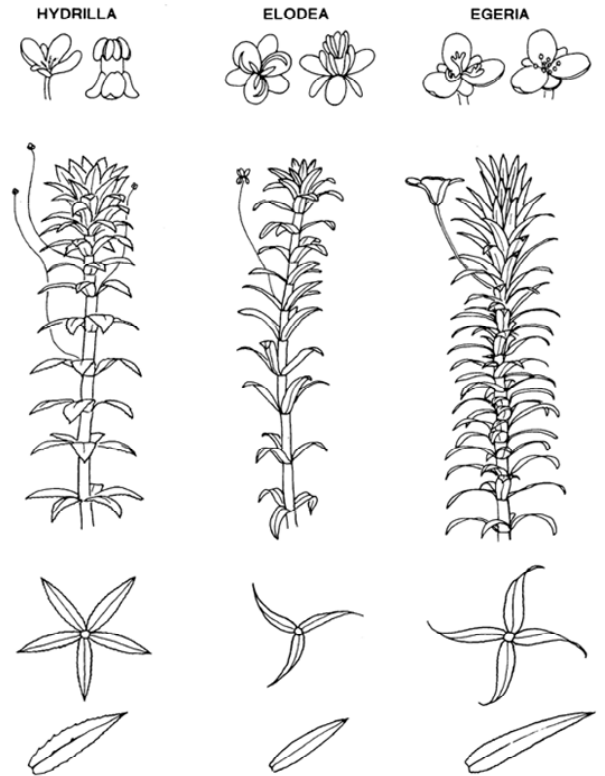


HYDRILLA IDENTIFICATION TIPS

Differences: Hydrilla v. Egeria v. Elodea v. Naiads

- Hydrilla:
 - Leaf whorls in 4-6
 - Leaf margins serrate (“hook” under scope)
 - Tuber as “foot” of plant
 - Turion near growing tip in late fall
 - White rhizomes (roots)
- Egeria:
 - Leaf whorls in 4-6
 - Leaf margins smooth (“saw” under scope)
 - No tubers, turions or rhizomes
- Elodea:
 - Leaf whorls in 3 (usually)
 - Smooth margin
 - No tubers, turions or rhizomes
- Naiads:
 - Leaves not in whorls (opposite or nearly so)
 - No tubers, turions or rhizomes



Check List of Hydrilla Traits:

| | | | |
|----------------------|----------------------------------|----------------------------------|---------------------------------|
| • Leaf Arrangement- | Leaves in Whorls? | YES? <input type="checkbox"/> | NO? <input type="checkbox"/> |
| • # Leaves in Whorl- | More Than 3? | YES? <input type="checkbox"/> | NO? <input type="checkbox"/> |
| • Leaf Margin- | Serrations Visible w/ Naked Eye? | YES? <input type="checkbox"/> | NO? <input type="checkbox"/> |
| • Tubers, Turions- | Present? w/ White Rhizome? | YES? <input type="checkbox"/> | NO? <input type="checkbox"/> |

HYDRILLA SAMPLING TIPS

If you are conducting a shoreline visual survey

- Look where invaders are most likely to land:
 - Boat launch
 - Outlet or Inlet
 - Shallow water near other plants
- Collect a lookalike plant
 - Gather washed up plants
 - Use a long handled rake and slowly grab
 - Use a long handled net to gather floating plants
 - Wade into the water and gently remove as much of the plant as you can- leaves, flowers, etc.

If you are conducting a boat-over survey

- Look in shallow water, generally 3-12 feet deep
- Look near boat launch, inlet, outlet
- If available, look into water w/viewscope
- Collect a lookalike plant
 - Use a long handled rake and slowly grab
 - Use a long handled net to gather floating plants
 - Drop an anchor or weighted rake head to gather deeper plants.

If you are conducting a rake toss survey

- Identify sampling points
 - Ideally in 50-100 meter increments along shore
 - Sample various depths, 3-12ft deep
- Go to sample point, toss rake length of line and retrieve slowly
- Separate plants into piles of distinct types and ID each pile if possible

- Assume that any plants that look different are different

For ALL Survey Methods

- Complete Field Form
- Take digital photo of any plant that looks like hydrilla
 - Better if photographed indoors
 - Use white or light background
 - Closeups for important identifying characteristics (leaf whorls, roots, flowers, tubers)
 - Label plant, location, date on background
- Collect any flowers
- Try to collect whorls from top and bottom of plant
- If collecting by hand, try to gently remove entire root structure by grabbing deep into sediment to get under the tubers and rhizomes
- Gently rinse any mud or debris from plants
- Collect a specimen- preferably with tubers, rhizomes, and intact whorls. **SEND JUST ONE OR TWO- NOT A PILE!**
- Place specimen in a labeled baggie with a moist paper towel (plant should be separate, not wrapped in towel)
- Contact Scott Kishbaugh (sakishba@gw.dec.state.ny.us) to send digital photos and field form
- If the plant appears to be hydrilla, he will ask you to send it in a manilla envelope with field information to: NYSDEC Division of Water, 4th Floor 625 Broadway, Albany NY 12233-3502