

NOTES AND BRIEF ARTICLES

NEW SPECIES OF PSILOCYBE

Psilocybe collybioides Sing. & Smith sp. nov.

Pileo dilute ochraceo-brunneo, subhygrophano, viscido, a campanulato repando, 13–40 mm lato.—Lamellis pallidis vel albis, confertis vel subconfertis, plus minusve adnatis, aliquanto latis (e. gr. 2.6 mm).—Stipite albo, a basi apicem versus gradatim obscuriore (cinnamomeo), sericeo-fibrilloso-subsquamuloso in juvenilibus, saepe monstrose contorto, farcto dein cavo, 30–70 × 1.5–4.5 mm.—Carne alba vel pallida vel partim cinnamomea, caerulescente; odore farinaceo dein spermatico.—Sporis rarissimis (e. gr. 10 × 6.5 μ); hymenio e pseudoparaphysibus cystidiolisque efformato; epicute pelliculosa; cheilocystidiis ventricosis, apice ampullaceo vel subcapitato instructis, 17.5–23.5 × 8–8.5 μ.—Ad detritum varium praecipue *Alni jurulensis* var. *spachii* sed etiam in fragmentis putrescentibus aliorum di- et monocotyledonum locis semiumbrosis in zona temperata montana, 2200 m altitudinis s. m., Tafí del Valle, prov. Tucumán, Argentina, *R. Singer T 1882* (MICH), TYPE.—Nota: Cum descriptionibus *Hypholomatis cyanescentis* R. Maire optime congruit sed hoc ad detritum *Cedri* crescit et characteribus minoribus tantum differt; nostra a *Psilocybe cyanescente* Wakefield longe differt.

Psilocybe strictipes Sing. & Smith sp. nov.

Pileo obtuse flavido-brunneo vel olivaceo-brunneo, isabellino (Ridgwayi), hygrophano, viscido, pellicula separabili intracto, convexo dein plano, 20–40 mm lato.—Lamellis pallidis, dein sepiaceis, adnatis, horizontalibus, angustis, confertis.—Stipite stricto, elongato, appresse pallido-fibrilloso, fibrillis cum strigositate basis caerulescentibus, saepe ad apicem (e velo fracto) zonato.—Carne caerulescente; sapore miti; odore nullo.—Sporis 9–12 × 5.5–6.5 μ, vix compressis; cheilocystidiis 26–37 × 6–11.5 μ; epicute lata fortiter gelatinascente.—Ad ligna detritumque coniferarum, prope Welches, Oregon, USA, *Gruber & Smith 202448* (MICH), TYPE.

Psilocybe baecystis Sing. & Smith sp. nov.

Pileo, lamellis stipiteque ut in specie praecedente, sed sporis (8–)10.5–13.3 × 6.3–7 μ et cheilocystidiis 20–30(–36) × 4.2–5.7 μ.—Ad sphagna etc., prope viridarium, Eugene, Ore., USA, Nov. 1, 1945, *F. P. Sipe* (MICH), TYPE.

Psilocybe candidipes Sing. & Smith sp. nov.

Pileo sordide alutaceo, hygrophano, sicco albido-alutaceo, convexo, centro depresso, 50–55 mm lato.—Lamellis sinuato-adnatis, latiusculis, subconfertis vel subdistantibus.—Stipite albo, basi strigosissimo.—Carne admodum caerulescente, odore farinaceo; sapore astringente.—Sporis 6.7–7 × 3.5–3.8 μ; cheilocystidiis 18–27.5 × 3.8–6 μ, acutis vel subacutis; cystidiolis praesentibus; hyphis epicutis pilei subgalati-

nescentibus.—Fasciculariter caespitoseve ad terram inter folia *Coffeae* et *Ingae* in plantationibus. Huautla, Oaxaca, Mexico, *R. Singer M 1514* (MICH), TYPE.

***Psilocybe aggericola* Sing. & Smith sp. nov.**

Pileo brunneo, hygrophano, conico, dein campanulato vel convexo, umbonato vel papillato, 20–40 mm lato.—Lamellis confertis vel subconfertis, anguste et sat profunde sinuatis—Stipite flavido ad apicem, ceterum subbrunnescente, demum brunneo vel nigrescente, initio fugaciter fibrilloso.—Carne caerulescente; inodora.—Sporis $6.2-8.2 \times 4-5.2 \times 3.6-4.5 \mu$; cheilocystidiis 20–29 \times 3.5–8.2 μ ; pleurocystidiis praesentibus; epicute vix gelatinescente.—Ad aggeres terreos varios, Monumento al Indio, Camino a Taff del Valle, Rio de los Sosas, 900–1000 m altitudinis s. m., prov. Tucumán, Argentina, *R. Singer T-760* (MICH), TYPE.

***Psilocybe muliercula* Sing. & Smith sp. nov.**

Pileo rufobrunneo, hygrophano, campanulato, dein convexo, umbonato vel subumbonato vel papillato, demum frequenter applanato, 20–35 mm lato.—Lamellis fusco-sepiaceis, subangustis, ascendentibus vel subhorizontalibus, dein horizontalibus, sinuato-adnatis.—Stipite sordide carneo-albido, dein cum pileo subconcolori, praesertim in parte inferiore, levi, subnudo.—Carne odore farinaceo gaudente.—Sporis (6–)7–8(–10) \times 4.2–4.8(–5) \times 3.9–4.7 μ , vix vel paullum lentiformibus; cheilocystidiis 12–23 \times 3–5.5 μ ; pleurocystidiis nullis; epicute bene evoluta sed vix manifeste gelatinescente.—Ad terram in silvis persparsiis (sub *Pino pseudoastrobo*) prope ripas torrentium montanorum, 3000 m altitudinis s. m., Piedras Blancas, Mexico, *R. Singer M 1611* (MICH), TYPE.

***Psilocybe yungensis* Sing. & Smith sp. nov.**

Pileo castaneo-brunneo, hygrophano, conico, papillato, haud expanso, parvo.—Lamellis confertissimis, angustis, adnatis.—Stipite atrobrunneo, clarobrunneo-fibrilloso, diametro pilei longiore.—Carne caerulescente; odore nullo.—Sporis 4.4–6.2 (–7.2) \times 3.8–5 \times 3.3–3.8 μ , compresso-lentiformibus; cheilocystidiis 18–34 \times 5–7.3 μ ; cystidiolis praesentibus; epicute paulum evoluta, vix gelatinascente.—Ad humum silvestrem lignaque putridissima in Yungis bolivianis gregatim, Cataratas San Juan, Nor-Yungas, La Paz, Bolivia, 2000 m altitudinis s. m., *R. Singer B 648* (MICH), TYPE.—Exstat. var. **diconica** nob. Magis conica et apice obconice appendiculato pilei insignis est, ibidem collecta, *B. 651* (MICH), TYPE.

—R. SINGER AND ALEXANDER H. SMITH, Instituto Miguel Lillo and University of Michigan.

A METHOD FOR OBTAINING SOIL-FREE AQUATIC PHYCOMYCETES

In the course of growing certain aquatic Phycomycetes for use in mycology classes, I have until recently followed the customary procedure of using boiled hemp-seed halves in Petri dishes to which soil