



Neodolichodorus sinensis sp. nov. (Nematoda: Dolichodoridae) from China

KAN ZHUO¹, HONGHONG WANG¹ & JINLING LIAO²

Laboratory of Plant Nematology, South China Agricultural University, Guangzhou 510642, China

¹These authors contributed equally to this work

²Corresponding author. E-mail: jlliao@scau.edu.cn

Neodolichodorus Andr ssy, 1976 currently encompasses eleven species of plant ectoparasites, including pathogenic species such as *N. australis* Hodda & Nambiar, 2005 associated with damage to carrot (Hodda and Nambiar 2005). The genus has not to date been reported in China. In 2008, during a survey of marine nematodes in Futian Mangrove Reserve of Shenzhen, Guangdong Province, China, specimens of a bisexual population of *Neodolichodorus* were isolated from soil in the rhizosphere of *Kandelia candel*. Detailed studies of the nematode revealed that it differed from all other nominal species in the genus and it is herein described as a new species.

Material and methods

Soil samples were sieved through 500 µm and 45 µm mesh sieves with filtered water. Nematodes were extracted from material retained on the finer sieve (Armenteros *et al.* 2008). Extracted nematodes were relaxed by gentle heat, fixed in TAF and processed by the glycerin-ethanol method (Feng 2001). Mounted nematodes on permanent slides were observed, drawn, measured and photographed using a Nikon ECLIPSE 90i microscope at 1000× magnification. Spicule length was measured along the curved median line.

Neodolichodorus sinensis sp. nov.

Figs. 1–31

Measurements. See Table 1.

Material examined. Type material: Holotype, adult female, slide NSF04. Paratypes, adult females (slides NSF, NSF01–NSF03); adult males (NSM & NSM01–NSM05); juveniles (slides NSJ13, NSJ15 & NSJ16, all putative stage 2 juveniles; NSJ01, NSJ08, NSJ14 & NSJ18–NSJ22, all putative stage 3 juveniles; NSJ03, NSJ04, NSJ06, NSJ07, NSJ09, NSJ10, NSJ23, all putative stage 4 juveniles).

Type locality: Found in sandy soil samples collected from the rhizosphere of *Kandelia candel* in Futian Mangrove Reserve of Shenzhen, Guangdong Province, China (22°31'35.04" N, 113°59'53.77" E). All specimens are deposited in Laboratory of Plant Nematology, South China Agricultural University, Guangzhou, China.

Description. Female. Body slightly ventrally curved to C-shaped when heat relaxed, tapering at both ends. Cuticle with striae about 1.6 µm apart at mid-body. Lateral fields with four incisures, originating behind lip region and ending on tail, not areolated at mid-body, irregularly areolated anteriorly and posteriorly, inner band obviously wider than outer bands posteriorly. Lip region continuous or slightly offset from body contour, bearing five to six transverse striae. Labial disc not prominent. Cephalic framework sclerotized. Stylet elongate, conus longer than shaft, basal knobs sloping posteriorly. Precorpus cylindrical, median bulb well developed with conspicuous valve, ovate in profile. Basal bulb elongate-pyriform. Excretory pore at level of median bulb, between base and valves. Hemizonid conspicuous, posterior to excretory pore, 192–235 µm from