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Short Communication

Pandanicola graminella comb. nov. from *Festuca filiformis* in the Canary Islands, West Africa

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Anthostomella graminella **has been re-examined and ascomata were found to be immersed beneath a clypeus. Asci were unitunicate, broad cylindrical, and lacked an apical apparatus, while ascospores were inequilaterally ellipsoidal, 1–2 seriate, brown to light brown and unicellular, with bipolar germ pores. Based on these characters, *A. graminella* is transferred to *Pandanicola*. An illustration of this species and a tabulated comparison of this species with *Pandanicola calocarpa* is given.**

Key Words——*Anthostomella*; new combination; *Pandanicola*; Xylariales.

Pandanicola was introduced by Hyde (1994) to accommodate *Anthostomella calocarpa* Syd. & P. Syd. from *Pandanus* collected in the Philippines, following collections of the same species from *Pandanus* in North Queensland, Australia. The genus is characterized by ascomata which are immersed beneath a clypeus, unitunicate, broadly cylindrical, pedicellate asci, which lack an apical apparatus, and ellipsoidal, 1–2 seriate, reddish brown, unicellular, thick-walled ascospores, with bipolar germ pores. *Pandanicola* was thought best placed in the Xylariales and was monotypic (Hyde, 1994).

In the course of monographic study on the genus *Anthostomella* and related genera (Lu, 1998; Lu et al., 1998), type specimens of *Anthostomella graminella* from *Festuca filiformis* in the Canary Islands, West Africa were re-examined. The asci in this species are broadly cylindrical and lack an apical apparatus. Ascospores are inequilaterally ellipsoidal, brown to light brown, unicellular, with polar germ pores. *Anthostomella graminella* is therefore transferred to *Pandanicola*, and is distinguished from *Pandanicola calocarpa* (Syd. et P. Syd.) K. D. Hyde, mainly by the shape and size of ascospores.

Taxonomy

Pandanicola graminella (Höhn.) B. S. Lu et K. D. Hyde, comb. nov. Figs. 1–8

≡*Anthostomella graminella* Höhn. *Sitzungsberichten der Kaiserlichen Akademie der Wissenschaften Mathematisch-Naturwissenschaftliche*, Klasse. Abteilung 1, **129**: 180 (1920).

Ascomata immersed beneath the host surface, visible as darkened, slightly raised areas, solitary (Fig. 1); in vertical section ca 190 μm diam., 140 μm high, brown, subglobose (Fig. 2), with a central, periphysate ostiole. Clypeus dark brown, ca 300 μm diam, 20 μm thick, comprising host cells with dark brown intracellular fungal hyphae (Fig. 2). Peridium ca 15 μm wide, comprising several layers of compressed cells, walls hyaline at the inside, and light brown to brown-walled towards the outside (Fig. 3). Paraphyses deliquescent. Asci 75–85 × 20–25 μm, 8-spored, broadly cylindrical, short-pedicellate, unitunicate, apically rounded, lacking an apical apparatus (Fig. 4). Ascospores 17.5–24 × 10–14 μm ($\bar{x}$ = 20.7 × 11.8 μm, n = 25), uniseriate to biseriate, inequilaterally ellipsoidal, brown to light brown, unicellular, walls thickened and smooth, surrounded by a mucilaginous sheath, with bipolar germ pores (Figs. 5–8).

Known distribution: Canary Islands, West Africa.

Known host: *Festuca* (Gramineae).

Material examined: Canary Islands (off coast of W. Africa), Tenerife, on *Festuca filiformis*, 29 May 1901, J. Bornmüller, Herb. Prof. Dr. Fr. v. Höhnel 3857 (GH, holotype); *ibid.*, slide ex. herb. FH (IMI 1646 84).

Pandanicola graminella differs from *P. calocarpa* as ascospores in *P. graminella* are inequilaterally ellipsoidal (ellipsoidal in *P. calocarpa*), smaller (17.5–24 × 10–14 μm, $\bar{x}$ = 20.7 × 11.8 μm in *P. graminella*; 24–30 × 15–16.5 μm, $\bar{x}$ = 27 × 15.3 μm in *P. calocarpa*), and brown to light brown (reddish brown in *P. calocarpa*) (Table 1).

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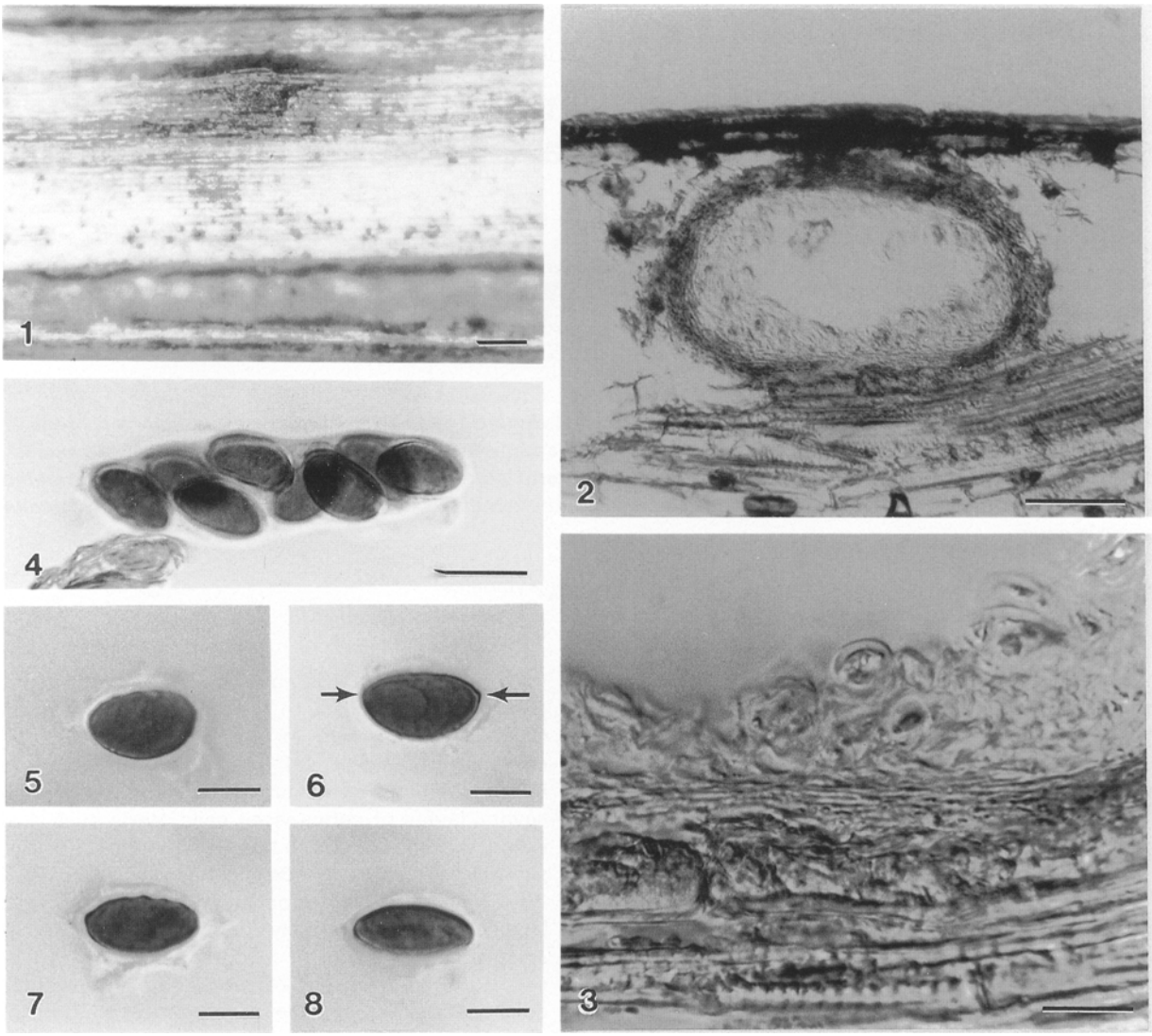

Figs. 1–8. *Pandanicola graminella* (from holotype). 1. Appearance of ascoma on the host surface. 2. Section of ascoma, note the clypeus. 3. Peridium comprising several layers of compressed cells, walls hyaline at the inside, and light brown to brown-walled towards the outside. 4. Asci, note the lack of an apical apparatus. 5–8. Ascospores, note the bipolar germ pore (arrowed in 6). Scale bars: 1 = 200 μm; 2 = 50 μm; 3, 4 = 20 μm; 5–8 = 10 μm.

Table 1. Comparison of *Pandanicola graminella* and *P. calocarpa*.

Species	Hosts	Ascomata	Asci	Ascospores
P. graminella (Höhn.) B. S. Lu et K. D. Hyde*	*Festuca* (Gramineae)	Subglobose, 190 × 140 μm, immersed beneath a clypeus	Broadly cylindrical, 75–85 × 20–25 μm, lacking an apical apparatus	Inequilaterally ellipsoidal, 17.5–24 × 10–14 μm, brown to light brown, thick walled and smooth, surrounded by a mucilaginous sheath, with bipolar germ pores
P. calocarpa (Syd. et P. Syd.) K. D. Hyde	*Pandanus* (Pandanaceae)	Conical with a flattened base, 640 × 240 μm, immersed beneath a clypeus	Broadly cylindrical, 160–180 × 20–25 μm, lacking an apical apparatus	Ellipsoidal, 24–30 × 12–14 μm, reddish brown, very thick walled and smooth, lacking a mucilaginous sheath, with bipolar germ pores

* After Hyde (1994)

are thanked for the loan of the specimens examined in this study.

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