

Extension Aids Expansion of Organic Fertilizer Market



Marco Nicorich

By Bonnie Coblentz

When the owners of an organic fertilizer company in Lawrence County were trying to determine best uses for their product and develop new markets, they turned for help to a team of professionals with the Mississippi State University Extension Service and the Mississippi Agricultural and Forestry Experiment Station.

Amanda Walker, Extension director in Lawrence County, spearheaded the efforts on behalf of Organic Growing Systems, a relatively new and growing company that produces organic fertilizer from poultry litter.

"Their mill manager was from Ohio and did not have much knowledge about the community," Walker said. "The company was doing well financially, but they didn't have a big budget for research and development. They turned to the Extension Service for help primarily with the development of data that would help them market their product to forage producers."

Walker put together an Extension and experiment station team of soil, forage, horticulture, truck crops, turf and poultry experts. The group met with company representatives to determine how MSU could meet some of their needs. Trial plots were planted to see how the fertilizer performed with different crops and in different conditions.

Larry Oldham, an Extension soil specialist, was one of the team members.

"This has been a great example of an Extension county director working with a local economic development interest to bring in university assets to help develop an expertise pool to aid that industry," Oldham said. "I think Amanda has done a textbook job of working with the client and bringing in the resources of Mississippi State."

Oldham said Organic Growing Systems' fertilizer is made with litter from the state's poultry industry.

"The nutrients in it are the same as in synthetic fertilizer, but the nitrogen in the material has to be converted into simpler forms that are available to plants," he said. "The nitrogen in this fertilizer is not immediately available, but it is in effect a slow-release fertilizer. This form is preferred by many operators in the turf market, one of the markets this company is trying to serve."

Oldham said nutrients are immediately available in synthetic fertilizers but may take 1–3 weeks to become available in this organic fertilizer.

Robin Borden, chief agronomist and director of technical services for Organic Growing Systems in Monticello, said the slow-release nature of the product is one of its biggest advantages.

"Poultry litter that is applied to farmland is considered somewhat of a negative because of run-off issues that result in algae blooms and bacteria in nearby water supplies," Borden said. "We add certain things to the litter that reduce odor and enhance performance, heat-treat it to kill pathogens and convert it to pellets or granules."

Borden said the product has very little odor when dry, and it is odor-free once wet. It provides a good growth pattern for 3–4 months. Other organic fertilizers are on the market, but Borden said his company's product is available at a price the competition can't touch.

"We keep it simple, and we have a proven formula that works," Borden said. "Our customers love it because it works and it provides an alternative to a more expensive product."

Hobie Hughes lifts a shovel full of Organic Growing Systems' fertilizer pellets for Lawrence County Extension Director Amanda Walker. Hughes is vice president of operations at OGS in Monticello.

MSU Outreach: A Team Effort

By Bob Ratliff

When clients contact their county Extension office for help or information, they usually don't realize they are drawing on the resources of MSU's entire Extension Service and the Mississippi Agricultural and Forestry Experiment Station.

When first contacted about help for an organic fertilizer enterprise in her county, Lawrence County Extension Director Amanda Walker immediately began drawing on all the available resources.

"I put together an MSU working group in the beginning, as well as connecting this business with local infrastructure here in the county," she said.

The Mississippi State team includes Bill Evans, a research professor at the MAFES Truck Crops Branch Experiment Station in Crystal Springs. He and his colleagues have studied the use of Organic Growing Systems' product with tomatoes, herbs and marigolds. Evans has presented data from his research at meetings of the American Society for Horticultural Sciences and regional grower conferences. He is preparing to publish the data.

Larry Oldham, an Extension professor in the Department of Plant and Soil Sciences, provided results of agronomic, environmental and soils research by the USDA Agricultural Research Service, as well as results of studies at MSU and other universities in the Southeast.

Area Extension horticulture agent Kerry Johnson used Organic Growing Systems fertilizer in production evaluations for turf and ornamentals. One of his trials was included in a field day demonstration with wood ornamentals. Forage plot testing with the organic fertilizer has also been done by area Extension agent Randy Smith, who has recruited Organic Growing Systems personnel to speak at field days.

"The Organic Growing Systems experience is an important example of how one contact can mobilize MSU resources in support of a Mississippi enterprise," Walker said.