

Organic cotton farming gains popularity

By JOHN ROBINSON
Sentinel staff writer

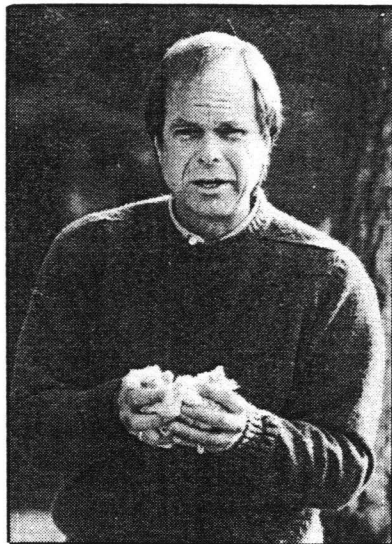
SANTA CRUZ — Organic cotton farmers in the Central Valley are getting a higher yield and more money for their crops than those who use pesticides and other chemicals, according to a UC Santa Cruz researcher.

"I thought it would be difficult to grow organic cotton because of the heavy chemical use, but these growers have opened my eyes," said Sean Swezey, an entomologist and coordinator of conversion studies at UCSC. "Essentially, their operation is indistinguishable from the conventional growers around them. I expected to see a difference, but I didn't."

Cotton is one of California's largest crops, covering more than 1 million acres and generating nearly \$1 billion in sales. Traditional cotton farming methods, however, use huge amounts of defoliants, insecticides and herbicides. In the United States, millions of pounds of dangerous chemicals are used on cotton each year. Although cotton comprised 3 percent of the world's cropland in the 1980s, it consumed nearly 25 percent of all insecticides.

Swezey had been monitoring the growing methods of Claude and Linda Sheppard, a Central Valley family who began growing organic cotton on their own about six years ago to escape exposure to dangerous chemicals.

By using natural insect predators to control insect pests, organic farmers have been able to cease using chemicals entirely and make more money.



Sean Swezey of UCSC is helping Central Valley cotton growers take a shine to organic farming methods.

Dan Coyro/Sentinel

"Organic was a word we didn't know anything about," Linda Sheppard said in a telephone interview from their farm near Chowchilla. "We were having our fifth child and became concerned about the chemicals we were putting on the ground. We live in the middle of our farm. I got scared every time a (crop-dusting) plane was flying over because I didn't know what they were spraying or how long to keep my children inside."

Like other farmers, the Sheppards assumed that massive amounts of chemicals were needed to keep weeds down and to control pests. Her husband followed the advice of the chemical companies and regularly sprayed the poisons on the crops.

"He used the chemicals and every year he got really sick, even with all the precautions," Sheppard said. "He wore the gloves, masks, plastic coveralls and everything else, but still got sick from the fumes."

After hearing a friend tell them about using bugs to control bugs, the Sheppards decided to give it a try. Their worry was that the natural pest control would prove inadequate.

"Just like everyone else, we were skeptical," Sheppard said. "We were afraid we would put the bugs in the field and next day they would fly off and there goes our money."

The secret to maintaining natural pest control is to have a proper balance of predators and pests, so the "good" bugs have enough food, and "bad" bugs don't damage crops.

Swezey said the Central Valley area near Modesto, where the Sheppards operate, is ideal for such methods as the area has a range of crops including alfalfa, which help maintain a healthy insect mix.

"It's called farming in place," Swezey said. "The idea is you farm in a place with specific characteristics, such as climate, weather, soils and the right biological factors."

In other words, some crops can be grown organically better than others as long as it is a location conducive to organic methods. As an example, Swezey

points to the organic apple growers in Watsonville and the Pajaro Valley, who benefit from a proper climate and a beneficial natural insect mix, which reduces the amount of chemicals needed.

The Sheppards said after switching to organic methods they got larger plants and saved significant amounts of money on chemicals, which are one of the largest expenses for a cotton farmer.

"A lot of people thought we were crazy and some were really afraid of us," Sheppard said. "They thought we were going to try to outlaw all chemicals and were against them (pesticide users). We aren't. But we think there are chemicals on the market that we don't need, but are being pressured by the big companies into using them."

The organic method requires more labor to keep the cotton fields free of weeds, and natural pest control takes longer than a fast-acting chemical.

The additional labor costs are made up in savings on chemicals and the higher price that organic cotton brings on the market.

Environmental concerns have created a market for organic clothing, especially non-chemical cotton. Retailers such as the Gap, Esprit and Patagonia have launched "environmentally friendly" clothing lines.

But while organic cotton prices remain high enough for the growing methods to remain profitable, it a market that is at the mercy of consumer demand, Swezey points out. If the demand for environmentally friendly clothes does not continue, prices could drop. Also increased production by organic farmers may erode the prices.