was on display during the extreme drought of 2011 and 2012 that affected South Dakota, Nebraska, and Kansas. In a 13 year old side by side planting in NE South Dakota, European Larch (*Larix decidua*), American larch (*Larix laricina*), had virtually 100% mortality due to the drought. In contrast Siberian Larch not only survived but thrived.

The primary objection to the species is that it looks like a dead spruce in the winter. Siberian Larch should not be overlooked because of one attribute that it uses to cope with the winter environment. The lush elegant look of the needles, the drought tolerance, tolerance of slightly alkaline soils, extreme cold hardiness, and attractive fall color make this species an exceptional choice for our region.

