

Organic Grain Insight Analysis

S. Hong

Today there is a lot of buzz about eating organic and it has become synonymous to living a healthy lifestyle. Studies show that eating organic food affects our health, lifespan and lifestyle. This study looks for a trend for the organic grain business. I hypothesize that the demand for organic grain is increasing by year. As more people choose to eat healthy, the demand for organic produce will increase.

The data source is from the USDA (United States Department of Agriculture) which collects data from certified organic and non-organic farmlands. The data cleanup was mostly done in excel. The handling of missing state data for the maps and loading the data was coded into the javascript portion. If I included only the organic data, the growth by years could be misleading without looking at the entire grain production. When I used the percentage of organic grain acres over the total acres, there was a more complete story.

I used the following two tables:

- Table 3. Certified organic and total U.S. acreage, selected crops and livestock, 1995-2011
- Table 6. Certified organic grains. Acres of corn, wheat, oats, barley, sorghum, rice, spelt, millet, buckwheat, and rye by State, 1997 and 2000-11.
- Source: <http://www.ers.usda.gov/data-products/organic-production.aspx>

The first visualization, I used Google visualization to create sparklines for each grain type by year to show the trend. The data point per grain was the percentage of organic grain over the total grain production. The majority, six out of eight types of organic grain showed growth between 2005 to 2011. Yet, wheat and rice declined between 2008 to 2011. The simple chart illustrated that the majority of organic grain production grew. Overall, there appears to be an increase demand for organic grain.

The second visualization, I used Google visualization to map out the top two grain production for 2011. I was able to use one map to show both types of grain by using the bubble size to represent wheat and using the color scale to represent Corn. The map has tooltips for State, Corn acres, and Wheat acres. This shows which states have the highest acreage for the top two organic grain products. It was interesting to see from the map that wheat is a west U.S. product and corn is mostly an east and central U.S. product.