

"Two approaches to farm-grown nitrogen" SARE Grant

By Susan Sauter, Bruceton Mills, WV

Do you consider yourself a scientist? No, neither do I, but if you are a farmer or gardener, then you have what it takes—and you've probably been trying things out all along in your fields, in your gardens, or on your animals. Put that wherewithal together with the Sustainable Agriculture Research and Education (SARE) "Farmer-Grower" grants, and you just might be able to get some funding to try out your ideas—especially if they've never been tried before.

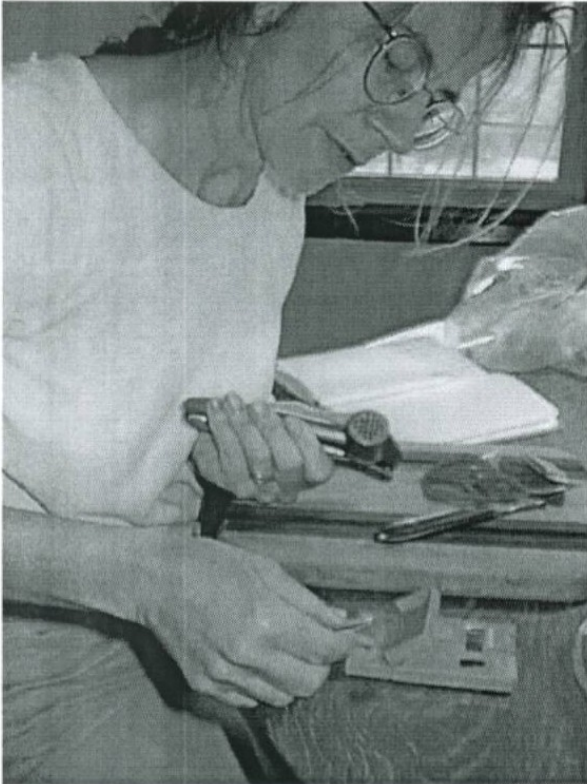
That's what I did last year—I wrote a grant called "Two approaches to farm-grown nitrogen" to try both using my own home-grown alfalfa/clover hay as a high-nitrogen dry mulch on my vegetables and my own in-garden grown alfalfa/ clover as a high-nitrogen wet mulch on my basil. This would be different from the usual scheme of legumes grown for their nitrogen fixation. Sure, I'd get some of that benefit as well, but I needed a quick organic, solution to correct nitrogen deficiencies throughout the active growing season—especially for basil of which I grow lots but which takes on a yellow pallor as the season stretches on. I also wanted a cheaper solution than buying any number of expensive off-farm organic supplements. So maybe I could grow my own. Yeh, grow my own! Others have tried that and been thrown in jail. This would be legal green leafy material.





Consulting with our grant's technical advisor, someone SARE insists you must have as a condition of the grant, we established a 2 acre legume hayfield this year for part of the experiment. Boy, did we learn a lot—if nothing else, this moved us into another dimension of farming, i.e., caring for and cultivating larger acreage. It also taught us about using the right equipment for a job. I don't know how many calls I made researching the kind of seeder needed to finely seed and seat that two acres or how many I made regarding the appropriate mower to use that wouldn't knock off the tiny but high-in-nitrogen legume leaves once it was time to make the hay. These difficulties were unforeseen when I wrote the grant.

We made the mistaken assumption that because we lived in a farming community, we'd just be able to



borrow the right equipment from a knowledgeable and experienced neighboring farmer. We quickly learned that no one within close proximity had ever grown legume hay before. No one had the right fertilizer spreader. No one had the right seeding equipment. But we did find the right mower. We were still successful in establishing this field—we made do with a spreader intended for granulated not powdery fertilizer; I hand seeded the field with a broadcast spreader; my husband fabricated a roller out of a water-filled wine barrel for me to drag behind our all-terrain type vehicle to compress the seed into the soil. And in early September, 94 bales of our own legume hay was cut, baled and stacked. Because we only got this one cutting and fairly late in the season, we don't have results from this part of the grant, but I'll continue the project next year, using weekly tests to see how quickly the nitrogen from the dry mulch hay is released. I have great hopes for good results—not only will I be suppressing weeds, but I'll be feeding the vegetables a slow-release nitrogen—and adding organic matter.

I consider the other part of the experiment a great success. In the future, I will always grow alfalfa or clover around my basil as I did this year. Over the course of 10 weeks, I cut the legume strips 3 times with a side-discharge lawnmower when they reached a height of about 8-10 inches, but I found the clippings were better applied by hand after they were bagged instead of blowing them into the basil row. Otherwise the basil leaves developed a blemish where the wet material hit. The weekly soil and basil leaf nitrogen tests showed an increase fairly soon after the wet legumes were applied—2-7 days. My own observation noted that I only had to apply fish emulsion once during the 10 weeks, something I would normally do 4-5 times over the season.

So why not try your hand at a SARE grant? Mine was only 6 pages long, and two of those were budget pages. The Northeast Region office of Sustainable Agriculture Research and Education is accepting applications from farmers in the Northeast for grants to support innovative, exploratory projects to enhance the sustainability of farms and farming. Deadline is Dec. 3. Applications and information are available at www.uvm.edu/~nesare/ or call 802-656-0471.