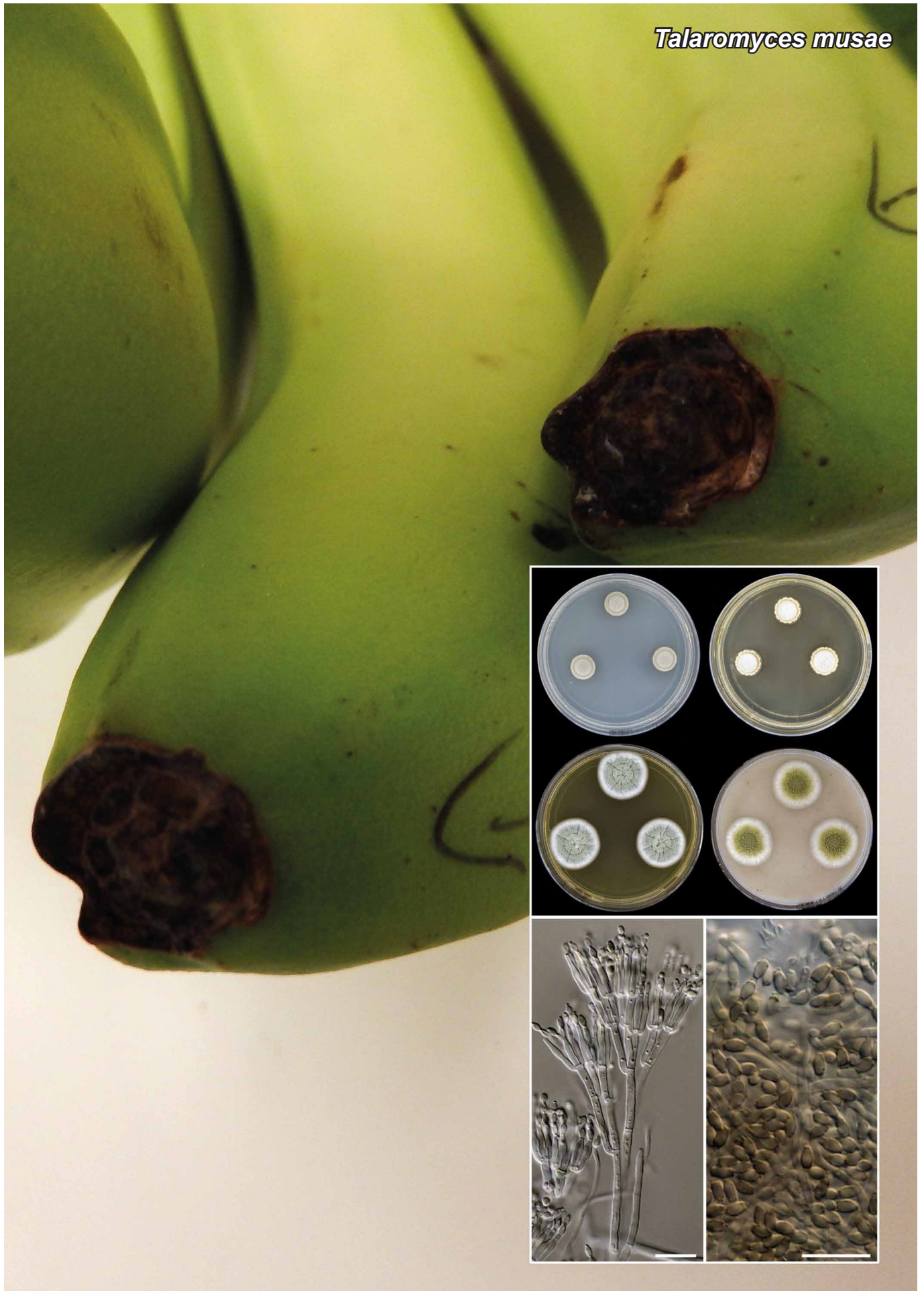


Talaromyces musae



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Talaromyces musae Houbraken, Kraak & M. Meijer, *sp. nov.*

Etymology. Name refers to *Musa* (banana), the original substrate of the ex-type strain.

Classification — *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*.

Conidiophores 50–150 µm long, predominantly terverticillate, occasionally biverticillate, branches adpressed, 12–30 µm long, stipes 2–2.5 µm wide, smooth-walled, non-vesiculate. *Metulae* cylindrical, 2–5, (8–)9–12(–14) × 1.5–2.5 µm. *Phialides* acerose, 3–6(–8) per metula, 9–11 × 2–2.5 µm. *Conidia* in long, distorted chains, smooth-walled, ellipsoid or barrel-shaped, often with connectives on both sides, 3–3.5 × 1.5–2 µm. *Ascomata* not observed.

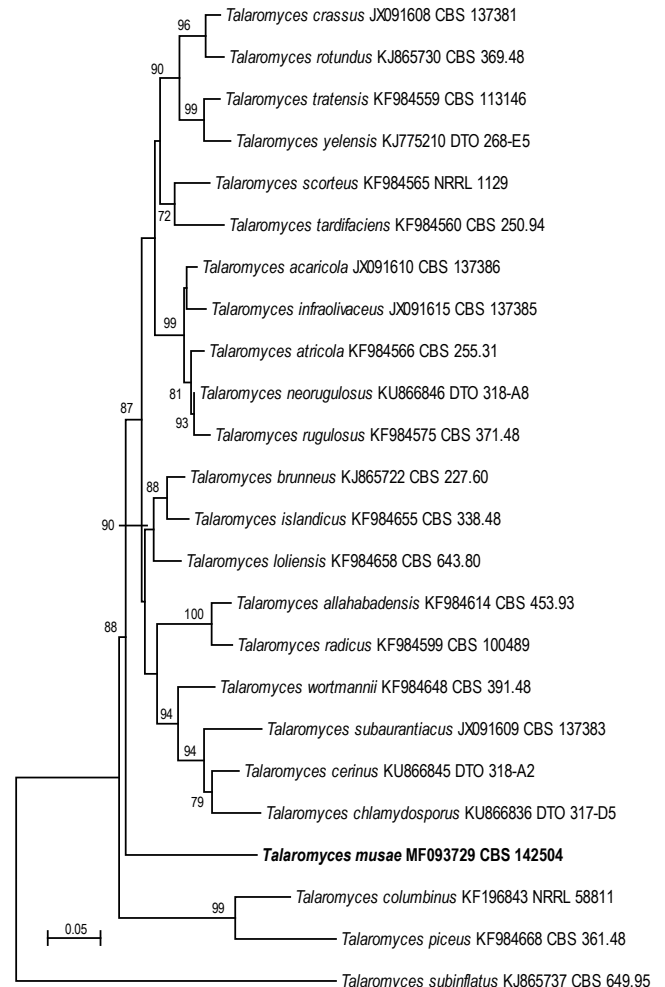
Culture characteristics — Colony diam, 7 d, in mm: CYA 12–16; CYA 30 °C 9–14; CYA 37 °C no growth; CYAS 2–5; MEA 25–30; MEA 30 °C 27–31; OA 25–30; DG18 19–24; YES 12–16; creatine agar 4–8, poor growth, acid production absent.

CYA, 25 °C: Colonies slightly flat, non-sulcate; colony texture granular in centre, velvety towards edges; sporulation moderate to good; conidia grey in centre, greyish green towards edges; mycelium white; exudate absent; soluble pigment absent after 7 d, present after 14 d, brown; margin entire; reverse pale brown. YES, 25 °C: Colonies slightly raised in centre, non-sulcate; colony texture velvety; sporulation poor; mycelium white in centre, pale brown at the margin; exudate present, small pale brown; soluble pigments absent after 7 d, present after 14 d, terracotta; margin undulate; reverse brown. MEA, 25 °C: Colonies flat, concentrically and radially sulcate; colony texture granular; sporulation good; conidia yellow-green; mycelium white; exudate absent; soluble pigments absent; margin entire; reverse dark brown in centre, brown at margin.

Typus. GERMANY, Hamburg (imported), from tip of banana, 2017, coll. A. Heselink, isol. M. Meijer & B. Kraak (holotype CBS H-23138, culture ex-type CBS 142504 = DTO 366-C5, ITS, *BenA*, *CaM* and *rpb2* sequences GenBank MF072316, MF093729, MF093728 and MF093727, MycoBank MB821051).

Notes — Maximum Likelihood analysis based on partial β-tubulin (*BenA*) sequences revealed that *Talaromyces musae* belongs to section *Islandici*. The species is phylogenetically unique and has a basal position to the majority of species belonging to this section. *Talaromyces musae* grows, like the other members of this section, restrictedly on agar media such as CYA (12–16 mm). However, most species of this section produce yellow mycelium and this feature is not observed in this species. *Talaromyces musae* is unique in predominantly producing terverticillate conidiophores and smooth-walled, ellipsoid or barrel-shaped conidia that often have connectives on both sides (Yilmaz et al. 2014, 2016).

Colour illustrations. Bananas; from top-left to bottom-right (7-d-old colonies), CYA, obverse; YES, obverse; MEA, obverse; OA, obverse; conidiophores; conidia. Scale bars = 10 µm.



The *BenA* phylogenetic tree was inferred using the Maximum Likelihood method based on the Kimura 2-parameter model in MEGA v. 6.06. Bootstrap support values are indicated at the nodes (1000 bootstraps); all values below 70 % are deleted. The scale bar indicates the expected number of changes per site.