

Right-of-Way 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
- g) Insect – growth stage, appropriate time for control (thresholds)
- h) Rodent
- i) Scouting/ Monitoring/ Trapping for Pests
- j) Growth Regulators

Pests

- k) Ants
 - 1. Southern fire ant
 - 2. Red Imported fire ant (Qualified Applicator)
 - 3. Harvester ant
- l) Cockroaches
- m) Beetles
 - 1. Flat-head borer
 - 2. Palo Verde
 - 3. Bark Beetles
 - 4. Bill Bugs
 - 5. Long-Horned Beetles
 - 6. Agave Weevils
 - 7. Yuccas
- n) Pests of Public Health concern
 - 1. Ticks
- o) Scorpions
 - 1. Bark scorpion
- p) Wasps/Bees
- q) Noctuid moths/insects that come to lights/occasional invaders
 - 1. Aphids
 - 2. Whiteflies
 - 3. Psyllids
 - 4. Stink bugs
 - 5. Mealy bugs
 - 6. False chinch bugs
 - 7. Leaf hoppers
- r) Vertebrates
 - 1. Gophers
 - 2. Ground Squirrels

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
 - 4. Swine cress
- c. Composites
 - 1. Groundsel
 - 2. Sow thistle
 - 3. Prickly lettuce
- d. Other
 - 1. Cheeseweed
 - 2. Red Stem Filaree
 - 3. Chickweed
 - 4. Knotweed

e. Summer annual broadleaves

1. Spurge
2. Horseweed
3. Pigweed
4. Common purslane
5. Russian thistle
6. Puncturevine

f. Winter annual grass weeds

1. Hare Barley

g. Summer annual grass weeds

1. Goosegrass
2. Southwestern cupgrass
3. Crabgrasses

h. Perennial weeds

1. Purple Nutsedge
2. Yellow Nutsedge
3. Kyllinga
4. Silverleaf nightshade
5. Johnsongrass

7. Toadflax
8. Thistles
9. Globe Chamomile
10. Hairy Fleabane
11. Camphorweed

2. Red brome

4. Sandbur
5. Bermudagrass

6. Buffelgrass
7. Fountaingrass
8. Camelthorn
9. Hogpotato

II. Read and Comprehend Label and Labeling

a) Safety Issues

1. Spray Drift
2. Run Off

3. Surface Waters (lakes, rivers, washes)

4. Groundwater Protection List – A.I.

b) Worker Safety – PPE

1. Application Rates
 - i. Site

c) Calculate chemicals

- ii. Pests

d) Types of Applications

1. Pre-emergent
 - i. Spray to Wet
 - ii. Broadcast
3. Injection
 - i. Stump treatment

2. Post-emergent
 - iii. Spot spray
 - iv. Spray to run-off

4. Drench

5. Baits

6. Traps

7. Use of Adjuvants

e) Tank Mixes

f) Growth Regulators

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

f) Mowing

g) IPM

h) Bio/cultural controls

1. Beneficial Insects

2. Bacillus Thuringiensis

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

V. Equipment Types, Uses, Maintenance and Calibration

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|-------------------------|------------------------------|
| a) <u>Nozzles</u> | e) <u>Backpack Sprayers</u> |
| b) <u>Pumps</u> | f) <u>Broadcast Sprayers</u> |
| c) <u>Hoses</u> | g) <u>Granular Spreaders</u> |
| d) <u>Hand Sprayers</u> | |

Resources:

- [*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*](#);
- [*US Forest Service Region 3 Invasive Weeds*](#);
- [*Arizona Revised Statute Title 3 Chapter 20 & Arizona Administrative Code Title 3 Chapter 8 – Pest Management Division*](#); and
- [*National Pesticide Applicator Certification Core Manual*](#)