

Protein enhancer does the trick

ROTHERS Lee and Albert Goodin like to try new crop inputs and management ideas at their 2,700-acre Goodin Farms just outside Charleston, Mo. It's not unusual for them to include a half-dozen or more trials of different products for crop fertility and plant health. In 2005, the standout result was the 26-bushel-per-acre advantage of corn treated with a new protein-based plant health regulator.

"Every year we try different products or systems on a few fields, and we had about eight trials going in 2005," says Lee, who has been farming for 33 years. He has seen new products promise a lot but deliver just a little. "This year none of those trials came out better than ProAct."

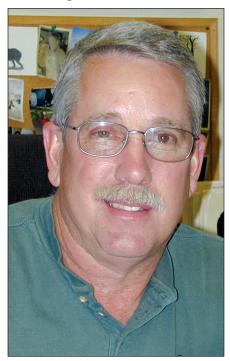
The Goodins used ProAct on 25 acres of an 80-acre field of Pioneer Hi-Bred 32P76, a Yieldgard corn.

"That field produced 205 bushels an acre where we used ProAct and 179 bushels where we didn't, all at 15% moisture," says Lee. "This year we'll use ProAct on all our corn acres, and we'll leave multiple check strips to confirm the 2005 results. But I'm confident it'll deliver a good payback this time as well. You could see the difference — the line between treated and untreated — all season long after the application. There was a striking vigor and color difference where the ProAct went on."

Protein 'tricks' the plant

Registered with the U.S. EPA just before the 2005 planting season, ProAct contains Harpin proteins ("Harp-N-Tek" is the name Eden Bioscience has coined for the proprietary technology). The proteins link to receptors that plants developed to alert them to the presence of disease pathogens. ProAct contains no pathogens, but the plant doesn't know that. The plant "panics" and turns on its self-defense and growth systems. Eden Bioscience research shows the result is improved vigor, stamina, nutrient uptake and reproductive growth.

The Goodins rotate corn, wheat and soybeans in that order. In October 2004, the ProAct test field of Commerce Loam soil was coming out of soybeans and was given NPK+S of 15-35-45-5.



LEE GOODIN

Key Points

- Brothers tried out new inputs last year, hoping for an advantage in yield.
- Farmers got a 26-bushel-per-acre boost from use of ProAct on corn.
- They'll use the product again this year on all of their corn acres.

Then on April 19, 2005, the field was subsoiled and "dragged off" once prior to planting. A quart of Asset and a 5-ounce rate of garlic oil (to discourage

blackbirds) was applied in furrow over the seed as the bed was closed. Then a RoGator was used to apply 25 gallons of 32% with 1 quart of atrazine.

On May 17, when the corn was about 12 inches tall (three- to four-collar stage), a ground rig applied a tankmix of Steadfast and another quart of atrazine. A ½-ounce rate of ProAct went into the tank for the 25 test acres. Within a few days, the field received an additional 45 gallons of 32% side-dressed. The field was laid by until harvest on Sept. 30.





LESS CYSTS, LESS EGGS.

MANAGE SOYBEAN CYST NEMATODES A NEW WAY!

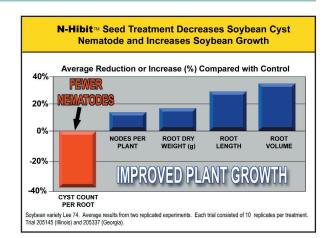
N-Hibit[™] Soybean Seed Treatment reduces Soybean Cyst Nematode cysts per root weight by about 40% in replicated greenhouse work by independent agricultural research scientists

N-Hibit™ treated soybeans also averaged more plant growth: Nodes, leaves, stem diameter, root length and volume, and plant weights (root, shoot, and leaf) compared with the Untreated Control.

At 0.3 oz/100 lbs of seed, N-Hibit provides an economical option in soybeans for reducing and managing SCN eggs and cysts while improving plant health and growth.

N-Hibit uses Harp-N-Tek $^{\text{\tiny M}}$ natural harpin protein technology to activate the soybean plant's own self-defense and growth systems to defend itself from within against nematodes in the surrounding soil.

This is a unique mode of action, and one that involves virtually no environmental or health issues.



Because of its high degree of safety, N-Hibit can be applied on-farm at planting as well as applied by commercial seed treaters.

DEFEND YOUR ROOTS FROM WITHIN!







Photo of SCN females and cysts courtesy of Terry Niblack, University of Illinois.

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