

Certified Organic Field Crop Profitability



William D. McBride
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Organic Acreage Profitable?

- Growing interest among producers and consumers in organic crop production as an alternative to conventional crop production
- Experimental research suggests a potential for similar yields, lower production costs, and higher returns to organic crop production
- The relative costs and returns of conventional and organic crop production on commercial farms is less known

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Organic Corn Acreage Up the Most

- Organic producer surveys in 2011 and 2014 show:
 - Organic corn acreage **up 24%**
 - Organic wheat acreage **down 3%**
 - Organic soybean acreage **up 3%**

Source: USDA, Economic Research Service calculations from National Agricultural Statistics Service 2011 Certified Organic Production Survey and National Agricultural Statistics Service 2014 Organic Survey.

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Objective to Evaluate Profitability

- Determine the difference in organic and conventional field crop production costs that is due to being organic
- Examine how the difference in production costs compares with the price premiums received for organic field crops during 2011-14



Organic Producer Data

- Agricultural Resource Management Survey (ARMS)
 - Corn Producers: 2010
 - Wheat Producers: 2009
 - Soybean Producers: 2006
- Targets producers in States with more than 90 percent of U.S. planted (commodity) acreage
- Includes a sub-sample targeting organic (commodity) producers from lists provided by organic certifiers
- Includes the information to compute total economic production costs for each surveyed farm



Measuring Production Costs

- Total economic production costs (operating plus allocated overhead) are computed using USDA methods, recommended by the AAEA
- Operating costs: seed, fertilizer, chemicals, custom operations, fuel (including lube & elec.), repairs, purchased irrigation water, operating capital
- Allocated overhead: hired labor, opportunity cost of unpaid labor, capital recovery, opportunity cost of land, taxes and insurance, general farm overhead



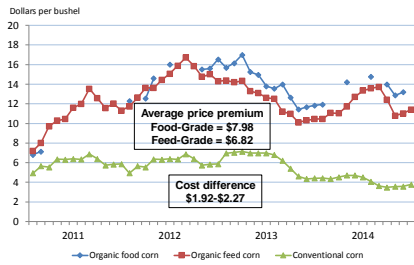
Organic Costs More Per-Bushel

Crop	Difference between Organic and Conventional		
	Mean Difference	Matched Samples	Regression
<i>dollars per bushel</i>			
Corn	1.50	1.92	2.27
Wheat	3.53	3.90	4.46
Soybeans	6.13	6.62	7.81

Source: USDA, Economic Research Service calculations using Agricultural Resource Management Survey data and include production cost differences plus organic transition and certification costs.

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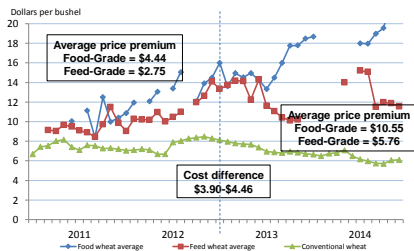
Organic Corn Profitable



Source: Organic prices from USDA, Agricultural Marketing Service; conventional prices from USDA, National Agricultural Statistics Service.

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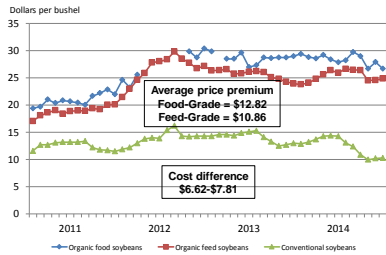
Organic Wheat Less Profitable



Source: Organic prices from USDA, Agricultural Marketing Service; conventional prices from USDA, National Agricultural Statistics Service.

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Organic Soybeans Profitable



Source: Organic prices from USDA, Agricultural Marketing Service; conventional prices from USDA, National Agricultural Statistics Service.

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Organic Corn Most Profitable

Crop	Difference between Organic and Conventional	
	Economic Costs	Economic Returns
	<i>dollars per acre</i>	
Corn	\$83 to \$98	\$51 to \$66
Wheat	\$55 to \$62	-\$9 to -\$2
Soybeans	\$106 to \$125	\$22 to \$41

Source: USDA, Economic Research Service calculations using Agricultural Resource Management Survey data and include production cost differences plus organic transition and certification costs. The range of costs and returns were generated from alternative statistical methods. Prices and yields used to compute per-acre costs and returns are those from the survey year of each crop.

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Organic Acreage Profitable

- Organic corn and soybeans were profitable during 2011-14 primarily due to significant price premiums offsetting the additional economic costs
- Organic wheat was less profitable, but profitability improved during 2013-14 due to greater price premiums
- Despite profit potential organic field crop adoption has been slow—less than 1% of field crop acreage
 - challenges of achieving yields
 - climatic and market factors
 - management and risk issues

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ERS Organic Farming Research

- Economic Research Report:
<http://www.ers.usda.gov/publications/err-economic-research-report/err188.aspx>
- Amber Waves article:
<http://www.ers.usda.gov/amber-waves/2015-november/despite-profit-potential,-organic-field-crop-acreage-remains-low.aspx#.VjkAWrerS5s>
- Infographic:
<http://www.ers.usda.gov/amber-waves/2015-september/price-premiums-behind-organic-field-crop-profitability.aspx#.VhblvfIVhBc>
- Webinar:
<http://cc.readytalk.com/play?id=6jc1cn>

