

WHEAT (*Triticum aestivum*)Speckled leaf blotch ; *Septoria tritici*Septoria leaf blotch, *Septoria nodorum*Powdery mildew, *Erysiphe graminis f.sp. tritici*

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WHEAT DISEASE EVALUATIONS—2003

Disease occurrence and severity was evaluated at both small grain variety trial locations. The variety trials test the adaptability of soft red winter wheat varieties to Delaware growing conditions. The Septoria leafspot complex caused by *Septoria tritici*, speckled leaf blotch, and *Septoria nodorum*, Septoria leafspot and glume blotch, was the predominant disease at both locations. Powdery mildew caused by *Erysiphe graminis* was also present. In Middletown, *Septoria tritici* (speckled leaf blotch) predominated while *Septoria nodorum* (Septoria leafspot and glume blotch) predominated at the Georgetown location. Fusarium head blight or scab and glume blotch were observed at both locations near harvest.

Disease severity varied at each site with the least amount of powdery mildew at the Middletown location. In general, foliar disease incidence and severity was moderate to high. The season was late and wheat growth was less than normal due to the lack of tillering from late planting in the fall. The data are summarized in the following table.

Some varieties were submitted with Baytan or Dividend seed treatments and those varieties are noted in the table. Baytan treatment provides early season control of powdery mildew and rust and would affect the disease ratings. The Dividend rates were not stated, so depending on the rate there may be some powdery mildew and rust control as well.

The disease ratings were made on May 29 at the Middletown location, and June 3 at the Georgetown location. The stage of wheat development for both locations was Feek's 10.54 (watery ripe) to Feek's 11.1 (milky ripe).

The Septoria leafspot ratings were made using a scale from 1-9 = increasing levels of leaf spotting throughout the canopy.

The rating scale used for powdery mildew was 1 to 9 (1 = none observed; 2 to 4 = severity on the lower leaves, no infection on the flag leaf or L-1; 5 = no mildew on the lower leaves, but some present on L-2 or upper canopy, but not on the flag leaf; and 6 to 9 = severity on L-1 and flag leaf, lower leaves infected).

Wheat Variety Trials Disease Ratings. Mulrooney, Uniatowski. 2003

Brand	Variety/ Seed treatment*	Septoria Leafspot		Powdery Mildew	
		Middletown	Georgetown	Middletown	Georgetown
Experimental	NC96-13156 (L)	5	5	0	0
Experimental	VA 97W-24 (RTR)	4	4	2	0
Experimental	VA 97W-375RS (RTR)	5	4	0	0
Experimental	VA-98W-706 (RTR)	3	5	0	3
Experimental	MD 5-46 (0)	4	5	0	0
Experimental	MD 71-5 (0)	6	5	0	0
Experimental	MD 11-52 (0)	5	3	0	0
Experimental	MD 27-78 (0)	5	5	0	0
Experimental	GA 931470E62 (V)	4	5	0	0
Experimental	GA 931241E16 (V)	4	6	0	0
GA	AGS 2000 (R)	5	6	0	0
Hyttest	HTW 252 (DA)	4	4	0	3
Hyttest	HTW 350 (DA)	3	3	2	0
NK	Coker 9025 (D)	5	6	3	0
NK	Coker 9663 (D)	3	3	3	3
NK	Coker 9184 (D)	5	6	0	0
NK	Century II (D)	4	5	0	6
NK	B 961378 (D)	2	4	4	0
NK	B 950943 (D)	4	6	0	0
Public	Crawford (R)	4	5	0	0
Public	Pat (R)	3	4	3	2
Public	Sabbe (R)	5	5	3	4
Public	McCormick (RTR)	3	4	0	0
Public	Jackson (D)	5	5	2	3
Public	Roane (R)	6	6	3	4
Public	Madison (R)	3	3	3	0
Public	Sisson (D)	7	5	0	0
Southern States	SS-524 (R)	3	5	0	0
Southern States	SS-520 (RT)	6	6	2	0
Southern States	SS-522 (B)	5	7	2	0
Southern States	SS-535W (R)	4	4	0	0
Southern States	SS-550 (R)	6	6	0	0
Southern States	SS-560 (GXT)	4	4	3	3
Unisouth	USG 3209 (RTL))	5	4	0	2
Unisouth	USG 3350 (RTL)	5	6	3	3
Unisouth	USG 3430 (RTL)	6	5	5	5
Vigoro	Tribute (RT)	3	4	0	0

* Seed treatment fungicides B=Baytan, D= Dividend, DA= Dividend/Apron, GXT= Gaucho/Dividend XT, L= Lorsban, R=Raxil, RTL= Raxil/thiram/Lorsban, RTR= Raxil/thiram/Reldan, RT= Raxil/thiram, V= Vitavax, 0 = untreated.

** Septoria rating. 1-9= increasing level of leaf spotting throughout the canopy.

***The rating scale used was 1 to 9 (1=none observed; 2 to 4= severity on the lower leaves, no infection on the flag leaf or L-1; 5= some mildew on the lower leaves, some present on L-2 or upper canopy, but not on the flag leaf; 6-9= increasing severity on the L-1 and flag leaf, lower leaves heavily infected).