

Cropping Systems

Discussing the quality of soybeans for the organic tofu market at the Klinge/Tidwell field day

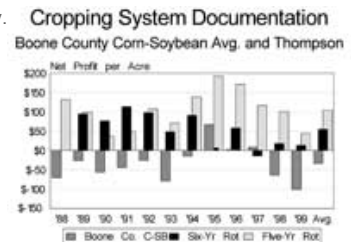


Jeff Klinge and Deb Tidwell, Farmersburg, have documented the economics of cropping as they transitioned to organic production. Jeff's reports have appeared in these PFI annual publications, but in the past the "conventional" comparison came from his own farm. As he writes below, that was not possible for this soybean comparison. The figures in [Table 9, click to view](#), come from 1998 because he didn't sell the crop until recently. Jeff writes:

1998 was the first year that I ever grew soybeans. To do it organically made it more of a challenge. Despite problems with black nightshade and a 10% hail loss, things turned out quite well. I compared my organic soybeans to a neighboring farmer's conventional beans because I do not have any conventional crops. I based this information on actual sales from 32.5 acres of organic soybeans which were not sold until June of 1999. That is why this material is a year behind. The conventional information came from actual sales from 110 acres.

Richard and Sharon Thompson, Boone, have kept close track of yields and farming operations for more than a decade. Dick has put this

Figure 4. Five-year rotation: corn-soybeans-corn-oats/hay-hay.
Six-year rotation: corn-soybeans-oats-meadow-meadow.



information together in a way designed to allow comparisons to other farming systems. Leaving out government price supports, and using local land rental rates and custom charges for the operations, he generates net profit for each crop in each year of his two crop rotations and for a hypothetical corn-soybean rotation that is representative of Boone County. This approach was described in "Can You Afford a Crop Rotation," in *The Practical Farmer*, Vol. 11, #4, winter 1996-97.

As Figure 4 shows, when you take away the outside support, the Boone County corn-soybean rotation has not kept pace with the more diversified rotations on the Thompson farm. Dick is interested in seeing more producers learn to use this tool. He believes that over time it can be a way of tracking a farm's progress toward its goals and to compare farming systems. †

Table 9. Soybean production budgets, organic and conventional, Klinge farm, 1998 Crop Year.

Item		Organic	Conventional
Pre-Harvest Machinery		\$27.50 †	\$15.50 ‡
Seed			
Organic	@\$15.50/50# bag x 1.8 bags, Dyna-grow 3233	\$27.90	
Conventional	@\$22/50# bag x 1.5 bags, Roundup Ready™		\$33.00
Fertilizer		\$0.00	\$0.00
Weed Control			
Organic	hand weeding (3 hrs x \$8/hr)	\$24.00	
Conventional	herbicide (Roundup)		\$12.00
Crop Insurance		\$10.00	\$10.00
Interest	Pre-harvest expense, 9.0% for 8 months	\$5.36	\$4.23
Pre-Harvest Total		\$94.76	\$74.73
Harvest Machinery			
Combine		\$25.00	\$25.00
Haul grain from field		\$0.50	\$0.50
Dry Grain (\$0.05/bu x 42 bu)		\$2.10	\$0.00
Trucking		buyer pd.	\$6.84
Harvest Total		\$27.60	\$25.50
Labor	@\$8.00/hr	\$40.00	\$24.00
Land	cash rent equivalent	\$160.00	\$160.00
Certification & user fees	(approx. 1% of sales)	\$8.00	\$0.00
Extra Handling		\$4.00 §	\$0.00
6 months interest and storage		\$14.00 ¶	\$0.00
Total Cost per Acre		\$348.36	\$291.07
Crop Yield (bu/acre)		42	57
Cost per Bushel		\$8.29	\$5.11
Sale Price (per bu)		\$19.00	\$6.00
Field Border Harvest	(½ bu @\$6/bu)	\$3.00	\$0.00
Insurance Claim	(10% hail loss)	\$40.00	\$0.00
Gross Income/Acre		\$841.00	\$342.00
Net Profit/Acre		\$492.64	\$50.93

† Organic: tandem disk, chisel, field cultivate (2x), harrow, plant, cultivate (3x).

‡ Conventional: chisel plow, field cultivate, harrow, plant, cultivate (1x).

§ First load of beans was rejected because of black nightshade, shipped back to the farm, and the entire crop was dried until the nightshade berries were completely dried up. Extra handling included the costs of trucking and drying.

¶ The organic soybeans were not marketed until June, 1999. Costs included storage and interest on all expenses.