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Background

This publication provides price information for operating inputs commonly used to produce crops in Idaho. The information can be used to develop or modify cost of production estimates for traditional or alternative crops or cropping systems. Input prices include: herbicides, fungicides, insecticides/nematicides, fertilizers, seeds, interest rates, labor, fuel, water assessments, custom rate charges for chemical and fertilizer applications and crop insurance rates. Additional custom rates are found in University of Idaho Bulletin 729, *1998/99 Custom Rates for Idaho Agricultural Operations*. A PDF version of this publication is available on the Internet at

<http://info.ag.uidaho.edu/pdf/BUL/BUL0729.pdf>

The University of Idaho College of Agricultural and Life Sciences publishes costs and returns (CAR) estimates -- also 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**.

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 vary significantly by region. The four crop regions include: 1) Northern Idaho (NI) with primary emphasis on Benewah, Boundary, Clearwater, Kootenai and Latah counties 2) Southwestern Idaho (SWI) with primary emphasis on Canyon, Elmore, Owyhee and Payette counties, 3) Southcentral Idaho (SCI) with primary emphasis on Jerome, Twin Falls, Cassia and Minidoka counties, and 4) Eastern Idaho (EI) with an emphasis on two areas: Power, Bingham, and Bannock counties for the southern part of the region and Bonneville, Madison, Fremont and Jefferson 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

Cost data reported in this publication are the averages by region. The data were collected by phone and mail surveys conducted during July and August 2005. 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 was obtained from a survey of Idaho seed potato growers. The seed potato prices shown in Table 10 are the F.O.B price for whole seed potatoes in the seed producing area, plus the cost of handling and transportation 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. This is a catchall category and includes interest rates, labor costs and the irrigation power rates for Idaho Power.

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 can 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." Typically, the interest rate is 0.5 to 2.5 percent above the Prime Interest Rate. The rate charged on the operating line can remain variable and fluctuate with the Prime Rate. It can also 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 0.50 percent above the operating interest for a given borrower.

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 2005) ranged between 6.5 and 8.25 percent. A typical interest rate was 7.5 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, 2005 the Prime Rate was 6.25 percent, a full 2 percentage points higher than last year. The Fed has increased short-term interest rates twice since July. The Fed increased rates by an additional ¼ percentage

point at their August 7th meeting and again on September 20th, which pushed the prime to 6.75 percent. Further ¼ % point increases are expected over the next 6 to 12 months as concerns over inflation because of hurricane Katrina and rising energy costs outweigh concern of an economic slowdown. The interest rate charged on intermediate loans, money borrowed from one to seven years, varied from 6.75 to 8.5 percent in the August survey. A typical rate was 7.75 percent. This rate assumes a fixed rather than a variable rate loan, and a low credit risk borrower. Cheaper financing is generally available through many machinery dealerships.

Labor

Labor charges used in the CAR estimates vary according to the type of job and the skill of the laborer. There are three labor categories used in the University of Idaho CAR estimates. These are shown in 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 handlines and wheelines, or to manage center pivots. Machinery labor includes semi-skilled laborers that operate tractors, machinery and drive trucks. The irrigation and other labor costs shown in Table 1 are based on a 2001 survey of potato farmers in southern Idaho, adjusted to 2005 using the USDA's Wage Rate 1990-92 Prices Paid Index. From the 2001 average wage index to the 2005 July preliminary index, the Wage Rate Index changed from 146 to 164, or 12.3 percent. The 2001 wage rates were increased by 12 percent. The labor costs include a base wage, plus the employer's payroll tax contribution and other benefits and overhead typically paid by the employer. The value of benefits varies by the class of labor and is expressed as a percent of the base wage. The benefit rate is 15 percent for other labor, 25 percent for irrigation labor and 30 percent for machinery labor. The benefit percentages also come from the 2001 and earlier labor surveys.

Power Costs

The cost per acre of inch of water applied using a center pivot irrigation system with a corner system for a 160 acre field (152 irrigated), a 69 percent pumping plant efficiency and zero feet of lift (pressurization only) was \$1.39, based on Idaho Power's Agricultural Irrigation Schedule 24 for 2005. This standard cost per acre-inch of water applied is used in most irrigated crop costs and returns estimates published by the University of Idaho. The cost per acre-inch of water applied with a wheeline irrigation system with a 200-foot lift was \$2.62. This is based on a 160-acre field (154 irrigated) and 64 percent pumping plant efficiency. While the energy charge per kilowatt-hour increased 7.0 percent from 2004 to 2005 (3.2618 cents vs 3.4897 cents), the effective rate (the base rate plus the power cost adjustment) increased 8.7 percent,

from 3.7672 cents per kWh to 4.0949 cents per kWh. Demand charge per kW increased from \$4.02 to \$4.19. The monthly service charge remained unchanged at \$12 month.

General Input Costs With Regional Variation

Table 2 on page 8 includes fuel prices, water assessments and fertilizer component prices by region. The fertilizer component prices found in Table 2 are derived from fertilizer product prices listed in Table 9. Fertilizer in the University of Idaho CAR estimates is listed in pounds of element, not product. The price per pound for nitrogen (dry and liquid), phosphate (dry and liquid), potassium and sulfur are included in Table 2. The source material is identified in the last footnote below the table.

Fuel

Fuel price varies by location within the state. In general, the price of gasoline typically increases going from eastern Idaho across southern Idaho. While the price of gas was eight cents higher in western Idaho compared to eastern Idaho, gas prices in the Magic Valley were lower at the time of the survey. Diesel prices do not always follow a consistent price difference by region. In general, however, diesel prices are cheapest in eastern Idaho and increase going west. But in the 2005 survey, prices were nearly identical across southern Idaho, varying by only one or two cents. Fuel prices in southern Idaho were obtained the last week of July, while fuel prices in northern Idaho were obtained the fourth week of August, reflecting the significant run up in prices that occurred during August. Fuel prices will likely stay high and volatile at prices well above \$2 per gallon for both gasoline and diesel. Nominal prices set new records but inflation adjusted prices at the time of the survey remained below the record real price of just over \$3 per gallon for gasoline in 1981. Since the survey in July/August, real prices have set all time records. Unleaded gasoline prices were roughly \$.30 per gallon higher than those obtained at the same time of year for last year's survey. Diesel prices were \$.50 to \$.65 higher than in 2004. The price for gasoline shown in Table 2 is for bulk delivery un-leaded with the road-use tax included. The price for diesel is for bulk delivery and does not include the road-use tax.

Irrigation Water Assessments

A typical water assessment charge for each region is shown in Table 2. 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 water to the farm in an open ditch.

The average water assessment reported by the seven water organizations surveyed in Southwestern Idaho increased by \$.85 to \$34.45 per acre, ranging from a low of \$20.00 per acre to a high of \$45.00. The average water assessment charge reported by the four water organizations surveyed in Southcentral Idaho increased by \$3 to \$30.20, ranging from \$19.00 to \$40.00 per acre. Water charges in Eastern Idaho are considerably lower than for the other two areas of southern Idaho. The average water assessment reported by the four water organizations surveyed decreased by \$.65 to \$12.40 per acre, while per acre charges ranged from \$9.00 to \$21.00 per acre. The three water organizations in the north end of the region charged an average \$9.50 per acre, a \$.40 increase, while the one water organization in the south end of the region charged \$21 per acre, a \$4 decrease.

Fertilizer Component Prices

The component fertilizer prices, shown in Table 2, can be used to revise cost estimates where fertilizer is specified by element, not by total pounds of product. Table 10 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 2 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 on nitrogen in Solution 32 (32-0-0). The liquid nitrogen price is typically used on post-planting 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 (46-0-0). 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 Urea. Potassium price is based on Muriate of potash (0-0-60).

Custom Rates

Table 3 on page 10 contains the rate charged by aerial applicators for both liquid and dry material applications. Table 3 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 3 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 irregular 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 3. The rates charged for ground application were obtained primarily from fertilizer and chemical retailers who also sell the product. Table 3 also contains costs of other types of services, including the custom application of sulfuric acid to kill potato vines.

Herbicide Prices

Table 4, found on pages 11-13, gives regional price information for herbicides. Dry material is priced per pound and liquid material is priced per gallon or ounce. There are a few products priced per case. The price of liquid products was generally based on a 2-1/2 gallon container price. Prices are rounded to the nearest \$.05. 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 14 in Table 5. Prices are rounded to the nearest \$.05.

Fungicide Prices

Table 6, found on page 15-16, contains regional price information for commonly used fungicides. Dry material is priced per pound and liquid material is priced per gallon or per ounce. Prices for the liquid products were based on a 2-1/2 gallon container. Prices were rounded to the nearest \$.05. Fumigants are listed in Table 7 found on page 16.

Insecticide and Nematicide Prices

Insecticide and nematicide prices are shown in Table 8 on pages 17 and 18. Dry material is priced on a per pound basis and the price of liquids is per gallon, based on a 2-1/2 gallon container price. Prices were rounded to the nearest \$.05.

Seed Prices

Table 9 on page 19 contains seed prices by region. Prices are per pound, per hundredweight, per unit in the case of sugarbeet seed, and per pail 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, particularly among different varieties.* The seed prices in Table 9 should be considered representative, but they are by no means comprehensive. Seed prices in Table 9 generally include a seed treatment. Potatoes are an exception.

Fertilizer Prices

Table 10 on pages 20-21 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. Some 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.

Crop Insurance

Crop insurance rates vary considerably even within a narrow geographic area. The insurance rates on page 21 in Table 11 are expressed in the cost per \$100 of insured crop value. These "typical" rates were obtained from crop insurance companies in each region. The insurance is based on hail-fire, not multiple peril. The values in Table 11 should not be used uncritically as insurance rates should reflect risk. Higher insurance costs should be used in areas with high loss potential and lower rates for lower risk areas. An example of how to convert these to per acre value follow. Consider a farmer producing irrigated wheat in southcentral Idaho. If the farmer wished to insure \$300 of crop value per acre, the insurance cost per acre would be \$6, given the \$2 rate per \$100 of crop value.

Costs and Returns Estimates

Crop costs and returns estimates can be obtained at county Extension offices, normally for a fee, or they can be downloaded from the Department of Agricultural Economics and Rural Sociology website at the following URL: <http://www.ag.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).

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 (529-8376) or Bob Smathers (rsmather@uidaho.edu) at the Department of Agricultural Economics and Rural Sociology, P.O. Box 442334, University of Idaho, Moscow, ID 83843 (885-6934).

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. General input rates and costs, 2005.

	<u>All Regions</u>
Operating Interest	7.50%
Intermediate Term Interest	7.75%
Machinery Labor: cost per hour*	\$13.15
Irrigation Labor: cost per hour*	\$ 8.75
Other Labor: cost per hour*	\$ 7.70
Pumping Cost per Acre Inch of Water Applied	
Based on 2005 IPC Rate: Center Pivot, 0 lift	\$1.39
Based on IPC 2005 Rate: Wheelline, 200 ft. lift	\$2.62
<u>2005 Idaho Power Irrigation Service: Schedule 24</u>	
Monthly Service Charge: irrigation season	\$12.00
Monthly Demand Charge per kW: irrigation season	\$ 4.19
Energy Charge Base Rate: per kWh	3.4897¢
Power Cost Adjustment: per kWh	0.6052¢
Effective Energy Charge: per kWh	4.0949

* Labor includes a base wage plus 15 percent for taxes and benefits on other labor, 25 percent on irrigation labor, and 30 percent on machinery labor.

Table 2. Fuel, water assessments and fertilizer component prices by region, 2005.

	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Gasoline: per gallon - bulk delivery**	\$2.66	\$2.37	\$2.26	\$2.29
Diesel: per gallon - bulk delivery**	\$2.45	\$2.09	\$2.07	\$2.08
Water Assessment: per acre		\$34.45	\$30.20	\$12.40
Eastern Idaho: South District				\$21.00
Eastern Idaho: North District				\$9.50
Dry Nitrogen per lb*** (46-0-0-0)	\$.40	\$.42	\$.39	\$.39
Liquid Nitrogen per lb*** (32-0-0-0)	\$.50	\$.47	\$.45	\$.43
Dry Phosphate (P ₂ O ₅) per lb*** (11-52-0)	\$.25	\$.24	\$.23	\$.24
Liquid Phosphate (per lb*** (10-34-0)	\$.36	\$.33	\$.31	\$.28
Potassium (K ₂ O) per lb*** (0-0-60)	\$.24	\$.22	\$.22	\$.21
Sulfur per lb	\$.17	\$.16	\$.14	\$.12

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

** Gasoline price includes road use tax, diesel price does not. Fuel prices for northern Idaho were obtained the week of August 22nd and the fuel prices for all other regions was obtained the last week of July.

*** Fertilizer prices are per pound of element, not product, and are based on values found in Table 10. Price will vary depending on source material. Nitrogen in 11-52-0 and 10-34-0 was valued at cost of N in urea.

Table 3. Custom fertilizer & chemical application rates by region, 2005.

	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Custom Aerial Application: price/acre				
Liquid Material:**				
3-gallon: Standard		\$6.10	\$6.00	\$5.75
5-gallon: Standard	\$6.50	\$6.50	\$6.45	\$6.20
7-gallon: Standard	\$7.10	\$7.80	\$7.30	\$6.85
10-gallon: Standard	\$8.00	\$8.50	\$8.25	\$7.65
15-gallon: Standard		\$12.00		
Dry Material:				
Price per lb	\$0.065	\$0.06	\$0.06	\$0.065
Minimum charge per acre	\$6.50	\$7.50	\$6.90	\$6.50
Dry Fertilizer Application: price/acre				
Spinner Truck: <500 lbs	\$6.50	\$7.25	\$5.55	\$4.65
Spinner Truck: >500 lbs	\$6.50		\$6.86	\$5.25
Air Machine: < 500 lbs	\$2.75	\$6.90	\$5.70	\$4.95
Air Machine: > 500 lbs	\$2.75	\$6.50	\$7.05	\$5.40
Fertilizer Spinner Cart, Rental	\$1.75		\$1.20	\$1.35
Fertilizer Air Cart, Rental		\$3.35	\$2.95	
Liquid Fertilizer Application: price/acre				
Markout		\$14.75		\$14.50
Sidedress		\$11.40		
Shank-in				\$28.00
Chemical Application: price per acre				
Ground Spray: Grain, Hay, Beans			\$5.40	\$5.15
Ground Spray: Potatoes/Sugarbeets		\$8.50	\$6.75	\$5.85
Ground Spray & Incorporate		\$12.00		
Fumigate: Deep injection		\$23.75		
Fumigate: Bedding Row		\$18.25		
Other				
Sulfuric Acid: application only			\$ 8.00	\$ 8.00
Sulfuric Acid & Application: 20 gal/ac			\$26.50	\$24.75
Sulfuric Acid & Application: 30 gal/ac			\$34.50	\$32.75

* 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 18 and 40 gallons of sulfuric acid per acre. The application charge varies from \$8 to \$12 per acre and the product charge is \$.70 to \$.80 per gallon of acid.

Table 4. Herbicide prices by region, 2005.

<u>Product</u>	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
2,4-DB	gal		\$33.15	\$35.60	\$35.00
2,4-D Amine (4 lb)	gal	\$14.65	\$14.25	\$14.55	\$13.35
2,4-D Ester (LV4)	gal	\$18.25	\$15.85	\$16.90	\$16.15
2,4-D Ester (LV6)	gal		\$19.75	\$23.25	\$22.50
Accent SP	oz		\$34.65	\$40.65	\$37.45
Accent Gold	oz			\$9.25	
Achieve SC 2.16 gal per case	case	\$543.00		\$533.40	\$520.00
Aim 40WDG	oz		\$8.80		\$9.00
Aim EW (1.9 lb)	gal				
Ally XP	oz	\$19.55	\$24.20	\$28.00	\$26.00
Amber 75DF	lb	\$9.95			\$10.75
Assure II EC	gal	\$144.15	\$131.35	\$145.45	\$141.65
Assert 2.5EC	gal	\$100.70		\$96.75	\$89.00
Atrazine 4L	gal	\$14.15	\$13.20	\$12.65	\$12.25
Atrazine 90 DF	lb	\$4.60	\$3.75		\$2.95
Avenge 2LC	gal	\$49.65			
Balan	lb		\$11.00	\$12.10	
Banvel 4SC	gal	\$80.60	\$88.25	\$101.35	\$87.50
Banvel SGF	gal	\$45.00			
Barrage	gal	\$39.10			
Basagran	gal	\$95.40	\$81.40	\$89.40	\$85.30
Beacon	oz	\$28.70			
Betamix 1.3EC	gal		\$93.35	\$104.73	\$97.60
Beyond	gal	\$566.70		\$595.00	\$581.10
Brash	gal	\$39.65			\$30.45
Bronate (4 lb)	gal	\$44.80	\$50.00		\$38.35
Bronate Advanced (2.5 lb)	gal	\$67.00	\$60.35	\$64.70	\$65.10
Bromox (4 lb)	gal			\$59.20	\$39.00
Brox-M	gal			\$38.00	
Buctril 2EC	gal	\$70.25	\$62.05	\$70.90	\$68.25
Callisto (4 lb)	gal		\$536.10	\$627.20	\$591.95
Casoron	lb	\$2.70	\$2.15	\$2.40	\$2.25
Cerone	gal	\$112.15		\$94.20	\$85.50
Clarity	gal	\$113.45	\$94.15	\$102.45	\$104.90
Clopyr Ag	gal		\$455.00	\$468.45	\$431.00
Curtail 2.38SC	gal	\$45.50	\$38.75	\$45.15	\$44.50
Curtail M 2.77SC	gal	\$52.55	\$44.80	\$51.45	\$49.50
Direx 80DF	lb	\$22.55	\$4.05	\$4.15	\$4.00
Direx 4E	gal	\$20.60	\$18.05	\$19.65	\$19.00
Discover (5 gal/case)	case	\$700.50	\$640.00	\$682.35	\$653.95

Table 4. Herbicide prices by region, 2005. (cont.)

<u>Product</u>	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Distinct	lb		\$41.35	\$45.70	
Diuron 80DF	lb	\$22.55	\$4.10	\$3.65	\$4.35
Dual Magnum	gal	\$130.20	\$99.70	\$116.85	\$104.80
Dual II Magnum EC	gal	\$126.60	\$107.45	\$127.10	\$128.20
Eptam 7EC	gal	\$41.80	\$34.60	\$36.70	\$35.40
Eradicane 6.7E	gal	\$35.10	\$30.00	\$34.40	\$32.45
Etho SC	gal			\$101.75	\$88.00
Escort	oz	\$24.15	\$20.75	\$22.65	\$23.00
Everest	oz	\$29.20		\$28.65	\$29.00
Express XP	oz	\$21.90	\$19.50	\$21.55	\$20.75
Far-Go 10G	lb	\$1.10			
Far-Go EC	gal	\$55.70		\$52.75	\$56.10
Finesse 75DF	oz	\$16.80		\$17.00	\$16.25
Frontier	gal	\$109.60	\$84.80		
Fusilade	gal	\$160.95	\$138.00	153.60	\$165.80
Glean 75DF	oz	\$17.95		\$18.65	\$17.85
Goal 2XL	gal	\$110.70	\$92.65	\$103.40	\$105.55
Gramoxone Extra	gal		\$45.00		
Gramoxone Max	gal	\$50.85	\$41.20	\$47.75	\$46.35
Harmony Extra 75DF	oz				\$14.10
Harmony Extra XP	oz	\$14.60	\$13.10	\$14.55	\$14.20
Harmony GT XP	oz	\$13.00	\$12.20	\$13.45	\$12.95
Harness	gal		\$86.80	\$93.60	\$97.10
Hoelon 3EC	gal	\$80.90			
Karmex 80DF	lb		\$4.10	\$3.90	\$4.50
Landmaster BW	gal		\$20.50	\$19.75	\$19.75
Lasso	gal		\$26.35	\$26.70	
Matrix 25DF	oz		\$13.30	\$13.50	\$13.65
Maverick	lb	\$16.65		\$17.20	\$16.55
MCPA-Amine	gal	\$18.70	\$16.00	\$18.05	\$18.25
MCPA-Ester	gal	\$21.20	\$18.50	\$20.30	\$19.75
MCPA 2 lb Sodium Salt	gal	\$11.95	\$10.10		\$11.75
MH-30	gal		\$17.50	\$20.50	\$17.95
Nortron 4SC	gal		\$107.00	\$118.10	\$115.25
Option	oz		\$11.05	\$12.50	
Oust	gal	\$15.15			
Outlook 6EC	gal	\$175.05	\$140.70	\$158.75	\$146.75
Paramount	lb			\$55.05	\$52.10

Table 4. Herbicide prices by region, 2005. (cont.)

<u>Product</u>	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Peak	oz	\$13.10			\$19.00
Poast 1.5EC	gal	\$85.50	\$68.30	\$75.20	\$69.60
Poast Plus	gal		\$53.00	\$62.65	
Princep 4L	gal			\$18.15	\$16.00
Progress 1.8EC	gal		\$107.05	\$118.75	\$112.65
Prowl 3.3 EC	gal	\$26.50	\$21.00	\$23.70	\$22.40
Prowl H2O	gal	\$38.35	\$29.65	\$34.35	\$29.85
Puma EC	gal	\$211.95	\$187.30	\$205.30	\$191.45
Pursuit W	gal	\$525.25	\$527.10	\$545.45	\$597.90
Pursuit WDG	oz	\$12.60	\$12.30	\$12.45	
Pyramin 65DF	lb			\$16.50	\$15.55
Raptor	gal	\$609.20	\$514.90	\$581.20	\$572.30
Rave WDG	oz	\$27.05		\$1.70	
Reglone (Diquat)	gal		\$84.75	\$98.55	\$97.75
Ro-Neet 6EC	gal		\$64.40	\$74.95	\$77.25
Roundup RT Master II	gal	\$28.10			
Roundup Ultra Max RT	gal	\$23.00	\$32.00	\$26.35	\$34.60
Roundup Ultra Max II	gal	\$58.95	\$35.00		\$41.50
Select 2EC	gal	\$236.00	\$195.45	\$212.60	\$201.35
Sencor 75DF	lb	\$21.65	\$20.40	\$22.25	\$19.65
Sencor 4L	gal	\$23.60	\$105.85	\$114.15	\$105.35
Sinbar 80W	lb	\$38.00	\$29.85	\$33.40	\$36.50
Sonalan HFP	gal		\$27.95	\$31.10	\$31.95
Spartan 75DF	lb	\$60.10	\$45.50	\$53.00	
Stalwart	gal		\$72.50	\$82.55	\$68.00
Starane 1.5EC	gal	\$111.80	\$102.20	\$104.55	\$105.50
Stinger 3EC	gal	\$288.00	\$473.00	\$498.50	\$513.45
Tordon 22K	gal	\$115.05	\$93.85	\$96.40	\$105.55
Treflan 4 HFP	gal	\$21.30	\$28.00	\$32.95	\$19.65
Treflan TR10	lb	\$1.10	\$1.00	\$1.10	\$1.10
Trilin	gal	\$21.70	\$19.05	\$22.00	\$19.80
UpBeet 50DF	oz		\$44.75	\$49.65	\$44.90
Velpar L	gal	\$69.10	\$56.25	\$64.75	\$62.85
Weedmaster	gal	\$35.40	\$30.95	\$29.80	\$33.85
Weedone 638	gal		\$23.35	\$25.40	\$24.55

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

Table 5. Sticker/spreader prices by region, 2005.

<u>Product</u>	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Actriivate Plus	gal	\$23.45			
Activator 90	gal			\$29.55	\$15.75
Ad Wet 90	gal		\$18.75	\$18.00	
Ad Here XL	gal		\$35.00	\$27.65	
Aero-Dynamic	gal			\$52.55	
Alliance	gal		\$11.00		\$10.45
Breakthru	gal		\$116.00	\$87.50	\$99.00
Celoxone	gal	\$106.90			
Class Act	gal	\$9.00	\$6.90		\$9.35
Crop Oil	gal		\$8.70	\$10.50	\$10.95
Destiny	gal	\$15.30	\$10.75		\$13.82
Dynamic	gal			\$45.60	
Excel 90	gal			\$22.00	
Indicate S	gal			28.20	
Interlock	gal				\$42.00
Load Out	gal			\$30.40	
Meth. Seed Oil	gal		\$14.90	\$14.35	\$13.50
Non Ionic	gal		\$14.40	\$10.45	
Placement	gal				\$40.00
Preference	gal		\$13.50		\$14.75
Prime Oil	gal	\$10.40			
Rivot	gal	\$49.40			
Spreader 90	gal				\$18.00
Superb HC	gal		\$11.00		
Quest	gal			\$18.05	\$16.85

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

Table 6. Fungicide prices by region, 2005.

<u>Product</u>	<u>Unit</u>	<u>NI*</u>	<u>WI*</u>	<u>SCI*</u>	<u>EI*</u>
Acrobat 50WP	lb		\$20.50	\$21.80	\$21.60
Amistar	lb		\$86.50	\$96.80	\$90.50
Blocker 4F	gal		\$26.90	\$30.75	\$29.80
Bravo Zn	gal			\$37.95	\$32.20
Bravo Ultrex WDG	lb		\$6.75	\$7.00	\$6.95
Bravo Weather Stik (6 lb)	gal	\$56.70	\$45.35	\$52.45	\$46.80
Curzate 60 DF	lb			\$38.30	\$35.85
Dithane 75DF Rainshield	lb		\$2.70	\$3.30	\$2.60
Dithane F45 Rainshield	gal		\$15.15	\$14.95	\$14.65
Dividend	gal			\$149.35	
Echo DF	lb			\$5.95	\$5.20
Endura	oz		\$5.40	\$5.65	\$33.40
Equus DF	lb			\$5.75	
Equus 720	gal		\$34.50	\$35.95	\$39.40
Fosphite	gal				\$17.90
Gavel DF	lb			\$5.30	\$5.50
Gem 25WG	oz		\$3.35	\$3.50	\$4.05
Headline	gal	\$266.65	\$220.35	\$236.75	\$237.00
Kocide 2000	lb		\$2.75	\$3.35	\$3.25
Kocide 4.5 LF	gal		\$27.75	\$31.55	\$29.40
Manzate 200DF	lb			\$3.20	\$2.40
Maxim MZ	lb			\$3.40	\$3.30
Mertect 340F	gal		\$233.50	\$223.20	\$250.10
Microthiol Disperss	lb		\$0.70	\$0.65	\$0.85
Moncoat MZ	lb			\$2.40	\$1.75
Moncut 70DF	lb		\$26.50	\$29.95	\$27.00
Omega 500 DF	gal			\$402.85	\$362.35
Penncozeb 75DF	lb			\$2.85	\$2.45
Phostrol	gal			\$19.85	\$16.50
Previcur Flex	lb			\$82.55	
Quilt	gal	\$155.60	\$118.50	\$130.85	\$125.65
Rally WP	oz		\$4.75	\$5.45	\$5.20
Raxil Thiram	gal		\$50.75	\$55.75	\$55.95
Ridomil Gold EC	gal		\$712.25	\$810.25	\$792.25
Ridomil Gold MZ	lb		\$11.65	\$13.05	\$12.65
Ridomil Gold/Bravo 81 WP	lb		\$18.00	\$18.50	\$18.21
Ridomil Gold/Copper 70 WP	lb		\$13.40	\$14.35	\$14.90
Rovral 4L	gal		\$157.00	\$174.85	\$161.45
RTU Vitavex Thiram	gal		\$38.50		

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

Table 6. Fungicide prices by region, 2005 (cont.).

<u>Product</u>	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Stratego	gal			\$173.00	\$
Super Tin 80WP	lb		\$34.30	\$33.55	\$35.60
Tanos DF	lb		\$22.25	\$24.90	\$23.45
Tilt	gal	\$336.95	\$347.40	\$413.00	\$377.70
Tilt Plus	oz	\$1.45			
Tops 2.5	lb				\$2.50
Tops MZ	lb			\$2.65	\$2.60
Topsin 4.5 FL	gal			\$121.50	\$132.65
Topsin MWSP	lb		\$19.00	\$18.30	
Ultra Flourish	gal		\$350.00	\$413.00	
Vitavax/Thiram RTU	gal				\$40.00

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

Table 7. Fumigant prices by region, 2005.

<u>FUMIGANTS:</u>	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Metam Sodium	gal		\$3.55	\$3.65	\$3.60
Telone II	gal		\$11.70	\$12.25	\$10.20
Telone C17	gal			\$13.95	
Vapam 42%	gal		\$3.55	\$3.80	\$3.65
K-Pam	gal			\$5.30	

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

Table 8. Insecticide and nematicide prices by region, 2005.

<u>Product</u>	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Admire 2F	gal		\$599.00	\$625.70	\$605.20
Agrimec EC	oz		\$675.00		
Ambush 2E	gal				\$135.00
Assail 70WP	lb		\$13.75	\$16.05	\$
Asana XL	gal	\$121.60	\$99.80	\$106.05	\$102.50
Capture 2EC	gal	\$452.75	\$378.00	\$419.60	\$416.65
Comite	gal		\$83.00	\$91.80	
Counter 15G L-N-L	lb		\$2.10	\$2.35	\$2.10
Cruiser 5FS	gal			\$2300.00	\$2300.00
Cygon 400 (Dimethoate)	gal	\$37.20	\$35.40		\$39.00
Dibrom 8E	gal		\$75.50	\$83.15	\$95.55
Dimate	gal			\$25.65	
Di-Syston L 8E	gal		\$94.90	\$105.95	\$112.70
Fulfill WDG	oz		\$5.55	\$6.30	\$38.25
Furadan 4F	gal		\$81.10	\$89.75	\$87.00
Gaucho	lb			\$4.40	\$4.35
Genesis FL	gal			\$565.00	\$590.00
Guthion 50WP	lb		\$10.40	\$12.35	\$11.80
Imidan 70WP	lb	\$9.15	\$7.30	\$9.60	\$7.50
Lannate LV	gal		\$55.90	\$58.45	\$23.70
Leverage 2.7	gal		\$440.00	\$403.15	\$438.70
Lorsban 4E	gal		\$35.95	\$43.70	\$37.00
Lorsban 15G	lb		\$1.75	\$1.85	\$1.90
Malathion 5 EC	gal		\$25.85	\$31.75	\$26.45
Malathion 8 EC	gal		\$34.75	\$33.70	
Malathion 6% Grain Dust	lb		\$1.00	\$1.25	\$0.95
Malathion 57EC	gal			\$22.90	
Metasystox R	gal		\$80.40	\$81.20	
Methyl Parathion	gal	\$43.85	\$36.50	\$33.54	
Mocap 10G Lock 'n Load	lb		\$1.90	\$2.45	\$1.35

Table 8. Insecticide and nematicide prices by region, 2005. (cont.)

<u>Product</u>	<u>Uni</u> <u>t</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Mocap 15G	gal		\$2.10	\$2.10	\$2.40
Mocap 6EC	gal		\$76.30	\$81.35	\$78.45
Monitor 4	gal		\$99.00	\$100.95	\$100.10
Mustang	gal			\$213.90	\$196.45
Mustang Max	gal	\$299.70	217.60	\$238.95	\$253.80
Orthene 75S	lb		\$10.80	\$12.05	
Pennacap-M	gal		\$30.00	\$30.55	\$33.00
Perm-Up	gal			\$113.65	\$90.00
Phaser 3EC	gal				
Phorate 20G	lb			\$2.00	\$2.35
Platinum	oz		\$9.50	\$10.95	\$10.20
Pounce 3.2EC	gal			\$145.50	\$96.50
Provado 1.6F	gal		\$485.75	\$594.00	\$519.40
Provado Solupak 75%WP	oz				\$584.10
Reldan 4E	gal		\$200.00	\$218.00	\$238.25
Sevin 4F	gal		\$29.70	\$33.65	\$33.00
Sevin XLR	gal		\$30.75	\$35.50	\$33.60
Success (2 lb)	gal		\$160.00		\$172.15
Supracide	gal		\$49.55		
Temik 15G (L-N-L)	lb		\$3.45	\$3.45	\$3.75
Tempo SC Ultra	gal	\$786			
Thimet 20G (L-N-L)	lb		\$2.35	\$2.35	\$2.45
Thiodan 2EC	gal		\$29.50		\$33.35
Vydate C-L-V (3.77 lb)	gal		\$70.00	\$76.80	\$76.35
Vydate L (2 lb)	gal		\$63.35	\$68.80	\$73.95
Warrior T	gal	\$355.15	\$271.65	\$288.29	\$298.45

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

Table 9. Seed prices by region, 2005.

	<u>Unit</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Alfalfa (private)	lb	\$3.40	\$2.75	\$2.75	\$2.80
Alfalfa (public)	lb	\$1.40	\$1.70	\$1.75	\$1.80
Barley: Feed	lb	\$.18	\$0.14	\$0.13	\$0.13
Barley: Malting (private)	lb			\$0.16	\$0.16
Dry Beans: Commercial, Pintos	lb		\$0.37	\$0.37	
Dry Beans: Garden Seed, Pintos	lb		\$0.38	\$0.38	
Garbanzo Beans	lb	\$.48			
Canola (treated)	lb	\$3.50			
Corn: Field & Silage	lb		\$1.60	\$1.60	
Corn: Field & Silage, Roundup Ready	lb		\$1.90	\$1.90	
Blue Grass (common)	lb	\$1.00			
Blue Grass (proprietary)	lb	\$2.30			
Brome	lb	\$1.25			
Orchard Grass	lb	\$1.30			\$1.50
Timothy Grass	lb	\$0.77			
Lentils	lb	\$0.18			
Oats	lb	\$0.16		\$0.15	\$0.15
Dry Peas	lb	\$0.12			
Rapeseed Seed: spring variety	lb	\$1.20			
Rapeseed Seed: winter variety	lb	\$0.20			
Onions: 500,000 seeds/pail, 5 lbs	pail		\$750		
Sugarbeet: Raw 100,000 seeds	unit		\$86.50	\$82.75	\$83.75
Sugarbeet: Pelleted 100,000 seeds	unit		\$91.00	\$88.00	\$90.50
^{1/} Potatoes: Chipping G-3	cwt				\$7.75
^{1/} Potatoes: R. Burbank G-2 (\$7.00)	cwt				\$7.60
^{1/} Potatoes: R. Burbank G-3 (\$5.80)	cwt		\$8.00	\$7.55	\$6.75
^{1/} Potatoes: R. Norkotah G-3 (\$6.80)	cwt		\$9.00	\$8.55	\$7.75
^{1/} Potatoes: Shepody G-3 (\$7.25)	cwt		\$9.45	\$9.00	
Cut Potato Seed	cwt		\$1.15	\$1.15	\$1.15
Cut and Treat Potato Seed**	cwt		\$1.55	\$1.55	\$1.55
^{2/} Wheat: Hard Red Spring	lb	\$0.20		\$0.17	\$0.16
^{2/} Wheat: Hard Red Winter	lb	\$0.19		\$0.15	\$0.15
^{2/} Wheat: Soft White Spring	lb	\$0.16	\$0.14	\$0.14	\$0.14
^{2/} Wheat: Soft White Winter	lb	\$0.16	\$0.14	\$0.14	\$0.14

* 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.

^{1/} Seed potato prices include a base price plus transportation. Transportation and handling costs for SWI, SCI, EI-South and EI-North are \$2.20, \$1.75, \$0.95 and \$0.60 respectively. The values shown in

Table 8 for EI seed potatoes are for the South District counties, except for G2 Russet Burbank, which is for the North District.

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

Table 10. Fertilizer prices by region, 2005.

<u>Product</u>	<u>NI*</u>	<u>SWI*</u>	<u>SCI*</u>	<u>EI*</u>
Nitrogen: Price per ton				
Ammonium Nitrate (34-0-0-0)	\$324		\$275	\$303
Ammonium Sulfate (20-0-0-24)	\$242	\$228	\$222	\$221
Urea (46-0-0-0)	\$369	\$385	\$356	\$358
Anhydrous Ammonia (82%)	\$600		\$523	\$410
Solution 32 (32-0-0-0)	\$319	\$302	\$286	\$278
Thio Sul (12-0-0-26)	\$221	\$216	\$163	\$160
Phosphate: Price per ton				
16-20-0	\$283		\$265	\$273
11-52-0	\$349	\$340	\$330	\$332
10-34-0	\$327	\$307	\$289	\$269
18-46-0			\$323	\$310
3-30-0-4			\$230	\$215
Potash: Price per ton				
Muriate of Potash (0-0-60-0)	\$283	\$260	\$259	\$249
Sulfate of Potash (0-0-50-17)		\$325	\$277	\$303
Liquid Potash		\$101	\$80	\$90
Trace: Price per ton.				
Boron (14%)	\$880	\$1,150	\$1,235	\$830
Copper (25%)		\$2,490	\$2,501	\$1,953
Iron (14%)	\$675	\$700	\$	\$680
Manganese (30-32%)		\$1,390	\$1,165	\$1,080
Zinc (36%)	\$983	\$1,060	\$852	\$906
Sulfur – Elemental (90%)	\$303	\$277	\$247	\$222
Gypsum – Granulated		\$60		
Gypsum – Borated	\$183			
	\$139			

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