

Nematode Problems in the Urban Landscape

www.ncagr.gov/agronomi/uyrnem.htm

The results of your nematode assay indicate the presence of a potentially hazardous nematode problem. Unfortunately, there are no nematicides labeled for use by homeowners on turf grasses or ornamentals.

Generally, nematode damage to ornamentals can be reduced by providing plants with optimum growing conditions. These include amending the soil with sufficient organic matter before planting, providing adequate soil moisture, maintaining proper soil pH and fertility levels, and pruning at the proper time. For turf grasses, it is also important to keep the grass cut to the correct height; cutting the grass too short can cause additional stress on the plants.

If plants succumb to nematode damage, it is important to replace them with plants that are resistant or tolerant to nematode damage. TABLE 1 lists the relative susceptibility of several woody landscape plants to four common nematode species. NCDA&CS Agronomic Division Nematode Assay Section

PHYSICAL ADDRESS 4300 Reedy Creek Road Raleigh NC 27607-6465

MAILING ADDRESS 1040 MAIL SERVICE CENTER RALEIGH NC 27699-1040

PHONE: 919-733-2655 Fax: 919-733-2837

> Dr. Weimin Ye Nematologist

DR. COLLEEN HUDAK-WISE DIVISION DIRECTOR

Steve Troxler Agriculture Commissioner

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.
- Refer to one or more of the following online publications:
 - *Foliar nematodes in nursery crops* (University of Florida IFAS Extension, 2006) — ipm.ifas.ufl.edu/community/landscape/commercial/foliar.shtml
 - Nematode management for nursery crops (University of Florida IFAS Extension, 2002)
 edis.ifas.ufl.edu/NG011
 - Nematode management in bedding plants in the landscape
 (N.C. State University Plant Pathology Extension, 2000)
 - ----www.ces.ncsu.edu/depts/pp/notes/Ornamental/nematodes/odin31_nematodes.htm
 - Nematodes and their control in woody ornamentals in the landscape
 - (N.C. State University Plant Pathology Extension, 2000)
 - ----www.ces.ncsu.edu/depts/pp/notes/oldnotes/no63.htm

| Plant | Reaction to Nematode * | | | |
|---------------------------------------|------------------------|-------|--------|------|
| | Root Knot | Stunt | Lesion | Ring |
| Aucuba japonica | HS | S | 0 | S |
| Buxus microphylla (Japanese boxwood) | HS | Т | 0 | Ο |
| Buxus sempervirens (American boxwood) | 0 | Т | HS | Ο |
| Buxus sempervirens (English boxwood) | 0 | 0 | HS | Ο |
| Camellia japonica | Т | Т | 0 | Ο |
| Camellia sasanqua | Т | Т | 0 | Ο |
| Gardenia jasminoides | S | Т | Т | Т |
| Gardenia radicans | HS | Т | Т | Т |
| <i>Ilex cornuta</i> (Chinese holly) | | | | |
| cv. Burfordi | Т | Т | 0 | Т |
| cv. Rotunda | S | S | 0 | S |
| Ilex crenata (Japanese holly) | | | | |
| cv. Compacta | HS | Т | Т | S |
| cv. Convexa | HS | Т | 0 | S |
| cv. Helleri | HS | S | 0 | S |
| cv. Rotundifolia | HS | S | 0 | S |
| Ilex vomitoria nana (yaupon holly) | Т | Т | 0 | Т |
| Juniper spp. | | | | |
| cv. Blue Rug | Т | Т | HS | Т |
| cv. Shore Juniper | Т | Т | 0 | Т |
| cv. Spiny Creek | Т | Т | S | Т |
| Ligustrum sp. (privet) | Т | Т | 0 | Т |
| Nandina domestica (heavenly bamboo) | Т | Т | Т | Т |
| Photinia fraseri (red tip) | Т | Т | 0 | Т |
| Rhododendron spp. (azalea) | Т | S | 0 | Т |
| Rosa spp. (rose) | S | S | S | Т |

TABLE 1. Response of selected woody ornamentals to nematodes ¹

¹ Information in this table comes from

Benson DM. 2000. Nematodes and their control in woody ornamentals in the landscape. Raleigh (NC): North Carolina State University Plant Pathology Extension. [Disease Information Note 63]. Available online at www.ces.ncsu.edu/depts/pp/notes/oldnotes/no63.htm.

² HS = highly susceptible: plant is subject to severe stunting, branch die-back and death;

O = plants have not been tested;

R = resistant: plants may grow well and actually suppress any existing nematode populations;

S = susceptible: plant may exhibit some stunting;

T = tolerant: plant will grow satisfactorily.