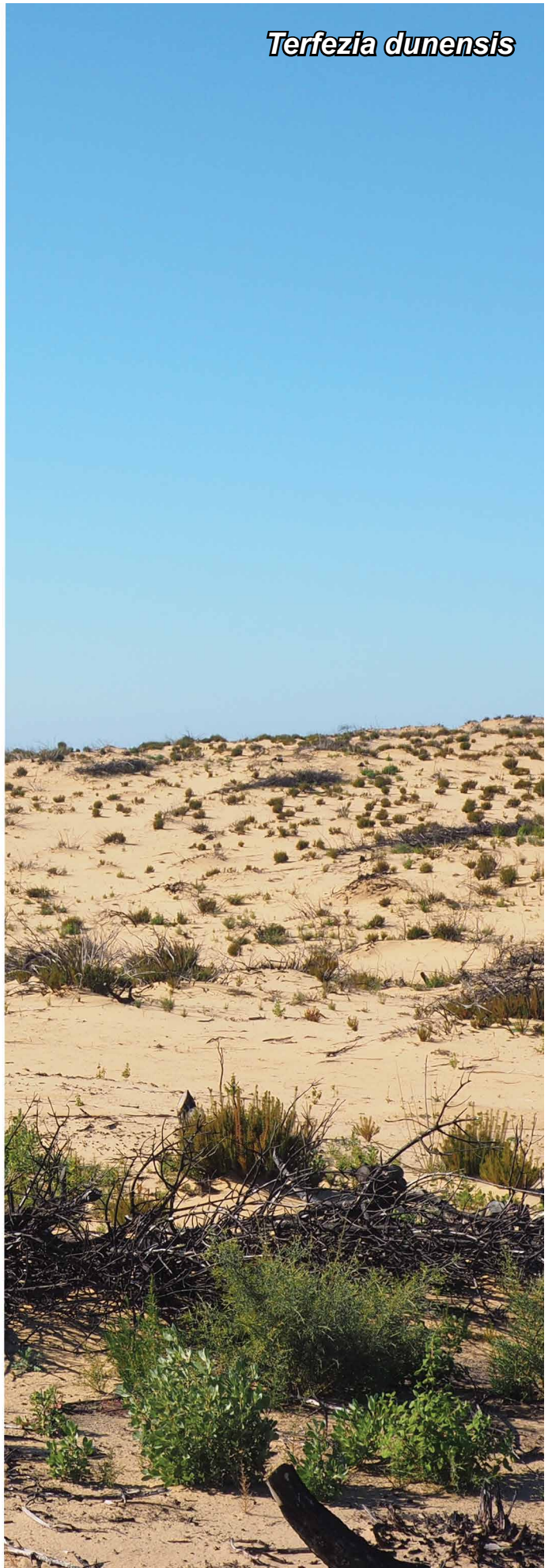
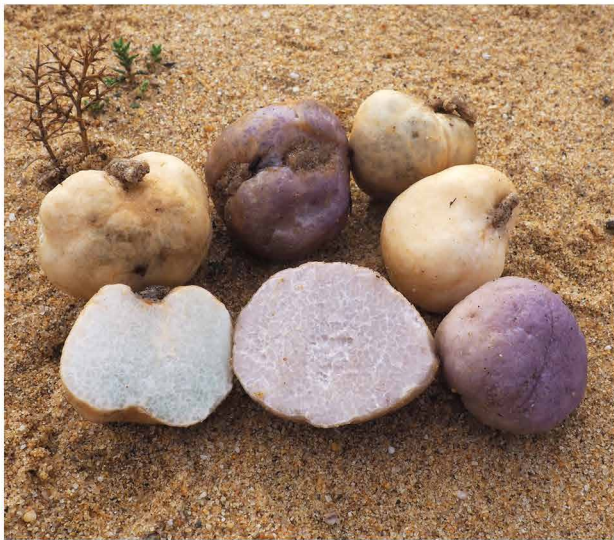


Terfezia dunensis



Fungal Planet 1036 – 18 December 2019

Terfezia dunensis* Ant. Rodr., Cabero, Luque & Morte, *sp. nov.*Etymology.* In accordance with the habitat (coastal dunes).Classification — *Pezizaceae*, *Pezizales*, *Pezizomycetes*.

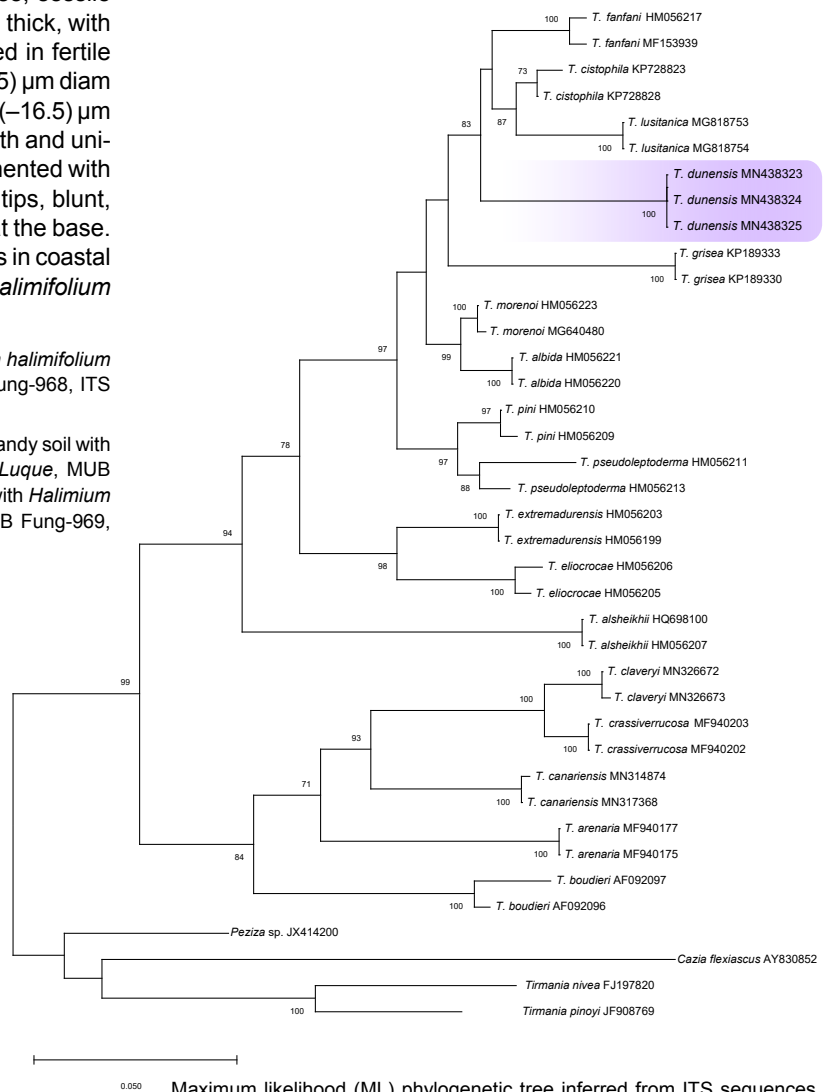
Ascomata hypogeous to partially emergent at maturity, 2–5 cm in size, globose to subglobose, sometimes gibbous or lobed, often with tapered, sterile short base with a thick mycelial cord, cream colour at first, becoming lilac to pale lavender, then ochre brown with black spots, smooth, rough to tuberculate at full maturity. *Peridium* 150–500 µm thick, whitish in cross section, pseudoparenchymatous, composed of subglobose cells, 40–90 µm diam, thin-walled, hyaline, yellowish and angular to oblong in the outermost layers. *Gleba* solid, fleshy, succulent, whitish with small pale grey pockets at first, soon becoming lilac, then brown, maturing to dark grey to black pockets of fertile tissue separated by whitish, sterile veins. Spermatic odour. Acidic, unpleasant taste. *Asci* inamyloid, subglobose, sessile or short-stipitate, 60–85 × 50–70 µm, walls 1–2 µm thick, with 6–8 irregularly disposed spores, randomly arranged in fertile pockets. *Ascospores* globose, (18–)18.5–19.5(–20.5) µm diam (av. = 19 µm) including ornamentation, (13–)13.5–15(–16.5) µm (av. = 14 µm) without ornamentation, hyaline, smooth and uniguttulate at first, by maturity yellow ochre and ornamented with cylindrical, conical spines with occasional uncinuate tips, blunt, separate, (2–)2.5–3.5(–4) µm long, 1–2 µm wide at the base.

Ecology & Distribution — *Terfezia dunensis* grows in coastal sand dunes, acidic soils, associated with *Halimium halimifolium* and *Cistus salvifolius*, from January to March.

Typus. SPAIN, Huelva, Almonte, in sandy soil with *Halimium halimifolium* and *Cistus salvifolius*, Mar. 2019, D. Luque (holotype MUB Fung-968, ITS sequence GenBank MN438324, MycoBank MB831972).

Additional materials examined. SPAIN, Huelva, Almonte, in sandy soil with *Halimium halimifolium* and *Cistus salvifolius*, Jan. 2019, D. Luque, MUB Fung-967, ITS sequence GenBank MN438323; in sandy soil with *Halimium halimifolium* and *Cistus salvifolius*, Mar. 2019, D. Luque, MUB Fung-969, ITS sequence GenBank MN438325.

Notes — *Terfezia dunensis* is a spiny-spored *Terfezia* species characterised by its acidic coastal dune habitat, associated with *Halimium halimifolium* and *Cistus salvifolius*, lilac colours of peridium and gleba and spermatic odour. It differs from all other spiny-spored species by its habitat and lilac colour, that is unique in the genus *Terfezia*. *Terfezia cistophila* and *T. albida* have spermatic odour but different habitat, colour and spores (Bordallo et al. 2013, 2015). Moreover, the new taxon is distinguished from all *Terfezia* spp. in its ITS nrDNA sequence.



Colour illustrations. Spain, Almonte (Huelva), coastal dune in National Park of Doñana. Ascocarps; mature ascospores; *Halimium halimifolium* and *Cistus salvifolius* plants. Scale bar = 20 µm.

Antonio Rodríguez, Alfonso Navarro-Ródenas & Asunción Morte, Departamento de Biología Vegetal (Botánica), Facultad de Biología, Universidad de Murcia, 30100 Murcia, Spain; e-mail: antonio@trufamania.com, anr@um.es & amorte@um.es
 Julio Cabero, Asociación Micológica Zamorana, 49080 Zamora, Spain; e-mail: fotovideocabero@hotmail.com
 Diego Luque, C/ Severo Daza 31, 41820 Carrión de los Céspedes (Sevilla), Spain; e-mail: jdmon1978@gmail.com