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Abstract Book

## Monitoring the presence of different ambrosia beetle species in cork oak trees in central Portugal

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Between the third autumn and spring after a wildfire that occurred in Coruche, central Portugal (July 2013), we installed 35 individual emergence traps in 14 cork oak trees, in order to assess the medium-term presence and dynamics of ambrosia beetles. Each trap, placed in the main trunk, covered one single insect hole in order to capture all individuals emerging from that gallery. Most traps (80%) were installed in burned trees that regenerated vegetatively after fire, while the remaining were installed in unburned oaks in the vicinity of the burned area. Overall, 83% of the traps were installed in 11 live oaks (24 traps in oaks with living crown), and the remaining in 3 oaks that had recently died. The traps were monitored during about 3 years and in total we captured 1804 ambrosia beetles, of which 76% of the Xyleborini tribe, represented by the species *Xyleborus monographus* (F.), *X. dryographus* (Ratzeburg) and *Xyleborinus saxeseni* (Ratzeburg) (43%, 4% and 29%, respectively), and the remaining 24% consisting of *Platypus cylindrus* (Platypodinae). The frequency of individuals and presence of each species was much variable between traps and trees. *X. saxeseni* was present in all trees and all traps, *X. monographus* was missing in only one tree, and *X. dryographus* was recorded in 9 trees. In contrast *P. cylindrus* was present in only half of the trees. It was very common to find several ambrosia beetle species in the same tree and in the same trap, and in only 2 traps there was one single species (*X. saxeseni*). The temporal patterns of emergence also differed considerably between species and between holes. Overall, the highest emergence peak for Xyleborini occurred in the spring, while for *P. cylindrus* occurred in the autumn, and the total number of ambrosia beetles decreased sharply from year to year. At the end of the sampling period only 4 oaks were still alive.