

***Diplomitoporus taquarae* G. Coelho, sp. nov.****Mycobank:** MB505892.**Etymology:** Species name derived from “taquara”, a native indigenous word for bamboo.

**Latin diagnosis:** Basidiomata resupinata marginibus reflexis, discoidea, alba vel cremea, margine alba; poris rotundis ad angulatis, (2–)4–5(–6) per mm. Systema hypharum dimiticum hyphis skeletalibus crassitunicatis vel solidis, hyalinis, (1.6–)2.4–4(–4.4)  $\mu\text{m}$  latis; hyphis generatoriis tenuitunicatis, hyalinis, fibulatis, (1.8–)2–2.8(–3.2)  $\mu\text{m}$  latis. Hymenium sporis allantoidis, hyalinis, tenuitunicatis, (3.8–)4.4–6.4(–6.8)  $\times$  1.2–1.8(–2)  $\mu\text{m}$ . Proxima *Diplomitoporo allantosporo*, sed poris et hyphis generatoriis diminutis distincta.

**Description:** *Basidiome* annual, first resupinate, soon reflexed at the margins, somewhat discoid and umbonate, up to 12.5  $\times$  12.5 mm, 2 mm thick, cartilaginous when fresh, papery upon drying, very light in weight. Pileus surface very pale brown (8/3–8/4 10YR<sup>1</sup>) to yellow (8/6 10YR), discretely zonate, with one or two slightly depressed yellow zones (7/6 10YR), glabrous to velutinous; margin entire, slightly paler than the pileus surface, white (8/1 10YR). Hymenophore white (8/1 10YR) to very pale brown (8/2–7/4 10YR); pores round to polygonal, (2–)4–5(–6)/mm,  $P_m = 4.47$ ,  $n = 61/1$ ; dissepiments thin, velutinous, dentate; margin sterile, somewhat elevated, velutinous, concolorous to the hymenophore. Tube layer concolorous with the hymenophore, 0.75 mm thick, non-stratified. Context concolorous with the hymenophore, slightly darker next to the substrate, very thin, up to 0.25 mm thick, homogeneous. *Hyphal system* dimitic. *Tramal generative hyphae* clamped, hyaline, thin- to slightly thick-walled, branched, sometimes H-shaped, (1.8–)2–2.8(–3.2)  $\mu\text{m}$  diam,  $D_m = 2.4$ ,  $n = 60/1$ . *Tramal skeletal hyphae* hyaline to whitish-opaque, thick-walled, with a wide lumen to solid, abundant, unbranched, interwoven, (1.6–)2.4–2.8(–3.2)  $\mu\text{m}$  diam,  $D_m = 2.7$ ,  $n = 61/1$ . *Contextual generative hyphae* clamped, hyaline, thin- to slightly thick-walled, abundant next to the substrate, branched, (2–)2.4–2.8(–3.2)  $\mu\text{m}$  diam,  $D_m = 2.9$ ,  $n = 61/1$ . *Contextual skeletal hyphae* easily found next to the tubes, absent next to the substrate, hyaline to whitish-opaque, thick-walled, with a narrow lumen to solid, long, straight to slightly tortuous, unbranched, interwoven, (2.8–)3.2–4(–4.4)  $\mu\text{m}$  diam,  $D_m = 3.4$ ,  $n = 61/1$ . *Basidia* clavate, four-sterigmate, (8.4–)9.6–12(–12.8)  $\times$  3.6–4.4  $\mu\text{m}$ ,  $L_m \times W_m = 10.6 \pm 1.02 \times 4.02 \pm 0.33$ ,  $Q_r = 2.08–4.00$ ,  $Q_m = 2.66 \pm 0.34$ ,  $n = 61/1$ . *Basidiospores* mostly allantoid, rarely suballantoid or cylindrical, hyaline, thin-walled, apiculum difficult to observe, indextrinoid, acyanophilic, (3.8–)4.4–6.4(–6.8)  $\times$  1.2–1.8(–2)  $\mu\text{m}$ ,  $L_m \times W_m = 5.3 \pm 0.78 \times 1.56 \pm 0.18$ ,  $Q_r = 2.50–4.67$ ,  $Q_m = 3.42 \pm 0.51$ ,  $n = 60/1$ . *Cystidia* absent. *Hyphal pegs* formed by conical hyphal groups scattered on the tube walls. *Substrate:* so far known on decayed culms of *Bambusa tuldoidea* Munro, a non-native species. Associated with a white-rot.

**Typus:** Brazil, Rio Grande do Sul State, Santa Maria, District of Boca do Monte, FEPAGRO, on *Bambusa tuldoidea*, 2 October 2006, collected by G. Coelho, ICN 139391, **holotypus**.

**Notes:** *Diplomitoporus taquarae* is characterised by white to pale yellow basidiomes, that are resupinate and somewhat discoid with reflexed margins. Closely related species are: *D. allantosporus* Ryvarden & Iturr.<sup>2</sup>, which differs by having larger pores (2–3/mm) and wider generative hyphae (3–5  $\mu\text{m}$  diam) with larger conspicuous clamps; *D. cunninghamii* P. K. Buchanan. & Ryvarden<sup>3</sup>, which differs by having pileate to effused-reflexed basidiomes, larger pores (1–3/mm), and larger allantoid to cylindrical basidiospores (5.5–9  $\times$  2–3  $\mu\text{m}$ ); *D. venezuelicus* Ryvarden & Iturr.<sup>2</sup>, which differs by its fully adnate basidiomes, smaller pores (6–8/mm), and cylindrical basidiospores (4–4.5  $\times$  1.2–1.5  $\mu\text{m}$ ). *Postia minuta* Rajchenb.<sup>4</sup> and *Oligoporus bambusicola* (Corner) T. Hatt.<sup>5</sup> also grow on bamboo and have white basidiomes with middle-sized pores, but are distinguished by having a monomitic hyphal system, and being associated with brown-rot. Some species of *Antrodia* P. Karst., such as *A. novaezelandiae* P. K. Buchanan & Ryvarden<sup>6</sup>, *A. pseudosinuosa* A. Henrici & Ryvarden<sup>7</sup>, *A. sinuosa* (Fr.) P. Karst. and *A. xantha* (Fr.) Ryvarden<sup>8</sup>, have a dimitic hyphal system and cylindrical, suballantoid to allantoid spores, but their pore surfaces are yellow to light brown, cause a brown cubical wood-rot, and are not related to bamboo as substrate. *Antrodiella* Ryvarden & I. Johans. is characterised by having a dimitic hyphal system, and causing white-rot; it has a vague distinction with *Diplomitoporus* Domanski by being separated based on its ellipsoid spores and pileate basidiomes in almost all the species, except to a few allantoid-spored species with resupinate to pileate basidiomes.

**Colour illustrations:** Healthy and decayed culms of *Bambusa tuldoidea* (G. Coelho); basidiomes of *Diplomitoporus taquarae* growing on fallen culms of *B. tuldoidea*. Scale bars = 0.5 cm. A. Basidia, B. Basidiospores, C. Generative hyphae, D. Skeletal hyphae. Scale bar = 10  $\mu\text{m}$ .

**References:** <sup>1</sup>Munsell (1994). *Munsell Soil Color Charts*. Macbeth (USA): Munsell Co. <sup>2</sup>Ryvarden L, Iturriaga T (2003). Studies in neotropical polypores 10. New polypores from Venezuela. *Mycologia* **95**: 1066–1077. <sup>3</sup>Buchanan PK, Ryvarden L (1998). New Zealand polypore fungi. *New Zealand Journal of Botany* **36**: 219–231. <sup>4</sup>Rajchenberg M (2001). *Postia minuta* sp. nov. from Southern Argentina. *Harvard Papers in Botany* **6**: 183–187. <sup>5</sup>Hattori T (2002). Type studies of the polypores described by E. J. H. Corner from Asia and West Pacific Areas. IV. Species described in *Tyromyces* (1). *Mycoscience* **43**: 307–315. <sup>6</sup>Buchanan PK, Ryvarden L (2000). New Zealand polypore fungi: six new species and a redetermination. *New Zealand Journal of Botany* **38**: 251–263. <sup>7</sup>Henrici A, Ryvarden L (1997). *Antrodia pseudosinuosa* sp. nov. *Mycologist* **11**: 152–154. <sup>8</sup>Gilbertson RL, Ryvarden L (1986). North American polypores. *Fungiflora* **1**: 1–433.

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