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2017 Costs and Returns Estimate

Eastern Idaho Spring Malting Barley

Ben Eborn, Terrell Sorensen and Jon Hogge



Background and Assumptions

The University of Idaho's costs and returns estimates are based on economic costs, not accounting costs. All resources are valued at a market rate or "opportunity cost". Input prices are based on the data collected annually by the University of Idaho from agricultural supply companies. The selling price for the commodity is typically an historical average, not a current year's price. The cost estimate shown here is typical for growing spring malting barley under irrigation in eastern Idaho. Production practices are based on data from farmers, crop consultants, and extension personnel in eastern Idaho. These aren't University of Idaho recommendations. The practices most closely represent those in Bingham, Bonneville, Jefferson, Madison, and Power counties. Although production practices may be similar for individual farms, each farm has a unique set of resources with different levels of productivity, different production problems, and therefore different costs. Farm size, crop rotation, age and type of equipment, and the quality and intensity of management are all crucial factors that influence production costs.

The Model Farm

The model farm for this costs and returns estimate is a 2,400-acre irrigated farm with 1,600 acres in grain and 800 acres in potatoes. The typical crop rotation is one year of potatoes followed by two years of grain. Corn or an oil seed crop may substitute for grain, and alfalfa hay may be grown in longer rotations.

The farm uses a center pivot irrigation system and surface water delivered to the farm from an irrigation district. The irrigation district charges a flat fee per acre for water. Irrigation power use is based only on pressurization (no lift). Power costs per acre-inch of water applied are calculated using 2017 Idaho Power Schedule 24 Agricultural Irrigation Service rates. Power costs per acre-inch for water pumped from different depths and for different irrigation systems are found in the Crop Input Cost Summary located at:

https://www.uidaho.edu/cals/idaho-agbiz/cropbudgets

Production Practices

After harvest of the previous crop (potatoes), the ground is deep ripped and disk-ripped in the fall. Only the cost of the disk-ripping is assigned to the grain crop. The ground is roller harrowed and planted in April as a single-pass operation. Barley is harvested by the farm operator in August and hauled to a grain elevator and sold. Storage costs are not included. Harvest cost in grain budgets published prior to 2013 was based on a custom rate.

All fertilizer is custom applied in March before planting. A 3-way herbicide mix is ground applied post emergence to control wild oats and broadleaf weeds. A foliar fungicide is applied by air, but may not be needed every year. While an insecticide may be needed in some years, none is included because treatment is infrequent and unpredictable. Spring malting barley receives 18 inches of water during the growing season from May through July; 5 inches in May, 7 inches in June, and 6 inches in July. Two inches of water applied the previous fall are also credited to barley for a total of 20 inches.

Machinery

Equipment used to produce spring grain is shown in Tables 4 and 5. Table 4 lists the equipment and their hourly operating and ownership costs, while Table 5 lists the equipment and their annual ownership costs. Machinery ownership cost (capital recovery) is based on 75% of the replacement cost of a new piece of equipment, except for trucks. Truck prices are for a used vehicle with a new bed. Capital recovery combines depreciation and interest into a single value. To keep machinery prices current between years in which a comprehensive survey is conducted, machinery prices are adjusted using USDA's Farm Machinery Prices Paid Index. Equipment prices are collected approximately every five years.

The University of Idaho uses the budget generator program *Budget Planner* from the University of California-Davis to produce the various tables shown in this publication. Machinery operating and ownership costs are calculated based on engineering equations in this program. Machinery operating costs include fuel, lubricants and repairs.

Labor and Management

The cost of labor used in this study includes a base wage, plus a percentage to account for various payroll taxes (FICA, SUTA & FUTA), and workman's compensation, as well as benefits such as paid vacation/personal leave days, health insurance and bonuses. Labor is classified by the type of work performed. Labor classifications, labor rates and payroll overhead are shown below.

Labor Values

Labor	Base	Payroll	Effective
Class	Rate	Overhead	Rate
General Farm	\$9.85	15%	\$11.35
Labor			
Truck Drivers	\$13.35	15%	\$15.35
Equipment	\$15.75	25%	\$19.70
Operators			
Irrigation Labor			
Set Move: HL &	\$10.75	30%	\$14.00
WL			
Continuous Move:	\$15.75	25%	\$19.70
CP & L			

Set Move includes: handlines and wheellines

Continuous Move includes: center pivots and linear move Payroll overhead for set move systems includes housing

Based on the speed, width and overall field efficiency, *Budget Planner* calculates equipment operator labor hours for all field operations except those performed on a custom basis. Custom operations are listed separately. General farm labor accounts for extra field labor used during planting or harvest. A management fee based on approximately 5% of the total production costs is included. Prior to 2013, the basis of the 5% charge was expected revenue.

Capital, Land and Overhead Costs

Interest on operating capital is charged from the time an input is applied until harvest and is calculated at a nominal rate of 6.25 percent. Interest on intermediate term capital, primarily equipment, is calculated using a nominal rate of 6.0 percent. A general overhead charge, calculated at approximately 2.5 percent of operating expenses, is included to cover unallocated whole-farm costs such as office expenses, legal and accounting fees, cell phones, internet service and utilities. Irrigation power is not included as part of general farm utilities.

Land rent is based on a one-year cash lease for grain and covers the ownership costs (depreciation, interest, and insurance) of the irrigation system. Because the charge for water, irrigation system repairs and irrigation power costs are listed separately, the land rent may appear low because the land owner in many circumstances pays some or even all these expenses.

Budget Format

In addition to the Background and Assumption pages, this publication has six tables presenting a variety of cost and returns information.

Table 1 shows both expected revenue, based on a specified yield and price, and expenses. Expenses are broken into two main categories: operating and ownership. Operating expenses are those that typically vary with the level of production and involve inputs that are used in a single production cycle. Ownership expenses include a systematic cost recovery over the useful life for inputs used in the production process that have a useful life of more than one year. Machinery and land fall into this category. Operating inputs are organized by category. In addition to the cost per unit and cost per acre for each input, a total cost is given for each category. Table 1 also gives a total of all operating, ownership and total costs per acre, as well as these same categories on a yield basis (per bushel, cwt, ton, etc.).

<u>Table 2</u> has most of the same cost information presented in Table 1 but the data is organized by operation for both pre-harvest and harvest costs. Operations can define a single activity, such as seed hauling, or multiple activities as in the case of tillage. The quantity of labor is shown for each operation. The cash costs per acre for labor, machinery costs, materials and custom are also specified. Cash overhead expenses are listed separately as are the non-cash overhead.

<u>Table 3</u> is a monthly cash flow of expenses based on when the operation occurs and when inputs are applied. Field operations are classified as preharvest, harvest and post-harvest.

<u>Table 4</u> lists the equipment used to produce this crop and the costs per hour to operate this equipment. Total annual hours of use for the current crop and for all crops on the farm is also shown.

<u>Table 5</u> lists the purchase price and salvage value of equipment used to produce this crop, as well annual capital recovery and cash overhead expenses.

<u>Table 6</u> provides a ranging analysis, sometime referred to as a sensitivity analysis. It shows how the costs and returns per acre will vary as the yield and/or price ranges above and below the base values from Table 1.

Authors

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Disclaimer

The practices and chemicals specified in the publication are not recommendations. Always read and follow the directions printed on the pesticide label. Due to constantly changing pesticide laws and labels, some pesticides may have been cancelled or had certain uses prohibited. The use of trade names for various products simplifies

presentation of this material and should not be considered an endorsement, nor is any criticism implied of similar products not mentioned.



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TABLE 1. COSTS AND RETURNS PER ACRE TO PRODUCE MALTING BARLEY

	Quantity/	Unit	Price or	Value or Cost/Acre	Your
	Acre	Unit	Cost/Unit	Cost/Acre	Cost
GROSS RETURNS	105.00		1.50	5 60 50	
Malting Barley	125.00	bu	4.50	562.50	
TOTAL GROSS RETURNS	125.00	bu		562.50	
OPERATING COSTS					
Seed:				23.75	
Malting Barley Seed - Spring	95.00	lb	0.25	23.75	
Fertilizer:				56.20	
Dry Nitrogen - Pre-plant	90.00	lb	0.40	36.00	
Dry P2O5	45.00	lb	0.38	17.10	
KŹŎ	10.00	lb	0.31	3.10	
Pesticides/Chemicals:				41.51	
Axial XL	16.40	fl oz	1.00	16.40	
Affinity Tank Mix 50SG	0.60	oz	8.55	5.13	
Starane Ultra	0.30	pint	28.10	8.43	
TwinLine	7.00	floz	1.65	11.55	
Custom:				34.75	
Custom Fertilize: 0 - 400 lbs	1.00	acre	7.25	7.25	
Custom Air Spray - 5 gal. rate	1.00	acre	8.75	8.75	
Custom Haul: barley	125.00	bu	0.15	18.75	
Irrigation:	120100	ou	0110	67.40	
Irrigation Power - Center Pivot	20.00	ac-in	1.94	38.80	
Irrigation Water Assessment - Al	1.00	acre	18.00	18.00	
Irrigation Repairs - CP	20.00	ac-in	0.53	10.60	
Other:	20.00	ue in	0.55	28.00	
Crop Insurance	1.00	acre	28.00	28.00	
Labor	1.00	uere	20.00	52.44	
Equipment Operator Labor	1.66	hrs	19.70	32.77	
Irrigation Labor - CP	0.80	hrs	19.70	15.76	
General Farm Labor	0.34	hrs	11.35	3.91	
Machinery	0.54	ins	11.55	36.09	
Fuel-Gas	2.88	gal	2.40	6.91	
Fuel-Diesel	5.32	gal	2.40	11.45	
Fuel-Road Diesel	0.16	gal	2.13	0.42	
Lube	0.10	gai	2.70	2.82	
Machinery Repair				2.82 14.48	
				14.48 8.46	
Interest on Operating Capital @ 6.25%					
TOTAL OPERATING COSTS/ACRE				348.59	
TOTAL OPERATING COSTS/BU				2.79	
NET RETURNS ABOVE OPERATING COSTS				213.91	

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TABLE 1. CONTINUED

	Quantity/ Acre	Unit	Price or Cost/Unit	Value or Cost/Acre	Your Cost
CASH OVERHEAD COSTS					
General Overhead				10.00	
Land Rent				210.00	
Management Fee				34.00	
Property Taxes				0.00	
Property Insurance				1.44	
Investment Repairs				0.00	
TOTAL CASH OVERHEAD COSTS/ACRE				255.44	
TOTAL CASH OVERHEAD COSTS/BU				2.04	
TOTAL CASH COSTS/ACRE				604.03	
TOTAL CASH COSTS/BU				4.83	
NET RETURNS ABOVE CASH COSTS				-41.53	
NON-CASH OVERHEAD COSTS (Capital Recovery)					
Equipment				55.04	
TOTAL NON-CASH OVERHEAD COSTS/ACRE				55.04	
TOTAL NON-CASH OVERHEAD COSTS/BU				0.44	
TOTAL COST/ACRE				659.07	
TOTAL COST/BU				5.27	
NET RETURNS ABOVE TOTAL COST				-97.07	

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TABLE 2. COSTS PER ACRE TO PRODUCE MALTING BARLEY

	Operation			Cash an	d Labor Cos	ts per Acre		
	Time	Labor	Fuel	Lube	Material	Custom/	Total	Your
Operation	(Hrs/A)	Cost		&Repairs	Cost	Rent	Cost	Cost
Preharvest:								
Irrigation	0.00	15.76	0.00	0.00	38.80	0.00	54.56	
Tillage	0.13	4.73	5.03	4.97	0.00	0.00	14.73	
Applying Fertililzer	0.00	0.00	0.00	0.00	56.20	7.25	63.45	
Seed Hauling	0.03	0.79	0.09	0.16	0.00	0.00	1.03	
Roller Harrow & Plant	0.11	4.07	2.55	4.03	23.75	0.00	34.40	
Crop Insurance	0.00	0.00	0.00	0.00	28.00	0.00	28.00	
Irrigation Water Assessment	0.00	0.00	0.00	0.00	18.00	0.00	18.00	
Irrigation Repairs	0.00	0.00	0.00	0.00	10.60	0.00	10.60	
Applying Pesticides	0.04	1.55	0.68	0.40	41.51	8.75	52.89	
General Pickup Use	0.86	20.39	6.89	2.83	0.00	0.00	30.11	
4-Wheeler Use	0.03	0.79	0.02	0.02	0.00	0.00	0.83	
Service Truck Use	0.03	0.59	0.17	0.07	0.00	0.00	0.83	
Fuel Truck Use	0.03	0.59	0.17	0.08	0.00	0.00	0.84	
TOTAL PREHARVEST COSTS	1.25	49.25	15.60	12.55	216.86	16.00	310.26	
Harvest:								
Harvest	0.13	3.19	3.19	4.75	0.00	0.00	11.12	
Crop Hauling	0.00	0.00	0.00	0.00	0.00	18.75	18.75	
TOTAL HARVEST COSTS	0.13	3.19	3.19	4.75	0.00	18.75	29.87	
Interest on Operating Capital at 6.25%							8.46	
TOTAL OPERATING COSTS/ACRE	1.39	52.44	18.78	17.30	216.86	34.75	348.59	

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TABLE 2. CONTINUED

	Operation _			Cash an	d Labor Cos	ts per Acre		
	Time	Labor	Fuel	Lube	Material	Custom/	Total	Your
Operation	(Hrs/A)	Cost		&Repairs	Cost	Rent	Cost	Cost
CASH OVERHEAD:								
General Overhead							10.00	
Land Rent							210.00	
Management Fee							34.00	
Property Taxes							0.00	
Property Insurance							1.44	
Investment Repairs							0.00	
TOTAL CASH OVERHEAD COSTS/ACRE							255.44	
TOTAL CASH COSTS/ACRE							604.03	
NON-CASH OVERHEAD:		Per Producing		Annual	Cost			
		Acre		Capital Re	ecovery			
Equipment		490.40		55.04			55.04	
TOTAL NON-CASH OVERHEAD COSTS		490.40		55.04			55.04	
TOTAL COSTS/ACRE							659.07	

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TABLE 3. MONTHLY COSTS PER ACRE TO PRODUCE MALTING BARLEY

	OCT 14	NOV 14	DEC 14	JAN 15	FEB 15	MAR 15	APR 15	MAY 15	JUN 15	JUL 15	AUG 15	Total
	14	14	14	15	15	15	15	15	15	15	15	
Preharvest:	5.46							13.64	19.10	16.37		5156
Irrigation Tillage	5.46 14.73							13.04	19.10	10.37		54.56 14.73
Applying Fertililzer	14.75					63.45						63.45
Seed Hauling						03.45	1.03					1.03
Roller Harrow & Plant							34.40					34.40
Crop Insurance							28.00					28.00
Irrigation Water Assessment							18.00					18.00
Irrigation Repairs							10.60					10.60
Applying Pesticides							10100	32.59	20.30			52.89
General Pickup Use	2.74	2.74	2.74	2.74	2.74	2.74	2.74	2.74	2.74	2.74	2.74	30.11
4-Wheeler Use	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.83
Service Truck Use	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.83
Fuel Truck Use	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.84
TOTAL PREHARVEST COSTS	23.15	2.96	2.96	2.96	2.96	66.41	94.99	49.19	42.36	19.33	2.96	310.26
Harvest:												
Harvest											11.12	11.12
Crop Hauling											18.75	18.75
TOTAL HARVEST COSTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.87	29.87
Interest on Operating Capital @6.25%	0.12	0.14	0.15	0.17	0.18	0.53	1.02	1.28	1.50	1.60	1.77	8.46
TOTAL OPERATING COSTS/ACRE	23.27	3.10	3.12	3.13	3.15	66.94	96.02	50.47	43.86	20.93	34.61	348.59
CASH OVERHEAD												
General Overhead	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	10.00
Land Rent						210.00						210.00
Management Fee	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	34.00
Property Taxes												0.00
Property Insurance							1.44					1.44
Investment Repairs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL CASH OVERHEAD COSTS	4.00	4.00	4.00	4.00	4.00	214.00	5.44	4.00	4.00	4.00	4.00	255.44
TOTAL CASH COSTS/ACRE	27.27	7.10	7.12	7.13	7.15	280.94	101.45	54.47	47.86	24.93	38.61	604.03

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TABLE 4. HOURLY EQUIPMENT COSTS

		Malting Barley	Total		Cash Ov	verhead		Operating		
		Hours	Hours	Capital	Insur-		Lube&		Total	- Total
Yr	Description	Used	Used	Recovery	ance	Taxes	Repairs	Fuel	Oper.	Costs/Hr.
15	4-wheeler	53	90	7.01	0.19	0.00	0.56	0.60	1.16	8.36
15	Grain Drill - 24'	175	175	26.35	0.58	0.00	10.28	0.00	10.28	37.21
15	Pickup 1 - 3/4 ton	400	800	8.47	0.16	0.00	3.28	7.99	11.27	19.90
15	Pickup 2 - 3/4 ton	400	800	8.47	0.16	0.00	3.28	7.99	11.27	19.90
15	Roller-harrow -24'	175	175	31.76	0.81	0.00	10.60	0.00	10.60	43.18
15	Tractor - 160hp	64	350	26.62	0.94	0.00	8.25	16.99	25.23	52.79
15	Truck 1P 10-Wheeler	53	345	21.78	0.66	0.00	4.76	2.62	7.38	29.81
15	Sprayer - 50' 200 gal.	58	100	4.45	0.12	0.00	1.96	0.00	1.96	6.53
15	Tractor 2 - 200hp	192	500	24.41	0.82	0.00	11.46	21.22	32.68	57.90
15	Service Truck	40	80	39.30	1.24	0.00	2.86	6.75	9.61	50.14
15	Disk-Ripper - 17'	203	250	29.66	0.66	0.00	25.31	0.00	25.31	55.63
15	RT Tractor - 340hp	223	500	49.26	1.66	0.00	12.56	36.06	48.62	99.54
15	Pickup 3 - 3/4ton	193	375	12.06	0.31	0.00	3.28	7.99	11.27	23.63
15	Pickup 4 - 3/4ton	193	375	12.06	0.31	0.00	3.28	7.99	11.27	23.63
15	Pickup 5 - 3/4ton	193	375	12.06	0.31	0.00	3.28	7.99	11.27	23.63
15	Fuel Truck	40	80	49.10	1.52	0.00	3.31	6.75	10.06	60.68
15	Combine 25' Grain	237	250	142.22	3.48	0.00	32.03	21.50	53.53	199.23

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TABLE 5. WHOLE FARM ANNUAL EQUIPMENT, INVESTMENT, AND BUSINESS OVERHEAD COSTS

ANNUAL EQUIPMENT COSTS

						Cash Ove	rhead		
			Yrs	Salvage	Capital	Insur-			
Yr	Description	Price	Life	Value	Recovery	ance	Taxes	Total	
15	4-wheeler	6,000.00	10	1,500.00	701.41	18.75	0.00	720.16	
15	Grain Drill - 24'	37,000.00	8	8,354.09	5,114.27	113.39	0.00	5,227.65	
15	Pickup 1 - 3/4 ton	42,000.00	5	13,750.00	7,531.45	139.38	0.00	7,670.82	
15	Pickup 2 - 3/4 ton	42,000.00	5	13,750.00	7,531.45	139.38	0.00	7,670.82	
15	Roller-harrow -24'	55,500.00	12	7,687.12	6,164.21	157.97	0.00	6,322.17	
15	Tractor - 160hp	135,000.00	25	11,416.65	10,352.52	366.04	0.00	10,718.56	
15	Truck 1P 10-Wheeler	97,000.00	20	4,000.00	8,348.16	252.50	0.00	8,600.66	
15	Sprayer - 50' 200 gal.	5,000.00	15	480.03	494.19	13.70	0.00	507.89	
15	Tractor 2 - 200hp	162,000.00	20	20,786.46	13,558.83	456.97	0.00	14,015.79	
15	Service Truck	41,000.00	20	3,000.00	3,493.01	110.00	0.00	3,603.01	
15	Disk-Ripper - 17'	59,600.00	8	13,456.86	8,238.12	182.64	0.00	8,420.76	
15	RT Tractor - 340hp	327,000.00	20	41,957.86	27,368.74	922.39	0.00	28,291.14	
15	Pickup 3 - 3/4ton	42,000.00	10	9,000.00	5,023.64	127.50	0.00	5,151.14	
15	Pickup 4 - 3/4ton	42,000.00	10	9,000.00	5,023.64	127.50	0.00	5,151.14	
15	Pickup 5 - 3/4ton	42,000.00	10	9,000.00	5,023.64	127.50	0.00	5,151.14	
15	Fuel Truck	51,000.00	20	3,000.00	4,364.86	135.00	0.00	4,499.86	
15	Combine 25' Grain	325,000.00	10	61,305.01	39,506.00	965.76	0.00	40,471.76	
	TOTAL	1,511,100.00	-	231,444.08	157,838.14	4,356.36	0.00	162,194.50	
	90% of New Cost*	1,359,990.00	-	208,299.67	142,054.32	3,920.72	0.00	145,975.05	

*Used to reflect a mix of new and used equipment

ANNUAL INVESTMENT COSTS

					Cash Ov	erhead			
		Yrs	Salvage	Capital	Insur-				
Description	Price	Life	Value	Recovery	ance	Taxes	Repairs	Total	
INVESTMENT									
TOTAL INVESTMENT	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	

ANNUAL BUSINESS OVERHEAD COSTS

	Units/		Price/	Total
Description	Farm	Unit	Unit	Cost
General Overhead	1600	acre	10.00	16,000.00
Land Rent	1600	acre	210.00	336,000.00
Management Fee	1600	acre	34.00	54,400.00

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TABLE 6. RANGING ANALYSIS - MALTING BARLEY

COSTS PER ACRE AND PER BU AT VARYING YIELDS TO PRODUCE MALTING BARLEY

-			YI	ELD(BU)			
	110.00	115.00	120.00	125.00	130.00	135.00	140.00
OPERATING COSTS/ACRE:							
Preharvest	310.26	310.26	310.26	310.26	310.26	310.26	310.26
Harvest	29.87	29.87	29.87	29.87	29.87	29.87	29.87
Interest on Operating Capital @ 6.25%	8.46	8.46	8.46	8.46	8.46	8.46	8.46
TOTAL OPERATING COSTS/ACRE	348.59	348.59	348.59	348.59	348.59	348.59	348.59
TOTAL OPERATING COSTS/BU	3.17	3.03	2.90	2.79	2.68	2.58	2.49
CASH OVERHEAD COSTS/ACRE	255.44	255.44	255.44	255.44	255.44	255.44	255.44
TOTAL CASH COSTS/ACRE	604.03	604.03	604.03	604.03	604.03	604.03	604.03
TOTAL CASH COSTS/BU	5.49	5.25	5.03	4.83	4.65	4.47	4.31
NON-CASH OVERHEAD COSTS/ACRE	55.04	55.04	55.04	55.04	55.04	55.04	55.04
TOTAL COSTS/ACRE	659.07	659.07	659.07	659.07	659.07	659.07	659.07
TOTAL COSTS/BU	5.99	5.73	5.49	5.27	5.07	4.88	4.71

Net Return Per Acre Above Operating Costs For Malting Barley

PRICE (\$/bu)	YIELD (bu/acre)								
Malting Barley	110.00	115.00	120.00	125.00	130.00	135.00	140.00		
3.75	63.91	82.66	101.41	120.16	138.91	157.66	176.41		
4.00	91.41	111.41	131.41	151.41	171.41	191.41	211.41		
4.25	118.91	140.16	161.41	182.66	203.91	225.16	246.41		
4.50	146.41	168.91	191.41	213.91	236.41	258.91	281.41		
4.75	173.91	197.66	221.41	245.16	268.91	292.66	316.41		
5.00	201.41	226.41	251.41	276.41	301.41	326.41	351.41		
5.25	228.91	255.16	281.41	307.66	333.91	360.16	386.41		

Net Return Per Acre Above Cash Costs For Malting Barley

PRICE (\$/bu)	YIELD (bu/acre)								
Malting Barley	110.00	115.00	120.00	125.00	130.00	135.00	140.00		
3.75	-191.53	-172.78	-154.03	-135.28	-116.53	-97.78	-79.03		
4.00	-164.03	-144.03	-124.03	-104.03	-84.03	-64.03	-44.03		
4.25	-136.53	-115.28	-94.03	-72.78	-51.53	-30.28	-9.03		
4.50	-109.03	-86.53	-64.03	-41.53	-19.03	3.47	25.97		
4.75	-81.53	-57.78	-34.03	-10.28	13.47	37.22	60.97		
5.00	-54.03	-29.03	-4.03	20.97	45.97	70.97	95.97		
5.25	-26.53	-0.28	25.97	52.22	78.47	104.72	130.97		

EASTERN IDAHO

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TABLE 6. RANGING ANALYSIS CONTINUED

Net Return Per Acre Above Total Costs For Malting Barley

PRICE (\$/bu)	YIELD (bu/acre)									
Malting Barley	110.00	115.00	120.00	125.00	130.00	135.00	140.00			
3.75	-246.57	-227.82	-209.07	-190.32	-171.57	-152.82	-134.07			
4.00	-219.07	-199.07	-179.07	-159.07	-139.07	-119.07	-99.07			
4.25	-191.57	-170.32	-149.07	-127.82	-106.57	-85.32	-64.07			
4.50	-164.07	-141.57	-119.07	-96.57	-74.07	-51.57	-29.07			
4.75	-136.57	-112.82	-89.07	-65.32	-41.57	-17.82	5.93			
5.00	-109.07	-84.07	-59.07	-34.07	-9.07	15.93	40.93			
5.25	-81.57	-55.32	-29.07	-2.82	23.43	49.68	75.93			