

Aquatic Pest Management

Test Plan Development

I. Pest Identification

- a. Vascular Plants
 - i. Submersed
 - 1. Curly leaf Pondweed
 - 2. Eurasian Water-milfoil
 - 3. Coontail
 - 4. Brittle Naiad
 - 5. Horned Pondweed
 - 6. Widgeongrass
 - ii. Floating
 - 1. Duckweed
 - 2. Water Lily
 - 3. Water-hyacinth
 - 4. False loose strife
 - iii. Emergent
 - 1. Cattail
 - 2. Bullrush
 - 3. Arrowhead
 - 4. Johnsongrass
 - 5. Tamarix
 - 6. Cottonwood
 - 7. Willows
 - a. Seep
 - 8. Russian Olive
- b. Algae
 - i. Unicell
 - 1. Greens
 - 2. Bluegreens
 - 3. Daitoms
 - 4. Golden Algae
 - ii. Colonies
 - 1. Greens
 - 2. Bluegreens
 - iii. Filaments
 - 1. Greens
 - 2. Bluegreens
 - iv. Chara
- c. Arthropods

- i. Crawfish
 - ii. Mosquitoes
 - 1. Flood Water (QA)
 - 2. Stagnant (QA)
 - iii. Midges
 - iv. Black Flies
 - d. Mollusks
 - i. Clams
 - 1. Asian
 - ii. Snails
 - 1. New Zealand Mudsnaill
 - 2. Applesnail
 - iii. Mussels
 - 1. Quagga
 - 2. Zebra
 - e. Miscellaneous
 - i. Birds
 - 1. Cormorants
 - 2. Canada Geese
 - ii. Mammals
 - 1. Beavers
 - 2. Muskrats
 - iii. Fish
 - 1. Beneficial
 - a. Talapia
 - b. Grass Carp
 - c. Mosquito Fish
 - d. Fathead Minnow
 - 2. Pest
 - a. Common Carp
 - b. Talapia
 - c. Pike
 - iv. Amphibians
 - 1. Bullfrogs
 - 2. Toads
 - 3. Frogs

Resources - [Handbook on Pests of Community Environments in the Desert Southwest United States; UC IPM; Aquatic Pest Management – Purdue Extension \(PPP-5\)](#)

II. Planning & Implementing a Management Strategy

- a. Endangered and Non-Target Species
- b. Integrated Pest Management (IPM)
- c. Selection of the Appropriate Pesticide

- d. Public Safety
- e. Transportation, Storage, and Disposal of Pesticides

III. Application Techniques

- a. Control Strategy
 - i. Mechanical
 - ii. Biological
 - iii. Chemical
- b. Habitat Manipulation
- c. Equipment
 - i. Types
 - ii. Uses
 - iii. Calibration
 - iv. Maintenance
- d. Calculations
 - i. Area
 - ii. Volume
 - iii. Flow
 - iv. Dosage

IV. Comprehend and Apply Label & Labeling Directions

- a. Water Use Restrictions
- b. Environmental Risks
- c. Personal Protective Equipment (PPE)

Resources – *Cutrine Plus Granular Algaecide Label (EPA Reg. 8959-12)*; [National Pesticide Applicator Certification Core Manual](#)

V. Laws, Rules, and Environmental Concerns

- a. Endangered Species Act
- b. Clean Water Act
- c. Drift & Run-off
- d. Habitat Effects
- e. AZPDES

Resources – [Arizona Revised Statute Title 3 Chapter 20 – Pest Management Division](#); [Arizona Administrative Code Title 3 Chapter 8 – Pest Management Division](#)