

HOW THE SCN PROBLEM EVOLVED.

What's your number?

Take the test.  Beat the pest.

The **SCN** Coalition™

Funded by the soybean checkoff

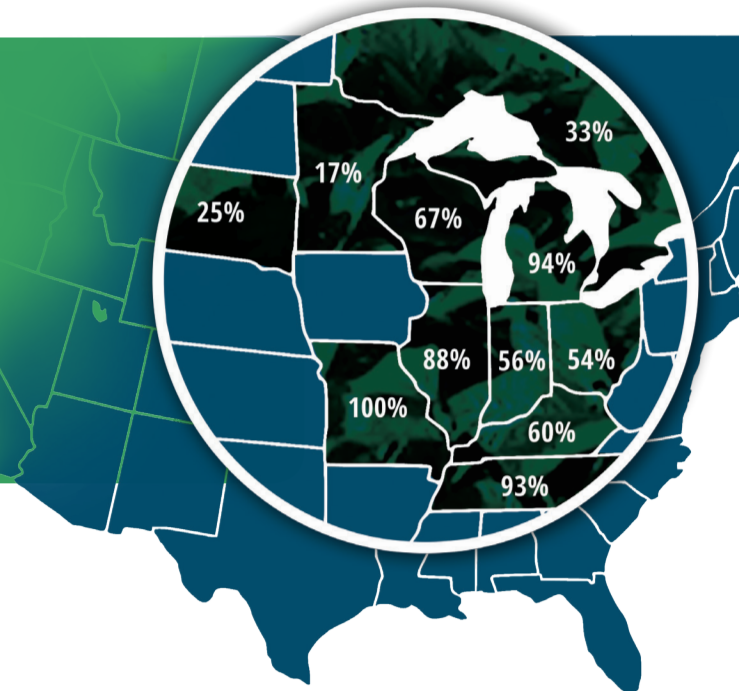
TOO MUCH of a good thing.

For more than 20 years, greater than 95 percent of all SCN-resistant soybean varieties have included resistance from the PI 88788 breeding line.

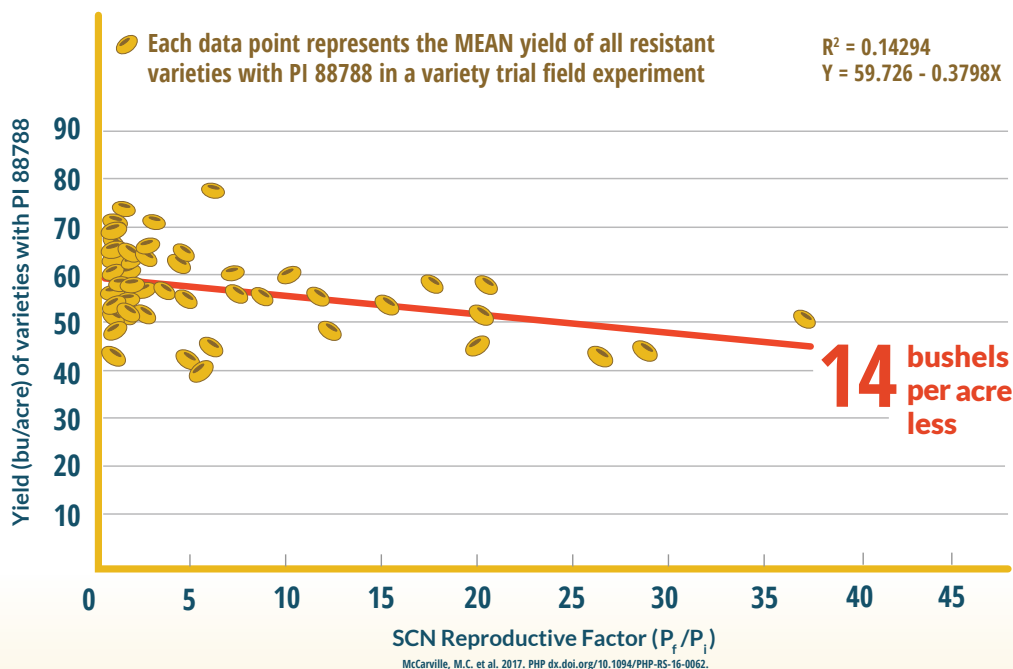
Nematodes are becoming “resistant to the resistance.”

A resistant variety should allow less than 10 percent reproduction. In other words, a resistant variety should stop 90 percent of the SCN in a field from reproducing. Across the region, varieties with PI 88788 resistance aren't hitting the mark. On some farms, one out of every two nematodes can reproduce.

The percentage of SCN populations in a state/province with elevated reproduction (>10%) on PI 88788



AS SCN REPRODUCTION INCREASES, yields decrease by as much as 14 bushels per acre.



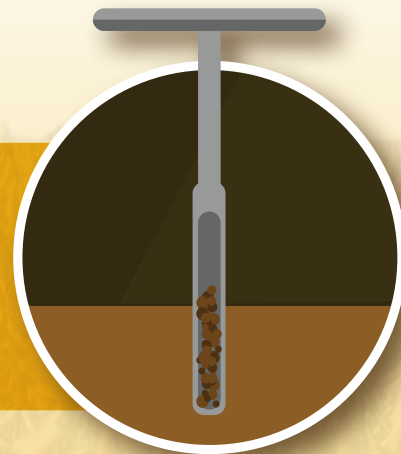
Research shows yield loss as SCN populations increase on varieties with the PI 88788 resistance source. This data is from 25 years of variety trial experiments in farmers' fields in Iowa.

The Reproductive Factor (RF) is the end-of-season number of SCN eggs divided by the beginning-season number of eggs. An RF of 2 means SCN egg numbers doubled from spring to fall. An RF of 4 means egg numbers quadrupled. The last data point on the far right in the graph has an RF of almost 40 (a fortyfold increase).

NEW SCN MANAGEMENT recommendations.

Work with your advisors and develop a plan to manage SCN:

- Test your fields to know your numbers.
- Rotate resistant varieties.*
- Rotate to non-host crops.
- Consider using a nematode-protectant seed treatment.



* SCN populations can adapt to individual resistant varieties as well as to sources of resistance such as PI 88788 and Peking. So, rotating to a different resistant variety – even if it's still PI 88788 – may help slow the buildup of SCN populations.