

[Home](#) » [Volume 9 / 2005](#) »

## Relative Host Status of Selected Weeds and Crops for *Meloidogyne incognita* and *Rotylenchulus reniformis*

---

Authors: Richard F. Davis and Theodore M. Webster  
Pages: 41-46  
*Plant Pathology and Nematology*

[Full Text PDF](#) (124K)

Plant-parasitic nematodes that damage crops can also reproduce on weeds, thereby reducing the efficacy of nematode-suppressive crop rotations. The amount of reproduction by two important cotton pathogens, *Meloidogyne incognita* and *Rotylenchulus reniformis*, on common weeds in the major crops in the Southeast was not known. This study documented the total reproduction and reproduction relative to cotton by these two nematodes on common southeastern weeds. Final egg counts of *M. incognita* on the plants tested ranged from 0 to 193% of the number on cotton in one trial and from 0 to 407% in a second trial. Final egg counts of *R. reniformis* ranged from 0 to 105% in one trial and from 0 to 454% in a second trial. For *M. incognita*, only prickly sida was consistently a better host than cotton, although ivyleaf morningglory was a better host in one trial. Smallflower morningglory was a moderate host, whereas yellow and purple nutsedge, pigweed, Florida beggarweed, sicklepod, common cocklebur, cutleaf eveningprimrose, and Florida pusley were poor or non-hosts relative to cotton. For *R. reniformis*, only Florida beggarweed was a consistently good host, although purple nutsedge and sicklepod were good hosts in one trial, and smallflower morningglory was a moderate host in both trials. Pigweed, prickly sida, Florida pusley, cutleaf eveningprimrose, yellow nutsedge, and common cocklebur were poor or non-hosts for *R. reniformis*. Most of the weeds tested would not maintain high population levels of *M. incognita* or *R. reniformis* when non-host or nematode-resistant crops were grown.