

Producer Benchmarking for Development of Enterprise Budgets for Malting Barley in Ohio

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Introduction

A new company in Ohio contracting malting barley with Ohio growers to supply a proposed malting house has increased interests in growing malting barley. Malting barley production is risky, as it requires careful management to maximize yield while maintaining quality. Contracts, insurance, and financial planning help minimize marketing and financial risks. In order to reduce financial risk, OSU Extension educators worked with local barley producers to benchmark actual production costs. In a series of face-to-face meetings, growers shared their yields and costs to develop a malting barley budget.

Methodology

- Retool a current Ohio Wheat production budget to reflect revenue and inputs costs differentials associated with a similar small grain such as malting barley
- Search the literature of nearby states that produce malting barley
- Survey a group of Ohio producers currently growing the crop on a limited number of acres
- Convene producers, malting barley buyer and commodity group to go over and discuss the production budget

Data Collection

- North Central Risk Management Education (<http://extensionrme.org/>)
- Ohio Crop Production Budgets at <https://farmoffice.osu.edu>
- Cornell and Michigan State University Small Grains Programs
- Northwest Ohio Barley Growers Cohort

Zoom Call with Extension Educators, malt growers and malt buyer to confirm and clarify the budget numbers

Presented draft budget at the First Annual Wheat and Barley Virtual Summit sponsored by the Ohio Small Grains Council



MALTING BARLEY PRODUCTION BUDGET - 2021									
Conservation Tillage Practices (Grain and Straw)									
Reflects 2000 acres, Conservation Tillage Barley/Con/No-Till RR Soybeans									
Updated: 5/9/2020									
ITEM	EXPLANATION	YOUR PROD. NUMBERS	PRICE PER UNIT	YIELD (bu/A)	YOUR BUDGET	65	75	85	90
RECEIPTS									
Malting Grade Barley ¹	100.0%		\$6.00 /bu	380.00	450.00	510.00	540.00	540.00	540.00
Feed Grade Barley ²	0.0%		\$2.73	0.00	0.00	0.00	0.00	0.00	0.00
ARC/PLC Payment (paid October 2021) ³				19.92	19.92	19.92	19.92	19.92	19.92
Crop Insurance Indemnity				0.00	0.00	0.00	0.00	0.00	0.00
Market Facilitation Payment				0.00	0.00	0.00	0.00	0.00	0.00
Grower or Market Premium				0.00	0.00	0.00	0.00	0.00	0.00
TOTAL BARLEY RECEIPTS				409.92	469.92	529.92	559.92	559.92	559.92
VARIABLE COSTS									
Seed ⁴	1,400,000 seeds	1,400,000	0.0480 /1000 seeds	67.20	67.20	67.20	67.20	67.20	67.20
Fertilizer ⁵									
N (lbs.)	100.0	100.0	100.0	100.0	0.429 /lb	42.86	42.86	42.86	42.86
P ₂ O ₅ (lbs)	24.7	28.5	32.3	34.2	0.285 /lb	9.50	10.96	12.42	13.15
K ₂ O(lbs)	19.3	19.8	21.3	22.5	0.283 /lb	4.90	5.31	6.02	6.36
Lime(ton)	0.25				25 /ton	6.25	6.25	6.25	6.25
Chemicals ⁶									
Herbicide						13.25	13.25	13.25	13.25
Insecticide						0.00	0.00	0.00	0.00
Fungicide						20.00	20.00	20.00	20.00
Drying ⁷	\$0.01 /bushelpoint		15.5 %Harvest moisture	1.30	1.50	1.70	1.80	1.80	1.80
Storage ⁸				1.30	1.50	1.70	1.80	1.80	1.80
Seed Cleaning ⁹				0.00	0.00	0.00	0.00	0.00	0.00
Hauling ¹⁰	\$0.172 /per bushel			11.18	12.90	14.62	15.48	15.48	15.48
Fuel, Oil, Grease ¹⁰				8.33	8.33	8.33	8.33	8.33	8.33
Repairs ¹¹				13.81	13.81	13.81	13.81	13.81	13.81
Crop Insurance ¹²				9.00	9.00	9.00	9.00	9.00	9.00
Miscellaneous ¹³				3.00	3.00	3.00	3.00	3.00	3.00
Hired Custom Work ¹⁴				13.50	13.50	13.50	13.50	13.50	13.50
Hired Labor ¹⁵				0.00	0.00	0.00	0.00	0.00	0.00
Int. on Oper. Cap. ¹⁶	9 mo.		5.00%	7.68	7.78	7.88	7.92	7.92	7.92
TOTAL VARIABLE COSTS				232.77	237.15	241.54	243.73	243.73	243.73
FIXED COSTS									
Labor Charge ¹⁵	1.5 hours		15.00 /hr	22.50	22.50	22.50	22.50	22.50	22.50
Management Charge ¹⁷	5% of gross revenue			19.50	22.50	25.50	27.00	27.00	27.00
Mach. And Equip. Charge ¹⁸				33.79	33.79	33.79	33.79	33.79	33.79
Land Charge ¹⁹				145.00	187.00	235.00	235.00	235.00	235.00
Miscellaneous ²⁰				10.70	10.70	10.70	10.70	10.70	10.70
TOTAL FIXED COSTS				231.49	276.49	327.49	328.99	328.99	328.99
TOTAL COSTS (Grain Only)				464.25	513.64	569.02	572.72	572.72	572.72
RETURN ABOVE VARIABLE COSTS²¹				177.15	232.77	288.38	316.19	316.19	316.19
RETURN ABOVE VARIABLE AND LAND COSTS				32.15	45.77	53.38	81.19	81.19	81.19
RETURN ABOVE TOTAL COSTS				-54.33	-43.72	-39.10	-12.80	-12.80	-12.80
RETURN TO LAND				80.87	143.28	195.50	222.20	222.20	222.20
RETURN TO LABOR AND MANAGEMENT				-12.33	1.28	8.90	36.70	36.70	36.70
RETURN TO LAND, LABOR AND MANAGEMENT				132.67	188.28	243.90	271.70	271.70	271.70

Conclusions

Production Budgets are based off representative average input costs. Individual farmer data provides a better idea on the profitability of a malting barley crop in Ohio.

Land costs are different for every farm and area of Ohio. It is always the fixed cost that generates the most discussion

Malting barley grown on contract must meet malting grade specifics to be a viable alternative to wheat in Ohio, thus more input costs associated with fungicide application to avoid fusarium head scab and possible DON (vomitin)

Malting barley harvest is 10-14-days earlier than wheat, thus giving growers additional growing days and higher yield potential for double crop soybeans.



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