Terfezia insitiana, a new mycorrhizal species associated to Tuberaria guttata (Clitaceae)

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Abstract

A new Terfezia species associated with Tuberaria guttata, Terfezia insitiana sp. nov., is described from Spain and Portugal. This claim is based on the specimen's distinct morphology and unique ITS+DNA sequence. Macro and micro descriptions and phylogenetic analyses of ITS data are provided for T. insitiana and discussed in relation to similar spiny-seeded Terfezia species. T. insitiana differs morphologically from other spiny-seeded Terfezia that share the same habitats, by the combination of its ochre peridium colour and spores size, and in its ITS and DNA sequence from all other ITS sequenced Terfezia species. Among the morphologically similar species, T. rugosa has a reddish peridium, T. extremadurensis has distinctly larger spores and fiber-like gleba, and T. crampeli has smaller spores, a spermatic odour, and is never found in association with T. guttata.

Keywords: desert truffle, hypogeous, mycorrhizal fungi, Patricaeae, Clitaceae