BWSR FEATURED PLANT GOLDEN ALEXANDERS Zizia aurea

Publication Date: 4-3-13

Golden Alexanders is a widespread species in Minnesota found in a variety of plant communities. Its ability to grow in a range of moisture conditions and light levels has made it a common species in natural areas and old fields across Minnesota, and a species that is commonly included in seed mixes. The species is important for pollinators because it is widespread, starts blooming early in the season (May) and has a long bloom period well into June. The genus Zizia was named for the German botanist Johann Baptist Ziz; aurea is Latin for "golden".

Identification

Golden Alexanders is a species in the carrot family (Apiaceae) with smooth ridged stems 1-3 feet tall. The flowers form a compound umbel with many small flower

heads. Each yellow flower is less than 3mm wide with tiny petals. The dry fruit splits into two seeds. Leaves are stalked, alternate, compound and divided into three parts. Each of these parts is further divided into three leaflets. Each leaflet is up to 3 inches long and up to one inch wide with evenly toothed edges. The leaves turn reddish in the fall. The flower is similar in appearance to the invasive species wild parsnip, but the



Golden Alexander Leaves





Golden Alexanders leaves turning red in late June



Wild Parsnip Leaves

plants can be distinguished by their leaves, as wild parsnip tends to be pinnately-compound (lobed more like a white oak leaf) with 8-15 leaflets without evenly toothed edges (see additional species comparison on the back of the fact sheet).



Habitat/Range

Golden Alexanders is widespread in Minnesota, possibly ranging into all counties, as it is commonly planted in addition to having a wide natural distribution. The species covers the eastern half of

The similar species Heartleaved golden Alexanders prefers drier conditions

the United States and Canada, ranging as far north as northern Quebec, and as far south as southern Florida. It prefers full to partial sun but can grow in light shade. It is most common in moist, loamy soil but can also grow in some rocky soils. Common habitats for the species include mesic prairies, open woodlands, forest edges, bluff prairies, savannas, old fields and roadsides. The closely related

Heart-leaved Golden Alexanders is also widely distributed across Minnesota but tends to prefer drier conditions.

Uses

The species is important for many types of pollinators including short tongued bees (as pollen is easy to reach), bumblebees, wasps, butterflies, flies and beetles during the early growing season when few other flowers are in bloom. The species is also the food plant for the Black swallowtail butterfly that feeds on the leaves and flowers. There are some reports of the plant being eaten by humans but it is known to induce vomiting and is generally considered toxic (along with several other species in the carrot family). Native American tribes used a root tea to alleviate fevers and headaches. The species is also used for flower arrangements and is a common species in perennial gardens and raingardens with partial shade to provide early season color.

Planting Recommendations

Golden Alexanders is commonly included in mesic prairie and wet meadow seed mixes. The seed capsules slowly develop on seedheads in early to mid summer, turning from green to a reddish brown, at which point it can be collected. The capsules release dark brown seeds when crushed. Seed will germinate after 90 days of moist cold stratification at 4 degree Celcius (NRCS). Seeds are often grown in flats and later transplanted into plug containers. When planting from containers it is common to plant in late May or June after plants are fully rooted into plug containers. It is important that newly planted seedlings receive sufficient moisture through the growing season. The addition of mulch (dead stems, straw, or wood mulch) around the plants will help ensure successful growth and establishment.

When planting seed in restoration sites, broadcast seeding should be conducted to ensure that seed is placed near the soil surface, as it will not germinate if it is planted too deep. Seeding is generally conducted in late fall or mid to late spring.

Additional References

http://wisplants.uwsp.edu/scripts/SearchResults.asp?Genus=Zizia http://www.minnesotawildflowers.info/flower/golden-alexanders http://www.plant-materials.nrcs.usda.gov/pubs/mdpmcfs7726.pdf



Pollinators on the golden yellow flowers

Golden Alexanders is common in mesic prairie and wet meadow seed mixes.



Golden Alexanders growing in a prairie restoration



The regular teeth of Golden Alexanders is shown on the left, compared to the lobed, and irregularly toothed leaves of Wild parsnip on the right

Developed by Dan Shaw