Wheat Variety Comments—2017

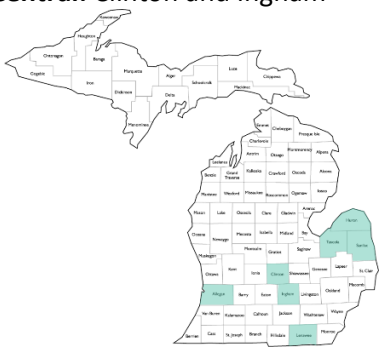
Linda K Brown, Martin L Nagelkirk, Andrew T Wiersma, Lee F Siler, and Eric L Olson

The following attempts to summarize the characteristics of soft winter wheat varieties popularly grown in Michigan. The varieties included here were selected based on inclusion in the MSU Wheat Performance Trials and the 2016 Michigan wheat variety survey. MSU makes no endorsement of any variety or brand. For brevity, only summary information is displayed in the following table. Complete information, including comparative statistics, is available from the MSU Wheat Performance Trials (varietytrials.msu.edu/wheat) and Wheat Search (web2.canr.msu.edu/varietytrials/wheat/wheatsearch.cfm) webpages.

Plant breeding efforts have resulted in improvements in agronomics, disease resistance, and grain yield over the years. The annual Michigan State Wheat Performance Trials evaluates entries submitted by wheat seed marketing companies to provide Michigan farmers with data to inform their variety selections. Some varieties are better adapted to certain growing environments than others making it important to identify varieties that perform well near the intended field location. The weather in any particular season will effect variety performance, so multi-year data are the most informative.

MSU Wheat Performance Trial Locations

Thumb: Huron, Tuscola, and Sanilac
Southern: Lenawee
Western: Allegan
Central: Clinton and Ingham



Important Traits to consider

Flowering: The time of flowering is used to indicate the time it takes for a variety to mature. Selecting varieties with different flowering times can help distribute the timing of fungicide applications across your farm. Different flowering times can also reduce the chance that all varieties are exposed to unfavorable weather conditions during critical developmental stages which can contribute to head scab development or sprouting damage.

Plant Height & Lodging: Plant height and lodging contribute to ease of harvest, straw yield, and standability. Tall varieties tend to provide more harvestable straw than short varieties, however, they also tend to be more susceptible to lodging. Varieties vary significantly in their propensity to stand erect despite adverse weather, excessive tillering, or high nitrogen environments.

Sprouting: Sprouting damage from preharvest sprouting (PHS) or high alpha-amylase can result in poor falling numbers. Precipitation events near the time of harvest are the primary cause of sprouting damage. Resistant varieties are less likely to have poor falling numbers even with unfavorable wet weather.

Head Scab (Fusarium head blight & DON): Head scab (*Fusarium graminearum*) is the most important disease to control in Michigan wheat. Head scab can cause major losses due to grain contamination with mycotoxins (deoxynivalenol, DON). Some newer varieties rated as moderately resistant, may have half the level of head scab infection and DON compared to susceptible varieties. The most effective strategy to manage head scab is an integrated approach that combines resistant variety selection and fungicide application at flowering time.

Stripe Rust & Leaf Rust: Rusts have the potential to reduce grain yield substantially if the flag leaf becomes infected. In 2016, there was an unprecedented level of stripe rust leading to 20% losses in some cases. The stripe rust resistance levels of varieties can help growers better decide which fields will need fungicide protection.

Leaf Blotch: Leaf blotch symptoms are caused by multiple leaf diseases, including Tan Spot (*Pyrenophora tritici-repentis*) Septoria (*Septoria tritici*) and Stagonospora (*Stagonospora nodorum*). The resulting tan lesions on the leaves can reduce plant productivity and yield, especially if the flag leaf becomes infected.

Powdery Mildew: Powdery mildew (*Blumeria graminis*) occurs every season on susceptible varieties. It is usually confined to the lower leaves and stem, but can move up the flag leaf under damp and moderately cool conditions. Infections can reduce grain yield by causing reductions in tiller number, grain number, and kernel weight. The best strategy for controlling powdery mildew is selection of resistant varieties and foliar fungicide treatment.

Wheat Variety Comments—2017

	Agronomics						Disease Resistance [d]					Yield [e]													Company
Variety	Grain Color	[a] Awns	[b] Flowering	[c] Plant Height	[d] Lodging	[d] Sprouting	Head Scab	Stripe Rust	Leaf Rust	Leaf Blotch	Powdery Mildew	All Sites	Huron	Huron (high mgt)	Tuscola	Tuscola (high mgt)	Sanilac	Sanilac (high mgt)	Lenawee	Lenawee (high mgt)	Allegan	Allegan (high mgt)	Ingham	Ingham (high mgt)	*MSU makes no endorsement of any variety or brand.* *Multi-year data are the most informative.*
			13,14, 15,16	13,14, 15,16	13,14, 15,16	14,15	13,14, 15,16	16	13,14, 15	13,14, 15	13,14, 15,16	13,14, 15,16	13	14,15, 16	13,16	13,14, 15,16	13	15,16	13	15,16	13	14	13,14, 15,16	14,15, 16	Years tested
AgriMAXX 413	Red	A	E	S	MS	S	MS	R	MS	MS	MR	99	100	95	111	113	85	133	88	93	89	91	87	104	AgriMAXX Wheat Company
AgriMAXX 438	Red	N/AL	ME	T	S	R	S	MR	MS	MS	MS	101	110	97	112	114	83	126	82	92	82	99	86	101	AgriMAXX Wheat Company
DF 105R	Red	A	E	S	MR	S	MS	R	MS	MS	MR	99	104	99	113	111	80	126	80	101	82	95	86	101	D.F. Seeds, Inc.
DF 112R	Red	A	ME	S	MS	S	MR	MR	S	MS	MR	103	113	101	117	114	96	133	85	102	95	105	87	100	D.F. Seeds, Inc.
25R25 [f]	Red	A	L	M	MR	R	MR	MR	MS	MR	MS	107	—	102	120	115	—	124	—	93	—	—	96	102	DuPont Pioneer
25R40 [f]	Red	A	ML	S	MR	S	S	MR	MS	MR	R	101	107	97	112	110	96	129	88	101	89	95	87	105	DuPont Pioneer
9692	Red	A	ME	M	MS	MS	MR	S	S	MR	S	106	—	97	108	117	—	120	—	89	—	—	94	112	Dyna-Gro Seed
Hopewell	Red	AL	ML	T	MR	MR	S	S	S	MS	MR	92	96	95	101	102	84	115	77	88	76	88	78	94	Michigan Crop Improvement
Red Devil	Red	A	ML	M	MR	R	MS	MR	R	MR	R	95	100	91	101	103	88	123	82	95	83	88	83	98	Michigan Crop Improvement
Red Dragon	Red	N	ME	T	MS	MR	MR	MR	S	MR	MS	98	109	91	110	112	95	123	91	97	79	97	84	100	Michigan Crop Improvement
Sunburst	Red	N	L	S	R	R	MS	MR	MR	MS	R	95	102	90	107	106	85	120	82	89	78	83	86	97	Michigan Crop Improvement
Whale	Red	N	L	M	R	R	S	MS	R	MR	S	101	—	98	115	104	—	123	—	85	—	80	92	102	Michigan Crop Improvement
W 206	Red	A	ME	M	MR	S	S	S	R	MR	MR	101	106	99	110	111	88	127	87	95	84	95	87	106	Wellman Seeds, Inc.
Ambassador	White	AL	ML	M	MR	S	S	S	S	S	MR	96	99	105	103	109	85	128	79	98	76	91	81	91	D.F. Seeds, Inc.
Aubrey	White	AL	E	M	MS	S	S	S	MR	MS	R	92	96	99	101	105	76	126	75	91	69	89	75	84	D.F. Seeds, Inc.
9242W	White	N/AL	ML	M	MR	MS	MS	MR	S	MR	MR	95	96	96	103	107	82	126	81	91	71	90	80	100	Dyna-Gro Seed
AC Mountain	White	AL	L	T	S	S	S	MS	MS	MS	MS	95	103	100	103	109	91	125	85	91	69	93	79	88	Michigan Crop Improvement
Jupiter	White	AL	L	S	MR	S	S	MR	MS	MS	MS	97	92	100	109	111	80	126	83	95	82	90	83	99	Michigan Crop Improvement
Venus	White	A	E	M	MS	S	S	MR	MR	MS	MR	91	96	88	105	102	75	123	76	89	94	81	76	96	Michigan Crop Improvement
E6012	White	A	ML	M	MS	S	S	MS	S	MR	MR	93	97	88	104	105	78	120	77	95	84	91	85	95	MSU Wheat Breeding

[a] A = awned (bearded), AL = awnletted (short awns), N = awnless (beardless); [b] E = early, ME = moderate-to-early, ML = moderate-to-late, L = late; [c] S = shorter, M = medium height, T = taller

[d] S = susceptible, MS = moderately susceptible, MR = moderately resistant, R = resistant. Classification assignments based on the average and least-significant-difference values among the varieties tested:
R < (*Average – LSD*) < MR < *Average* < MS < (*Average* + *LSD*) < S

[e] Displayed yield is the average across years and locations adjusted to 13.5% moisture. Not all varities were tested in all years or all locations. Complete yield results, including comparitive statistics, are available in the annual MSU Wheat Performance Trials (Siler et al., 2013, 2014, 2015, 2016) and Wheat Search (Pennington, 2016). high mgt = high management (increased N and fungicide inputs)

[f] All varieties displayed are included in the 2017 MSU Wheat Performance Trials, with the exception of DuPont Pioneer varieties 25R25 and 25R40

Wheat Variety Comments—2017 (Huron County, MI)

	Agronomics						Disease Resistance [d]					Yield [e]			Notes	Company
	Grain Color	[a] Awns	[b] Flowering	[c] Plant Height	[d] Lodging	[d] Sprouting	Head Scab	Stripe Rust	Leaf Rust	Leaf Blotch	Powdery Mildew	All Sites	Huron	Huron (high mgt)		*MSU makes no endorsement of any variety or brand.* *Multi-year data are the most informative.*
Variety			13,14, 15,16	13,14, 15,16	13,14, 15,16	14,15	13,14, 15,16	16	13,14, 15	13,14, 15	13,14, 15,16	13,14, 15,16	13	14,15, 16		Years tested
AgriMAXX 413	Red	A	E	S	MS	S	MS	R	MS	MS	MR	99	100	95		AgriMAXX Wheat Company
AgriMAXX 438	Red	N/AL	ME	T	S	R	S	MR	MS	MS	MS	101	110	97		AgriMAXX Wheat Company
DF 105R	Red	A	E	S	MR	S	MS	R	MS	MS	MR	99	104	99		D.F. Seeds, Inc.
DF 112R	Red	A	ME	S	MS	S	MR	MR	S	MS	MR	103	113	101		D.F. Seeds, Inc.
25R25 [f]	Red	A	L	M	MR	R	MR	MR	MS	MR	MS	107	—	102		DuPont Pioneer
25R40 [f]	Red	A	ML	S	MR	S	S	MR	MS	MR	R	101	107	97		DuPont Pioneer
9692	Red	A	ME	M	MS	MS	MR	S	S	MR	S	106	—	97		Dyna-Gro Seed
Hopewell	Red	AL	ML	T	MR	MR	S	S	S	MS	MR	92	96	95		Michigan Crop Improvement
Red Devil	Red	A	ML	M	MR	R	MS	MR	R	MR	R	95	100	91		Michigan Crop Improvement
Red Dragon	Red	N	ME	T	MS	MR	MR	MR	S	MR	MS	98	109	91		Michigan Crop Improvement
Sunburst	Red	N	L	S	R	R	MS	MR	MR	MS	R	95	102	90		Michigan Crop Improvement
Whale	Red	N	L	M	R	R	S	MS	R	MR	S	101	—	98		Michigan Crop Improvement
W 206	Red	A	ME	M	MR	S	S	S	R	MR	MR	101	106	99		Wellman Seeds, Inc.
Ambassador	White	AL	ML	M	MR	S	S	S	S	S	MR	96	99	105		D.F. Seeds, Inc.
Aubrey	White	AL	E	M	MS	S	S	S	MR	MS	R	92	96	99		D.F. Seeds, Inc.
9242W	White	N/AL	ML	M	MR	MS	MS	MR	S	MR	MR	95	96	96		Dyna-Gro Seed
AC Mountain	White	AL	L	T	S	S	S	MS	MS	MS	MS	95	103	100		Michigan Crop Improvement
Jupiter	White	AL	L	S	MR	S	S	MR	MS	MS	MS	97	92	100		Michigan Crop Improvement
Venus	White	A	E	M	MS	S	S	MR	MR	MS	MR	91	96	88		Michigan Crop Improvement
E6012	White	A	ML	M	MS	S	S	MS	S	MR	MR	93	97	88		MSU Wheat Breeding

[a] A = awned (bearded), AL = awnletted (short awns), N = awnless (beardless); [b] E = early, ME = moderate-to-early, ML = moderate-to-late, L = late; [c] S = shorter, M = medium height, T = taller

[d] S = susceptible, MS = moderately susceptible, MR = moderately resistant, R = resistant. Classification assignments based on the average and least-significant-difference values among the varieties tested:
R < (*Average* – *LSD*) < MR < *Average* < MS < (*Average* + *LSD*) < S

[e] Displayed yield is the average across years and locations adjusted to 13.5% moisture. Not all varities were tested in all years or all locations. Complete yield results, including comparitive statistics, are available in the annual MSU Wheat Performance Trials (Siler et al., 2013, 2014, 2015, 2016) and Wheat Search (Pennington, 2016). high mgt = high management (increased N and fungicide inputs)

[f] All varieties displayed are included in the 2017 MSU Wheat Performance Trials, with the exception of DuPont Pioneer varieties 25R25 and 25R40.

Wheat Variety Comments—2017 (Tuscola County, MI)

	Agronomics						Disease Resistance [d]					Yield [e]			Notes	Company
	Grain Color	[a] Awns	[b] Flowering	[c] Plant Height	[d] Lodging	[d] Sprouting	Head Scab	Stripe Rust	Leaf Rust	Leaf Blotch	Powdery Mildew	All Sites	Tuscola	Tuscola (high mgt)		*MSU makes no endorsement of any variety or brand.* *Multi-year data are the most informative.*
Variety			13,14, 15,16	13,14, 15,16	13,14, 15,16	14,15	13,14, 15,16	16	13,14, 15	13,14, 15	13,14, 15,16	13,14, 15,16	13,16	13,14, 15,16		Years tested
AgriMAXX 413	Red	A	E	S	MS	S	MS	R	MS	MS	MR	99	111	113		AgriMAXX Wheat Company
AgriMAXX 438	Red	N/AL	ME	T	S	R	S	MR	MS	MS	MS	101	112	114		AgriMAXX Wheat Company
DF 105R	Red	A	E	S	MR	S	MS	R	MS	MS	MR	99	113	111		D.F. Seeds, Inc.
DF 112R	Red	A	ME	S	MS	S	MR	MR	S	MS	MR	103	117	114		D.F. Seeds, Inc.
25R25 [f]	Red	A	L	M	MR	R	MR	MR	MS	MR	MS	107	120	115		DuPont Pioneer
25R40 [f]	Red	A	ML	S	MR	S	S	MR	MS	MR	R	101	112	110		DuPont Pioneer
9692	Red	A	ME	M	MS	MS	MR	S	S	MR	S	106	108	117		Dyna-Gro Seed
Hopewell	Red	AL	ML	T	MR	MR	S	S	S	MS	MR	92	101	102		Michigan Crop Improvement
Red Devil	Red	A	ML	M	MR	R	MS	MR	R	MR	R	95	101	103		Michigan Crop Improvement
Red Dragon	Red	N	ME	T	MS	MR	MR	MR	S	MR	MS	98	110	112		Michigan Crop Improvement
Sunburst	Red	N	L	S	R	R	MS	MR	MR	MS	R	95	107	106		Michigan Crop Improvement
Whale	Red	N	L	M	R	R	S	MS	R	MR	S	101	115	104		Michigan Crop Improvement
W 206	Red	A	ME	M	MR	S	S	S	R	MR	MR	101	110	111		Wellman Seeds, Inc.
Ambassador	White	AL	ML	M	MR	S	S	S	S	S	MR	96	103	109		D.F. Seeds, Inc.
Aubrey	White	AL	E	M	MS	S	S	S	MR	MS	R	92	101	105		D.F. Seeds, Inc.
9242W	White	N/AL	ML	M	MR	MS	MS	MR	S	MR	MR	95	103	107		Dyna-Gro Seed
AC Mountain	White	AL	L	T	S	S	S	MS	MS	MS	MS	95	103	109		Michigan Crop Improvement
Jupiter	White	AL	L	S	MR	S	S	MR	MS	MS	MS	97	109	111		Michigan Crop Improvement
Venus	White	A	E	M	MS	S	S	MR	MR	MS	MR	91	105	102		Michigan Crop Improvement
E6012	White	A	ML	M	MS	S	S	MS	S	MR	MR	93	104	105		MSU Wheat Breeding

[a] A = awned (bearded), AL = awnletted (short awns), N = awnless (beardless); [b] E = early, ME = moderate-to-early, ML = moderate-to-late, L = late; [c] S = shorter, M = medium height, T = taller

[d] S = susceptible, MS = moderately susceptible, MR = moderately resistant, R = resistant. Classification assignments based on the average and least-significant-difference values among the varieties tested:
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[e] Displayed yield is the average across years and locations adjusted to 13.5% moisture. Not all varities were tested in all years or all locations. Complete yield results, including comparitive statistics, are available in the annual MSU Wheat Performance Trials (Siler et al., 2013, 2014, 2015, 2016) and Wheat Search (Pennington, 2016). high mgt = high management (increased N and fungicide inputs)

[f] All varieties displayed are included in the 2017 MSU Wheat Performance Trials, with the exception of DuPont Pioneer varieties 25R25 and 25R40.

Wheat Variety Comments—2017 (Sanilac County, MI)

	Agronomics						Disease Resistance [d]					Yield [e]			Notes	Company
	Grain Color	[a] Awns	[b] Flowering	[c] Plant Height	[d] Lodging	[d] Sprouting	Head Scab	Stripe Rust	Leaf Rust	Leaf Blotch	Powdery Mildew	All Sites	Sanilac	Sanilac (high mgt)		*MSU makes no endorsement of any variety or brand.* *Multi-year data are the most informative.*
Variety			13,14, 15,16	13,14, 15,16	13,14, 15,16	14,15	13,14, 15,16	16	13,14, 15	13,14, 15	13,14, 15,16	13,14, 15,16	13	15,16		Years tested
AgriMAXX 413	Red	A	E	S	MS	S	MS	R	MS	MS	MR	99	85	133		AgriMAXX Wheat Company
AgriMAXX 438	Red	N/AL	ME	T	S	R	S	MR	MS	MS	MS	101	83	126		AgriMAXX Wheat Company
DF 105R	Red	A	E	S	MR	S	MS	R	MS	MS	MR	99	80	126		D.F. Seeds, Inc.
DF 112R	Red	A	ME	S	MS	S	MR	MR	S	MS	MR	103	96	133		D.F. Seeds, Inc.
25R25 [f]	Red	A	L	M	MR	R	MR	MR	MS	MR	MS	107	—	124		DuPont Pioneer
25R40 [f]	Red	A	ML	S	MR	S	S	MR	MS	MR	R	101	96	129		DuPont Pioneer
9692	Red	A	ME	M	MS	MS	MR	S	S	MR	S	106	—	120		Dyna-Gro Seed
Hopewell	Red	AL	ML	T	MR	MR	S	S	S	MS	MR	92	84	115		Michigan Crop Improvement
Red Devil	Red	A	ML	M	MR	R	MS	MR	R	MR	R	95	88	123		Michigan Crop Improvement
Red Dragon	Red	N	ME	T	MS	MR	MR	MR	S	MR	MS	98	95	123		Michigan Crop Improvement
Sunburst	Red	N	L	S	R	R	MS	MR	MR	MS	R	95	85	120		Michigan Crop Improvement
Whale	Red	N	L	M	R	R	S	MS	R	MR	S	101	—	123		Michigan Crop Improvement
W 206	Red	A	ME	M	MR	S	S	S	R	MR	MR	101	88	127		Wellman Seeds, Inc.
Ambassador	White	AL	ML	M	MR	S	S	S	S	S	MR	96	85	128		D.F. Seeds, Inc.
Aubrey	White	AL	E	M	MS	S	S	S	MR	MS	R	92	76	126		D.F. Seeds, Inc.
9242W	White	N/AL	ML	M	MR	MS	MS	MR	S	MR	MR	95	82	126		Dyna-Gro Seed
AC Mountain	White	AL	L	T	S	S	S	MS	MS	MS	MS	95	91	125		Michigan Crop Improvement
Jupiter	White	AL	L	S	MR	S	S	MR	MS	MS	MS	97	80	126		Michigan Crop Improvement
Venus	White	A	E	M	MS	S	S	MR	MR	MS	MR	91	75	123		Michigan Crop Improvement
E6012	White	A	ML	M	MS	S	S	MS	S	MR	MR	93	78	120		MSU Wheat Breeding

[a] A = awned (bearded), AL = awnletted (short awns), N = awnless (beardless); [b] E = early, ME = moderate-to-early, ML = moderate-to-late, L = late; [c] S = shorter, M = medium height, T = taller

[d] S = susceptible, MS = moderately susceptible, MR = moderately resistant, R = resistant. Classification assignments based on the average and least-significant-difference values among the varieties tested:
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[e] Displayed yield is the average across years and locations adjusted to 13.5% moisture. Not all varities were tested in all years or all locations. Complete yield results, including comparitive statistics, are available in the annual MSU Wheat Performance Trials (Siler et al., 2013, 2014, 2015, 2016) and Wheat Search (Pennington, 2016). high mgt = high management (increased N and fungicide inputs)

[f] All varieties displayed are included in the 2017 MSU Wheat Performance Trials, with the exception of DuPont Pioneer varieties 25R25 and 25R40.

Wheat Variety Comments—2017 (Lenawee County, MI)

	Agronomics						Disease Resistance [d]					Yield [e]			Notes	Company
	Grain Color	[a] Awns	[b] Flowering	[c] Plant Height	[d] Lodging	[d] Sprouting	Head Scab	Stripe Rust	Leaf Rust	Leaf Blotch	Powdery Mildew	All Sites	Lenawee	Lenawee (high mgt)		*MSU makes no endorsement of any variety or brand.* *Multi-year data are the most informative.*
Variety			13,14, 15,16	13,14, 15,16	13,14, 15,16	14,15	13,14, 15,16	16	13,14, 15	13,14, 15	13,14, 15,16	13,14, 15,16	13	15,16		Years tested
AgriMAXX 413	Red	A	E	S	MS	S	MS	R	MS	MS	MR	99	88	93		AgriMAXX Wheat Company
AgriMAXX 438	Red	N/AL	ME	T	S	R	S	MR	MS	MS	MS	101	82	92		AgriMAXX Wheat Company
DF 105R	Red	A	E	S	MR	S	MS	R	MS	MS	MR	99	80	101		D.F. Seeds, Inc.
DF 112R	Red	A	ME	S	MS	S	MR	MR	S	MS	MR	103	85	102		D.F. Seeds, Inc.
25R25 [f]	Red	A	L	M	MR	R	MR	MR	MS	MR	MS	107	—	93		DuPont Pioneer
25R40 [f]	Red	A	ML	S	MR	S	S	MR	MS	MR	R	101	88	101		DuPont Pioneer
9692	Red	A	ME	M	MS	MS	MR	S	S	MR	S	106	—	89		Dyna-Gro Seed
Hopewell	Red	AL	ML	T	MR	MR	S	S	S	MS	MR	92	77	88		Michigan Crop Improvement
Red Devil	Red	A	ML	M	MR	R	MS	MR	R	MR	R	95	82	95		Michigan Crop Improvement
Red Dragon	Red	N	ME	T	MS	MR	MR	MR	S	MR	MS	98	91	97		Michigan Crop Improvement
Sunburst	Red	N	L	S	R	R	MS	MR	MR	MS	R	95	82	89		Michigan Crop Improvement
Whale	Red	N	L	M	R	R	S	MS	R	MR	S	101	—	85		Michigan Crop Improvement
W 206	Red	A	ME	M	MR	S	S	S	R	MR	MR	101	87	95		Wellman Seeds, Inc.
Ambassador	White	AL	ML	M	MR	S	S	S	S	S	MR	96	79	98		D.F. Seeds, Inc.
Aubrey	White	AL	E	M	MS	S	S	S	MR	MS	R	92	75	91		D.F. Seeds, Inc.
9242W	White	N/AL	ML	M	MR	MS	MS	MR	S	MR	MR	95	81	91		Dyna-Gro Seed
AC Mountain	White	AL	L	T	S	S	S	MS	MS	MS	MS	95	85	91		Michigan Crop Improvement
Jupiter	White	AL	L	S	MR	S	S	MR	MS	MS	MS	97	83	95		Michigan Crop Improvement
Venus	White	A	E	M	MS	S	S	MR	MR	MS	MR	91	76	89		Michigan Crop Improvement
E6012	White	A	ML	M	MS	S	S	MS	S	MR	MR	93	77	95		MSU Wheat Breeding

[a] A = awned (bearded), AL = awnletted (short awns), N = awnless (beardless); [b] E = early, ME = moderate-to-early, ML = moderate-to-late, L = late; [c] S = shorter, M = medium height, T = taller

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[e] Displayed yield is the average across years and locations adjusted to 13.5% moisture. Not all varities were tested in all years or all locations. Complete yield results, including comparitive statistics, are available in the annual MSU Wheat Performance Trials (Siler et al., 2013, 2014, 2015, 2016) and Wheat Search (Pennington, 2016). high mgt = high management (increased N and fungicide inputs)

[f] All varieties displayed are included in the 2017 MSU Wheat Performance Trials, with the exception of DuPont Pioneer varieties 25R25 and 25R40.

Wheat Variety Comments—2017 (Allegan County, MI)

	Agronomics						Disease Resistance [d]					Yield [e]			Notes	Company
	Grain Color	[a] Awns	[b] Flowering	[c] Plant Height	[d] Lodging	[d] Sprouting	Head Scab	Stripe Rust	Leaf Rust	Leaf Blotch	Powdery Mildew	All Sites	Allegan	Allegan (high mgt)		*MSU makes no endorsement of any variety or brand.* *Multi-year data are the most informative.*
Variety			13,14, 15,16	13,14, 15,16	13,14, 15,16	14,15	13,14, 15,16	16	13,14, 15	13,14, 15	13,14, 15,16	13,14, 15,16	13	14		Years tested
AgriMAXX 413	Red	A	E	S	MS	S	MS	R	MS	MS	MR	99	89	91		AgriMAXX Wheat Company
AgriMAXX 438	Red	N/AL	ME	T	S	R	S	MR	MS	MS	MS	101	82	99		AgriMAXX Wheat Company
DF 105R	Red	A	E	S	MR	S	MS	R	MS	MS	MR	99	82	95		D.F. Seeds, Inc.
DF 112R	Red	A	ME	S	MS	S	MR	MR	S	MS	MR	103	95	105		D.F. Seeds, Inc.
25R25 [f]	Red	A	L	M	MR	R	MR	MR	MS	MR	MS	107	—	—		DuPont Pioneer
25R40 [f]	Red	A	ML	S	MR	S	S	MR	MS	MR	R	101	89	95		DuPont Pioneer
9692	Red	A	ME	M	MS	MS	MR	S	S	MR	S	106	—	—		Dyna-Gro Seed
Hopewell	Red	AL	ML	T	MR	MR	S	S	S	MS	MR	92	76	88		Michigan Crop Improvement
Red Devil	Red	A	ML	M	MR	R	MS	MR	R	MR	R	95	83	88		Michigan Crop Improvement
Red Dragon	Red	N	ME	T	MS	MR	MR	MR	S	MR	MS	98	79	97		Michigan Crop Improvement
Sunburst	Red	N	L	S	R	R	MS	MR	MR	MS	R	95	78	83		Michigan Crop Improvement
Whale	Red	N	L	M	R	R	S	MS	R	MR	S	101	—	80		Michigan Crop Improvement
W 206	Red	A	ME	M	MR	S	S	S	R	MR	MR	101	84	95		Wellman Seeds, Inc.
Ambassador	White	AL	ML	M	MR	S	S	S	S	S	MR	96	76	91		D.F. Seeds, Inc.
Aubrey	White	AL	E	M	MS	S	S	S	MR	MS	R	92	69	89		D.F. Seeds, Inc.
9242W	White	N/AL	ML	M	MR	MS	MS	MR	S	MR	MR	95	71	90		Dyna-Gro Seed
AC Mountain	White	AL	L	T	S	S	S	MS	MS	MS	MS	95	69	93		Michigan Crop Improvement
Jupiter	White	AL	L	S	MR	S	S	MR	MS	MS	MS	97	82	90		Michigan Crop Improvement
Venus	White	A	E	M	MS	S	S	MR	MR	MS	MR	91	94	81		Michigan Crop Improvement
E6012	White	A	ML	M	MS	S	S	MS	S	MR	MR	93	84	91		MSU Wheat Breeding

[a] A = awned (bearded), AL = awnletted (short awns), N = awnless (beardless); [b] E = early, ME = moderate-to-early, ML = moderate-to-late, L = late; [c] S = shorter, M = medium height, T = taller

[d] S = susceptible, MS = moderately susceptible, MR = moderately resistant, R = resistant. Classification assignments based on the average and least-significant-difference values among the varieties tested:
R < (*Average – LSD*) < MR < *Average* < MS < (*Average* + *LSD*) < S

[e] Displayed yield is the average across years and locations adjusted to 13.5% moisture. Not all varities were tested in all years or all locations. Complete yield results, including comparitive statistics, are available in the annual MSU Wheat Performance Trials (Siler et al., 2013, 2014, 2015, 2016) and Wheat Search (Pennington, 2016). high mgt = high management (increased N and fungicide inputs)

[f] All varieties displayed are included in the 2017 MSU Wheat Performance Trials, with the exception of DuPont Pioneer varieties 25R25 and 25R40.

Wheat Variety Comments—2017 (Ingham County, MI)

	Agronomics						Disease Resistance [d]					Yield [e]			Notes	Company
	Grain Color	[a] Awns	[b] Flowering	[c] Plant Height	[d] Lodging	[d] Sprouting	Head Scab	Stripe Rust	Leaf Rust	Leaf Blotch	Powdery Mildew	All Sites	Ingham	Ingham (high mgt)		*MSU makes no endorsement of any variety or brand.* *Multi-year data are the most informative.*
Variety			13,14, 15,16	13,14, 15,16	13,14, 15,16	14,15	13,14, 15,16	16	13,14, 15	13,14, 15	13,14, 15,16	13,14, 15,16	13,14, 15,16	14,15, 16		Years tested
AgriMAXX 413	Red	A	E	S	MS	S	MS	R	MS	MS	MR	99	87	104		AgriMAXX Wheat Company
AgriMAXX 438	Red	N/AL	ME	T	S	R	S	MR	MS	MS	MS	101	86	101		AgriMAXX Wheat Company
DF 105R	Red	A	E	S	MR	S	MS	R	MS	MS	MR	99	86	101		D.F. Seeds, Inc.
DF 112R	Red	A	ME	S	MS	S	MR	MR	S	MS	MR	103	87	100		D.F. Seeds, Inc.
25R25 [f]	Red	A	L	M	MR	R	MR	MR	MS	MR	MS	107	96	102		DuPont Pioneer
25R40 [f]	Red	A	ML	S	MR	S	S	MR	MS	MR	R	101	87	105		DuPont Pioneer
9692	Red	A	ME	M	MS	MS	MR	S	S	MR	S	106	94	112		Dyna-Gro Seed
Hopewell	Red	AL	ML	T	MR	MR	S	S	S	MS	MR	92	78	94		Michigan Crop Improvement
Red Devil	Red	A	ML	M	MR	R	MS	MR	R	MR	R	95	83	98		Michigan Crop Improvement
Red Dragon	Red	N	ME	T	MS	MR	MR	MR	S	MR	MS	98	84	100		Michigan Crop Improvement
Sunburst	Red	N	L	S	R	R	MS	MR	MR	MS	R	95	86	97		Michigan Crop Improvement
Whale	Red	N	L	M	R	R	S	MS	R	MR	S	101	92	102		Michigan Crop Improvement
W 206	Red	A	ME	M	MR	S	S	S	R	MR	MR	101	87	106		Wellman Seeds, Inc.
Ambassador	White	AL	ML	M	MR	S	S	S	S	S	MR	96	81	91		D.F. Seeds, Inc.
Aubrey	White	AL	E	M	MS	S	S	S	MR	MS	R	92	75	84		D.F. Seeds, Inc.
9242W	White	N/AL	ML	M	MR	MS	MS	MR	S	MR	MR	95	80	100		Dyna-Gro Seed
AC Mountain	White	AL	L	T	S	S	S	MS	MS	MS	MS	95	79	88		Michigan Crop Improvement
Jupiter	White	AL	L	S	MR	S	S	MR	MS	MS	MS	97	83	99		Michigan Crop Improvement
Venus	White	A	E	M	MS	S	S	MR	MR	MS	MR	91	76	96		Michigan Crop Improvement
E6012	White	A	ML	M	MS	S	S	MS	S	MR	MR	93	85	95		MSU Wheat Breeding

[a] A = awned (bearded), AL = awnletted (short awns), N = awnless (beardless); [b] E = early, ME = moderate-to-early, ML = moderate-to-late, L = late; [c] S = shorter, M = medium height, T = taller

[d] S = susceptible, MS = moderately susceptible, MR = moderately resistant, R = resistant. Classification assignments based on the average and least-significant-difference values among the varieties tested:
R < (*Average – LSD*) < MR < *Average* < MS < (*Average* + *LSD*) < S

[e] Displayed yield is the average across years and locations adjusted to 13.5% moisture. Not all varities were tested in all years or all locations. Complete yield results, including comparitive statistics, are available in the annual MSU Wheat Performance Trials (Siler et al., 2013, 2014, 2015, 2016) and Wheat Search (Pennington, 2016). high mgt = high management (increased N and fungicide inputs)

[f] All varieties displayed are included in the 2017 MSU Wheat Performance Trials, with the exception of DuPont Pioneer varieties 25R25 and 25R40.

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