

Harvesting holiday profits

Some lucky women around Stillwater, Oklahoma, have not been receiving the same old roses and carnations on Valentine's and Mothers Day. Thanks to Vicki Stamback's SSARE producer grant they are being gifted with fragrant, airy arrangements of snapdragons, stock, anemone, ranunculus and sweetpeas—an English garden mix of perfume, color and texture to make Laura Ashley swoon.

Stamback first used a SSARE producer grant in 1994 to evaluate the potential of converting some wheat fields into specialty cut flowers at Bear Creek Farms. The results pointed to abundant potential for growing and selling cut flowers to florists in Oklahoma, but she didn't stop there.

She helped Dr. John Dole, her mentor at Oklahoma State University, write a cut flower production guide. The Oklahoma zinnia was named in honor of the work Dr. Dole and Stamback did in seed trials for the Ernst Benary Seed Company of Germany. She continues to educate florists in the use of cut flowers and is a popular speaker at state and national meetings for growers.

As florists learned to use fresh cuts and customers began demanding them, Bear Creek's business blossomed from the original three acres to six acres. Unfortunately demand was highest

from October through May, the months which have the major holidays but also the most inclement weather for growing flowers outdoors.

Stamback applied for a second SSARE producer grant to determine whether it would be profitable to extend the growing season with minimally heated greenhouses. Even

maintained an average soil temperature of 59° while the heated house maintained a soil temperature of 63°. By planting directly into raised beds in the ground, Stamback took advantage of the warmth absorbed by the soil during the day. Circulating fans also captured and distributed heat from the top of the green houses.



Vicki Stamback used a producer grant to evaluate the potential of extending her specialty cut flower season through the holidays with minimally heated greenhouses. Photo by John Mayne

though the grant was funded for only one year, the results were so intriguing that Stamback conducted a second year of comparison growing on her own before deciding to expand commercial production during winter.

The first year she experimented with an unheated greenhouse and a heated greenhouse that averaged 55° at night. That winter was mild so the unheated house

Flowers used in the experiment were pansy, larkspur, stock, snapdragons, delphinium, lupine and anemone. Lupine was the only species profitable in both houses. Snapdragons surprised Stamback by preferring the unheated house, producing more and longer stems and higher quality flowers in the less expensive, cooler environment. Stock produced one less stem in the unheated house, but those stems were longer, stronger and the flower quality higher than in the heated house. Delphinium didn't produce well in either house.

**2001 Producer Grant
Call for Proposals is released!**

Get it from
WWW.griffin.peachnet.edu/sare
or call
(770) 412-4788

Continued on page 2

Continued from page 1

Harvesting holiday profits

Although anemone, larkspur, stock and pansy produced better in the heated house, their sales didn't recoup all the heating costs. However, in the unheated house they didn't produce enough to make a profit there, either.

These complicated results gave Stamback plenty to ponder through the spring and summer. Determined to find out more in a second winter growing season, she heated both houses, splitting the temperature difference between the unheated and heated environment to maintain average night temperatures of 36° and 50°, respectively. She hoped to pinpoint a temperature that would improve production and flower quality while decreasing production time for the highest number of flower varieties and using the least amount of heating fuel.

She also adjusted the varieties of flowers planted. Delphinium was omitted because it produced poorly in both houses. Pansy was omitted because it was labor intensive to harvest and difficult for florists to handle, even though it produced well the year before. A popular sunflower was added to see if there were benefits to starting the plants earlier than usual.

Those adjustments improved results over the first year. Snapdragons and larkspur made a profit in both houses, and the lupine made a profit in the warmer house. Anemones and stock were still unprofitable in both houses, but the loss was not as drastic as in

year one. Sunflowers were not as profitable per square foot as when grown on benches with 18 plants per flat until time to plant in the field.

The third winter both greenhouses were set at a minimum night temperature of 45° on the belief that this was the magic number that would lower heating costs and shorten production time while maintaining heavy production with long stems and high quality flowers. Major crops were snapdragons, lupine, ranunculus, anemone and sweet peas. All made a profit except anemones, which she is going to try one more year.

"This project was definitely worth doing," says Stamback. "The past two years while we were conducting the experiments, flowers were available for Valentine's and Mothers Day. The extra cash flow was wonderful to have going into summer production. It has transformed Bear Creek from a seasonal to year-round business. I started the business with two full-time summer employees. This summer I added two additional green houses based on the project results and have expanded to four full-time and one part-time employee in the summer. This winter I will have two full-time and two part-time employees.

Although a growing payroll and expanding acreage is a concrete way to measure success, Stamback's yardstick is more personal.

"Best of all, the customers are crazy about the flowers and look forward to having them next holiday season," she says. "In the past, Bear Creek could not grow snapdragons, stock, anemone, ranunculus or sweet peas because of the fluctuating temperatures in the winter and high temperatures too early in the spring, not to mention wind damage. Protected winter production has allowed these popular flowers to be added to our offerings. Snapdragons have quickly become the third largest crop of all species grown at Bear Creek. We will continue to fine tune what we started in the project now that the initial results indicate it will work and will make a profit."



Common Ground is published by the Southern Region Sustainable Agriculture Research and Education Program (SARE) SARE funds projects that develop environmentally sound, economically viable and socially acceptable agricultural methods. SARE is funded by USDA and EPA.

The Southern Region SARE Program is administered by the University of Georgia and Fort Valley State University. The Southern Region includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, Puerto Rico and the U.S.V.I.

Communications Committee

Steve Carmichael, Chair
EPA/NRCS
Georgia

Jill Auburn
National SARE Director
Washington DC
Peggy Barlett

Emory University
Georgia

Shirley Harris
Producer
Tennessee

Janie Hipp
Kerr Center
Oklahoma

Jim Lukens
ATTRA
Arkansas

La Rhea Pepper
Producer
Texas

Harry Wells
EPA

Washington DC

Comments welcomed by
Gwen Roland, editor
Ph: (770) 412-4786
groland@gaes.griffin.peachnet.edu

Velvet bean rotation helps battle nematodes

Richard Edgar learned the basics of farming from his father and neighbors in Deatsville, Alabama. Today he and his father farm full time, with part-time help from a younger brother, to stay ahead of 440 acres of cotton, 150 acres of corn, 120 acres of grass hay and 35 acres of woodlands.

“Most of my education came from on-the-job training,” Edgar says. “I started raking hay when I was only eight years old.”

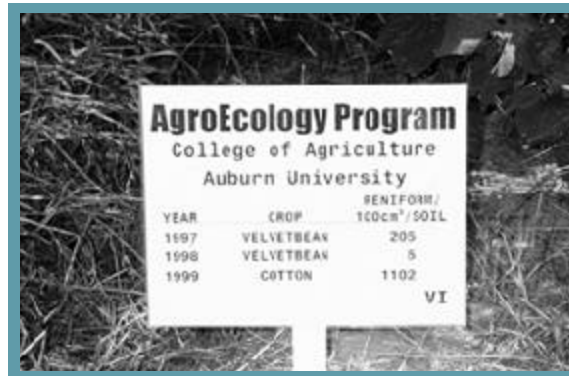
An avid learner, he added to that hands-on experience with a degree in ag education and by attending extension programs and field days. Despite their combined years of experience and education, the Edgars were losing the battle to reniform nematodes in cotton fields that had been monocropped for 25 years.

Then at a meeting of the Alabama Farmers Federation he heard Auburn researchers Rodriguez Kabana and Robert Taylor talk about their work with velvet beans to reduce reniform nematodes.

“They concluded by saying they were looking for a place to evaluate the findings on a real farm. I immediately volunteered our farm. After visiting, they agreed I had plenty of nematodes for experimental purposes—as many as 1500 in a gram of soil. They urged me to apply for a SSARE producer grant to help pay for the research.”

Once awarded the producer grant to evaluate non-chemical control of nematodes in cotton, Edgar set aside 10 acres divided into 128 rows for rotations of velvet bean alone, and velvet bean grown on trellises of corn or grain sorghum to keep the bean vines off the ground. While reducing the nematode count was the primary focus of the trials, Edgar was also hoping to find a rotational crop that would double as a cash crop.

Two years of results indicated that all the rotations reduced nematode populations to varying degrees, but the system that worked best for his farm was velvet beans grown on corn. “Growing the beans on a trellis crop makes them easier to harvest than



A field day sign tells the story of nematode reduction and resurgence during the trials. Such field days and study tours brought farmers from as far away as Brazil. Photo by John Mayne.



letting them vine all over the ground,” says Edgar, who saves some of his bean crop to plant the following year.

Surplus beans give him an opportunity to explore another sustainable ag practice—direct marketing. Currently selling at \$2.50 per pound, the seeds are bought by other farmers who want to use velvet bean in rotations and by hunters planting wildlife feed plots. The corn is also harvested for sale to a neighbor who raises pigs, providing two cash crops from the rotation.

Despite dramatic reductions in nematodes during each rotation, the effect is not long lasting. The nematodes demonstrate their resilience by multiplying from single digit numbers per gram of soil up to triple digits in the first year back in cotton.

“The results indicated that it would take a one-to-one rotation in order to non-chemically control nematodes on our farm,” says Edgar. “At this time, it

is not economically feasible to do that. The rotations have a niche on my farm but they can’t totally manage the nematodes.”

After the project concluded, Edgar devised a management plan for his farm that combines crop rotations with reduced chemical control. He rotates one third of the cotton land every year—most to corn, some to velvet beans on corn.

“More rows are planted to corn because it is easier to harvest and market than velvet beans,” he explains. “As the velvet bean market expands it may be profitable to plant more.”

The rotation system has paid off economically and environmentally for the farm.

“We used to apply very high rates of Timek at about \$15 to \$21 per acre,” recalls Edgar. “Even at that rate there was loss of yield to nematodes. Now during the rotation year, there are

no Timek or nitrogen costs. Herbicide costs are greatly reduced because the beans shade out weeds. There's also income from the beans and corn."

The first year back in cotton there is a boost in yield because of the reduced nematode populations and extra nitrogen from the beans. There are also savings that year because Timek use is cut by about 50% and nitrogen is cut by 15% as compared to input when cotton is monocropped.

"I use chemicals as needed that first year to keep the nematode populations down and to get another year's life out of the rotation," he explains. "The second year back in cotton, we try to maintain the effect of the rotation through chemicals until the field goes back into velvet beans. Before starting the experiment, the chemicals were overwhelmed by the increasing numbers of nematodes. Now the rotations reduce the populations to the point that the chemicals can have some effect. This project allowed us to try a number of different scenarios with reduced risk and then choose what would suit our farm situation."

Editor's note: For more information contact the SARE office for a detailed report on Project FS 97-49.



Growing Velvet Beans on Corn



Richard Edgar has worked out the following management plan for his velvet bean plantings.

1. Plant corn and immediately follow with velvet beans in the same rows.
2. Plant 12-15 pounds per acre so that beans are approximately 15-18 inches apart, 1½ inches deep.
3. Cultivate as needed for weed control before beans start vining. Once the beans form a canopy, weeds will be shaded out.
4. Harvest beans and corn simultaneously with grain platform on combine.
5. Send to a seed cleaner to separate beans from corn.
6. Sell corn to neighbor for hogs.
7. Set aside bean seeds for next year and sell surplus to other farmers or hunters for wildlife plots.

Continued from page 2

Harvesting holiday profits

Future plans for Bear Creek call for a total of six greenhouses for season extension, with at least one of them unheated to accommodate larkspur and stock. Two houses could be set at 35° and three houses at 45°. This combination could provide a great variety in production times and save fuel expenses.

"It's great to do something you love," says Stamback, "and it's even better to know you're making a profit doing what you love."

(Editor's note: For more information request final report for FS97-60 by contacting Gwen Roland at the SARE office at (770) 412-4786.)



Two information bulletins written by Dole and Stamback are available from the Association of Specialty Cut Flower Growers at phone (440) 774-2887 or fax (440) 774-2435 or jml-ascfg@email.msn.com. Ask for: Pricing Specialty Cuts and/or Commercial Outdoor Cuts for the South Central United States.

Producer and NGO nominations due by October 1

Nominations are still being sought for two Southern Region SARE Administrative council members. Besides a knowledge of sustainable ag issues, nominees must possess team skills and a willingness to work toward shared goals for sustainable ag. The vacant positions are for a producer and a representative from a non-governmental organization (NGO), especially an NGO representing minority or limited-resource farmers. The AC currently has no members from Alabama, Kentucky, Arkansas or the Virgin Islands, so representation is needed from those areas. People may nominate themselves or others.

If you would like to nominate someone, write a maximum of two pages, including:

- A statement of the nominee's ability to work collaboratively to address sustainable ag needs
- A description of the person's interest in and contributions to sustainable ag
- A description of teamwork capabilities
- Confirmation of the nominee's consent to be nominated
- Demographic information (sex, race, type of farm, commodity interest, and address/ telephone contact information).

Mail nomination to:

Jeff Jordan

Southern Region SARE Program

The University of Georgia

1109 Experiment Street

Griffin, GA 30223-1797



West Texas organic cotton farmer and marketer LaRhea Pepper inspects fabric at Cotton Plus prior to shipping. She is currently vice chair of Southern Region SARE's Administrative Council. Like the other AC members, she makes time in her busy schedule to attend semi-annual meetings, serve on committees and participate in conference calls throughout the year. Most importantly she keeps up with sustainable ag issues so she can contribute informed opinions that influence sustainable ag research and policy. Photo by Gwen Roland

[WWW.griffin.peachnet.edu/sare](http://www.griffin.peachnet.edu/sare)

Don't forget to check the SSARE website for the latest information. On it you can always find:

- Current calls for proposals and descriptions of all four grant programs
- All past issues of Common Ground
- Contact information for regional and national SARE staff
- PDP workshop information
- Upcoming sustainable ag events
- Links to other sustainable ag sites
- Publications from SSARE research

This summer we added:

- Final reports of all completed research projects
- Summaries of all current research projects

Coming this fall:

- 12 Aprils Dairying—A manual of Tom Trantham's grazing dairy system complete with photos of his herd, paddocks, fencing, lanes and new irrigation system.

Which SARE grant program for you?

Southern SARE administers four separate grant programs, each with its own priorities and audiences. The process begins with the release of calls for proposals for each of the programs. If you are on the Common Ground mailing list you will receive an issue prior to the release of each call for proposals. The SSARE web site www.griffin.peachnet.edu/SARE is the quickest way to receive the calls for proposals as soon as they are released.

Research and Education Projects generally are conducted by interdisciplinary, multi-institutional, and often, multi-state research teams coordinated by a principal investigator from a non-governmental organization, university or governmental agency. These projects include farmers as participants. For more information call Jeff Jordan at (770) 412-4788.

2000

June 1 Call for preproposals released

August 31 Preproposals due

November 1 Full proposals invited.

2001

January 19 Full proposals due

March Full proposals reviewed

April Administrative Council announces all grant awards

Producer Grant Projects are developed, coordinated and conducted by producers or producer organizations. These projects are generally located in one state, often on one farm. There is a \$10,000 limit for funding proposals submitted by an individual producer and a \$15,000 limit on proposals submitted by producer organizations. For more information about Producer Grants call John C. Mayne at (770) 229-3350.

2000

September 1 Call for proposals released

2001

January 26 Proposals due

March Proposals reviewed

April Administrative Council announces all grant awards

Graduate Student Awards are intended for full-time graduate students (masters or Ph.D.) enrolled at accredited colleges and universities in the Southern Region. Up to \$10,000 will be awarded to each successful applicant for up to three years of project activities. The funds are paid directly to the university for use on the graduate student's project. For more information call John C. Mayne at (770) 229-3350.

2000

May 15 Call for proposal released

December 8 Proposals due

2001

March Proposals reviewed

April Administrative Council announces all grant awards

Professional Development Program Projects train agricultural information providers in sustainable agriculture techniques and concepts. The Southern Region Training Consortium consists of North Carolina State University, North Carolina A&T University and ATTRA. For more information contact Roger Crickenberger at (919) 515-3252.

2000

June 1 Call for preproposals released

August 31 Preproposals due

November 1 Full proposals invited

2001

February 2 Full proposals due

March Full proposals reviewed

April Administrative Council announces all grant awards

The University of Georgia
Campus at Griffin
Southern Region SARE
1109 Experiment Street
Griffin, GA 30223-1797

NONPROFIT ORG.
U.S. POSTAGE
PAID
GRIFFIN, GA
PERMIT NO.155

Address Correction Requested

Producer
Call
Released !