

Table 2. Incidence of *Stictospora* one year after introducing infected grubs.

Golf course	Treatment	Number of grubs examined	% <i>Stictospora</i> infected
Currie #2	Introduction	30	27
	Control	30	0
Currie #5	Introduction	27	11
	Control	30	3
Currie #8	Introduction	18	22
	Control	20	0
Brookwood	Introduction	19	58
	Control	23	30
Crooked Creek	Introduction	30	53
	Control	25	0

II. Suppression of ant mounding on tees, greens and fairways. Dursban has been a standard product for ant suppression on golf courses for many years, but with new guidelines introduced by the Environmental Protection Agency for the use of organophosphate insecticides, we need some alternative products that suppress ant mounding. The apron area around a practice green at Wuskowhan Players Club was divided into 60 plot areas to test insecticides for ant suppression. All the plots except for the controls were sprayed on June 2, 2004. Ant mound data were collected weekly, for 5 weeks after treatment (Table 3). The first 4 products in Table 3, below Dursban, provided good suppression of ant mounding for 5 weeks, at a level similar to Dursban. In this test Scimitar worked as well as Dursban. Of interest to many golf course superintendents is how well Merit worked, since this product is often used for grub control. Merit reduced ant mounding by about 50% in this test. Because it persists for 6 months or longer in the soil and in grass plants, Merit may have a suppressive effect on ants for most of the growing season. In other tests, Merit did work as well for ants as it did this time.

Table 3. Percent reduction in ant mounds for 5 weeks after a single application at Wuskowhan Players Club.

Product	Rate (ai/A)	6/2	6/9	6/16	6/23	6/30	7/7
Dursban Pro	1 lb	0	71	100	92	84	80
Scimitar	0.069 lb	0	87	97	92	77	75
Talstar F	0.05 lb	0	87	95	86	56	57
Precise	5 lb	0	63	63	75	55	80
Astro	0.2 lb	0	92	60	64	79	70
Tempo 20WP	0.135 lb	0	87	62	26	21	0
Sevin SL	8 lb	0	52	45	54	55	38
DeltaGard GC	0.85 lb	0	84	35	40	17	9
Merit 75WP	4 lb	0	55	22	48	66	46
Unsprayed	--	0	0	0	0	0	0

III. Earthworm mounding on golf courses. Earthworm mounds are so abundant in the spring on some golf courses with heavy soils, that over 50% of the turf is lost on some fairways. Although earthworms are also very beneficial to turf, this kind of damage is unacceptable to golfers. Two products commonly used for suppressing earthworms, Cleary 3336 and Sevin SL, were tested at Kalamazoo Country Club in April of 2003. Data were collected as the number of earthworm mounds per plot at 2, 4 and 6 weeks after application (Table 4). Dursban had little effect on earthworms. Sevin reduced mounding by 96% the first 2 weeks after application, but had no suppressive effect after 6 weeks. Cleary 3336 applied at the 11 lbs ai/A rate reduced mounding by 90% for the 6 weeks of this study.

Table 4. Suppression of earthworm mounding on a fairway at Kalamazoo Country Club.

Product	Rate (lbs ai/A)	4/14	4/28	5/14	5/27
Cleary 3336	10.9	0	94	93	88
Dursban	1.0	0	0	0	0
Sevin SL	8.0	0	96	42	0