

# Hydrilla

Hydrilla verticillata

## **History**

- \* There are two types of hydrilla in the United States: monoecious and dioecious
- \* The monoecious type is found in the northeastern states. It was first discovered in the Potomac Basin in the 1980's and was likely introduced from Korea.
- \* The dioecious type is primarily found in the southern states. It was introduced in Florida in the 1950's for use in the aquarium trade.

#### Characteristics

- \* Submersed aquatic plant
- \* Stem of the monoecious type has a delicate sprawling growth that freely branches at the lake bottom with stems reaching to the surface.
- \* Leaves are bright green, small and pointed; 1-5 mm wide and 6-20 mm long. Margins are toothed. Leaves grow in whorls of 3-10 along the stem though 5 leaves per whorl is most common.
  - \* Roots are fibrous rhizomes and above ground stolons.
- \* Unique to hydrilla is the peanut-sized or smaller tubers which form along the rhizomes. Tuber is whitish to brown.
- \* Flower: the monoecious type has both female and male flowers on the same plant. The female flower has 3 small white petals, 4-8 mmwide and 1-5 m long, and is attached to the stem tip by a slender stalk. Male flowers are produced in the leaf axils, but detach and become free-floating. Blooms mid to late summer.
  - \* Tuber is the primary identifier for hydrilla.

#### Habitat

- \* Lakes, ponds, rivers, streams, canals, reservoirs, drainage ditches
- \* Usually in shallow water (1.5-20 ft, 0.5-6 m) but as deep as 40 ft (12 m) in non-turbid water
  - \* Acidic or alkaline waters
- \* Tolerates moderate salinity and high levels of raw sewage

### **Known Distribution**

- \* Present in many areas of U.S., including Maine, Connecticut, Massachusetts, New York
- \* Believed to be native to Asia or Africa, now widespread around the world

### **Impacts**

\* Competes with native plants by growing to the water surface and forming dense mats that block sunlight

- \* May affect fish that cannot hunt effectively in the thick mats
- \* Impairs recreational activities such as fishing, boating, swimming
- \* Clogs rivers, irrigation ditches, and flood control canals, creating stagnant water that is prime mosquito breeding habitat
- \* May cause flooding and alter water quality by decreasing oxygen levels and increasing pH and water temperature

