

BLACK CUTWORM CONTROL

by D. K. Pollet

As with many insects, the immature or larval stage of an insect is the most damaging. This is particularly true in the case of butterflies and moths, where the larval stage causes damage and the adult beautifies the surroundings with its presence. One particular group of moth larvae, the cutworms, cause problems and sometimes severe damage to crops, vegetable plants, and turf.

Cutworms are a serious pest in the south on grasses on the home lawn as well as the golf course. They produce multiple generations each year and can be a problem from the time the weather warms up until it frosts in the fall.

The abundance of a given species of cutworms is greatly affected from year to year by rainfall conditions which may prevent the adult moths from laying their eggs or by flooding which will force the larvae to the surface where they become food for birds or other predatory insects or animals.

The cutworm overwinters in the larval or pupal stage although a few hibernate as adults in the soil or under trash or in clumps of grass. The larval stage burrows into the soil beneath the turf and comes out to feed at night. This cutworm is cosmopolitan and has a pernicious habit of cutting off several plants while satisfying its appetite.

Their eggs are laid singly and occasionally two or three together on the blades and stems of the turf. The larva is a greasy gray to dark

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Evaluation of New and Standard Materials for the Control of Black Cutworms on Bent Green Putting Surfaces¹

Turf Varieties	Seaside			Emerald							
	Count ²	Interval	Hours	0 ³	24	48	120	0	24	48	120
Treatment⁴/Rate											
Proxol 80SP 3 oz/1000 sq. ft.	5	0	0	0	6	0	0	0			
Dursban 2E 1.5 oz/1000 sq. ft.	8	0	0	0	13	0	0	0			
Velsicol 4283-4EC 1 lb ai/A	7	2	1	1	6	5	2	0			
Velsicol 4283-4EC 3 lb ai/A	3	0	0	0	11	0	0	0			
Velsicol 3883-90WP 1 lb ai/A	9	0	0	0	5	0	0	0			
Velsicol 3883-90WP 3 lb ai/A	7	1	0	1	7	0	0	0			
Diazinon 8 oz/1000	9	0	0	0	7	0	0	0			
Proxol 80SP + Tuco S8314											
3 oz/1000 + 1 pt/100	2	0	0	0	5	0	0	0			
Dursban 2E + Tuco S8314											
1.5 oz/1000 + 1 pt/100	2	0	0	0	4	0	0	0			
Orthene 75S 2.5 lb ai/A	3	1	0	0	5	2	0	0			
Orthene 75S 7.5 lb ai/A	7	1	0	0	5	0	0	0			
U.C. 51762-75WP 0.5 lb ai/A	8	0	0	0	10	0	0	0			
U.C. 51762-75WP 1.0 lb ai/A	9	0	0	0	6	0	0	0			
Dursban Plus 3 oz/1000	5	0	0	0	6	0	0	0			
Control (water only)	9	5	4	6	4	7	5	12			

¹Plots — 90 sq. ft. each

²Counts — each represents a total of 2 — 1 sq. ft. areas

³Counts made with use of Diagnostic aid 8/18/76

⁴Plots were treated with 1.5 gallons water, applied by hand — one application

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brown and occasionally black color with faint stripes.

The black cutworm takes advantage of the cultural practice of aeration of golf greens. A course may not have a bad cutworm infestation, but as soon as the greens are aerated in come the cutworms. These little aeration holes or pockets make an ideal hideout for this bandit to move in and out of as he devours the turf.

Severe feeding causes areas to turn brown and occasionally die out. The feeding patterns radiates out from a hiding place. As the food source decreases around one hiding place the larvae simply moves to a more lush area.

Control of the cutworm has been established by several materials on the market: Dursban, Dursban Plus,

Diazinon, Proxol, Dylox and Sevin. In addition to these, new materials coming on the market show good cutworm control potential.

These tests were made on bent green varieties Seaside and Emerald at the turf plots on the Simpson Experiment Station in Clemson. A single application was made by hand to each 90 square foot plot on Aug. 18, using a 1.5 gallon sprinker can. The pre and post treatment counts were made on two one-square foot areas in each plot using Diagnostic Aid as an adjuvant to stimulate larval movement.

All the registered materials in the test showed excellent control. The Dursban and Proxol treatments agitated the larva within 15 minutes after application as they were noted

squirming on the surface. Orthene 75S and U.C. 51762-75WP showed good and consistent control of the larvae. The Velsicol materials Vel-4283-4EC and Vel-3883-90WP were a little erratic but did give good control. In no instance did any of the materials cause any phytotoxic symptoms on the plots.

Between the materials on the market and the new materials coming, cutworm control as well as other turf pest, should be no problem on the golf course or in the yard providing the applicator uses the materials properly. □

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