

Use of Trimmit 2SC for Suppression of Annual Bluegrass On Golf Course Fairways in Minnesota

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Introduction

Recent winters in Minnesota has led to considerable annual bluegrass death on golf course putting surfaces and fairways. These harsh winters have proven to be a good control method for removal of annual bluegrass on turf surfaces that are predominately creeping bentgrass. However, a large number of golf clubs in the Twin Cities Metropolitan Area are just the opposite, predominately annual bluegrass with patches of creeping bentgrass.

In addition, some of our older clubs are planning considerable renovation projects to restore golf course playing conditions to the original design specifications. Three of these courses are North Oaks Golf Club, Minneapolis Golf Club, and Golden Valley Country Club.

These three astute golf course superintendents have approached the University of Minnesota requesting information on how to transition out their annual bluegrass without harming the bentgrass.

The purpose of this research project is to develop an annual bluegrass removal/transition program that golf course superintendents can use in Minnesota. Previous research has been conducted using Trimmit in North Carolina (Fred Yelverton) and Illinois (Bruce Branham). Unfortunately, our winters in Minnesota are unique and provide an opportunity for research that North Carolina and Illinois can not duplicate.

Materials and Methods

This research project will evaluate the use of Trimmit 2SC for suppression of annual bluegrass. Timing and rates of application in addition to the number of applications will be evaluated. The following is a list of proposed treatments following discussion with the superintendents and the Trimmit label.

Treatment initiation is May for spring timing (B), July for summer timing (C), and September for fall timing (A). Treatments 19 and 20

Trt #	Name	lbs a.i. / A / application	product rate / application	Timing	lbs a.i. / yr / A
1	Trimmit	0.1250	LB A/A	8 FL OZ/A	A Fall 0.1250
2	Trimmit	0.1250	LB A/A	8 FL OZ/A	B Spring 0.1250
3	Trimmit	0.1250	LB A/A	8 FL OZ/A	C Summer 0.1250
4	Trimmit	0.1250	LB A/A	8 FL OZ/A	A,B Fall, Spring 0.2500
5	Trimmit	0.1250	LB A/A	8 FL OZ/A	A,C Fall, Summer 0.2500
6	Trimmit	0.1250	LB A/A	8 FL OZ/A	A,B,C Fall, Spring, Summer 0.3750
7	Trimmit	0.2500	LB A/A	16 FL OZ/A	A Fall 0.2500
8	Trimmit	0.2500	LB A/A	16 FL OZ/A	B Spring 0.2500
9	Trimmit	0.2500	LB A/A	16 FL OZ/A	C Summer 0.2500
10	Trimmit	0.2500	LB A/A	16 FL OZ/A	A,B Fall, Spring 0.5000
11	Trimmit	0.2500	LB A/A	16 FL OZ/A	A,C Fall, Summer 0.5000
12	Trimmit	0.2500	LB A/A	16 FL OZ/A	A,B,C Fall, Spring, Summer 0.7500
13	Trimmit	0.5000	LB A/A	32 FL OZ/A	A Fall 0.5000
14	Trimmit	0.5000	LB A/A	32 FL OZ/A	B Spring 0.5000
15	Trimmit	0.5000	LB A/A	32 FL OZ/A	C Summer 0.5000
16	Trimmit	0.5000	LB A/A	32 FL OZ/A	A,B Fall, Spring 1.0000
17	Trimmit	0.5000	LB A/A	32 FL OZ/A	A,C Fall, Summer 1.0000
18	Trimmit	0.5000	LB A/A	32 FL OZ/A	A,B,C Fall, Spring, Summer 1.5000
19	Trimmit	0.1250	LB A/A	8 FL OZ/A	D Every 4 wk 0.8750
20	Trimmit	0.0625	LB A/A	4 FL OZ/A	D Every 4 wk 0.4375
21	Glyphosate			2 QT/A	B Spring
22	Untreated				

A=fall B=spring C=summer D=4 wk interval

NORTH OAKS GOLF CLUB - TEE BOX

101	18	201	20	301	1	401	12	501	10	601	6
102	8	202	11	302	2	402	13	502	8	602	3
103	14	203	17	303	3	403	14	503	9	603	19
104	6	204	12	304	4	404	15	504	18	604	15
105	7	205	21	305	5	405	16	505	21	605	14
106	4	206	3	306	6	406	17	506	5	606	12
107	19	207	5	307	7	407	18	507	16	607	17
108	10	208	1	308	8	408	19	508	2	608	11
109	13	209	22	309	9	409	20	509	22	609	4
110	9	210	16	310	10	410	21	510	1	610	20
111	15	211	2	311	11	411	22	511	7	611	13

MINNEAPOLIS GOLF CLUB - TEE BOX

101	3	201	10	301	1	401	12	501	17	601	22
102	12	202	6	302	2	402	13	502	14	602	7
103	18	203	8	303	3	403	14	503	1	603	12
104	15	204	2	304	4	404	15	504	4	604	8
105	17	205	5	305	5	405	16	505	19	605	11
106	4	206	20	306	6	406	17	506	9	606	5
107	1	207	21	307	7	407	18	507	13	607	15
108	11	208	22	308	8	408	19	508	10	608	16
109	13	209	19	309	9	409	20	509	18	609	20
110	14	210	9	310	10	410	21	510	2	610	6
111	7	211	16	311	11	411	22	511	3	611	21

GOLDEN VALLEY GOLF & COUNTRY CLUB - TEE BOX

101	7	201	5	301	1	401	12	501	21	601	18
102	1	202	9	302	2	402	13	502	12	602	6
103	17	203	6	303	3	403	14	503	11	603	13
104	13	204	22	304	4	404	15	504	3	604	16
105	4	205	21	305	5	405	16	505	7	605	8
106	15	206	20	306	6	406	17	506	19	606	4
107	18	207	12	307	7	407	18	507	1	607	2
108	19	208	10	308	8	408	19	508	10	608	17
109	2	209	14	309	9	409	20	509	5	609	9
110	8	210	16	310	10	410	21	510	22	610	15
111	3	211	11	311	11	411	22	511	20	611	14

will be applied from April to October at 4 week intervals. Roundup Pro was selected to demonstrate the use of a nonselective herbicide.

For those plots that only receive one application of Trimmit per season or Glyphosate, bentgrass slit seeding will occur at the recommended interval following application (2 to 4 wks).

Prior to treatment initiation, plots will be rated for percent annual bluegrass and percent creeping bentgrass. Following application of treatments, plots will be rated for turfgrass quality, phytotoxicity, percent annual bluegrass and percent creeping bentgrass.

Duration of experiment: To develop an annual bluegrass removal program, the experiment will continue through 2007.