

## Texas Turfgrass Integrated Pest Management (IPM) - Insecticide Alternatives (Rev. Mar. 2013)

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See: <http://LandscapeIPM.tamu.edu> for turfgrass insects and management information for Texas and elsewhere.

For ant management, see <http://fireant.tamu.edu> or <http://eXtension.org/fire+ants>.

Table modified from: <http://edis.ifas.ufl.edu/ig001> and [http://commodities.caes.uga.edu/turfgrass/georgiaturf/Publicat/1640\\_Recommendations.htm](http://commodities.caes.uga.edu/turfgrass/georgiaturf/Publicat/1640_Recommendations.htm).

Mode of action/pesticide class information: <http://www.irac-online.org/>.

Insecticide common name (Trade name examples, only)	Class (Restricted Use)	Arthropod Pest(s)			
		Chinch bugs	Caterpillars <sup>1</sup>	Mole crickets	White Grubs <sup>2</sup> Hunting Billbug
acephate	Organo Phosphate (OP)				adults
(Surrender)					
(Orthene TTO 75WP)		x	x	x	
(Orthene TTO 97 -golf, sodfarms)		x	x	x	
(Orthene TTO)					
bifenthrin	Pyrethroid				adults, larvae
(Talstar GC Flowable)	(R)	x	x	x	curative
(Talstar EZ Golf Granular)		x		x	
carbaryl	OP				adult, larvae
(Sevin SL)		x	x		x
(Sevin 80 WSP)		x	x		x
(10% Sevin granules)					
(Mole cricket bait)				x	
chlorantraniliprole	Diamide				larvae curative
(Acelepryn)		suppression	x		x
clothianidin	Neonicotinoid				larvae preventive
(Arena 50 WDG)		x		x	x
(Arena 0.5G)		x		x	x
cyfluthrin	Pyrethroid				adults
(Tempo WP Ultra)	(R)	x		x	
(Tempo SC Ultra)		x	x	x	
(Tempo 20 WP - golf)		x	x		
deltamethrin	Pyrethroid				adults
(DeltaGard GC 5SC)	(R)	x	x	x	
(DeltaGard T&O 5SC)		x			
(Deltagard G)		x			
(DeltaGard T&O Granular)					

Insecticide common name (Trade name examples)	Class (Restricted Use)	Chinch bugs	Caterpillars <sup>1</sup>	Mole crickets	White Grubs <sup>2</sup>	Hunting Billbug
dinotefuran (Zylam 20SG)	Neonicotinoid	X	X	X	X	
fipronil (Chipco TopChoice)	Phenyl Pyrazole			X		
imidacloprid (Merit 75 WSP) (Merit 0.5G)	Neonicotinoid			X	X	larvae preventive
indoxacarb (Advion Mole Cricket Bait) (Provaunt SC)	Oxadiazine		X	X		
halofenozide (Mach 2 1.5 G) (Mach 2 2SC)	IGR - Chitin Syn.				X	larvae preventive
lambda-cyhalothrin (Scimitar CS) (Scimitar GC)	Pyrethroid	(R)	X	X	X	adults, larvae curative
permethrin (Astro)	Pyrethroid			X		
spinosad (Conserve 1SC)	Spinosyns		X			
thiamethoxam (Meridian 0.33 G)	Neonicotinoid	suppression		suppression	X	larvae
trichlorfon (Dylox 80) (Dylox 80 T&O) (Dylox 6.2 G)	OP	X	X	X	X	larvae curative
<b>Combination Products</b>						
clothiodin + bifenthrin (Aloft)	Nicotinoid + Pyrethroid	X	X	X	X	
imidacloprid + bifenthrin (AllectusSC)	Combination (R)	X		X	X	
lambda-cyhalothrin + thiametoxam (Tandem)	Pyrethroid + Neonicotinoid	X	X	X	X	

<sup>1</sup> Caterpillars = armyworms, cutworms, sod webworms

<sup>2</sup> White grubs = May and June beetles, masked chafers, Japanese beetle, green June beetle

**Other pests:** Digger bees and wasps - acephate (Surrender), Orthene TTO 75 WP), various pyrethroids; Snails and slugs - metaldehyde or mesurol; Millipedes, sowbugs and pillbugs - bifenthrin (Talstar F, GC, G), carbaryl (Sevin 80 WSP), various pyrethroids. Mites (eriphyid mites) – cultural practices as follows: an infrequent scalping to remove ca 98% of the infestation; remove clippings from the area (they are full of mites) and destroy off-site; Grow the grass ahead of the mites with adequate H2O and fertilization.

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