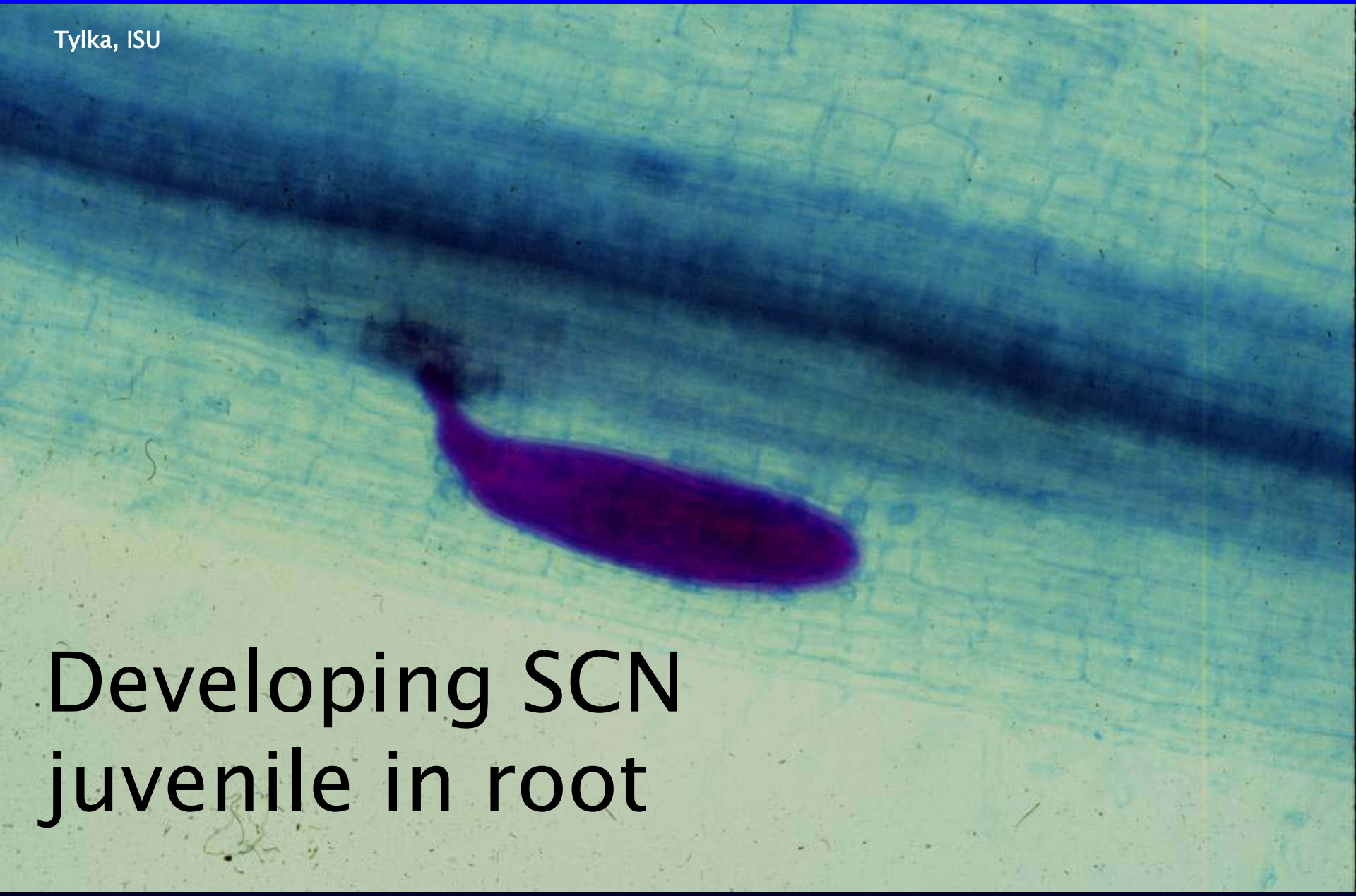


A microscopic view of soil showing a SCN egg and a juvenile nematode. The egg is a small, oval, reddish-brown structure. The juvenile is a long, thin, curved, translucent worm-like structure. The background is a light brown, textured surface.

SCN egg and  
juvenile in soil

Tylka, ISU

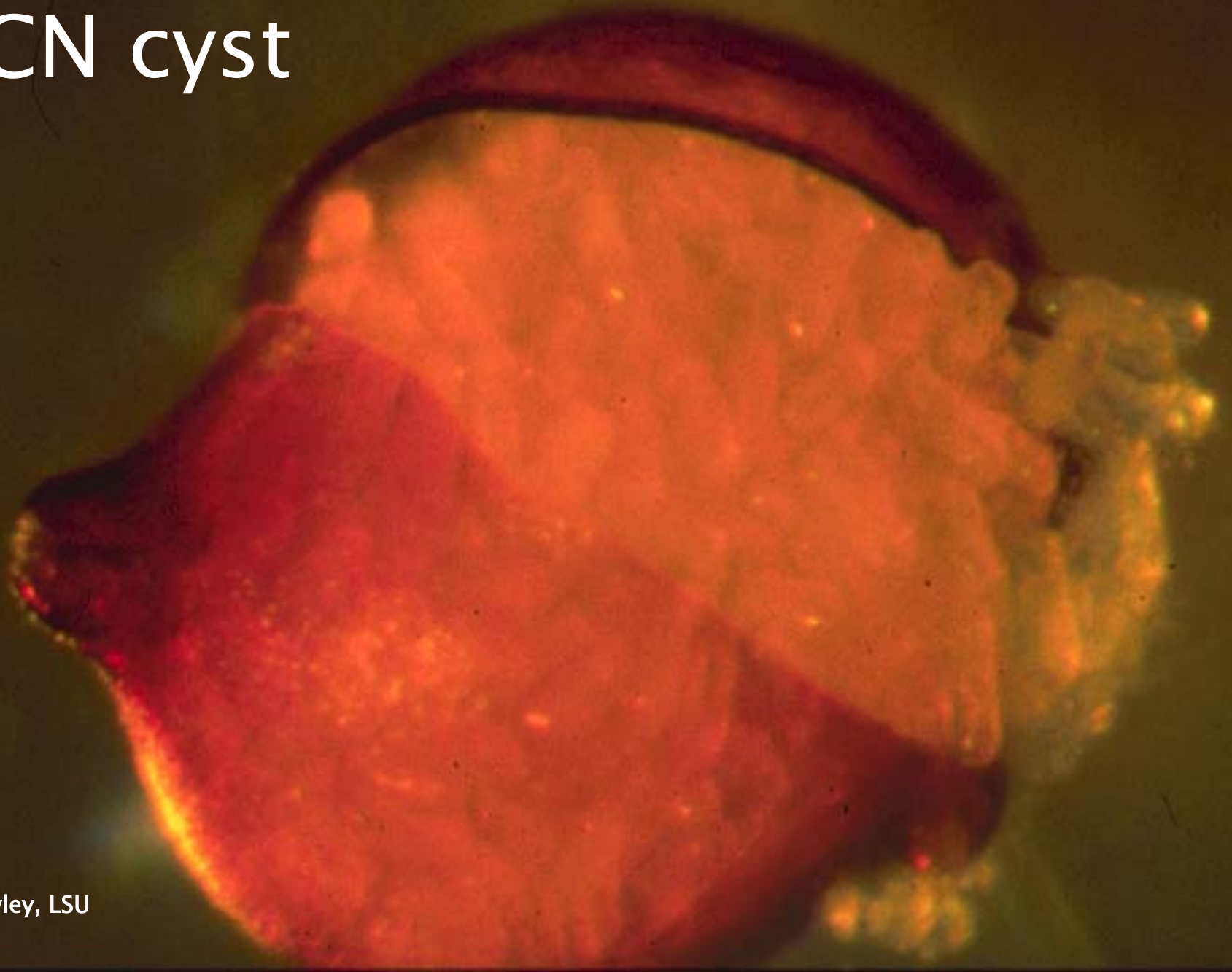


Developing SCN  
juvenile in root

# Adult SCN female



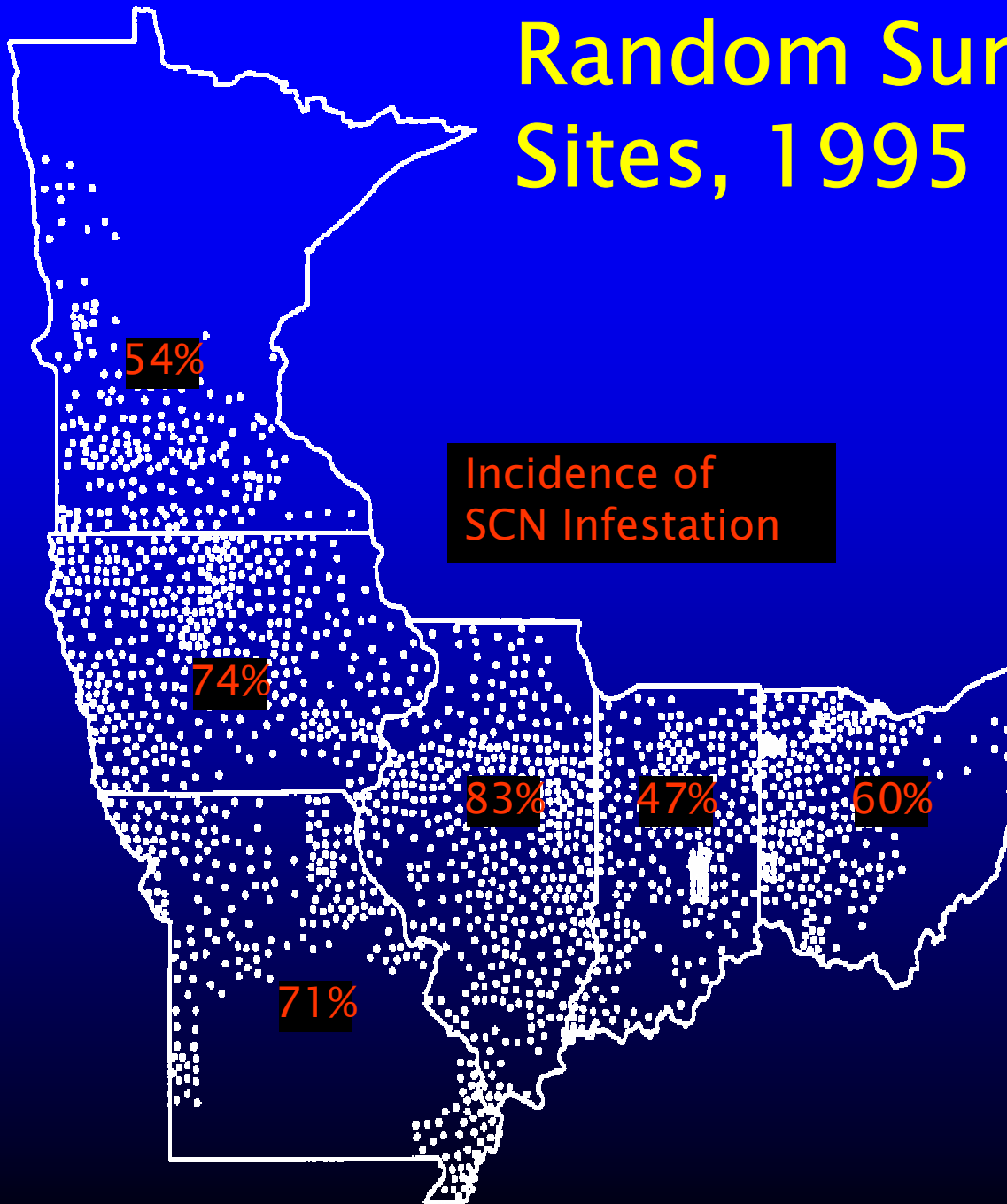
# SCN cyst



# Why is SCN such a Serious Threat ?

- distributed widely throughout many states
- does not cause obvious symptoms for several years
- has prolific reproduction  
(>200 eggs per female, 2–4 generations per year)
- has effective long-term survival  
(eggs can live >10 years without food (soybeans))
- has potential for devastating damage

# Random Survey Sample Sites, 1995 – 1996

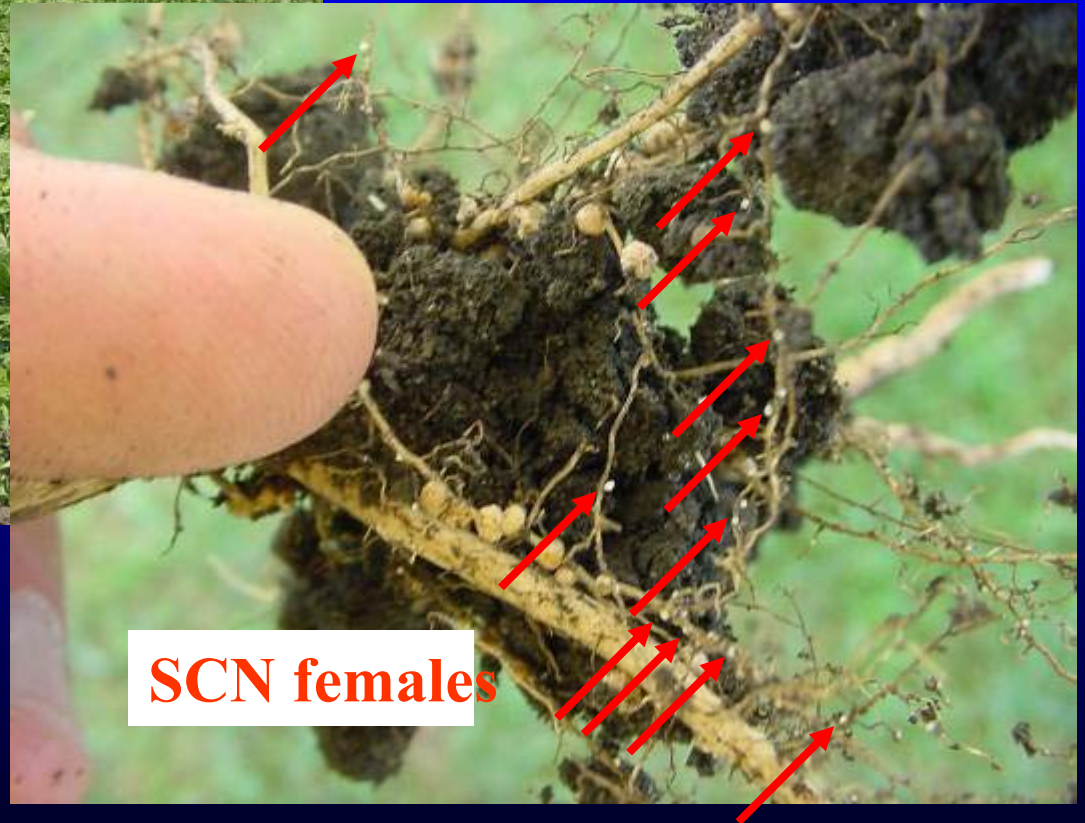


# Lack of Symptoms



field in central Iowa

roots dug from field



**SCN females**





# Soybean Cyst Nematode Management

- scout for early detection
- grow nonhost crops
- grow resistant soybean varieties

# How to Scout for SCN

- ~~look for yellow plants~~
- ~~look for stunted plants~~
- look for SCN females on roots
- collect soil samples

# Dig roots and look for females



**Advantages: quick and cheap**

**Disadvantages: only during growing season  
no quantitative information**

# Collect soil samples to test for SCN

A person wearing blue jeans and brown work boots is using a long, thin metal soil probe to collect a sample from the ground. The ground is covered with a layer of dry straw or mulch. A white bucket is visible on the right side of the frame.

**Advantages:** anytime of the year  
numerical information

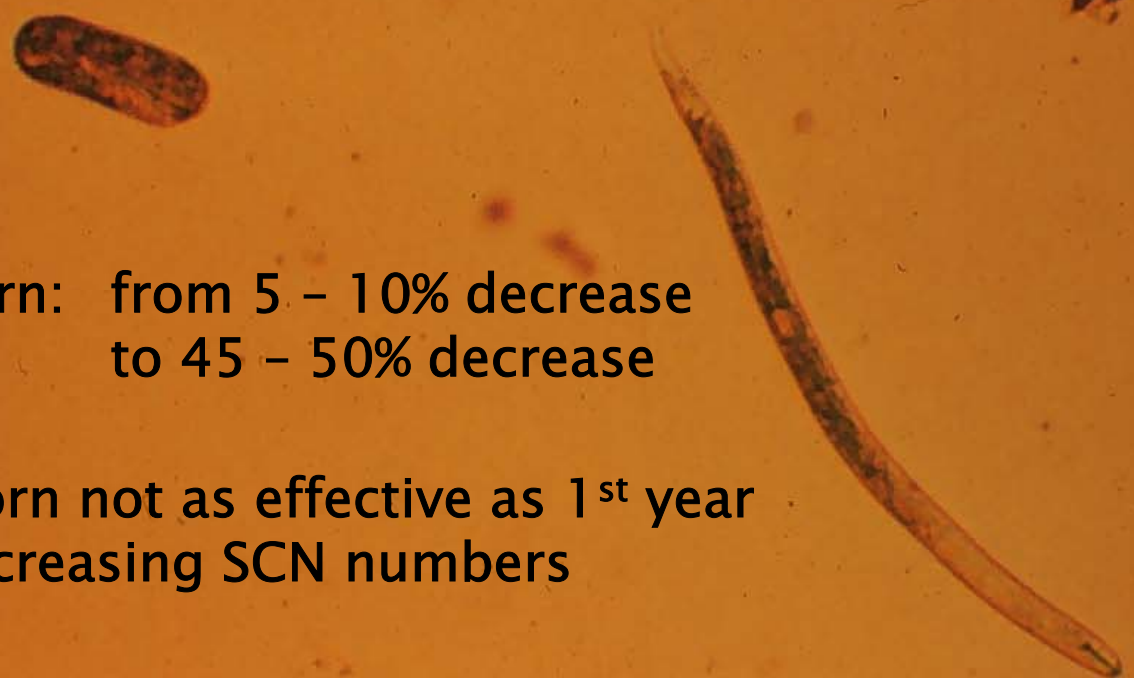
**Disadvantages:** must pay a processing fee  
must wait for results

# Soybean Cyst Nematode

## Nonhost Crops

- alfalfa
- barley
- canola
- clover (some)
- corn
- cotton
- forage grasses
- oats
- peanut
- rye
- sorghum
- wheat

# Nonhost Crops Reduce SCN Population Densities

A microscopic image of a nematode, likely a root-knot disease vector, showing its characteristic curved, worm-like shape and internal structure. The nematode is positioned diagonally across the frame, with its head pointing towards the bottom right. The background is a light, textured surface, possibly a slide or a piece of paper.

1<sup>st</sup> year corn: from 5 – 10% decrease  
to 45 – 50% decrease

2<sup>nd</sup> year corn not as effective as 1<sup>st</sup> year  
corn at decreasing SCN numbers

# Resistant Soybeans Produce Acceptable Yields and Prevent SCN Population Density Increases



SCN-resistant soybean variety

SCN-susceptible soybean variety

**Want more information?**

[www.soybeancyst.info](http://www.soybeancyst.info)

[www.planthealth.info](http://www.planthealth.info)