

## Phylogeny, morphology and pathogenicity of *Diaporthe* and *Phomopsis* species on almond in Portugal

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**Abstract** The ascomycete genus *Diaporthe* includes plant pathogens and endophytes on a wide range of hosts including economically important crops. Anamorphs are coelomycetous and reside in the genus *Phomopsis*. *Phomopsis amygdali* is the causal agent of twig canker and blight of almonds. In a recent survey of dieback of almonds in Portugal, the most frequent fungi detected were *Diaporthe/Phomopsis* species. Isolates from almond and other *Prunus* species were characterised and grouped according to their microsatellite-primed PCR (MSP-PCR) profiles and representatives of the different groups were selected for a phylogenetic study based on the ITS rDNA region (ITS1–5.8S–ITS2). Combining morphological, cultural, molecular and pathogenicity data, three species were distinguished. *Phomopsis amygdali* was shown to be the main pathogen on almond and is epitypified in the present work. *Diaporthe neotheicola* is reported for the first time on this host. A third species represented by a single isolate could not be unequivocally identified.

**Keywords** Almond · *Diaporthe* · Epitype · ITS ·  
*Phomopsis* · Systematics

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