

REDESCRIPTION AND MOLECULAR CHARACTERIZATION OF XIPHINEMA CHAMBERSI THORNE, 1939 (NEMATODA: LONGIDORIDAE) FROM LIVE OAK TREES IN JEKYLL ISLAND, GEORGIA WITH COMMENTS ON ITS MORPHOMETRIC VARIATIONS. **Handoo, Z.A.¹, L.K. Carta¹, A.M. Skantar¹, S.A. Subbotin², and S.W. Fraedrich³.** ¹ Nematology Laboratory, USDA, ARS, Beltsville, MD 20705; ² California Department of Food and Agriculture, Plant Pest Diagnostic Center, 3294 Meadowview Road, Sacramento, CA 95832; ³ Forest Service, Southern Research Station, 320 Green Street, Athens, GA 30602.

A population of *Xiphinema chambersi* from the root zone around live oak (*Quercus virginiana* Mill.) trees on Jekyll Island, Georgia, USA is described using both morphological and molecular tools and compared with descriptions of type specimens. Initially, because of few morphological differences this nematode was thought to represent an undescribed species. However, upon further examination, the morphometrics of the nematodes from live oak tend to agree with most of the morphometrics in the original description and redescription of *X. chambersi* except for differences in V% relative to body length, slightly shorter stylet length, different c value and the number of caudal pores. We consider these differences to be part of the normal variation within this species and accordingly re-describe and image this new population of *Xiphinema chambersi* from the roots of live oak. It is characterized by having females with a body length of 2.1-2.5 mm; lip region slightly rounded and set off from head; total stylet length 170-193mm; vulva at 20.4%-21.8% of body length; a monodelphic, posterior reproductive system; elongate, conoid tail with a blunt terminus and 4 pairs of caudal pores, of which 2 pairs are subdorsal and 2 subventral. Sequence data from the D2-D3 region of the 28S rDNA molecule subjected to GenBank sequence comparison using BLAST showed that the sequence had 96 and 99% similarity with *X. chambersi* from Alabama and Florida, 242 Journal of Nematology, Volume 47, No. 3, September 2015 respectively. Phylogenetic relationships of *Xiphinema chambersi* with other xiphinematids based on analysis of this DNA fragment are presented. This finding represents a new location of *X. chambersi* in Georgia and a new host record of live oak for this species. Additional information regarding the distribution of this species within the region is anticipated.