SCN Coalition: TAKING THE GLOVES OFF







PERSISTENT OPPONENT

Soybean cyst nematode (SCN) was first discovered in the U.S. in 1954, spreading from North Carolina to the Midwest and eventually into most soybean production areas. By 1974, it had become the most damaging soybean pathogen in the country. Today, it remains more damaging than any other disease or pest, causing about \$1 billion in soybean yield losses annually.

PUTTING SCN ON THE ROPES

With soybean checkoff funding through the North Central Soybean Research Program (NCSRP), the SCN Coalition was created in 1997. The goal was to encourage farmers to "Take the Test. Beat the Pest." Training and education were provided to agronomists and farmers, along with free SCN soil sample processing to test and take control of SCN. University SCN testing labs in 1999 reported an increase from

11% to 736% the number of SCN samples submitted.



GOING FOR THE KNOCKOUT

By 2015, the list of SCN-resistant soybean varieties in the Upper Midwest showed nearly 90 percent had PI 88788 as a source of resistance. So, in 2016, a newly focused SCN Coalition was created to prevent a resistance crisis. The goal is to increase the number of farmers testing and actively

managing for SCN across all soybean states. "Know Your Number" is the new aim for farmers to quantify their problem, decrease SCN populations and increase yield potential.



READY FOR THE NEXT ROUND

USB and NCSRP developed a National Sovbean Nematode Strategic Plan for 2018-2022, which includes funds for the SCN Coalition to explore additional economically important soybean nematodes like root-knot and reniform nematode. The expansion addresses the growing need of farmers who manage multiple nematodes and associated diseases. NCSRP is also funding research into the durability of SCN resistance, breeding to improve resistance, relationships to related soybean diseases, and outlining best management practices.

ONE, TWO PUNCH: RESISTANCE AND RESISTANCE TO THE RESISTANCE

Farmers for about two decades were able to manage SCN with genetic resistance found in many soybean varieties: PI 88788. However, using the same resistance source over and over began to lead to soybean yield losses. Aggressive SCN populations were able to slowly overcome the genetic resistance. Checkoff funding shifted to finding breeding solutions for SCN resistance.



13 NCSRP MEMBER STATES REPRESENT MORE THAN 355,000 SOYBEAN FARMERS



























