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# New records of *Epigloea* Zukal from Spain

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**Abstract:** Pérez-Ortega, S. 2009. New records of *Epigloea* Zukal from Spain. *Bot. Complut*. 33: 7-8.

New records for three species of the algicolous genus *Epigloea* (Ascomycota) from Spain are given, expanding considerably their distribution range southwards. Some remarks on one specimen of *E.* cf. *medioincrassata* found in Sierra de Gredos are made.

**Key words:** *Epigloea*, Iberian Peninsula, Spain, Ávila, Burgos, Madrid, ephemeral fungi.

**Resumen:** Pérez-Ortega, S. 2009. Nuevas citas de *Epigloea* Zukal en España. *Bot. Complut.* 33: 7-8.

Se ofrecen nuevas citas para tres especies del género de hongos alguícolas *Epigloea* (Ascomycota) en España, aumentando considerablemente su rango de distribución hacia el sur. Se hacen algunos comentarios sobre el espécimen de *E.* cf. *medioincrassata* encontrado en la Sierra de Gredos.

**Palabras clave:** *Epigloea*, Península Ibérica, España, Ávila, Burgos, Madrid, hongos efímeros.

## INTRODUCTION

The genus *Epigloea* Zukal comprises twelve species worldwide, seven of which were previously recorded from the Iberian Peninsula (Pérez-Ortega & Barreno 2006). *Epigloea* lives in association with algal films and it is still unclear the specificity of the relationship of the fungus with the algae since it is common to find different algal species below the fungal ascomata. Although it was previously thought to be a lichen, modern works treat it as a highly adapted biotrophic parasitism (Döbbeler 1984). However it continues to be looked for by lichenologists, although collections of *Epigloea* are rare because due to its small size and its ephemeral nature it is commonly overlooked.

The genus was monographed by Döbbeler (1984) and species occurring in the Iberian Peninsula were treated in Pérez-Ortega & Barreno (2006). Based on recent collections carried out in different areas of the Iberian Peninsula, I present here new records for three of the species known from the Iberian Peninsula, expanding their distribution ranges southwards.

### *Epigloea filifera* Döbbeler

The specimens fit well with the descriptions found in the literature (Döbbeler 1984). Material from Burgos was found on algal films on soil overgrowing unidentified *Cladonia* mats in *Quercus rotundifolia* forest; other lichen species members also of the this terricolous community were *Cetraria aculeata*, *Cladonia convoluta*, *Diploschistes diacapsis*, *Toninia sedifolia* and *Xanthoparmelia pseudohungarica*. Specimens from Madrid were richer and were collected on algal films on the top of siliceous boulders, overgrowing bryophytes and unidentified *Cladonia* squamules; other lichen species growing on the top of these boulders and within bryophytes were *Polychidium muscicola* and *Massalongia carnosa*. Up to now, *E. filifera* was only known in the Iberian Peninsula from Asturias. These records represent floristic novelties for Castilla y León and Madrid.

Specimens examined: **SPAIN:** Castilla y León, **Burgos:** Riocavado de la Sierra, 5 km NE of Riocavado, thallus slope, 1353 m, 42º 9' 54" N, 3º 12' 29" W, 22-V-2006, *S. Pérez-Ortega*, (herb. Pérez-Ortega). **Madrid:** El Escorial, granitic boulders around the Silla de Felipe II, 1069 m, 40º 33' 59" N, 4º 9' 14" W, 1-X-2008, *S. Pérez-Ortega & M. Vivas*, (herb. Pérez-Ortega).

### *Epigloea* cf. *medioincrassata* (Grumman) Döbbeler

The specimen was collected on algal films overgrowing bryophytes (*Grimmia* sp.) on granitic boulders. The material shows some divergent characters

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regarding the descriptions provided in Döbbeler (1994). Ascospores are 3 to 4-septate and slightly smaller: 20-27 × 3.5-5.5 µm vs. (18-)24-33(-38) × 3.5-5 µm. However, the most striking differences between typical *E. medioincrassata* and our specimens are the lack of appendages at the end of the ascospores and that these ends are not pointed but roundish. Material is too scant for a more careful study, preventing further comparisons. New collections of this deviant taxon will decide whether it represents a new taxon or not. In the Iberian Peninsula, *E. medioincrassata* was known so far from Asturias. New to Castilla y León.

Specimens examined: **SPAIN:** Castilla y León, **Ávila**: Puerto de Mijares, granitic outcrops close to the road AV-901, 1440-1570 m, 40º19'43" N, 4º49'22", 28-IV-2008, *S. Pérez-Ortega et al.* (herb. Pérez-Ortega).

***Epigloea soleiformis*** Döbbeler

This species is likely the most frequently collected species of the genus. It was found growing on algal films, which were covering bryophytes and squamules of the primary thallus of an unidentified *Cladonia* species growing in the north side of a granitic boulder, forming large patches. Previously known only from Asturias in the Iberian Peninsula (Pérez-Ortega & Barreno 2006). New to Castilla y León.

Specimens examined: **SPAIN:** Castilla y León, **Burgos:** Quintanar de la Sierra, siliceous boulders close to Arlanza river, 1196 m, 41º59'59" N, 3º0'57" W, 7 VII 2007, *S. Pérez-Ortega* (herb. Pérez-Ortega).

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BIBLIOGRAPHY

Döbberler, P. 1984. Symbiosen zwischen Gallertalgen und Gallertpilzen der Gattung *Epigloea* (Ascomycetes). *Beih. Nova Hedwigia* 79: 203-239.

Pérez-Ortega, S. & Barreno, E. 2006. The genus *Epigloea* Zukal in the Iberian Peninsula. *Nova Hedwigia* 83: 523-531.