

Diplomitoporus mariano-rochae* G. Coelho, sp. nov.*MycoBank:** MB505891.**Etymology:** Species named in honour of José Mariano da Rocha Filho, founder of UFSM (Univ. Fed. of Santa Maria), and promoter of scientific and social development in the central region of Rio Grande do Sul State, Southern Brazil.

Latin diagnosis: Basidiomata annua, resupinata, marginibus reflexis, carnosa vel cartilaginea, omnino albida. Hymenophora poris rotundis ad plerumque daedaloidea, integeris vel laceratis, dissepimentis dentatis, 0.5–2 per mm. Systema hypharum dimiticum hyphis generatoriis fibulatis, tenui- ad leviter crassitunicatos, sparse ramosis, hyalinis, (1.6–)2–4.8(–5.6) μm latis; hyphis skeletalibus lumenibus vel frequenter solidis, in tramate sparse ramosis, in contexto plerumque ramosis, (1.8–)2.4–4(–4.4) μm latis. Hymenophora basidiis clavatis, (7.2–)16–60(–65.2) \times (3.2–)4–5.6(–6) μm ; basidiosporis allantoidis, (3.6–)4.4–8(–9.2) \times (1.6–)2–2.4(–2.8) μm ; Dendrohyphidiis vel hyphidiis apicem leviter dendroideis vel simplicibus, tortuosis, (15.2–)16–25.6(–2) \times (1.6–)2–2.4(–4) μm . Proxima *Diplomitoporo allantosporo* et *Diplomitoporo taquarae*, sed sporis allantoidis magnis distincta. *Diplomitoporus hondurensis* dendrohyphidia habet, autem a nostra specie fasciculis hyphalibus et sporis oblongo-ellipsoideis vel cylindricis diversa.

Description: *Basidiome* annual, resupinate with reflexed borders, fleshy to almost cartilaginous, soft when fresh, firm upon drying, up to 200 \times 60 mm, and 6 mm thick. Pileus formed by reflexed borders, white (8/1 10YR)¹ to very pale brown (8/2–7/4 10YR) when bruised and aging, up to 70 \times 12 \times 6 mm; pileus surface glabrous, without cuticle; margin indistinct, velutinous, seeming to be irregular by the growing tubes with dentate walls. Hymenophore concolorous to the pileus surface, poroid, daedaloid to slightly lacerate; pores round to mostly daedaloid, (0.5–)1–2/mm, $P_m = 1.10$; dissepiments thick, velutinous, entire to lacerate; margin indistinct, fertile at the reflexed part, sterile and fibrous at the resupinate part, up to 1 mm. Tube layer concolorous to the hymenophore, up to 5 mm thick, hyphal pegs lacking. Context concolorous to hymenophore, up to 1 mm thick, homogenous. *Hyphal system* dimitic. *Tramal generative hyphae* clamped, hyaline, thin- to slightly thick-walled, sparsely branched, (1.6–)2–3.6(–4) μm diam, $D_m = 2.8$, $n = 172/4$. *Tramal skeletal hyphae* whitish-opaque, thick-walled, with a narrow lumen to usually solid, sparsely branched, intertwined, often with a basal clamp, (1.8–)2.4–4(–4.4) μm diam, $D_m = 2.7$, $n = 173/4$. *Contextual generative hyphae* clamped, hyaline, thin- to slightly thick-walled, sparsely branched, (2–)2.8–4.8(–5.6) μm diam, $D_m = 3.6$, $n = 173/4$. *Contextual skeletal hyphae* whitish-opaque, thick-walled, with a narrow lumen to usually solid, similar to binding hyphae, elongated to branched, somewhat tortuous, (1.8–)2–2.8(–3.6) μm diam, $D_m = 2.9$, $n = 129/2$. *Hymenophore* with *basidia* clavate, four-sterigmate, (7.2–)16–60(–65.2) \times (3.2–)4–5.6(–6) μm , $L_m \times W_m = 24.3 \pm 11.74 \times 4.81 \pm 0.61$, $Q_r = 1.29–10.87$, $Q_m = 4.96 \pm 0.36$, $n = 202/6$. *Basidiospores* allantoid, hyaline, thick-walled, sometimes guttulate, indextrinoid, acyanophilous, (3.6–)4.4–8(–9.2) \times (1.6–)2–2.4(–2.8) μm , $L_m \times W_m = 6 \pm 0.92 \times 2.16 \pm 0.28$, $Q_r = 1.80–4.00$, $Q_m = 2.79 \pm 1.78$, $n = 238/7$. *Hyphidia or dendrohyphidia* easily found as sterile structures in fresh basidiomes, present in the hymenium and on the dissepiments, with a simple to slightly dendroid apex, long, hyaline, thin-walled, slightly tortuous in outline, (15.2–)16–25.6(–32) \times (1.6–)2–2.4(–4) μm , $L_m \times W_m = 22.2 \pm 4.84 \times 2.26 \pm 0.40$, $Q_r = 5.00–16.00$, $Q_m = 10.13 \pm 3.07$, $n = 65/2$ μm . *Substrate:* on decayed woods of undetermined angiosperms. Associated with a white-rot.

Typus: **Brazil**, Rio Grande do Sul State, Santa Maria, District of Arroio do Só, Agua Boa, on decayed wood of undetermined angiosperm, 5 June 2003, collected by G. Coelho, V. G. Cortez & D. Rigon, ICN 139387, **holotypus**.

Notes: *Diplomitoporus mariano-rochae* is characterised by having fleshy to almost cartilaginous basidiomes, pores white (0.5–2/mm), branched contextual skeletal hyphae, allantoid spores (3.5–9.5 \times 1.5–3 μm), and abundant hyphidia or dendrohyphidia when fresh. *Diplomitoporus allantosporus* Ryvarden & Iturr.² and *D. taquarae* G. Coelho have smaller pores (2–3 and 2–6/mm, respectively), narrower allantoid basidiospores (5–6 \times 1–1.5 and 4–7 \times 1–2 μm), and do not have hyphidia or dendrohyphidia, whilst *D. mariano-rochae* has wider basidiospores, larger pores and dendrohyphidia. *Diplomitoporus hondurensis* (Murril) Ryvarden differs by having smaller pores (2–4/mm), abundant hyphal pegs, and oblong-ellipsoid to cylindrical basidiospores (5–8 \times 3–3.5 μm)^{2–4}.

Colour illustrations: Native relict of subtropical forests with several angiosperms growing under a dominant gymnosperm, *Araucaria angustifolia* (Bertol.) O. Kuntze; basidiomes of *Diplomitoporus mariano-rochae* growing on fallen angiosperm wood, likely *Senna multijuga* (Rich.) H.S. Irwin & Barneby. Scale bars = 10 and 1 cm. A. Basidia, B. Basidiospores, C. Generative hyphae, D. Hyphidia with simple to dendroid apex, E. Skeletal hyphae (G. Coelho). Scale bar = 10 μm .

References: ¹Munsell (1994). *Munsell Soil Color Charts*. Macbeth (USA): Munsell Co. ²Ryvarden L, Iturriaga T (2003). Studies in neotropical polypores 10. New polypores from Venezuela. *Mycologia* **95**: 1066–1077. ³Lowe JL (1966). Polyporaceae of North America. The genus *Poria*. *State University of New York College, Forestry Technical Publication* **90**: 1–183. ⁴Ryvarden L (2000). Studies in Neotropical polypores 5. New and noteworthy species from Puerto Rico and Virgin Islands. *Mycotaxon* **74**: 119–129.

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