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2005 UPDATE ON AQUATIC HERBICIDES

What you need to know BEFORE using a chemical:

1. Identify the weed

The two major groups are the algae and the flowering plants.

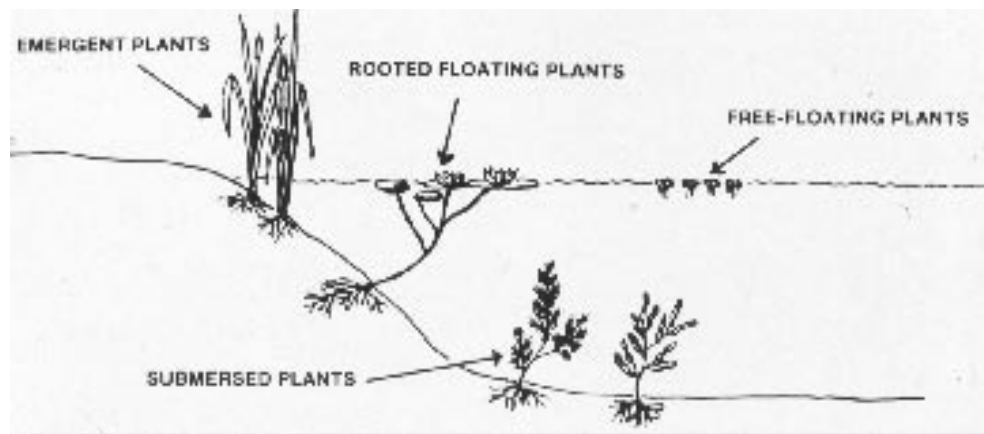
Algae (3 types):

Those that cause green water

The mat-formers

Chara (can be confused with submersed flowering plants because it has stems and leaves)

Flowering plants are categorized by where they live (submersed, free-floating, rooted floating, emergent)



2. Always read the herbicide label. Particularly note the following:

- A. Restrictions on use of water following herbicide treatment (e.g. for irrigation, livestock watering, fishing, etc.)
- B. Dosage calculation

3. Timing of treatment is important: late spring and early summer are best. DO NOT treat when the pond is heavily infested with the weeds or algae. Treating and killing all this vegetation may cause oxygen depletion and a fish kill.
4. Water temperature in the area of treatment should be at least 60o F.
5. Retreatment is usually needed, either the year of application or the next year. We do not have any permanent solutions to getting rid of aquatic weed growth!

AQUATIC HERBICIDES/ALGICIDES

Algae	Copper sulfate Copper chelates (e.g. Cutrine Plus, Captain, and others) GreenClean Hydrothol 191 (liquid or granular): recommended primarily for certified applicator use
Flowering plants	
Submersed (underwater) plants	Aquathol K (liquid) Aquathol Super K (granular) Reward (liquid) Sonar or Avast! (liquid or pellet)
Submersed (underwater) plants, specifically Eurasian watermilfoil	Renovate 3 (liquid) Navigate or Aqua-Kleen (granular) Sonar or Avast! (liquid or pellet) DMA 4 IVM (liquid)
Free-floating plants such as duckweed and watermeal	Reward (liquid) Sonar or Avast! (liquid)
Emergent (shoreline) plants (NONSELECTIVE: all plants, including broadleaves and grass-like plants such as cattails = glyphosate)	Rodeo, AquaMaster, AquaNeat, Aqua-Pro, and others (liquids); these require adding a wetting agent (surfactant) to the solution Glyphomate 41 (does not require addition of surfactant)

Information listed here is based on research and outreach extension programming at Purdue University and elsewhere. The use of trade names is for clarity to readers of this site, does not imply endorsement of a particular brand nor does exclusion imply non-approval. Always consult the herbicide label for the most current and update precautions and restrictions. Copies, reproductions, or transcriptions of this document or its information must bear the statement 'Produced and prepared by Purdue University Extension Weed Science' unless approval is given by the author.

Emergent (shoreline) (SELECTIVE: broadleaved plants such as purple loosestrife; should not affect grasses and grass-like plants such as cattails)

Renovate 3 (liquid)

DMA 4 IVM (liquid)

Emergent: specific recommendation for control of Phragmites (from Army Corps of Engineers):

6 pts/acre glyphosate with 0.5% v:v surfactant during the mid to late flowering stage. Spot treatments should be made during the year following treatment.

HABITAT, a new herbicide, received EPA registration January 2004. Recommended for duckweed, cattails, Phragmites.

FOR ADDITIONAL INFORMATION ON THE FOLLOWING TOPICS, GO TO

<http://www.btny.purdue.edu/pubs>

WS-21 Aquatic Plant Management

APM-1-W Barley Straw for Algae Control

APM-2-W Control of Duckweed and Watermeal

A NARRATED SLIDE SHOW ON “ Why Aquatic Herbicides Affect Aquatic Plants and Not You!” is available at

http://www.btny.purdue.edu/outreach/teachresources.html#aquatic_herbicides

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