

**Survey of conifer forests and export lumber for potentially pathogenic nematodes,  
(*Bursaphelenchus* spp), in Russia**

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The pinewood nematode (PWN) *B. xylophilus* occurs widely in North America and East Asia and is a quarantine pest for Europe. However, recently it was detected in Portugal (Mota *et al.*, 1999) where it may have been introduced on wood imported from China or Russia. Russia exports over  $40 \times 10^6$  m<sup>3</sup> of wood products per year, most of which to Europe. Officially the PWN is absent in Russia but recently, Braasch *et al.* (2001) reported it in wood imported from Siberia. This resulted in our surveying in the forests and woodlands of Siberia to determine if the PWN occurs in this part of Russia and also to identify other nematode species that might pose a threat to Russian and European forests. Conifer samples were collected in 2002-2003 by the Russian Forest and Plant Quarantine Service or during our own surveys in some of these regions. In total, 631 samples were analyzed and no typical *B. xylophilus* (e.g. females possessing a round tail) was found in any of the samples. The closely related, but non-pathogenic *B. mucronatus*, was found in five of the nine sampled areas. Morphological identification was confirmed by PCR-RFLP studies and sequences of ITS-rDNA at the Agricultural Research Centre in Belgium (Kulinich *et al.* 2003). The highest occurrence of *B. mucronatus* was in samples from the Ural Mountains and the Irkutsk region (28.8 and 20.2% respectively). Special attention was directed to sampling in the Krasnoyarsk region from which Braasch *et al.* (2001) reported finding *B. xylophilus* in lumber imported into Germany. Some 368 samples was analyzed from this region with only four samples yielding *B. mucronatus*. To date, 10 species of *Bursaphelenchus* have been found in Russia. The goals of past and future work was/is to determine (i) if the PWN occurs in Russia, especially in the harsh-climate Krasnoyarsk region and (ii) also what other *Bursaphelenchus* species recorded in Russia may threaten Russian and European forests.