



### INSECT CONTROL

Commercial Turf Insect Control			
Insect	Insecticide	Rate	Comments
<b>Billbugs</b>			
	bifenthrin BRIGADE 2EC	0.05-0.08 fl.oz./1000 sq.ft. or 2.2-3.5 fl.oz./A	Brigade is a <b>RESTRICTED USE</b> insecticide. Use on sod farms only.
	TALSTAR EZ GRANULAR	1.15-2.3 lb./1000 sq.ft.	Apply when adults are first observed. Not for use on golf courses or sod farms.
	TALSTAR GC GRANULAR	1.15-2.3 lb./1000 sq.ft.	Talstar is a <b>RESTRICTED USE</b> insecticide. Can be applied to golf courses, sod farms, and other locations.
	TALSTAR P PROFESSIONAL	0.25-0.5 fl.oz./1000 sq.ft.	Apply when adult billbugs are first observed. Not for use on golf courses or sod farms.
	TALSTAR PL GRANULAR	1.15-2.3 lb./1000 sq.ft.	Apply when adult billbugs are first observed. Not for use on golf courses or sod farms.
	carbaryl SEVIN SL	6 fl.oz./1000 sq.ft. or 8 qt./A	Irrigate turfgrass soon after treatment.
	SEVIN 80 WSP	10 lb./A	Irrigate turfgrass soon after treatment.
	chlorantraniliprole ACELEPRYN	8-20 fl.oz./A	For use on sod farms, golf courses, landscape and recreational turfgrass.
	ACELEPRYN GRANULAR	50-100 lb./A	For use on sod farms, golf courses, landscape and recreational turfgrass.
	chlorpyrifos DURSBAN 50W	2-4 lb./A	Dursban is a <b>RESTRICTED USE</b> insecticide. Use on sod farms only. Apply when adults are first observed.
	clothianidin ARENA 50WDG ARENA 0.5G	8 oz./A 50 lb./A	Irrigate within 24 hours after treatment. Irrigate within 24 hours after treatment.
	deltamethrin DELTAGARD GC 5SC	0.6-0.9 fl.oz./1000 sq.ft.	DeltaGard is a <b>RESTRICTED USE</b> insecticide. Water in following application 0.25 to 0.5 inch. Treat when insects first appear.
	DELTAGARD T&O GRANULAR	2-3 lb./1000 sq.ft.	Use on landscape turf only. Water in following application 0.25 to 0.5 inch. Treat when insects first appear.
	halofenozide MACH 2 1.5 G MACH 2 SC	133 lb./A 2.9 fl.oz./1000 sq.ft.	Irrigate within 24 hours after treatment. Mach may cause short-term discoloration of Tifdwarf bermudagrass. For sod farms allow at least 7 days to elapse between application and harvest of sod.

Insect	Insecticide	Rate	Comments
<b>Billbugs (cont.)</b>			
	imidacloprid		
	MERIT 75 WSP	1.6 oz./8250 sq.ft. <b>or</b> 8.6 oz./A	Irrigate within 24 hours after treatment.
	MERIT 0.5 G	1.4 lb./1000 sq.ft. <b>or</b> 60 lb./A	Irrigate within 24 hours after application.
	MERIT 2F	0.46-0.6 fl.oz./1000 sq.ft. <b>or</b> 1.25-1.6 pt./A	Irrigate within 24 hours after application.
	imidacloprid + bifenthrin		
	ALLECTUS GC SC	0.9-1.65 fl.oz./1000 sq.ft.	Allectus is a <b>RESTRICTED USE</b> insecticide. Use on golf courses and sod farms. Irrigate within 24 hours after treatment. Time application when adults are active.
	ALLECTUS GC	1.7-2.9 lb./1000 sq.ft.	Use on golf courses and sod farms. Irrigate within 24 hours after treatment. Time application when adults are active.
	ALLECTUS G	1.7-2.9 lb./1000 sq.ft. 75-125 lb./A	Not for use on golf courses and sod farms.
	ALLECTUS SC	0.4-1.65 fl.oz./A 1.1-4.5 pt./A	Not for use on golf courses and sod farms.
	thiamethoxam		
	MERIDIAN 0.33G	7.1-9.4 lb./5000 sq.ft.	Irrigate after treatment.
	MERIDIAN 25WG	1.5-1.95 oz./5000 sq.ft.	Use 1.5 to 5 gallons of spray per 1,000 square feet for 25WG formulation. Irrigate after treatment.
<b>Chinch Bugs</b>			
	acephate		
	ORTHENE TTO 75 WP	1.2-2.4 oz./1000 sq.ft.	Use on golf courses or sod farms only.
	ORTHENE TTO 97	0.9-1.8 oz./1000 sq.ft.	Use on golf course or sod farms only.
	bifenthrin		Brigade is a <b>RESTRICTED USE</b> insecticide.
	BRIGADE 2EC	0.08-0.16 fl.oz./1000 sq.ft. <b>or</b> 3.5-7.0 fl.oz./A	
	TALSTAR EZ GRANULAR	2.3-4.6 lb./1000 sq.ft.	Not for use on golf courses or sod farms. Irrigate immediately after application with a minimum of 0.25 inch of water.
	TALSTAR GC GRANULAR	2.3-4.6 lb./1000 sq.ft.	Talstar is a <b>RESTRICTED USE</b> insecticide. Irrigate before treatment. Higher application rate may be required to control heavy infestations (up to 0.1 pound a.i. per acre). Can be applied to golf courses and sod farms.
	TALSTAR P PROFESSIONAL	0.5-1.0 fl.oz./1000 sq.ft.	Irrigate before application. Not for use on golf courses or sod farms.
	TALSTAR PL GRANULAR	2.3-4.6 lb./1000 sq.ft.	Irrigate immediately after application with a minimum of 0.25 inch of water. Not for use on golf courses or sod farms.
	carbaryl		
	SEVIN SL	4.5-6 fl.oz./1000 sq.ft. <b>or</b> 6-8 qt./A	Irrigate before application; then do not irrigate for 24 hours after application.
	SEVIN 80 WSP	7.5-10 lb./A	Irrigate before application; then do not irrigate for 24 hours.
	clothianidin		Irrigate immediately after application.
	ARENA 50WDG	10.67 oz./A	
	ARENA 0.5G	66.67 lb./A	For suppression only

Insect	Insecticide	Rate	Comments
<b>Chinch Bugs (cont.)</b>			
	cyfluthrin TEMPO SC ULTRA	8 ml/1000 sq.ft.	Use on landscape and recreational turf only. Not for use on sod farms or golf courses. Irrigate after application.
	TEMPO ULTRA WP	15.4 oz./A	Use on landscape and recreational turf only. Irrigate after application.
	TEMPO 20 WP GC	1 packet/7800 sq.ft.	Tempo is a <b>RESTRICTED USE</b> insecticide. Use on golf courses only. Irrigate after application.
	deltamethrin DELTAGARD T&O 5SC	0.6-0.9 fl.oz./1000 sq.ft.	Use on landscape turf only.
	DELTAGARD GC 5SC	0.6-0.9 fl.oz./1000 sq.ft.	DeltaGard is a <b>RESTRICTED USE</b> insecticide.
	DELTAGARD G	2-3 lb./1000 sq.ft.	Use on landscape turf only.
	DELTAGARD T&O GRANULAR	2-3 lb./1000 sq.ft.	
	dinotefuran ZYLAM 20SG	1 oz./1000 sq.ft.	For suppression of chinch bugs, apply prior to hatching of first instar nymphs.
	imidacloprid + bifenthrin ALLECTUS SC	0.4-1.65 fl.oz./1000 sq.ft.	Use on landscape turf only. Irrigate before and after application.
	ALLECTUS GC	1.7-2.9 lb./1000 sq.ft.	Allectus is a <b>RESTRICTED USE</b> insecticide. Use on golf courses and sod farms. Irrigate after application.
	ALLECTUS GC SC	0.9-1.65 fl.oz./1000 sq.ft.	Allectus is a <b>RESTRICTED USE</b> insecticide. Use on golf courses and sod farms. Irrigate after application.
	ALLECTUS G	1.7-2.9 lb./1000 sq.ft.	Not for use on golf courses and sod farms. Irrigate after application.
	lambda-cyhalothrin SCIMITAR CS	0.47 fl.oz. (14 ml)/1000 sq.ft. or 20 oz./A	Use on landscape turf only. Apply using 2 to 10 gallons of spray per 1,000 square feet. Water in following application 0.25 to 0.5 inch.
	SCIMITAR GC	20 oz./A	Scimitar is a <b>RESTRICTED USE</b> insecticide.
	thiamethoxam MERIDIAN 0.33G	7.1-9.4 lb./5000 sq.ft.	Irrigate granular formulation after treatment.
	MERIDIAN 25WG	1.5-1.95 oz./5000 sq.ft.	Use 1.5 to 5 gallons of spray per 1,000 square feet Suppression only.
	trichlorfon DYLOX 80	3.75 oz./1000 sq.ft.	Water immediately after application. Use on landscape and recreational turf only.

Insect	Insecticide	Rate	Comments	
<b>Fire Ants</b>				
<i>Baits</i>				
	indoxacarb ADVION BAIT	4 T./mound 1.5 lb./A	Avoid applying all baits just before or after irrigation or rain. The most effective method for control of ants over a broad area is the use of a broadcast bait two times per year (spring and fall) coupled with individual mound treatments as needed.	
	hydromethylnon AMDRO BAIT	5 T./mound 1-1.5 lb./A		
	MAXFORCE GRANULAR BAIT	2-4 oz./5000 sq.ft. 1-2 lb./A		
	MAXFORCE FINE GRANULAR BAIT	2 T./mound 1 oz./1800 sq.ft.		
	MAXFORCE FC BAIT	2-5 T./mound 1.5-5 lb./A		
	PROBAIT	2-5 T./mound 1-1.5 lb./A		
	fenoxycarb AWARD BAIT	1-3 T./mound 1-1.5 lb./A		
	s-methoprene EXTINGUISH BAIT	3-5 T./mound 1-1.5 lb./A		
<i>Mound Drench Treatments</i>				
	acephate ORTHENE TTO 75WP	1 oz./5 gal. water		Drench mounds when queen and brood are located close to soil surface on warm, dry days. Generally it takes 1 to 2 gallons of water to drench a fire ant mound effectively.
	ORTHENE TTO 97	0.75 oz./5 gal. water		
	bifenthrin TALSTAR GC FLOWABLE	1 t./gal. water	Drench treated mound with 1 to 2 gallons of water.	
	TALSTAR EZ GRANULAR	0.5 cup/mound		
	TALSTAR P PROFESSIONAL	1 t./gal. water		
	TALSTAR PL GRANULAR	0.5 cup/mound	Drench treated mound with 1 to 2 gallons of water.	
	carbaryl SEVIN SL	0.75 fl.oz./gal. water	Dursban is a <b>RESTRICTED USE</b> insecticide. Use on golf courses and sod farms only.	
	chlorpyrifos DURSBAN 50W	0.24 oz./gal. water		
	DURSBAN PRO	1 fl.oz./2 gal. water		
	deltamethrin DELTAGARD GC 5SC	1.5 fl.oz./gal. water	DeltaGard is a <b>RESTRICTED USE</b> insecticide.	
	imidacloprid + bifenthrin ALLECTUS GC SC	0.33 fl.oz./gal. water	Allectus is a <b>RESTRICTED USE</b> insecticide. Use on golf courses and sod farms only.	
	ALLECTUS SC	0.33 fl.oz./gal. water	Use on landscape turf only.	
	lambda-cyhalothrin SCIMITAR CS	0.5 fl.oz./2.5 gal. water	Scimitar is a <b>RESTRICTED USE</b> insecticide. Use on landscape turf only.	
	SCIMITAR GC	0.5 fl.oz./2.5 gal. water	Scimitar is a <b>RESTRICTED USE</b> insecticide.	

Insect	Insecticide	Rate	Comments
<b>Fire Ants (cont.)</b>			
<i>Mound Drench Treatments (cont.)</i>			
	permethrin ASTRO	0.64 oz./gal. water	Astro is a <b>RESTRICTED USE</b> insecticide. Use on landscape turf only.
	spinosad CONSERVE	0.1 fl.oz./gal. water	
	thiamethoxam MERIDIAN 25WG	0.1-0.3 oz./gal. water	
<i>Dry Mound Treatments</i>			
	acephate ORTHENE TTO 75WP	1-2 t./mound	For best results with all dry mound treatments, sprinkle dry product over and around mound as directed on label. Do not disturb mound before or after treatment.
	cyfluthrin BAYER FIRE ANT KILLER	1 t./mound	
	deltamethrin BENGAL ULTRA DUST FIRE ANT KILLER 0.05%	1 T./mound	
	TERRO FIRE ANT KILLER (0.05%)	1 T./mound	
	DELTAGARD G	2 T./mound	Use on landscape turf only. Follow with 1 to 2 gallons of water for best results.
	imidacloprid + bifenthrin ALLECTUS GC	4 oz./mound	Use on golf courses and sod farms only. Follow with 1 to 2 gallons of water for best results.
	ALLECTUS G	4 oz./mound	Allectus is a <b>RESTRICTED USE</b> insecticide. Use on landscape turf only. Follow with 1 to 2 gallons of water for best results.
<i>Broadcast Treatments</i>			
	bifenthrin BRIGADE 2EC	7-14 fl.oz./A	Brigade is a <b>RESTRICTED USE</b> insecticide. Use on sod farms only.
	TALSTAR EZ GRANULAR	2.3-4.6 lb./1000 sq.ft.	If soil is not moist, irrigate before application.
	TALSTAR GC GRANULAR	2.3-4.6 lb./1000 sq.ft.	Talstar is a <b>RESTRICTED USE</b> insecticide. If soil is not moist, irrigate before application. Can be used on golf courses and sod farms.
	TALSTAR P PROFESSIONAL	0.5-1.0 fl.oz./1000 sq.ft.	If soil is not moist, irrigate before application. Not for use on golf courses or sod farms.
	TALSTAR PL GRANULAR	2.3-4.6 lb./1000 sq.ft.	If soil is not moist, irrigate before application. Not for use on golf courses or sod farms.
	carbaryl SEVIN SL	3 fl.oz./1000 sq.ft.	
	chlorpyrifos DURSBAN PRO	1.5 fl.oz./1000 sq.ft. or 2 qt./A	Dursban is a <b>RESTRICTED USE</b> insecticide. For use on golf courses, road medians, and industrial plant sites only.
	cyfluthrin TEMPO SC ULTRA	8 ml/1000 sq.ft.	Use on landscape and recreational turf only.
	TEMPO ULTRA WP	15.4 oz./A	Use on landscape and recreational turf only.
	TEMPO WP GC	1 packet/7,800 sq.ft.	Tempo is a <b>RESTRICTED USE</b> insecticide. Use on golf courses only.

Insect	Insecticide	Rate	Comments
<b>Fire Ants (cont.)</b>			
<i>Broadcast Treatments (cont.)</i>			
	deltamethrin		DeltaGard is a <b>RESTRICTED USE</b> insecticide.
	DELTAGARD GC 5SC	1.5 fl.oz./gal.	
	DELTAGARD T&O 5SC	1.5 fl.oz./gal.	Use on landscape turf only.
	DELTAGARD G	2-3 lb./1000 sq.ft.	Use on landscape turf only.
	fipronil		For use on golf courses, sod farms, sports fields, and other locations.
	CHIPCO CHOICE	4.6 oz./1000 sq.ft.	
	GARDENTECH OVER'N OUT!	87 lb./A	
	TOP CHOICE	2 lb./1000 sq.ft.	For use on golf courses, sod farms, sports fields, and other locations. Irrigate after application.
	imidacloprid + bifenthrin		Allectus is a <b>RESTRICTED USE</b> insecticide. For use on golf courses and sod farms.
	ALLECTUS GC SC	1.32-1.65 fl.oz./1000 sq.ft.	
	ALLECTUS SC	1.32-1.65 fl.oz./1000 sq.ft.	Use on landscape turf, athletic fields, and parks.
	ALLECTUS GC	1.7-2.9 lb./1000 sq.ft.	Allectus is a <b>RESTRICTED USE</b> insecticide.
	ALLECTUS G	2.9 lb./1000 sq.ft.	Use on landscape turf, athletic fields, and parks. Not for use on golf courses or sod farms. For heavy fire ant infestations, use up to 5.7 pounds per 1,000 square feet in non-residential areas only.
	lambda-cyhalothrin		Use on landscape turf, athletic fields, and parks.
	SCIMITAR CS	3.4-7 ml/1000 sq.ft. or 5-10 fl.oz./A	
	SCIMITAR GC	3.4-7 ml/1000 sq.ft. or 5-10 fl.oz./A	Scimitar is a <b>RESTRICTED USE</b> insecticide. Use on golf courses, sod farms, and other locations.
<b>Mole Crickets</b>			
	acephate		Irrigate before application, not following application.
	ORTHENE TTO 75WP	1-1.9 oz./1000 sq.ft.	Use on golf courses and sod farms only.
	ORTHENE TTO 97	0.8-1.4 oz./1000 sq.ft.	
	bifenthrin		Brigade is a <b>RESTRICTED USE</b> insecticide.
	BRIGADE 2EC	0.16-0.32 fl.oz./1000 sq.ft. or 7-14 fl.oz./A	Irrigate after application.
	TALSTAR GC GRANULAR	2.3-4.6 lb./1000 sq.ft.	Talstar is a <b>RESTRICTED USE</b> insecticide. Irrigate before and after application. Apply during peak egg hatch. Use on golf courses, sod farms, and recreational areas.
	TALSTAR EZ GRANULAR	2.3-4.6 lb./1000 sq.ft.	Irrigate before and after application. Apply during peak egg hatch. Not for use on golf courses and sod farms.
	TALSTAR P PROFESSIONAL	0.5-1.0 fl.oz./1000 sq.ft.	Irrigate before and after application. Not for use on golf courses or sod farms.
	TALSTAR PL GRANULAR	2.3-4.6 lb./1000 sq.ft.	Irrigate before and after application. Not for use on golf courses or sod farms.

Insect	Insecticide	Rate	Comments
<b>Mole Crickets (cont.)</b>			
	carbaryl MOLE CRICKET BAIT	0.75-0.9 lb./1000 sq.ft.	This is a bait. Do not water following treatment. Baits are used primarily for control of large nymphs and adults.
	clothianidin ARENA 50WDG	10.67 oz./A	Irrigate before and after application. Apply during peak egg hatch. For suppression
	ARENA 0.5G	66.67 lb./A	
	cyfluthrin TEMPO WP ULTRA	7.7-15.4 oz./A	Tempo is a <b>RESTRICTED USE</b> insecticide. Landscape and recreational turf only. Apply during peak egg hatch.
	TEMPO SC ULTRA	8 ml/1000 sq.ft. or 12 fl.oz./A	Tempo is a <b>RESTRICTED USE</b> insecticide. Landscape and recreational turf only. Apply during peak egg hatch.
	deltamethrin DELTAGARD GC 5SC	0.6-0.9 fl.oz./1000 sq.ft.	DeltaGard is a <b>RESTRICTED USE</b> insecticide. For use on golf courses.
	DELTAGARD T&O GRANULAR	2-3 lb./1000 sq.ft.	Use on landscape turf only. Irrigate after application.
	dinotefuran ZYLAM 20SG	1 oz./1000 sq.ft.	Apply prior to or during the peak egg hatch period. When adults or large nymphs are present and actively tunneling, tank mix with a curative insecticide.
	fipronil CHIPCO CHOICE	4.6-9.4 oz./1000 sq.ft.	Apply using slit-placement application equipment. For use on golf courses, sod farms, sports fields, and other locations.
	imidacloprid MERIT 75 WSP	1.6 oz./8250 sq.ft.	Apply during peak egg hatch period. Irrigate within 24 hours after application.
	MERIT 0.5 G	1.8 lb./1000 sq.ft.	Apply during peak egg hatch period. Irrigate within 24 hours after application. Not for use on sod farms.
	imidacloprid + bifenthrin ALLECTUS SC	1.32-1.65 fl.oz./1000 sq.ft.	Use on landscape turf only. Irrigate before and after application.
	ALLECTUS GC	2.9 lb./1000 sq.ft. or up to 250 lb./A for heavy infestation	Allectus is a <b>RESTRICTED USE</b> insecticide. Irrigate before and after application.
	indoxacarb ADVION MOLE CRICKET BAIT	1.15-4.6 lb./1000 sq.ft.	Rates at or above 2.3 pounds per 1,000 square feet may be needed against heavier infestations. Do not irrigate after application. Crickets may die on surface for 1 to 5 days after treatment.
	lambda-cyhalothrin SCIMITAR CS	Nymphs: 7 ml/1000 sq.ft. Adults: 14 ml/1000 sq.ft.	Use on landscape turf only. Apply 4 to 10 gallons spray per 1000 square feet. Irrigate before and after application.
	SCIMITAR GC	Nymphs: 7 ml/1000 sq.ft. Adults: 14 ml/1000 sq.ft.	Scimitar is a <b>RESTRICTED USE</b> insecticide. Apply 4 to 10 gallons spray per 1000 square feet. Irrigate before and after application.
	permethrin ASTRO	1.6 fl.oz./gal.	Astro is a <b>RESTRICTED USE</b> insecticide. Use on landscape turf only. Water in following application 0.25 to 0.5 inch.
	thiamethoxam MERIDIAN 0.33G	7.1-9.4 lb./5000 sq.ft.	Irrigate granular formulation after treatment.
	MERIDIAN 25WG	1.5-1.95 oz./5000 sq.ft.	Use 1.5 to 5 gallons of spray per 1,000 square feet for 25WG formulation. (For suppression only)
	trichlorfon DYLOX 80	3.75 oz./1000 sq.ft.	Irrigate before and after application.
	DYLOX 6.2 G	3 lb./1000 sq.ft.	

Insect	Insecticide	Rate	Comments
<b>Spittlebug</b>			
	acephate ORTHENE TTO 75WP ORTHENE TTO 97	1-1.9 oz./1000 sq.ft. 0.8-1.4 oz./1000 sq.ft.	Apply in the late afternoon or evening. Do not irrigate within 24 hours of application.
	bifenthrin ONYX	0.07-0.15 fl.oz./1000 sq.ft.	Onyx is a <b>RESTRICTED USE</b> insecticide. Do not irrigate within 24 hours of application.
	carbaryl SEVIN SL	1.5-3 fl.oz./1000 sq.ft. <b>or</b> 2-4 qt./A	Do not irrigate within 24 hours of application.
	SEVIN 80 WSP	2.5-5 lb./A	Do not irrigate within 24 hours of application.
	deltamethrin DELTAGARD GC 5SC DELTAGARD T&O 5SC	0.2-0.4 fl.oz./1000 sq.ft. 8.75-17.5 fl.oz./A	DeltaGard is a <b>RESTRICTED USE</b> insecticide. Do not irrigate within 24 hours of application. Use on landscape turf only. Do not irrigate within 24 hours of application.
<b>Turf Caterpillars</b>			
	acephate ORTHENE TTO 75WP ORTHENE TTO 97	1-1.9 oz./1000 sq.ft. 0.8-1.4 oz./1000 sq.ft.	Use on sod farms and golf courses only. Irrigate before application. Delay watering or mowing for 24 hours following application. Labels indicate control of cutworm, southern armyworm, and yellow-striped armyworm.
	bifenthrin BRIGADE 2EC	2.2-3.5 fl.oz./A	Brigade is a <b>RESTRICTED USE</b> insecticide. Use on sod farms only. Delay watering for 24 hours after application.
	TALSTAR GC GRANULAR	1.15 lb./1000 sq.ft. <b>or</b> 10 fl.oz./A	Talstar is a <b>RESTRICTED USE</b> insecticide. Irrigate immediately after application. For use on golf courses, sod farms, and athletic fields.
	TALSTAR EZ GRANULAR	1.15 lb./1000 sq.ft.	Irrigate immediately after application. Not for use on golf courses or sod farms.
	TALSTAR P PROFESSIONAL	0.18-1.0 fl.oz./1000 sq.ft.	Delay watering or mowing for 24 hours after application. Not for use on golf courses or sod farms.
	TALSTAR PL GRANULAR	1.15 lb./1000 sq.ft.	Irrigate immediately after application. Not for use on golf courses or sod farms.
	carbaryl SEVIN SL	1.5-3 fl.oz./1000 sq.ft. <b>or</b> 2-4 qt./A	Do not irrigate following insecticide application. Use 6 quarts of Sevin SL per acre for sod webworm control.
	SEVIN 80 WSP	2.5-5 lb./A	Do not irrigate following insecticide application. Use 7.5 pounds of Sevin 80 WSP per acre for sod webworm control.
	chlorantraniliprole ACELEPRYN	2-4 fl.oz./A	Delay watering or mowing for 24 hours after application.
	ACELEPRYN GRANULAR	50-100 lb./A	Delay watering or mowing for 24 hours after application.
	chlorpyrifos DURSBAN 50W	2 lb./A	Dursban is a <b>RESTRICTED USE</b> insecticide. Use on sod farms and golf courses only.
	cyfluthrin TEMPO SC ULTRA	4-8 ml/1000 sq.ft. <b>or</b> 6-12 fl.oz./A	Delay watering or mowing for 24 hours following application. Use on landscape turf only.
	TEMPO 20 WP GC	55 grams/7,800-11,000 sq.ft.	Includes golf course uses

Insect	Insecticide	Rate	Comments
<b>Turf Caterpillars (cont.)</b>			
	deltamethrin DELTAGARD GC 5SC	0.2-0.4 fl.oz./1000 sq.ft. or 8.75-17.5 fl.oz./A	DeltaGard is a <b>RESTRICTED USE</b> insecticide.
	diflubenzuron DIMILIN 2L	2 oz. /A	Dimilin is a <b>RESTRICTED USE</b> insecticide. Use on sod farms only. Apply before larvae become a half inch long in 20 to 50 gallons of water/acre.
	halofenozide MACH2 SC	1.5 fl.oz./1000 sq.ft. or 2 qt./A	Mach may cause short-term discoloration to Tifdwarf bermudagrass. For sod farms, allow at least 7 days between application and harvest.
	imidacloprid + bifenthrin ALLECTUS SC	0.4-1.65 fl.oz./1000 sq.ft. 1.1-4.5 pt./A	Delay watering or mowing after application. Use on landscape turf only.
	ALLECTUS GC	1.1-2.9 lb./1000 sq.ft. 50-125 lb./A	Allectus is a <b>RESTRICTED USE</b> insecticide. Irrigate within 24 hours after application. Use on golf courses and sod farms.
	ALLECTUS GC SC	0.67-1.65 fl.oz./1000 sq.ft. 1.8-4.5 pt./A	Allectus is a <b>RESTRICTED USE</b> insecticide. Delay watering or mowing after application. Use on golf courses and sod farms.
	ALLECTUS G	1.2-2.9 lb./1000 sq.ft. 50-125 lb./A	Irrigate within 24 hours after application. Not for use on golf courses and sod farms.
	indoxacarb PROVAUNT	2-4 oz./A or 0.046-0.092 oz./1000 sq.ft.	Delay mowing and irrigation for 24 hours after application. If applied to turf maintained at greater than 1 inch, use 4 ounces application rate. Not for use on sod farms.
	lambda- cyhalothrin SCIMITAR CS	3.4-7 ml/1000 sq.ft. or 5-10 fl.oz./A	Scimitar is a <b>RESTRICTED USE</b> insecticide. Apply 2 to 5 gallons of spray per 1,000 square feet. Delay watering or mowing for 24 hours. Use on landscape turf only.
	trichlorfon DYLOX 80 T&O	2.5-3.75 oz./1000 sq.ft. or 6.8-10.2 lb./A	For caterpillars, do not irrigate following application.
	DYLOX 420SL	4.6-6.9 fl.oz./1000 sq.ft.	For caterpillars, do not irrigate following application.
	spinosad CONSERVE 1SC	0.25-0.8 fl.oz./1000 sq.ft. or 10-35 fl.oz./A	Lower rate is effective against small fall armyworms and sod webworms, but high rate is required against cutworms. Delay watering or mowing for 24 hours following application.
<b>White Grubs</b>			
	carbaryl SEVIN SL	6 fl.oz./1000 sq.ft. or 8 qt./A	Irrigate turfgrass soon after treatment.
	SEVIN 80 WSP	10 lb./A	Irrigate turfgrass soon after treatment.
	chlorantraniliprole ACELEPRYN	8-16 fl.oz./A	Irrigate into turf immediately after application.
	ACELEPRYN GRANULAR	50-100 lb./A	Irrigate into turf immediately after application.
	clothianidin ARENA 50WDG	8 oz./A	Irrigate within 24 hours after treatment.
	ARENA 0.5G	50 lb./A	Irrigate within 24 hours after treatment.
	dinotefuran ZYLAM 20SG	1 oz./1000 sq.ft.	For optimum control of grubs, billbugs, and annual bluegrass weevil, apply prior to or during egg hatch of the target pest.
	halofenozide MACH 2 1.5 G	133 lb./A	Irrigate within 24 hours after treatment.
	MACH 2 SC	2.9 fl.oz./1000 sq.ft.	May cause short-term discoloration of Tifdwarf bermudagrass. For sod farms, allow at least 7 days to elapse between application and harvest of sod.

Insect	Insecticide	Rate	Comments
<b>White Grubs (cont.)</b>			
	imidacloprid MERIT 75 WSP	8.6 oz./A	Irrigate within 24 hours after treatment.
	MERIT 0.5 G	1.4 lb./1000 sq.ft. or 60 lb./A	Irrigate within 24 hours after treatment.
	imidacloprid + bifenthrin ALLECTUS SC	1.32-1.65 fl.oz./1000 sq.ft.	Landscape turf only. Irrigate within 24 hours after treatment.
	ALLECTUS GC	2.3-2.9 lb./1000 sq.ft.	Allectus is a <b>RESTRICTED USE</b> insecticide. Irrigate within 24 hours after treatment.
	ALLECTUS GC SC	1.32-1.65 fl.oz./A 3.6-4.5 pt./A	Allectus is a <b>RESTRICTED USE</b> insecticide. Irrigate after application. For use on golf courses and sod farms.
	ALLECTUS G	2.3-2.9 lb./1000 sq.ft. 100-125 lb./A	Irrigate after application. Not for use on golf courses and sod farms.
	thiamethoxam MERIDIAN 0.33G	7.1-9.4 lb./5000 sq.ft.	Irrigate granular formulation after treatment.
	MERIDIAN 25WG	1.5-1.95 oz./5000 sq.ft.	Use 1.5 to 5 gallons of spray per 1,000 square feet for 25WG formulation.
	trichlorfon DYLOX 80 T&O	3.75 oz./1000 sq.ft. or 10.2 lb./A	Irrigate following application. For use on landscape and recreational turf including golf courses. Do not apply within 25 feet of surface waters.
	DYLOX 6.2 G	3 lb./1000 sq.ft. or 130 lb./A	Can be used on golf courses. Do not apply within 25 feet of surface waters. Not for use on turf being grown for sale or other commercial use as sod. Irrigate following application.
	DYLOX 420 SL	6.9 oz./1000 sq.ft.	For use on landscape, residential, and recreational turf and golf courses. Irrigate following application.

Commercial Turf and Lawns: Insect Control Recommendations prepared by Tim Reed, *Extension Entomologist*, Alabama Cooperative Extension System, Alabama A&M University and Auburn University.

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**For more information**, contact your county Extension office. Visit <http://www.aces.edu/counties> or look in your telephone directory under your county's name to find contact information.

Use pesticides **only** according to the directions on the label. Follow all directions, precautions, and restrictions that are listed. Do not use pesticides on plants that are not listed on the label.

The pesticide rates in this publication are recommended **only** if they are registered with the Environmental Protection Agency or the Alabama Department of Agriculture and Industries. If a registration is changed or canceled, the rate listed here is no longer recommended. Before you apply **any** pesticide, check with your county Extension agent for the latest information.

Trade names are used **only** to give specific information. The Alabama Cooperative Extension System does not endorse or guarantee any product and does not recommend one product instead of another that might be similar.

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