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# Integrated Crop Management NEWS

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## Start Checking Soybean Roots for SCN Females

By Greg Tylka, Department of Plant Pathology

Soybean cyst nematode (SCN) is a serious pest concern for soybean every season in Iowa. Current SCN management options include soil-applied nematicides and resistant soybean varieties. All are implemented at the time of planting. However, effective scouting during the growing season is the key to successful, integrated management of SCN.

Many Iowa fields are known to be infested with the SCN and many more are suspected of being infested. Research funded by the soybean checkoff indicates that about 70 percent of Iowa's fields may be infested with SCN. Symptoms of damage from SCN on soybean could include stunting of the plants and yellowing of leaves. But more than 30 percent yield loss can occur without the appearance of any symptoms.

SCN females can be seen with the unaided eye on roots of soybean plants. So digging roots and looking for SCN females is an effective way to scout fields for the presence of this pest. The SCN life cycle takes about 24 days to complete under ideal conditions (including soil temperatures of about 78 F). But depending on spring rainfall and soil temperatures, the first SCN females may not appear on soybean roots until five or six weeks after planting.

To check for the presence of SCN females on roots, carefully dig roots from the ground and then gently shake or crumble soil away from the fine roots and look for the small, white dots that are the SCN females. Checking for SCN by [looking for adult females on soybean roots](#) was covered in a previous ICM News article.

#### Summary

- Up to 30 percent yield loss can occur with SCN without above ground symptoms.
- Digging soybean roots and looking for SCN females is an effective way to scout fields.
- It may take 5 or 6 weeks after planting for the first SCN females to appear.
- Female numbers on roots reflect a resistant variety's ability to control SCN reproduction.



### **Digging roots to check for SCN females.**

In addition to observing roots for SCN females to determine if a field is infested with the pest, assessing how many SCN females are on the roots of SCN-resistant soybeans gives an indication of how well the resistance is controlling reproduction of the nematode. There should not be more than 10 to 20 white SCN females on the roots of an SCN-resistant soybean variety if it is controlling reproduction of the nematode well. See "[Check SCN-resistant Soybean Roots for SCN Females](#)" for more details.

*Greg Tylka is a professor of plant pathology with extension and research responsibilities in management of plant-parasitic nematodes.*

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