

# Ornamental & Turf Pest Control

## Test Plan Development

### I. Pest Identification

- a. Bi-annuals
- b. Annuals
- c. Perennials
- d. Desirable vs. Pest (selective control)
- e. Monocot
- f. Dicot
- l. Regulators
- g. Insect – growth stage, appropriate time for control (thresholds)
- h. Disease identification
- i. Rodent
- j. Scouting/Monitoring/Trapping for Pests
- k. Growth

### Pests

- m. Ants
  - 1. Southern fire ant
  - 2. Red Imported fire ant (Qualified Applicator)
  - 3. Harvester ant
- n. Cockroaches
  - 1. Oriental
  - 2. Turkestan
- o. Beetles
  - 1. Flat-head borer
  - 2. Palo Verde
  - 3. Bark Beetles
  - 4. White Grubs
  - 5. Bill Bugs
  - 6. Long-Horned Beetles
  - 7. Agave Weevils
  - 8. Yuccas
- p. Pests of Public Health concern
  - 1. Mosquitoes
  - 2. Ticks
  - 3. Mites
  - 4. Chiggers
- q. Scorpions
  - 1. Bark scorpion
- r. Wasps
  - 1. Yellow-jacket-2 + 1 invasive
  - 2. Paper wasps
- s. Other invaders
  - 1. Aphids
  - 2. Whiteflies
  - 3. Psyllids
  - 4. Stink bugs
  - 5. Mealy bugs
  - 6. False chinch bugs
  - 7. Ground Pearl
  - 8. Armyworm, Cutworm, Webworm
  - 9. Skeletonizers
- t. Vertebrates
  - 1. Gophers
  - 2. Ground Squirrels
- u. Crickets
  - 1. Mole Crickets
  - 2. Camel Crickets
  - 3. Field Cricket

### Weeds

- a. Clovers
  - 1. Black medic
  - 2. Bur clover
  - 3. Annual sweet clover
- b. Mustards
  - 1. London rocket
  - 2. Mustards (Sahara, Black, Wild Radish)

- 3. Shepherds purse
- c. Composites
  - 1. Groundsel
  - 2. Sow thistle
- d. Other
  - 1. Cheese weed
  - 2. Red stem filaree
  - 3. Chickweed
- e. Summer annual
- f. Broadleaves
  - 1. Spurge
  - 2. Horseweed
  - 3. Pigweed
  - 4. Common purslane
  - 5. Russian thistle
  - 6. Puncturevine
- g. Winter annual grass weeds
  - 1. Hare Barley
- h. Summer annual grass weeds
  - 1. Goosegrass
  - 2. Southwestern cupgrass
  - 5. Bermudagrass
- i. Perennial weeds
  - 1. Purple Nutsedge
  - 2. Yellow Nutsedge
  - 3. Kyllinga
  - 4. Silverleaf nightshade
  - 5. Johnsongrass
  - 6. Rescuegrass
- 4. Swine cress
- 3. Prickly lettuce
- 4. Knotweed
- 5. Dodder
- 7. Toadflax
- 8. Thistles
- 9. Globe Chamomile
- 10. Hairy Fleabane
- 11. Camphorweed
- 2. Red brome
- 3. Crabgrasses
- 4. Sandbur
- 7. Dallisgrass
- 8. Buffelgrass
- 9. Fountaingrass
- 10. Camelthorn
- 11. Hogpotato

## II. Read and Comprehend Label and Labeling

- a. Safety Issues
  - 1. Spray Drift
  - 2. Run Off
  - 3. Wildlife
  - 4. Surface Waters (lakes, rivers, washes)
  - 5. Groundwater Protection List – A.I.
- b. Worker Safety – PPE
- c. Public Safety
  - 1. Re-entry
  - 2. Workers
  - 3. Children
  - 4. Pets
- d. Calculate chemicals
  - 1. Application Rates
    - i. Site
    - ii. Pests
- e. Types of Applications
  - 1. Pre-emergent
  - 2. Post-emergent
    - i. Spray to Wet
    - iii. Spot spray
    - ii. Broadcast
    - iv. Spray to run-off
  - 3. Injection
    - i. Stump treatment

- 4. Drench
- 5. Baits
- 6. Gases
- f. Tank Mixes
- g. Growth Regulators
- 7. Traps
- 8. Use of Adjuvants

### III. Planning and Implementing a Vegetation /Pest Management Plan

- a. Appropriate Product formulations
- b. Secondary poisoning
- c. Application Timing
  - 1. Weather
  - 2. Life Stage
- d. Pesticide Resistance Issues
- e. Monitoring after Application

### IV. Laws and Rules

- a. Ground water protection reporting
  - 1. A.A.C. R3-8-505
    - i. Reporting Requirements
    - ii. Where to find the list (QA)
  - 2. QA Responsibilities
  - 3. School
  - 4. Posting

### V. Equipment Types, Uses, Maintenance and Calibration

- a. Nozzles
- b. Pumps
- c. Hoses
- d. Hand Sprayers
- e. Backpack Sprayers
- f. Broadcast Sprayers
- g. Granular Spreaders

### Resources:

- [Category 3b: Turf Management \(Purdue Extension\);](#)
- [Rights-of-Way Vegetation Management \(Washington State University Extension\);](#)
- [Weeds of California and other Western States Vol. 1 & 2 \(University of California\);](#)
- [Truman's Scientific Guide to Pest Management Operations Seventh Edition;](#)
- [Handbook on Pests of Community Environments in the Desert Southwest United States;](#)
- [UC IPM \(University of California – Statewide Integrated Pest Management\);](#)
- [Arizona Revised Statute Title 3 Chapter 20 & Arizona Administrative Code Title 3 Chapter 8 – Pest Management Division;](#) and
- [National Pesticide Applicator Certification Core Manual](#)