

Carvel Research and Education Center Georgetown, DE

2022 Barley Fungicide Timing Trial

Treatment ^z	% Frost Incidence ^y	% Frost Severity	FHB % Incidence ^x	FHB % Severity ^w	DON (PPM)	FDK (%)	Yield (Bu/A) ^v
Control	52.0	8.50	26.0	2.24	2.32 a	2.08 a	67.5 c
Prosaro anthesis 6.5 oz/a	66.0	13.46	27.0	2.43	1.72 ab	1.44 ab	69.1 bc
Caramba anthesis ^t 13.5 oz/a	56.0	9.11	31.0	2.29	1.51 b	1.52 ab	70.7 abc
Miravis Ace anthesis 13.7 oz/a	44.0	8.50	23.0	2.10	0.71 cde	1.00 bc	80.2 ab
Prosaro Pro anthesis 10.3 oz/a	54.0	11.12	29.0	2.94	0.85 cd	1.16 bc	75.8 abc
Sphaerex anthesis 7.3 oz/a	66.0	14.39	27.0	1.96	1.28 bc	0.92 bc	65.7 c
Miravis Ace anthesis fb Prosaro Pro 5 daa 13.7 oz/a fb 10.3 oz/a	70.0	12.99	22.0	1.68	0.30 e	0.52 c	77.6 abc
Miravis Ace anthesis fb Sphaerex 5 daa 13.7 oz/a fb 7.3 oz/a	52.0	10.28	26.0	2.80	0.40 de	1.08 bc	74.8 abc
Miravis Ace anthesis fb Tebuconazole 5 daa 13.7 oz/a fb 4 oz/a	46.0	6.92	16.0	1.54	0.79 cd	1.08 bc	81.7 a
<i>p</i> -value	0.58	0.31	0.85	0.90	0.0001	0.0002	0.002
LSD ($\alpha=0.05$)	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.6	0.5	8.15

^z Applications were made at anthesis 4/25/22 and 5 days after anthesis (daa) 4/29/22 using a CO₂ pressurized backpack sprayer equipped with Turbo TwinJet 1102 nozzles calibrated to deliver 20 GPA at 40 psi. All treatments included 0.125% non-ionic surfactant, Induce 90SL, fb= followed by.

^y Percent of 10 heads showing frost damage. Means followed by the same letter are not significantly different based on Fisher's Least Significant Difference (LSD; $\alpha=0.05$), *ns*= not significant.

^x Fusarium Head Blight Incidence was visually assessed as the % of 20 barley heads per plot displaying symptoms.

^w Fusarium Head Blight Severity was visually assessed as the average amount of symptoms present on 20 barley heads per plot.

^v Plots were harvested 6/21/22 and yield was adjusted to 13.5% Moisture.

Variety: Violetta
Planting Date: 10/20/21
Planting Population: 1.5 mil sd/A



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2022 Wheat Fungicide Timing Trial

Treatment ^z	FHB % Incidence ^y (5/25/22)	FHB % Severity (5/25/22)	FHB % Incidence (6/1/22)	FHB % Severity (6/1/22)	DON (PPM)	FDK (%)	Yield (Bu/A) ^x
Control	46.3 a	8.3 a	62.0 a	19.5 a	3.3 ab	14.7 a	76.8 b
Prosaro anthesis 6.5 oz/a	38.8 ab	5.5 ab	52.0 ab	11.9 ab	2.5 abc	9.8 abc	82.7 ab
Caramba anthesis 13.5 oz/a	38.6 ab	5.2 ab	45.0 a-d	10.3 abc	2.4 a-d	10.5 abc	84.2 ab
Miravis Ace anthesis 13.7 oz/a	23.9 bc	4.0 ab	43.0 bcd	8.5 bcd	1.9 cde	6.7 c-f	91.2 ab
Prosaro Pro anthesis 10.3 oz/a	38.8 ab	6.8 a	45.0 a-d	14.2 ab	2.2 b-e	9.1 bc	84.1 ab
Sphaerex anthesis 7.3 oz/a	32.7 ab	4.5 ab	46.0 abc	13.9 ab	1.9 cde	7.9 bcd	83.6 ab
Miravis Ace anthesis fb Prosaro 5 daa 13.7 fb 10.3 oz/a	21.8 bc	2.3 bc	25.0 e	4.9 d	1.2 cde	5.3 def	93.9 a
Miravis Ace anthesis fb Sphaerex 5 daa 13.7 fb 7.3 oz/a	8.8 c	1.2 c	24.0 e	3.9 d	0.9 de	4.3 f	89.6 ab
Miravis Ace anthesis fb Tebuconazole 5daa 13.7 fb 4 oz/a	19.6 bc	2.2 bc	44.0 a-d	7.8 bcd	2.1 b-e	5.4 def	93.2 a
Prosaro Pro 10.3 10.3 oz/a	37.0 ab	4.8 ab	57.0 ab	13.6 ab	3.5 a	11.1 ab	85.3 ab
Miravis Ace 10.3 13.7 oz/a	33.9 ab	4.7 ab	55.0 ab	12.6 ab	3.6 a	8.7 bc	85.5 ab
Prosaro Pro 5 daa 10.3 oz/a	17.9 bc	1.9 bc	27.0 e	3.9 d	0.8 e	5.0 def	94.3 a
Sphaerex 5 daa 7.3 oz/a	21.0 bc	1.7 bc	33.0 cde	5.3 cd	1.3 cde	7.2 b-e	88.3 ab
Miravis Ace 5 daa 13.7 oz/a	18.4 bc	2.1 bc	28.0 de	4.1 d	1.1 cde	4.5 ef	85.8 ab
<i>p</i> -value	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.03
LSD ($\alpha=0.05$)	9.7	1.6	11.7	2.8	0.9	1.7	9.0

^z Applications were made at 10.3 on 4/27/22, anthesis (10.5.1.) 5/6/22 and 5 days after anthesis (daa) 5/11/22 using a CO₂ pressurized backpack sprayer equipped with Turbo TwinJet 1102 nozzles calibrated to deliver 20 GPA at 40 psi. All treatments included 0.125% non-ionic surfactant, Induce 90SL.

^y Fusarium Head Blight incidence and severity were visually assessed as the % of 20 wheat heads per plot displaying symptoms. Means followed by the same letter are not significantly different based on Fisher's Least Significant Difference (LSD; $\alpha=0.05$).

^x Plots were harvested 6/29/22 and yield was adjusted to 13.5% Moisture.

Variety: Shirley
Planting Date: 10/18/21
Planting Population: 1.5 mil sd/a



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