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MOLECULAR AND MORPHOLOGICAL ANALYSIS OF AN UNUSUAL POPULATION OF ROOT-KNOT NEMATODE FROM GARLIC MUSTARD IN OREGON. **Skantar, Andrea M.¹, Z. A. Handoo¹, C. Aldassy², and W. L. Bruckart³.** ¹ USDA-ARS Mycology and Nematology Genetic Diversity and Biology Laboratory, Beltsville, MD. ² East Multnomah Soil and Water Conservation District, Portland. ³ USDA-ARS Foreign Disease Weed Science Research Unit, Frederick, MD.

The weed garlic mustard (*Allaria petiolata*) was isolated from a field in Oregon, exhibiting galling symptoms that indicated possible infection with nematodes. Morphological species identification was consistent with *Meloidogyne arenaria*, although diagnosis was somewhat hampered by specimens that were not in optimal condition. Molecular analysis of ribosomal and mitochondrial markers indicated this isolate may be a new species, as there were no definitive matches to existing sequences in GenBank. Nuclear Hsp90 genomic sequences from this population were distinct from the closest matches, with 81% similarity to *M. hapla, M. arenaria, M. floridensis, and M. incognita*. Further evidence of diseased plants at the initial location has not been detected, but the site is being monitored. A definitive description of the population would benefit from analysis of additional sampling and host range tests.