

Curly-leaf pondweed (*Potamogeton crispus*)



Description

Appearance

Curly-leaf pondweed is a rooted, submersed aquatic plant. Its coloration varies from olive-green to reddish-brown.

Leaves and Stem

Wavy, lasagna-like leaves grow approximately a half-inch wide and two to three inches long. Leaves have an obvious mid-vein, “toothed” or serrated edges and blunt tips. Leaves are arranged alternately, are directly attached to the stem, and become denser toward the end of the stem. The main stem can be various colors including white, green, brown, and red, and tends to branch multiple times near the top of the plant. The plant may mat at the surface but does not have true floating leaves.

Flowers

The flower stalk grows up above the water surface, typically in June. It grows to about one inch tall and appears reddish-brown in the water but is actually green when examined closely.

Reproductive Structures

Reproductive structures are called turions. They are brown, typically a half-inch in size and look like sharp small pinecones. It can also reproduce via seed, but seeds play a small role in reproduction.

Roots

Rhizomes (an underground stem that sends out roots and shoots from its nodes) are thick and pale yellow in color. Many stems can be connected by one rhizome.

Biology

Curly-leaf pondweed generally grows from the shore to water depths of 15 feet and can grow up to 15 feet tall. It tolerates low water clarity and will readily invade disturbed areas. Curly-leaf can be distinguished from native pondweeds by its unique life cycle. Turions sprout in the fall, and it is generally the first pondweed to come up in the spring. It typically flowers, fruits, and produces turions in June before dying back in mid-summer.

Origin and Spread

Curly-leaf pondweed is native to Eurasia, Africa, and Australia. It was likely introduced when common carp were intentionally introduced into Midwest waters as a game fish in the 1880s. The species was likely spread through the movement of watercraft and water-related equipment. It was first noted in Minnesota around 1910. Refer to [EDDMapS](#) for distribution information.

Don't be fooled by these look-alikes

Curly-leaf pondweed looks similar to many native beneficial pondweeds found in Minnesota lakes and rivers but can be distinguished based on its serrated leaf edges.

- [Broad-leaf pondweeds](#) (native)
- [Clasping-leaf pondweed](#) (native)
- [White-stem pondweed](#) (native)
- [Narrow-leaf pondweeds](#) (native)

Regulatory Classification

Curly-leaf Pondweed (*Potamogeton crispus*) is a [prohibited invasive species](#) in Minnesota, which means it is unlawful (a misdemeanor) to possess, import, purchase, transport or introduce this species except under a permit for disposal, control, research or education.

Control Methods

Management of invasive aquatic plants involving either mechanical removal of plants or application of herbicides to public waters [requires a permit from the DNR](#). Talk to a DNR specialist for more information.

Mechanical control can be done by cutting or pulling the plant by hand or with equipment such as rakes or cutting blades.

Herbicide control can be done using an endothall herbicide.

Resources

- [U.S. Geological Survey, Nonindigenous Aquatic Species Database](#)
- [Minnesota Aquatic Invasive Species Research Center AIS Identification Guide](#)
- [Minnesota Infested Waters List](#)

- Questions?
- Call: 888-646-6367 (MINNDNR) or 651-296-6157
- Email: info.dnr@state.mn.us