

Soy-Based Additive Boosts Fuel Efficiency

by James Ritchie

"Tractor fuel economy is better and engines start easier with this in the fuel," says Dave Bernhardt, Wing, ND, farmer. "We started using No. 2 diesel with SoyShield last spring, and I'm happy with the way it performs." Bernhardt is talking about a soy-derived diesel fuel additive developed more than three years ago with funding from the Minnesota Research and Promotion Council. After extensive testing, the National Biodiesel Board decided to put SoyShield on the market. The merchandising nod went to Schaeffer's Specialized Lubricants, St. Louis. Schaeffer's markets petroleum products primarily through a network of about 300 jobbers around the country.

"We put our first emphasis on the ag market," says Jay Shields, Schaeffer's executive vice president. "it seemed logical to distribute SoyShield first to the people who produce soybeans. We already had a network of distributors in place."

One of them is Mark Ryser, an oil jobber and service station owner in Blanchardville, WI. "We started blending SoyShield into diesel on June 1, 1999," says Ryser. "Frankly, I was skeptical about the additive at first. I got farmers acquainted with SoyShield by offering it at no extra cost for a month."

Ryser got early favorable feedback from his customers, most of whom are dairy farmers. "The biggest benefit farmers report is improved fuel economy," says Ryser. "some farmers say they're getting more tractor horsepower and more hours on the same amount of fuel. I also blend SoyShield in low-sulfur diesel we sell through the pumps at the station."

"One customer says he used to burn more than a tankful of diesel in his tractor in a long day of hay-making," Ryser adds. "Now he has fuel left in the tank at the end of the day. He told me not to bring him any diesel fuel that doesn't have SoyShield in it."

Bernhardt crops 700-800 acres, and has another 2,000 acres of hay and pasture land.

"My tractors have a lot of hours on the engines," he says. "Before, I was burning premium diesel. When I started using SoyShield, I blended it with No. 2 diesel and got the same performance I was getting with higher-quality fuel, or better."

A gallon of the additive, which costs about \$15, is blended with 500 gallons of diesel fuel. That adds 3¢ per gallon to fuel cost. "But premium-grade diesel costs 6¢ more per gallon," says Bernhardt. "So I'm more than offsetting the cost of the SoyShield by no longer burning premium diesel. With the boost in engine performance I'm getting, I can't argue with the SoyShield price. I haven't had any engines apart since I've been using fuel with this additive, but I'd guess that pumps and injectors stay cleaner. And I like the idea that this product is supporting farmers, and is made in our own country."

While Schaeffer's Specialized Lubricants put SoyShield on the ag market first, the company now is expanding the clientele to industry and government.

"North Dakota Highway Department personnel ran test this winter comparing diesel fuel with SoyShield, and the fuel they have been using in roadworking equipment," says Bernhardt. "They're considering going to SoyShield in all of their diesel-powered machines."



North Dakotan David Bernhardt gets the performance of Premium Diesel by blending SoyShield with No. 2 diesel.