

September 2010

Invasive Species of the Month Hydrilla (*Hydrilla verticillata*)



Hydrilla plants have leaves in whorls around the stem (generally five leaves per whorl), serrations or small spines along the leaf edges, and the midrib of the leaf is often reddish when fresh (left). Recreational boating can be difficult in lakes infested with hydrilla (middle). Hydrilla can completely choke a water body (right).

What can you do?

- Clean, drain, and dry your boat before moving to another water body.
- Report any suspected sightings of hydrilla to 1-866-INVADER or oregoninvasiveshotline.org
- Join a local Early Detection and Rapid Response network in your local area to learn about hydrilla and other invasives
- Help spread the word about invasives like hydrilla so that more people are watching for invaders

What? Hydrilla is a submersed plant. It can grow to the surface and form dense mats. It may be found in all types of freshwater bodies. Hydrilla stems are slender, branched and up to 25 feet long. Hydrilla's small leaves are strap-like and pointed. They typically grow in whorls of five around the stem but the number of leaves in a whorl can range from four to eight. The leaf margins are distinctly saw-toothed. Hydrilla often has one or more sharp teeth along the length of the leaf mid-rib. Hydrilla produces tiny white flowers on long stalks that reach the surface of the water. It also produces 1/4- to 1/2-inch turions at the leaf axils and peanut-like tubers attached to the roots in the mud. Hydrilla appears on the the state's 100 Most Dangerous Invaders list. Hydrilla verticillata fills the lake or river that it infests, "topping out" at the surface. Hydrilla can grow an inch a day. When hydrilla invades, ecologically-important native submersed plants are shaded out by hydrilla's thick mats, or are simply outcompeted, and eliminated; millions of dollars are spent each year on herbicides and mechanical harvesters in Florida alone in an effort to place hydrilla under "maintenance control." California spends about \$1 million per year to eradicate hydrilla whenever it is found. Hydrilla verticillata greatly slows water flow and clogs irrigation and flood-control canals -- in Florida, large mats of fragments collect at culverts and clog essential water control pumping stations; hydrilla seriously interferes with boating, both recreational and commercial, and prevents swimming and fishing; major infestations limit sportfish weight and size; and dense hydrilla infestations can alter water chemistry and oxygen levels.

Where? Hydrilla verticillata's dioecious type (plants having female flowers only) originates from India. Hydrilla's monoecious type (plants having male and female flowers on the same plant) is probably from Korea. How did it arrive here? Hydrilla verticillata was probably brought to the Tampa and Miami, Florida areas as an aquarium plant in the late 1950s; by the 1970s, it was established throughout Florida and has since spread through several southern states. The monoecious type was introduced separately much later in the Potomac Basin and typically occurs in more northerly latitudes, including Maine, Wisconsin and Washington state. Hydrilla verticillata continues to be sold through aquarium supply dealers and over the Internet, even though the plant is on the U.S. Federal Noxious Weed List. The species is not yet known to be found in Oregon.

Lookalike? Hydrilla closely resembles two other aquatic plants: The non-native plant Brazilian elodea (*Egeria densa*) and the native plant American waterweed (*Elodea canadensis*). You can distinguish hydrilla from these look-alike species by the presence of tubers (0.2 to 0.4 inch long, off-white to yellowish, pea-like structures buried in the sediment). Neither Brazilian elodea nor waterweed has tubers.