

Interactions among DMI Fungicides and Plant Growth Regulators on Creeping Bentgrass Putting Greens

Lane Tredway, Mike Soika, Thomas Redding, and Thomas Kirkpatrick
Department of Plant Pathology, NC State University

Due to their growth regulating properties and potential to injure stressed turf, the DMI fungicides are generally not recommended for application to putting greens during hot weather. Several new DMIs have been released into the turf market, and some have shown improved safety for application to creeping bentgrass greens during the summer. However, little is known about how these products interact with growth regulator programs that are commonly applied to putting greens. The objective of this study is to evaluate the safety of DMI fungicides in combination with Primo, Cutless, and Legacy growth regulator programs on a 'Dominant Plus' creeping bentgrass green.

Trt #	Fungicide (every 28 days)	Growth Regulator (every 14 days)
1.	Bayleton SC (1 fl oz/1000 ft ²)	Primo Maxx (5.4 fl oz/acre)
2.	Bayleton SC (1 fl oz/1000 ft ²)	Cutless (6 oz/acre)
3.	Bayleton SC (1 fl oz/1000 ft ²)	Legacy (8 fl oz/acre)
4.	Bayleton SC (1 fl oz/1000 ft ²)	--
5.	Banner Maxx (2 fl oz/1000 ft ²)	Primo Maxx (5.4 fl oz/acre)
6.	Banner Maxx (2 fl oz/1000 ft ²)	Cutless (6 oz/acre)
7.	Banner Maxx (2 fl oz/1000 ft ²)	Legacy (8 fl oz/acre)
8.	Banner Maxx (2 fl oz/1000 ft ²)	--
9.	Tourney (0.37 oz/1000 ft ²)	Primo Maxx (5.4 fl oz/acre)
10.	Tourney (0.37 oz/1000 ft ²)	Cutless (6 oz/acre)
11.	Tourney (0.37 oz/1000 ft ²)	Legacy (8 fl oz/acre)
12.	Tourney (0.37 oz/1000 ft ²)	--
13.	Trinity (2 fl oz/1000 ft ²)	Primo Maxx (5.4 fl oz/acre)
14.	Trinity (2 fl oz/1000 ft ²)	Cutless (6 oz/acre)
15.	Trinity (2 fl oz/1000 ft ²)	Legacy (8 fl oz/acre)
16.	Trinity (2 fl oz/1000 ft ²)	--
17.	Triton Flo (1.1 oz/1000 ft ²)	Primo Maxx (5.4 fl oz/acre)
18.	Triton Flo (1.1 oz/1000 ft ²)	Cutless (6 oz/acre)
19.	Triton Flo (1.1 oz/1000 ft ²)	Legacy (8 fl oz/acre)
20.	Triton Flo (1.1 oz/1000 ft ²)	--
21.	SP2169 (0.5 lb ai/acre)	Primo Maxx (5.4 fl oz/acre)
22.	SP2169 (0.5 lb ai/acre)	Cutless (6 oz/acre)
23.	SP2169 (0.5 lb ai/acre)	Legacy (8 fl oz/acre)
24.	SP2169 (0.5 lb ai/acre)	--
25.	Control - No fungicide	Primo Maxx (5.4 fl oz/acre)
26.	Control - No fungicide	Cutless (6 oz/acre)
27.	Control - No fungicide	Legacy (8 fl oz/acre)
28.	Control - No fungicide	--

All treatments were applied at the specified interval beginning on June 10, 2009. Fungicides and growth regulators were applied in 2 gallons H₂O per 1000 ft² using TeeJet 9508E nozzles at 40 psi.

Plot Map

Numbers correspond to treatments listed on previous page

Lake Wheeler Road

	7	28	14	8	6	12	3	21	5	24	27	1	10	23
Rep 4	22	4	17	18	25	20	16	11	13	26	2	15	19	9
	16	7	20	8	9	10	23	18	1	5	6	26	27	3
Rep 3	24	22	25	17	2	21	19	4	28	15	14	13	11	12
	22	18	11	8	19	14	2	10	7	9	26	25	13	23
Rep 2	24	21	12	20	16	4	3	15	27	6	5	17	28	1
	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rep 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14