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Prices of Crop Products Grown Organically in the Northern Plains and Upper Midwest

by

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Researchers in SDSU's Economics Department maintain a data series to compare prices of 'organically grown' and 'conventionally grown' crop products. Price comparisons have been published, usually annually, since 1998—with prices going back to 1995. The most recent update prior to the present one was published as *Economics Commentator No. 426* (Feb. 22, 2002). In the present *Commentator*, we report price comparisons through 2002. The ratios of organic-to-conventional crop prices rose in 2002 (compared to 2001) for corn and oats, but the ratios fell for soybeans and spring wheat.

Data Sources

Our data on organic prices come from the **Organic Food Business News** *Commodity Fax Service*, through Hotline Printing and Publishing (Altamonte Springs, Florida). 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 this data for the third week of each month since 1995. For each commodity, the midpoints between the highs and lows in those third weeks were calculated and used for our monthly observations. In this Commentator issue, we compare farm-level organic prices to both South Dakota (SD) and national (U.S.) cash prices, as reported by the USDA's National Agricultural Statistics Service, for conventionally grown crops.

Price Comparisons

Yearly average organic and conventional prices for corn, soybeans, spring wheat, and oats—and comparisons in the form of ratios—are shown in Table 1. 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. The monthly prices for each crop also are shown in Figures 1 through 4. Gaps in the graphs are where data are missing.

Corn

Organic corn prices fell from 1997 through 2001, but they rose in 2002 (Table 1 and Figure 1). At the end of 2002, organic corn prices were at their highest level since 1998. Annual average conventional SD and U.S. corn prices experienced their first increase in price in 2001 since 1996; prices rose again in 2002. The ratio of organic-to-SD conventional cash prices of corn rose from 1.82 in 2001 to 2.02 in 2002. The ratio of organic-to-U.S. conventional prices also rose, from 1.59 in 2001 to 1.86 in 2002.

The USDA's Economic Research Service updated its data on organic crop acreage through 2001 in the Fall of 2002 (http://www.ers.usda.gov/Data/organic/). Organic corn acreage across the U.S. increased by 187% from 1995 to 2001. Although this is a sizeable increase, organic corn acreage in 2001 (93,551 acres) accounted for only 0.12% of the total U.S. corn acreage. Looking at corn prices over the same time period, we can see that organic corn prices fell by 13% between 1995 and 2001, while conventional U.S. corn prices fell by 26%. By 2002, organic corn prices were 14% higher than in 1995 and conventional U.S. corn prices were 17% lower.

Soybeans

Organic soybean prices declined for 3 years in a row starting in 1999, and the average price in 2002 remained the same as in 2001 (Table 1 and Figure 2). Conventional soybean prices declined from

1998 through 2002, but the average SD conventional soybean cash price increased from $4.18 in 2001 to $4.69 in 2002. Average U.S. soybean prices increased from $4.43 in 2001 to $4.93 in 2002, which is the highest average yearly level since 1998. The organic-to-SD conventional and organic-to-U.S. conventional price ratios fell in 2002. The ratios in 2002—2.62 for organic-to-SD cash prices and 2.49 for organic-to-U.S. cash prices—were the lowest since 1997.

The organic soybean price shown in Table 1 for 2002 ($12.29/bushel) is for the Clear Hilum type, on a cleaned basis. This is a variety required by the Japanese and many other food-grade markets. Some farmers in climatically suited areas grow the Vinton variety of Clear Hilum soybeans, which generally commands an even higher premium price (an average of $17.46/bushel in 2002). However, viral diseases, especially bean pod mottle, have been increasing in the Upper Midwest in recent years, and they may cause seed discoloration of Clear Hilum soybeans, including the Vintons. Other diseases, as well as drought stress, may also cause seed discoloration. This discoloration is jeopardizing the ability of many organic farmers to sell their soybeans at food-grade price premium levels. Subject to the availability of markets, they can still market their soybeans for use as feed in organic livestock operations, but the price premium generally is much lower than the food-grade premium.

The USDA data, referred to previously, show U.S. organic soybean acreage increased by 270% in the U.S. between 1995 and 2001. The Nation's 174,467 organic soybean acres in 2001 constituted only 0.24% of total soybean acres. In spite of the large percentage increase in organic soybean acreage between 1995 and 2001, the average annual organic soybean price was only 2% lower at the end of the period ($12.29) than at the beginning of the period ($12.52). U.S. conventional soybean prices were 24% lower in 2001 than in 1995, though they were only 16% lower in 2002.

Spring Wheat

Average prices for organic spring wheat declined in 2002, reaching $5.54, the lowest level since 1999 (Table 1 and Figure 3). However, average SD and U.S. conventional spring wheat prices increased in 2002, to $3.50 and $3.47, respectively. These conventional prices were the highest they had been since 1997. With organic and conventional prices moving in opposite directions, the ratios of organic-to-conventional prices declined in 2002. The ratios—1.58 for organic-to-SD conventional cash and 1.60 for organic-to-US conventional cash—were the lowest since 1996.

Organic all wheat acreage in the U.S. increased by 103% from 1995 to 2001. The 2001 acreage (194,640) was only 0.33% of National wheat acreage that year. Data for organic wheat acreage in 2002, either for all wheat or for spring wheat, is not available at this time. However, the decline in organic spring wheat prices in 2002 apparently is attributable to growth in supply of good quality organic wheat last year.

Oats

Organic oats prices increased substantially in 2002, after 4 years of price declines and 1 year (2001) in which average annual prices were unchanged from the previous year (Table 1 and Figure 4). Average prices rose from $2.00 in 2001 to $3.64 in 2002, an 82% increase. The $1.64/bushel increase in 2002 is even larger than the $1.20/bushel increase that occurred between 1995 and 1996. Average conventional oats prices in 2002 were higher than in 2001, but the increases were less (in both absolute and percentage terms) than the organic price increases. The ratios of organic-to-conventional oats prices increased in 2002, to 1.78 in the comparison to SD prices and to 1.87 in the comparison to U.S. prices. One industry source indicated that the organic oats price increase in 2002 was attributable to drought conditions throughout the U.S. Great Plains and into Canada, that reduced supply.

Organic oats acreage in the U.S. increased by 151% from 1995 to 2001. Although the 33,254 organic oats acres constituted only 0.76% of total U.S. oats acreage, that percentage was higher than for soybeans, corn, or wheat. In spite of the increase in organic oats acreage, organic prices were slightly higher in 2001 than in 1995, and much higher in 2002. Conventional oats prices were slightly lower in 2001 than in 1995.

Additional Comments

As noted in previous SDSU reports on organic prices, there can be a great deal of variation in organic price premiums received by different farmers, even in the same year and within the same area. Therefore, readers should be cautious in

drawing inferences from the data reported here,
based on price ranges and averages.
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Table 1. Comparison of Organic and Conventional Prices

Crop, Commodity, and Year	Prices ($/bu) Organic Farm*	Conv- SD Cash	Conv- US Cash	Price Ratios** Organic-Farm/ SD Cash	Organic-Farm/ 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
Corn, 1999	3.74	1.61	1.89	2.32	1.98
Corn, 2000	3.51	1.61	1.86	2.18	1.89
Corn, 2001	3.01	1.65	1.89	1.82	1.59
Corn, 2002	3.96	1.96	2.13	2.02	1.86
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
Soybeans, 1999	14.50	4.31	4.57	3.36	3.17
Soybeans, 2000	13.02	4.45	4.73	2.93	2.75
Soybeans, 2001	12.29	4.18	4.43	2.94	2.77
Soybeans, 2002	12.29	4.69	4.93	2.62	2.49
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
Spring Wheat, 1999	5.49	2.86	2.94	1.92	1.87
Spring Wheat, 2000	5.72	2.79	2.82	2.05	2.03
Spring Wheat, 2001	5.75	2.93	2.96	1.96	1.94
Spring Wheat, 2002	5.54	3.50	3.47	1.58	1.60
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
Oats, 1999	2.04	1.07	1.15	1.91	1.77
Oats, 2000	2.00	1.18	1.17	1.69	1.71
Oats, 2001	2.00	1.45	1.42	1.38	1.41
Oats, 2002	3.64	1.99	1.89	1.78	1.87

*The organic soybeans refer to Clear Hilum, cleaned.

**Price ratios have 1 as the basis of comparison. For example, 1.45 can be interpreted as 1.45:1

(Turn page for Figures 1-4)

FIGURE 1. CORN PRICES

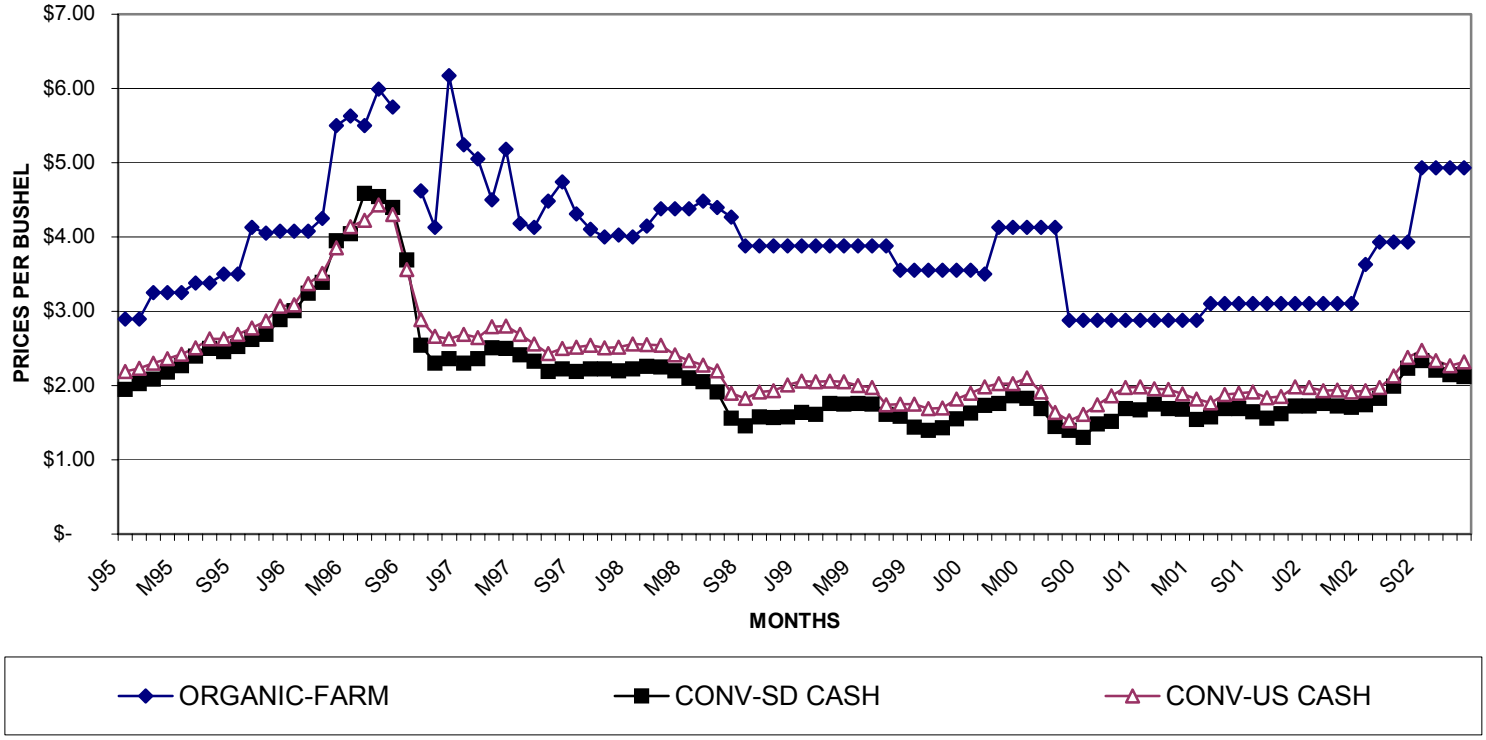


FIGURE 2. SOYBEAN PRICES

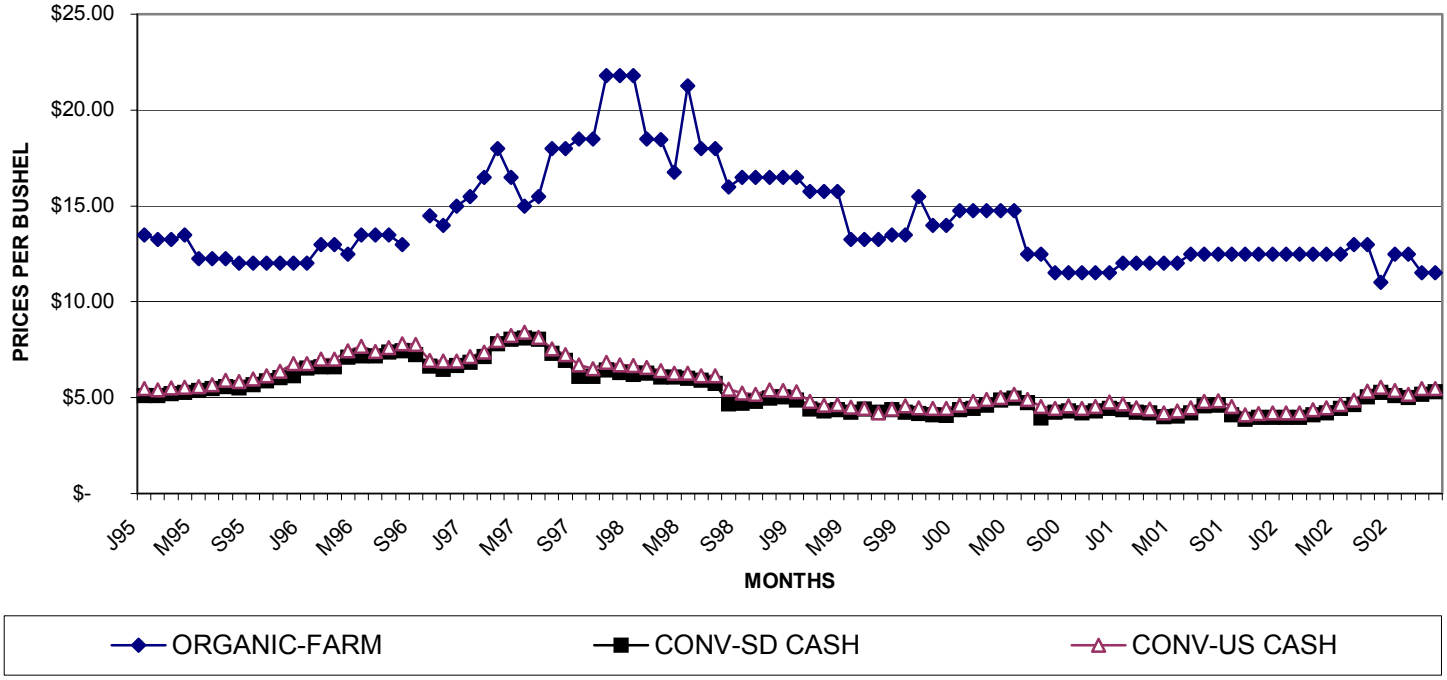


FIGURE 3. SPRING WHEAT PRICES

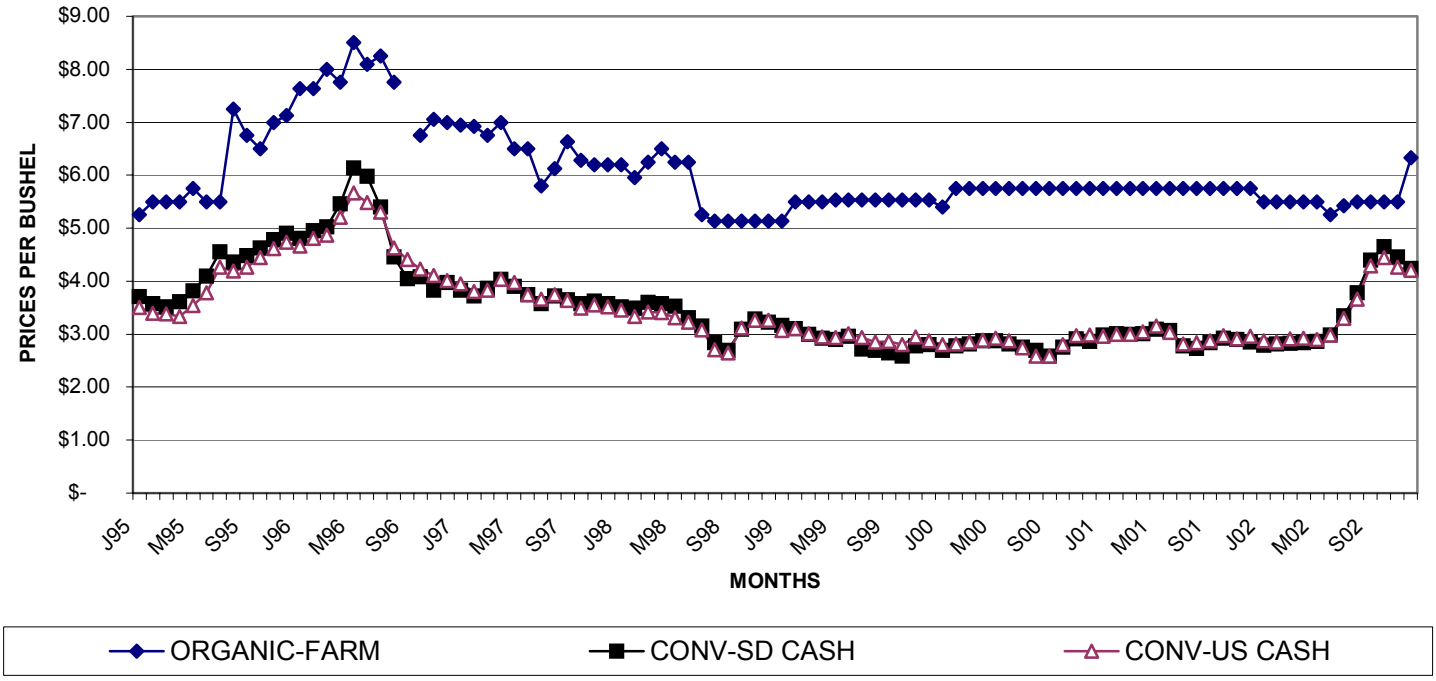
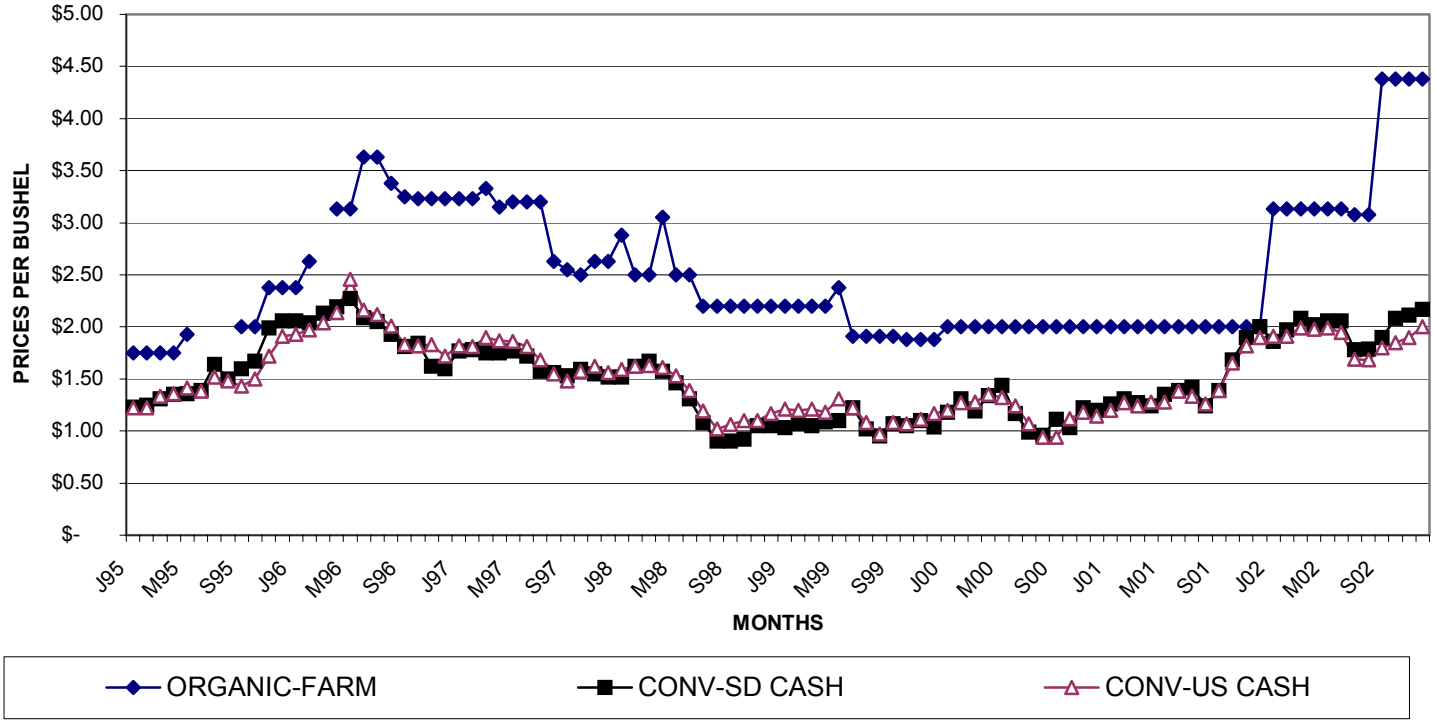


FIGURE 4. OATS PRICES



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