

Uropisphaeria korrae is a homothallic Ascomycota that causes necrotic root rot in turfgrass, principally Kentucky bluegrass. It is not known if this disease is spread primarily by mycelia or ascospores. To evaluate the role of ascospores in dissemination, it first needed to be determined if progeny from self fertilization could be differentiated since polymorphisms are expected to be limited in isolates of such an organism. Eight sibling single spore progeny were examined for the presence of DNA polymorphisms using random amplified polymorphic DNA markers. No polymorphisms were observed with any of the five primers tested. Due to this lack of polymorphism the study was expanded to look for differences between isolates on a regional level. Isolates of U. korrae from British Columbia, Ontario, Quebec and the state of Washington were then examined using the same primers. Two of the primers revealed polymorphisms within and between these regions.

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OCCURRENCE OF FOLIAR NEMATODES ON WOODLAND PLANTS IN A MASSACHUSETTS NATIVE PLANT GARDEN. R. p. Wick University of Massachusetts, Amherst, MA 01003.

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Native woodland plants from the New England Wild Flower Society's Garden in the Woods in Framingham MA, were submitted to the University of Massachusetts for confirmation of the occurrence of foliar nematodes. The problem was especially prevalent in the nursery, where Acaea and Waldsteinia were severely affected. A nematode, which was consistent morphologically with Aphelenchoides fragariae, was found in several locations throughout the woodland site on the following plants: Acaea pachypoda, A. rubra, Adiantum peduncatum, Carex palustris. Crypsogonum virginianum, Cimicifuga acerina, Cornus canadensis, Diphyllia caryophylla, Disporum lanuginosum, D. maculatum, Geranium maculatum, Hepatica acutiloba, Hydrophyllum virginianum, Jeffersonia dubia, Lilium canadense. Polysiphonia braunii, Smilacina racemosa, Vulpia hexagonopoda, Trientalis borealis, and Waldsteinia fragarioides.

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NEMATODES OF SEVENTEEN COVER CROPS TO THE LESION NEMATODE. G. M. Aliawi and J. W. Ludwig. Dept. of Plant Pathology, Cornell University, Geneva, NY 14456.

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Reproduction of the lesion nematode (Pratylenchus penetrans) on selected cultivars of hairy vetch, crown vetch, red clover, white clover, alsike clover, alfalfa, ryegrass, ryegrain, oat, sudangrass hybrid, buckwheat, mustard, oilseed radish, and rape were evaluated in two tests in the greenhouse at 20 to 24 C. Seeds were planted in 10-cm clay pots (5 pots/crop/test) filled with pasteurized potting soil mixture (3:1 (v:v) loam soil:sand). After two weeks all pots were inoculated with 1,120 or 1,000 P. penetrans in ca. 20 ml of water/pot in tests 1 and 2, respectively. Eight weeks after inoculation, nematodes were extracted from roots and soils by the shaker and Pie-Pan technique (see respective), counted under a microscope: and the reproductive factor was < 1.0 for each crop. Only ryegrass cv. Pennant had an R value < 1 (0.49 and 0.28 in test 1 and 2, respectively), indicating that it is a poor host to P. penetrans. Crown vetch cv. Pennant was considered a maintenance host to P. penetrans (Ave. R = 0.5). Hairy vetch (M52, NK Seeds) was the most efficient host to P. penetrans, as it had an R value of 5.10 and 8.15 in tests 1 and 2, respectively. The other cover crops were considered as intermediate hosts.

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