

Turfgrass disease research

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Fungicide tests for control of benzimidazole resistant dollarspot on Seaside creeping bentgrass

Application dates were July 14, July 24 and August 4, 1980. Disease symptoms did not appear until the first week in August. The plot area was infested with *Sclerotinia homoeocarpa*. Disease was rated on a 1-10 scale in 10 percent increments. The bentgrass plot area was mowed at 3/16 to 4/16.

With a few exceptions, most fungicides provided effective control through the September 12 rating. Cadminate and treatments containing Bayleton alone or in combination provided excellent control at all four rating periods (51 days after the last application). Treatments in which benzimidazole fungicides were the primary fungicide targeted for control, were not effective, as expected, because of the known benzimidazole tolerance associated with *S. homoeocarpa* in the plot area.

Treatment and rate per 1000 ft ²	8/14/80	9/2/80	9/12/80	9/23 ^h 0
CGA 64251, 1.125E, 2.0 g. a.i.	0.25b*	1.00def*	0.75e*	3.25def*
CGA 64251, 1.125E, 4.0 g. a.i.	0.25b	0.50def	1.00e	3.00efg
Daconil 2787, 4.17F, 3.0 fl. oz.	0.75b	4.25ab	4.25bc	5.00bcd
Daconil 2787, 4.17F, 6.0 fl. oz.	0.25b	2.00cde	1.75de	2.75efgh
Powder Blue + Hydr. Lime, 2 lb + 1 lb	2.25a	5.00ab	5.00ab	5.75ab
Bayleton, 25W, 1.0 oz.	0.00b	0.25ef	0.25e	0.75j
Tersan 1991, 50W + Bayleton, 25W, 1.0 oz. + 0.5 oz.	0.00b	1.00def	0.25e	1.50fghij
Tersan 1991, 50W + Bayleton, 25W, 1.0 oz. + 1.0 oz.	0.00b	0.00f	0.000e	0.25j
Tersan 1991, 50W, 1.0 oz.	3.00a	5.50a	4.75abc	6.25ab
Chipco 26019, 50W, 2.0 oz.	0.00b	1.75cdef	1.75de	3.75cde
Acti-dione TGF, 2.1W, 1.0 oz.	0.00b	2.25cd	1.75de	3.75cde
Acti-dione, TGF, 2.1W, 2.0 oz.	0.00b	0.75def	0.75e	2.50efghi
Daconil 2787, 75W, 1.0 oz.	2.25a	5.00ab	4.50bc	5.50abc
Daconil 2787, 75W, 2.0 oz.	0.75b	3.25bc	3.00cd	3.00efg
Acti-dione TGF, 2.1W + Daconil 2787, 75W, 1.0 oz. + 1.0 oz.	0.25b	1.50cdef	1.25ef	2.50efghi
Bayleton, 25W, 0.5 oz.	0.00b	0.75def	0.50e	1.25ghij
Acti-dione TGF, 2.1W + Bayleton, 25W 1.0 oz. + 0.5 oz.	0.00b	0.25ef	0.00e	1.00hij
Duosan, 75W, 3.0 oz.	3.50a	5.00ab	4.75abc	6.00ab
Cadimate, 60W, 0.5 oz.	0.25b	0.50def	0.25e	1.25ghij
Control	3.00a	5.75a	6.50a	7.25a

Evaluation of fungicides for curative control of melting out of Kentucky bluegrass

Treatment and rate oz/1000 ft ²	5/10	5/21	6/4	6/19
Acti-dione TGF 2.1W 0.34	6.50ab	5.50bcdefg	3.00bcde	2.00abcd
Acti-dione TGF 2.1W 0.69	6.75ab	6.75efgh	4.25efg	2.75bcde
Acti-dione TGF 2.1 W 0.34 + FeSO ₄ 1.0	6.50ab	6.75efgh	4.75fg	3.75ef
Acti-dione TGF 2.1W 0.69 + FeSO ₄ 2.0	6.75ab	7.25fgh	3.75defg	3.50de
Chipco 26019 50W 2.0	6.25a	3.75abc	1.00a	1.00a
Daconil 2787 500F 8.0	6.50ab	4.00abcd	1.25a	2.00abcd
Tersan 1991 50W 1.0 + Tersan LSR 80W 3.75	7.00ab	4.75abcde	2.25abcd	3.00cde
Tersan LSR 80W 8.0	6.25a	3.25ab	1.00a	1.00a
Dyrene 50W 8.0	6.00a	4.00abcd	1.00a	1.00a
Lesco 2887 4.0	7.25ab	6.50efg	1.50ab	2.50abcde
Check	8.25b	8.75g	6.75h	5.00fg

Registered and experimental turf fungicides were evaluated on a Kentucky bluegrass golf course fairway in Columbus, Ohio. Fungicides were applied on May 1, 10 and 22, 1979. Granular fungicides were applied to moist foliage. The turf was maintained at a 2-inch cutting height. Disease severity was evaluated using a 1-10 visual rating scale on the basis of percent area affected, 1 equals 0-10 percent and 10 equals 90-100 percent.

*Means in columns followed by the same letter are not statistically different at the 5 percent level of significance according to Duncan's New Multiple Range Test.

Answers to turf disease identification quiz, page 16

A. *Typhula ishikariensis*, sclerotia; B. *Fusarium* patch; C. *Helminthosporium* leafspot; D. *Sclerotinia borealis*; E. Fairy ring on bentgrass; F. Stripe smut; G. Gray snowmold, sclerotia; H. *T. ishikariensis*, mycelium; I. *Fusarium* patch; J. Brown patch; K. Cool-weather brown patch; L. *T. incarnata*, mycelium; M. Rust symptoms; N. Southern blight on bluegrass; O. Brown patch, sclerotia; P. *Ophiobolus* patch on bentgrass; Q. Brown patch on bermudagrass; R. Melting out on bluegrass; S. Spring deadspot; T. *Pythium* blight on bentgrass; U. Dollar spot, mycelium; V. *T. incarnata*, sclerotia; W. Red thread.

Photographs were courtesy of Gary Chastagner, Western Washington Research Center, Puyallup, Wash., Philip O. Larsen, The Ohio State University, Columbus, Leon T. Lucas, North Carolina State University, Raleigh, and Ward Stienstra, University of Minnesota, St. Paul.