

Idaho Crop Input Price Summary for 2010

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Background

This publication provides price information for operating inputs commonly used in the production of crops in Idaho. This information is used to develop new or revise existing cost of production estimates for traditional and alternative crops or crop production systems. Input prices include: herbicides, fungicides, insecticides/nematicides, fertilizers, seeds, interest rates, labor, fuel, water assessments, and custom rate charges for chemical and fertilizer applications. Additional custom rates are found in University of Idaho Bulletin 729, *Custom Rates for Idaho Agricultural Operations 2005/2006*. A PDF version of this publication is available on the Internet at <http://info.ag.uidaho.edu/pdf/BUL/BUL0729.pdf> Custom rates shown in the 2005/2006 publication should be increased by between 10 and 20 percent to account for increases in operating and ownership costs since the data was collected. We hope to have an update on the custom rates guide available in the spring of 2011.

The University of Idaho College of Agricultural and Life Sciences publishes costs and returns (CAR) estimates – more commonly referred to as enterprise budgets -- for many of the major crops grown in Idaho. Crop CAR estimates are revised and published every other year in odd-numbered years. Livestock CAR estimates are revised and published in even-numbered years. PDF versions of the CAR estimates can be found on the Internet at <http://www.cals.uidaho.edu/aers> Click on **Resources** and then click on **Crops** or **Livestock**. The crop CAR estimates are also available in Excel format and as data files for the U of I's *Crop Enterprise Budget Worksheet* program. These data files are available at no charge and can be found at the same Internet site.

Idaho crop costs and returns estimates are developed for four geographic regions of the state. Not only are there different crops produced within these regions because of varying climatic and soil conditions, but the crop production practices for the same crop can and do vary significantly by region. The four crop regions include: 1) Northern Idaho (NI), with primary emphasis on Boundary, Clearwater, Idaho, Kootenai, Latah and Lewis counties: 2) Southwestern Idaho (SWI), with primary emphasis on Canyon, Elmore, Owyhee, Payette and Washington counties: 3) Southcentral Idaho (SCI), with primary emphasis on Cassia, Gooding, Jerome, Minidoka, and Twin Falls counties: and 4) Eastern Idaho (EI) with an emphasis on two areas: Bannock, Bingham and Power counties for the southern part of the region and Bonneville, Jefferson, Fremont and Madison counties for the northern portion of the region. The Southcentral region also contains crop costs and returns for subregional areas.

Procedure

The data used to generate the information in this publication were collected by phone and mail surveys conducted between February and August 2010. Cost data reported in this publication are the averages by region, or in the case of labor and interest rates, averages for the state. Sample selection was not random, nor was the sample stratified according to characteristics of the firms. The objective of the surveys was to obtain representative price information within each geographic region, including price information from different firms operating within a region. Firms with multiple outlets in a given geographic area were sampled only once.

Five primary types of businesses were surveyed. These were: 1) irrigation districts and canal companies, 2) custom applicators, 3) agricultural lenders, 4) farm chemical and fertilizer dealers, and 5) seed dealers. The price for seed potatoes and the cost of treating potato seed were obtained from a survey of Idaho seed potato growers and commercial potato growers. The seed potato prices shown in parenthesis in Table 12 are the F.O.B price for whole seed potatoes in the seed producing regions of eastern Idaho. The seed potato price shown for each region includes the F.O.B. seed price from seed potato growers plus handling and transportation costs from the seed area to the commercial potato area of the respective regions.

General Input Costs

Input costs that do not vary consistently between regions and those that do not fit one of the major input categories are found on page 9 in Table 1. These include interest rates and labor costs.

Interest Rates

Agricultural lenders use a risk-rating system to evaluate a customer's credit status. Along with loan volume, the credit score is used in determining the interest rate on a loan. Low risk, high volume borrowers are charged a lower interest rate. Interest rates also vary depending on whether the rate is variable or fixed over the loan period. The interest rate charged on an operating line by most banks is on a "Prime Rate plus basis." Traditionally, the interest rate is 0.5 to 2.5 percent above the Prime Interest Rate. But financially sound borrowers may have a sub-prime rate. The interest rate charged on most operating lines remains variable and fluctuates with the Prime Rate, although the rate may be fixed for a specified period of time, six months for example. The interest rate on intermediate term loans lasting one to eight years was typically 0.25 to 0.75 percent above the operating interest for a given borrower. An increasing number of financial institutions now use LIBOR-based interest rates for term loans (London Inter-Bank Offered Rate), rather than basing them on the prime rate.

Typical interest rates charged on operating and intermediate term loans are shown in Table 1. Operating loan interest rates at the time of the survey (July 2010) ranged between 6.25 and 8.0 percent. A typical interest rate was 7.0 percent. This rate pertains to a low credit risk customer on a moderate to high loan volume. At the time of the survey in July, 2010, the Prime Rate was 3.25 percent, the same rate as July 2009. The spread between the prime interest rate and the rate charged producers on operating lines is currently much wider than it has been in the recent past. Since July, the Fed has not made any interest rate adjustments and is not likely to raise rates until early to mid 2011. The historically low interest rate is designed to provide liquidity for financial markets and fight the recession. While interest rates over the next year will remain low by historical standards, credit availability will remain a more important issue for many borrowers, especially for highly leveraged farmers and ranchers, or for those with a severe or chronic cash flow problem because of lower commodity prices.

The interest rate charged by agricultural lenders on intermediate loans, which is typically from one to seven years, varied from 6.00 to 9.0 percent in the July survey. A typical fixed rate for a low credit risk borrower was 7.5 percent. Financing with a lower interest rate is often available through machinery and equipment dealerships, however.

Labor

Labor charges used in the CAR estimates vary according to the type of job and the skill of the laborer. Three labor categories are used in the University of Idaho CAR estimates (Table 1). "Other labor" pertains to unskilled, seasonal labor hired primarily to help during planting and harvesting. Irrigation labor is the hourly wage equivalent paid to move set-move irrigation systems (handlines and wheellines), or to manage center pivots. Labor for irrigation system repairs is included in the irrigation repair costs. Machinery labor includes semi-skilled laborers that operate tractors and machinery and drive trucks. Compared to 2009, base wage rates increased by approximately 1.5% or \$.10 to \$.20 per hour, varying by the type of labor. Labor costs shown in Table 1 include a base wage plus the employer's payroll tax contribution and other benefits and overhead typically paid by the employer, converted to an hourly basis. The value of these payroll taxes and benefits varies by the class of labor and is expressed as a percent of the base wage. The tax/benefit rate is 15 percent for other labor, and 30 percent for irrigation labor and for machinery labor. The tax/benefit percentages are from a 2008 and earlier labor surveys.

Power Costs

The cost per acre of inch of water applied by different irrigation systems at different lifts (0, 100, 200 and 300 feet) are shown in Table 2. The costs for all irrigation systems are based on a 160-acre field

configuration and Idaho Power's Agricultural Irrigation Schedule 24 for 2010. The standard cost per acre-inch of water applied used in most irrigated crop costs and returns estimates published by the University of Idaho is based on the center pivot with a corner system and zero lift. The 2010 CAR estimates will use \$1.65 per acre-inch for power costs, a decrease of 4.1 percent over the cost in 2009 of \$1.72. Idaho Power's Energy Charge base rate per kilowatt-hour was 3.9397 cents in 2009 and 4.482 cents in 2010, an increase of 13.8%. But the effective power rate (the Energy Charge Base Rate plus the Power Cost Adjustment) decreased 10.3 percent, going from 5.3419 cents per kWh to 4.7936 cents per kWh. The Power Cost Adjustment factor in 2009 was 1.4022 cents and 0.3114 cents in 2010, a decrease of 78%. The demand charge per kW and the monthly service charge increased from \$4.90 and \$15.75, respectively for 2009 to \$5.57 and \$17.92 for 2010. The cost per acre-inch of water applied shows the net impact of all these rate changes.

General Input Costs with Regional Variation

Table 3 on page 10 includes fuel prices by region and Table 4 summarizes the per acre water assessments paid by surface water users in southern Idaho. Table 5 on page 11 summarizes the commonly used custom rate charges by region.

Fuel

For the third year fuel prices were based on the average of multiple samples during the year, rather than the previous practice of sampling only once. Prices in Table 3 are the simple average of prices from four time periods: February, April, June, and August. Prices were rounded to the nearest \$.05. Fuel prices (both diesel and gasoline) were lowest in February and highest in May in all locations. Fuel price varies by location within the state. In general, the price of gasoline and diesel typically increases going from eastern Idaho across southern Idaho. Compared to eastern Idaho, the annual average price of gas was ten cents higher in both western Idaho and in the Magic Valley. Diesel prices in western Idaho averaged ten cents higher than eastern Idaho, while the average price in the Magic Valley was five cents higher. At the time of the August survey, fuel prices in Idaho were trending down. Compared to 2009, unleaded gasoline prices in 2010 were \$0.70 to \$0.75 per gallon higher in southern Idaho and \$0.60 higher in northern Idaho. Compared to 2009, diesel prices in 2010 were \$0.60 per gallon higher in eastern Idaho and northern Idaho, and \$0.65 per gallon higher in the Magic Valley and western Idaho.

Irrigation Water Assessments

Table 4 on page 10 summarizes the water assessments for southern Idaho. These water assessment charges are the simple average of the values reported by irrigation districts and canal companies contacted in each region. The same irrigation districts/canal companies are surveyed each year to maintain a consistent base for price change comparisons. Assessments made on a per share of water basis are converted to a per acre charge. All canal companies and irrigation districts surveyed deliver surface water to the farm in an open ditch.

The average water assessment reported by the seven water organizations surveyed in Southwestern Idaho increased by \$2.30 to \$45.55 per acre from 2009 to 2010, ranging from a low of \$18.00 per acre to a high of \$66.00. The average water assessment charge reported by the four water organizations surveyed in Southcentral Idaho increased by \$4.00 per acre from \$38.20 to \$42.20, ranging from \$24.00 to \$65.00 per acre. Water charges in Eastern Idaho are considerably lower than for the other two areas of southern Idaho, especially in the upper Snake River. The average water assessment reported by the four water organizations surveyed in eastern Idaho increased by \$0.35 from \$14.55 to \$14.80 per acre, ranging from \$9.50 to \$25.00 per acre. The three water organizations in the north end of the region charged an average \$11.40 per acre, a \$.35 increase over 2008, while the one water organization in the south end of the region charged \$25 per acre, the same as 2009.

Custom Rates

Table 5 on page 11 contains the rate charged by aerial applicators for both liquid and dry material applications. Table 5 also lists the custom charges made to apply fertilizer and chemical by various ground methods. Aerial application charges typically vary by the quantity and type of material applied. The charge for applying liquid materials falls into the categories based on the application rate. While other categories exist, Table 5 shows the most common categories: 3-gallon, 5-gallon, 7-gallon, and 10-gallon and 15-gallon rates. Aerial application of dry material is typically charged on a per pound basis with a minimum per acre charge. The minimum per acre charge on dry material is generally based on 100 pounds of material. Many aerial applicators have a sliding scale, charging less per acre for a large job and more per acre for smaller jobs. They may also charge less when fields are large and easily accessible, compared with small or irregularly shaped fields. These same factors help explain some of the regional cost differences. Fields in Eastern Idaho tend to be large, while those in Western Idaho, and to some extent Southcentral Idaho, are smaller. The standard charge in Eastern Idaho is for large fields, while the standard charge in Western Idaho is for small fields. These regional differences are reflected in Table 5. Table 5 also contains costs of other types of services, including the custom application of sulfuric acid to kill potato vines. A complete list of

custom rates can be found in Extension Bulletin 729, Custom Rates of Idaho Agricultural Operations 2005-2006. A PDF can be found at <http://info.ag.uidaho.edu/pdf/BUL/BUL0729.pdf>

Fertilizer Component Prices

The fertilizer component prices found in Table 6 are derived from fertilizer product prices listed in Table 13. Fertilizers in the University of Idaho CAR estimates are typically listed in pounds of element (N, P₂O₅, K₂O, etc.), not product (i.e. 11-52-0). The price per pound for nitrogen (dry and liquid), phosphate (dry and liquid), potassium and sulfur are included in Table 6. The source material is identified in the last footnote below the table.

Table 13 contains the price per ton of various source materials as well as the price per pound for micronutrients. The component price will vary depending on the source material. The dry nitrogen price in Table 6 is based on the price of nitrogen in Urea (46-0-0) and is used for most pre-plant nitrogen applications in the University of Idaho's CAR estimates, while the liquid nitrogen price is based on the price of nitrogen in Solution 32 (32-0-0). The liquid nitrogen price is typically used on post-planting fertilizer applications. Dry phosphate price is based on the price of phosphate in 11-52-0 with the nitrogen in 11-52-0 valued at the price of nitrogen in Urea. The liquid phosphate price is based on the price of phosphate in 10-34-0 with the nitrogen valued at the price of nitrogen in Solution 32. Potassium's price is based on Muriate of potash (0-0-60) and sulfur's price is based on elemental sulfur.

Fertilizer prices were down pretty much across the board, with prices down the most for phosphate and potassium. Dry nitrogen prices in southern Idaho were down by \$0.3 per pound, or by 6%. The southern Idaho average was \$.50 in 2009 and \$.47 in 2010. The price for liquid nitrogen was down by 14%, or \$0.08 in southern Idaho. Dry phosphate prices in southern Idaho were down by \$0.12 or 26%. Potassium prices were lower by \$0.26 compared to last year's prices, or 38% lower. Sulfur prices also dropped by 11%, from \$. 19 to \$.17 per pound.

Herbicide Prices

Table 7, found on pages 13-15, gives herbicide price information for just two regions of Idaho, northern Idaho and southern Idaho. This is the second year where herbicide prices for all three regions of southern Idaho are combined. Dry material is priced per pound or ounce and liquid material is priced per gallon or fluid ounce. There are a few products priced per case, with an equivalent price per ounce. The price of liquid products is generally based on a 2-1/2 gallon container price. Prices are rounded to the nearest \$.05 for most products or to the nearest \$1 on products costing over \$100 per unit. While the list of herbicides is not all encompassing, it covers a

wide range of products currently used on row crops, small grains and other crops for which the University of Idaho has developed CAR estimates.

Sticker/Spreader Prices

The price per gallon for commonly used stickers and spreaders are found on page 16 in Table 8. Prices are rounded to the nearest \$.05 per gallon.

Fungicide Prices

Table 9, found on pages 17-18, contains fungicide price information for two regions of Idaho, northern Idaho and southern Idaho. This is the second year where the prices for all of southern Idaho are combined into one region. Dry material is priced per pound or per ounce and liquid material is priced per gallon or per fluid ounce. Prices were rounded to the nearest \$.05 or the nearest \$1 for products costing more than \$100 per unit. Fumigant prices are listed in Table 10 found on page 18.

Insecticide and Nematicide Prices

Insecticide and nematicide prices are shown in Table 11 on pages 19 and 20 for two regions of Idaho, northern and southern. Dry material is priced on per pound or ounce basis and the price of liquids is per gallon. Prices were rounded to the nearest \$.05 or the nearest \$1 for products costing more than \$100 per unit.

Seed Prices

Table 12 on pages 21-23 contains seed prices by region. Prices are given in the common units for that commodity and include pound, hundredweight, unit (100,000 seeds) in the case of sugarbeet seed, and pail (500,000 seeds) for onion seed. In general, seed prices were obtained only for those crops for which the University of Idaho presently publishes a costs and returns estimate. *Keep in mind that there is a great deal of variability in seed prices for some crops, particularly among different varieties.* The seed prices in Table 12 should be considered representative, but they are by no means comprehensive. Seed prices in Table 12 generally include a seed treatment. Potatoes are an exception with the price to cut and treat potato seed shown separately. Seed treatment on sugarbeets is also listed separately.

Fertilizer Prices

Table 13 on pages 24-25 contains the price information on fertilizer. Prices for the macronutrients are per ton. The formulation of the various materials is also shown. Prices for micronutrients (trace elements) are given both per ton and per pound of element. Caution is advised on the prices for the

trace elements. The price variation is extreme and there are likely subtle but important differences in the source material that were not picked up by the survey.

Costs and Returns Estimates

University of Idaho crop costs and returns estimates are no longer printed but they can be downloaded from the Department of Agricultural Economics and Rural Sociology website at the following URL: <http://www.cals.uidaho.edu/aers> Click on Resources, then on Crops. Each budget is a separate publication, which is stored as a PDF (portable document file). A program called Acrobat Reader is required to view and or print these files. A link to obtain a free copy of Acrobat Reader is also shown on the AERS website.

Further Information

For additional information about publications and other resource materials available from the College of Agriculture, contact Ag Publications, University of Idaho, Moscow, ID 83844-2240 (885-7982). A catalog of all available publications can be found on the Internet at <http://info.ag.uidaho.edu/> Many of these publications are available as PDFs.

If you have any questions or comments regarding the information contained in this publication, contact Paul Patterson (pattersn@uidaho.edu) at the Idaho Falls R & E Center, 1776 Science Center Drive, Suite 205, Idaho Falls, ID 83402-1575 (529-8376), or Dr. Kathleen Painter (kpainter@uidaho.edu) at University of Idaho, AERS Dept., P.O. Box 442334, Moscow, ID 83844-2334 (885-6041).

The authors would like to thank all the companies and individuals who assisted with this publication by providing price information. Because of the confidential nature of the information obtained from companies participating in the survey, it is our policy not to identify the companies that provide information. While this keeps us from publicly thanking the cooperators, it also avoids problems of price disclosure. We would also like to thank the Idaho Potato Commission for their assistance in funding a portion of this project under BDK802, Cost of Potato Production in Idaho.

Table 1. Interest rates and labor costs used for all Idaho crop regions: 2009 and 2010.

		<u>2009</u>	<u>2010</u>
Operating Interest		6.75%	7.0%
Intermediate Term Interest		7.0%	7.5%
	(2010 Base Wage)		<u>Effective Wage</u>
Machinery Labor: cost per hour*	(\$12.15)	\$15.60	\$15.80
Irrigation Labor: cost per hour*	(\$8.65)	\$11.05	\$11.25
Other Labor: cost per hour*	(\$8.10)	\$9.20	\$ 9.30

*Labor cost includes a base wage plus 15 percent for taxes and benefits on other labor and 30 percent on irrigation and machinery labor. Prior to 2009, the percent on irrigation labor was 25%.

Table 2. Irrigation power costs: 2009 and 2010.**Southern Idaho**

Pumping costs are based on Idaho Power's Irrigation Service Schedule 24, and a net water application of 22 inches. Cost per acre inch of water applied will drop when the total water applied is increased because the fixed cost component of the power charge is spread over more inches of water.

	<u>\$/ ac-inch applied</u>	
	<u>2009</u>	<u>2010</u>
Center Pivot w/ Corner System, 0 lift	\$1.72	\$1.65
Center Pivot w/ Corner System, 100 ft. lift	\$3.01	\$2.88
Center Pivot w/ Corner System, 200 ft. lift	\$4.19	\$4.00
Center Pivot w/ Corner System, 300 ft. lift	\$5.36	\$5.11
Center Pivot w/ Endgun, 0 lift	\$1.17	\$1.13
Center Pivot w/ Endgun, 100 ft. lift	\$2.24	\$2.14
Center Pivot w/ Endgun, 200 ft. lift	\$3.24	\$3.09
Center Pivot w/ Endgun, 300 ft. lift	\$4.23	\$4.04
Wheelline, 0 lift	\$1.16	\$1.11
Wheelline, 100 ft. lift	\$2.25	\$2.15
Wheelline, 200 ft. lift	\$3.25	\$3.10
Wheelline, 300 ft. lift	\$4.26	\$4.05
<u>Idaho Power Irrigation Service: Schedule 24</u>	<u>2009</u>	<u>2010</u>
Monthly Service Charge: irrigation season	\$15.75	\$17.92
Monthly Demand Charge per kW: irrigation season	\$4.90	\$ 5.57
Energy Charge Base Rate: per kWh	3.9397¢	4.4822¢
Power Cost Adjustment: per kWh	1.4022¢	0.3114¢
Effective Energy Charge: per kWh	5.3419¢	4.7936¢

Table 3. Fuel prices per gallon by region, 2009 and 2010.

	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
<u>Unleaded Gasoline:</u> **				
2009	\$2.35	\$2.30	\$2.25	\$2.20
2010	\$2.95	\$3.00	\$3.00	\$2.90
Change	+\$0.60	+\$0.70	+\$0.75	+\$0.70
<u>Off-Road Diesel:</u> **				
2009	\$2.05	\$2.00	\$1.95	\$1.95
2010	\$2.65	\$2.65	\$2.60	\$2.55
Change	+\$0.60	+\$0.65	+\$0.65	+\$0.60
<u>Road Diesel:</u>				
2009	\$2.55	\$2.50	\$2.45	\$2.45
2010	\$3.15	\$3.15	\$3.10	\$3.05
Change	+\$0.60	+\$0.65	+\$0.65	+\$0.60

* Northern Idaho (NI), Southwestern Idaho (SWI), Southcentral Idaho (SCI) and Eastern Idaho (EI).

** Price is for bulk delivery to the farm. Fuel prices are the simple average of prices in four months: February, April, July and September.

Table 4. Surface water assessments per acre by region, 2009 and 2010.

	<u>SWI*</u>	<u>SCI*</u>	<u>EI*- All</u>	<u>EI - S</u>	<u>EI - N</u>
2009	\$43.25	\$38.20	\$14.55	\$25.00	\$11.05
2010	\$45.55	\$42.20	\$14.80	\$25.00	\$11.40

* Northern Idaho (NI), Southwestern Idaho (SWI), Southcentral Idaho (SCI) and Eastern Idaho (EI).

** EI - S (eastern Idaho south counties) include: Bannock, Bingham and Power counties, and EI - N (eastern Idaho north counties) include: Bonneville, Jefferson and Madison counties.

Table 5. Custom fertilizer & chemical application rates per acre by region, 2010.

	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
	\$/acre	\$/acre	\$/acre	\$/acre
Custom Aerial Application:				
<u>Liquid Material:**</u>				
3-gallon: Standard	\$6.75	\$6.75	\$5.70	\$5.50
5-gallon: Standard	\$7.25	\$8.50	\$8.50	\$6.90
7 & 7.5-gallon: Standard		\$10.25	\$9.25	\$8.25
10-gallon: Standard		\$12.00	\$11.40	\$9.50
<u>Dry Material:</u>				
Cents per lb	7.50	8.25	8.0	8.0
Minimum Charge per acre	\$6.00	\$9.50	\$8.75	\$8.00
<u>Dry Fertilizer Application:</u>				
Broadcast: air flow applicator		\$9.00	\$7.75	\$6.50
Broadcast: Rowgator		\$9.50		
Variable Rate Application + grid sampling		\$38.00		
Variable Rate Application			\$14.00	\$12.00
<u>Liquid Fertilizer Application:</u>				
Anhydrous applicator rental	\$6.25			
Anhydrous applicator/cultivator rental	\$7.75			
Markout		\$22.00	\$20.00	\$20.25
Sidedress		\$12.50	\$12.00	
Shank-in				
<u>Chemical Application:</u>				
Ground Spray: Grain, Hay, Beans		\$9.00	\$7.25	\$6.50
Ground Spray: Potatoes/Sugarbeets		\$9.50	\$7.80	\$7.00
Ground Spray & Incorporate		\$12.50		
Fumigate: Deep injection		\$35.00	\$32.00	\$34.00
Fumigate: Bedding Row		\$25.00	\$25.50	\$25.00
<u>Other:</u>				
Markout (dry)		\$16.50	\$15.40	\$15.00
Sulfuric Acid: application only		\$18.00	\$10.00	\$ 9.50
Sulfuric Acid & Application: 20 gal/ac		\$38.00	\$30.00	\$29.50
Sulfuric Acid & Application: 30 gal/ac		\$46.00	\$40.00	\$37.00

* Northern Idaho (NI), Southwestern Idaho (SWI), Southcentral Idaho (SCI) and Eastern Idaho (EI).

** The charge to apply sulfuric acid to kill potato vines varies by the amount of product applied. The rate varies between 15 and 40 gallons of sulfuric acid per acre. The application charge varies from \$9 to \$20 per acre and the product charge is \$.80 to \$1.15 per gallon of acid.

Note: Custom rates obtained from Extension Bulletin 729, revised 2006.

Table 6. Fertilizer component prices per pound by region, 2009 and 2010.

	<u>Northern Idaho</u>	<u>Southern Idaho</u>
<u>Dry Nitrogen (46-0-0): **</u>		
2009	\$0.58	\$0.50
2010	\$0.48	\$0.47
% Change	-17%	-6.0%
<u>Liquid Nitrogen (32-0-0): **</u>		
2009	\$0.64	\$0.56
2010	\$0.53	\$0.48
% Change	-17%	-14%
<u>Dry Phosphate (11-52-0)</u>		
2009	\$0.52	\$0.46
2010	\$0.47	\$0.34
% Change	-9.6%	-26%
<u>Liquid Phosphate (10-34-0)</u>		
2009	\$0.76	\$0.63
2010	\$0.52	\$0.50
% Change	-32%	-21%
<u>Potassium (0-0-60)</u>		
2009	\$0.81	\$0.69
2010	\$0.46	\$0.43
% Change	-43%	-38%
<u>Dry Sulfur (Elemental 90%)</u>		
2009		\$0.19
2010	\$0.35	\$0.17
% Change		-11%
<u>Liquid Sulfur (Thiosul)</u>		
2009	\$0.44	
2010	\$0.31	
% Change	-30%	

Note: prior to 2009, prices in southern Idaho were listed by region: southwestern, southcentral and eastern.

Phosphate is P₂O₅ and potassium is K₂O.

Fertilizer prices are given in price per pound of element, not product. Prices in Table 6 are based on average product prices per ton found in Table 13. The nitrogen in 11-52-0 was valued at the cost of urea-based nitrogen in order to calculate the value of the phosphate. The nitrogen in 10-34-0 was valued at the cost of solution 32 nitrogen in order to calculate the value of liquid phosphate.

Table 7. Herbicide prices for northern Idaho and southern Idaho, 2010.

Product	Unit	Northern Idaho*	Southern Idaho*
2,4-DB 200	gal	\$37.60	\$36.00
2,4-D Amine 4	gal	\$17.40	\$17.20
2,4-D Ester LV4	gal	\$21.95	\$20.60
Affinity BroadSpec 50 SG	oz	\$11.90	\$10.40
Affinity TankMix 50 SG	oz	\$9.00	\$8.10
Aim 2EW	gal	\$1,145	\$992
Ally XP DF	oz	\$15.45	\$15.10
Assure II EC	gal	\$134	\$144
Atrazine 4L	gal	\$20.55	\$20.85
Axial XL	gal	\$100	\$122
AZA-Direct	gal		\$177
Balan DF	lb		\$14.00
Banvel 4L	gal	\$47.70	\$74.70
Basagran	gal	\$105	\$107
Beacon	oz	\$31.90	
Beyond	gal	\$593	
Bronate Advanced 2.5 + 2.5EC	gal	\$60	\$48.50
Brox M	gal	\$33	
Brox M Ultra	gal	\$53.35	
Buctril 2EC	gal		\$72.50
Buctril 4EC	gal		\$148
Callisto (4 lb)	gal	\$567	\$627
Casoron 4G	lb	\$3.00	\$2.40
Cerone Plant Regulator	gal		\$97.50
Chateau WDG	lb	\$91.05	\$95.25
Clarity	gal	\$123	\$106
Clopyr 3SL	gal	\$487	\$477
Curtail	gal	\$46.60	\$50.30
Curtail M	gal	\$52.85	\$58.05
Direx 80DF	lb	\$4.80	\$4.25
Direx 4L	gal	\$28.75	\$27.60
Discover NG .5EC	gal	\$150	\$136
Distinct	lb	\$56	\$51.60
Diuron 80DF	lb	\$4.80	\$4.85
Dual Magnum 7.62EC	gal	\$149	\$114

Table 7. Herbicide prices for northern Idaho and southern Idaho, 2010. (cont.)

<u>Product</u>	<u>Unit</u>	<u>Northern Idaho*</u>	<u>Southern Idaho*</u>
Dual II Magnum 7.64EC	gal		\$124
Eptam 7EC	gal	\$53.80	\$42.15
Escort XP	oz	\$14.80	\$12.80
Everest WDG	oz	\$33.50	
Express SG	oz	\$17.65	\$16.25
Far-Go 4EC	gal	\$56.35	
Finesse 75DF	oz	\$18.30	
Fusilade DX	gal	\$241	\$202
Goal 2XL	gal	\$110	\$91.55
GoldSky	gal	\$142	
Gramoxone Inteon	gal	\$37.50	\$35.30
Harmony Extra SG	oz	\$14.15	\$11.95
Harmony Extra XP DF	oz	\$19.25	\$15.65
Harmony GT 75XP	oz	\$23.65	
Harness 7EC	gal		\$112
Hoelon	gal	\$111	
Huskie	gal	\$98.55	\$88.45
Lorox DF	lb	\$20.55	
Matrix 25DF	oz		\$15.65
Maverick WDG	oz	\$18.05	
MCPA-Amine	gal	\$18.60	\$20.60
MCPA-Ester	gal	\$23.10	\$23.45
MH-30	gal		\$17.30
Micro-Tech	gal		\$28.75
Mustang Max	gal	\$215	
Nortron 4SC	gal		\$106
Orion	gal	\$57.90	\$48.00
Osprey 4.5WDG	oz	\$3.60	\$3.10
Outlook 6EC	gal	\$198	\$162
Poast 1.5EC	gal	\$78.00	\$75.50
Powerflex	lb	\$56.40	
Prowl 3.3 EC	gal	\$37.95	\$33.05
Prowl H2O	gal	\$42.90	\$38.70
Puma 1EC	gal	\$222	\$204
Pursuit 2AS	gal	\$603	\$635
Raptor 1SL	gal	\$643	\$617

Table 7. Herbicide prices for northern Idaho and southern Idaho, 2010. (cont.)

Product	Unit	Northern Idaho*	Southern Idaho*
Reglone (Diquat)	gal		\$101
Rely 200	gal		\$56.95
Roundup RT Master III	gal	\$19.65	
Roundup Original Max 6 lb	gal	\$21.00	
Roundup Power Max	gal		\$38.20
Select 2EC	gal	\$219	
Select Max 1EC	gal	\$147	\$150
Sencor 75DF	lb	\$14.05	\$15.00
Metribuzen Generics DF	lb	\$13.00	\$14.00
Metribuzen Generics L	gal		\$74.35
Sinbar 80WP	lb	\$44.10	\$37.25
Sonalan HFP	gal	\$45.05	\$35.50
Spartan 4F	gal	\$610	
Spur (Stinger)	gal	\$418	
Starane 1.5EC	gal	\$110	
Starane NXT	gal	\$75.60	\$66.50
Starane Ultra	gal	\$250	\$241
Starane + Salvo	gal	\$62.25	
Starane + Sword	gal	\$62.25	
Stinger	gal		\$475
Sulfuric Acid	gal		\$0.95
Targa	gal	\$104	\$196
Tordon 22K	gal	\$98.40	\$96.50
Treflan 4 HFP	gal	\$28.10	\$23.50
Treflan TR10	lb	\$1.30	\$0.90
Tricor 75DF	lb	\$13.00	\$13.85
Trilin	gal	\$24.50	
Triflurex HFP 4EC	gal	\$27.10	\$23.80
Velpar 2L	gal	\$84.95	\$73.30
Velpar AlfaMax DG	lb		\$12.90
Weedmaster	gal	\$32.05	\$33.35
Weedone 638	gal	\$29.95	\$27.35
Widematch EC	gal	\$73.85	\$67.10

Note: prior to 2009, prices in southern Idaho were listed by region: southwestern, southcentral and eastern.

Table 8. Sticker/spreader prices for northern Idaho and southern Idaho, 2010.

<u>Product</u>	<u>Unit</u>	<u>Northern Idaho</u>	<u>Southern Idaho</u>
Activate Plus	gal	\$23.30	\$34.00
Activator 90	gal	\$17.10	\$22.25
Ad Wet 90	gal		\$18.55
Ad Here XL	gal		\$28.50
Alliance	gal	\$13.00	\$16.60
Ammonium Sulfate	lb	\$0.35	
Ammonium Sulfate	gal	\$4.80	\$7.25
Breakthru	gal		\$94.00
Class Act	gal	\$12.25	\$13.85
Crop Oil Concentrate	gal	\$11.25	\$12.75
Destiny	gal	\$14.65	\$25.45
Dynamic	gal	\$55.95	
Excel 90	gal		\$30.70
Indicate S	gal		\$39.55
In-Place	gal	\$35.35	
M-90	gal	\$18.05	
Meth. Seed Oil	gal	\$16.35	\$17.55
Non Ionic (R-11)	gal		\$19.50
Preference 1	gal	\$30.05	\$38.25
Preference 2.5's	gal	\$25.15	
Prime Oil	gal	\$13.75	
Quest	gal	\$20.35	
Surf 90	gal		\$17.20

Note: prior to 2009, prices in southern Idaho were listed by region: southwestern, southcentral and eastern.

Table 9. Fungicide prices for northern Idaho and southern Idaho, 2010.

Product	Unit	Northern Idaho*	Southern II*
Amistar	lb	\$128	\$99
Blocker 4F	gal		\$36.00
Bravo Ultrex WDG	lb		\$8.00
Bravo Weather Stik (6 lb)	gal	\$90.55	\$55.50
Bumper 41.8EC (generic Tilt)	gal	\$164	\$125
Curzate 60 DF	lb		\$46.80
Dithane 75DF Rainshield	lb		\$4.45
Dithane F45 Rainshield	gal		\$23.70
Dividend Extreme	lb	\$139	
Echo DF	lb	\$45	
Enable 2F	lb		\$223
Endura	oz		\$5.20
Equus DF	lb		\$8.40
Equus 720	gal		\$40.10
Forum	gal		\$255
Gavel 75DF	lb		\$7.85
Headline	gal	\$366	\$333
Kocide 300	lb	\$9.00	
ManKocide 2000	lb		\$7.15
Manzate 200DF	lb		\$3.85
Maxim MZ	lb		\$3.60
Microthiol Disperss	lb		\$1.30
Moncoat MZ	lb		\$2.40
Moncut 70DF	lb		\$28.30
Omega 500 DF	gal		\$432
Penncozeb 75DF	lb		\$3.70
Pristine	lb		\$46.10
Quadris	gal	\$383	\$311
Quadris Opti	gal	\$111	\$80
Quadris Ridomil Gold	gal		\$750
Quilt	gal	\$161	\$180
Rally WP	oz		\$4.25
Raxil MD	gal	\$62.00	
Raxil Thiram	gal	\$74.00	\$57.30
Raxil XT	lb		\$77.40
Ridomil Gold MZ	lb		\$13.95
Ridomil Gold/Bravo	lb		\$19.95
Rovral 4L	gal		\$161
RTU Vitavax-Thiram	gal	\$39.00	
Stratego	gal	\$235	

Table 9. Fungicide prices for northern Idaho and southern Idaho, 2010 (cont.).

<u>Product</u>	<u>Unit</u>	<u>Northern Idaho</u>	<u>Southern Idaho</u>
Tanos DF	lb		\$32.90
Thiolux	lb		\$1.25
Tilt	gal	\$275	

Note: prior to 2009, prices in southern Idaho were listed by region: southwestern, southcentral and eastern.

Table 10. Fumigant/Nematicide prices for southern Idaho, 2010.

FUMIGANTS:	<u>Unit</u>	<u>Southern Idaho*</u>
Metam Sodium	gal	\$ 4.40
Telone II	gal	\$14.95
Vapam 42%	gal	\$ 4.65
K-Pam	gal	\$ 6.70

Note: prior to 2009, prices in southern Idaho were listed by region: southwestern, southcentral and eastern.

Table 11. Insecticide and nematicide prices for northern and southern Idaho, 2010.

<u>Product</u>	<u>Unit</u>	<u>Northern Idaho</u>	<u>Southern Idaho</u>
Admire Pro	fl oz		\$3.50
Agri-Mek 0.15EC	gal	\$462	\$393
Ambush 25W	lb		\$12.95
Asana XL	gal	\$93.70	\$89.95
Assail 70WP	oz		\$10.95
Assail 30SG	oz		\$6.65
AZA-Direct	gal		\$183
Beleaf 50SG	lb		\$134
Capture 2 EC	gal	\$282	\$257
Carzol	lb		\$44.95
Comite (6.5 lb)	gal	\$96.15	\$80.10
Counter 15G L-N-L	lb		\$2.45
Cruiser 5 FS	gal	2,600	\$2,000
Cruiser Max	gal		\$1,180
Dibrom 8 E	gal		\$92.45
Dimethoate 4EC	gal	\$41.40	\$49.30
Di-Syston L 8E	gal		\$118
Fulfill WDG	oz		\$6.50
Furadan 4F	gal		\$89.90
Gaucho 600	gal	\$850	
Gaucho XT	gal	\$355	
Guthion Solupak	lb		\$12.55
Hero	lb		\$164
Imidan 70WP	lb	\$11.65	\$9.10
Lannate LV	gal		\$74.30
Leverage 2.7	gal		\$233
Lorsban 4 E	gal	\$45.00	\$41.30
Lorsban 15G	lb		\$1.65
Malathion 5 EC	gal	\$40.65	\$35.40
Metasystox R	gal		\$104
Methyl Parathion 4 EC	gal		\$38.75
Mocap 15G	lb		\$2.85
Mocap 6 EC	gal		\$105
Monitor 4	gal		\$168
Mustang 1.5EC	gal		\$263
Mustang Max	gal	\$215	\$199
Oberon 2SC	gal		\$458
Orthene 97	lb		\$9.75
Pennacap-M	gal		\$33.20

**Table 11. Insecticide and nematicide prices for northern & southern Idaho, 2010.
(cont.)**

<u>Product</u>	<u>Unit</u>	<u>Northern Idaho</u>	<u>Southern Idaho</u>
Perm-Up	gal		\$85.80
Phorate 20G	lb		\$3.00
Platinum	fl oz		\$6.30
Proaxis	gal		\$175
Provado 1.6 F	gal		\$268
Regent 4SC	fl oz		\$5.60
Regent 4SC (416 oz)	case		\$2,278
Rimon 0.83 EC	gal		\$182
Sevin 4F	gal	\$53.15	\$43.15
Sevin XLR	gal	\$48.60	\$44.80
Success (2 lb ai Spinosad)	gal		\$704
Supracide 2E	gal		\$59.55
Temik 15G (L-N-L)	lb		\$3.70
Thimet 20G (L-N-L)	lb		\$2.85
Thiodan 2 EC	gal		\$32.00
Vydate C-L-V (3.77 lb)	gal		\$90.40
Vydate L (2 lb)	gal		\$84.00
Warrior w/Zeon Tech.	gal	\$279	\$273
Warrior II w/ Zeon Tech.	gal	\$429	\$404

Note: prior to 2009, prices in southern Idaho were listed by region: southwestern, southcentral and eastern.

Table 12. Seed prices, most include treatment, by region, 2010.

	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
<u>Forage Crops:</u>					
Alfalfa (private) – pre-inoculated	lb	\$2.70	\$3.75	\$3.65	\$4.00
Alfalfa (public) – pre-inoculated	lb	\$1.95	\$3.00	\$2.75	\$2.85
Alfalfa (Ladek)	lb	\$2.65			
Forage Barley, Spring	lb		\$0.25	\$0.24	\$0.24
Triticale	lb			\$0.28	
<u>Corn Seed per bag: 80,000 seed</u>					
Corn Silage, Conventional	bag		\$100-145	\$100-145	
Corn Silage, Roundup Ready (RR)	bag		\$170-195	\$165-195	\$152-175
Corn Silage, RR + Poncho 1250	bag				\$180
Corn Silage, RR + Corn Borer	bag		\$180		
Corn Silage: triple-stack (RR+CB+RW)	bag		\$	\$	\$190-220
Corn Silage: triple stack + LL	bag		\$225-265		\$220
Corn Silage: Liberty Link (LL)	bag		\$105		
Corn Silage: LL + Corn Borer	bag		\$165		
Corn Silage: LL + CB + Root Worm	bag		\$185		
Blue Grass (turf)	lb	\$1.70			
Blue Grass (pasture)	lb	\$1.75			
Brome (Smooth)	lb	\$1.20	\$1.30	\$1.35	\$2.25
Brome (Smooth - Meadow)	lb	\$2.00	\$3.25	\$2.95	
Clover	lb		\$1.75-4.40	\$1.50-4.40	
Orchard Grass	lb	\$1.20	\$2.15	\$1.40	\$2.05
Pasture Mix	lb		\$2.00	\$1.75	\$2.30
Rye Grass	lb		\$1.95	\$1.45	\$3.65
Timothy Grass - Common	lb	\$0.95			
Timothy Grass – Outlaw	lb	\$1.65			
<u>Legumes</u>					
Austrian Winter Peas	lb			\$0.38	\$0.32
Chick Peas (Garbanzo Beans)	cwt	\$48.00			
Edible Dry Spring Peas (stand-up type)	cwt	\$22.15			
Edible Dry Spring Peas (vine type)	cwt	\$20.15			
Lentils - Brewers	cwt	\$41.15			
Lentils – Pardina	cwt	\$44.05			

* Northern Idaho (NI), Southwestern Idaho (SWI), Southcentral Idaho (SCI), and Eastern Idaho (EI).
 Bag of corn seed weighs approximately 50 lbs. Corn seeding rate: 35,000 – 40,000 seeds per acre.

Table 12. (cont.) Seed prices, most prices include treatment, by region, 2010.

	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
<u>Oil Seeds:</u>					
Canola, Roundup Ready	lb	\$9.50			
Canola, non-Roundup Ready	lb	\$5.00			
Mustard	lb	\$2.00			
Rapeseed Seed: spring variety	lb				
Rapeseed Seed: winter variety	lb	\$			
<u>Grain:</u>					
Feed Barley, Spring	lb	\$0.22	\$0.19	\$0.19	\$0.18
Malting Barley, Spring	lb	\$0.23		\$0.26	\$0.21
Malting Barley, Winter	lb			\$0.20	
Oats	lb	\$0.15	\$0.19	\$0.20	\$0.20
^{3/} Wheat: Durum	lb			\$0.20	\$0.19
^{3/} Wheat: Hard Red Spring	lb	\$0.25		\$0.21	\$0.21
^{3/} Wheat: Hard White Spring	lb			\$0.19	\$0.18
^{3/} Wheat: Hard White Winter				\$0.21	
^{3/} Wheat: Hard Red Winter	lb			\$0.20	\$0.19
^{3/} Wheat: Soft White Spring	lb	\$0.21	\$0.19	\$0.17	\$0.16
^{3/} Wheat: Soft White Winter	lb	\$0.23	\$0.18	\$0.20	\$0.17
^{3/} Wheat: Club	lb	\$0.26			
<u>Corn Seed per bag: (80,000 seed)</u>					
Field Corn, Conventional	bag		\$100-145	\$100-155	
Field Corn, Roundup Ready (RR)	bag		\$190	\$175-200	\$170-198
Field Corn, RR + Poncho 1250	Bag		\$180-190		\$180
Field Corn, RR + Corn Borer	bag		\$180		
Field Corn: triple-stack (RR+CB+RW)	bag		\$220-260	\$	\$190-220
Field Corn: triple stack + LL	bag		\$235-265		
Field Corn: Liberty Link (LL)	bag		\$105		
Field Corn: LL + Corn Borer	bag		\$150-165		
Field Corn: LL + CB + Root Worm	bag		\$180-185		

* Northern Idaho (NI), Southwestern Idaho (SWI), Southcentral Idaho (SCI), and Eastern Idaho (EI).
 Bag of corn seed weighs approximately 50 lbs. Corn seeding rate: 35,000 – 40,000 seeds per acre.

Table 12 (cont.). Seed prices, mostly with treatment, by region, 2010.

	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Dry Beans: Commercial, Pintos	cwt		\$40-45	\$40-45	
Dry Beans: Commercial, Pinks	cwt		\$40-47	\$40-47	
Dry Beans: Commercial, Small Reds	cwt		\$40-47	\$40-47	
Onion Seed: 500,000 seeds per pail^{1/}					
Cost to Prime Seed	pail		\$105		
Cost to Coat Seed	pail		\$130		
Yellow (Raw)	pail		\$1,020		
Red (Raw)	pail		\$1,145		
White (Raw)	pail		\$1,000		
Potatoes:					
^{2/} Russet Burbank G-2 (\$8.50)	cwt				\$9.15
^{2/} Russet Burbank G-3 (\$8.00)	cwt		\$10.50	\$9.75	\$9.20
^{2/} Russet. Norkotah G-3 (\$9.80)	cwt		\$12.30	\$11.55	\$11.00
^{2/} Ranger G-3 (\$9.05)	cwt		\$11.55	\$10.80	
	cwt				
Cutting Potato Seed	cwt		\$1.60	\$1.60	\$1.60
Treat Potato Seed**	cwt		\$0.50	\$0.50	\$0.50
Sugarbeet Seed: 100,000 seeds/unit					
Roundup Ready: Raw, Coated & Primed	unit		\$125	\$120	\$120
- Roundup Ready Technology Fee	unit		\$129.50	\$129.50	\$129.50
Nematode Resistance & RUR Fee	unit			\$147	\$147
Insecticide Seed Treatment (Poncho beta)	unit		\$49.00	\$45.75	\$48.00
^{3/} Total Seed Cost: Range	unit		\$303-321	\$295-313	\$297-315
^{3/} Total Seed Cost: Typical	unit		\$303	\$295.00	\$297.50

* Northern Idaho (NI), Southwestern Idaho (SWI), Southcentral Idaho (SCI), and Eastern Idaho (EI).

** Treatment is with Mancozeb and bark. Treatment can cost up to \$2.00 per cwt, or \$3.25 to cut & treat.

^{1/} Approximately 98% of seed sold are coated and 10-20% is primed.

^{2/} Regional seed potato prices include the base price plus regional transportation and handling costs :
SWI, SCI, EI-South and EI-North are \$2.50, \$1.75, \$1.20 and \$0.65 respectively. The values shown above for EI seed potatoes are for the South District counties, except for G2 Russet Burbank, which is for the North District.

^{3/} Price includes technology fee

Table 13. Fertilizer prices for northern Idaho and southern Idaho, Spring/Summer 2010.

<u>Product</u>	<u>Northern Idaho</u>	<u>Southern Idaho</u>
Nitrogen: Price per ton		
Ammonium Sulfate (20-0-0-24)	\$270	\$255
Urea (46-0-0-0)	\$400	\$436
Ammonium Nitrate Solution	\$239	
Anhydrous Ammonia (82%)	\$582	
Aqua Ammonia (23%)	\$175	
Solution 32 (32-0-0-0)	\$342	\$308
Thio Sul (12-0-0-26)	\$290	\$261
Nitro Sul (20-0-0-40)	\$550	
Phosphate: Price per ton		
16-20-0	\$390	\$420
11-52-0 (MAP)	\$580	\$462
10-34-0	\$482	\$432
3-30-0-4		\$365
11-37-0		\$450
0-20-20	\$820	
Potash: Price per ton		
Muriate of Potash (0-0-60-0)	\$550	\$512
Sulfate of Potash (0-0-50-17)		\$645
Liquid Potash	\$188	\$137
KTS (0-0-25-17)	\$770	
Trace: Price per ton.		
Boron (14%)		\$1,600
Copper Sulfate (25%)		\$4,220
Iron (14%)		\$1,040
Manganese Sulfate (30-32%)		\$2,040
Zinc Sulfate (36%)		\$1,960
Sulfur – Elemental (90%)	\$621	\$305
Gypsum	\$390	\$

Note: prior to 2009, prices in southern Idaho were listed by region: southwestern, southcentral and eastern.

Table 13. Fertilizer prices for northern Idaho and southern Idaho, 2010 (cont).

<u>Product</u>	<u>NI*</u>	<u>Southern Idaho*</u>
Trace: Price per lb. of element, not product.		
Boron (14%)		\$0.80
Copper Sulfate(25%)		\$2.10
Iron (14%)		\$0.50
Manganese Sulfate (30-32%)		\$1.00
Zinc Sulfate (36%)		\$1.00
Sulfur – Elemental (90%)	\$0.35	\$0.17

* Northern Idaho (NI), Southwestern Idaho (SWI), Southcentral Idaho (SCI) and Eastern Idaho (EI).