

Lactifluus ceraceus



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***Lactifluus ceraceus* Delgat & M. Roy, sp. nov.**

Etymology. Refers to the waxy surface of the cap.

Classification — *Russulaceae*, *Russulales*, *Agaricomycetes*.

Pileus 64–98 mm diam, infundibuliform to deeply infundibuliform; margin straight to slightly inflexed, slightly sulcate; surface smooth, glabrous, waxy but not viscose, orange (+/- 4B7 to 5B7). *Stipe* 83–112 × 18–26 mm, cylindrical; surface smooth, yellow-orange, with a slight greenish tinge (4A5 to 4C5), slightly paler at the top. *Lamellae* decurrent, very broad, thick, brittle, transverse and slightly intervenose, distant, paler than pileus and stipe, cream yellow (2A3); edge concolorous and entire. *Context* yellowish white, unchanging when cut, very slowly changing to very light blue-green with gaiac, changing to orange-red with FeSO₄. *Smell* weak, pleasant. *Taste* fruity. *Latex* absent. *Basidiospores* broadly ellipsoid, 5.4–6.4–6.9–8.1 × 4.4–5.2–5.5–6.2 μm (Q = 1.12–1.23–1.25–1.35); ornamentation amyloid, composed of broad irregular warts and ridges, forming an incomplete reticulum, with some isolated warts; plage distinct and inamyloid. *Basidia* 43–68 × 7.5–10 μm, subclavate, 4-spored. *Pleurocystidia* abundant, 49–92 × 5–9 μm, cylindrical to subclavate, with an obtuse, mucronate, slightly rostrate or moniliform apex, slightly thick-walled. *Pseudocystidia* absent. *Lamellar edge* fertile. *Hymenophoral trama* cellular, with large sphaerocytes and very few lactifers. *Pileipellis* a lampropalisade; elements of the suprapellis 8–42 × 3.5–6 μm, cylindrical to utriform, thick-walled, some septate; subpellis composed of slightly thick-walled globose/isodiametric cells.

Distribution — So far only known from French Guiana. Occurring in primary terra-firme forests.

Typus. FRENCH GUIANA, Reserve Naturelle La Trinité, terra-firme forest, slope, on the trail from Camp Aya to the inselberg de la Roche Bénitier, N4°37'09" W53°24'33", 15 Apr. 2016, *L. Delgat* (holotype LD16-005 (GENT), ITS and LSU sequences GenBank KY884995 and MG253925, MycoBank MB820812).

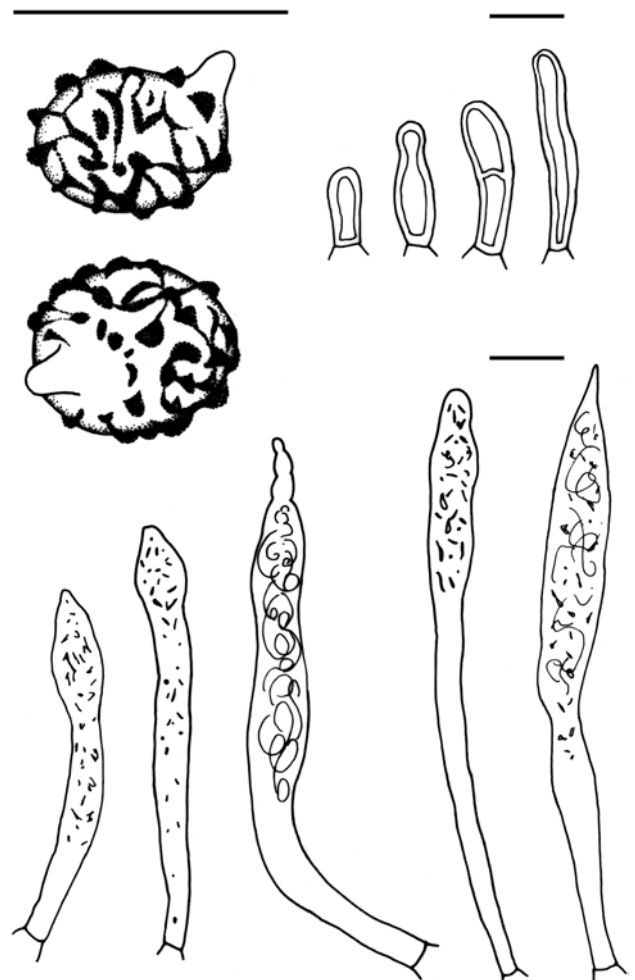
Additional material examined. FRENCH GUIANA, Regina, Nouragues station, terra-firme forest, plateau, 6 July 2013, *M. Roy*, PC0713390 (PC), ITS and LSU sequences GenBank KY884996 and KJ786583.

Colour illustrations. Tropical rainforest in Reserve Naturelle La Trinité near Camp Aya; basidiocarps, cystidia, basidia and pileipellis. Scale bars = 10 μm.

Notes — *Lactifluus ceraceus* belongs to *L.* subg. *Pseudogymnocarpi*, which is supported by molecular data (ITS phylogeny: MycoBank supplementary data), as well as by morphological characters, such as the lampropalisade structure of the pileipellis and the yellow/orange cap colour. *Lactifluus ceraceus* is part of *L.* sect. *Polysphaerophori*, a section which contains exclusively Neotropical species. This placement is based on molecular data, since this section has not yet been clearly characterized morphologically.

Lactifluus ceraceus morphologically closely resembles *Lactarius amazonensis**. However, *Lactarius amazonensis* has larger spores (8.5–11 × 7–8.5 μm) and its macrocystidia have a more fusoid shape compared to the cylindrical or subclavate shape of the macrocystidia of *L. ceraceus*. *Lactifluus ceraceus* is also morphologically similar to *Lactarius brasiliensis**. But the spores of *Lactarius brasiliensis* are larger (7.5–11 × 7–8 μm) and subglobose. Furthermore, *Lactarius brasiliensis* differs by having numerous and conspicuous laticiferous hyphae.

* these two species are yet to be recombined in *Lactifluus*.



Lactifluus ceraceus. Basidiospores; pileipellis hairs; macrocystidia. Scale bars = 10 μm.

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