



In the United States, as well as South America and Australia, sorghum is used primarily as a livestock feed in the form of “green chop”, hay, silage, and/or pasture. Its growing popularity in Kings County is due in large measure to its drought tolerance and nutritional value being comparable to corn. Sorghum requires little water to grow in comparison to many other crops; in fact it will go dormant in the absence of water and re-grow once water is available to the plant. These characteristics make it a viable alternative to growers looking to diversify their farming operation, while conserving the resources that are becoming increasingly restricted and less available.

Sorghum originated on the continent of Africa. One of the earliest findings of sorghum being used domestically was discovered in an archeological dig in North Africa. The excavation documented sorghum’s domesticated use 8000 years ago. It was also grown in India before recorded history and in Assyria as early as 700 B.C. The crop reached China in the 13<sup>th</sup> century, and much later the Western Hemisphere. Its introduction to what is now the United States came in the 17<sup>th</sup> century, but it was not extensively planted here until the 1850s. That’s when a forage variety called Black Amber, also known as “Chinese sugarcane” possibly alluding to its Chinese heritage, was introduced by way of France. Ben Franklin made one of the earliest notations about the plant in 1757, describing sorghum as having ideal attributes for producing brooms.

Historically in the U. S., sorghum was mostly grown as a source of sugar for syrup. Today, its uses are diverse. Sorghum is a powerhouse of nutrition for animal and human consumption alike. It is the third leading cereal crop in the United States; however, domestically it is used almost exclusively for animal feed. In other regions of the world it is still used as a major food source for humans, and worldwide it is the third largest food grain. In addition to being an animal feed source, it is used as a substitute for wheat in gluten-free food products and as a renewable source of ethanol-based energy. Grain sorghum is capable of producing the same amount of ethanol as corn, while utilizing one-third less water. In Kings County its use is primarily for animal feed.

Generally, four types of sorghum are grown in Kings County.

- Grain sorghum – includes varieties that grow 2-5 feet tall for easier harvesting of the grain.
- Forage sorghum – includes varieties that grow 6-12 feet tall and produced more dry matter tonnage than grain sorghum.
- Sudangrass – a fine stem, short season sorghum used for pasture, hay, or silage.
- Sorghum-sudangrass hybrids – cross between the two forage types that have intermediate yield potential and can be used for pasture, hay, or silage.

Sorghum acreage continues to increase in Kings County. From 2003 to 2008 sorghum acreage has increased steadily, from 43 acres to 4,500 acres. The value of sorghum is now being recognized due to new varieties with increased production and its ability to grow on less water than corn, yet maintaining comparable tonnage and nutrient values per acre. The amount of acres grown in Kings County will continue to depend on several factors, including the results of ongoing tests on the nutritional value of sorghum for cattle, fertilizer costs, as well as the increasing expense and availability of water. If the nutritional values are close to corn, growing sorghum may be an easier choice for growers looking to maximize their profit margin in these times of persistent water shortages and increased input costs.



## Department of Agriculture / Measurement Standards

---

**TIM NISWANDER**  
Agricultural Commissioner  
Sealer of Weights and Measures

May 12, 2009

Secretary A.G. Kawamura  
California Department of Food and Agriculture  
And  
The Honorable Board of Supervisors  
County of Kings, California

It is my privilege to submit to you the 2008 Annual Agricultural Crop Report for the County of Kings. This report contains statistical information on the acreage, yield and gross values in accordance with Sections 2272 and 2279 of the California Food and Agricultural Code. The numbers in this report are only gross values and do not represent net income or loss to producers.

The gross value of all agricultural crops and products produced during 2008 in Kings County was \$1,760,168,000. This represents a decrease of \$1,684,000 (0.1%) from the 2007 value.

Most major crop categories decreased in value, with the exception of vegetable and field crops. Field crops (led by wheat grain) had the largest increase, up \$71,732,000 (16.8%) due to acreage and pricing increases. Vegetable Crops increased \$39,604,000 (32.9%), due to increased acreage, yield and price.

The following categories contributed to the overall decrease: Fruit and Nut Crops had the largest decrease in value, down \$55,322,000 (-17.5%), due largely to lower nut prices. Livestock and Poultry declined \$36,301,000 (-19.7%), due to decreasing prices and fewer cattle and calves on-hand. Livestock and Poultry Products decreased \$18,606,000 (-2.7%) due to lower milk prices. Seed Crops decreased \$2,039,000 (-18.9%) due to reduced acreage. Apiary Products decreased \$752,000 (-12%) due mainly to decreased pollination prices.

My thanks and appreciation is extended to the many producers and organizations who contributed information for this report. This report was compiled and prepared by Joan Vernon and Robbie Coelho, Agricultural and Standards Inspectors, and Steve Schweizer, Deputy Agricultural Commissioner/Sealer, with assistance from Roberta Spomer and Janet Eckles, Agricultural and Standards Aides.

Respectfully Submitted,

Tim Niswander