

A NOTE ON THE GENUS *XENASMATELLA* (FUNGI, BASIDIOMYCETES)

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Abstract. *Dendrothele canariensis* (Manjón & G. Moreno) Hjortstam subsp. *bicornis* Boidin & Duhem is raised to species rank and transferred to the genus *Xenasmatella* Oberw. as *Xenasmatella bicornis* (Boidin & Duhem) M. Piątek, *stat. et comb. nov.* The species is illustrated and compared with *Xenasmatella canariensis* (Manjón & G. Moreno) M. Piątek, *comb. nov.*

Key words: *Aphanobasidium*, *Phlebiella*, *Xenasmatella*, corticioid fungi

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Boidin and Duhem (in Boidin *et al.* 1996) described *Dendrothele canariensis* (Manjón & G. Moreno) Hjortstam subsp. *bicornis* Boidin & Duhem, based on material collected on *Buxus sempervirens* L. in Haute-Savoie (Alps), France. This taxon differed from the nominative variety by its bi-sterigmatic basidia instead of basidia with four sterigmata.

The occurrence of *Dendrothele canariensis* (Manjón & G. Moreno) Hjortstam is restricted to palms (*Phoenix* spp.) in the western Mediterranean, being known from Spain (Hjortstam *et al.* 1988b) including the Canary Islands (Manjón & Moreno 1982) and the Balearic Islands (Tellería *et al.* 1997), and Portugal (Melo 1994). This species has had a very unstable taxonomic position; it has been placed by various authors in the genera *Cerocorticium* Henn., *Dendrothele* Höhn. & Litsch. and *Epithele* (Pat.) Pat. However, Tellería *et al.* (1997) found that it has pleural basidia, which are not observed in these three genera. They concluded that the best genus for this species should be *Phlebiella* P. Karst., and proposed the combination *Phlebiella canariensis* (Manjón & G. Moreno) Tellería, Melo & M. Dueñas. Later, Boidin and Michel (in Boidin & Gilles 2000) transferred it to *Aphanobasidium* Jülich as *A. canariense* (Manjón & G. Moreno) Boidin & H. Michel.

These considerations suggested to me that *Dendrothele canariensis* subsp. *bicornis* also does not belong to the genus *Dendrothele*. Indeed, a re-examination of the type specimen revealed typical pleural basidia. In the meantime, Boidin *et al.* (2004) changed their view of the taxonomic position of *D. canariensis* subsp. *bicornis* and transferred it to *Aphanobasidium*. Many authors considered this latter genus to be synonymous with *Phlebiella* (e.g., Hjortstam & Larsson 1987, 1994; Hjortstam *et al.* 1988a; Parmasto *et al.* 2004), and only a few mycologists treat it as separate genus differing from *Phlebiella* by the presence of smooth instead of verruculose spores (e.g., Boidin *et al.* 2004). The name *Phlebiella* cannot be used for *D. canariensis* subsp. *bicornis* or other species, however, because this genus has not been validly published. When Karsten (1890) erected it he did not give a generic description of *Phlebiella* (see Donk 1963). Nor was it described by any author in any language before 1934 or in Latin after that year. The first available generic name for the group of species traditionally rooted in *Phlebiella* is *Xenasmatella* Oberw. (Oberwinkler 1965), described 75 years after Karsten introduced the name *Phlebiella*. Therefore this genus should accommodate taxa such as *Dendrothele canariensis* subsp. *bicornis*. A comparison of it with

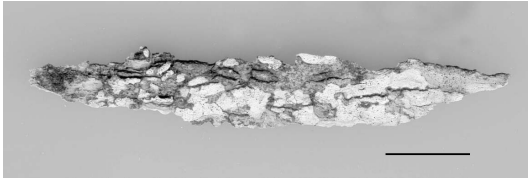


Fig. 1. Basidiomes of *Xenasmatella bicornis* (Boidin & Duhem) M. Piątek, *stat. et comb. nov.* (holotype, *B. Duhem* 3466, LY 16372).

Dendrothele canariensis suggests that its differing characters, such as the number of sterigmata in basidia, the host spectrum and geographic vicarism, are sufficient to raise this taxon to species level. In consequence the following nomenclatural and taxonomic changes are proposed:

Xenasmatella bicornis (Boidin & Duhem) M. Piątek, *stat. et comb. nov.* (Figs 1–2)

BASIONYM: *Dendrothele canariensis* (Manjón & G. Moreno) Hjortstam subsp. *bicornis* Boidin & Duhem, Bull. Soc. Mycol. France **112**(2): 98. 1996.

Basidiomes resupinate, gregarious, forming small patches, hymenial surface whitish, ceraceous, smooth or delicately granulate. Hyphal system monomitic, hyphae thin-walled, flexuose and irregularly inflated, with clamps, mostly 1.5–2.0 µm wide. Cystidia absent. Basidia cylindrical, mostly pleural, with 2 or very rarely 3 sterigmata and basal clamp, 20–35 × 5–6 µm (measurements without sterigmata). Basidiospores very rarely observed in the type specimen, globose or subglobose, hyaline, with small apiculus and oil drop, 5–6 × 6–7 µm.

SPECIMEN EXAMINED. FRANCE. La Jaysinia, Samoens (Haute-Savoie), on living *Buxus sempervivens*, 3 Sep. 1995, *B. Duhem* 3466 (HOLOTYPE: LY 16372!).

DISTRIBUTION. Known only from type locality.

As a consequence of the taxonomic arguments given above *Dendrothele canariensis*, originally described as *Cerocorticium canariense* Manjón & Moreno, is also transferred to the genus *Xenasmatella* as follows:

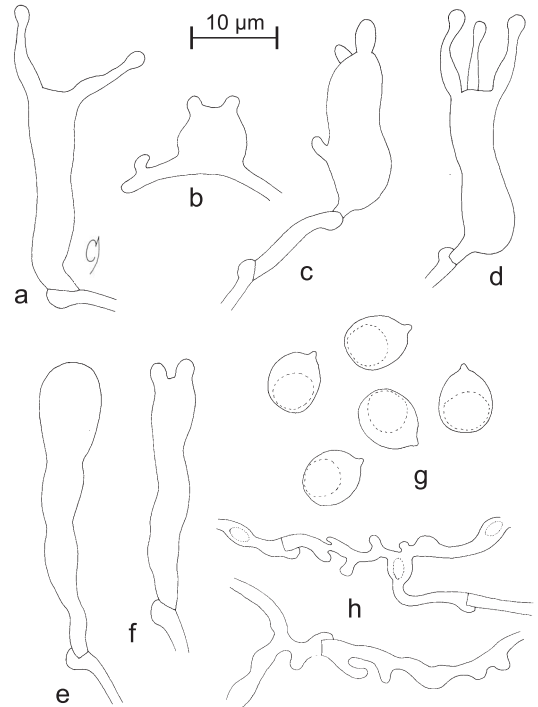


Fig. 2. *Xenasmatella bicornis* (Boidin & Duhem) M. Piątek, *stat. et comb. nov.*: a–f – basidia, g – basidiospores, h – hyphae (drawn from holotype, *B. Duhem* 3466, LY 16372).

Xenasmatella canariensis (Manjón & G. Moreno) M. Piątek, *comb. nov.*

BASIONYM: *Cerocorticium canariensis* Manjón & G. Moreno, Bot. Macaronésica **10**: 29. 1982.

These species can be easily distinguished from each other on the basis of morphological and ecological characters. *Xenasmatella bicornis* has basidia with two sterigmata and occurs on *Buxus sempervirens* in a mountainous area of France, while *X. canariensis* has basidia with four sterigmata and occurs on *Phoenix* spp. in the far-western Mediterranean.

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