

Sampling For Corn Nematodes

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Several months ago, Don Hershman and I published a Kentucky Pest News article on a nematicidal seed treatment for corn called Avicta® (<http://www.ca.uky.edu/agcollege/plantpathology/extension/KPN%20Site%20Files/pdf/kpn1221.pdf>). The best use of Avicta® or any other nematicide would be in fields with high nematode counts. Sampling so far suggests that populations of corn nematodes in Kentucky are commonly below levels that “raise a yellow flag”. However, some fields have high enough counts to warrant concern. The only way to know is to sample the field.

An excellent time to sample for corn nematodes is around 4-6 weeks after planting. With early planting in many areas, many fields will soon be at the optimal stage for sampling. Sampling recommendations from nematologists are as follows:

1. Using a one-inch soil probe, pull 20-25 cores from within rows. Sample to a depth of 12 inches.
2. Sampling pattern:

a. If the field appears more or less uniform, sample in a zig-zag or “W” pattern.

b. If there are “hot spots” of stunted, yellowing corn, sample around the edge of such areas.

3. The nematodes must remain alive in order to count them.

a. Put soil cores in plastic bags (they will dry out in paper bags).

b. Do not allow samples to heat up. Leaving samples on the seat of the pickup can kill them quickly.

c. Handle samples gently. Don’t even break up soil cores any more than necessary. Some nematodes are sensitive to physical disturbance.

Among the laboratories that can assay and interpret numbers of corn nematodes in soils and roots are:

- The University of Illinois (<http://plantclinic.cropsci.illinois.edu/>)

- Purdue University (<http://extension.entm.purdue.edu/nematology/index.html>)

- Iowa State University (<http://www.plantpath.iastate.edu/pdc/node/158>) . Δ

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