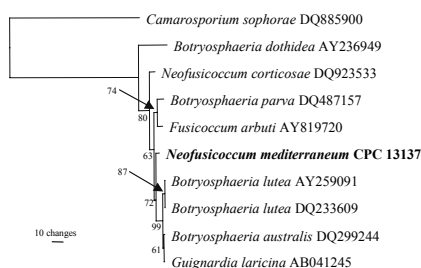


***Neofusicoccum mediterraneum* Crous, M.J. Wingf. & A.J.L. Phillips, sp. nov.****Mycobank:** MB504461.**Etymology:** Named for the Mediterranean region where this fungus was discovered.**Latin diagnosis:** *Neofusicocci parvi* similis, sed conidiis majoribus, (19–)22–26(–27) × (5.5–)6(–6.5) μm.**Description:** Associated with branch die-back and leaf tip-blight symptoms on *Eucalyptus* sp. on the Island of Rhodes, and drupe rot of *Olea europaea* in Italy. *Conidiomata* amphigenous, pycnidoid, stromatic, brown, up to 450 μm diam in culture (sporulating on sterilized pine needles); ostiolate, exuding conidia in a white mucoid mass; wall consisting of 3–5 layers of brown *textura angularis*. *Conidiophores* lining the inner layer of the conidioma, hyaline, smooth, 0–1-septate, 15–40 × 3–5 μm. *Conidiogenous cells* integrated, phialidic, subcylindrical, rarely ampulliform, 15–30 × 3–5 μm; proliferating several times percurrently near apex, rarely with minute periclinal thickening. *Conidia* hyaline, smooth, thin-walled, fusoid-ellipsoidal, widest in the middle or in the upper third, apex subobtusate, base subtruncate, somewhat flattened with minute marginal frill, (19–)22–26(–27) × (5.5–)6(–6.5) μm *in vitro* (av. 24 × 6 μm; L:W = 4:1), with granular cytoplasm.**Cultural characteristics:** Colonies on 2 % malt extract agar<sup>1</sup> fluffy, iron-grey, with abundant grey aerial mycelium; fertile on water agar overlaid with autoclaved pine needles; no *Dichomera* synanamorph observed.**Typus:** **Greece**, Rhodes, Rhodos Palace Hotel parking lot, N 36° 25' 26", E 28° 11' 40", on branches and leaves of *Eucalyptus* sp., 12 June 2006, collected by P.W. Crous, M.J. Wingfield & A.J.L. Phillips, CBS H-19921, **holotypus**, culture ex-type CPC 13137 = CBS 121718, CPC 13138–13139, GenBank EU040221. **Italy**, Puglia, Lecce, Lepre, Scorrano, on rotting drupes of *Olea europaea*, November 2004, collected by C. Lazzizzera, CBS 121558, GenBank EF638787.**Notes:** *Neofusicoccum mediterraneum* is morphologically similar to *N. parvum* (Pennycook & Samuels) Crous, Slippers & A.J.L. Phillips (conidia 12–25 × 5–7.5 μm)<sup>2</sup>, but can be distinguished from it in having slightly larger conidia (19–27 × 5.5–6.5 μm). *Neofusicoccum mediterraneum* was also found associated with rotting drupes of *O. europaea* in southern Italy, but the frequency of occurrence in this habitat is low compared with other *Neofusicoccum* spp. on the same host. Symptoms on olives are identical to those caused by *Botryosphaeria dothidea* (Moug. : Fr.) Ces. & De Not., *N. australe* (Slippers, Crous & M.J. Wingf.) Crous, Slippers & A.J.L. Phillips and *N. vitifusiforme* (Niekerk & Crous) Crous, Slippers & A.J.L. Phillips. *Neofusicoccum mediterraneum* was shown to be pathogenic to olive trees in artificial inoculations<sup>3</sup>.BLASTn results of the ITS sequence of *N. mediterraneum* strain CPC 13137 had high identity to sequences of *Guignardia loricata* (Sawada) W. Yamam. & Kaz. Itô (AB041245, 97 % identical), *Neofusicoccum corticosae* Crous & Summerell (DQ923533, 97 % identical) and *Botryosphaeria lutea* A.J.L. Phillips (AY259091, 98 % identical). It differed in three nucleotides from *Botryosphaeria dothidea* (AY662403, 99 % identical), but the latter sequence is a misidentification because it does not cluster with reference strains of *B. dothidea*.Single most parsimonious tree (TL = 310; CI = 0.965; RI = 0.761; RC = 0.734) obtained from a heuristic search with 100 random taxon additions of an ITS sequence alignment using PAUP v. 4.0b10. The scale bar shows 10 changes, and bootstrap support values from 1000 replicates are shown at the nodes. The species described here is printed in bold face. The tree was rooted to *Camarosporium sophorae* Gonz. Frag. (GenBank DQ885900). The alignment and tree is available in MycoBank (Accession MB504461).**Colour illustrations:** Aerial view of *Eucalyptus* trees with visible die-back symptoms, growing in front of the Rhodos Palace Hotel; pycnidia forming on a sterile pine needle on water agar; conidiogenous cells; conidia (P.W. Crous). Scale bar = 10 μm.**References:** <sup>1</sup>Gams W, Verkley GJM, Crous PW (2007). *CBS course of mycology*. 5<sup>th</sup> ed. Centraalbureau voor Schimmelcultures, Utrecht, Netherlands. <sup>2</sup>Crous PW, Slippers B, Wingfield MJ, Rheeder J, Marasas WFO, Phillips AJL, Alves A, Burgess T, Barber P, Groenewald JZ (2006). Phylogenetic lineages in the *Botryosphaeriaceae*. *Studies in Mycology* **55**: 235–253. <sup>3</sup>Lazzizzera C, Frisullo S, Alves A, Phillips AJL (2007). Morphology, phylogeny and pathogenicity of *Botryosphaeria* and *Neofusicoccum* species associated with drupe rot of olives in Southern Italy. *Plant Pathology* (in press).

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*Neofusicoccum mediterraneum*

