BOARD OF WATER AND SOIL RESOURCES

BWSR Featured Plant

Name: Downy yellow violet (Viola pubescens) Plant family: Violet (Violaceae)

Downy yellow violets are an important early food source for pollinators. Fine hairs along the rounded teeth edge of the leaf are a distinguishing feature. Brown lines on the flower petals lead pollinators to nectar and pollen. **Photo Credits:** Heather Holm





Downy yellow violet, AKA hairy yellow violet or smooth yellow violet, is a short (4- to 12-inch-tall), native, herbaceous perennial that blooms in

woodlands, gardens and shady areas starting in April. It provides an early splash of color and important early season nectar and pollen. Like other Viola species, this plant produces both showy, open crosspollinating flowers

at the top of the plant, and fully closed, self-pollinating flowers that may be found aboveground or underground. The showy flowers bloom before trees leaf out. The closed flowers bloom once the tree canopy leafs out.

Plant Stats

STATEWIDE WETLAND INDICATOR STATUS: FACU

PRIMARY USES: Ground cover, shade/pollinator gardens, edibles, woodland restorations

Planting Recommendations

Downy yellow violets may not be as aggressive as some other violets in a garden, but will spread over time in ideal conditions — part shade and medium to dry soils. Plants can be divided and moved to new areas. They make a great ground cover and can be used as an alternative to turf grass, along paths and woodland borders, and can be mixed with other short woodland plants such as sedges, anemones and wild geranium. Seeds, bareroot stock and potted plants are available at native plant nurseries.

Range

Downy yellow violet is found throughout Minnesota. Records exist in all but a handful of counties. It is mostly found east of the Missouri River, with a few records west of the Missouri. Its range stretches into New England and north into central and eastern Canada. This plant grows in open woods in mesic to dry conditions, and in floodplains along rivers and streams.



Range map source: USDA/Natural Resources Conservation Service Plants Database

Uses

Many invertebrates use downy vellow violet. Mason bees, carpenter bees, digger bees, sweat bees, mining bees, bee flies, small butterflies and skippers visit the flowers for nectar and pollen. Violets are the host plant for fritallary butterfly species. Adult fritallaries lay their eggs next to or on violets. When caterpillars emerge, they feed on the violets. If you mow violets in your yard, you may be destroying fritillary butterfly caterpillars. The seeds of violets have a protein-rich structure called an elaiosome. This structure is relished by ants, which carry seeds back to their nest, eat the structure and leave the seed to possibly germinate. Birds, including mourning doves, ruffed grouse, wild turkey and juncos, also eat the seeds. Leaves and stems are eaten by rabbits, chipmunks and turtles. Violets are not a preferred food of deer. Edible and high in vitamins A and C, the leaves and flowers have been used for their medicinal value. Violets are used for salads, soups, teas, jams, cakes and candy.

Identification

The three-quarter-inch, showy yellow flowers have five petals with purple or brown vein-like lines. The lower petal will have several lines; the other petals will have few to none. Flowers rise from a stem that extends from a leaf axil. Individual plants produce one to a few showy flowers. The closed flowers (cleistogamous) lack petals and look like buds that never open. Both types of flowers produce three-part seed capsules containing many small brownish to pale white seeds, which can be ballistically scattered or spread by ants. This plant has both basal leaves and leaves on the stem. Basal leaves are 1.5 to 3 inches



A metallic green sweat bee enters the violet flower upside down to reach nectar at the bottom of the flower, which transfers pollen to the bee. **Photo Credit:** Heather Holm

wide, and similarly long. The stem leaves are somewhat smaller and more elongated. Both types of leaves are heart-shaped with rounded teeth.

Similar Species





Clockwise from top: Yellow prairie violets are found in remnant prairies. Photo: Katy Chayka, Minnesota Wildflowers; Common violet Photo: Dan Shaw, BWSR; Canadian white violet; Photo: Peter M. Dziuk, Minnesota Wildflowers

The three-quarter-inch, vellow flowers with five petals make this violet easy to distinguish from other Minnesota violets, which are violet or white. Our only other yellow violet in the state is the yellow prairie Violet, Viola nuttallii, which has been found in three western Minnesota counties — Traverse, Lac Qui Parle and Yellow Medicine. When not in bloom, downy yellow violets look similar to common blue violets, Viola sororia, and Canadian white violets, Viola canadensis, which can be found in the same areas.

References

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