WEATHER REFERENCE

Threat temperatures for preventive insect control

Timing of threat periods and management activities for key insect pests of turf. The threat temperature is a rough guideline that indicates when insects are likely to begin laying eggs or causing damage on golf course turf.

Insect	Threat temperature*		Monitoring (begin when threat temp is reached unless otherwise noted)	Control Measure
	F	C		
WHITE GRUBS	65-73	18-23	No monitoring. Control appropriate only if history of infestation.	Apply systemic product within 2-4 wks after reaching threat temperature. If multiple white grubs spp present, use insect w/lowest threat temperature to time application.
• Asiatic garden beetle	>70	>21	"	Apply systemic product 2-4 wks after reaching threat temperature.
• Black turfgrass ataenius	>65	>18	"	Apply systemic product 2-4 wks after reaching threat temperature.
• European chafer	>70	>21	"	Apply systemic product 2-4 wks after reaching threat temperature.
• Green June beetle	>73	>23	"	Apply systemic product 2-4 wks after reaching threat temperature.
• Japanese beetle	>70	>21	"	Apply systemic product 2-4 wks after reaching threat temperature.
• Masked chafers	>71	>22	"	Apply systemic product 2-4 wks after reaching threat temperature.
• May/June beetles	>71	>22	"	Apply systemic product 2-4 wks after reaching threat temperature.
• Oriental beetle	>70	>21	"	Apply systemic product 2-4 wks after reaching threat temperature.
OTHER PREVENTIVELY CONTROLLED INSECTS				
Annual bluegrass weevil	>55	>13	Monitor for adult weevils, starting at avg air temp >55F (13C) **OR**	Apply systemic product against grubs, 4 wks after adults appear
Annual bluegrass weevil	>55	>13	No monitoring. Appropriate only if history of infestation	Apply systemic product against grubs 2 wks after reaching threat temperatures
Billbugs	>60	>16	Monitor for adults on paved areas, starting at avg. air temp>60F (16C) **OR**	Apply systemic product against grubs, 4 wks after adults appear
Billbugs	>60	>16	No monitoring. Appropriate only if history of infestation)	Apply systemic product against grubs within 2 – 4 wks after reaching threat temperature.
Earthworms	>45	>7	Monitor for earthworm casts	Institute sand topdressing program on fairways at least 4X/year during periods of active turf growth only
Mole crickets	>60	>16	No monitoring; use this option only if history of infestation	Target hatching eggs w/imidacloprid or fipronil when avg air temps > 65 F(18C)

*average daily air temperature unless otherwise noted

NOTE: Most systemic products (imidacloprid, halofenozide) applied against soil pests are applied 1X/ season, & have 2-3 months residual activity. Follow-up applications are required only in warm locations with long (>3 months) periods of threat from damage