



**David Wright, Ph.D.**  
Plant Health Initiative Coordinator

## Nematodes – Still the Number One Pest of Soybean Producers

**H**igh soybean yields in parts of Illinois and Iowa last year may have producers believing they have beaten the soybean cyst nematode (SCN), or worse yet, believing they don't have a SCN problem at all. In reality, once you have SCN, you will always have it unless you switch to a continuous corn production system.

“SCN is still the number one pest of soybean producers,” says Terry Niblack, professor of nematology at the University of Illinois. Current estimates show that US soybean producers lose nearly 142 million bushels annually to SCN. “Generally soybean producers do not know they have SCN until they start realizing yield losses. Visible symptoms, such as yellowing of plants will not be apparent with low to moderate nematode populations unless plants are stressed by other conditions,” she continues.

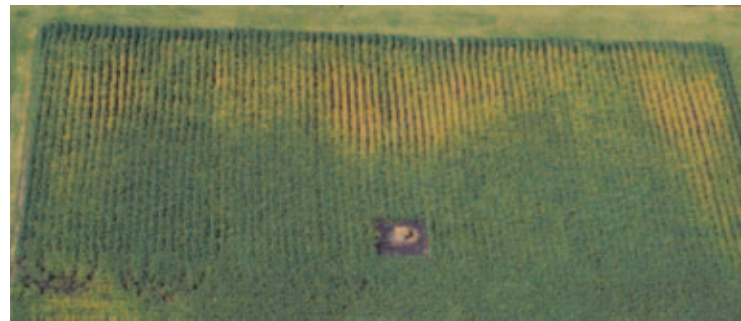


All soybean fields should be routinely tested for SCN. If you know you have SCN, test fields each fall prior to planting soybeans to monitor the effectiveness of your management program. At a minimum, each soybean field should be sampled prior to planting every other soybean crop. “If you believe you don't have a problem, and haven't tested your fields recently, now is a good time to test,” says Niblack. SCN has been confirmed in all but a few counties in Illinois and Iowa.

### Spring soil test to detect SCN infestations.

Spring is a good time to test for SCN although the preferred time to sample is in the fall. When sampling in the spring, the best time is just before planting.

Pull soil samples from field entryways, low spots including any area that has been flooded in the past, high pH spots, and near fence lines where wind-blown soil accumulates. These are the areas where SCN are typically found. Soil samples should be pulled from a depth of 6-8 inches.



**Aerial photography image of SCN infested soybean field. Chlorate areas indicate location of high SCN populations.**

### Using aerial photography to detect SCN

Recently, scientists at the University of Missouri and Iowa State University have been using more unusual methods of crop scouting. Satellite imagery and aerial photography have been proven as potential low-cost methods of identifying problem areas in fields. Stressed areas will show up quite clearly as differences in canopy density, color or as thin spots.

The best time to take aerial photographs to identify stressed areas is from mid to late August through the first week of September. However, aerial photography has been used successfully throughout the growing season as a diagnostic tool.

Soil samples still need to be taken to confirm the presence of SCN, however. Aerial photographs cannot tell you the cause of the stress but they can show you where it is and how large of an area is affected. The rest is up to the producer.

Although neither of these methods enables the producer to initiate immediate remediation measures, they do enable the producer to plan for the future. Management of SCN is a long-term process that begins with the soil test, includes the selection of well adapted, high-yielding soybean varieties and concludes with a plan to rotate the use of the source of SCN resistance.

For more information on sampling for SCN, locations of labs for SCN analysis and using satellite imagery and aerial photography as diagnostic tools, log on to [www.planthealth.info](http://www.planthealth.info).