

Rust's silver lining

Looking for positives in the soybean rust threat: it wasn't a bad year.

By Chad Elmore

As Hurricane Dennis blew into the Midwest, it brought a little precipitation to parched fields. While farmers looked forward to the arrival of the rain, they also feared a damaging side effect. There was a good chance the winds would carry with them the feared and much-discussed Asian soybean rust disease.

Hurricane Dennis made landfall along the Gulf Coast in July, and blew across southwestern Alabama, where soybean

rust had already been found. While the spores didn't travel as far inland as had been feared, there was a legitimate cause for concern. Soybean rust originally emigrated to the continental United States from South America, possibly after hitching a ride with Hurricane Ivan. It's believed the spores that hit Brazil and Paraguay in 2001 rode in on winds from southern Africa. In 2004, Brazilian farmers saw yield losses as high as 80%.

First discovered in Japan in 1902, soy-

Spraying System Co.'s TwinJet nozzle in action. (TeeJet photo).

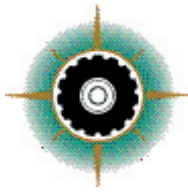
bean rust is aggressive and develops deep within the plant canopy, making spray penetration and plant coverage a challenge as the canopy becomes more dense. If left untreated, soybean rust destroys the photosynthetic tissue of the soybean plant, leading to premature defoliation and early maturation. Ultimately, yields suffer due to the reduction in weight and quantity of pods and seeds.

In late August, the news site StopSoybeanRust.com reported that the northernmost incidence of soybean rust was near Athens, GA, in Oconee County. At press time, it appears that this year's U.S. soybean crop will not be effected by rust at the level that had been feared. Appearances in the Gulf States have been minor, and the spores were not found in major soybean growing states in the Corn Belt — possibly because of the dry weather. Still, researchers warn that the fungus that causes soybean rust is here to stay; it would likely overwinter in the southeast and return next year.

Back in July, Jim Sallstron, United Soybean Board Production Chair and Winthrop, MN soybean farmer, said: "The key to managing soybean rust is early identification of the disease, which leads to timely treatment with appropriate fungicides. Farmers need to know what they are up against in order to protect their crop."

There is a silver lining in the soybean rust cloud, and sharing a portion of it is the fact that 2005 has simply become a year to study: farmers now know what to look for when scouting for rust, and they know what to do if it is spotted — soybean rust can move from less than 5% to 90% disease severity in 21 days. Another portion of that silver lining was shared by sprayer OEMs and their suppliers. Fungicide application is the first line of defense in the battle with soybean rust.

"Rust has really triggered an awareness



MARKET AT A GLANCE

in the minds of farmers," says Mike Flatt, Illinois territory manager, Equipment Technologies, Inc., Mooresville, IN. "In the past self-propelled sprayers were the least appreciated piece of equipment on a farm. A farmer might have tried to get away with a low-quality sprayer or a cheap used model. Soybean rust has helped them realize owning a good sprayer can save money as well as their crops."

The nozzle is the working end of the sprayer, and choosing the right nozzle for the application is crucial. Late last year, Spraying Systems Co., Wheaton, IL, parent company of TeeJet Spray Products, began the educational process by joining John Deere and a number of chemical companies in partnership with the American Soybean Assn., St. Louis, MO, to host a series of Winter Soybean Rust Seminars in five states, including Illinois and Georgia. Covered were soybean rust basics, detection techniques, protecting crops from soybean rust and the fundamentals of fungicide application.

In addition, TeeJet sales offices throughout soybean producing areas have been actively involved with meetings at local dealers and distributors, and TeeJet has published several informa-

tional brochures that were available at trade-shows and on its website (www.teejet.com).

"TeeJet has been involved from the get-go in educating farmers, dealers and OEMs," says Marty Heyen, marketing and customer relations manager, Spraying Systems Co., Mobile Systems Div. "It is important for everybody in the industry be educated on how to apply these fungicides properly. Spraying fungicides is not a new application, it is just new to a majority of soybean growers."

Equipment Technologies (ET), manufacturer of four models of Apache sprayers that range in size from 500 to 1,200 gal., has seen its sales climb for several years. But "when people started getting really worried about the soybean crop in late January, our phones started ringing off the hook," says Matt Hays, CEO, ET. "The dealers needed machines that had been on order immediately."

Spraying Systems Co. also saw an



Asian soybean rust appears as lesions on the leaves. (USDA photos).

increase in sales of spraying tips, particularly those designed for spraying fungicide: the Twin Jet and the new Turbo TeeJet Duo nozzles.

Both TwinJet and Turbo TeeJet Duo nozzles offer two flat fan spray patterns at a 30 degree angle front and back at the same time to force the spray into the plant canopy. "In fungicide spraying" says Heyen, "penetration into the canopy for proper plant coverage is an essential ingredient for effective control."

Soybean rust has strengthened a trend that has been in place for the last five years — more farmers will purchase their own sprayers. Other factors driving sprayer sales are that chemicals are easier to apply, and the sprayers themselves are easier to operate and maintain.

"The on-going threat of soybean rust will continue to attract buyers who were already thinking about buying a sprayer," says Hays, "and may be nervous about depending on a custom applicator's schedule, especially if soybean rust hits the big soybean areas."

"Some people wonder if the market overreacted to the threat of soybean rust," says Heyen, "but I think it's better safe than sorry. It's better to have the equipment and understand what to do so we're prepared when soybean rust does show up." 📷



A pair of the recently introduced 2006 Apache AS710 sprayers are loaded onto a lowboy bound for Kansas outside of Equipment Technologies' Mooresville, IN, factory. Equipment Technologies, which builds its sprayers to order, has enjoyed a busy year, thanks in part to the role of sprayers in combatting Asian soybean rust. The firm's other new model, the Apache AS1010, is seen in the foreground. (Author photo).