



## IUFRO Conference 2023

## Emergent diseases in Eucalypts in Portugal

Diogo, E. <sup>1,2</sup>; Valente, C. <sup>3</sup>; Reis, A. <sup>2</sup>; Silva, A. C. <sup>1</sup>; Gonçalves, C. <sup>3</sup>; Machado, H. <sup>1</sup>; Phillips, A. J. L. <sup>4</sup>; Bragança, H. <sup>1</sup>

<sup>1</sup> Instituto Nacional de Investigação Agrária e Veterinária (INIAV), Oeiras, Portugal

<sup>2</sup> Universidade de Lisboa, Lisboa, Portugal

<sup>3</sup> RAIZ – Forest and Paper Research Institute, Aveiro, Portugal

<sup>4</sup> Altri Florestal S. A., Óbidos, Portugal

<sup>5</sup> GREEN-IT Bioresources for Sustainability, Oeiras, Portugal

Received 15 Sep 2023

Accepted 02 Oct 2023

Published 20 Nov 2023

Correspondence

Carlos Valente,  
carlos.valente@thenavigatorcompany.com

Eucalypt, mostly *Eucalyptus globulus*, is the exotic tree species occupying the largest area of Portuguese planted forest. Eucalypts were introduced in the country more than one hundred years ago. However, it was only in the second half of the 20<sup>th</sup> century that the area of plantations grew with the onset of their use in the paper and pulp industry. Being an exotic species, it was initially free from pests and diseases but, over time, the number of insects and pathogens affecting these plants increased. Recently, a disease syndrome characterised by leaf necrosis, stem girdling, and cutting dieback in nurseries and young plantations was detected, as well as a new disease causing root rot and dieback in plantations. By combining morphological, cultural, and molecular data, five new species of *Neopestalotiopsis* were described associated with that syndrome (*Neopestalotiopsis eucalyptorum*, *Neopestalotiopsis hispanica*, *Neopestalotiopsis iberica*, *Neopestalotiopsis longiappendiculata*, *Neopestalotiopsis lusitanica*), and two species of *Phytophthora* were identified in root rot and dieback symptomatic plants (*P. cinnamomi* and *P. alticola*), being the first report of *P. alticola* outside South Africa. These emerging diseases have required additional research efforts to achieve good control methodologies.

**Keywords:** *Eucalyptus globulus*, *Neopestalotiopsis*, *Phytophthora*, plant nurseries, Europe

