

Table 1. Agronomic trait means of the 2024-2025 Winter Malting Barley Trial (WMBT)^a at 20 locations.

Trial location	Winter Survival (%)	Yield (Bu/A)	Heading date (Julian day)	Height (cm)	Lodging degree (0-9)	Lodging Incidence (%)	Test Weight (lb/Bu)	Grain Protein- breeder measure (%)	Plump-breeder measure (%)	BYDV susceptibility (0-9)	Leaf Rust susceptibility (0-9)	Leaf Scald reaction (0-9)	Leaf Scald severity (%)	Net blotch (net form) reaction (0-9)	Powdery Mildew susceptibility (0-9)	Stripe Rust severity (%)	Stripe Rust infection (0-9)
Aberdeen, ID	95.9	81.7	141.2	75.4	0.0	.	.	.	.	.	.	.	.	.	.	.	.
Kimberly, ID	97.1	188.8	132.6	92.4	1.1	.	.	.	.	.	.	.	.	.	.	.	.
Lexington, KY	100.0	35.5	122.6	90.4	.	48.6	41.1	.	.	.	.	.	.	.	.	.	.
Cooks, MI	0.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Hickory Corners, MI	100.0	128.1	.	.	.	.	44.4	.	.	.	.	.	.	.	.	.	.
Saint Paul, MN	0.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mead, NE	64.2	.	139.4	82.9	.	.	.	.	.	.	.	.	.	.	.	.	.
Farmington, NM	89.0	38.3	122.4	.	0.0	.	.	11.8	.	.	.	.	.	.	.	.	.
Tucumcari, NM	99.4	.	105.2	34.2	.	.	.	.	.	.	.	.	.	.	.	.	.
Ithaca, NY	92.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Custar, OH	21.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Wooster, OH	100.0	107.8	129.8	89.1	.	.	.	.	.	0.3	0.4	1.0	.	0.0	1.5	.	.
Corvallis, OR	100.0	139.3	115.7	100.2	.	.	53.3	10.7	98.4	.	.	.	17.4	.	.	.	.
Logan, UT	100.0	165.6	141.7	88.4	2.1	.	46.7	.	.	.	.	.	.	.	.	.	.
Blacksburg, VA	100.0	87.6	114.5	74.3	0.0	.	46.9	.	.	3.2	.	.	.	.	0.7	.	.
Warsaw, VA	100.0	103.6	118.1	67.2	1.5	.	45.6	.	.	.	.	.	.	.	.	.	.
Alburgh, VT	99.2	81.6	147.6	93.4	1.5	.	48.4	.	88.2	.	.	.	.	.	.	.	.
Mt Vernon, WA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4.5	2.6
Pullman Rust, WA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	21.0	7.3
New Auburn, WI	84.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
GRAND MEAN	86.1	108.8	127.7	79.6	0.9	48.6	46.0	11.5	90.7	1.4	0.4	1.0	17.4	0.0	1.2	13.3	5.2

^a Agronomic data reported for 20 of 23 locations planted

Table 2. Winter Survival (%) line means for 2024-2025 Winter Malting Barley Trial (WMBT) entries at 18 locations.

Line	Line Mean	Aberdeen, ID	Kimberly, ID	Lexington, KY	Cooks, MI	Hickory Corners, MI	Saint Paul, MN	Mead, NE	Farmington, NM	Tucumcari, NM	Ithaca, NY	Custar, OH	Wooster, OH	Corvallis, OR	Logan, UT	Blacksburg, VA	Warsaw, VA	Alburgh, VT	New Auburn, WI
LCS_VIOLETTA	82.9	96.7	100.0	100	0	100	0	70.0	93.8	100.0	95.0	46.7	100	100	100	100	100	100.0	89.5
WINTMALT	81.1	98.3	95.0	100	0	100	0	70.0	90.4	100.0	91.7	20.0	100	100	100	100	100	100.0	94.4
KWS_DONAU	79.2	85.0	95.0	100	0	100	0	75.0	95.6	100.0	88.3	5.0	100	100	100	100	100	98.3	84.2
KWS_Delis	81.3	96.7	98.3	100	0	100	0	60.0	93.4	100.0	95.0	36.7	100	100	100	100	100	100.0	83.3
15ARS607-1	79.5	98.3	100.0	100	0	100	0	60.0	87.0	100.0	93.3	5.0	100	100	100	100	100	98.3	88.9
16ARS622-248	79.9	100.0	96.7	100	0	100	0	68.3	92.2	100.0	93.3	18.3	100	100	100	100	100	90.0	78.9
16ARS627-037	80.2	100.0	98.3	100	0	100	0	46.7	91.9	100.0	95.0	21.7	100	100	100	100	100	100.0	89.5
16ARS634-2	77.8	90.0	98.3	100	0	100	0	25.0	82.0	100.0	95.0	15.7	100	100	100	100	100	100.0	94.4
16/449/71	80.1	100.0	93.3	100	0	100	0	78.3	86.9	100.0	93.3	7.3	100	100	100	100	100	98.3	84.2
VA22M-160	81.4	96.7	100.0	100	0	100	0	76.7	93.7	100.0	95.0	24.0	100	100	100	100	100	100.0	78.9
VA22M-158	80.1	96.7	96.7	100	0	100	0	43.3	102.4	100.0	93.3	20.0	100	100	100	100	100	100.0	88.9
VA22M-30	79.9	96.7	98.3	100	0	100	0	56.7	77.0	100.0	91.7	25.0	100	100	100	100	100	100.0	93.2
NYBS811-31	78.3	91.7	96.7	100	0	100	0	48.3	85.5	100.0	90.0	13.3	100	100	100	100	100	100.0	84.2
NYBS811-43	78.1	86.7	96.7	100	0	100	0	43.3	96.7	100.0	91.7	11.7	100	100	100	100	100	100.0	78.9
NYBS811-33	80.5	96.7	100.0	100	0	100	0	60.0	93.7	100.0	93.3	21.7	100	100	100	100	100	100.0	82.9
NYBS811-34	79.7	95.0	96.7	100	0	100	0	50.0	90.9	100.0	93.3	20.0	100	100	100	100	100	100.0	89.5
NB22260	82.1	100.0	93.3	100	0	100	0	91.7	87.4	100.0	91.7	30.0	100	100	100	100	100	100.0	83.3
NB22259	83.0	100.0	98.3	100	0	100	0	90.0	86.7	100.0	91.7	48.3	100	100	100	100	100	100.0	78.9
RIL0257-01-011	78.3	96.7	95.0	100	0	100	0	48.3	84.8	100.0	95.0	20.0	100	100	100	100	100	100.0	69.7
GHRIL0201-088	77.0	83.3	96.7	100	0	100	0	51.7	83.3	100.0	63.3	27.3	100	100	100	100	100	96.7	83.3
GHRIL02OPL-190	82.3	98.3	95.0	100	0	100	0	86.7	96.8	100.0	95.0	28.3	100	100	100	100	100	96.7	84.2
GHRIL02SCL-010	80.1	95.0	96.7	100	0	100	0	66.7	97.4	100.0	93.3	15.0	100	100	100	100	100	100.0	77.8
DH141947	81.4	95.0	100.0	100	0	100	0	80.0	88.7	100.0	93.3	30.0	100	100	100	100	100	100.0	78.9
DH171854	80.9	96.7	96.7	100	0	100	0	71.7	83.2	100.0	91.7	25.0	100	100	100	100	100	100.0	90.8
DH190077	77.7	96.7	91.7	100	0	100	0	55.0	83.5	100.0	93.3	15.7	100	100	100	100	100	98.3	64.5
DH200620	79.8	98.3	96.7	100	0	100	0	73.3	81.9	100.0	93.3	15.0	100	100	100	100	100	100.0	77.8
2MW19_3013-004	81.3	96.7	93.3	100	0	100	0	73.3	90.0	98.8	93.3	28.3	100	100	100	100	100	100.0	88.9
2MW19_3346-014	81.5	100.0	98.3	100	0	100	0	80.0	84.0	100.0	91.7	18.3	100	100	100	100	100	100.0	94.4
TM17.167-008	79.0	96.7	100.0	100	0	100	0	53.3	84.4	99.5	91.7	14.0	100	100	100	100	100	98.3	84.2
TM18.236-016	79.2	98.3	100.0	100	0	100	0	71.7	85.4	83.1	95.0	8.3	100	100	100	100	100	100.0	84.2
GRAND MEAN	80.1	95.9	97.1	100	0	100	0	64.2	89.0	99.4	92.1	21.2	100	100	100	100	100	99.2	84.2

Table 3. Yield (Bu/A) line means for 2024-2025 Winter Malting Barley Trial (WMBT) entries at 11 locations.

Line	Line Mean	Aberdeen, ID	Kimberly, ID	Lexington, KY	Hickory Corners, MI	Farmington, NM	Wooster, OH	Corvallis, OR	Logan, UT	Blacksburg, VA	Warsaw, VA	Alburgh, VT
LCS_VIOLETTA	112.5	74.2	200.6	52.7	137.2	43.1	108.8	147.8	181.3	93.1	102.5	96.2
WINTMALT	103.2	71.9	196.6	40.1	139.2	41.0	103.0	145.9	132.1	86.4	89.6	89.1
KWS_DONAU	102.6	71.8	206.2	40.3	119.9	43.9	109.8	165.2	151.5	85.2	76.2	59.1
KWS_Delis	132.9	106.9	223.6	43.4	168.5	39.3	116.1	205.7	205.1	124.6	127.0	101.5
15ARS607-1	101.6	90.4	182.9	22.1	132.8	40.1	102.7	122.4	160.6	82.0	107.4	74.2
16ARS622-248	104.0	100.0	212.1	24.4	119.8	34.6	97.0	128.4	141.1	93.3	120.9	72.8
16ARS627-037	103.3	103.8	214.8	21.1	102.0	33.1	87.8	151.6	160.8	73.0	105.5	82.6
16ARS634-2	88.9	93.9	202.9	10.2	101.1	26.5	70.1	127.1	141.2	51.6	80.2	73.1
16/449/71	124.2	90.7	195.0	46.1	137.0	46.9	130.3	169.6	202.5	124.5	127.7	96.4
VA22M-160	115.1	81.9	190.1	66.6	99.3	51.2	106.6	148.5	185.1	118.6	124.5	93.6
VA22M-158	121.9	75.9	194.8	47.5	150.8	40.5	133.4	154.1	183.3	130.2	122.6	107.5
VA22M-30	110.0	70.3	177.8	38.9	139.5	50.5	133.8	128.7	175.4	108.7	107.2	78.8
NYBS811-31	107.6	82.6	179.0	31.8	126.9	32.5	117.2	162.7	145.0	93.0	125.9	86.7
NYBS811-43	106.3	79.6	201.3	21.4	135.4	39.7	98.8	158.4	147.0	111.3	96.5	80.2
NYBS811-33	109.4	96.1	194.1	22.9	146.7	35.4	111.2	165.6	155.6	93.2	86.6	95.6
NYBS811-34	108.6	84.2	185.8	28.6	157.7	30.1	95.0	156.3	157.1	92.9	114.3	92.9
NB22260	97.8	80.1	169.3	31.6	118.1	44.6	107.6	104.3	156.9	91.7	98.1	73.2
NB22259	86.1	85.8	145.0	33.3	69.0	38.6	105.4	106.5	133.3	67.5	98.1	65.2
RIL0257-01-011	88.8	63.2	162.9	37.5	99.0	37.8	98.3	105.9	166.6	55.0	94.4	56.3
GHRIL0201-088	72.8	62.5	141.7	23.3	85.4	36.9	76.2	77.3	118.0	66.1	60.3	53.3
GHRIL02OPL-190	108.2	82.9	202.5	46.4	146.6	35.5	106.7	124.9	181.3	90.5	113.7	59.1
GHRIL02SCL-010	106.2	70.8	182.7	39.7	141.4	30.3	100.9	143.5	183.0	87.4	107.2	81.5
DH141947	114.3	86.8	208.9	36.3	141.2	36.3	102.2	161.5	180.8	90.5	118.4	94.1
DH171854	108.2	76.3	201.9	37.5	73.0	45.9	122.3	159.3	187.5	62.2	132.7	92.0
DH190077	111.9	75.1	181.5	52.3	161.0	42.0	120.7	154.0	189.2	97.6	85.5	72.0
DH200620	119.0	86.5	212.3	32.8	162.9	39.5	132.3	166.1	178.6	105.4	102.1	90.8
2MW19_3013-004	108.2	76.5	173.7	33.3	146.3	35.2	118.5	140.3	160.3	93.9	119.9	92.8
2MW19_3346-014	98.1	67.9	160.5	26.2	141.6	35.5	114.3	112.6	169.1	64.5	91.6	95.1
TM17.167-008	89.3	75.6	170.8	36.2	111.0	26.7	97.8	96.5	168.0	55.3	78.5	66.0
TM18.236-016	95.5	87.1	191.5	39.7	132.7	30.8	109.1	89.0	160.5	39.8	94.2	76.1
GRAND MEAN	105.2	81.7	188.8	35.5	128.1	38.1	107.8	139.3	165.3	87.6	103.6	81.6

Table 4. Agronomic trait line means for 2024-2025 Winter Malting Barley Trial (WMBT) entries.

Line	Winter Survival (%)	Yield (Bu/A)	Heading date (Julian day)	Height (cm)	Lodging degree (0-9)	Lodging incidence (%)	Test Weight (lb/Bu)	Grain Protein- breeder measure (%)	Plump-breeder measure (%)	BYDV susceptibility (0-9)	Leaf Rust susceptibility (0-9)	Leaf Scald reaction (0-9)	Leaf Scald severity (%)	Net blotch (net form) reaction (0-9)	Powdery Mildew susceptibility (0-9)	Stripe Rust severity (%)	Stripe Rust infection (0-9)
LCS_VIOLETTA	89.3	116.2	125.8	78.7	0.5	15.0	72.4	11.2	92.5	0.4	0.0	0.3	8.3	0.0	0.4	4.0	15.0
WINTMALT	87.5	106.5	130.7	75.8	0.6	37.5	44.2	12.1	93.1	0.5	0.0	1.0	21.7	0.0	1.2	8.0	20.0
KWS_DONAU	85.0	106.2	128.8	76.0	0.4	42.5	44.5	13.2	93.5	0.6	0.0	0.0	8.3	0.0	0.2	8.0	30.0
KWS_Delis	87.5	137.4	125.0	75.1	0.3	50.0	46.4	8.9	96.9	0.0	0.0	0.7	16.7	0.0	1.0	4.0	15.0
15ARS607-1	85.6	105.6	129.6	78.1	1.5	60.0	42.8	11.6	85.8	1.4	0.0	1.3	35.0	0.0	1.2	2.5	5.0
16ARS622-248	85.9	106.9	128.1	68.9	1.6	87.5	42.5	10.9	83.9	0.6	0.0	2.0	43.3	0.0	0.4	7.0	15.0
16ARS627-037	86.4	106.8	125.8	73.0	1.7	85.0	45.1	10.0	84.7	1.6	0.0	0.3	6.7	0.3	3.2	4.0	10.0
16ARS634-2	83.9	93.0	129.7	74.2	2.2	12.5	40.8	12.3	89.9	4.0	0.0	0.0	33.3	0.0	1.2	2.5	10.0
16/449/71	86.2	127.1	125.8	77.1	0.9	47.5	47.0	9.5	94.3	0.7	0.0	1.0	30.0	0.0	1.2	2.5	5.0
VA22M-160	87.5	115.7	125.5	84.7	1.2	50.0	48.6	10.5	93.9	0.8	0.3	1.3	10.0	0.0	1.0	8.0	35.0
VA22M-158	86.3	124.9	127.3	86.6	0.7	45.0	46.7	12.1	95.7	0.0	0.3	1.0	18.3	0.0	0.8	8.0	20.0
VA22M-30	85.9	112.5	126.4	93.5	0.9	60.0	48.4	11.6	91.6	0.3	0.0	0.7	15.0	0.0	0.4	5.0	15.0
NYBS811-31	83.9	110.0	130.7	83.9	0.6	60.0	45.8	12.5	89.6	0.6	0.7	0.0	6.7	0.0	0.4	8.0	15.0
NYBS811-43	83.9	110.2	130.4	74.5	1.2	92.5	45.1	12.0	88.2	1.6	0.0	0.3	5.0	0.0	0.0	2.5	10.0
NYBS811-33	86.3	113.6	129.6	78.8	0.6	45.0	46.2	10.1	92.3	0.8	0.0	0.7	18.3	0.0	0.2	2.5	2.5
NYBS811-34	85.9	113.1	130.6	79.5	0.7	80.0	46.2	9.9	92.8	1.2	0.0	1.3	11.7	0.0	0.0	8.0	15.0
NB22260	88.3	100.7	128.0	90.9	1.3	80.0	44.8	12.6	95.5	1.2	0.3	0.7	8.3	0.0	2.0	8.0	10.0
NB22259	89.2	87.5	134.1	90.1	1.8	12.5	46.7	11.5	90.5	1.8	2.7	2.0	5.0	0.0	0.4	8.0	15.0
RIL0257-01-011	84.0	91.7	129.0	84.3	1.3	5.0	42.9	12.7	86.8	2.4	0.3	2.0	11.7	0.0	3.8	8.0	10.0
GHRIL0201-088	82.8	75.4	136.9	96.5	0.8	12.5	42.3	12.8	82.5	3.0	1.3	2.0	0.0	0.0	5.4	4.0	5.0
GHRIL02OPL-190	88.5	111.8	126.7	75.7	0.7	77.5	46.7	12.2	89.5	1.0	0.0	1.3	20.0	0.0	0.4	8.0	20.0
GHRIL02SCL-010	85.8	112.7	127.6	76.3	0.5	90.0	46.9	9.8	93.2	1.4	0.0	0.0	11.7	0.0	0.2	4.0	5.0
DH141947	87.5	118.3	127.6	75.1	0.6	57.5	43.9	12.5	93.3	1.6	0.3	0.7	6.7	0.0	0.2	4.0	5.0
DH171854	87.2	110.1	128.7	80.8	1.1	65.0	45.8	10.5	92.2	2.6	1.3	0.7	3.3	0.7	1.2	4.0	2.5
DH190077	83.2	116.7	125.4	74.1	1.1	67.5	44.9	11.7	86.4	1.4	0.0	0.7	6.7	0.0	0.8	4.0	10.0
DH200620	85.7	124.2	129.0	75.2	0.8	40.0	46.2	12.0	93.2	0.4	0.0	0.7	6.7	0.0	0.8	4.0	5.0
2MW19_3013-004	87.5	114.5	125.0	83.9	0.5	67.5	46.5	10.3	93.9	1.2	0.0	0.0	15.0	0.0	0.6	4.0	5.0
2MW19_3346-014	87.7	101.8	120.4	79.1	0.5	2.5	44.4	11.6	90.9	2.6	0.7	3.3	53.3	0.0	2.8	4.0	25.0
TM17.167-008	84.7	92.6	124.3	84.1	0.4	2.5	41.4	11.9	88.7	2.4	3.0	2.0	38.3	0.0	1.2	4.0	25.0
TM18.236-016	84.9	99.3	119.2	62.6	0.4	7.5	44.2	13.1	86.7	3.2	0.0	2.0	46.7	0.0	2.4	4.0	20.0
GRAND MEAN	86.1	108.8	127.7	79.6	0.9	48.6	46.0	11.5	90.7	1.4	0.4	1.0	17.4	0.0	1.2	13.3	5.2
# of Env.	18	11	12	11	7	1	7	2	2	2	1	1	1	1	2	2	2

Table 5. Line entry details available for submissions to the 2024-2025 Winter Malting Barley Trial (WMBT).

Entry	Line	Row type	Submitter
1	LCS_VIOLETTA	2	CHECK
2	WINTMALT	2	CHECK
3	KWS_DONAU	2	CHECK
4	KWS_Delis	6	KWS
5	15ARS607-1	2	USDA-ARS
6	16ARS622-248	2	USDA-ARS
7	16ARS627-037	2	USDA-ARS
8	16ARS634-2	2	USDA-ARS
9	16/449/71	6R Lax	VA Tech
10	VA22M-160	2	VA Tech
11	VA22M-158	2	VA Tech
12	VA22M-30	2	VA Tech
13	NYBS811-31	2	Cornell
14	NYBS811-43	2	Cornell
15	NYBS811-33	2	Cornell
16	NYBS811-34	2	Cornell
17	NB22260	2	U Nebraska-Lincoln
18	NB22259	2	U Nebraska-Lincoln
19	RIL0257-01-011		Ohio State U
20	GHRIL0201-088		Ohio State U
21	GHRIL02OPL-190		Ohio State U
22	GHRIL02SCL-010		Ohio State U
23	DH141947		Oregon State U
24	DH171854		Oregon State U
25	DH190077		Oregon State U
26	DH200620		Oregon State U
27	2MW19_3013-004	2	U of Minnesota
28	2MW19_3346-014	2	U of Minnesota
29	TM17.167-008	2	U of Minnesota
30	TM18.236-016	2	U of Minnesota