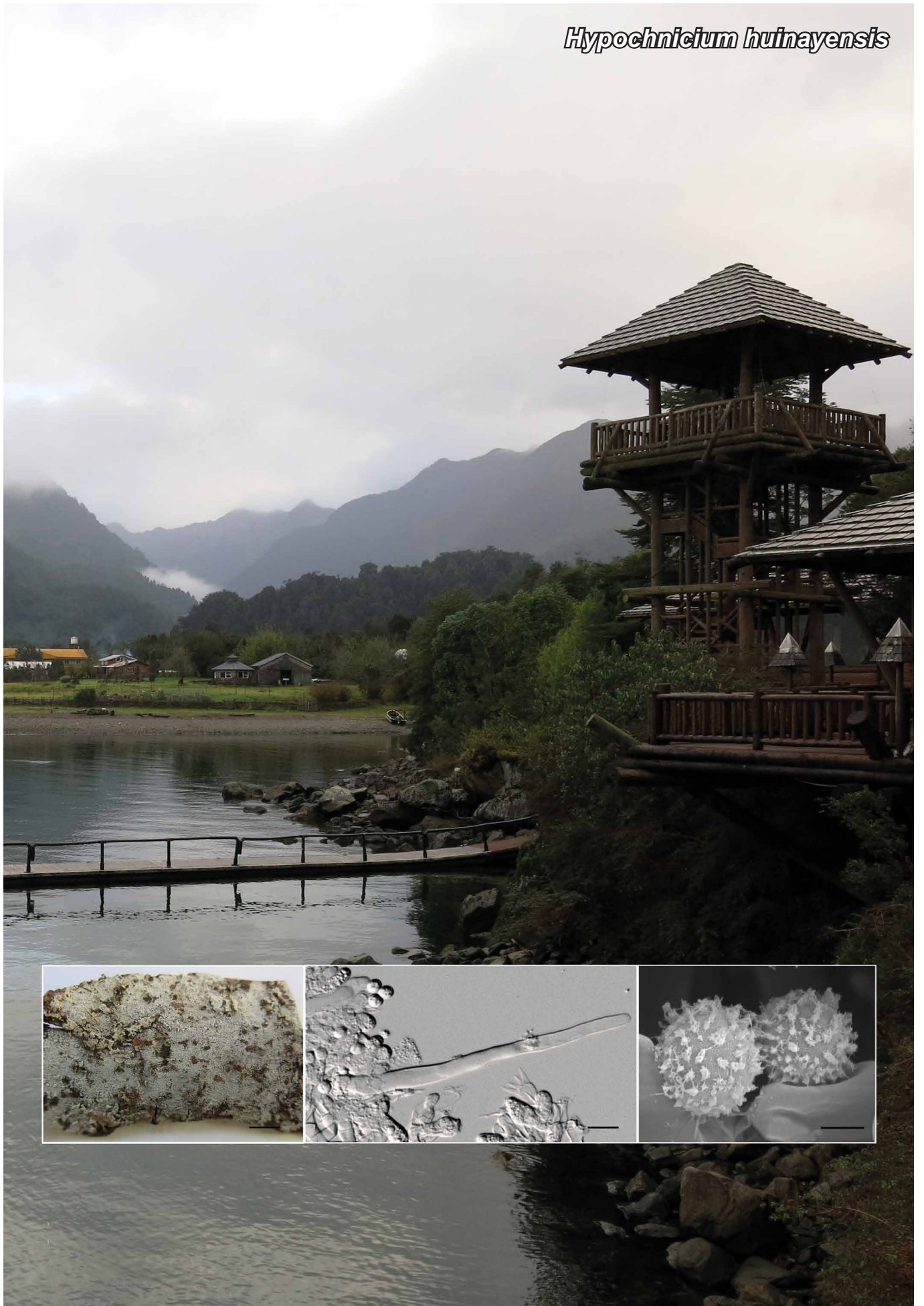


Hypochnicium huinayensis



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Hypochnicium huinayensis Tellería, M. Dueñas & M.P. Martín, *sp. nov.*

Etymology. Named in honour of the San Ignacio del Huinay Foundation, promoter of scientific research and sustainable development in Chilean fjord region.

Basidioma resupinate, effused, loosely adnate, thin, furfuraceous; hymenophore porose-reticulate, sometimes more or less tuberculate, greyish white to cream; margin not specially differentiated. *Hyphal system* monomitic; hyphae hyaline, thin-walled, ramified, with clamps, 4–5 µm wide; subicular texture open and subhymenial hyphae densely interwoven. *Cystidia* numerous, enclosed or projecting, thin-walled, somewhat thick-walled in the basal part, non encrusted, subcylindrical to fusiform, sometimes basely tapering to a stalk-like hyphal part, long, 110–240 × 9–12 µm. *Basidia* subclaviform to suburniform, 25–30 × 7–9 µm. *Spores* almost globose, 6.5–8(–9) × 6.5–8 µm, thick-walled, uniguttulate, ornamented in Melzer and cotton blue, smooth in 3 % KOH, cyanophilous.

Habitat — Decayed wood in Valdivian temperate rainforest from Chilean Northern Patagonian region.

Typus. CHILE, Los Lagos (X Region), Palena, Comuna Hualaihué, Comau fjord, Huinay, path to Cerro del Tambor, S42°22'44.5" W72°24'25.8", on unidentified wood, 100 m, 26 Apr. 2012, M. Dueñas, M.P. Martín & M.T. Tellería, 19598Tell. (holotype MA-Fungi 86742, ITS sequence GenBank HG000303, MycoBank MB805569).

Additional specimens examined. CHILE, Los Lagos (X Region), Palena, Comuna Hualaihué, Comau fjord, Huinay, path to Cerro del Tambor, S42°22'44.5" W72°24'25.8", on *Eucryphia cordifolia* (Cunoniaceae), 24 m, 25 Apr. 2012, M. Dueñas, M.P. Martín & M.T. Tellería, 13980MD (MA-Fungi 86743), ITS sequence GenBank HG326616.

Notes — Phylogenetic analyses (parsimony and Bayesian), based on two specimens of *H. huinayensis*, and previously published data (Paulus et al. 2007, Tellería et al. 2010), clearly grouped *Hypochnicium* sequences in two main clades according to the spore morphology (clade I: smooth spores; clade II: ornamented spores); the six main subclades described in Tellería et al. (2010) were resolved. Specimens of *H. huinayensis* cluster together as a group of their own in the subclade II-F, as sister group of the three sequences of *H. albostramineum*, two from Sweden and one from Spain (intraspecific K2P *H. albostramineum* < 0.00370; interspecific K2P *H. huinayensis*/*H. albostramineum* > 0.0683).

The four species, *Hypochnicium bombycinum*, *H. aff. erikssonii*, *H. lundellii* and *H. polonense*, reported from the Argentinian Patagonia (Greslebin & Rajchenberg 2003) have smooth spores (clade I), while *H. patagonicum* and *H. huinayensis*, described from Chilean Patagonia (Gorjón & Hallenberg 2013), have ornamented spores (clade II). The ITS sequences for 19598Tell. (holotype) and 13980MD of *H. huinayensis* were identical (Kimura-2-Parameter pairwise distances, K2P, obtained using PAUP v. 4.0b10 was 0.0) and different to the ITS sequence (HG000304) of *H. patagonicum* (isotype, GB0129149) (interspecific K2P *H. chilense*/*H. patagonicum* > 0.14289).

Colour illustrations. San Ignacio del Huinay scientific field station, Chilean Patagonia, when the fungus was collected on decayed wood in Valdivian temperate rainforest (M.T. Tellería); basidioma (MA-Fungi 86743), scale bar = 50 mm; hymenium with cystidium, basidium and spores (MA-Fungi 86742), scale bar = 15 µm; spores by SEM (MA-Fungi 86742), scale bar = 2.5 µm.

From a morphological point of view, *H. huinayensis* is related to *H. albostramineum*, *H. punctulatum* and *H. patagonicum*. These species all share basal hyphae that are thin- to thick-walled in *H. patagonicum*, differing by the following combination of morphological characters: *H. patagonicum* has thick-walled and septate cystidia, whereas in *H. huinayensis*, *H. albostramineum* and *H. punctulatum* they are thin-walled and non-septate. *Hypochnicium albostramineum* has spores that are broadly ellipsoid to ellipsoid, 8–9.5(–12) × 6.5–7.5 µm, whereas in *H. huinayensis* and *H. punctulatum* they are almost globose or ellipsoid to globose, 6.5–8(–9) × 6.5–8 µm and 7.5–8 × 6.5–7 µm, respectively.

Maximum parsimony phylogram of ITS sequence analysis (one of the 100 most parsimonious trees), showing the clades and subclades; two *Hyphoderma* species as outgroup. The phylogenetic position of *Hypochnicium chilense* and *H. patagonicum* are indicated in **bold**. Branches with bootstrap support (BS) ≥ 70 % (based on 10 000 replicates) are thickened. Country of origin for each included species is stated.

