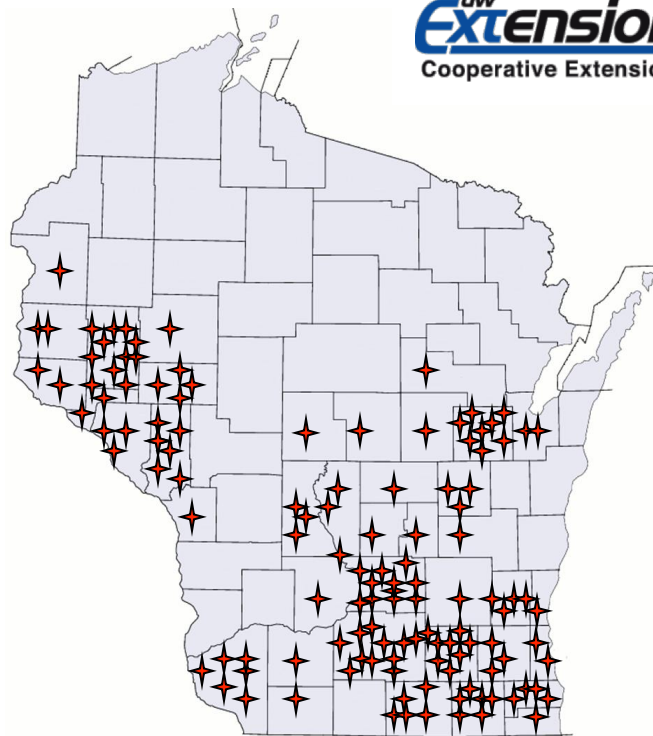


SCN Hg Types in Wisconsin

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Hg Type 2 or Hg Type 1.2 in Wisconsin

The Hg (*Heterodera glycines*) Type system is used to convey the reaction of a soybean cyst nematode (SCN) population to the seven soybean lines that provide the basis for resistance in SCN-resistant varieties. Researchers evaluate the percentage of SCN that develop from the egg to adult stage on these lines, using a coding system of 1-7 to assign Hg Type. A threshold of 10% is used to classify the population as adapted to a resistant line, and the Hg Type name shows which lines exceed that threshold. For example, an Hg Type 1.2 population has 10% or more individuals able to develop on both Peking and PI 88788, while an Hg Type 0 population is below the threshold for all seven lines.



Hg Test

SCN indicator lines

1. Peking
2. PI 88788
3. PI 90763
4. PI 437654
5. PI 209332
6. PI 89772
7. Cloud

Lee 74 Suscep. check

The Hg Type has been determined for more than 150 SCN populations obtained from samples submitted to the Wisconsin Soybean Marketing Board SCN testing program. About 18% of the populations are Hg Type 0, 4% are Hg Type 1, and 78% are Hg Type 2 or Hg Type 1.2. Many of the fields with populations able to develop on PI 88788 have never been planted with SCN-resistant varieties. It's important to remember, however, that SCN can be moved by wind, animals, and soil so resistant varieties may have been used at their point of origin.

Resistant soybean varieties improve yield in fields infested with SCN and are recommended once SCN is detected. The ability of SCN to survive plant defense responses is a heritable trait so resistance can break down over time if it is overused. Most SCN-resistant varieties for Wisconsin derive their resistance from PI 88788 so the prevalence of Hg Type 2 SCN populations increases the importance of rotating crops and varieties. Growers are encouraged to submit a sample for SCN testing if SCN-resistant varieties underperform. The WSMB sponsors 4 free SCN tests per grower, per year.

Rotate soybean with non-host crops like corn and small grains.

Plant a SCN resistant soybean variety and rotate varieties with different sources of resistance.

Retest SCN infested fields if yields start to decline.