BWSR Featured Plant

Name: Leadplant (*Amorpha canescens*)

Plant Family: Bean (Fabaceae)

Statewide Wetland Indicator Status:

- UPL

Spike-like flowers clusters of leadplant

With roots ten to fifteen feet deep leadplant is a resilient prairie shrub. It withstands drought, benefits from prescribed burning and can tolerate moderate grazing. The species grows in soils ranging from sands to clays, adding to its versatility and making it one of the most widespread prairie plants across the Midwest. The species is a legume so it can fix nitrogen in the soil, benefitting other plant species. Its flowers are a rich pollen and nectar source for a wide range of native insects as well as honey bees.

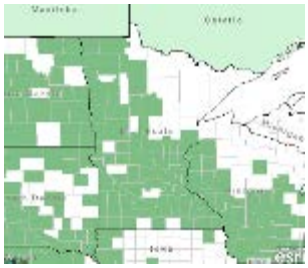
Mature plants have multiple branches and can reach up to three feet tall

There are up to fifty oval shaped leaflets per leaf

Identification

Like other legumes, leadplant has compound leaves. Its oval shaped leaflets are around ¾ inch long and have fine white hairs that give the plant an appearance of being dusted with lead. It can have up to fifty leaflets per leaf. Its flowers are tubular violet-purple to dark-purple in color, and grow in spike-like clusters that are typically around five inches tall. The flowers bloom from the bottom up from early to mid-summer. Each flower develops into a seedpod that contains one or two seeds. Lower stems are woody while new stems are greyish green due to fine hairs. It grows up to 35 inches tall and may be somewhat sprawling when growing in partial shade.

Range



Range based on University of MN Herbarium data.

Leadplant is a very widespread prairie plant due to the variety of prairie type communities that it is found in. It occurs in nineteen states in the central United States, ranging as far south as Texas. It is found in all parts of Minnesota except the northeast forested region. The species grows in dry prairies, mesic prairies, savannas, pine barrens, and along railways. It can thrive on bluff slopes where fire and grazing is less frequent.

Developed by Dan Shaw

Uses

Leadplant provides good forage for grazers. It is also used by a wide range of pollinators such as long-tongue bees (including honey bees and bumblebees) and short-tongued bees and wasps. A study in southeast Minnesota found that 47 insect species used the flowers (Reed 1995). A wide range of insects feed on the foliage including grasshoppers, caterpillars, beetles and leafhoppers. A variety of grazers feed on the plant's protein rich leaves including bison, deer, rabbits, and cattle. The species is often used in dry prairie restorations as well as prairie gardens. Its deep roots and ability to fix nitrogen make it useful for reclaiming degraded landscapes.

Primary Uses:
- Prairie Restoration
- Reclamation
- Pollinator /Insect Habitat

Leadplant growing in a restored mesic prairie

Planting Recommendations

Planting Methods
- Seed
- Containerized Plants

Like other legumes leadplant seeds should be inoculated with rhizobium bacterium prior to seeding. This is the bacteria that allows it to fix nitrogen in the ground. The seeds also require stratification. The species prefers full or partial sun and well drained soils. It can be easy to germinate but it grows slowly, sometimes taking a few years to flower. Mature plants can have roots that extend beyond ten feet deep so the species does not transplant easily.

Similar Species

Amorpha fruiticosa (False Indigo) grows much taller than leadplant (up to eight feet tall) has larger leaflets and tends to grow in moist areas such as along rivers, streams and wetlands. Image by Katy Chayka of Minnesota Wildflowers

Amorpha nana (Fragrant False Indigo) is very similar to leadplant but it lacks fine hairs on its leaves and stems so its foliage has a darker appearance. *Amorpha nana* also has single spike-like flower clusters where leadplant has several together. Image by Peter Dziuk of Minnesota Wildflowers

References

Minnesota Wildflowers: https://www.minnesotawildflowers.info/tree-shrub/lead-plant
Illinois Wildflowers: http://www.illinoiswildflowers.info/prairie/plantx/leadplantx.htm
Reed, Catherine C. 1995. Species richness of insects on prairie flowers in southeastern Minnesota. In: Hartnett, David C., ed. Prairie biodiversity: Proceedings, 14th North American prairie conference; 1994 July 12-16; Manhattan, KS. Manhattan, KS: Kansas State University: 103-115.