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Checklist of the Argentine *Agaricales* I. *Amanitaceae*, *Pluteaceae* and *Hygrophoraceae*

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ABSTRACT —A checklist of species belonging to families *Amanitaceae*, *Pluteaceae*, and *Hygrophoraceae* was made for Argentina. The list includes all species published till year 2011. Eleven genera and 150 species were recorded. The family *Pluteaceae* is the most cited for the country with 93 species.

KEY WORDS—*Agaricomycetes*, diversity, *Amanita*, *Pluteus*, *Hygrocybe*

Introduction

Argentina is located in southern South America, between 21° and 55° S and 53° and 73° W, covering 3.7 million of km². Due to the large size of the country, Argentina has a vast variety of climates; from humid tropical (subtropical forest as the Yungas and Paranaense Forests), xerophytic forests (Chaco, Espinal), grassland (Pampa), deserts (Puna, Patagonian steppe, Monte), to cold and humid habitats (Patagonian Andes Forest) (Burkart et al. 1999, Brown et al. 2006). Average annual temperatures vary from 25 to 5 °C from north to south. The incidence of moist winds coming from the oceans, the Atlantic in the north and the Pacific in the south, together with different soil types, make possible the existence of many types of vegetation adapted to different climatic conditions. Cabrera (1994) divides Argentina into 11 phytogeographic provinces, which belong to 4 Domains and 2 Regions.

The first mycologist to study the *Agaricales* from Argentina was Spegazzini between 1880 and 1926 and he described 400 species in 22 publications. Rolf Singer lived and worked in Argentina from 1948 to 1961 in Tucumán, and from 1961 to 1967 in Buenos Aires. He contributed to the knowledge of Argentinian *Agaricales* with the description of many new species and with the knowledge of the biodiversity of this group not only in Argentina but also in South America. Some years later, Egon Horak published 11 contributions from 1964 to 1983, mainly on *Agaricales* of Argentinean Patagonia. Raithelhuber published 6 books and 35 papers between 1972 and 2004. At present, Alberto (since 1994, with one book and 8 contributions), Lechner (since 2000, with one book and 8 contributions) and Niveiro (since 2009, with 2 contributions) are studying the group in different regions of Argentina.

Although the study of the *Agaricales* from Argentina has been in progress for more than one century, knowledge about the group is still incomplete, since many areas have not been fully studied yet.

The purpose of this study is to establish a baseline of knowledge about the diversity of species described for the Families *Amanitaceae*, *Pluteaceae* and *Hygrophoraceae* in Argentina. This checklist will serve then as a base for future studies of mushroom biodiversity in Argentina.

Material and Methods

Nomenclature and classification systems

This checklist was based on all publications recorded for Argentina till 2011. Nomenclature and classification systems followed Singer (1986) for families, and Kirk et al. (2008) and Index Fungorum (<http://www.indexfungorum.org>) for genera and species. Synonyms were simplified and only the basionym of each species and the names recorded for Argentina were included. Index Fungorum was consulted for current names of species and synonyms.

For journal abbreviations, the Botanico Periodico Huntianum (http://fmhibd.library.cmu.edu/fmi/iwp/cgi?db=BPH_Online&loadframes) web site was used. For authors abbreviations, the International Plant Names Index (IPNI) (<http://www.ipni.org>) and Authors of Fungal Names (<http://www.indexfungorum.org/names/AuthorsOfFungalNames.asp>) were used. References cited for each species were ordered firstly by author in alphabetical order and secondly by year of publication.

We found genera that are not considered valid at present (Kirk et al. 2008), and species that were transferred to another genus (for example *Camarophyllum*, at present *Hygrophorus*). However, not all the species of those genera have been transferred to the current genus. As type materials were not studied, we cited them as were originally published. The valid genus according to Kirk et al. (2008) is given between brackets followed by the symbol =.

Remarks were only added in those taxa where we found conflict such as: species not validly published (NVP), the holotype is missing (MH), doubtful name, synonyms, unpublished transfer of a species to a different genus, or when the distribution of the species was not completely clear.

Books were cited by the year in which they were really published and not the year printed in the publication. This is the case, for example, of “Pródromo de la flora Agaricina” which was cited as Singer & Digilio (1952). In this case, two years are provided for species citation in the “literature cited” section, the real year of publication between parenthesis and year printed in the book between brackets.

Distribution

Species distribution was cited according to the Province (State) where it was collected (Fig. 1) using abbreviations found in Table 1.

Occasionally, authors only described a place or an area to indicate the distribution; in this case we reproduced author’s comments between quotations marks; for example “south of Pampa Argentina”.

It should be taken into account that although many species were recorded in the provinces of the Patagonia Argentina (Neuquén, Río Negro, Chubut, Santa Cruz, Tierra del Fuego), most of them were found in the Patagonian Andes forest which is located in a narrow strip to the west of the southern provinces.

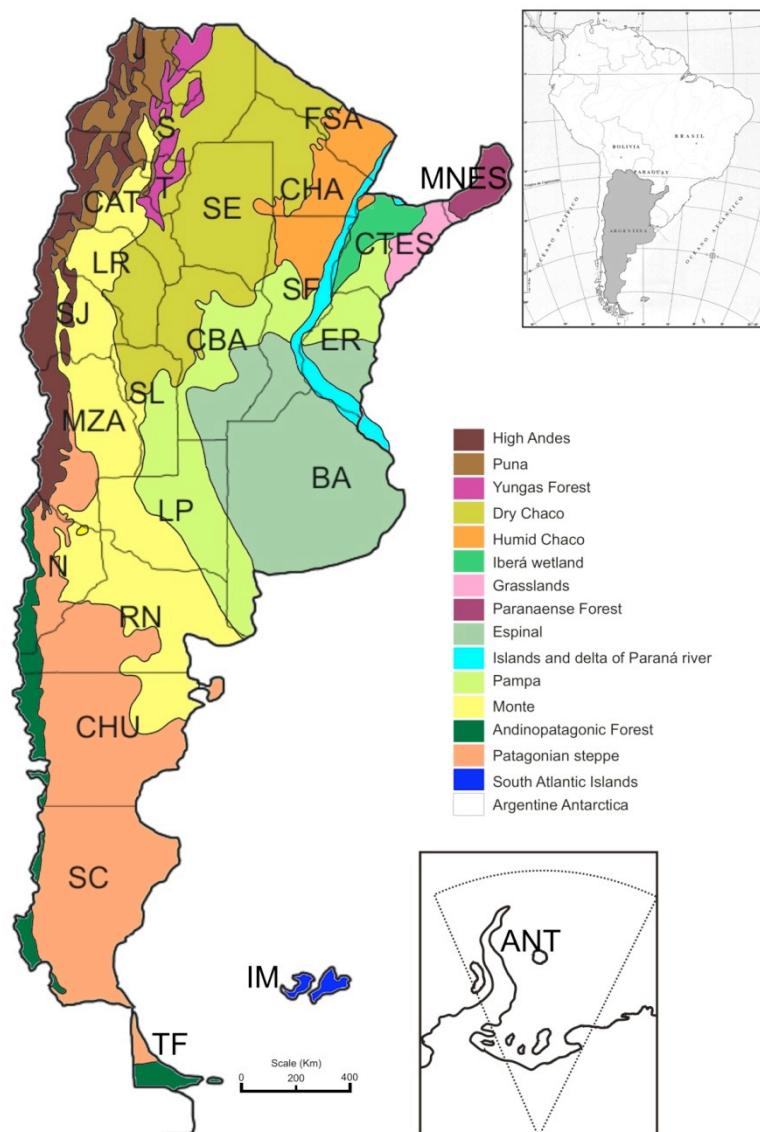


FIG. 1— Political division of Argentina. Abbreviations were used to identify the provinces where species were collected. Ecoregions are shown in color (modified from Burkart et al. 1999).

TABLE 1—Abbreviations used for the Provinces of Argentina.

Province	Abbrev.	Province	Abbrev.
Antártida	ANT	Misiones	MNES
Buenos Aires	BA	Mendoza	MZA
Catamarca	CAT	Neuquén	N
Córdoba	CBA	Rio Negro	RN
Chaco	CH	Salta	S
Chubut	CHU	Santa Cruz	SC
Corrientes	CTES	Santiago del Estero	SE
Entre Ríos	ER	Santa Fe	SF
Formosa	FSA	San Juan	SJ
Islas Malvinas	IM	San Luis	SL
Jujuy	J	Tucumán	T
La Pampa	LP	Tierra del Fuego	TF
La Rioja	LR	No data	ND
Patagonian Andes forest			AP

Results

CHECKLIST OF AMANITACEAE, PLUTEACEAE, AND HYGROPHORACEAE FROM ARGENTINA

AMANITACEAE

Amanita Pers.

Amanita ameghinoi (Speg.) Singer, *Sydotia* **6**(5-6): 344, 1952.

Bas: *Armillaria ameghinoi* Speg. 1899 [1898].

Dist: T, CAT, BA

Ref: Faar (1973), Raithelhuber (1974, 1986, 1991, 2004), Spegazzini (1899a, 1926b).

Amanita austro-olivacea Raithelh., *Metrodiana* **5**(3-4): 72, 1974.

Dist: T, CAT, BA, AP

Ref: Raithelhuber (1977, 1986, 1987, 1991, 2004).

Amanita battarrae (Boud.) Bon, *Doc. Mycol.* **16**(61): 16, 1985.

Bas: *Amanitopsis battarrae* Boud. 1902.

= *Amanitopsis umbrinolutea* Secr. ex E. J. Gilbert 1928.

Dist: TF

Ref: Raithelhuber (1986).

Amanita bubalina Bas, *Persoonia* **5**(4): 365, 1969.

Dist: T, CAT, BA

Ref: Raithelhuber (1986, 1991, 2004).

Amanita ceciliae (Berk. & Broome) Bas, *Persoonia* **12**(2): 192, 1983.

Bas: *Agaricus ceciliae* Berk. & Broome 1854.

= *Amanita inaurata* Secr. ex Gillet 1874.

Dist: RN

Ref: Raithelhuber (1977, 1986, 1987, 1991, 2004).

Amanita chlorinosma (Peck) Lloyd, *Mycol. Writ.* **7**: 7, 1898.

Bas: *Agaricus chlorinosmus* Peck 1879.

Dist: S, BA

Ref: Raithelhuber (1986, 1987, 1991, 2004), Singer & Digilio (1952).

Amanita crassa Bas, *Persoonia* **5**(4): 402, 1969.

Dist: RN

Ref: Raithelhuber (1986, 1991, 2004).

Amanita diemii Singer, *Sydowia* **8**: 120, 1954.

Dist: N, RN

Ref: Gamundí & Horak (2002), Raithelhuber (1977, 1986, 1987, 1991, 2004), Singer (1954, 1969).

Amanita foetens Singer, *Rev. Mycol. (Paris)* **18**(1): 15, 1953.

Dist: T, BA

Ref: Raithelhuber (1986, 1991, 2004), Singer (1953a), Wright & Albertó (2002).

Amanita foetens var. **grassii** Raithelh., *Metrodiana* **14**(1): 7, 1986 [1985].

Dist: T, BA

Ref: Raithelhuber (1986, 1991).

Amanita gemmata (Fr.) Bertill., *Essai Crypt. Écorc.* (Paris) **3**: 496, 1866.

Bas: *Agaricus gemmatus* Fr. 1838 [1836].

Dist: BA, "South Argentina".

Ref: Albertó et al. (2002), Raithelhuber (1986, 1991), Singer (1953a).

Amanita lilloi Singer, *Lilloa* **25**: 245, 1952 [1951].

Dist: T, BA

Ref: Raithelhuber (1986, 1987, 1991, 2004), Singer & Digilio (1952), Wright & Albertó (2002).

Amanita morenoi Raithelh., *Metrodiana* **14**(1): 7, 1986 [1985].

Dist: RN

Ref: Raithelhuber (1986, 1991, 2004)

Amanita muscaria (L.) Lam., *Encycl. Méth. Bot. (Paris)* **1**: 111, 1783.

Bas: *Agaricus muscarius* L. 1753.

Dist: MZA, CBA, BA, AP

Ref: Barroetaveña (2006), Daniele et al. (2005), Raithelhuber (1986, 2004), Singer & Digilio (1952), Wright & Albertó (2002).

Amanita phalloides (Vaill. ex Fr.) Link, *Handbuck zur Erkennung der Nutzbarsten und am Häufigsten Vorkommenden Gewächse* **3**: 272, 1833.

Bas: *Agaricus phalloides* Vaill. ex Fr. 1821.

Dist: ER, SF, BA, MZA, RN

Ref: Martínez (1945), Raithelhuber (1974, 1986, 1987, 1991, 2004), Singer (1969), Singer & Digilio (1952), Wright & Albertó (2002).

Amanita prairiicola Peck, *Bull. Torrey Bot. Club* **24**: 138, 1897.

Dist: T

Ref: Raithelhuber (1986).

Amanita pseudospreta Raithelh., *Metrodiana* **5**(3-4): 73, 1974.

Dist: T, AP

Ref: Raithelhuber (1977, 1986, 1987, 1991, 2004).

Amanita ravenelii (Berk. & Broome) Sacc., *Syll. fung.* **5**: 15, 1887.

Bas: *Agaricus ravenelii* Berk. & Broome 1859.

Dist: T, BA, RN

Ref: Raithelhuber (1986, 1987, 1991), Singer (1969).

Amanita salmonophylla Singer, *Beih. Nova Hedwigia* **29**: 152, 1969.

Dist: "South of Pampa Argentina"

Ref: Singer (1969).

Obs: NVP

Amanita singeri Bas, *Persoonia* **5**(4): 364, 1969.

Dist: BA

Ref: Raithelhuber (1986, 1991, 2004).

Amanita umbrinella E.-J. Gilbert & Cleland, *Iconogr. Mycol. (Milan)* **26**: 250, 1941.

Dist: N, RN, TF

Ref: Horak (1980), Raithelhuber (1977, 1986, 1987, 1991, 2004), Singer (1954, 1969).

Amanita ushuaiensis (Raithelh.) Raithelh., *Metrodiana* **9**(2): 47, 1980.

Bas: *Amanitopsis ushuaiensis* Raithelh. 1972.

Dist: TF

Ref: Horak (1980), Raithelhuber (1972, 1977, 1986, 1987, 1991, 2004).

Amanita vaginata (Bull.) Lam., *Encycl. Méth. Bot. (Paris)* **1**: 109, 1783.

Bas: *Agaricus vaginatus* Bull. 1783.

Dist: TF

Ref: Singer & Digilio (1952).

Limacella Earle

Limacella laeviceps (Speg.) Raithelh., *Metrodiana* **9**(2): 47, 1980.

Bas: *Lepiota laeviceps* Speg. 1899 [1898].

Dist: BA, “temperate and warm provinces from Argentina and Uruguay”.

Ref: Faar (1973), Raithelhuber (1974, 1987, 1991, 2004), Spegazzini (1899a, 1926b).

PLUTEACEAE

Pluteus Fr.

Pluteus admirabilis Peck, *Syll. fung.* **5**: 679, 1872

Dist: T

Ref: Raithelhuber (1987, 1991, 2004), Singer & Digilio (1952).

Pluteus aethalus (Berk. & M.A. Curtis) Sacc., *Syll. fung.* **5**: 674, 1887.

Bas: *Agaricus aethalus* Berk. & M.A. Curtis, 1868.

Dist: MNES

Ref: Raithelhuber (1987, 1991, 2004), Singer & Digilio (1952), Wright & Wright (2005).

Pluteus alborubellus (Mont.) Pat., *Bull. Soc. Mycol. France* **15**: 196, 1899.

Bas: *Agaricus alborubellus* Mont. 1854.

Dist: T

Ref: Raithelhuber (1991, 2004), Singer & Digilio (1952).

Pluteus albostipitatus (Dennis) Singer, *Lloydia* **21**: 240, 1959 [1958].

Bas: *Pluteus spilopus* var. *albostipitatus* Dennis 1953.

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2000a, 2004), Singer (1959a).

Pluteus aporus Singer, *Sydotzia* **8**: 122, 1954.

Dist: N, RN

Ref: Raithelhuber (1987, 1991, 2004), Singer (1954, 1959a, 1969).

Pluteus aporus f. porpophorus Singer, *Sydotzia* **15**: 130, 1962.

Dist: N

Ref: Singer (1969).

Pluteus aquosus Singer, *Trans. Brit. Mycol. Soc.* **39**: 148, 1956.

Dist: T

Ref: Singer (1956, 1959a).

Pluteus argentinensis Singer, *Lloydia* **21**: 230, 1959 [1958].

Dist: T, BA

Ref: Raithelhuber (2004), Singer (1959a), Wright & Albertó (2002).

Pluteus argentininus Speg., *Anales Mus. Nac. Buenos Aires* **6**:118, 1899 [1898].

Dist: BA

Ref: Faar (1973), Singer (1950), Spegazzini (1899a).

Pluteus atravellaneus var. **parvus** Singer, *Lloydia* **21**: 248, 1959 [1958].

Dist: T

Ref: Singer (1956, 1959a).

Pluteus brunneopunctus E. Horak, *Nova Hedwigia* **8**: 182, 1964.

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004).

Pluteus caldarium Henn., *Verh. Bot. Vereins. Prov. Brandenburg* **40**: 139, 1899 [1898].

Dist: MNES

Ref: Wright & Wright (2005).

Pluteus carneobrunneolus E. Horak, *Nova Hedwigia* **8**: 195, 1964.

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004).

Pluteus cervinus (Schaeff.) P. Kumm., *Führ. Pilzk.* (Zwickau): 99, 1871.

Bas: *Agaricus cervinus* Schaeff. 1774.

Dist: CAT, BA

Ref: Spegazzini (1912, 1926b).

Pluteus chrysophlebius subsp. **bruchii** (Speg.) Singer, *Trans. Brit. Mycol. Soc.* **39**: 196, 1956.

Bas: *Nolanea bruchii* Speg. 1926.

= *Pluteus bruchii* (Speg.) Singer, 1951 [1949].

Dist: CBA

Ref: Faar (1973), Singer (1950, 1956, 1959a), Singer & Digilio (1952), Spegazzini (1926a).

Pluteus chrysophlebius var. **aconquijensis** Singer, *Lloydia* **21**: 279, 1959 [1958].

Dist: T

Ref: Singer (1959a).

Pluteus chusqueicola E. Horak, *Nova Hedwigia* **8**: 190, 1964.

Dist: N, RN

Ref: Horak (1964), Raithelhuber (1977, 1987, 1991, 2004), Singer (1969).

Pluteus cubensis (Murrill) Dennis, *Bull. Soc. Mycol. France* **69**(2): 155, 1953.

Bas: *Nolanea cubensis* Murrill 1911.

Dist: S, T

Ref: Singer (1956, 1959a).

Pluteus defibulatus Singer, *Sydowia* **6**: 222, 1952.

Dist: TF

Ref: Raithelhuber (1977), Singer (1952, 1956), Singer & Digilio (1952).

Pluteus diptychocystis Singer, *Sydowia* **8**: 123, 1954.

Dist: N, RN

Ref: Raithelhuber (1977, 1987, 1991, 2004), Singer (1954, 1956, 1959a).

Pluteus eugraptus (Berk. & Broome) Sacc., *Syll. fung.* **5**: 678, 1887.

Bas: *Agaricus eugraptus* Berk. & Broome 1871.

Dist: T

Ref: Singer (1956, 1959a).

Pluteus eugraptus var. **chusqueae** (E. Horak) Singer, *Beih. Nova Hedwigia* **29**: 157, 1969.

Bas: *Pluteus psichiophorus* var. *chusqueae* E. Horak 1964.

Dist: N

Ref: Horak (1964), Singer (1969).

Pluteus eupigmentatus Singer, *Lloydia* **21**: 223, 1959 [1958].

Dist: T

Ref: Singer (1959a, 1962).

Pluteus fallax Singer, *Lloydia* **21**: 294, 1959 [1958].

Dist: T

Ref: Singer (1959a).

Pluteus fastigiatus Singer, *Lilloa* **25**: 259, 1952 [1951].

Dist: T

Ref: Raithelhuber (1987, 1991, 2004), Singer (1956, 1959a), Singer & Digilio (1952).

Pluteus fernandezianus Singer, *Lloydia* **21**: 220, 1959 [1958].

= *Pluteus brunneo-olivaceus* E. Horak 1964.

Dist: TF

Ref: Horak (1980), Raithelhuber (1977, 1987, 1991, 2004), Singer (1969).

Pluteus fibulatus Singer, *Lilloa* **25**: 252, 1952 [1951].

Dist: T

Ref: Raithelhuber (1987, 1991), Singer (1956, 1959a), Singer & Digilio (1952).

Pluteus fuligineovenosus E. Horak, *Nova Hedwigia* **8**: 190, 1964.

Dist: N

Ref: Raithelhuber (1987, 1991, 2004), Singer (1969).

Pluteus globiger Singer, *Lilloa* **25**: 266, 1952 [1951].

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004), Singer (1962), Singer & Digilio (1952).

Pluteus haywardii Singer, *Trans. Brit. Mycol. Soc.* **39**: 147, 1956.

Dist: J, T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004), Singer (1956, 1959a, 1962), Singer & Digilio (1952).

Pluteus hiemalis Singer, *Lloydia* **21**: 248, 1959 [1958].

Dist: T

Ref: Singer (1959a).

Pluteus hololeucus Singer, *Trans. Brit. Mycol. Soc.* **39**: 200, 1956.

Dist: T

Ref: Singer (1956, 1959a).

Pluteus iguazuensis Singer, *Trans. Brit. Mycol. Soc.* **39**: 201, 1956.

Dist: T

Ref: Singer (1956, 1959a), Wright & Wright (2005).

Pluteus inocybirimosus E. Horak, *Nova Hedwigia* **8**: 193, 1964.

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004).

Pluteus jamaicensis Murrill, *Mycologia* **3**(6): 278, 1911.

Dist: T, BA

Ref: Horak (1964), Raithelhuber (1987, 1991, 2000a, 2004), Singer (1959a).

Pluteus laetus Singer, *Lloydia* **21**: 274, 1959 [1958].

Dist: T

Ref: Raithelhuber (1991, 2004), Singer (1962).

Pluteus longistriatus (Peck) Peck, *Rep. (Annual) New York State Mus. Nat. Hist.* **38**: 137, 1885.

Bas: *Agaricus longistriatus* Peck 1878.

Dist: S

Ref: Singer (1959a).

Pluteus luctuosus Boud., *Bull. Soc. Mycol. France* **21**: 70, 1905.

= *Pluteus marginatus* (Quél.) Bres. 1929.

Dist: T, SGO

Ref: Raithelhuber (1991, 2004), Singer (1956, 1959a, 1962), Singer & Digilio (1952).

Pluteus mammillatus (Longyear) Minnis, Sundb. & Methven, *Mycotaxon* **96**: 34, 2006.

Bas: *Annularia mammillatus* Longyear 1902.

= *Chamaeota sphaerospora* (Peck) Kauffman 1918.

Dist: BA

Ref: Moreno & Albertó (1996), Wright & Albertó (2002).

Pluteus minimus Henn., *Verh. Bot. Vereins. Prov. Brandenburg* **40**: 139, 1899 [1898].

Dist: T

Ref: Singer (1965).

Pluteus nanus (Pers.) P. Kumm., *Führ. Pilzk. (Zwickau)*: 98, 1871.

Bas: *Agaricus nanus* Pers. 1801.

Dist: BA, N

Ref: Singer (1956, 1969).

Pluteus nigrolineatus Murrill, *Bull. Torrey Bot. Club* **66**: 30, 1939.

Dist: T

Ref: Raithelhuber (1987, 1991, 2004), Singer (1962, 1969).

Pluteus nitens Pat., *Bull. Soc. Mycol. France* **14**: 53, 1898.

Dist: T

Ref: Singer (1956).

Pluteus ochraceus E. Horak, *Nova Hedwigia* **8**: 180, 1964.

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991).

Pluteus phlebophorus (Ditmar) P. Kumm., *Führ. Pilzk. (Zwickau)*: 98, 1871.

Dist: T

Ref: Raithelhuber (1987, 1991, 2004), Singer & Digilio (1952).

Pluteus plautus (Weinm.) Gillet, *Hyménomycètes* (Alençon): 394, 1876.

Bas: *Agaricus plautus* Weinm. 1836.

= *Pluteus depauperatus* Romagn. 1956.

Dist: T

Ref: Raithelhuber (1987, 2004), Singer (1956), Singer & Digilio (1952).

Pluteus polycystis Singer, *Lloydia* **21**: 271, 1959 [1958].

Dist: MNES

Ref: Singer (1959a), Wright & Wright (2005).

Pluteus pseudograptus E. Horak, *Nova Hedwigia* **8**: 187, 1964.

Dist: N, RN

Ref: Horak (1964), Raithelhuber (1977, 1987, 1991, 2004), Singer (1969).

Pluteus psichiophorus (Berk. & Broome) Sacc., *Syll. fung.* **5**: 670, 1887.

Bas: *Agaricus psichiophorus* Berk. & Broome 1871.

Dist: N, RN

Ref: Horak (1964), Raithelhuber (1977).

Pluteus pulverulentus var. **pseudonanus** Singer, *Lloydia* **21**: 289, 1959 [1958].

Dist: S

Ref: Singer (1959a).

Pluteus raphaniodorus E. Horak, *Nova Hedwigia* **8**: 163, 1964.

Dist: RN

Ref: Horak (1964), Raithelhuber (1977, 1987, 1991, 2004), Singer (1969).

Pluteus riberaltensis var. **missionensis** Singer, *Syдовia* **15**: 131, 1962 [1961].

Dist: MNES

Ref: Raithelhuber (1991, 2004), Singer (1962), Wright & Wright (2005).

Pluteus rimosellus Singer, *Lilloa* **25**: 262, 1952 [1951].

Dist: MNES

Ref: Raithelhuber (1987, 1991, 2004), Singer (1959a), Singer & Digilio (1952).

Pluteus rimosoaffinis Singer, *Trans. Brit. Mycol. Soc.* **39**: 211, 1956.

Dist: T

Ref: Singer (1956, 1959a).

Pluteus riograndensis var. **atromarginatus** Singer, *Syдовia* **15**: 131, 1962 [1961].

Dist: T

Ref: Raithelhuber (1991, 2004), Singer (1962).

Pluteus roberti var. **fibroso-striatus** Singer ex Raithelh., *Metrodiana, Sonderh.* **4**: 15, 1990.

= *Pluteus roberti* (Fr.) Gillet, sensu Singer & Digilio 1952 [1951].

Dist: T

Ref: Raithelhuber (1990b, 1991, 2004), Singer & Digilio (1952).

Pluteus romellii (Britzelm.) Lapl., *Syll. fung.* **11**: 44, 1895.

Bas: *Agaricus romellii* Britzelm. 1891.

= *Pluteus nanus* var. *lutescens* (Fr.) Bres. 1879.

Dist: BA

Ref: Martínez (1949), Raithelhuber (1974, 1987, 1991, 2004), Singer & Digilio (1952).

Pluteus sancti-xaverii Singer, *Lloydia* **21**: 264, 1959 [1958].

Dist: T

Ref: Singer (1959a).

Pluteus sapicola Singer, *Lloydia* **21**: 290, 1959 [1958].

Dist: S, T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004), Singer (1959a).

Pluteus spegazzinianus Singer, *Syдовia* **6**: 221, 1952.

Dist: N, RN, TF

Ref: Gamundí & Horak (2002), Horak (1964, 1980), Raithelhuber (1977, 1987, 1991), Singer (1952, 1954, 1956, 1959a, 1969), Singer & Digilio (1952).

Pluteus spilopus (Berk. & Broome) Sacc., *Syll. fung.* **5**: 669, 1887.

Bas: *Agaricus spilopus* Berk. & Broome 1881.

Dist: T

Ref: Singer (1965).

Pluteus squamosopunctus E. Horak, *Nova Hedwigia* **8**: 169, 1964.

Dist: RN

Ref: Raithelhuber (1977, 1987, 1991, 2004).

Pluteus squamosopunctus f. alcaliodorus E. Horak, *Nova Hedwigia* **8**: 171, 1964.

Dist: RN

Ref: Horak (1964), Raithelhuber (1977).

Pluteus squamosopunctus f. magnocystis E. Horak, *Nova Hedwigia* **8**: 170, 1964.

Dist: N

Ref: Horak (1964), Raithelhuber (1977).

Pluteus stephanobasis Singer, *Lloydia* **21**: 212, 1959 [1958].

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004), Singer (1959a).

Pluteus subcervinus (Berk. & Broome) Sacc., *Syll. fung.* **5**: 666, 1887.

Bas: *Agaricus subcervinus* Berk. & Broome 1871.

Dist: MNES

Ref: Lechner et al. (2006), Wright & Wright (2005).

Pluteus subfibrillosus Singer, *Trans. Brit. Mycol. Soc.* **39**: 187, 1956.

Dist: T

Ref: Singer (1956, 1959a).

Pluteus submarginatus E. Horak, *Nova Hedwigia* **8**: 188, 1964.

Dist: TF

Ref: Horak (1980), Singer (1969).

Pluteus subminutus Singer, *Lloydia* **21**: 269, 1959 [1958].

Dist: S

Ref: Singer (1959a).

Pluteus subspinulosus E. Horak, *Nova Hedwigia* **8**: 165, 1964.

Dist: N, RN

Ref: Horak (1964), Raithelhuber (1977, 1987, 1991, 2004), Singer (1969).

Pluteus sulcatus Singer, *Sydowia* **6**: 265, 1952.

Dist: T

Ref: Raithelhuber (1987, 1991, 2004), Singer (1956, 1959a), Singer & Digilio (1952).

Pluteus tucumanus Singer, *Sydowia* **6**: 260, 1952.

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004), Singer (1956, 1959a), Singer & Digilio (1952).

Pluteus variipes Singer, *Trans. Brit. Mycol. Soc.* **39**: 218, 1956.

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004), Singer (1956, 1959a).

Pluteus variipes var. **atrofibrillosus** Singer, *Lloydia* **21**: 266, 1959 [1958].

Dist: T

Ref: Singer (1959a).

Pluteus viscidulus Singer, *Sydowia* **6**: 255, 1952.

Dist: T

Ref: Raithelhuber (1987, 1991, 2004), Singer (1953b, 1959a), Singer & Digilio (1952).

Pluteus xanthopus Singer, *Lloydia* **21**: 282, 1959 [1958].

Dist: T

Ref: Horak (1964), Raithelhuber (1987, 1991, 2004), Singer (1959a).

Pluteus xylophilus (Speg.) Singer, *Lilloa* **22**: 405, 1951 [1949].

Bas: *Entoloma xylophilum* Speg. 1926.

= *Pluteus cervinus* var. *brasiliensis* Bres. 1920.

= *Pluteus atricapillus* var. *brasiliensis* (Bres.) Raithelh. 1983.

Dist: S, T, SL, BA

Ref: Faar (1973), Raithelhuber (1983, 1987, 1991, 2004), Singer (1950, 1956, 1959a), Singer & Digilio (1952), Spegazzini (1926b).

Pluteus xylophilus var. **major** Singer, *Lloydia* **21**: 210, 1959.

Dist: T

Ref: Singer (1959a).

Pluteus xylophilus var. **tucumanensis** Singer, *Lloydia* **21** (4): 209, 1959.

= *Pluteus atricapillus* var. *tucumanensis* (Singer) Raithelh. 1987.

= *Pluteus cervinus* var. *tucumanensis* Singer 1952 [1951].

Dist: T

Ref: Raithelhuber (1987, 1991, 2004), Singer (1956, 1959a), Singer & Digilio (1952).

Pluteus yungensis Singer, *Lloydia* **21**: 232, 1959 [1958].

Dist: T

Ref: Singer (1962).

Volvariella Speg.

Volvariella argentina Speg., *Anales Mus. Nac. Buenos Aires* **6**(3): 119, 1899 [1898].

Dist: BA

Ref: Singer (1950), Spegazzini (1899a).

Volvariella bombycinia (Schaeff.) Singer, *Lilloa* **22**: 401, 1951 [1949].

Bas: *Agaricus bombycinus* Schaeff. 1774.

= *Volvaria ilicicola* Speg. 1908.

Dist: T, MNES, BA

Ref: Raithelhuber (1987, 1991, 2004), Singer & Digilio (1952), Spegazzini (1880, 1908, 1926b).

Volvariella cnemidophora (Mont.) Singer, *Lilloa* **22**: 401, 1951 [1949].

Bas: *Agaricus cnemidophorus* Mont. 1856.

= *Volvaria cnemidophora* (Mont.) Sacc. 1887.

Dist: S, T, BA

Ref: Raithelhuber (1974, 1987, 1991, 2004), Singer & Digilio (1952), Spegazzini (1899a, 1919).

Volvariella earlei (Murrill) Shaffer, *Mycologia* **49**(4): 550, 1957.

Bas: *Volvariopsis earlei* Murrill 1911.

Diat: BA

Ref: Albertó et al. (1996), Raithelhuber (2004), Wright & Albertó (2002).

Volvariella gloiocephala (DC.) Boekhout & Enderle, *Beitr. Kenntn. Pilze Mitteleurop.* **2**: 78, 1986.

Bas: *Agaricus gloiocephalus* DC. 1815.

= *Volvariella speciosa* (Fr.) Singer 1951 [1949].

= *Volvariella speciosa* var. *gloiocephala* (DC.) Singer 1951 [1949].

= *Agaricus microchlamidus* Speg. 1881.

= *Volvaria microchlamida* (Speg.) Speg. 1887.

Dist: BA

Ref: Moreno & Albertó (1996), Raithelhuber (2004), Singer (1950, 1969), Spegazzini (1881, 1899a, 1926b), Wright & Albertó (2002).

Volvariella gloicephala var. **colorata** (Singer) Wright & Albertó, *Hongos, Guía de la Región Pampeana I*: 176. 2002.

Bas: *Volvariella cnemidophora* f. *colorata* Singer 1951.

Dist: BA

Ref: Raithelhuber (2004), Wright & Albertó (2002).

Volvariella islagarciae Raithelh., *Metrodiana, Sonderh.* **5**: 54. 2000.

Dist: BA

Ref: Raithelhuber (2000b, 2004).

Volvariella platensis (Speg.) Shaffer, *Mycologia* **54**(5): 571. 1963.

Bas: *Volvaria platensis* Speg. 1899 [1898].

Dist: BA

Ref: Faar (1973), Spegazzini (1899a).

Volvariella psammophila Singer, *Fieldiana, Bot.* **21**: 92. 1989.

Dist: BA

Ref: Raithelhuber (1991, 2004), Singer (1989).

Volvariella pusilla (Pers.) Singer, *Lilloa* **22**: 401. 1951 [1949].

Bas: *Amanita pusilla* Pers. 1800 [1799].

= *Volvariella parvula* (Weinm.) Speg. 1926.

Dist: T, BA, “temperate and warm provinces from Argentina, and Uruguay”.

Ref: Raithelhuber (1974, 1987, 1991, 2004), Singer & Digilio (1952), Spegazzini (1926b).

Volvariella subxerophytica Singer, *Fieldiana, Bot.* **21**: 93. 1989.

Dist: T, CAT

Ref: Raithelhuber (1991, 2004), Singer (1989).

Volvariella taylorii (Berk. & Broome) Singer, *Lilloa* **22**: 401. 1951 [1949].

Bas: *Agaricus taylorii* Berk. 1854.

Dist: T

Ref: Singer (1953a).

HYGROPHORACEAE

Camarophyllum (Fr.) P. Kumm. (= **Hygrophorus** Fr.)

Camarophyllum cremeus (Murrill) Singer, *Beih. Nova Hedwigia* **29**: 10. 1969.

Bas: *Omphalina cremea* Murrill 1916.

Dist: N, RN, TF

Ref: Raithelhuber (1977, 1987, 1990a, 1991, 2004), Singer (1969).

Camarophyllum laccarioides Singer, *Syдовия* **6**: 170, 1952.

Dist: N, RN, TF

Ref: Horak (1980), Raithelhuber (1977, 1987, 1990a, 1991, 2004), Singer (1952, 1954, 1969), Singer & Digilio (1952).

Camarophyllum recurvatus (Peck) Murrill, *N. Amer. Fl. (New York)* **9**(6): 388, 1916.

Bas: *Hygrophorus recurvatus* Peck 1912.

= *Camarophyllum patagonicus* Singer 1969.

= *Camarophyllum recurvatus* var. *patagonicus* (Singer) Raithelh. 1992.

Dist: N, RN, TF

Ref: Horak (1967, 1980), Raithelhuber (1987, 1990a, 1991, 2004), Singer (1969).

Camarophyllum tehuelches (Speg.) Singer, *Syдовия* **6**: 169, 1952.

Bas: *Agaricus tehuelches* Speg. 1887.

= *Clitocybe tehuelches* Speg. 1887.

= *Omphalia tehuelches* (Speg.) Speg. 1912.

Dist: N, RN, TF

Ref: Faar (1973), Horak (1967, 1980), Raithelhuber (1977, 1987, 1990a, 1991, 2004), Singer (1950, 1952, 1954, 1969), Singer & Digilio (1952), Spegazzini (1887).

Chrysomphalina Clémençon

Chrysomphalina chrysophylla (Fr.) Clémençon, *Z. Mykol.* **48**(2): 203, 1982.

Bas: *Agaricus chrysophyllus* Fr. 1821.

= *Omphalina chrysophylla* (Fr.) Murrill 1916.

= *Gerronema chrysophyllum* (Fr.) Singer 1959.

Dist: BA

Ref: Ramadori (1995), Singer (1959b).

Humidicutis (Singer) Singer

Humidicutis multicolor (Berk. & Broome) E. Horak, *N.Z. Jl. Bot.* **28**(3): 298, 1990.

Bas: *Hygrophorus multicolor* Berk. & Broome 1871.

= *Hygrocybe multicolor* (Berk. & Broome) E. Horak 1980 [1979].

Dist: TF

Ref: Horak (1980), Raithelhuber (1987, 1990a, 1991, 2004).

Humidicutis rosella (Speg.) Singer, *Beih. Nova Hedwigia* **29**: 23, 1969.

Bas: *Tricholoma rosellum* Speg. 1926.

Dist: BA

Ref: Faar (1973), Raithelhuber (1987, 1990a, 1991), Singer (1950, 1969), Spegazzini (1926b).

Hygroaster Singer

Hygroaster iguazuensis B.E. Lechner & J.E. Wright, *Mycotaxon* **91**: 10, 2005.

Dist: MNES

Ref: Lechner et al. (2005), Wright et al. (2008), Wright & Wright (2005).

Hygrocybe (Fr.) P. Kumm.

Hygrocybe adonis (Singer) Boertm., *Biblioth. Mycol.* **192**: 10, 2002.

= *Camarophyllum adonis* Singer 1952.

Dist: N, RN, TF

Ref: Gamundí & Horak (2002), Horak (1980), Raithelhuber (1977, 1987, 1990a, 1991, 2004),
Singer (1952, 1954, 1969), Singer & Digilio (1952).

Hygrocybe arechavaletae (Speg.) Singer, *Beih. Sydowia* **7**: 7, 1973.

Bas: *Omphalia arechavaletae* Speg. 1899 [1898].

Dist: ND

Ref: Faar (1973), Raithelhuber (1990a).

Obs: Raithelhuber (1990a) cited this species as recorded for Argentina, but he did not clear up
where he exactly collected it. Spegazzini (1899b) recorded it for Uruguay.

Hygrocybe araucana Singer, *Beih. Nova Hedwigia* **29**: 11, 1969.

Dist: TF

Ref: Horak (1980), Raithelhuber (1987, 1990a, 1991, 2004), Singer (1969).

Hygrocybe blestiana Singer, *Beih. Nova Hedwigia* **29**: 18, 1969.

Dist: N, RN

Ref: Raithelhuber (1977, 1987, 1990a, 1991, 2004), Singer (1969).

Hygrocybe cantharellus (Schwein.) Murrill, *Mycologia* **3**(4): 196, 1911.

Bas: *Agaricus cantharellus* Schwein. 1822.

= *Hygrocybe lepida* Arnolds 1986.

Dist: BA

Ref: Moreno & Albertó (1996), Raithelhuber (2004), Wright & Albertó (2002).

Hygrocybe chilensis Singer, *Beih. Nova Hedwigia* **29**: 18, 1969.

Dist: AP

Ref: Raithelhuber (1990a, 2004), Singer (1969).

Hygrocybe conica (Schaeff.) P. Kumm., *Führ. Pilzk.* (Zwickau): 111, 1871.

Bas: *Agaricus conicus* Schaeff. 1774.

Dist: CHU, TF, "NW Argentina".

Ref: Horak (1980), Raithelhuber (1987, 1990a, 1991, 2004), Singer (1969), Singer & Digilio (1952).

Hygrocybe glutinipes (J.E. Lange) R. Haller Aar., *Schweiz. Z. Pilzk.* **34**: 179, 1956.

Bas: *Hygrocybe citrina* var. *glutinipes* J.E. Lange 1940.

= *Hygrocybe aurantioviscida* Arnolds 1982.

Dist: BA

Ref: Raithelhuber (2004), Wright & Albertó (2002).

Hygrocybe holoxantha E. Horak, *Fl. criptog. Tierra del Fuego* **11**(6): 60, 1980 [1979].

Dist: TF

Ref: Horak (1980), Raithelhuber (1987, 1990a, 1991).

Hygrocybe huronensis (A.H. Sm. & Hesler) Singer, *Lilloa* **22**: 153, 1951 [1949].

Bas: *Hygrophorus huronensis* A.H. Sm. & Hesler 1942.

Dist: N, RN

Ref: Raithelhuber (1977, 1987, 1990a, 1991, 2004), Singer (1969).

Hygrocybe laeta var. **laeta** (Pers.) P. Kumm., *Führ. Pilzk.* (Zwickau): 112, 1871.

Bas: *Agaricus laetus* Pers. 1800 [1799].

Dist: BA

Ref: Raithelhuber (1974, 1987, 1990a, 1991, 2004), Singer & Digilio (1952).

Hygrocybe marchii (Bres.) Singer, *Lilloa* **22**: 153, 1951 [1949].

Bas: *Hygrophorus marchii* Bres. 1928.

Dist: N, TF

Ref: Horak (1980), Raithelhuber (1987, 1990a, 1991, 2004), Singer (1969).

Hygrocybe pratensis var. **pratensis** (Pers.) Bon, *Mycologia* **6**: 2, 1914.

Bas: *Agaricus pratensis* Pers. 1801.

= *Camarophyllum pratensis* (Pers.) P. Kumm. 1871.

Dist: T, BA, N, RN

Ref: Raithelhuber (1974, 1977, 1987, 1990a, 1991, 2004), Singer (1950, 1954, 1969), Singer & Digilio (1952).

Hygrocybe proteus Singer, *Beih. Nova Hedwigia* **29**: 14, 1969.

Dist: AP

Ref: Raithelhuber (2004).

Hygrocybe psittacina (Schaeff.) P. Kumm., *Führ. Pilzk.* (Zwickau): 112, 1871.

Bas: *Agaricus psittacinus* Schaeff. 1774.

Dist: BA

Ref: Raithelhuber (1974, 1987, 1990a, 1991, 2004), Singer & Digilio (1952).

Hygrocybe psittacina var. **perplexa** (A.H. Sm. & Hesler) Boertm., *Fungi of Northern Europe* (Greve) 1: 82, 1995.

Bas: *Hygrophorus perplexus* A.H. Sm. & Hesler 1954.

= *Hygrocybe sciophana* (Fr.) Wünsche 1877.

Dist: N, RN, TF

Ref: Horak (1980), Raithelhuber (1977, 1987, 1990a, 1991, 2004), Singer (1952, 1954, 1969), Singer & Digilio (1952).

Hygrocybe rosea Murrill, *Mycologia* 3(4): 197, 1911.

Dist: TF

Ref: Horak (1980), Raithelhuber (1987, 1990a, 1991, 2004), Singer (1969).

Hygrocybe singeri (A.H. Sm. & Hesler) Singer, *Sydowia* 11: 355, 1958 [1957].

Bas: *Hygrophorus singeri* A.H. Sm. & Hesler 1954.

Dist: N

Ref: Singer (1969).

Hygrocybe singeri var. **albifolia** (Hesler & A.H. Sm.) Singer, *Beih. Nova Hedwigia* 29: 17, 1969.

Bas: *Hygrophorus singeri* var. *albifolius* Hesler & A.H. Sm. 1963.

Dist: N

Ref: Raithelhuber (1987, 1990a, 1991, 2004).

Hygrocybe striatella Singer, *Beih. Nova Hedwigia* 29: 20, 1969.

Dist: N, TF

Ref: Horak (1980), Raithelhuber (1987, 1990a, 2004), Singer (1969).

Hygrocybe transformabilis Singer, *Beih. Sydowia* 7: 5, 1973.

Dist: T

Ref: Raithelhuber (1987, 1990a, 1991, 2004), Singer (1973).

Hygrophorus Fr.

Hygrophorus buccinulus (Speg.) Dennis, *Kew Bull.* 8(2): 256, 1953.

Bas: *Clitocybe buccinula* Speg. 1889.

= *Marasmiellus buccinulus* (Speg.) Singer 1951 [1949].

Dist: T

Ref: Faar (1973), Raithelhuber (1987, 1991), Singer (1950), Singer & Digilio (1952).

Hygrophorus cinnabarinus Schwein., *Syll. fung.* **5**: 414 ,1887.

Dist: BA

Ref: Singer (1950), Spegazzini (1926b).

Hygrophorus poetarum R. Heim, *Bull. Trimestriel Soc. mycol. France* **63**: 127, 1948 [1947].

Dist: BA

Ref: Ramadori (1992).

Omphaliaster Lamoure

Omphaliaster ianthinocystis (Singer) T.J. Baroni, *Beih. Nova Hedwigia* **67**: 115, 1981.

Bas: *Rhodocybe ianthinocystis* Singer 1952 [1951].

Dist: T

Ref: Raithelhuber (1987, 1991, 2004), Singer & Digilio (1952).

General remarks

When data were analyzed we concluded that 150 species belonging to families *Amanitaceae*, *Pluteaceae* y *Hygrophoraceae* were recorded. All of them distributed in 11 genera, the most important being *Pluteus* (81 species), *Amanita* (23) *Hygrocybe* (21) and *Volvariella* (12). The rest of the genera had only a few species recorded (1-3).

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Literature cited

- Albertó E, Pire G & Franco MG. 2002. Presencia del hongo tóxico *Amanita gemmata* (*Agaricales, Basidiomycetes*) en la costa bonaerense. *Bol. Soc. Argent. Bot.* 37(1-2): 13-17.
- Albertó E, Wright JE & Fazio A. 1996. *Agaricales* nuevos para la Argentina. *Bol. Soc. Argent. Bot.* 31(3-4): 235-244.
- Barroetaveña C. 2006. Hongos asociados a las plantaciones forestales de la región Andino Patagónica. Manual Nº6. Esquel. Centro Forestal CIEFAP.
- Brown A, Martínez Ortiz U, Acerbi M. & Corcuera J. 2006. La situación ambiental Argentina 2005. Buenos Aires. Fundación Vida Silvestre Argentina.
- Burkart R, Bárbaro NO, Sánchez RO & Gómez DA. 1999. Eco-regiones de la Argentina. Buenos Aires. Administración de Parques Nacionales.
- Cabrera AL. 1994. Regiones fitogeográficas argentinas. Buenos Aires. ACME.
- Daniele G, Becerra A & Crespo E. 2005. *Amanita muscaria* (*Basidiomycota*) y su asociación micorrícica con *Cedrus deodara* (*Pinaceae*) en las Sierras de Córdoba, Argentina. *Bol. Soc. Argent. Bot.* 40(1-2): 45-49.
- Faar M.L. 1973. An annotated list of Spegazzini's fungus taxa. *Biblioth Mycol.* 35(2): 1-1620.

- Gamundí I & Horak E. 2002. Hongos de los bosques Andino-patagónicos. Guía para el reconocimiento de las especies más comunes y atractivas. Buenos Aires, Vazquez Mazzini Editores.
- Horak E. 1964. Fungi austroamericanus II. *Pluteus* Fr. Beih. Nova Hedwigia 8(1–2): 163–199.
- Horak E. 1967. Fungi austroamericanus 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): 355–385.
- Horak E. 1980 [1979]. Fungi *Basidiomycetes*. *Agaricales* y *Gasteromycetes* secotioides. Flora Criptogámica de Tierra del Fuego 11(6): 1–528.
- Kirk PM, Cannon PF, Minter DW, Stalpers JA (eds). 2008. Ainsworth & Bisby's. Dictionary of the fungi. 10th edition. CABI Publishing, UK.
- Lechner BE, Wright JE & Popoff O. 2005. *Hygroaster iguazuensis* sp. nov. and a new continental record for *Lentinus similis*. Mycotaxon 91: 9–14.
- Lechner BE, Wright JE & Popoff O. 2006. New taxa and new records for Argentina of fungi from Iguazú National Park, Misiones. Fungal Diversity 21: 131–139.
- Martínez A. 1945. La presencia en al Argentina del hongo venenoso *Ananita phalloides*. Notas Mus. La Plata, Bot. 10(48): 93–98.
- Martínez A. 1949. Agaricáceas nuevas para la Argentina. Lilloa 21: 43–52.
- Moreno G. & Albertó E. 1996. *Agaricales* sensu lato de Argentina. I. Cryptog. Mycol. 17(2): 61–84.
- Raithelhuber J. 1972. Lateinische kurzdiagnosen der auf der dreilandertagung in neubulach vorgestellten pilzarten aus Argentinien. Metrodiana 3(1): 95–97.
- Raithelhuber J. 1974. Hongos Argentinos I. Buenos. Aires, Compañía Impresora Argentina.
- Raithelhuber J. 1977. Hongos Argentinos II. Buenos. Aires, Compañía Impresora Argentina.
- Raithelhuber J. 1983. Über die Nomenklatur einiger Argentinischer Blätterpilze. Metrodiana Sonderh. 2: 1–24.
- Raithelhuber J. 1986 [1985]. *Amanitaceae* in Südamerika. Metrodiana 14(1): 3–20.
- Raithelhuber J. 1987. Flora mycologica Argentina. Hongos I. Stuttgart, Mycosur.
- Raithelhuber J. 1990a. Agaric flora of South America (1). Metrodiana 19(1): 5–47.
- Raithelhuber J. 1990b. Diagnoses fungorum et combinationes novae. Metrodiana Sonderh 4: 4–22.
- Raithelhuber J. 1991. Flora mycológica Argentina. Hongos III. Stuttgart, Mycosur.
- Raithelhuber J. 2000a. Refugio natural educativo de la ribera norte. Acassuso/San Isidro –Provincia de Buenos Aires. Observaciones sobre hongos. Stuttgart. Publ. by author.
- Raithelhuber J. 2000b. Hongos *Agaricales* de la Isla Martín García. Metrodiana Sonderh. 5: 1–59.
- Raithelhuber J. 2004. Nueva flora micológica Argentina. Stuttgart, Mycosur.
- Ramarodi EA. 1992. Fungus flora de Sierra de la Ventana. Metrodiana 20(3): 111–138.
- Ramarodi EA. 1995. Flora micológica de Bahía Blanca. Nueva aportación. Metrodiana 22(1): 26–30.
- Singer R. 1950. Type studies on *Basidiomycetes* IV. Lilloa 23: 147–246.
- Singer R. 1952. The agarics of the Argentine sector of the Tierra del Fuego and limitrophous regions of Magallanes area. Part1. White and pink spored groups. Sydowia 6: 165–226.
- Singer R. 1953a. Quelques Agarics nouveaux de l'Argentine. Rev. Mycol. (Paris) 18(1): 3–23.
- Singer R. 1953b. Type studies on *Basidiomycetes* VI. Lilloa 26: 57–159.
- Singer R. 1954. *Agaricales* von Nahuel Huapi. Sydowia 8: 100–157.
- Singer R. 1956. Contributions towards a monographs of the genus *Pluteus*. Trans. Brit. Mycol. Soc. 39(2): 145–232. [http://dx.doi.org/10.1016/S0007-1536\(56\)80001-6](http://dx.doi.org/10.1016/S0007-1536(56)80001-6).
- Singer R. 1959a [1958]. Monographs of South American *Basidiomycetes*, especially those of the east slope of the Andes and Brazil. I. The genus *Pluteus* in South America. Lloydia 21(4): 195–302.
- Singer R. 1959b. New and interesting species of *Basidiomycetes* VI. Mycologia 51(3): 375–400. <http://dx.doi.org/10.2307/3756058>
- Singer R. 1962 [1961]. Monographs of South American *Basidiomycetes* especially these of the east slope of the Andes and Brazil. 4. *Inocybe* in the Amazone region, with a supplement to part I (*Pluteus* in South America). Sydowia 15: 112–132.

- Singer R. 1965. Monographs of South America *Basidiomycetes*, especially those of the east slope of the Andes and Brazil X. *Xeromphalina*. Bol. Soc. Argent. Bot. 10(4): 302–310.
- Singer R. 1969. Mycoflora australis. Beih. Nova Hedwigia 29: 1–405.
- Singer R. 1973. Diagnoses fungorum novorum agaricalium III. Beih. Sydowia 7: 1–106
- Singer R. 1986. The *Agaricales* in modern taxonomy. 4th ed. Koenigstein. Koeltz Scientific Books.
- Singer R. 1989. New taxa and new combinations of *Agaricales* (*Diagnoses fungorum novorum agaricalium IV*). Fieldiana, Bot. 21: 1–133.
- Singer R & Digilio APL. 1952 [1951]. Pródromo de la flora agaricina Argentina. Lilloa 25: 6–461.
- Spegazzini C. 1880. Fungi argentini. Pugillus primus. Anales Soc. Ci. Argent. 9(4): 158–192.
- Spegazzini C. 1881. Fungi argentini, additis nonnullis Brasilien sibus Montevideensibusque. Pugillus IV. Anales Soc. Ci. Argent. 12: 13–30.
- Spegazzini C. 1887. Fungi patagonici. Bol. Acad. Nac. Ci. Republ. Argent. 11: 5–64.
- Spegazzini C. 1899a [1898]. Fungi argentini novi v. critici. Anales Mus. Nac. Buenos Aires 6: 6–365.
- Spegazzini C. 1899b. Mycetes argentinenses (serie I). Anales Soc. Ci. Argent. 47(6): 262–279.
- Spegazzini C. 1908. Hongos de la Yerba Mate. Anales Mus. Nac. Buenos Aires 17: 111–141.
- Spegazzini C. 1912. Mycetes argentinenses (series VI). Anales Mus. Nac. Buenos Aires 23: 167–244.
- Spegazzini C. 1919. Los Hongos del Tucumán. Primera Reunión Nacional de la Soc. Arg. de Cs. Naturales: Tucumán, 254–274.
- Spegazzini C. 1926a. Contribución al conocimiento de la flora micológica de las Sierras de Córdoba. Bol. Acad. Ci. (Córdoba) 29: 113–190.
- Spegazzini C. 1926b. Observaciones y adiciones a la micología argentina. Bol. Acad. Ci. (Córdoba) 28(3/4): 267–351.
- Wright JE, Albertó E. 2002. Guía de los hongos de la región Pampeana. I. Hongos con laminillas. Buenos Aires, L.O.L.A.
- Wright JE, Lechner BE & Popoff OF. 2008. Hongos. Atlas pictórico del Parque Nacional Iguazú. Buenos Aires, L.O.L.A.
- Wright JE & Wright E. 2005. Checklist of the mycobiota of Iguazu National Park (Misiones, Argentina). Bol. Soc. Argent. Bot. 40(1–2): 23–44.