Sample Fields for Soybean Cyst Nematode

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Abstract
As we work to complete harvest and put the finishing touches on the 2013 growing season, it is not too early to start thinking about 2014 crops. Results of soil samples collected in the next few weeks from fields in which soybeans will be grown in 2014 could mean the difference between “so-so” and profitable yields next year.

Disciplines
Agricultural Science | Agriculture | Plant Pathology
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Collecting soil cores from a field of harvested corn to check for the soybean cyst nematode.

The soybean cyst nematode (SCN) is a widespread pest of soybeans in Iowa and the Midwest, and SCN reproduction was extremely high in the 2012 growing season. Many of the fields in which soybeans were grown in 2012 will be planted to soybeans again in 2014.

Fall is a perfect time to collect soil samples to check fields for SCN and to determine the population density (number) of SCN in the fields, if it is present. If SCN is discovered at low or moderate population densities, SCN-resistant soybean varieties should be grown in 2014 to maximize soybean yields in the presence of the nematode.

Fall also is a good time to determine if SCN was present in soybean fields in 2013. Collecting samples for this purpose is done in the same manner as sampling fields of corn stalks for SCN in anticipation of the 2014 soybean crop. Following are some sampling guidelines.

How to collect a good sample

- Collect 8-inch-long soil cores.
Collect 15 to 20 soil cores per sampling area.
Limit the area sampled to 20 acres or so, if possible.
Collect numerous multiple-core samples from different areas in large fields
If grid sampling, collect one or two soil cores from every grid cell and combine cores from the number of cells that represent approximately 20 acres.
Collect cores from underneath crop row if soybeans were grown this season.
Do not collect samples if the soil is muddy or frozen.
Send samples to a private soil-testing laboratory that does SCN testing or to:
Plant and Insect Diagnostic Clinic
Iowa State University
327 Bessey Hall
Ames, IA 50011

Soil sampling pattern based on the agronomic features of the field.

More information on SCN

For more information about the biology and management of SCN, visit www.soybeancyst.info and www.planthealth.info/scn_basics.htm.

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