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# Organic Price Premiums for Northern Great Plains and Upper Midwest Crops: 1995 to 1998

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## Organic Price Premiums for Northern Great Plains and Upper Midwest Crops: 1995 to 1998

Price premiums for organic crops have drawn the attention of increasing numbers of farmers in the Northern Great Plains and Upper Midwest in recent years. Falling prices for crops grown with "conventional" farming methods have caused an increasing number of farmers to explore the possibilities of switching to organic methods and obtaining organic certification. One indication of this interest has been the relatively high attendance at meetings of organic and sustainable farming associations in 1998 and 1999.

As part of the sustainable agriculture research program in the Economics

Department at South Dakota State University (SDSU), we have been comparing

"organic" and "conventional" crop prices over the past several years. This pamphlet

contains an update of the price comparisons through 1998. The information should be of

use to farmers and others considering management changes and investments related to

organic agriculture.

#### **Data sources**

Our data on organic prices come from the **Organic Food Business News**Commodity Fax Service, through Hotline Printing and Publishing.<sup>2</sup> Weekly lows and highs for a wide variety of organic crop products are reported. For each of the grain commodities, prices are reported simply for the U.S. as a whole, and not by State. We have these data for the third week of each month since 1995. For each commodity, the

<sup>&</sup>lt;sup>1</sup> A shorter version of this price comparison update appeared as "Organic Price Premiums for Grains and Beans Remain High," by Thomas L. Dobbs, with assistance from Jamie L. Pourier, in South Dakota State University Economics Commentator No. 397 (April 5, 1999), Brookings, SD, pp. 1-3.

<sup>&</sup>lt;sup>2</sup>Altamonte Springs, Florida.

midpoints between the highs and lows in those third weeks were calculated and used for our monthly observations. The following four crops that are frequently included in organic farming systems in South Dakota and other parts of the Northern Great Plains and Upper Midwest were singled out: corn, soybeans, spring wheat, and oats. Monthly and annual average organic prices for these four crops are reported in this pamphlet.

"Conventional" cash prices in this pamphlet are reported both for South Dakota and the United States. These are monthly prices reported by the U.S. Department of Agriculture's National Agricultural Statistics Service. The <u>annual</u> averages that we computed are simple (unweighted) averages based on the monthly figures for each calendar year.

A comparison is made between organic and conventional prices for the past four years, using line charts and ratios.

#### Price comparisons

Yearly average organic and conventional prices for corn, soybeans, spring wheat, and oats are shown in Table 1, as are ratios of organic to conventional prices. For cases in which organic price quotes were not available every month, the ratio calculations include only the comparable months for the prices of conventionally grown crops.

Monthly organic and conventional prices are shown in Figures 1 through 4.

Corn: The ratios of organic to conventional corn prices became larger in both 1997 and 1998 (Table 1). We can see in Figure 1 that both organic and conventional corn prices have trending downward since the last half of 1996. However, conventional prices fell proportionally more than organic prices. For example, organic corn prices fell by 18

percent (based on annual averages) between 1996 and 1998, whereas conventional U.S. cash prices fell by 38 percent over the same time period.

Soybeans: Organic price premiums for soybeans were higher (on a percent basis) than for corn, wheat, and oats throughout the 1995-1998 period (Table 1). The 3.02:1 organic to US cash price ratio for soybeans in 1998, for example, means that the organic price premium was 202 percent of the conventional price.<sup>3</sup> The price premiums as a percent of conventional prices declined somewhat from 1995 to 1996, but then increased in both 1997 and 1998. Conventional soybean prices began to decline in the summer of 1997 and continued to decline during 1998 (Figure 2). While some downward trend in organic soybean prices during 1998 is apparent in Figure 2, the average price for calendar year 1998 was no lower (in fact, it was slightly higher) than the price for 1997. Consequently, by 1998, organic soybean prices reported by the *Commodity Fax Service* were 223 percent higher than SD cash prices and 202 percent higher than US cash prices (Table 1).

The organic soybean prices reported here are for the Clear Hilum type, on a cleaned basis. This is the variety required by the Japanese market. Even accounting for a 10-15 percent loss in volume from cleaning organic soybeans, the price differentials shown in Table 1 and Figure 2 are substantial. Some farmers in climatically suited areas grow the Vinton variety of Clear Hilum soybeans, which generally commands an even higher price premium. The ratio of cleaned organic Vinton prices to conventional

<sup>&</sup>lt;sup>3</sup> The premium in dollars was \$11.97 (\$17.89 - \$5.92). In percent terms, this is \$11.97/\$5.92 = 2.02 = 202 percent. The calculation also can be carried out directly with the ratios, as follows: 3.02 - 1.00 = 2.02 = 202 percent.

soybean US prices was 2.67:1 in 1997 and 3.56:1 in 1998. The Vintons, however, usually have lower yields than do other Clear Hilum varieties.

Wheat: The ratios of organic to conventional spring wheat prices were higher in 1997 than in 1995 and 1996, but they were about the same in 1998 as in 1997 (Table 1). Both organic and conventional wheat prices trended downward from summer 1996 through summer 1998 (Figure 3). On average, organic wheat sold for about \$2.75/bushel over and above the price of conventional wheat in 1997 and for about \$2.40-2.50/bushel more than the price of conventional wheat in 1998.

Oats: Ratios of organic to conventional prices for oats have been fairly similar to those for wheat over the past three years (Table 1). In each of the past three years, price premiums (in percent terms) for oats rose some over the previous year. Prices for conventional oats were on a downward trend from mid-1996 through much of 1998 (Figure 4). Organic oats prices also fell in 1997 and 1998, but by proportionally less than did conventional oats prices. Consequently, by 1998, organic oats prices averaged 94 percent higher than SD cash prices for conventional oats and 83 percent higher than US cash prices.

#### **Recent developments**

As recently as 1997, some processors in the Upper Midwest were concerned about the adequacy of organic grain supplies over the next several years. There seemed to be little interest among conventional farmers in converting to organic production. By 1998, however, there were some indications of new interest among more conventional farmers in organic production. The persistence for several years of relatively strong organic price premiums appears now to be having some impact. For example, the

manager of an Upper Midwest organic soybean processing plant who had difficulty obtaining adequate supplies in 1997 indicated that the situation had changed considerably by August 1998. The plant had more growers supplying organic soybeans and the manager expected to have adequate supplies from the then upcoming U.S. harvest.

The extremely depressed prices of conventionally grown crops are fueling someperhaps much--of the new interest in organic agriculture. The planting flexibility
provisions of the 1996 Federal farm bill are stimulating some farmers to think more
broadly than in the past about crop alternatives. Also, land recently starting to come out
of 10-year Federal Conservation Reserve Program contracts provides fresh opportunity
for some farmers to introduce new crops and production methods. In addition, organic
agriculture has recently started receiving more government attention in some States, such
as Iowa. That attention, together with media reports over the last few years about
proposed Federal organic certification standards, have brought new visibility and
credibility to organic agriculture.

Anecdotal reports indicate that organic markets for the output of at least some crops may be softening. Also, in the case of soybeans, the percent decline in organic prices from the beginning to the end of 1998 (24 percent) was somewhat greater than the decline in conventional US cash prices over that time period (20 percent). It is difficult to detect any general reduction in (percent) price "premiums" with recent data available to us, however. Organic prices reported by *Commodity Fax Service* were, indeed, lower for some crops in the first three months (January-March) of 1999 than in the same months of 1998. The averages of midpoint organic prices during the first three months of 1999, computed from *Commodity Fax Service* data, were as follows (averages for the

same months of 1998 are shown in parentheses): corn--\$3.88 (\$4.18); soybeans--\$16.00 (\$19.58); spring wheat--\$6.13 (\$5.38); and oats--\$2.20 (\$2.63). Thus, of the four crops for which we have been monitoring organic prices, all except spring wheat were receiving lower prices in early 1999 than in early 1998. But, US cash prices for corn, soybeans, and oats grown conventionally also were lower in early 1999 than in early 1998; conventional spring wheat prices were higher in early 1999. The net result is that ratios of reported organic to US cash conventional prices were actually higher in early 1999 than in early 1998. The ratios for January-March 1999 were as follows (with the comparable ratios for 1998 shown in parentheses): corn--1.88:1 (1.64:1); soybeans--3.26:1 (2.99:1); spring wheat--1.80:1 (1.76:1); and oats--1.82:1 (1.63:1).

Despite these indications that organic price ratios appear to be increasing, it is entirely possible that the ratios <u>are</u> going down, even though the declines are not yet detected by our data. As pointed out in previous writings, there can be a great deal of variation in the organic prices received by different farmers within any given month or year. Although there also is variation in the prices received by conventional farmers, the variation is likely to be greater for organic farmers. Organic farmers use a variety of broker, distributor, and contracting arrangements. Sometimes they are able to market nearly all of their production from a particular crop at a relatively high premium, and at times part or all of their production from the same or another organically grown crop may garner little or no premium.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Also, cleaning losses and transportation costs can be higher for organic than for conventional crops.

A limitation of the *Commodity Fax Service* data is that only price <u>ranges</u> are available. From the "highs" and "lows" provided, we compute "midpoints". Midpoints are not the same as <u>averages</u>. Weighted average prices, computed on the basis of quantities sold at different prices in any given time period, would give a more accurate picture of organic price patterns. The price range for a particular crop--and consequent midpoint--could go unchanged, for example, at the same time that the weighted average of prices is actually going down (or up).

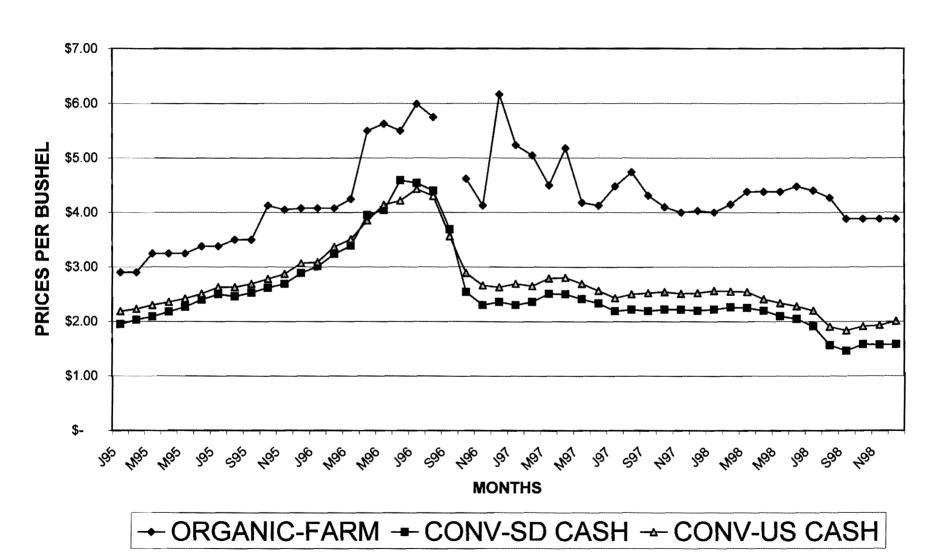
Table 1. Comparison of Organic and Conventional Prices

	Prices (\$/bu)			Price Ratios**	
Crop Commodity,	Organic-	Conv-	Conv-	Organic-Farm/	Organic-Farm/
and Year	Farm*	SD Cash	US Cash	SD Cash	US Cash
Corn, 1995	3.46	2.38	2.56	1.45	1.35
Corn, 1996	5.06	3.49	3.55	1.45	1.43
Corn, 1997	4.50	2.30	2.60	1.96	1.73
Corn, 1998	4.16	1.90	2.21	2.19	1.88
Soybeans, 1995	12.52	5.53	5.85	2.26	2.14
Soybeans, 1996	13.41	6.89	7.23	1.95	1.85
Soybeans, 1997	17.80	7.10	7.40	2.51	2.41
Soybeans, 1998	17.89	5.54	5.92	3.23	3.02
Spring Wheat, 1995	6.09	4.17	3.95	1.46	1.54
Spring Wheat, 1996	7.67	4.92	4.82	1.56	1.59
Spring Wheat, 1997	6.49	3.74	3.75	1.74	1.73
Spring Wheat, 1998	5.69	3.28	3.19	1.73	1.78
Oats, 1995	1.97	1.54	1.46	1.28	1.35
Oats, 1996	3.17	1.95	2.00	1.63	1.59
Oats, 1997	2.96	1.66	1.71	1.78	1.73
Oats, 1998	2.43	1.25	1.33	1.94	1.83

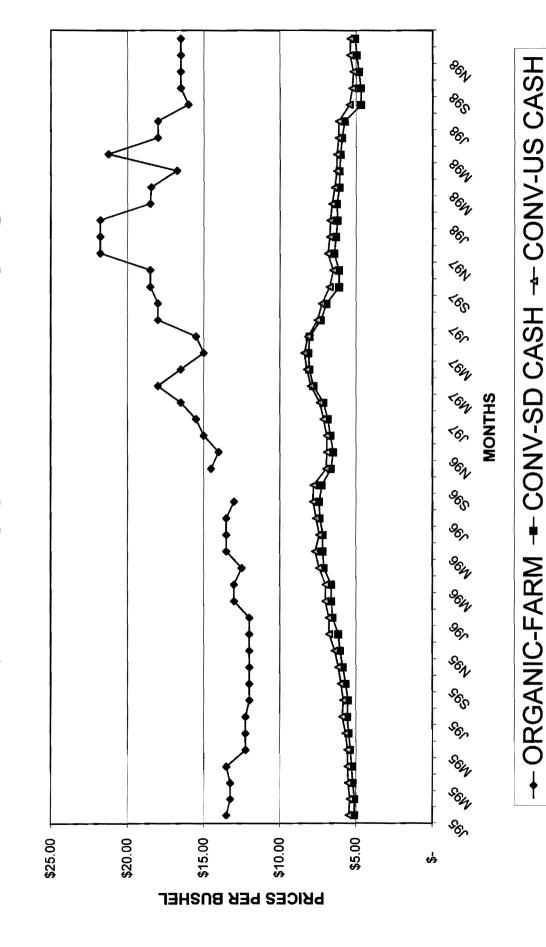
<sup>\*</sup> The organic soybeans refer to Clear Hilum, cleaned.

<sup>\*\*</sup> Price ratios have 1 as the basis of comparison. For example, 1.45 can be interpreted as 1.45:1.

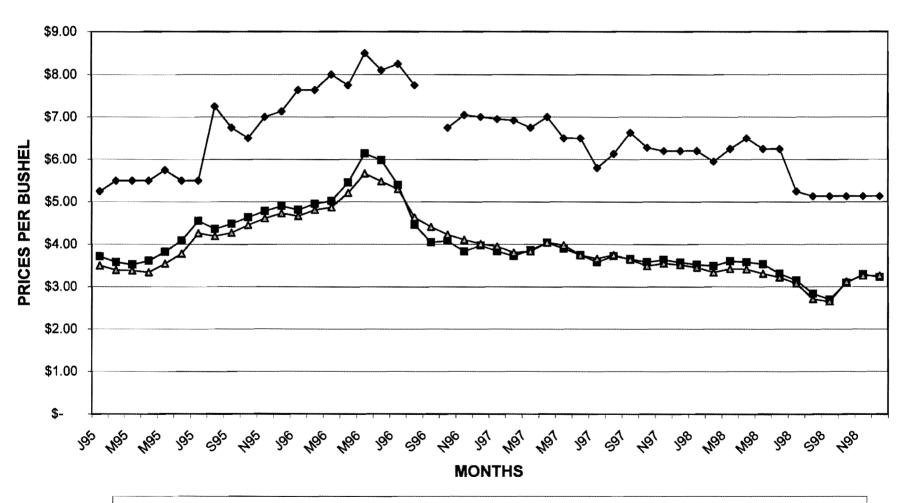
### **FIGURE 1. CORN PRICES**



**FIGURE 2. SOYBEAN PRICES** 

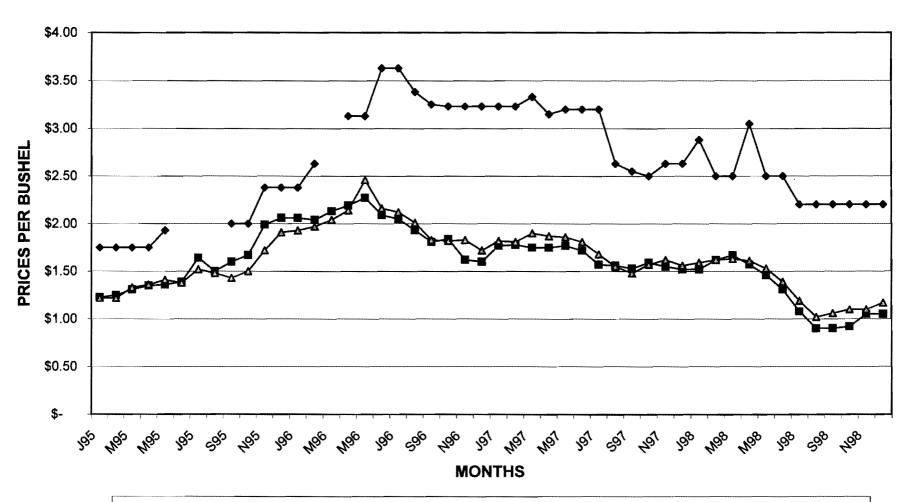


### FIGURE 3. SPRING WHEAT PRICES



→ ORGANIC-FARM → CONV-SD CASH → CONV-US CASH

### FIGURE 4. OATS PRICES



→ ORGANIC-FARM → CONV-SD CASH → CONV-US CASH