

Biological Characterization of *Belonolaimus longicaudatus* Axenically Cultured on Excised Corn Root System

Hye Rim Han and Donald W. Dickson¹

Horticultural Environment Division, National Horticultural Research Institute,
RDA, Suwon, Kyunggi, 441-440, Korea

¹Entomology and Nematology Department, P. O. Box 110620, University of Florida, Gainesville,
FL 32611-0620

Five isolates of sting nematode (*Belonolaimus logicaudatus*) were collected from different geographical location and different hosts in the southeastern United States. All isolates of sting nematode were successfully cultured in excised corn root grown in Gamborg B-5 medium at 28 °C. The morphology and developmental time of sting nematode were compared among different isolates, and basic biological characteristics of sting nematode were also observed. Females of the Lake Alfred isolate and North Carolina isolates were larger in body length and tail length, and the Lake Alfred isolate had a longer stylet compared with other isolates ($P \leq 0.05$). The Gainesville isolate had the shortest stylet and body among all the isolates ($P \leq 0.05$). Development from egg to adult at 28 °C ranged from 18.1 days (Georgia isolate) to 25 days (North Carolina isolate).