



Pyrethroid

Facts

Pyrethroid types: Lambda-Cyhalothrin, Cypermethrin, Esfenvalerate, Permethrin, Cyfluthrin

Products: Lambda-Cy, Lambdastar, Warrior, Karate, Ammo, Mustang, Silencer, Asana XL, Pounce, Baythroid

Movement: High tendency to attach to fine soil particles. Moving with irrigation tailwater and/or through application drift

Field Dissipation Half Life: Half-life in soils ranges from 1-2 months. In aquatic sediment, months to years.

Aquatic Toxicity: Very high

Recommended Practices

- 1) Consider Alternative Products (for product recommendations consult a Pest Control Advisor [PCA], Crop Advisor, or the Solano County Agricultural Commissioner's office)
- 2) Consider Integrated Pest Management (for technical assistance consult the Natural Resources Conservation Service [NRCS] or University of California Cooperative Extension [UCCE])
- 3) Where agricultural uses continue, recommend one or more of the following:
 - Targeted applicator training specific to water quality concerns
 - Irrigation management practices to reduce tailwater runoff:
 - * Drip or micro irrigation.
 - * Monitor soil moisture levels and evapotranspiration rates in irrigation management.
 - Avoid applications of pyrethroids just prior to a rainfall event or irrigation to minimize the potential for runoff.
 - Sediment Retention (especially fines) with the following methods suggested:
 - * Direct post-treatment runoff through filter strip, alfalfa field or vegetated drainage ditch.

- * Temporarily impound post-treatment runoff in a sediment basin (although basin sizes necessary to capture fine sediments may be impractical depending on site characteristics); sediment basin effectiveness can be increased by directing the basins outflow through a vegetated filter strip or vegetated ditch
- * Recirculate runoff through a tailwater return system.
- * Reduce and/or delay release of tailwater after application to allow product to degrade.
- Install irrigation socks where gated pipes are used to minimize soil erosion.
- Apply water-based Polyacrylamides (PAMs), after the first pyrethroid treatment post-cultivation.

Contact Information for Useful Resources

Dixon/Solano RCD Water Quality Coalition

(707) 678-1655, John Currey ext. 105, Kelly Huff ext. 108, or Andrea Mummert ext. 121

Natural Resources Conservation Service (NRCS)

(707) 678 – 1655 Sally Negroni ext. 107, Jim Schneider ext. 113

www.ca.nrcs.usda.gov

Solano County Agricultural Commissioner's Office

(707) 784-1475 Simone Hardy, JSHardy@solanocounty.com

University of California Cooperative Extension (UCCE)

(530) 666-8734, Rachael Long, rflong@ucdavis.edu

University of California Davis, Integrated Pest Management

<http://www.ipm.ucdavis.edu/index.html>