Bacterial communities associated with Monochamus galloprovincialis, the insect-vector of pine wilt disease

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Bacterial communities associated with the *Bursaphelenchus xylophilus* (pine wood nematode, PWN) are suggested to play a role in pine wilt disease (PWD) development. However, it's not clear where the PWN acquires these communities. In this sense, it is possible that bacterial communities colonizing *Monochamus* spp. may affect the bacterial communities associated with the PWN. In this work, we present the characterization of bacterial communities of the Portuguese insect vector *Monochamus galloprovincialis* using culture independent methods, and investigate the common bacterial communities between the insect-vector and the pathogenic agent, PWN. *Monochamus galloprovincialis* is mainly composed by γ-proteobacteria, Firmicutes and Bacteroidetes, sharing common bacterial genera with *B. xylophilus* (i.e. *Serratia*, *Bacillus*, and *Pseudomonas*). These results can bring new insights into the role of the insect vector in the PWN-bacteria interaction.