

Short communication

First record of *Diplotomma cedricola* in the eastern Mediterranean

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Abstract – The present paper reports the first record of *Diplotomma cedricola* (Werner) Etayo in the eastern Mediterranean (Crete Island, Greece), the nearest record being from Corsica (France). This lichen species was found near Iérapetra on decorticated *Cupressus sempervirens* L. and *Pinus brutia* Ten. trees. This finding constitutes a great expansion of the distribution range of this species.

Keywords: Greece, lichen, lignicolous species, new record

Introduction

Diplotomma cedricola (Werner) Etayo (= *Buellia cedricola* Werner) is a lignicolous specialist species growing on decorticated parts of conifer trunks in semi-open woodlands at elevations of 700 to 2400 m (Burgaz and Sarrión 1995, Bungartz et al. 2007). The known range of the species is extended to a few localities in the southwestern United States (Nordin 1999, Bungartz et al. 2007), Canary Islands (Nordin 2000, Giralt and van den Boom 2011) and western Mediterranean countries including the north of Morocco (Werner 1970, 1974), central-southern areas of Spain (Burgaz and Sarrión 1995, Aragón et al. 2004) and Corsica (France) (Werner and Deschatres 1974).

In this contribution, we present the first record of *Diplotomma cedricola* in Greece (Crete Island), significantly expanding the range of this species to southeastern Europe.

Materials and methods

Specimens were collected on 5th December 2022, in Selakano Forest, near the village of Selakano in Crete. The samples were deposited in the MACB Herbarium (Faculty of Biology, Complutense University of Madrid). To verify the identification, the collected specimens were compared with Spanish material (MA and MACB herbaria). The nomenclature follows Index Fungorum (www.indexfungorum.org). Habitat description is based on personal observations.

Localities of sampling: Greece: Crete Island, Iérapetra, Selakano, 35°05'06"N, 25°31'10"E, 1174 m a.s.l., on decorti-

cated *Cupressus sempervirens* L., G. Aragón n° 1009 et al., December 5, 2022, MACB. Iérapetra, Selakano, 35°04'52"N, 25°31'51"E, 1080 m a.s.l., on decorticated *Pinus brutia* Ten., G. Aragón n° 1010 et al., December 5, 2022, MACB.

Results and discussion

Diplotomma cedricola is distinctive by its yellowish tinged thallus (usnic acid), K+ red (norstictic acid), black apothecia cryptolecanorine to adnate, and its submuriform to muriform spores (21–26 × 10–13 µm). A complete and detailed description of the species is available in Burgaz and Sarrión (1995) and Bungartz et al. (2007).

The species is found on decorticated and hardened parts of old *Pinus brutia* and *Cupressus sempervirens* trees, in mountain forests, at 1000–1200 m altitude (Fig. 1). The species appears only together with *Lecanora varia* (Hoffm.) Ach. Host tree species were similar to those previously reported for *Diplotomma cedricola*. In general, the species appears on a variety of mostly decorticated coniferous trees such as *Cedrus atlantica* (Endl.) Carrière in Morocco (Werner 1970), *Juniperus* L. (*J. oxycedrus* L., *J. thurifera* L.) and *Pinus* spp. in southern Europe and the Canary Islands (Werner and Deschatres 1974, Nordin 2000, Aragón et al. 2004, Martínez et al. 2002) and *Juniperus deppeana* Steud. in North America but it has also been observed on *Cupressus arizonica* Greene and several species of *Pinus* (Nordin 1999).

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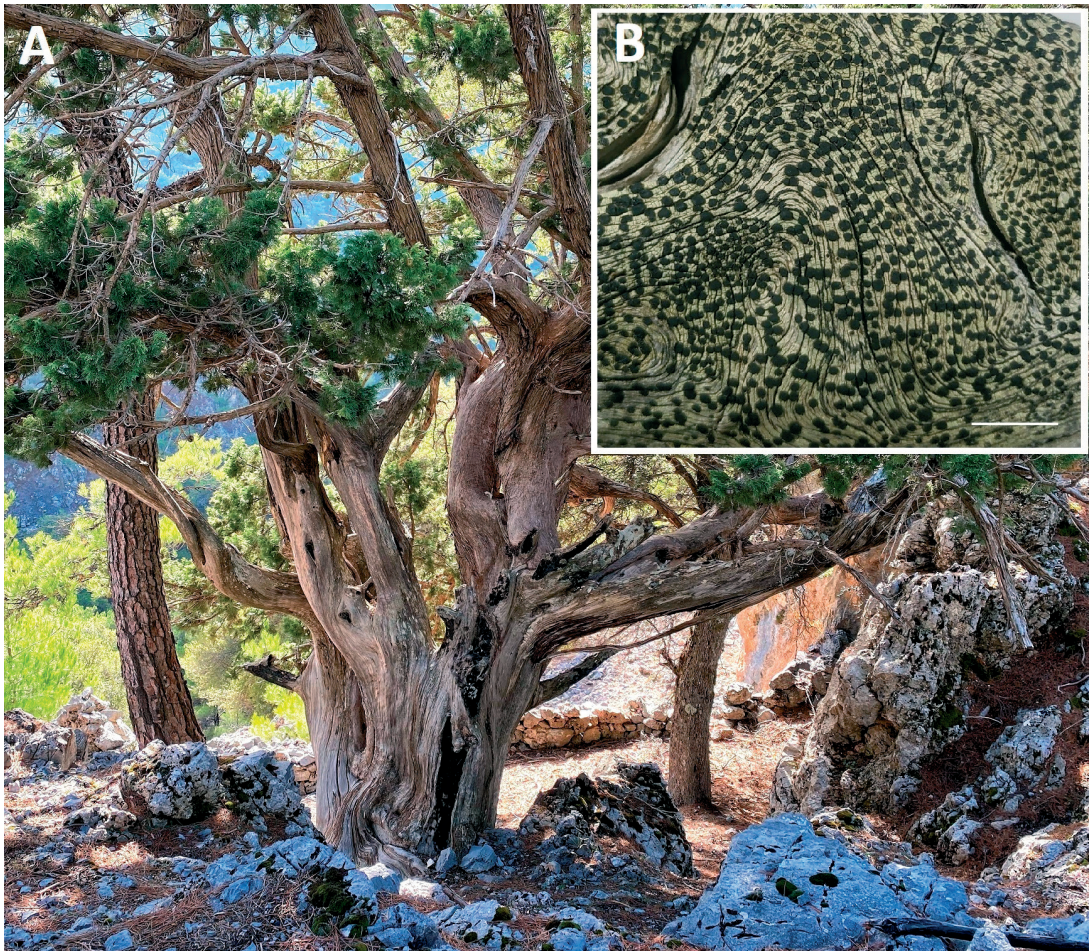


Fig. 1. A – Decorticated trunk of *Cupressus sempervirens* L., 1174 m a.s.l., Crete, is a typical habitat of *Diplotomma cedricola* (Werner) Etayo. Photo: L. Jiménez-Eguizábal. B – *Diplotomma cedricola*. Scale bar: 1.0 cm. Photo: G. Aragón.

The new locality situated in the east of Crete is composed of abrupt and unequal mountain landscape, where open forests are developed on limestone with intensive live-stock management (goats). The dominant tree species are *Pinus brutia* and *Cupressus sempervirens* at medium altitudes, and *Quercus coccifera* L. at lower altitudes, while the vegetation of the ravines is composed mainly of *Platanus orientalis* L. and *Nerium oleander* L.

Diplotomma cedricola is reported here from SE Europe for the first time and its distribution area is now enlarged to Crete (Greece). This species was not reported in the recent checklist of Greek lichens (Arcadia 2022), the nearest known locality being situated in Corsica (France) (Burgaz and Sarrión 1995).

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