

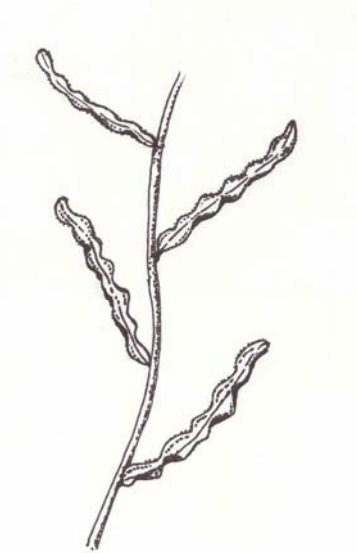
Identification of Curly leaf pondweed (*Potamogeton crispus*)

Mary Blickenderfer & Eleanor Burkett

UNIVERSITY OF MINNESOTA

Extension

S E R V I C E



Alternate leaf pattern on stem

Curly leaf pondweed is an exotic rooted, submersed aquatic plant, similar in appearance to many native species of pondweed commonly found in Minnesota lakes and streams.

Identification

Curly leaf pondweed can be distinguished from other aquatic plant species using the following two attributes:

- 1) their leaves attach to the stem in an *alternate pattern* (typical of pondweeds), AND
- 2) the summer leaves have *finely serrated margins* (only found in curly leaf pondweed)

In addition, the leaves are very wavy and may be reddish in color, but these are not unique to curly leaf pondweed.

Habitat

Curly leaf pondweed is considered a deep-water plant, but will also colonize in shallow water. In a lake where it is dominant, it may start in 1 to 2 feet of water and extend out to depths of 10 feet or more. Because it can tolerate low light curly leaf pondweed grows well in disturbed sites and can grow under algae blooms or ice.

The strong rhizomes anchoring the plants into sediment allow curly leaf to grow in areas with strong wave action or streams with moderate velocity.

Life cycle

Curly leaf pondweed also has a unique life cycle, which gives it competitive advantages over many other aquatic plants.

As the water cools in autumn, it sprouts from buds on small dormant stem structures (called “turions”) lying on the lake bottom. The small winter plants remain alive under the ice and snow. When the ice melts and water temperature warms in the spring, it begins a period of rapid growth of summer leaves. Mats of these leaves may float at or near the water surface.

Later in the spring, flower spikes are produced that emerge above the water surface. By June, the fruits are mature on the stalks and drop to the sediment. The seeds in these fruits have very low germination rates.

Prior to dying back in mid-summer, curly leaf pondweed produces large numbers of small turions in leaf axes along its stem. When the parent plant dies, these living turions disperse by water movement, sink to the lake bottom, and lie dormant during the summer when other aquatic plants are actively growing. Reproduction of curly leaf pondweed is primarily through these turions.



*Serrated leaf margin
2 x normal size*

References:

Boorman, S., Korth, R. & Temte, J. (1997). *Through the Looking Glass: A Field Guide to Aquatic Plant Management*. Wisconsin Lakes Partnership
Crowell, W. Curlyleaf Pondweed: New Management Ideas for an Old Problem. *Minnesota Lakes Association Reporter* 7:1.

Curly leaf pondweed look-alike:

Potamogeton richardsonii (Richardson's pondweed)

Compare Richardson's pondweed and curly leaf pondweed using these descriptions and illustrations below. Use this information to distinguish between these plants.

