Creeping Bentgrass Nematicide Study - 1978

The nematicide studies were conducted on a heavily infested Toronto bentgrass practice green on the Maple Lanes Golf Course in Warren, MI.

The study was laid out in three repetitions of a randomized block design. Nematode counts were determined for each plot prior to the application of nematicides and subsequent nematode counts were made one month and two months after application to determine the degree of control being obtained with each material. The two species of turf-pathogenic nematodes which were present in problematic numbers were the ring nematode (Criconemoides spp.) and the stunt nematode (Tylenchorhynchus spp.).

The plot area was sampled and treated on June 30, the granular nematicides being applied with a 3' Scotts drop-type spreader and the wettable powders and emulsifiable concentrates being applied with a CO_2 small-plot sprayer. All treatments were irrigated into the root zone immediately after application. The plots were then sampled and nematode counts determined for the ring and stunt nematodes one month later, on July 27 and two months later, on August 28.

Creeping Bentgrass Nematicide Study - 1978
% Reduction - Tylenchorhynchus (stunt) nematode
6/30 - 7/27

Treatment	Rate/1000 ft^2	% Reduction				
		I	II	III	AVE	(DMR)
Check	----	40	56	49	48.3	A
U.C. 21865 (GR)	10 lbs. ai/A	33	42	60	45	A
U.C. 21865 (WP)	6 lbs. ai/A	44	42	42	42.7	A
U.C. 21865 (GR)	6 lbs. ai/A	-16	60	47	30.3	A
U.C. 21865 (WP)	8 lbs. ai/A	28	60	-3	28.3	A
Vydate-EC	6 fl. oz.	47	-5	39	27	A
Dasinat	3 lbs.	52	-30	54	25.3	A
U.C. 21865 (GR)	8 lbs. ai/A	1	29	37	22.3	A
U.C. 21865 (WP)	10 lbs. ai/A	-15	30	15	10	A
LLSE	1:10 dilution	31	38	-62	2.3	A
Nemacur	3 lbs.	45	67	-150	-12.7	A

Note: Treatments followed by the same letter are not significantly different at the 5% level.

Creeping Bentgrass Nematicide Study - 1978
% Reduction - Tylenchorhynchus (stunt) nematode
6/30 - 8/28

Treatment	Rate/1000 ft^2	% Reduction				
		I	II	III	AVE	(DMR)
U.C. 21865 (WP)	6 lbs. ai/A	-2	16	78	30.7	A
U.C. 21865 (WP)	8 lbs. ai/A	13	17	32	20.7	A
U.C. 21865 (GR)	6 lbs. ai/A	-36	47	44	18.3	AB
Nemacur	3 lbs.	49	47	-79	5.7	AB
Dasinat	3 lbs.	41	-77	45	3	AB
Check	---	1	-67	34	-10.7	AB
Vydate-EC	6 fl oz.	0	-100	33	-22.3	AB
U.C. 21865 (GR)	8 lbs. ai/A	-20	-5	-89	-38	AB
U.C. 21865 (WP)	10 lbs. ai/A	-59	-53	-42	-51.3	AB
LLSE	1:10 dilution	-21	-71	-68	-53.3	AB
U.C. 21865 (GR)	10 lbs. ai/A	-95	-259	40	-104.7	B

NOTE: Treatments followed by the same letter are not significantly different at the 5% level.

Creeping Bentgrass Nematicide Study - 1978
% Reduction - Criconemoides (ring) nematode
6/30 - 7/27

Treatment	Rate/1000 ft^2	% Reduction				
		I	II	III	AVE	(DMR)
U.C. 21865 (GR)	10 lbs. ai/A	48	42	47	45.7	A
Nemacur	3 lbs.	34	0	34	22.7	A
Check	---	-3	69	-5	20.3	A
U.C. 21865 (WP)	8 lbs. ai/A	-5	49	-2	14	A
LLSE	1:10 dilution	3	36	-49	-3.3	A
U.C. 21865 (WP)	10 lbs. ai/A	-87	11	36	-13.3	A
U.C. 21865 (GR)	6 lbs. ai/A	-48	-35	7	-25.3	A
U.C. 21865 (WP)	6 lbs. ai/A	28	-67	-44	-27.7	A
Vydate-EC	6 fl oz.	-165	6	44	-38.3	A
Dasinat	3 lbs.	11	-123	-26	-46	A
U.C. 21865 (GR)	8 lbs. ai/A	-119	-167	67	-73	A

NOTE: Treatments followed by the same letter are not significantly different at the 5% level.

Creeping Bentgrass Nematicide Study - 1978
% Reduction - Criconemoides (ring) nematode
6/30 - 8/28

Treatment	Rate/1000 ft^2	% Reduction				
		I	II	III	AVE	(DMR)
Nemacur	3 lbs.	1	11	11	7.7	A
Dasinat	3 lbs.	-23	-69	-48	-46.7	AB
Vydate-EC	6 fl oz.	-85	-95	-6	-62	AB
Check	---	-205	-1	8	-66	AB
U.C. 21865 (GR)	10 lbs. ai/A	-42	-194	-6	-80.7	AB
U.C. 21865 (WP)	6 lbs. ai/A	-209	-69	-14	-97.3	AB
U.C. 21865 (WP)	8 lbs. ai/A	-233	-62	-5	-100	AB
U.C. 21865 (GR)	6 lbs. ai/A	-178	-185	42	-107	AB
U.C. 21865 (WP)	10 lbs. ai/A	-248	-89	-143	-160	AB
LLSE	1:10 dilution	12	-378	-172	-179.3	AB
U.C. 21865 (GR)	8 lbs. ai/A	-386	-206	-23	-205	B

NOTE: Treatments followed by the same letter are not significantly different at the 5% level.

Results: Nematicide Studies

The results of the nematicide studies were erratic. There was inconsistency among replicates of the same treatment which made it impossible to have significant differences. The other problem was the reduction in nematode populations in the untreated checks.