

Idaho Crop Input Price Summary for 2009

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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.

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.ag.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 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 the Blaine-Lincoln county area and the Lemhi-Custer-Butte county area.

Procedure

The data used to generate the information in this publication were collected by phone and mail surveys conducted between February and September 2009. Cost data reported in this publication are the averages by region, or in the case of labor and interest rates, 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 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 2009) ranged between 6.0 and 7.5 percent. A typical interest rate was 6.75 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, 2009, the Prime Rate was 3.25 percent, 1.75 percentage points below the 5.0% rate in July 2008. 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 well into 2010. The historically low interest rate is designed to provide liquidity for financial markets and fight the recession. While interest rates over the next 6 months will remain low, credit availability will become a more important issue for highly leveraged farmers and ranchers, or for those with persistent cash flow problems 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 8.0 percent in the July survey. A typical fixed rate for a low credit risk borrower was 7.0 percent. Cheaper financing 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 2008, base wage rates increased by \$.20 to \$.35 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, 30 percent for irrigation labor (an increase from 25% used previously to account for higher housing costs) and 30 percent for machinery labor. The tax/benefit percentages are from the 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 2009. 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 2009 CAR estimates will use \$1.72 per acre-inch for power costs, an increase of 16.2 percent over the cost in 2008 of \$1.48. Idaho Power's Energy Charge base rate per kilowatt-hour was 3.6402 cents in 2008 and 3.9397 cents in 2009, an increase of 8.2%. But the effective power rate (the Energy Charge plus the Power Cost Adjustment) increased 20.7 percent, going from 4.4266 cents per kWh to 5.3419 cents per kWh. The Power Cost Adjustment factor in 2008 was 0.7864 cents and 1.4022 cents in 2009, an increase of 78%. The demand charge per kW and the monthly service charge increased from \$4.67 and \$15.00, respectively, for 2008 to \$4.90 and \$15.75 for 2009.

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

This is the second year that the estimated fuel prices were based on prices from four time periods rather than one. Prices in Table 3 are the simple average of prices from four time periods: February, April, June, and September. Prices were rounded to the nearest \$.05. The price of fuel (both diesel and gasoline) was lowest in February and highest in September 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 price of gas was ten cents higher in western Idaho and five cents higher in the Magic Valley. Diesel prices in western Idaho averaged five cents higher than eastern Idaho, while the average price in the Magic Valley was the same as eastern Idaho. At the time of the September survey, fuel prices in Idaho were trending down. Compared to 2008, unleaded gasoline prices used in the 2009 crop costs of production estimates are \$1.30 to \$1.35 per gallon lower. Compared to 2008, diesel prices used in the 2009 cost of production estimates are \$1.75 to \$1.80 per gallon lower.

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 \$2.65 to \$43.25 per acre, ranging from a low of \$20.00 per acre to a high of \$66.00. The average water assessment charge reported by the four water organizations surveyed in Southcentral Idaho was the same as 2008 at \$38.20, ranging from \$24.00 to \$55.00 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 \$1.00 to \$14.55 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 \$11.05 per acre, a \$.65 increase over 2008, while the one water organization in the south end of the region charged \$25 per acre, an increase of \$2 per acre over 2008.

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, 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 (e.g. 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 applications. The 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 significantly for nitrogen and phosphate. Dry nitrogen prices were lower across southern Idaho by 39%, or \$0.32 per pound. The southern Idaho average was \$.82 in 2008 and \$.50 in 2009, back down to 2007 levels. The price for liquid nitrogen was down by 34%, or \$0.29 in southern Idaho. Dry phosphate prices in southern Idaho were down by \$0.30 or 39%. Potassium prices were higher by \$0.18 over last year's prices, or 35% higher. Sulfur prices also dropped substantially, from \$0.39 to \$0.19 per pound, a drop of 51%.

Herbicide Prices

Table 7, found on pages 13-15, gives herbicide price information for two regions of Idaho, northern Idaho and southern Idaho. 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 is 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. 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. 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 page 21 and 22 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 23-24 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 Kate 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.

Note: No input cost survey was conducted in northern Idaho for 2008.

Table 1. Interest rates and labor costs used for all Idaho crop regions: 2008 and 2009.

		<u>2008</u>	<u>2009</u>
Operating Interest		7.0%	6.75%
Intermediate Term Interest		7.5%	7.0%
	(2009 Base Wage)		
Machinery Labor: cost per hour*	(\$11.75)	\$14.95	\$15.60
Irrigation Labor: cost per hour*	(\$8.50)	\$10.20	\$11.05
Other Labor: cost per hour*	(\$7.75)	\$8.70	\$ 9.20

*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: 2008 and 2009.**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.

	\$/ ac-inch applied	
	2008	2009
Center Pivot w/ Corner System, 0 lift	\$1.48	\$1.72
Center Pivot w/ Corner System, 100 ft. lift	\$2.59	\$3.01
Center Pivot w/ Corner System, 200 ft. lift	\$3.59	\$4.19
Center Pivot w/ Corner System, 300 ft. lift	\$4.60	\$5.36
Center Pivot w/ Endgun, 0 lift	\$1.01	\$1.17
Center Pivot w/ Endgun, 100 ft. lift	\$1.93	\$2.24
Center Pivot w/ Endgun, 200 ft. lift	\$2.78	\$3.24
Center Pivot w/ Endgun, 300 ft. lift	\$3.63	\$4.23
Wheelline, 0 lift	\$1.00	\$1.16
Wheelline, 100 ft. lift	\$1.93	\$2.25
Wheelline, 200 ft. lift	\$2.79	\$3.25
Wheelline, 300 ft. lift	\$3.65	\$4.26
<u>Idaho Power Irrigation Service: Schedule 24</u>	<u>2008</u>	<u>2009</u>
Monthly Service Charge: irrigation season	\$15.00	\$15.75
Monthly Demand Charge per kW: irrigation season	\$4.67	\$ 4.90
Energy Charge Base Rate: per kWh	3.6402¢	3.9397¢
Power Cost Adjustment: per kWh	0.7864¢	1.4022¢
Effective Energy Charge: per kWh	4.4266¢	5.3419¢

Table 3. Fuel prices per gallon by region, 2008 and 2009.

		<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
<u>Unleaded Gasoline:</u> **					
	2008	na	\$3.65	\$3.60	\$3.50
	2009	\$2.35	\$2.30	\$2.25	\$2.20
<u>Off-Road Diesel:</u> **					
	2008	na	\$3.80	\$3.75	\$3.70
	2009	\$2.05	\$2.00	\$1.95	\$1.95
<u>Road Diesel:</u>					
	2008	na	\$4.30	\$4.25	\$4.20
	2009	\$2.55	\$2.50	\$2.45	\$2.45

* Northern Idaho (NI), Southwestern Idaho (SWI), Sout*central 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, 2008 and 2009.

	<u>SWI*</u>	<u>SCI*</u>	<u>EI*- All</u>	<u>EI – S</u>	<u>EI - N</u>
2008	\$40.60	\$38.20	\$13.55	\$23.00	\$10.40
2009	\$43.25	\$38.20	\$14.55	\$25.00	\$11.05

* 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, 2009.

	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Custom Aerial Application:	\$/acre	\$/acre	\$/acre	\$/acre
<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: no rate or crops specified		\$8.00	\$7.25	\$6.50
Broadcast: Grain or < 500 lbs	\$7.75	\$7.75	\$7.00	\$6.15
Broadcast: Row Crops: 500 – 1,000 lbs		\$8.50	\$7.50	\$6.75
<u>Liquid Fertilizer Application:</u>				
Anhydrous applicator rental	\$6.25			
Anhydrous applicator/cultivator rental	\$7.75			
Markout		\$24.00	\$22.00	\$20.00
Sidedress		\$17.00	\$14.00	
Shank-in				
<u>Chemical Application:</u>				
Ground Spray: Grain, Hay, Beans		\$8.50	\$6.50	\$6.25
Ground Spray: Potatoes/Sugarbeets		\$8.50	\$7.00	\$6.75
Ground Spray & Incorporate				
Fumigate: Deep injection		\$40.00	\$36.00	\$38.00
Fumigate: Bedding Row		\$28.00	\$25.50	\$25.00
<u>Other:</u>				
Markout (dry)		\$16.00	\$15.25	\$15.00
Sulfuric Acid: application only		\$11.75	\$10.00	\$ 9.50
Sulfuric Acid & Application: 20 gal/ac		\$38.00	\$36.00	\$34.50
Sulfuric Acid & Application: 30 gal/ac		\$50.00	\$48.50	\$47.00

* 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 \$14 per acre and the product charge is \$.90 to \$1.00 per gallon of acid.

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

Table 6. Fertilizer component prices per pound by region, 2008 and 2009.

	<u>Northern Idaho</u>	<u>Southern Idaho</u>
<u>Dry Nitrogen (46-0-0): **</u>		
2008		\$0.82
2009	\$0.58	\$0.50
<u>Liquid Nitrogen (32-0-0): **</u>		
2008		\$0.85
2009	\$0.64	\$0.56
<u>Dry Phosphate (11-52-0)</u>		
2008		\$0.76
2009	\$0.52	\$0.46
<u>Liquid Phosphate (10-34-0)</u>		
2008		\$0.98
2009	\$0.76	\$0.63
<u>Potassium (0-0-60)</u>		
2008		\$0.51
2009	\$0.81	\$0.69
<u>Dry Sulfur (Elemental 90%)</u>		
2008		\$0.39
2009		\$0.19
<u>Liquid Sulfur (Thiosul)</u>		
2008		
2009	\$0.44	

Notes: Prior to 2009, prices in southern Idaho were listed by region: southwestern, southcentral and eastern. Values shown for 2008 are the average of the three regional prices reported in 2008.

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. The nitrogen in 10-34-0 was valued at the cost of solution 32 nitrogen.

Table 7. Herbicide prices for northern Idaho and southern Idaho, 2009.

Product	Unit	Northern Idaho*	Southern Idaho*
2,4-DB	gal	\$43.20	\$32.65
2,4-D Amine (4 lb)	gal	\$19.55	\$17.65
2,4-D Ester (LV4)	gal	\$25.85	\$23.25
Affinity BroadSpec 50 SG	oz	\$12.10	\$11.05
Affinity TankMix 50 SG	oz	\$8.85	\$9.05
Aim 2EW	gal	\$250	\$210
Ally 60 XP	oz	\$12.50	\$12.55
Assure II EC	gal	\$140	\$139
Atrazine 4L	gal	\$23.50	\$18.30
Axial 0.83 EC	gal	\$243	
Axial XL	gal	\$184	\$120.00
Banvel 4SC	gal	\$56.90	\$93.50
Banvel SGF	gal	\$49.30	
Basagran	gal	\$107	\$87.95
Beacon	oz	\$33.00	
Beyond	gal	\$645	
Bronate 4EC	gal	\$48.95	
Bronate Advanced (2.5 lb)	gal	\$64.40	\$51.25
Brox M	gal	\$50.50	
Buctril 2EC	gal	\$72.20	\$69.95
Callisto (4 lb)	gal	\$686	\$558
Casoron	lb	\$3.10	\$2.45
Cerone	gal	\$124	\$104
Chateau WDG	lb	\$115	\$94.75
Clarity	gal	\$125	\$100
Clopyr Ag 3SC	gal	\$250	
Curtail	gal	\$48.05	\$46.80
Curtail M	gal	\$52.50	\$53.50
Direx 80DF	lb	\$5.50	\$5.40
Direx 4E	gal	\$27.70	\$26.15
Direx 4L	gal	\$28.50	
Discover 2EC	gal	\$525	\$530
Discover .5EC	gal	\$157	\$135
Distinct	lb		\$49.40
Diuron 80DF	lb	\$5.15	\$5.25

Table 7. Herbicide prices for northern Idaho and southern Idaho, 2009. (cont.)

Product	Unit	Northern Idaho*	Southern Idaho*
Dual Magnum 7.62EC	gal	\$139	\$111
Dual II Magnum 7.64EC	gal	\$149	\$117
Eptam 7EC	gal	\$51.50	\$39.60
Escort XP	oz	\$19.45	\$13.00
Everest	gal	\$34.40	
Express XP	oz	\$22.25	\$17.35
Far-Go EC	gal	\$55.80	
Finesse 75DF	oz	\$19.50	
Fusilade	gal	\$210	\$189
Goal 2XL	gal	\$117	\$84.10
Gramoxone Inteon	gal	\$39.00	\$35.20
Harmony Extra 75DF	oz		\$11.00
Harmony Extra XP	oz	\$17.05	\$15.80
Harmony GT XP	oz	\$26.60	\$20.80
Harness	gal		\$82.00
Hoelon	gal	\$111	
Huskie	gal	\$113	\$97.35
Lorox DF	lb	\$20.15	
Matrix 25DF	oz		\$16.95
Maverick WDG	oz	\$18.75	
MCPA-Amine	gal	\$24.45	\$18.80
MCPA-Ester	gal	\$28.10	\$24.65
MH-30	gal		\$18.10
Micro-Tech	gal		\$29.20
Mustang	gal	\$265	
Nortron 4SC	gal		\$97.95
Orion	gal	\$136	
Osprey	oz	\$3.70	\$2.90
Outlook 6EC	gal	\$197	\$155
Poast 1.5EC	gal	\$80.85	\$69.10
Poast Plus	gal		\$53.80
Prowl 3.3 EC	gal	\$38.00	\$27.80
Prowl H2O	gal	\$44.30	\$37.85
Puma EC	gal	\$217	\$161
Pursuit Plus EC	gal		\$58
Pursuit WDG	gal	\$523	\$608

Table 7. Herbicide prices for northern Idaho and southern Idaho, 2009. (cont.)

Product	Unit	Northern Idaho*	Southern Idaho*
Raptor	gal	\$666	\$609
Reglone (Diquat)	gal		\$98.50
Rely	gal		\$45.35
Rhomene	gal	\$22.15	
Roundup RT Master III	gal	\$56.85	
Roundup Original Max	gal	\$60.50	\$65.00
Roundup Power Max	gal	\$56.85	\$68.90
Roundup Weather Max	gal	\$69.55	
Select 2EC	gal	\$193.50	
Select Max	gal	\$155	\$137
Sencor 75DF	lb	\$17.15	\$16.05
Sencor 4L	gal	\$101	\$94.90
Metribuzen Generics DF	lb	\$15.15	\$14.35
Metribuzen Generics	gal		\$89
Sinbar 80W	lb	\$44.20	\$37.80
Sonalan HFP	gal	\$44.40	\$35.85
Stalwart 8EC	gal		\$34.00
Starane 1.5EC	gal	\$135	
Starane NXT	gal	\$74.40	\$70.65
Starane Ultra	gal	\$287	\$232
Starane + Salvo	gal	\$62.85	
Starane + Sword	gal	\$64.85	
Steadfast 75DF	oz		\$22.00
Stinger (Spur)	gal	\$283	
Stinger 3EC	gal		\$337
Sulfuric Acid	gal		\$1.30
Targa	gal	\$120	
Tordon 22K	gal	\$130	\$125
Treflan 4 HFP	gal	\$28.75	\$24.70
Treflan TR10	lb	\$1.25	\$0.85
Tricor 75DF	lb	\$15.15	\$15.75
Trilin	gal	\$25.25	
Triflurex HFP	gal		\$24.00
UpBeet 50 DF	oz		\$54.35
Velpar L	gal	\$89.00	\$71.70
Weedmaster	gal	\$38.95	\$32.40
Weedone 638	gal	\$30.25	\$28.55
Widematch EC	gal	\$82.75	\$77.65

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

Table 8. Sticker/spreader prices for northern Idaho and southern Idaho, 2009.

<u>Product</u>	<u>Unit</u>	<u>Northern Idaho</u>	<u>Southern Idaho</u>
Activate Plus	gal	\$26.65	
Activator 90	gal	\$13.50	\$20.00
Ad Wet 90	gal		\$20.15
Ad Here XL	gal		\$21.00
Alliance	gal	\$13.85	\$11.15
Ammonium Sulfate	lb	\$0.42	\$0.39
Ammonium Sulfate	gal	\$5.60	
Breakthru	gal		\$112
Class Act	gal	\$12.25	\$13.70
Crop Oil Concentrate	gal	\$13.80	\$11.85
Destiny	gal	\$19.55	\$20.60
Dynamic	gal		\$54.50
Indicate S	gal		\$38.50
Induce	gal		\$27.50
In-Place	gal	\$29.05	
M-90	gal	\$19.50	
Meth. Seed Oil	gal	\$17.75	\$14.60
Non Ionic (R-11)	gal		\$21.00
Preference 1's	gal	\$29.90	
Preference 2.5's	gal	\$19.75	
Prime Oil	gal	\$15.30	
Quest	gal	\$16.65	\$17.50

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, 2009.

Product	Unit	Northern Idaho*	Southern II*
Acrobat 50WP	lb		
Amistar	lb	\$127	
Bravo Ultrex WDG	lb		\$6.50
Bravo Weather Stik (6 lb)	gal	\$90.50	\$60.00
Bumper 41.8EC	gal	\$314	\$220
Curzate 60 DF	lb		\$36.00
Dithane 75DF Rainshield	lb		\$2.40
Dithane F45 Rainshield	gal		\$27.55
Dividend Extreme	lb	\$151	\$130
Endura	oz		\$5.55
Equus DF	lb		\$6.70
Equus 720	gal		\$43.50
Forum	gal		\$250
Gavel DF	lb		\$6.50
Gem 25WG	oz		\$7.20
Headline	gal	\$395	\$355
Kocide 2000	lb		\$4.80
Manzate 200DF	lb		\$5.00
Maxim MZ	lb		\$4.00
Moncoat MZ	lb		\$2.20
Moncut 70DF	lb		\$25.15
Omega 500 DF	gal		\$420
Penncozeb 75DF	lb		\$4.15
Pristine	lb		\$44.70
Quadris	gal	\$402	\$359
Quadris Opti	gal	\$110	\$85.50
Quadris Ridomil Gold	gal		\$765
Quilt	gal	\$171	\$137
Rally WP	oz		\$4.35
Ranman	gal		\$730
Raxil MD	gal	\$69.45	
Raxil Thiram	gal	\$74.00	\$58.50
Raxil XT	lb		\$75.00
Reason 500SC	gal		\$368
Ridomil Gold MZ	lb		\$13.00
Ridomil Gold MZ WG	lb		\$12.80
Ridomil Gold/Bravo	lb		\$18.40
Ridomil Gold/Copper GR	lb		\$13.00
Rovral 4L	gal		\$160
RTU Vitavax-Thiram	gal	\$39.00	

Table 9. Fungicide prices for northern Idaho and southern Idaho, 2009 (cont.).

<u>Product</u>	<u>Unit</u>	<u>Northern Idaho</u>	<u>Southern Idaho</u>
Stratego	gal	\$235	\$145
Super Tine 80WP	lb		\$36.00
Tanos DF	lb		\$26.50
Tilt	gal	\$354	\$270
Ultra Flourish	gal		\$330
Vitavax	gal		\$42

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

Table 10. Fumigant prices for southern Idaho, 2009.

<u>Product</u>	<u>Unit</u>	<u>Southern Idaho</u>
Metam Sodium	gal	\$ 4.50
Telone II	gal	\$11.90
Vapam 42%	gal	\$ 4.65
K-Pam	gal	\$ 5.05

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, 2008.

<u>Product</u>	<u>Unit</u>	<u>Northern Idaho</u>	<u>Southern Idaho</u>
Admire Pro	oz		\$4.05
Agri-Mek 0.15EC	gal		\$558
Asana XL	gal	\$109	\$95.70
Assail 70WP	oz		\$14.50
Assail 30SG	oz		\$6.40
AZA-Direct	gal		\$183
Beleaf 50SG	lb		\$129
Capture 2 EC	gal	\$282	\$254
Carzol	lb		\$50.70
Comite (6.5 lb)	gal	\$101	\$82.30
Counter 15G L-N-L	lb		\$2.40
Cruiser 5 FS	gal		\$1,875
Cruiser Max	gal	\$1,210	\$1,137
Dibrom 8 E	gal		\$92.65
Dimethoate 4EC	gal	\$47.00	\$46.20
Di-Syston L 8E	gal	\$142	\$118
Fulfill WDG	oz		\$6.30
Furadan 4F	gal		\$80.40
Gaucho 600	gal	\$902	
Gaucho XT	gal	\$335	
Gaucho	lb		\$2.80
Guthion Solupak	lb		\$12.45
Hero	lb	\$144	\$149
Imidan 70W	lb	\$10.65	\$8.80
Lannate LV	gal		\$68.85
Leverage 2.7	gal		\$307
Lorsban 4 E	gal	\$46.60	\$42.30
Lorsban 15G	lb		\$1.90
Malathion 5 EC	gal	\$40.50	\$30.90
Metasystox R	gal		\$92.10
Methyl Parathion 4 EC	gal	\$59.70	
Mocap 15G	gal		\$2.40
Mocap 6 EC	gal		\$82.00
Monitor 4	gal		\$130
Mustang Max	gal	\$265	\$224
Oberon 2SC	gal		\$340
Orthene 97	lb		\$13.10
Pennacap-M	gal		\$31.70

Table 12. Seed prices, mostly with treatment, by region, 2009.

	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Alfalfa (private)	lb	\$4.50	\$3.10	\$3.50	\$3.50
Alfalfa (public)	lb	\$3.00	\$2.55	\$2.50	\$2.75
Alfalfa (Lakek)	lb	\$3.90			
Feed Barley, Spring	lb	\$0.22	\$0.23	\$0.21	\$0.24
Malting Barley, Spring	lb			\$0.26	\$0.24
Malting Barley, Winter	lb			\$0.22	
Dry Beans: Commercial, Pintos	lb		\$0.56	\$0.56	
Chick Peas (Garbanzo)	lb	\$0.47			
Canola, Roundup Ready	lb	\$9.20			
Corn Seed per bag: 80,000 seed					
Field Corn, Conventional	bag		\$95	\$135	\$120
Field Corn, Roundup Ready (RR)	bag		\$165	\$160	\$180
Field Corn, RR + Corn Borer	bag		\$195		
Field Corn: triple-stack (RR+CB+RW)	bag		\$245	\$200	\$220
Field Corn: Liberty Link (LL)	bag		\$105		
Field Corn: LL + Corn Borer	bag		\$135		
Field Corn: LL + CB + Root Worm	bag		\$180		
Bluegrass (common)	lb	\$1.70			
Bluegrass (proprietary)	lb	\$3.20			
Brome (smooth)	lb		\$2.30	\$1.65	\$2.00
Orchard Grass	lb	\$2.08	\$3.35	\$2.50	\$3.35
Timothy Grass	lb	\$1.50			
Lentils	lb	\$0.49			
Oats	lb	\$0.14	\$0.24	\$0.28	\$0.28
Dry Peas	lb	\$0.26			
Rapeseed Seed: spring variety	lb				
Rapeseed Seed: winter variety	lb	\$0.50			

* Northern Idaho (NI), Southwestern Idaho (SWI), Southcentral Idaho (SCI), and Eastern Idaho (EI).
 Bag of corn seed weighs approximately 50 lbs. Corn seeding rate: 30,000 – 40,000 seeds per acre.

Table 12 (cont.). Seed prices, mostly with treatment, by region, 2009.

	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Onion Seed: 500,000 seeds per pail					
Prime & Coat	pail		\$85		
Yellow	pail		\$1,098		
Red	pail		\$1,228		
White	pail		\$1,118		
Sugarbeet Seed: 100,000 seeds/unit					
Roundup Ready: Raw Coated	unit		\$102	\$102	\$102
Roundup Ready: Primed	unit		\$112	\$112	\$112
Roundup Ready Technology Fee	unit		\$106	\$106	\$106
Nematode Resistance & RUR Fee	unit				\$148
Insecticide Seed Treatment (Poncho beta)	unit				\$49.50
^{1/} Total Seed Cost: Range	unit				\$208-\$250
^{1/} Total Seed Cost: Typical	unit		\$258	\$258	\$258
^{2/} Potatoes: R. Burbank G-2 (\$14.00)	cwt				\$14.65
^{2/} Potatoes: R. Burbank G-3 (\$13.00)	cwt		\$15.50	\$14.75	\$14.20
^{2/} Potatoes: R. Norkotah G-3 (\$16.00)	cwt		\$18.50	\$17.75	\$17.20
^{2/} Potatoes: Ranger G-3 (\$13.00)	cwt		\$15.50	\$14.75	
^{2/} Potatoes: Shepody G-3 (\$13.00)	cwt		\$15.50	\$14.75	
Cut Potato Seed	cwt		\$1.30	\$1.30	\$1.30
Cut and Treat Potato Seed**	cwt		\$2.00	\$2.00	\$2.00
^{3/} Wheat: Hard Red Spring	lb	\$0.27		\$0.26	\$0.23
^{3/} Wheat: Hard White Spring	lb				\$0.20
^{3/} Wheat: Hard White Winter				\$0.24	\$0.18
^{3/} Wheat: Hard Red Winter	lb	\$0.22			\$0.17
^{3/} Wheat: Soft White Spring	lb	\$0.23	\$0.21	\$0.18	\$0.17
^{3/} Wheat: Soft White Winter	lb	\$0.20	\$0.17	\$0.18	\$0.16
^{3/} Wheat: Club	lb	\$0.23			

* 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 \$3.50 to cut & treat.

^{1/} Price includes technology fee.

^{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/} Wheat and barley seed price includes treatment with fungicide. This adds 1-2 cents per pound.

Table 13. Fertilizer prices for northern Idaho and southern Idaho, Spring/Summer 2009.

<u>Product</u>	<u>Northern Idaho</u>	<u>Southern Idaho</u>
Nitrogen: Price per ton		
Ammonium Sulfate (20-0-0-24)	\$349	\$273
Urea (46-0-0-0)	\$567	\$461
Anhydrous Ammonia (82%)	\$748	\$1,300
Aqua Ammonia (23%)	\$180	
Solution 32 (32-0-0-0)	\$372	\$361
Thio Sul (12-0-0-26)	\$363	\$253
Phosphate: Price per ton		
16-20-0	\$490	\$380
11-52-0	\$655	\$593
10-34-0	\$623	\$540
Potash: Price per ton		
Muriate of Potash (0-0-60-0)	\$1,010	\$823
Sulfate of Potash (0-0-50-17)		\$1,183
Liquid Potash		\$255
Trace: Price per ton.		
Boron (14%)	\$1,425	\$1,281
Copper Sulfate (25%)		\$3,300
Iron (14%)		\$1,190
Manganese Sulfate (30-32%)		\$2,150
Zinc Sulfate (36%)	\$2,700	\$2,273
Sulfur – Elemental (90%)		\$344
Gypsum	\$247	\$300

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

Table 13. Fertilizer prices for northern Idaho and southern Idaho, 2009 (cont).

<u>Product</u>	<u>NI*</u>	<u>SWI*</u>
Trace: Price per lb. of element, not product.		
Boron (14%)	\$5.10	\$4.65
Copper Sulfate(25%)		\$6.35
Iron (14%)		\$1.05
Manganese Sulfate (30-32%)		\$3.20
Zinc Sulfate (36%)	\$3.75	\$3.10
Sulfur – Elemental (90%)		\$0.19

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