

The California Seed Industry: A Measure of Economic Activity and Contribution to California Agriculture

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Executive Summary

Seed industry activities have been a recorded part of California agriculture for the past three decades. Using multiple sources of data that estimate various parameters of seed production and sales this report accurately represents the economic size of California's seed industry. Using data from the California County Agricultural Commissioners' Annual Crop Reports and from the most recent U.S. Agriculture Census, this report examines the evolution of seed crop production in California and places it in the context of U.S. seed production. Exclusive primary data collected for this report provide information on the revenues generated from wholesale seed sales and expenses in California by California seed companies. Furthermore these data are compared to figures estimated from the International Seed Federation and display California seed companies' wholesale seed sales in the context of global and U.S. domestic seed sales.

California seed companies generated \$2.9 billion in gross revenue from seed sales worldwide in 2008. This represents about 7.9 percent of all global sales. U.S. seed sales by California seed companies in 2008 totaled \$1.1 billion or about 13 percent of all U.S. seed sales. The majority of seed sales revenue for California seed companies comes from the sale of field crop seeds and vegetable seed. These two categories of

seed account for 76 percent of global seed sales revenue for California seed companies in 2008. The remaining 24 percent of revenue is generated from the sale of turf and flower seeds. Through the business of producing and selling seed California seed companies spent approximately \$207 million in California in 2008. The highest proportion of expenditures, 51 percent, went toward the production of seed, this was followed by expenditures in marketing and sale of seed, research and development and regulatory compliance.

When considering the production of raw seed about 55 percent of the field crops seed and 31 percent of vegetable seed sold by California seed companies in 2008 was grown in California. According to 2007 U.S. Agriculture Census data California accounted for 43.5 percent of the vegetable seed and 37.7 percent of the flower seed produced in the United State. When examining California County Agricultural Commissioners' Annual Crop Reports, California has been growing seed for the past 30 years. From 1970 through 2008 the annual farm value of seed production in California ranged between \$200 million and \$300 million. For the 20 year period of 1980 to 2000, the harvested acres of seed crops in California ranged between 250,000 and 350,000 acres annually. Since 2001, seed crop acreage in California has dropped to a range of 200,000 to 300,000 acres.

The location of seed crop production in California has shifted over the past 30 years. During most of the 1980's and early 1990's a majority of seed production was in Southern California counties such as Fresno, Imperial and Kings Counties. From 1990 to 2008, seed production started to shift slightly to include counties in the North Central section of the state. Colusa, Yolo, Sutter and Glenn Counties emerged as important seed crop producing areas of California. For the most part, the shift in seed production to North Central California came primarily from the production of vegetable seed crops and some field seed crops occurring in Yolo County.

When considering the importance of seed as an agricultural input to California farmers, data show that California crops grown from seed account for a sizeable share of agricultural cash receipts, and the majority of crop receipts. In 2008, agricultural cash receipts in California from crops produced from seed amounted to \$14.7 billion, which was equal to 37 percent of the \$39.1 billion in total agriculture production value in California and 57

percent of all crop receipts. The value of crop production in California translates into California farmers being important customers to seed companies. Revenue from wholesale seed sales in California grew each year from 2006 through 2008, with an average value of \$442 million. In 2008, seed sales in California were worth \$480.7 million, or approximately 5.7 percent of the \$8.5 billion generated from all seed sales in the United States. California-based seed companies accounted for \$295.2 million or 61.4 percent of wholesale seed sales revenue in California in 2008.

The information presented in this report serves as evidence of the importance of California as a supplier of raw seed to U.S. and global agriculture. Furthermore, the activities of seed companies in California are a significant source of revenue generation for the State. Finally, this report documents the important role of California seed companies in supplying a vital input to the multi-billion dollar agricultural economy of California.