

# First Report of Columbia Root-Knot Nematode (*Meloidogyne chitwoodi*) in Potato in New Mexico

S. H. Thomas,  
S. A. Sanderson, and  
Z. A. Handoo

## Affiliations

- S. H. Thomas , Department of Entomology, Plant Pathology, and Weed Science, New Mexico State University, Las Cruces 88003
- S. A. Sanderson , Entomology and Nursery Industries Bureau, New Mexico Department of Agriculture, Las Cruces 88003
- Z. A. Handoo , USDA-ARS Nematology Laboratory, Beltsville, MD 20705

**Published Online:** 6 Mar 2007 <https://doi.org/10.1094/PDIS.2001.85.8.924C>

## Abstract

Following a report of Columbia root-knot nematode in potatoes (*Solanum tuberosum* L.) imported by Mexico from the United States in spring 2000, six fields in San Juan County, NM, were surveyed in August 2000. Soil samples from two fields in which the exported potatoes had been produced contained second-stage juveniles that were tentatively identified as Columbia root-knot nematode. During the 2000 potato harvest, state inspectors detected tubers from four additional fields that exhibited symptoms of Columbia root-knot nematode, including warty exteriors and discrete small brown lesions that were apparent to a depth of 1 cm below the tuber surface. *Meloidogyne chitwoodi* Golden et al. (1) was confirmed from a subsample of tubers sent to the USDA Nematology Laboratory in Beltsville, MD, in October 2000. Identification was based on morphological examination of the nematodes recovered from tubers. To our knowledge, this is the first report of *M. chitwoodi* from New Mexico. No Columbia root-knot nematodes were recovered from soil samples collected at 26 locations throughout San Juan County in 1988 and 1989, nor had symptomatic tubers or plants been observed in this area previously. Columbia root-knot nematode most likely represents a recent introduction into northwestern New Mexico. Additional information regarding distribution of this nematode within the region is needed.

**References:** (1) A. M. Golden et al. J. Nematol. 12:319–327, 1980.

