Nema Note 3-11



NCDA&CS

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Lesion Nematodes on Tobacco

www.ncagr.gov/agronomi/uyrnem.htm

The nematode assay for this field detected lesion nematodes, *Pratylenchus* spp. This nematode, along with soil fungi and bacteria, is one of the primary causes of brown root rot of tobacco. Outbreaks of this disease tend to be sporadic. *P. brachyurus* is the most common species of lesion nematode damaging tobacco in North Carolina. Little, if any, damage is caused by *P. zeae*, which primarily attacks grasses.

Early season stress (often caused by water deficiencies or excesses) increases brown root rot incidence and severity. Stress can trigger outbreaks even when populations of lesion nematodes are low. Because stressful conditions are not easy to predict, forecasting outbreaks of brown root rot is difficult.

Consider three variables when planning a nematode or brown root-rot management strategy:

• *Field history* Be particularly vigilant in managing fields with a history of brown root rot.

• Soil characteristics Damage is more likely to occur in sandy

soils.

• Irrigation possibilities Reducing drought stress can reduce the

risk of brown root rot, especially when populations of lesion nematodes are low.

The NCDA&CS recommends use of nematicides to control lesion nematodes on tobacco in two situations: 1) if populations are high in the field; and 2) if populations are low to moderate, but the field is subject to early season stresses. Refer to the Action Code for each field on the nematode assay report.

For Additional Assistance

- Call your NCDA&CS regional agronomist or the Agronomic Division office in Raleigh (919-733-2655).
- Visit the NCDA&CS Agronomic Division Web site at www.ncagr.gov/agronomi/.
- Visit your county Cooperative Extension office.