



Great Lakes HOP & BARLEY CONFERENCE



MICHIGAN STATE UNIVERSITY | Extension



GROWING THE MALTING BARLEY VALUE CHAIN



MICHIGAN STATE UNIVERSITY | Extension

Ryan Hamilton – 2019 Great Lakes Hop & Barley Conference – Traverse City, Michigan – March 1, 2019



Ryan Hamilton

MSU Barley Research Team – Grand Rapids, MI

Outreach

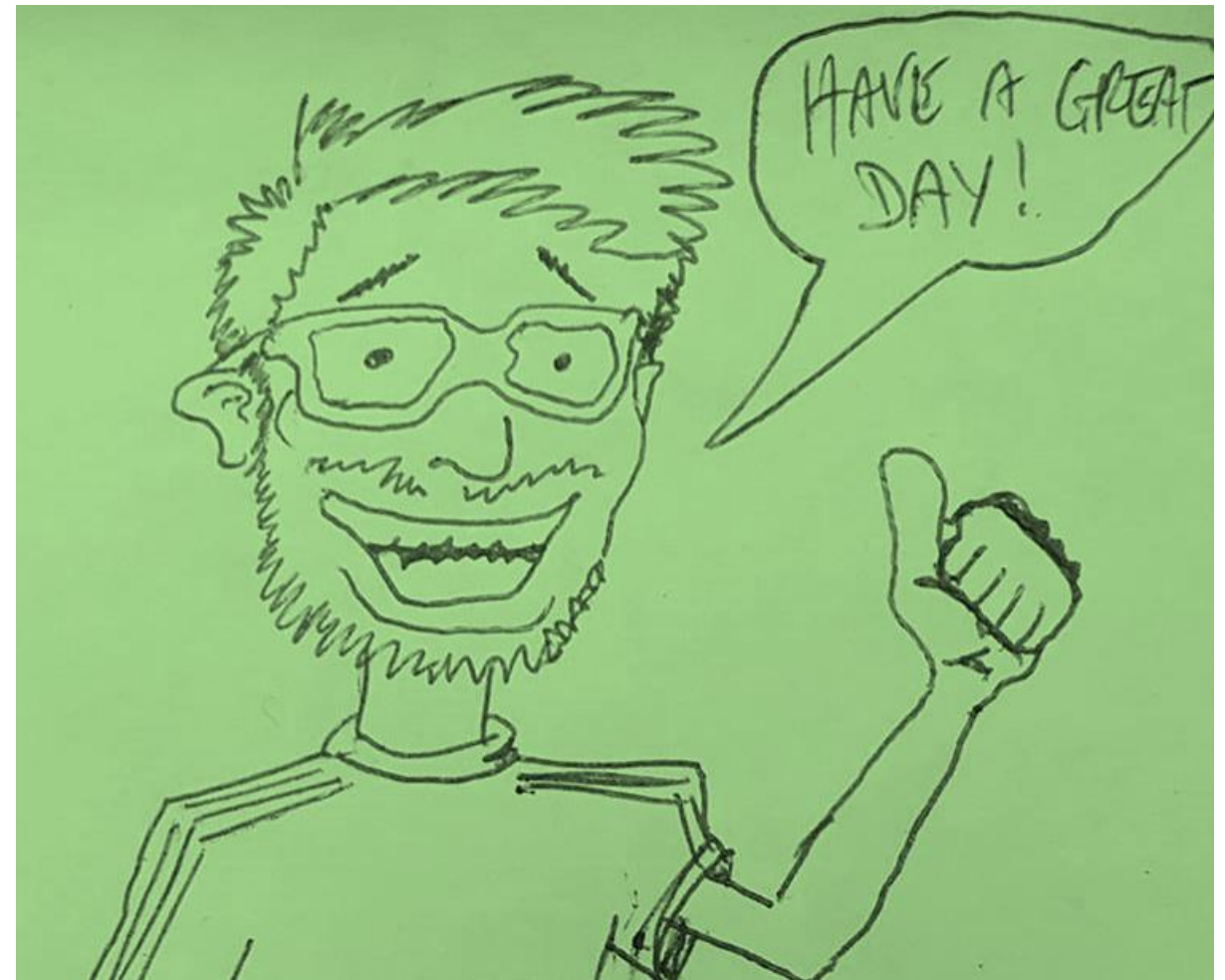
-  Barley Producers
-  Maltsters
-  Craft Food & Beverage Producers
-  Researchers

2018 Michigan Malting Barley Production Survey

Michigan Barley Association, LLC



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Carl Wagner III

C3 Seeds, LLC - Niles, Michigan



MCIA Certified Seed

-  LCS Calypso (Winter 2-Row)
-  Conlon (Spring 2-Row)
-  Pinnacle (Spring 2-Row)



Cover Crops

-  Spooner Cereal Rye (Winter)



Custom Cleaning Services

-  Certified Organic Processing
-  Seed Cleaning Services
-  Custom Seed Treatment



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Gary West

West Acres Farm - Crosswell, Michigan


Thumb Malting Barley

 LCS Odyssey (Spring 2-Row)

 AAC Synergy (Spring 2-Row)

 Quest (Spring 6-Row)

Other Crops

 Sugar Beets, non-GMO Corn,
wheat, rye, and soybean seed

Michigan Agriculture Environmental Assurance Program (MAEAP) Verified Farm



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Eric Richer

OSU Extension – Fulton County, Ohio

✦ **Lead Author** - *Double-crop Soybean Yields After Barley in Northwest Ohio*

✦ **Primary Research Contributor**

✦ *Management of Ohio Winter Malting Barley*

✦ Spring 2018

✦ Fall 2017

✦ **Specialization** - Farm Management, Agronomy, and Applied On Farm Research



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Matt Cunningham

Rustic Brew Farm - Marysville, Ohio

Ohio Malting Barley

 LCS Violetta (Winter 2-Row)

 KWS Scala (Winter 2-Row)

On-Farm Malt House!

 Kilned Base and Specialty Malts

 Malted Corn

Other Crops

 Corn, Soy Beans, & Hops(!)



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Ron Gerstenberger

Sahr Crop Insurance Agency – Sandusky, Michigan

Thumb Malting Barley 1984-1990

 Morex (Spring 6-Row) for...


Rickel Malting Company

 Detroit, Michigan

Wruble Elevator Company

 Ubly, Michigan

Other Crops

 Wheat, Corn, Soy Beans, Sugar
Beets, & Dry Beans



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COVER CROP

Golden Ale – 4.5% ABV

**Collaboration with Ohio
Farm Bureau**

“Celebrating 100 years of Ohio Farm Bureau’s grassroots efforts to positively impact agriculture through advocacy, supporting young farmers, promoting local food, and protecting farmland.”





Rickel Malting Company



H. W. Rickel & Company



1876-1971



Fleischmann Malting Company



1971-1976



Archer-Daniels-Midland



1976-1985



Supplier to Stroh Brewery Co. Until 1985

RICKEL MALTING COMPANY, INC.

1824 ADELAIDE STREET • DETROIT, MICHIGAN 48207
(313) 259-6382

1984 CROP

MICHIGAN MALTING BARLEY PROGRAM

*Rt. Below St. Aub
Stoplight & District*

The Rickel Malting Company of Detroit, Michigan, subject to the limitation of available storage space and customer demands, will maintain a market for malting quality barley.

Pricing will be based on published prices established by the Minneapolis Grain Exchange. Rickel will quote a daily market price for "top" barley which will not be less than the lowest quoted "top" six-row malting variety on the Minneapolis Grain Exchange.

The following premiums and discounts will apply:

<u>Plumps:</u>	96% & above	- add 7¢
	91-95%	- add 5¢
	86-90%	- add 3¢
	81-85%	- add 1¢
	71-80%	- <u>Base Price</u>
<u>Thins:</u>	66-70%	- deduct 3¢
	61-65%	- deduct 5¢
	55-60%	- deduct 7¢
	4% thin	- deduct 1¢
	6% thin	- deduct 4¢
	8% thin	- deduct 8¢
<u>Protein:</u>	Prefer 13.00-13.50%	- 5¢/bu. deducted for each .1% over 14%. 14.5% maximum.
<u>Appearance:</u>	Light stain	deduct 10¢
	Heavy stain	deduct 25¢

Above prices are subject to established basic specifications as follows:

1. Pure variety
2. Not less than 55% plump
3. Thins not more than 8%
4. Moisture: Maximum 13.5%
5. Germination: 96% or better
6. Testweight: Minimum 46 lbs.
7. Soundness: Minimum 90%
8. Skinned & Broken: Maximum 8%
9. Damaged Kernels: Maximum 4%
10. Foreign Materials: Maximum 3%
11. Frost or Heat Damage: None
12. No stain, bleach, smut, garlic, weevil, ergot, mold or sprouting.

gismail.airadvantage.net

RICKEL MALTING COMPANY, INC.

Page Two

Rickel Malting Company will maintain a normal operating inventory level and schedule orderly deliveries with barley growers on a first-come-first-serve basis.

Procedure for delivery and selling of Barley to the Rickel Malting Company is as follows:

- (A) Send samples for inspection.
- (B) Check for results and schedule for delivery.
- (C) After barley is in Rickel bins you can sell immediately at market price or leave it in storage at no cost to you.
- (D) You may sell at any time and price it as of the date of delivery or any date within 90 days after date of delivery.
- (E) After September 15, 1984 you may cash out any barley delivered to Rickel Malting Company with no interest deductions.

All Michigan barley will be subject to a 1¢ per bushel discount matched by a 1¢ per bushel contribution from Rickel Malting Company to support the Michigan State University barley research program.

In order to avoid misunderstandings, samples must be submitted for inspection at least 48 hours prior to delivery.

Rickel Malting Company, Inc.
1824 Adelaide Street
Detroit, Michigan 48207

Telephone: (313) 259-6382

glisqmail.airadvantage.net

DELIVERY RECEIPT

RICKEL MALTING COMPANY, INC.
1824 ADELAIDE STREET

MALTSTERS — GRAIN MERCHANTS

259-6382 Detroit, Mich. 48207 8-16 1984

From RON GERSTENBERGER

Address [REDACTED]

Suydam, Mich. 48471

GROSS WEIGHT 72450

TARE WEIGHT 25670

NET WEIGHT 46780

BARLEY MOREX

PL-93.6
TH-1.0
DOCK-0
H₂O-13.1
PRO-12.5

974⁵⁸

Received By Ron Gerstenberger

No. 50270

SCHOBER PRINTING COMPANY, DETROIT, MICHIGAN 48211

DELIVERY RECEIPT

RICKEL MALTING COMPANY, INC.
1824 ADELAIDE STREET

MALTSTERS — GRAIN MERCHANTS

259-6382 Detroit, Mich. 48207 8-17 1984

From GERSTENBERGER

Address _____

GROSS WEIGHT 72.040

TARE WEIGHT 25.040

NET WEIGHT 47.000

BARLEY MOREX

PL-94.4
TH-1.0
DOCK-0
H₂O-12.7
PRO-12.3

979¹⁷

Received By Ron Gerstenberger

No. 50276

SCHOBER PRINTING COMPANY, DETROIT, MICHIGAN 48211

RICKE

MALT

259-6382 De

From R

Address _____

GROSS WEIGH

TARE WEIGHT

NET WEIGHT

BARLEY A

PL-95.6
TH-0.6
DOCK-0
H₂O-12.1
PRO-13.1

Received By A

No. 502

SO



FLEISCHMANN-KURTH

November 3, 1987

Mr. Ron Gerstenberger
 [Redacted]
 Sanduski, MI 48471-0000

Dear Mr. Gerstenberger:

We are attaching our refund check # 497862 for the amount of \$ 127.75 and we are sorry for any inconvenience this may have caused.

We have inadvertently deducted Inspection and Weighing charges (18.25 per load) on barley sent to Detroit. This is a normal fee for handling incoming barley in the Midwest.

We are reviewing our position on this and will be informing you what we will be doing in the future.

Sincerely,
 FLEISCHMANN-KURTH MALTING COMPANY

Doug Barker
 Doug Barker
 Vice President Administration

DB:nd

Attachment

2100 South 43rd Street
 PO Box 18908
 Milwaukee, WI 53219-0909
 414.384.7400
 FAX: 1.414.384.8718

A Division of
 Archer Daniels Midland Co

Fleischmann Malting Company, Inc.

Fleischmann Malting Company, Inc.					REMITTANCE STATEMENT
VENDOR	CONTRACT	CAR WT. TICKET #/L	UNLOAD DATE	QUANTITY	AMOUNT
246997	SPOT	000111	07-27-87	978.75CR	1,831.59CR
246997	SPOT	000111	07-27-87	978.75	1,929.46
246997	SPOT	000113	07-28-87	1,036.25	2,043.89
246997	SPOT	000114	07-29-87	993.75	1,959.31
246997	SPOT	000115	07-30-87	1,001.67	1,975.07
246997	SPOT	000120	07-31-87	1,019.58	2,010.71
246997	SPOT	000123	08-03-87	1,032.08	2,035.59
246997	SPOT	000127	08-04-87	987.08	1,946.04
				6,070.41	12,068.48
		000023	08/14/87 04532		

THIS IS YOUR MEMORANDUM PLEASE DETACH BEFORE DEPOSITING.

Fleischmann Malting Company, Inc.

Fleischmann Malting Company, Inc.					REMITTANCE STATEMENT
VENDOR	CONTRACT	CAR WT. TICKET #/L	UNLOAD DATE	QUANTITY	AMOUNT
246997	SPOT	000111	07-27-87	978.75	1,831.59
				978.75	1,831.59
		000018	08/06/87 04532		

THIS IS YOUR MEMORANDUM PLEASE DETACH BEFORE DEPOSITING.

~\$197/bu

 ** ** ** ** ** ** ** ** ** ** **
 ** ** ** ** ** ** ** ** ** **

BOX 19909
 MILWAUKEE WI 53219

RON GERSTENBERGER

RETURN NR: 532-000
 PAGE: 1
 CONTROL: 179
 DATE: 08/14/87

SANDUSKI MI48471

CAR/TRK ID	UNLOAD DATE	ORIGIN	DESTINATION	UNLOAD WEIGHT	DOCKAGE	SHRINK WEIGHT	CONT. NUMBER	APPLIED QUANTITY	PRICE	TOTAL DISCOUNTS	NET
000111S	072787	SANDUSKY	MI DETROIT	MI 46980			*SPOT*	978.75-	1.89000	.00000	1
OT=1310	2MMB	TW=48.0	MS=12.6	SB=.0	HD=.0	FM=.0	TH= 3.2	PL=32.0			
QUAL DISCT=		.00000	DRYING=	.00000	OTHER DISCT=		.00000				
*** THE ABOVE ITEM RESETTLED DUE TO CONTRACT NUMBER CHANGE											
000111	072787	SANDUSKY	MI DETROIT	MI 46980			*SPOT*	978.75	1.99000	.00000	1
OT=1310	2MMB	TW=48.0	MS=12.6	SB=.0	HD=.0	FM=.0	TH= 3.2	PL=32.0			
QUAL DISCT=		.00000	DRYING=	.00000	OTHER DISCT=		.00000				
000113	072887	SANDUSKY	MI DETROIT	MI 49740			*SPOT*	1036.25	1.99000	.00000	1
OT=1080	2MMB	TW=48.0	MS=13.0	SB=.0	HD=.0	FM=.0	TH= 2.2	PL=84.0			
QUAL DISCT=		.00000	DRYING=	.00000	OTHER DISCT=		.00000				
000114	072987	SANDUSKY	MI DETROIT	MI 47700			*SPOT*	993.75	1.99000	.00000	1
OT=1230	0MMB	TW=48.0	MS=12.8	SB=.0	HD=.0	FM=.0	TH= 2.8	PL=80.0			
QUAL DISCT=		.00000	DRYING=	.00000	OTHER DISCT=		.00000				
000115	073087	SANDUSKY	MI DETROIT	MI 48080			*SPOT*	1001.67	1.99000	.00000	1
OT=1300	0MMB	TW=48.0	MS=12.9	SB=.0	HD=.0	FM=.0	TH= 1.8	PL=87.4			
QUAL DISCT=		.00000	DRYING=	.00000	OTHER DISCT=		.00000				
000120	073187	SANDUSKY	MI DETROIT	MI 48940			*SPOT*	1019.58	1.99000	.00000	1
OT=1250	0MMB	TW=48.0	MS=12.6	SB=.0	HD=.0	FM=.0	TH= 1.4	PL=87.2			
QUAL DISCT=		.00000	DRYING=	.00000	OTHER DISCT=		.00000				

QUALITY DISCOUNTS

- 1 = TEST WEIGHT
- 2 = MOISTURE
- 3 = DAMAGE
- 4 = HEAT DAMAGE
- 5 = F.M./DOCKAGE
- 6 = OTH COLOR/SB/OIL/THIN
- 7 = SPLITS/DEF/STONES/SOUND
- 8 = OTHER CLASSES
- 9 = SEE QUAL REMARKS

* OTHER DISCOUNTS

- 1 = EARLY SHIPMENT
- 2 = LATE SHIPMENT
- 3 = BILLING
- 4 = DP SERVICE CHG
- 5 = DHV
- 6 = UNLD/STORE CHG
- 7 = LIGHT LOAD
- 8 = PREMIUM
- 9 = PROTEIN PREM/DSC

** DEDUCTIONS

- 1 = WEIGHING
- 2 = INSPECTION
- 3 = RE-INSPECTION
- 4 = SWITCHING
- 5 = HAULING/COMBINING
- 6 = QUALITY DISCOUNT CHARGE
- 7 = MINIMUM FREIGHT TOT

PAGE TO

.00 VENDOR

31 RPTCTL: 9031724699708/26/88

PURCHASE RETURN FOR VENDOR @ 246997

** ** **
** ** ** ** ** **
** ** ** * **
***** ** **

ADM GRAIN CO
P O BOX 15166
COMMERCE STATION
MINNEAPOLIS MN 55415

RON GERSTENBERGER

SANDUSKI

MI48471

RETURN NR: 317-068417-88
PAGE: 1 ***
CONTROL: 179 *TR
DATE: 08/26/88 ***

UNLOAD UNLOAD DOCKAG SHRINK CONT. APPLIED TOTAL
ID DATE ORIGIN DESTINATION WEIGHT WEIGHT WEIGHT NUMBER QUANTITY PRICE DISCOUNTS NET PRIC

0261	081788	SANDUSKY MI	DETROIT MI	45660			016009	951.25	4.50000	.00000	4.50000
@ 1MMB TW=48.1 HS=13.2 SB= 3.0 HD= .0 FM= .0 TH= 2.0 PL=79.0											
DISCT= .00000 DRYING= OTHER DISCT= .00000 CHECK-OFF											

0269	081788	SANDUSKY MI	DETROIT MI	39020			016009	812.92	4.50000	.00000	4.50000
@ 1MMB TW=48.4 HS=13.1 SB= 2.9 HD= .0 FM= .0 TH= 1.8 PL=75.8											
DISCT= .00000 DRYING= OTHER DISCT= .00000 CHECK-OFF											

**** 179 CONTROL TOTALS				QUANTITY	1,764.17		PROCEEDS	7,938.77			
**** 09 COMMODITY TOTALS				QUANTITY	1,764.17		PROCEEDS	7,938.77			

			PAGE TOTAL	
TY DISCOUNTS	* OTHER DISCOUNTS	** DEDUCTIONS		
EST WEIGHT	1 = EARLY SHIPMENT	1 = WEIGHING		
DISTURE	2 = LATE SHIPMENT	2 = INSPECTION		
ANAGE	3 = BILLING	3 = RE-INSPECTION		
EAT DAMAGE	4 = DP SERVICE CHG	4 = SWITCHING		
IM./DOCKAGE	5 = DHV	5 = HAULING/COMBINING		
TH COLOR/SB/OIL/THIN	6 = UNLD/STORE CHG	6 = QUALITY DISC. CHRG		
PLITS/DEF/STONES/SDUND	7 = LIGHT LOAD	7 = MINIMUM FREIGHT	TOT QUANT	1,764.17
THER CLASSES	8 = PREMIUM	8 = CLEANING CHARGE		VENDOR TOT
EE QUAL REMARKS	9 = PROTEIN PREM/DSC	9 = BANK CHARGE		
		0 = PER CAR FREIGHT RATE		

DATE 1-1-89 UBLY, MICHIGAN 48475 43925

CUSTOMERS NAME Barley Production 70% Plump 3% TWIN

ADDRESS _____

COMMODITY Barley

CARRIER 1-1-89

DISCOUNTS		Grade
Moist	4.5 %	
T.W.	45.3 %	
Den.	%	
F.M.	1.6 %	
Splits	%	

Base Price \$ _____

Total Disc. \$ _____

NET PRICE \$ _____

02-1 PM 2:00 0 2 8 5 2 0 1/2 LBS. GROSS

02-1 PM 2:00 0 1 4 9 6 0 1/2 LBS. TARE — DRIVER ON OFF _____

NET _____

Wt. Dockage or F.M. % _____ Lbs. _____

Clean Grain _____ Lbs. _____

WEIGHER _____

THIS IS NOT A WAREHOUSE RECEIPT

WRUBLE ELEVATOR, INC. UBLY, MI 48475

DETACH AND RETAIN THIS STATEMENT THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

DELUXE FORM DVO-2 V-SPL 1599N

8-2-89 31484

177600	Barley @ 3.25 bu. Contracted	12034.99
	Dues Drying Charges	81.08
		11943.98

Unreceipted scale tickets:
47676-81-82-40725-43-66p

WRUBLE ELEVATOR, INC. UBLY ACCOUNT

DETACH AND RETAIN THIS STATEMENT THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

DELUXE FORM DVO-2 V-SPL 1599N

NO 4935 8-3-88

13233	Barley @ 4.30 bu.	1185.64
	Less test weight chgs 16.54	2558
	Less drying chgs 9.04	1160.06
	Total	2558

Scale Ticket 43925

RECORDED AT SWANLAC COUNTY ASOS OFFICE

WRUBLE ELEVATOR, INC. UBLY, MI 48475

DETACH AND RETAIN THIS STATEMENT THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

DELUXE FORM DVO-2 V-SPL 1599N

8-2-89 31485

54902	Barley @ 3.25 bu	3717.32
	Dues Drying Charges 37.07	5363
	Dues Test Charges 16.56	3663.69
		53.63

Unreceipted scale tickets:
47766p 4794-3 44

BARLEY PRICES INDEXED FOR INFLATION

1984

☿ \$2.64/bu (Rickel)

1987

☿ \$1.97/bu (Fleischmann)*

☿ \$1.89-\$1.99/bu (ADM)*

1988

☿ \$4.50/bu (ADM)

☿ \$4.30/bu (Wruble)

1989

☿ \$3.25/bu (Wruble)

*Purchased on "spot" market, not contracted

2019

☿ \$6.40/bu

2019

☿ \$4.37/bu

☿ \$4.19-\$4.41/bu

2019

☿ \$9.57/bu

☿ \$9.15/bu

2019

☿ \$6.60/bu



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BARLEY PRICES INDEXED FOR INFLATION

1984

✦ \$2.64/bu (Rickel)

1987

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✦ \$1.89-\$1.99/bu

1988

✦ \$4.50/bu (ADM)

✦ \$4.30/bu (Wruble)

1989

✦ \$3.25/bu (Wruble)

*Purchased on "spot" market, not contracted

2018 Michigan
Barley Prices

\$5.00-\$8.00/bu

Avg/Mean = \$7.36/bu

2019

✦ \$6.40/bu

2019

✦ \$4.37/bu

✦ \$4.19-\$4.41/bu

2019

✦ \$9.57/bu

✦ \$9.15/bu

2019

✦ \$6.60/bu

✦ Data taken from MSU
2018 Michigan Malting
Barley Production Survey
(Hamilton, 2019)

QUESTIONS?



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Thank You!



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For more information, please contact:

Ryan Hamilton – MSU Barley Research Team
hamil486@msu.edu

