

What is a Legume?

A Legume is a species in the pea family (*Fabaceae* family). The term is also used to describe a type of fruit that plants in the pea family produce. Most legumes have a fruit structure like a pea pod. In Minnesota, agricultural crops such as soybeans or green beans qualify as legumes, but we also have many native legumes that play important ecological roles in the landscape. These native species can be trees, shrubs or herbaceous plants and are commonly used as part of ecological restoration projects or plantings to benefit pollinators and provide many other environmental benefits.

Examples of Native Minnesota Legumes

List of Native Legumes from the [Minnesota Wildflowers Website](#)

Examples from Minnesota Board of Water and Soil Resources (BWSR) [Featured Plant Archive](#):

[Partridge Pea](#)



[Canada Milk Vetch](#)



[Purple Prairie Clover](#)



[Leadplant](#)



[False Indigo](#)





Why do we care about Legumes?

Legumes have attractive foliage and flowers that add to the beauty of native plantings, and they also provide benefits for soil and plant community health, contribute to carbon sequestration, and provide wildlife habitat for many species.

Soil Health: Most legumes have root nodules, or little bumps on the roots. These nodules allow for a symbiotic relationship with nitrogen fixing bacteria. The legumes provide an energy source for bacteria while the bacteria convert nitrogen from the air into ammonia, which is a form of nitrogen that can be used by plants. Nitrogen is an important nutrient for the development of amino acids and proteins that allow for the growth of all plants. Plants growing near legumes can also access the increased nitrogen in the soil, promoting their growth and overall health.

Soil Stabilization: Legumes tend to have deep taproots that are effective at stabilizing soils on slopes and other areas that are prone to erosion. Lead Plant is a native prairie species that has roots that can grow up to 15 feet deep, promoting prairie stabilization.

Carbon Sequestration: Legumes in combination with companion plants are effective at sequestering carbon from the atmosphere. Plants can convert carbon dioxide into organic carbon which is stored in roots, stems and leaves. Because of their role in making nitrogen available to nearby plants, legumes can increase the root mass of other species, which leads to additional carbon sequestration.

Wildlife Habitat: Bees, butterflies, moths, beetles, native flies, and hummingbirds use legumes as an important food source. False Indigo and many other legumes also act as essential larval hosts for butterfly species. Legumes also provide valuable cover for a wide range of wildlife.