

FUSARIUM BLIGHT CONTROL WITH SYSTEMIC FUNGICIDES
AND NON-FUMIGANT NEMATICIDES

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The Fusarium blight control study was conducted on previously infected Merion Kentucky bluegrass turf. The plots were 5 x 10 ft and replicated 3 times in a randomized block design. These studies consisted of both fungicides and nematicides. The fungicides were applied in Study A on July 6 and July 20 and Study B on June 20 and June 28, except Rhodia Experimental which was applied on July 17 and August 1. The nematicides were applied in Study A on July 20 and in Study B on July 17. The fungicides were applied with an Ortho jar applicator and the granular nematicides were pre-weighed for each plot and applied with a hand shaker. All treatments were drenched into the root zone immediately after treatment.

In Study A, the fungicide Tersan 1991 at the 8 oz rate, and the nematicide Oxymal at the 4.5 and 2.2 lb rates, Dasinat and Nemaçur at the 3 lb rate gave the best control of Fusarium blight. In Study B, the nematicide Oxymal at the 5 lb/1000 sq ft rate gave the best control of Fusarium blight. The fungicide Tersan 1991 also gave control which was significantly different from the untreated control. These results lend support to the theory that nematodes are the major pathogen in the disease called Fusarium blight.

Table 5. Fusarium Blight Control, 1973 (Study A)

Chemical	Rate/1000 sq ft	% Area Infested ¹
Tersan 1991	8 oz	2.0 a
Oxymal	4.5 lb	2.0 a
Dasinat	3 lb	5.6 a
Nemaçur	3 lb	10.6 a
Oxymal	2.2 lb	12.3 a
Dasinat	1.5 lb	19.0 a b
U-34-910	8 oz	21.6 a b
Fungo	8 oz	21.6 a b
Acti-dione+Thiram + Chloroneb	8 oz	21.6 a b
Tersan 1991	4 oz	24.0 a b
Untreated Control		30.0 a b
Cleary's 3336	8 oz	33.3 a b
Bay Dam 18654	4 oz	33.3 a b
Bay Dam 18654	8 oz	33.3 a b
Acti-dione + Thiram + Chloroneb	4 oz	33.3 a b
U-34-910	4 oz	46.6 b
Nemaçur	1.5 lb	50.0 b

¹ Treatments followed by the same letter are not significantly different at the 5% level.

Table 6. Fusarium Blight Control, 1973 (Study B)

Chemical	Rate/1000 sq ft	% Area Infested ¹
Oxymal	5 lb/acre	5.00 a
Tersan 1991	8 oz	13.33 a b
Rhodia Experimental	8 oz	20.00 a b c
Cleary's 2021	8 oz	21.66 a b c
Bromosan	8 oz	33.33 a b c d
Cleary's 1880	8 oz	33.33 a b c d
Tersan 1991	4 oz	35.00 a b c d
Cleary's 1881	8 oz	38.33 b c d
Cleary's 3336	8 oz	38.33 b c d
Cleary's 2020	8 oz	40.00 b c d
Untreated Control		48.33 c d
Fungo	8 oz	53.33 d
Fungo	4 oz	56.66 d
Cleary's 1882	8 oz	58.33 d

¹ Treatments followed by the same letter are not significantly different at the 5% level.

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Trade name or experimental number	Generic Name	Chemical Formulations
Cleary's 2021		33.3% 2,4-Dichloro-6-(0-chloroaniline)-s-triazine 16.66% Diethyl 4,4'-0-phenylenebis (3-Thioallophanate)
Cleary's 1880		20% Piperazin-1,4-diyl-bis-(1-(2,2,2-trichlorethylformamide))
Cleary's 1881		25% Piperazin-1,4-diyl-bis-(1-(2,2,2-trichlorethyl)formamide)
Cleary's 1882		16.66% Piperzine-1,4-diyl-bis-(1-(2,2,2-trichlorethyl)formamide) 16.66% Diethyl 4,4'-0-Phenylenebis (3-Thioallophanate)
Bromosan	Thio-ethyl and Thiram	16.67% Diethyl 4,4'-0-Phenylenebis (3-Thioallophanate) 50% Thiram (tetramethylthiuram disulfide)
Bravo	Chlorothalonil	54% Tetrachloroisophthalonitrile
Daconil 2787	Chlorothalonil	75% chlorothalonil (tetrachloroisophthalonitrile)
MF 571	Thiophanate-methyl	2% Dimethyl 4,4'-0-Phenylenebis (3-thioallophanate)
Acti-dione-thiram-chloroneb	Cyclohexamide-thiram + chloroneb	3-2-(3,5 dimethyl-2-oxyocohexyl)-2-hydroxyethyl glutaramid and tetramethylthiuram disulfide + chloroneb
Dasanit		0,0-diethyl 0-[p-(methylsulfinyl)phenyl] phosphorothioate
U-34-910		
Rhodia Exp.		

Trade name or experimental number	Generic Name	Chemical Formulations
Tersan 1991	Benomyl	50% (WP) (Methyl-1-butyl-carbamoyl)-2-benzimidazole-carbamate
Mertect 140	Thiabendazole	2-(4 thiazolyl)-benzimidazole (Thiabendazole)
Dyrene	Anilazine	2, 4 Dichloro-6-(0-chloroanilino)-s-triazine
Bay Dam		Methyl [1-[[(5-cyanopentyl) amins] carbonyl] -1 H-benzimidazol-2-yl] carbamate
Fungo	Thiophanate-methyl	50% (WP) dimethyl 4, 4'-0-phenylenebis (3-Thioallophanate)
Cleary's 3336	Thiophanate-ethyl	50% (WP) diethyl 4, 4'-0-phenylenebis (3-thioallophanate)
MF 568	Thio-methyl-Dyrene	15% Dimethyl 4, 4'-0-Phenylenebis [3-thioallophanate] 50% 2, 4-Dichloro-6-(0-chloroanilino)-s-triazine
Nemacur		ethyl 4-(methylthio)-m-tolyl isopropylphosphoramidate
Oxymal	Oxymal	10% (gr) S-methyl 1-(dimethyl carbamoyl)-N-[(methylcarbomoyloxy] thioformimidate
MF 573	Thio-methyl-Maneb	15% Dimethyl 4, 4'-0-phenylenebis (3-thioallophanate) 60% Manganese ethylene bisdi-thiocarbamate
Cleary's 2020		25% Diethyl 4, 4'-0-phenylenebis (3-thioallophanate) 17.5% p-Dimethylaminabenzediazo sodium sulfonate