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1,011 acres – zero organic

Despite a decade of double-digit growth in pesticide-free food consumption, CSU-Fresno still farms the old-fashioned way

Heather Halsey — Staff Writer

Organics is the fastest-growing, most profitable segment of the food market, but you wouldn't know it at California State University, Fresno.

Every day students steer tractors across 1,011 acres of university land under cultivation – not a single one of them organic. Not a single organic product is for sale in the school's popular farm store.

Washington State University and the University of Florida

offer undergraduate degrees in organic farming, the University of Iowa has a tenured organics professor, and North Carolina State has a graduate program that conducts research, something that does not exist in the UC or California State system.

"That's *North Carolina*," said Bob Scowcroft, exasperation ringing in his words. Scowcroft is executive director of the Organic Farming Research Foundation in Santa

Cruz. "Fresno State, you have a lot of organic farmers around you. You need to start a program."

Other California universities slowly have begun incorporating organic courses into their curriculums as students demand it. Chico State holds 800 acres and farms 60 of them organically, while UC Davis commits 20 acres of its 2,700 to organic crops. Cal Poly San Luis Obispo students maintain 9,000 acres of farmland and devote 11 acres to an organic farm that produces everything from apples to eggplants, and, just down Highway 99, the College of the Sequoias helps run an organic dairy.

Fresno State began offering a single class in organics only this semester.

Finding exact acreage system-wide is a difficult process.

"If no one analyzes the overall statewide investment in organic," Scowcroft says, "then there won't be a hue and cry to have at least a fair share of our resources devoted to it."

Fast-growing market

For the past decade, organics has been the fastest-growing segment of the food market as consumers become more concerned with the use of petro-chemicals on their food -- and the effects those chemicals have on their long-term health and the environment. In 2006 sales of organics nationally were up nearly 30 percent, a double-digit growth that has been sustained since the figures were first tracked in 1998.

Of the more than 1,000 acres under the domain of the CSU Fresno department of agriculture, just eight-tenths of one acre is in the midst of the three-year process of becoming certified organic, a move that is viewed as unnecessary by some professors in the department of agriculture, who see organic farming as

"Organic is a marketing tool and I am out in the trenches of ag everyday and we put out the safest possible products," said CSU Fresno vineyard manager Mark Salwasser. "That is my 10-cents as a grower, but others use organics because they can mark up their products and make more money."

Organics do cost more, but consumers are voting with their pocket-books. The amount of money spent on organic products has risen from \$3.5 billion in 1997 when it was .8 percent of the food market, to \$16.7 billion in 2006, when organics held a 2.8 percent share.

Scowcroft maintains that organics cost more because there is little-to-no research performed for farmers at California universities, where the focus has been on genetic modification and other areas that can be patented.

"All of these growers have to do their own research, their own trial-and-error, their own pest-control tests," he said. "And their organic tax dollars are not being re-invested in the public's interest."

The future is now

Tom Willey, a Valley farmer who has embraced organic methods for more than 20 years, said that he thinks organic practices are the way of the future and feels that it is irresponsible to keep them out of the university curriculum.

"Our valley ecosystem is battered and beat up by the practices that have been used, and I don't see Fresno State trying to educate its students about other practices," said Willey, who owns T & D Willey Farms in Madera.

Willey farms organically because he said that his crops have more bio-nutrients, better flavor, higher nutritional value and it is better for the environment and farm workers who work the soil. Field workers suffer the highest rates of occupational illness in the state.

Farmers across California are following in Willey's footsteps. Last year alone, CCOF certified 482,789 acres of the state's farmland, a 40.7 percent increase over 2006.

California farmers produce between 50 and 70 percent of the country's supply of organic leaf lettuce.

Mark Van Horn, director of the UC Davis organic student farm, has taught courses in organic farming principles for more than 10 years because he said students are interested in the subject and, according to the facts, so are consumers.

"Our society is becoming increasingly concerned with environmental issues, and California farmers must constantly adapt to meet their concerns," Van Horn said. "They are being manifested in the marketplace as an increase in demand for organic foods."

Others have acted

In some states legislatures mandate money for organic research at land-grant schools, but not California. Recently the president of the University of Washington visited San Francisco to raise money from alumni and corporations to support the school's organic program.

Following the organic trend is the College of the Sequoias in Visalia, which recently partnered with Potter Family Farms to offer its ag students a hands-on experience in a fully functioning organic dairy. The farm will produce 150 organic milk products, without bovine growth hormone, some of which will be sold to Whole Foods and Costco in

Northern California.

Larry Dutto, dean of academic services at the College of the Sequoias, said that one reason they are teaching more organic practices is because of demand. He said 26 percent of all food customers buy one or more organic products when they visit the grocery store.

"Movements such as organic, bio-mass for agriculture wastes, air and water quality issues are being addressed by the industry and need to be in the classroom for future agriculturalists," Dutto said.

Organics misleading

On the flip side of the issue is CSU Fresno's dairy professor Jon Robison. Robison said that producers have begun to generate more organic dairy products based on consumer demand but that consumers are misguided. He said that part of their misinformation comes from the idea that the term "hormone-free" means that products are actually free of hormones. Robison said that milk labeled as hormone-free means that synthetic hormones were not injected into the cows, but that all milk contains natural hormones.

"We, as agricultural producers, have got to do a better job of educating the consumers and I think that's where we dropped the ball," Robison said.

California State University Chancellor Charles B. Reed declined to comment about the agriculture department at CSU Fresno, and his office said that decisions about course offerings are the responsibility of individual universities.

One professor's effort

CSU Fresno professor Dave Goorahoo, who has a Ph.D. in soil science, is nudging the department along by teaching the challenges and opportunities of organic farming in the first semester of "Organic Farming Principles," Fresno State's only organic course offering. Goorahoo said that his students will one day farm the 0.8-acre plot and help transition it into becoming certified organic, which he expects to occur in September.

"Organic farming is rapidly grow-

ing around the world and we at Fresno State are obligated to exposing students," Goorahoo said.

It takes an average of three years after stopping the use of chemicals to convert a conventional field into an organic one. CCOF defines the standards that farmers must meet to become certified as, "food is produced without using most conventional pesticides; fertilizers made with synthetic ingredients or sewage sludge; bioengineering or ionizing radiation."

"It is a way of farming that takes into consideration the benefits of the soil and environment," Goorahoo said.

The harmful impacts pesticides and fertilizers have on the environment are most apparent in the 6,000 square miles of the Gulf of Mexico known as the dead zone, where fish don't swim and living creatures die due to a lack of oxygen created by runoff from pesticide-ridden fields throughout Middle America and into the Mississippi River.

Reigning San Francisco Chronicle Winemaker of the Year Josh Jensen farms his vineyards organically but you wouldn't know it by looking at his wine labels. He started Calera Wine Company 33 years ago in Hollister and grows world-class pinot noir organically to promote the sustainability of the land, not to increase his bottom line.

"My three adult children will inherit healthy, sustained, high-quality farmland that will still be that way 200 years from now," Jensen said. "This wouldn't be possible if we put chemicals and pest killers on the soil."

A misconception

Salwasser, Fresno State's vineyard manager, said that he thinks there is a misperception that organically grown produce is not sprayed with pesticides. He said that organic produce is sprayed with certified

organic sprays, and that depending on the crop and pest that is being sprayed, many times it requires several applications.

The toxicity of organic sprays does not compare with that of petrochemicals, making it irrelevant how often they are sprayed, said Viella Shipley, CCOF director of sales and marketing. She also said the majority of certified organic farmers do not use anything unless they are trying to wean themselves from the conventional sprays during a transition period.

"Old attitudes die hard and it takes time for new growers to trust, but eventually they see with their own eyes that when using sound organic principles, they need fewer inputs because their soil is more fertile," Shipley said.

While some organic growers do use all-natural pesticides made from things like chrysanthemums, none uses traditional petroleum-based products and manmade chemicals. Traditional sprays were looked at in a 1987 National Academy of Sciences study that showed they could contribute to an extra four million cancer cases among Americans, according to CCOF.

Many pesticides also were approved for use by the Environmental Protection Agency before research

linked the chemicals they contained to cancer and other diseases. Now the EPA says that 60 percent of all herbicides, 90 percent of all fungicides and 30 percent of all insecticides are potentially carcinogenic.

Organics more nutritious

A compilation of 41 studies performed by Virginia Worthington, a clinical nutritionist who earned her doctorate in nutrition at Johns Hopkins, showed that organic produce also has a higher nutritional value than conventional produce. Worthington's studies showed that organic produce contained, on average, 27 percent more vitamin C, 21.1 percent more iron, 29.3 percent more magnesium and 13.6 percent more phosphorous than conventionally grown produce.

Yet registered dietician Mollie Smith, who teaches at CSU Fresno, said that she feels it unnecessary for consumers to pay the higher costs for organic foods.

"Pesticides are pretty carefully regulated and it is not necessary to buy organic unless someone is concerned," Smith said.

Organic farmer Willey justifies the higher cost of organic produce by asking consumers to think about the effects traditional farming methods are having on the environment, such as soil erosion and water pollution. The EPA estimates pesticides contaminate the groundwater in 38 states, polluting the primary source of drinking water for more than half the country's population.

Conventional farming methods are

chipping away at the two most basic elements of the food chain: soil and water. Willey said that in the long run consumers will pay more if they continue to support practices that harm the soil and environment.

"The dollar you spend is a vote for the food system you want," Willey said.

A consumer who uses his dollar to vote for the organic system is Fresno artist Tim Stuart. He belongs to a CSA (Community Supported Agriculture) group and gets most of his produce directly from Willey's farm.

"First of all, organic produce tastes better and is fresher," Stuart said. "It is more expensive but I'd rather spend a couple extra dollars and feed my family with foods that aren't contaminated with pesticides."

As consumers like Stuart continue to drive the organic market, he hopes that universities like CSU Fresno will be forced to expand organic teachings.

For decades research and teaching have emphasized high yields and low prices, now the attitude is changing.

Shipley said that some of the biggest agricultural chemical companies fund doctoral-degree research for professors, making them naturally biased in promoting and teaching conventional techniques in their classrooms.

But as these professors retire and new professors come in, their approach toward pest management aligns with organic farming.

"Now instead of being pesticide applicators on the pesticide treadmill, farmers can actually be farmers," Shipley said.