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Fungi associated with the insect *Xyleborus monographus* in cork oak stands in Portugal

HENRIQUES Joana¹, SILVA Ana Cristina¹, BRAGANÇA Helena¹, SOUSA Edmundo¹ and CATRY X. Filipe²

(1) National Institute for Agrarian and Veterinary Research (INIAV) – Unit for Research and Services on Agricultural and Forestry Systems and Plant Health, Quinta do Marquês, 2780-159 Oeiras, Portugal; (2) Centre for Applied Ecology, Research Network in Biodiversity and Evolutionary Biology (CEABN, InBIO), School of Agriculture, University of Lisbon (ISA, UL), 1349-017 Lisboa, Portugal; joana.henriques@iniav.pt

Xyleborus monographus (F.) (Coleoptera: Curculionidae) is a xylomycetophagous insect which has been considered a secondary pest for cork oak that only attacks declining hosts. However, xylomycetophagous have been expanding their population levels mainly after fire occurrence, which increases cork oak trees attractiveness to the insect and compromises the survival of burnt trees. These insects establish symbiotic relationships with fungi (ambrosia beetles): they dig galleries inside the tree trunk colonizing the xylem with fungi for adults and larvae nourishment. In May 2018, live *X. monographus* were caught in pheromone-baited traps and individual emergency traps, with the purpose of identifying the mycoflora associated with the insect. The insects were surface disinfected and macerated to obtain isolates in axenic cultures. The isolates were identified using morphological features and ITS-rDNA sequencing. From the obtained results, several phytopathogenic fungi were isolated belonging to the Botryosphaeriaceae family, to the Ophiostomatales order, to *Botrytis* and *Microsphaeropsis* genera. The Botryosphaeriaceae family includes several fungi with severe pathogenic effect on numerous forest species. The isolates of the order Ophiostomatales stand out, both for their frequency and for their potential importance in the insect-fungus-host interaction. Fungi of this order establish specific relationships with the insects and are potentially pathogenic to cork oak trees. The increase of the aggressiveness of *X. monographus* may be caused by new symbiotic associations with specific pathogenic fungi, similar to the case of the insect *Platypus cylindrus* (L.) in cork oak.