

## Short note

# Neotype of *Amanita spissa* var. *laeta* (Basidiomycota, Amanitaceae)

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**Abstract.** While studying the genus *Amanita* in Brazil, a specimen identified by J. Rick as *Amanita spissa* var. *laeta* was found. Its morphological analysis suggested that this material certainly corresponded to the one used in the protologue of this name. For this reason, it is designated here as the neotype.

**Keywords.** Agaricales, Agaricomycetes, Neotropics, nomenclature, taxonomy.

**Resumen.** Mientras se estudiaba el género *Amanita* en Brasil se encontró un especimen identificado por J. Rick como *Amanita spissa* var. *laeta*. Su análisis morfológico sugirió que este material correspondía al usado en el protólogo de este nombre, por lo que se designa aquí como el néotipo.

**Palabras clave.** Agaricales, Agaricomycetes, Neotrópico, nomenclatura, taxonomía.

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The first studies of *Amanita* Pers. in Brazil were performed by J. Rick, who described seven taxa: *Amanita spissa* var. *laeta* Rick, *A. spissa* var. *alba* Rick, *A. bresadolae* (Rick) Rick non Schulzer (1885), *A. spissa* Fr., *A. strobiliformis*, *Amanitopsis plumbea* Rick (Rick 1906, 1907, 1937, 1938, 1961), and *Collybia sulcissima* Rick (presumably an *Amanita* according to Singer 1953 and Bas 1978), all from Rio Grande do Sul. Most of these species were revised by Singer (1953), Bas (1969, 1978), and Bas & de Meijer (1993), except for *Amanita spissa* var. *laeta*. Thus, the only authentic collection identified by Rick as *Armillaria spissa* var. *laeta* deposited at the PACA herbarium (Instituto Anchieta de Pesquisas) is selected as the neotype for *Amanita spissa* var. *laeta*.

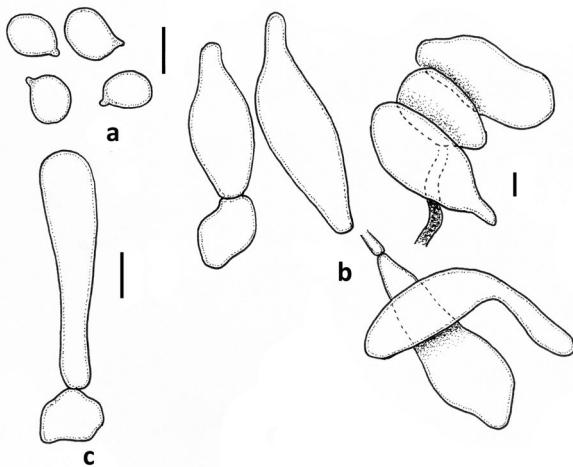
***Amanita spissa* var. *laeta*** Rick, Brotéria 5: 25. 1906. MycoBank: MB 839010. Type: location and date not informed, J. Rick s.n. (neotype here designated: PACA 12239! as ‘*Armillaria spissa*?’). MycoBank typification number: MBT 10001457. Figs. 1, 2.

Basidioma apparently small to medium size, solitary, rather stout. Pileus: about 30–45 mm, apparently plano-convex; margin smooth, probably appendiculate; con-

text apparently unchanging; universal veil as numerous sub-pyramidal warts up to 2 mm high. Lamellae: free (?), crowded; lamellulae not seen. Stipe: 28–36 × 4–8 mm (10 mm at apex), tapering downward; bulb absent; partial veil apical, thin-membranous, pendulous; universal veil scarce. Odor and taste not recorded. Basidiospores [30/2/1] (8.0–) 8.5–12 (–12.5) × (6.5–) 7.0–8.5 (–9.5) µm, (L = 9.5–9.6 µm, L' = 9.5 µm; W = 7.7–7.8 µm, W' = 7.8 µm; Q = (1.11–) 1.12–1.39 (–1.42); Q = 1.23, Qm = 1.23), amyloid, hyaline, colorless, broadly ellipsoid to ellipsoid and sometimes subglobose, smooth, thin-walled; apiculus sublateral to subapical; contents difficult to locate. Stipe context distinctly acrophysalidic, but difficult to rehydrate. Pileipellis not differentiated. Universal veil on pileus: common clavate, slender clavate, fusoid-ellipsoid to somewhat ovoid cells 60–95 × 23–37 µm, hyaline, apparently thin walled, plentiful, the terminal elements frequently submucronate, arising from filamentous hyphae or somewhat organized in loose chains with 2 (–3) cells; filamentous hyphae 4–10 µm, mostly colorless, common, clamped; vascular hyphae common, 10–15 µm wide, frequently dichotomously branched. On stipe: difficult to analyze. Partial veil: very weakly rehydrated with the inflated elements difficult to locate, but apparently c. 112 × 30 µm, slender clavate, moderately thick walled; filamentous hyphae



**Fig. 1.** *Amanita spissa* var. *laeta* Rick: basidiomes [PACA 12239, neotype; scale = 20 mm].



**Fig. 2.** *Amanita spissa* var. *laeta* Rick: **a**, basidiospores; **b**, universal veil elements from pileus; **c**, basidiole and subhymenial cell [PACA 12239, neotype; scale bars a-c = 10 µm].

plentiful 5 µm wide, interwoven; vascular hyphae up to 5 µm wide, occasional.

**Habitat.**—Unknown.

**Typification.**—Rick (1906) described *Amanita spissa* var. *laeta* with “grayish isabelline (= grayish-light yellowish brown, Kelly & Judd 1976) pileus and squamules, a non-bulbous and widening upward stipe covered with concentric squamules, and bright yellow lamellae” (translated from German), but without mention of any putative voucher or type specimen. In this same work he also described *A. spissa* var. *alba* Rick with “white pileus on which the margin transpose the lamellae length, and lamellae extending on the stipe by lines”. Both were described as growing on soil, surrounded by the “normal forms”. Unfortunately no type specimen exists or was previously designated (Bas 1969: 561). The specimen selected

only possesses annotations by Singer on the herbarium sheet as: ‘*Amanita* sp.’ Indeed, according Tulloss & Yang (2021) the name applied here is obviously a misinterpretation of *A. spissa* (Fr.) P.Kumm. [= *A. excelsa* (Fr.) Bertill.]. Although the material is poorly preserved, it is the only existing material that can be assigned to this epithet. Thus, this study suggests that this exsiccate corresponds to a very similar one used in the protologue of *A. spissa* var. *laeta*, a valid name since the Latin diagnosis was not required prior 1 January 1935 (Turland & al. 2018, Art. 39.1). In addition, due the lack of any other specimen of *A. spissa* var. *laeta*, I select PACA 12239 as the neotype for that name.

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