



## Root-knot Nematodes on Tobacco

[www.ncagr.gov/agronomi/uynrem.htm](http://www.ncagr.gov/agronomi/uynrem.htm)

Root-knot nematodes (*Meloidogyne incognita*, *M. arenaria* and *M. javanica*) can cause serious problems in tobacco. To minimize damage, implement the control practice(s) recommended by the note(s) specified on your nematode assay report. Notes 3-1 through 3-10 are presented here.

Note	Root-knot Population		Hazard	Comment
	Fall	Spring		
3-1	0	0	None	Root-knot nematode populations are undetectable. A nematicide is not needed. However, a chemical treatment may be required to control soil-borne diseases, such as black shank or Granville wilt.
3-2	10-200	10-20	Very Low	Root-knot nematodes are not likely to cause economic damage at this level. Use a resistant variety to prevent populations from increasing—unless the nematodes are already damaging a resistant variety. In that case, the usefulness of such varieties is limited. Other soil-borne diseases may still require chemical treatment.
3-3	201-1000	21-100	Low	Use a resistant variety <u>or</u> a nematicide. However, if nematodes are already damaging root-knot resistant tobacco in this field, rely on a nematicide with a control rating of excellent.*
3-4	1001-3000	101-300	Moderate	Use a resistant variety <u>and</u> a nematicide treatment. However, if root-knot damage has already occurred on resistant tobacco in this field, use a nematicide with a control rating of excellent.*
3-5	3000+	300+	High	Use a resistant variety <u>and</u> a nematicide with a control rating of excellent.* However, if nematodes are already damaging resistant varieties in this field, nematicide use is the only viable option.

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## Nema Note 3

Note	Comment
3-6	The grower did not provide the name of the variety for the previous tobacco crop on the sample information form. If it was a resistant variety, it was ineffective. Use a nematicide with a control rating of excellent.*
3-7	Currently available tobacco varieties with resistance to root-knot nematodes will not be effective in controlling this nematode population. Use a nematicide with a control rating of excellent.*
3-8	<i>Tobacco Beds:</i> Use a soil fumigant regardless of the nematode population. It helps control weeds and soil-borne diseases.
3-9	The grower did not provide the name of the variety for the previous tobacco crop on the sample information form. If it was a resistant variety, it was ineffective, and you should not rely on its resistance in this field. Resample this field prior to planting tobacco, and use a nematicide with a control rating of excellent* if the assay indicates the presence of root-knot nematodes.
3-10	In this case, root-knot nematode populations are relatively high on or following a root-knot resistant tobacco variety. Therefore, tobacco varieties with resistance to root-knot nematodes will be ineffective in this field. Sample this field again prior to planting tobacco, and use a nematicide with a control rating of excellent* if the assay indicates the presence of root-knot nematodes. Other nematodes that attack tobacco include the lesion nematodes ( <i>Pratylenchus</i> species) and tobacco cyst nematodes ( <i>Globodera</i> species) in limited areas of the state.

\* For more information, consult the latest edition of the bulletin *Tobacco Information* published annually by the North Carolina Cooperative Extension Service. The bulletin contains ratings for recommended nematicide treatments. It is available from county Cooperative Extension offices as well as online.

### 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/](http://www.ncagr.gov/agronomi/).
- Visit your county Cooperative Extension office.