



Pholiota oblita, new species in sect. *Adiposae* stirps *Subflammans* (Strophariaceae, Agaricomycetes), from the Argentinean Yungas

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Abstract

We present a study on the genus *Pholiota* sect. *Adiposae* stirps *Subflammans* from the Republic of Argentina. *Pholiota oblita* is proposed as a new species. It is characterized by its narrow lamellae, elongated cheilocystidia and broad spores. Singer originally described this species as *P. digilioi*, but this name was never validly published. *Pholiota oblita* is close to *P. flammans*, from the Northern Hemisphere, and *P. subflammans*, from the South American Andino-Patagonic forest, but differs by the diagnostic characters previously mentioned. The species was found in the southern end of the Yungas Forest, a cloud forest located on the eastern slopes of the sub-Andean mountains. Numerous collections of *P. oblita* were found in the Yungas forest but not in other areas. We believe that it could be an endemic species. Furthermore, we found that there are no herbarium specimens for the type of *Pholiota subflammans* (Speg.) Sacc. With the absence of original material, and to preserve current usage of the name, a neotype is designated hereby. The neotype chosen for *P. subflammans* is a specimen determined, described, and collected by Singer in the same area where the type specimen was found by Spegazzini.

Key word: Agaricales, *Pholiota oblita*, *P. digilioi*, *P. subflammans*, new species, neotype

Introduction

Pholiota (Fr.) P. Kumm. is a genus of the family Strophariaceae (Agaricomycetes). It is characterized by its fibrillose to squamose, viscid and glutinous to dry, typically yellowish, rusty yellow or brownish pileus, with appendiculate margin; lamellae close, yellowish at first; stipe smooth to squamose, with an annulus or at least a fibrillose area on the partial veil insertion; spore print rusty or ochraceous brown. Microscopically, spores are smooth, with an apical germ-pore; the pileipellis is a cutis or ixocutis, pleurocystidia are present or absent, if present either leptocystidia or chrysocystidia; clamp connections always present (Largent & Baroni 1988, Singer 1986). The stirps *Subflammans* is characterized by its yellow-brown to yellow basidiomata, not tending to any rusty, orange-red, warm sepia or violet-brown colours, with the pileus surface covered with conspicuous, floccose-squarrose scales, that eventually disappear because the strongly gelatinous underlying epicuticular layer is obliterated by weather and age (Singer 1986: 580).

In Argentina, 28 species of *Pholiota* are known; most of these recorded from the central region and the Andino-Patagonic forests (Niveiro & Albertó 2012). The aim of this work is to contribute to the knowledge of stirps *Subflammans* from Argentina, describing a new species and designating a neotype for *P. subflammans* (Speg.) Sacc.

Acknowledgments

This work was supported by the research project PIP 112-200801-0602 from Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET, Argentina). We are also grateful to the Argentinean National Parks Service for permission given to collect in protected areas and to the LIL and LPS herbaria for the loan of specimens and information given.

References

- Horak, E. (1967) Fungi Austroamerici IV. Revisión de los hongos superiores de Tierra del Fuego o Patagonia en el Herbario de C. Spegazzini en La Plata. *Darwiniana* 14 (2–3): 355–376.
- Largent, D.L. (1986) *How to identify mushrooms to genus I: macroscopic features*. Mad River Press, Eureka, pp. 1–165.
- Largent, D.L. & Baroni, T.J. (1988) *How to identify mushrooms to genus VI: Modern genera*. Mad River Press, Eureka, pp. 1–277.
- Lodge, J., Ammirati, J.F., O'Dell, T.E., Mueller, G.M., Huhndorf, S.M., Wang, C.J., Stokland, J.N., Schmit, J.P., Ryvarden, L., Leacock, P.R., Mata, M., Umaña, L., Wu, Q.F. & Czederpiltz, D. (2004) *Terrestrial and lignicolous macrofungi*. In G.M. Mueller *et al.* (eds), *Biodiversity of fungi. Inventory and monitoring methods*. Elsevier Academic Press, San Diego, pp. 127–172.
- Maerz, A. & Paul, M.R. (1930) *Dictionary of color*. McGraw-Hill Book Company, Inc. New York.
- McNeill, J.C., Barrie, F.R., Buck, W.R., Demoulin, V., Greuter, D.L., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Marhold, K., Prado, J., Prud'Homme van Reine, G.F., Smith, G.F. & Wiersema, J.H. (2012) *International Code of Nomenclature for algae, fungi and plants (Melbourne code)*. *Regnum Vegetabile* 154. Koeltz Scientific Books.
- Mueller, G.M. & Wu, Q. (1997) Mycological contributions of Rolf Singer: field itinerary, index to new taxa, and list of publications. *Fieldiana, Botany* 38: 1–124.
<http://dx.doi.org/10.5962/bhl.title.2626>
- Niveiro, N. & Albertó, E.O. (2012) Checklist of the Argentine Agaricales 2. *Coprinaceae* and *Strophariaceae*. *Mycotaxon* 120: 505. <http://www.mycotaxon.com/resources/checklists/NiveiroAlberto-v120-checklist.pdf> (complete paper, 38 p.).
- Singer, R. (1952) Type studies on Agarics III. *Lilloa* 25: 465–514.
- Singer, R. (1953) The agarics of the Argentine sector of Tierra del Fuego and limitrophous regions of the Magallanes area. Part 2. The brown-spored genera (except *Cortinarius*). *Sydowia* 7: 206–265.
- Singer, R. (1986) *The Agaricales in Modern Taxonomy*. 4th ed. Koeltz Scientific Books, Koenigstein, pp. 1–981.
- Singer, R. & Digilio A.P.L. (1952) [1951] Pródromo de la Flora Agaricina Argentina. *Lilloa* 25: 6–461.
- Smith, A.H. & Hesler, L.R. (1968) *The North American Species of Pholiota*. Hafner Publishing Company, New York, pp. 1–349.
- Spegazzini, C. (1887a) *Fungi patagonici*. *Boletín de Academia Nacional de Ciencias de la Republica Argentina*. 11: 5–64.
- Spegazzini, C. (1887b) *Fungi fuegiani*. *Boletín de Academia Nacional de Ciencias de la Republica Argentina*. 11: 135–308.
- Thiers, B. (2013 – continuously updated) *Index Herbariorum*: A global directory of public herbaria and associated staff. New York Botanical Garden's Virtual Herbarium. <http://sweetgum.nybg.org/ih/>