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988

Bursaphelenchus singaporensis sp. n. (Nematoda: Parasitaphelenchidae) in packaging wood from Singapore—a new species of the *B. xylophilus* group

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Abstract

Bursaphelenchus singaporensis sp. n. isolated in China from packaging wood of deciduous trees, imported from Singapore is described and illustrated. This new species clearly belongs to the *B. xylophilus* group, having males with the typically shaped spicules with a cucullus at their distal extremity, the typical position and number of caudal papillae (three pairs and one single) and the anterior vulval lip of the females developed as a distinct flap. The new species is characterized by a body length of 792 (553–950) µm and 850 (690–961) µm of males and females, respectively, robust body (a= 34 and 31, resp.), 15–16 µm-long stylet, lateral field with four lines, long postuterine branch (averaging 102 µm) and a strongly conoid female tail (c= 20) with a finely rounded, only slightly ventrally-bent terminus, male with very strong spicules (41–48 µm long), distinct rostrum and small cucullus, and a dorso-ventral visible terminal bursa. *Bursaphelenchus singaporensis* sp. n. is closely related to other species of the *B. xylophilus* group (*B. xylophilus, B. mucronatus, B. kolymensis, B. fraudulentus, B. conicaudatus, B. baujardi* and *B. luxuriosae)* and similar to *B. abruptus*. The morphological differentiation is mainly based on the shape of the female tail. However, *B. singaporensis* sp. n. differs from all other species of the *B. xylophilus* group by larger spicules. The new species can be differentiated from *B. abruptus, B. xylophilus, B. mucronatus, B. fraudulentus, B. conicaudatus* and *B. luxuriosae* by means of ITS-RFLP patterns.

Key words: Nematoda, Parasitaphelenchidae, *Bursaphelenchus singaporensis*, *Bursaphelenchus* spp., morphology, morphometrics, distribution, taxonomy, new species, Singapore, China, packaging wood

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