

Short Note

Resistance of *Pinus leucodermis* heartwood and sapwood against the brown-rot fungus *Coniophora puteana*

Running title: Decay resistance of *Pinus leucodermis* wood

STERGIOS ADAMOPOULOS^{1,2}, ANTJE GELLERICH², GEORGE MANTANIS³, TATIANA KALAITZI⁴ & HOLGER MILITZ²

¹Department of Forestry and Management of Natural Environment, Technological Educational Institute of Larissa, 431 00 Karditsa, Greece, ²Wood Biology and Wood Products, Burckhardt Institute, Georg-August-University Göttingen, Büsgenweg 4, 37077 Göttingen, Germany, ³Department of Wood & Furniture Design and Technology, Technological Educational Institute of Larissa, 431 00 Karditsa, Greece and ⁴School of Forestry and Natural Environment, Aristotle University of Thessaloniki, 541 24 Thessaloniki, Greece.

Correspondence: S. Adamopoulos E-mail: adamopoulos@teilar.gr

Abstract

This study assessed the decay resistance of *Pinus leucodermis* wood to the brown-rot fungus *Coniophora puteana*. Based upon the average weight losses of 30.65% for heartwood and of 34.68% for sapwood obtained in the biological tests, both the heartwood and sapwood material examined was classified as not durable (durability class 5) according to the CEN/TS 15083-1 classification. Total extractives were low, 3.93% in heartwood and 1.00% in sapwood, while lignin content was 22.60 and 25.41% in heartwood and sapwood, respectively. It is highly recommended to use protective treatments before using *Pinus leucodermis* wood in outdoor conditions.

Keywords: *Pinus leucodermis* wood, decay resistance, brown-rot, *Coniophora puteana*.