

## New keratinophilic species of *Chrysosporium*

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Two new keratinophilic species, *Chrysosporium europae* and *C. mephiticum*, are described and illustrated. The differences between these and other similar species are discussed.

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Deux nouvelles espèces kératinophiles, *Chrysosporium europae* et *C. mephiticum*, sont décrites et illustrées. Les différences entre ces deux espèces et d'autres espèces similaires sont discutées.

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### Introduction

Two new keratinophilic species of *Chrysosporium* Corda were encountered during surveys for keratinophilic fungi from soil. During an investigation of soil in Catalunya, Spain, a *Chrysosporium* characterized by its slow growth in culture and by development of chains of truncate, intercalary conidia was isolated on three occasions. *Chrysosporium europae* sp. nov. is described from these collections and from an additional collection from bottom sediments of a polluted river in Katowice, Poland. Because of its development of rhexolytically dehiscing lateral conidia and arthroconidia, *C. europae* could be accommodated in either *Chrysosporium* or *Malbranchea*. The reasons for placement of the species in *Chrysosporium* and the differences between *C. europae* and other species of *Chrysosporium* are discussed.

A second species, *C. mephiticum* sp. nov., isolated by Dr. P. C. Jain from soil in India by the keratin bait technique, is distinguished by its pungent odor and by the sessile, subglobose conidia borne in close proximity to one another on orthotropically branched fertile hyphae. Two additional isolates, preserved as *Trichophyton* sp. in the University of Alberta Microfungus Collection and Herbarium (UAMH), came from other keratinous substrates.

*Chrysosporium europae* Sigler, Guarro & Punsola, sp. nov.

Figs. 1, 3–6

Coloniae in agar phytone extracto levedinis ad 25°C, densae, lente crescunt, vinaceae vel luteae in centrum, cumulae, rugosae, ad marginem lobatae, planae, luteae, granulosae. Ad 37°C incrementum nullum. Hyphae hyalinae deinde flavae, septatae, 2.5–3.5 µm latae. Hyphae fertilia ramosae. Conidia ultima et a latere locata sunt. Conidia lateralia sessilia vel in protrusionibus cylindrica vel cymbiformae; arthroconidia in catenis brevibus vel longis, cylindrica vel doliiformae aut unilateraler inflata. Conidia hyalina vel lutea, levitunicata vel verruculosa, 4.5–8.5 × 2.5–3.5 µm, plerumque 6–8 × 2.5–3 µm, cum cicatrice deorsum 1.5–2 µm. Chlamydosporae et hyphae versus septum inflatae absunt. Teleomorphosis

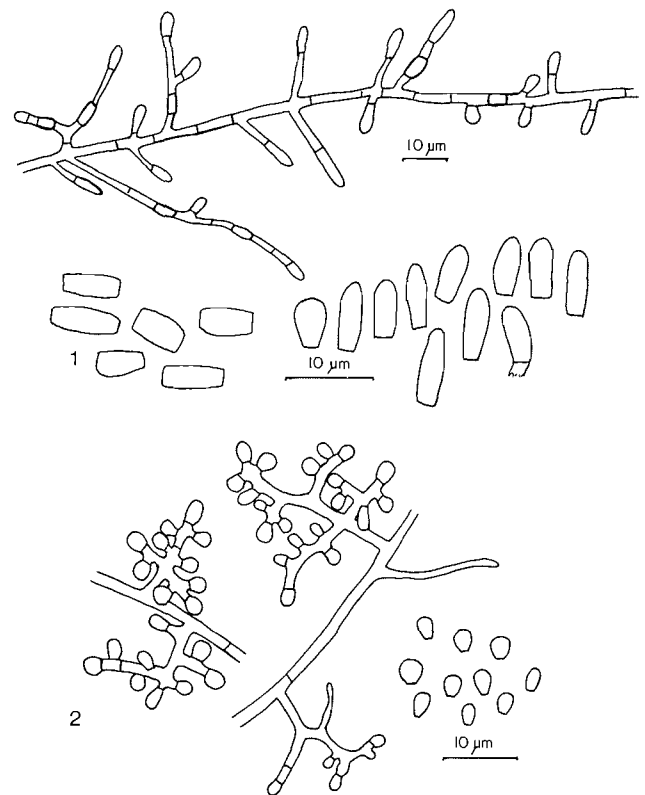


FIG. 1. *Chrysosporium europae*. FIG. 2. *Chrysosporium mephiticum*.

ignota est.

TYPUS: UAMH 4587, colonia exsiccata ex solo, Hispania, a J. Guarro (FFBA 298) isolata est.

Colonies on cellophane on phytone yeast extract agar (PYE, BBL) (1) at 25°C slow growing (55–65 mm diam after 5 weeks); in the centre, raised, wrinkled, granular and vinaceous buff; at the margin, flat, lobate, powdery, buff or pinkish buff;

FIGS. 3–6. *C. europae*. Fig. 3. Colony on PYE at 5 weeks, UAMH 4599. ×1. Figs. 4–6. Branched fertile hyphae bearing terminal and lateral conidia and chains of alternate arthroconidia. Figs. 4 and 6. UAMH 4735. ×610. Fig. 5. UAMH 4587. ×770. FIG. 7. *C. queenslandicum*, from type (UAMH 4319), showing terminal and lateral conidia and rare intercalary conidia. ×610. FIG. 8. *C. articulatum*, from type (UAMH 4320), showing chains of alternate arthroconidia. ×610.





