

WINTER MALTING BARLEY TRIAL – 2018 RESULTS

The Winter Malting Barley Trial (WMBT), through the University of Minnesota, was planted in Hickory Corners and Kawkawlin, MI in the fall of 2017. The plots included 27 varieties with three replications in a lattice design.

Hickory Corners, MI

Variety	Yield (bu/ac)	Test Weight (lbs/bu)	% Plump	Height (Inches)	Lodging # of plots
05ARS561-208	80.6	44.4	87.8	33.3	1
06ARS617-25	88.4	46.0	92.1	34	0
07ARS515-7	52.6	45.8	79.0	38.3	2
07ARS518-13	84.2	47.0	94.5	39.7	1
2WI15-8674	49.2	40.9	90.6	36	2
2WI15-8688	89.0	46.2	95.5	36	0
2WI15-8775	82.4	45.2	87.3	39.3	2
AC09/327/3 ^a	106.3	48.3	98.5	36	0
AC11/341/28	105.0	47.3	96.1	36.3	2
AC11/367/2	107.0	45.0	96.3	35.3	0
CHARLES	67.9	43.2	96.6	33	1
DH120304	103.5	48.6	99.0	36.3	0
DH130910	97.2	49.6	99.1	37	0
DH130939	87.4	48.7	98.3	35.3	1
DH140088	89.8	48.2	98.4	37.3	2
ENDEAVOR	88.1	47.0	91.6	38.3	1
Flavia	95.7	47.0	99.0	32.3	1
Hirondella*	89.6	46.6	99.1	36	0
LGGB13-W102*	102.3	45.7	97.9	34.3	0
MCGREGOR*	82.0	45.7	82.5	35	0
MW12_4007-001*	61.5	46.2	89.4	42.3	1
MW12_4028-007*	58.4	46.6	81.5	28.3	0
MW13_4122-012*	71.8	45.5	84.0	41	1
MW13_4159-012*	83.6	45.4	79.3	41	1
SU_Mateo	90.4	47.9	98.2	40.3	0
THOROUGHbred*	81.5	47.5	89.9	35.3	0
WINTMALT	76.7	47.1	98.3	31.3	0
Grand Mean	84.2	46.4	92.6	36.2	
CV	12.1	1.5	3.7	5.3	
LSD @ 5%	16.7	1.1	5.7	3.2	

*Six-row varieties, all others two-row

^a Also Known As "Lyberac"

HICKORY CORNERS TRIAL DETAILS

Planting date: 9/26/17 @ 120 lbs/A

Fertility: 9/26/17 – 20 lbs N/acre, 65 lbs K/acre

4/5/18 – 12 S/acre, 102.5 lbs N/acre (50 lbs AMS + 200 lbs urea/acre)

Fungicide: 5/29/18 – 8 oz/acre Prostar®

Harvest: 7/2/18

Growing season conditions: September was warm and very dry, but a switch to wet and cool conditions occurred mid-October, and cool conditions persisted through April delaying crop development. Temperatures turned warm in May with adequate rainfall until mid-June when conditions turned dry.

Research site details:

W.K. Kellogg Biological Station (KBS): Project managed by Brook Wilke, Dean Baas, Josh Dykstra and Christian Kapp

Previous crop: Soybeans

Soil type: Kalamazoo Sandy Loam



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Kawkawlin, MI

Variety	Yield (bu/ac)	Test Weight (lbs/bu)	% Plump	Height (Inches)	Lodging # of plots
05ARS561-208	54.3	41.7	74.0	22.3	0
06ARS617-25	55.8	42.9	63.3	25	0
07ARS515-7	55.8	44.6	68.3	25	0
07ARS518-13	56.8	47.0	82.4	26	0
2WI15-8674	73.5	43.0	86.6	22.7	0
2WI15-8688	43.5	41.3	78.4	24.7	0
2WI15-8775	55.2	43.6	58.2	26	0
AC09/327/3 ^a	65.8	43.2	89.7	23.3	0
AC11/341/28	50.3	44.7	72.6	22.7	0
AC11/367/2	77.6	47.6	93.5	24	0
CHARLES	58.2	44.4	88.9	20.3	0
DH120304	79.1	47.1	96.1	25.3	0
DH130910	67.2	47.5	87.2	27	0
DH130939	65.0	47.6	89.5	26	0
DH140088	79.0	48.1	90.0	27.7	0
ENDEAVOR	54.4	44.2	61.6	28	0
Flavia	67.4	46.3	92.1	22.7	0
Hirondella*	48.1	43.2	86.9	25.7	0
LGGB13-W102*	62.7	43.3	86.0	24	0
MCGREGOR*	64.1	45.4	55.5	26.7	0
MW12_4007-001*	61.7	48.2	87.9	30	0
MW12_4028-007*	47.4	47.1	74.7	21	0
MW13_4122-012*	58.0	47.8	82.9	27	0
MW13_4159-012*	77.2	47.3	83.8	30	0
SU_Mateo	52.3	41.1	84.4	26.3	0
THOROUGHbred*	43.7	48.6	77.5	21	0
WINTMALT	50.1	43.0	91.5	24.7	0
Grand Mean	60.2	45.2	80.9	25	
CV	20.3	4.1	10.4	7.6	
LSD @ 5%	20.0	3.1	13.8	3.1	

*Six-row varieties, all others two-row

^a Also Known As "Lyberac"

KAWKAWLIN TRIAL DETAILS

Planting date: 10/3/17 @ 120 lbs/A

Fertility: Fall of 2017- 150 lbs./ac of 10-10-30 was broadcast and then incorporated.

Spring of 2018- 35 gals/ac of 28% N plus 9 lbs./ac S.

Fungicide: 8.2 oz./acre of Prosaro® at heading.

Harvest: 7/6/18

Growing season conditions: Similar to Hickory Corners, cooler than average temperatures persisted from planting through April. Subsequently, this site experienced drought conditions during grain fill. Crop height was short and lodging was not present at harvest.

Research site details:

Cooperating Farmers: Don Shelagowski and Chris Schmidt.

Previous crop: Dry beans

Soil type: Wixom Sandy Loam



WINTER MALTING BARLEY TRIAL – 2018 QUALITY

The Winter Malting Barley Trial (WMBT), through the University of Minnesota, was planted in Hickory Corners and Kawkawlin, MI in the fall of 2017. The plots included 27 varieties with three replications in a lattice design.

Hickory Corners, MI

Variety	GC	4 ml GE	8 ml GE	WS	CP	DON	RVA
CHARLES	100	92	54	38	11	0.7	39
ENDEAVOR	99	90	33	57	10.6	0.9	45
Flavia	98	99	44	55	10	0.9	112
Hirondella*	99	99	81	18	11.7	1.3	133
MCGREGOR*	99	94	70	24	11	5.7	88
SU_Mateo	99	100	90	10	9.9	< 0.3	110
THOROUGHbred*	99	96	74	22	10.9	2.7	145
WINTMALT	98	97	56	41	10.8	0.4	140

Kawkawlin, MI

Variety	GC	4 ml GE	8 ml GE	WS	CP	DON	RVA
CHARLES	98	98	94	4	12	< 0.3	37
ENDEAVOR	97	94	86	8	11.5	< 0.3	9
Flavia	100	98	80	18	12.3	< 0.3	98
Hirondella*	99	100	63	37	12.8	< 0.3	114
MCGREGOR*	99	99	99	0	11.2	< 0.3	101
SU_Mateo	100	100	99	1	10.9	< 0.3	102
THOROUGHbred*	97	97	97	0	14.4	< 0.3	129
WINTMALT	100	100	100	0	13.5	< 0.3	129

*Six-row varieties, all others two-row

GC – Germination Capacity

GE – Germination Energy

WS – Water Sensitivity

CP - % Crude Protein

DON – Deoxynivalenol

RVA – Rapid Visco Analysis

GRAIN QUALITY

Grain quality is the most important characteristic for malting barley.

If the barley doesn't meet quality specifications, it may be rejected by the malthouse. Conversely, premiums may be offered for barley that meets or exceeds quality standards.

Ideal values for the quality data shown on this page are shown below.

- 4 ml GE >95%
- WS <30
- CP <12.5%
- DON <1.0 ppm
- RVA >120

