

University of California Division of Agriculture and Natural Resources Statewide Integrated Pest Management Program

Pest Management Decision Support Tool

Report Number	Year	Date/Time	Crop	
170524093135	2017	05/24 09:31 AM	Cotton	

Selected pest(s):

Sweetpotato Whitefly (P1)

Your Sampling Data

Your selected management options for cotton (in season):

Management Options	P1 (Pre-season/In Season Options)
Conservation of natural enemies	⊗ / ①
Defoliate as effectively and early as possible, watch for pest buildup between defoliation and harvest	\otimes / \bullet
Cultivar selection	1 ⊗
Good field sanitation of alternate crop hosts and weeds in winter and spring	1 ⊗
Develop cooperative regional pest management plan	\otimes / lacktree
Chemical control	⊗ / ○

Your selected chemical control options for cotton (in season):

Common Name (example trade name)	P1	MoA1	Selectivity ²	Predatory mites ³	General predators ⁴	Parasites ⁴	Honey bees ⁵	impact to natural enemies ⁶
acetamiprid (Assail)	Ø	4A	moderate	_	_	M/H	II	moderate
azadirachtin (Neemix, Neemix 4.5, AZA-Direct, Ornazin 3%EC, Azatin XL)	Ø	un	broad	М	L/M	L/M	II	short

Duration of

bifenthrin (Brigade, Brigade WSB, Brigade 2 EC, Attain TR, Talstar Professional)	⊘	3A	broad	Н	Н	Н	I	long
buprofezin (Courier)	⊘	16	narrow	L	Н	L	II	long
clothianidin (Poncho)	⊘	4A	_	_	_	_	_	_
dinotefuran (Venom)	②	4A	_	_	_	_	_	_
flupyradifurone (Sivanto 200SL)	⊘	4D	narrow	_	_	_	_	_
insecticidal soap (M-Pede)	②	UN	_	_	_	_	III	_
narrow range oil (Superior, Supreme, Omni)	⊘	UN	_	_	_	_	II	_
pyriproxyfen (Esteem, , Esteem Ant Bait 0.5%, Distance)	⊘	7C	narrow	L	Н	L	II	long
spiromesifen (Oberon)	⊘	23	_	_	_	_	_	_

¹ Rotate chemicals with a different mode-of-action Group number, and do not use products with the same mode-of-action Group number more than twice per season to help prevent development of resistance. For example, the organophosphates have a Group number of 1B; chemicals with a 1B Group number should be alternated with chemicals that have a Group number other than 1B. Mode of action Group numbers are assigned by IRAC (Insecticide Resistance Action Committee). For additional information, see their Web site at http://www.irac-online.org/.

- ² Selectivity: *broad* means it affects most groups of insects and mites; *narrow* means it affects only a few specific groups.
- ³ Generally, toxicities are to western predatory mite, *Galendromus occidentalis*. Where differences have been measured in toxicity of the pesticide-resistant strain versus the native strain, these are listed as pesticide-resistant strain or native strain.
- ⁴ Toxicities are averages of reported effects and should be used only as a general guide. Actual toxicity of a specific chemical depends on the species of predator or parasite, environmental conditions, and application rate.
- ⁵ Ratings are as follows: I = Do not apply to blooming plants; II = Apply only during late evening; III = Apply only during late evening, night, or early morning; and IV = Apply at any time withreasonable safety to bees. For more information, see How to Reduce Bee Poisoning From Pesticides (PDF), Pacific Northwest Extension Publication PNW591.
- 6 Duration: short means hours to days; moderate means days to 2 weeks; and long means many weeks or months.

Mitigating Pesticide Hazards (http://ipm.ucanr.edu/mitigation/index.html)
Precautions for Using Pesticides (http://ipm.ucanr.edu/GENERAL/precautions.html)

References



Sweetpotato Whitefly (P1) http://ipm.ucanr.edu/PMG/r114300311.html

Pest Identification

Several species of whiteflies may infest cotton. Proper identification of sweetpotato whitefly is important because other whitefly species do not usually cause economic damage in cotton. Use a hand lens to examine both immatures and adults. Sweetpotato whitefly adults are tiny (0.06 inch or 1.5 mm long), yellowish insects with white wings. Their wings are held somewhat vertically tilted, or rooflike, over the body and generally do not meet over the back but have a small space separating them. Greenhouse whitefly (*Trialeurodes vaporariorum*) adults, the species that is most similar in appearance, hold their wings flatter over the back and there is no space separating the two wings where they join. Bandedwinged whiteflies (*Trialeurodes abutiloneus*) have brownish bands across their wings.

(see link above for more detail)

UC IPM Sampling Information

Beginning at least 50 paces into the field, choose a sample plant at random and select the 5th mainstem node leaf from the terminal. Using a hand lens, turn the leaf over and check for insects on the underside (these are called leaf-turns). Record monitoring results. (see link above for more detail)

- ⊗ Information currently not available in the UC IPM Pest Management Guidelines.
- More information available in UC IPM Pest Management Guidelines.
- Option applicable. Additional information not available.
- Comparison of chemical control water-related risks.

MoA - Mode of Action

H = high

M = moderate

L = low

— = no information

I = Do not apply or allow to drift to plants that are flowering.

II = Do not apply or allow to drift to plants that are flowering, except when the application is made between sunset and midnight if allowed by the pesticide label and regulations.

III = No bee precaution, except when required by the pesticide label or regulations.