

News Releases/ Media Relations

PRODUCTION

Seed Treatment Taps New Tech

The National Cotton Council estimates that nematodes cost frustrated farmers more than a quarter of a billion dollars in lost revenues a year across the Cotton Belt. This year farmers will have a new tool for combating this troublesome pest. The newly available N-Hibit™ Cotton Seed Treatment uses harpin protein technology to spur cotton plants to fight nematodes from the "inside-out."

"By inside-out we mean that the plant's own natural inner growth and defense capabilities are turned on by N-Hibit's harpin protein, and one result is that nematode reproduction is substantially reduced," explains Dr. Ned French.

Tapping Harpin Triggers

Dr. French is the field development scientist at Eden Bioscience, which developed N-Hibit and other harpin protein products that contain their exclusive Harp-N-Tek technology.

"We already knew that the harpin proteins in N-Hibit are unique in the way they switch on plant growth and defense systems to enhance plant health," Dr. French says.

University trials additionally showed that N-Hibit and other harpin proteins can substantially reduce nematode egg production, Dr. French adds. The result was formulating a seed treatment so cotton farmers can have this additional protection starting at germination.

Plants have numerous ways to fight off and grow through invasive diseases and parasites such as the nematode, and scientists believe that harpin triggers one or more of them. Research results have been very positive, Dr. French says.

Promising Results

Researchers found that cotton boosted with N-Hibit seed treatment averaged fewer than half as many root knot nematode eggs as the untreated check.

Recent research findings will be detailed at the Beltwide Cotton Conferences in posters that are part of the Cotton Disease Council Technical Conference. Dr. French also will pre-



Early-season protection is critical.

"N-Hibit and other Harp-N-Tek products have no direct effect on any pest or on the plant's external environment," Dr. French notes. "Harp-N-Tek makes the plant do the protection work. Even when sprayed on a plant, Harp-N-Tek products do not enter the plant. They bind with the plant's external harpin protein receptors. Once they've done that and turned on the plant's internal signals that activate self-defense and growth, the harpin proteins harmlessly disintegrate, leaving no detectable residue."

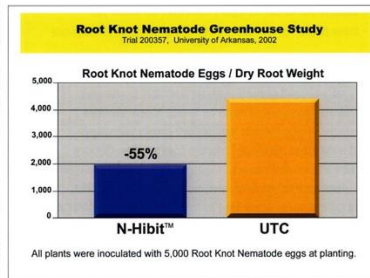
The Bottom Line

N-Hibit fits IPM programs and costs a fraction of standard plant protection products.

The product also can be used in conjunction with them to gain the added advantage of N-Hibit's environmentally preferable, non-toxic inside-out mode of action, Dr. French says.

N-Hibit is available as a commercial seed treatment applied by the seed dealer or as a hopper box formulation easily applied on the farm.

Eden Bioscience contributed to this article. For more information about N-Hibit, visit www.edenbio.com or call (888) 879-2429.



Reprinted from January 2005 Cotton Farming



1776/2006 "A Critical Year"

