# *Lenzitopsis oxycedri* Malençon & Bertault (*Thelephoraceae, Basidiomycota*), a Very Rare Wood-Decay Fungus Collected in Turkey

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**Abstract:** *Lenzitopsis oxycedri* Malençon & Bertault was collected on a living branch of *Juniperus foetidissima* Willd. from Thermessos national park, Antalya, situated in the southern Mediterranean part of Turkey. This very rare species belongs to a monotypic genus of *Thelephoraceae* and was previously only known from Morocco, Spain, and Italy. This fungus causes white rot in juniper wood.

Key Words: Basidiomycota, Juniperus foetidissima, Lenzitopsis oxycedri, Turkey, wood-decay fungus

# Lenzitopsis oxycedri (Thelephoraceae, Basidiomycota), Türkiye'de Ağaç Çürüklüğüne Neden Olan Çok Nadir Bir Mantar Toplandı

**Özet:** Türkiye'nin Güney Akdeniz bölgesinde bulunan Antalya-Termessos Milli park'ında *Juniperus foetidissima* Willd. nın canlı dalı üzerinde *Lenzitopsis oxycedri* Malençon & Bertault toplandı. Bu çok nadir tür *Thelephoraceae*'nin monotipik bir cinsidir ve daha önce yalnızca Fas, İspanya ve İtalya'dan bilinmektedir. Bu mantar ardıç odununda beyaz çürüklük yapar.

Anahtar Sözcükler: Basidiomycota, Juniperus foetidissima, Lenzitopsis oxycedri, Türkiye, odun-çürüklük mantarı

### Introduction

The genus *Lenzitopsis* Malençon & Bertault is a monotypic genus and belongs to *Thelephoraceae*. It is in an isolated position in the family because of perennial, resupinate to reflexed basidiocarps, a monomitic hyphal system, and globose to subglobose spores, which are finely warted and yellow to pale brown in KOH.

First, Malençon & Bertault (1963) described this species from Morocco on *Juniperus oxycedrus* L. Later Garcia-Manjon & Moreno (1981) reported this species from Guadalajara province in Spain as a saprobe on *Juniperus thurifera* L. and described it as new for Europe.

Based on the holotype reported by Garcia-Manjon & Moreno (1981) collected on *J. thurifera* in Spain, Ryvarden (1991) changed the organisation and separated a new monotypic genus with the type species *Lenzitella malenconii* Ryvarden. However, Ryvarden's reassignment of names was premature at the least and possibly even outright unnecessary. It was therefore decided to accept the original name *Lenzitopsis oxycedrii* Malençon & Bertault. Bernicchia (2000) also reported this species from Italy growing as a saprobe on *J. oxycedrus*. This is a very rare species, known only from a small number of localities in Morocco, Spain, and Italy (Figure 1). Our locality will be the fourth and the host is new for this species.

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Figure 1. Known distribution of *L. oxycedri*.

## Materials and Methods

The material was collected during the bilateral project between the Institute of Biology within the Faculty of Natural Science & Mathematics in Skopje, Republic of Macedonia, and the Biology Department within the Science & Arts Faculty, Selçuk University, Konya, Turkey, between 2002 and 2005.

The material was examined with Melzer reagent and KOH 5%. Identification was performed by referring to Ryvarden (1993) and Bernicchia (2000, 2005). All material is stored at the Mushroom Application and Research Centre of Selçuk University in Turkey.

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Figure 2. Macroscopic view of L. oxycedri (from HD1250, 1256).

# Results

Lenzitopsis oxycedri Malençon & Bertault, Bull. Soc. Mycol. Fr. 79: 82 (1963)

Syn: *Lenzitella malenconii* Ryvarden, *Syn. Fung.* (Oslo) 5: 174 (1991)

Basidiocarp is perennial, effuse reflexed to pileate, up to 1 cm wide and 2 to 3 cm long, 2-8 mm thick (Figure 2), pliable, when dry often loosening along the margin and orbicular to subpendent, upper surface dark brown

and finely tomentose, later becoming glabrous and almost black; hymenophore semilamellate, sinuous to raduloid or hydnoid with flat teeth, approximately 0.5 to 1 mm between the lamellae or spines, at first whitish, then ochraceous to pale brown (because of the deposited spores) and finely cracked (lens); trama whitish to tan; context or subiculum concolorous and with a black zone towards the substrate or the pileus.

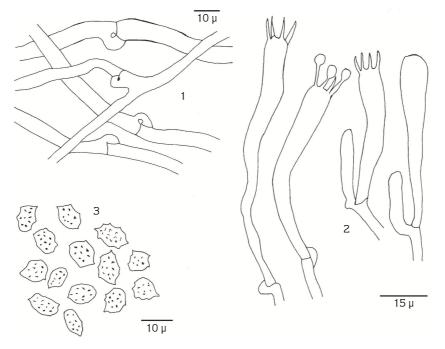


Figure 3. Microscopic elements of *L. oxycedri* (from *HD1250*):
1. Tramal generative hyphae. 2. Basidia. 3. Basidiospores (drawing of specimen by Katerina Aleksovska).

Hyphal system is monomitic, generative hyphae with clamps, hyaline in trama and context, pale brown in the tomentum, 3-4  $\mu$  wide, sparingly branched, when aged with scattered to more or less abundant brownish crystals that become bluish green in KOH (thelephoric acid). Cystidia are absent. Basidia are with 4-stergimata, at first clavate but elongating considerably to sinuous tube-like organs 35-80  $\mu$ , with a basal clamp. Basidiospores are globose to subglobose, pale brown, finely warted, often with small inner crystals of pigment, negative in Melzer's reagent,  $6-7(8) \times 5-6(7) \mu$  (Figure 3).

Material examined: Thermessos national park, Antalya, on *Juniperus foetidissima*, 1400 m, 16.03.2003, *Doğan 1250* and *1256*.

The material was collected on a living branch of *J. foetidissima*. The forest mainly consists of mixed *Quercus coccifera* L. and *Phillyrea media* L., but in some places *J. foetidissima* is a form of pure forest, and small *J. excelsa* stands can be found in the *J. foetidissima* community.

*L. oxycedri* causes white rot in *Juniper* spp. It has unknown cultural characteristics and sexuality (Ryvarden & Gilbertson, 1993; Bernicciha 2000, 2005).

According to the present literature, this is a very rare species, known only from one locality in Morocco and one in Guadalajara province in Spain. It is apparently restricted to *Juniperus* and known from *J. oxycedrus* and *J. thurifera* (Garcia-Manjon & Moreno, 1981). In addition, Bernicchia (2000, 2005) reported this species from Italy growing as a saprobe on *J. oxycedrus*. In Turkey it was collected twice in Thermessos national park, Antalya, on a branch of *J. foetidissima*, which is a new host for this species.

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