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Preliminary results of potential vector species of *Bursaphelenchus spp.* (Nematoda:Parasitaphelenchidae) in Turkey

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ABSTRACT

The detection of *Bursaphelenchus xylophilus* in 1999 in Europe prompted many European countries to carry out surveys to determine *B. xylophilus* and its insect vectors, and to prevent the pine wilt disease. As a result of these surveys, many *Bursaphelenchus* species isolated and reported from stressed, dying or newly dead conifer trees. In Turkey, several *Bursaphelenchus* species were found to be associated with dead or wilted conifer trees, but no records were available about insect vectors of these *Bursaphelenchus* species. For this purpose, several studies have been started in conifer forests in the Aegean and the Marmara regions of Turkey. In these studies, five trap trees, free from *Bursaphelenchus* species, were selected. These trees were cut and laid down in the same place to attract possible insect vector of *Bursaphelenchus* species reported from previous studies in the same regions. The trap trees were kept in the field between March and September to obtain oviposition of potential vector species in 2012 and 2013. The trap trees were checked periodically for insect and nematode presence. The wood chip samples were taken from each trap trees and controlled for the presence of *Bursaphelenchus spp.* In the lab. When the samples were positive for presence of *Bursaphelenchus* species, several log samples were taken from the trap trees. These logs were kept under constant conditions ($25\pm^{0}$C, 60-70 % RH) during the development of insects. *Orthotomicus erosus* and *Ips sexdentatus* emerged from *B. sexdentati* isolated *Pinus brutia* logs, *Monochamus galloprovincialis* emerged from *B. mucronatus* isolated *P. brutia* logs, *O. erosus* and *Acanthocinus griseus* emerged from *B. vallesianus* isolated *P. brutia* logs and *Pityokteines curvidens* and *Rhagium inquisitor* emerged from *B. hellenicus* isolated *Abies cilicica* logs.

Key words: Vector species, *Bursaphelenchus spp*., Conifer