

**Nomenclatural overview of the genera
in the *Agaricaceae* Chevall.
Version 4.1.**

A list of the genera in the *Agaricaceae*, with complete nomenclatural references, type species and synonyms.

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This list includes all genera currently considered to belong to the *Agaricaceae*, but also those formerly considered to be members of the *Agaricaceae*, like *Cystoderma* and allies in tribus *Cystodermateae*. Genera formerly considered to belong to Gasteromycetes, like those in the *Lycoperdaceae*, *Mycenastraceae*, *Phelloriniaceae*, and *Tulostomataceae*, and secotioid genera, are presented as well. Data on the gasteroid genera are far from complete, and additional information is welcome (email me at vellinga@nature.berkeley.edu)

Comments on position, notes on synonymy etc. are in [].

Basidiocarp shapes are in { }: AG – agaricoid; FOSSIL - fossil fungi; GAST – gasteroid; SEC - secotioid

This list will be updated when new information comes to my attention, and every edition will get its own version number; this is version 4.1. The date that the version is posted will be included as well.

Thanks are due to those who have contributed to this list, especially the people at Index of Fungi (Paul Kirk), Adolf Ceska who told me about the plant genus *Chlorophyllum*, P. Brandon Matheny who elucidated *Verrucospora* and *Verrucispora*, Ruben Walley who gave me an update on *Battarrea* and its other spellings, and the librarians at the Bioscience library of the University of California at Berkeley, the Nationaal Herbarium in Leiden, and the Farlow Reference library of Harvard University in Cambridge, MA who tend such excellent collections.

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There is a separate list for the nomenclature at species level and below for all the white-spored agaricoid members of the family, plus *Allopsalliota*, *Micropsalliota*, *Hymenagaricus* and *Xanthagaricus*. That list, ‘Nomenclatural overview of lepiotaceous fungi (*Agaricaceae*)’ is also at the website <http://pmb.berkeley.edu/~bruns/people/ev.html>

The Family

Agaricaceae Chevall., Fl. gén. Env. Paris (Paris): 121. 1826.

syn. *Psalliotaceae* Roze in Bull. Soc. bot. Fr., Act. bot. 23: 113. 1876. (as Psalliotées) [not valid]

including:

Lycoperdaceae Chevall., Fl. gén. Env. Paris (Paris): 348. 1826. (as *Lycoperdoneae*)

Podaxaceae Corda, Icon. Fung. (Prague) 5 24. 1842 (as *Podaxideae*)

Battarreaceae Corda in Anleit. Stud. Mykol.: 118. 1842 (as *Batarreae*)

Secotiaceae Tul. in Annl. Sci. Nat., Bot., Sér. III, 4: 176. 1845. (as *Secotieae*)

Lepiotaceae Roze in Bull. Soc. bot. Fr., Act. bot. 23: 111. 1876. (as Lépiotées) [not valid]

Tulostomataceae E. Fisch., Nat. Pflanzenfam. (Leipzig) 1 (1**): 342. 1900.

Mycenastraceae Zeller in Mycologia 40: 648. 1948.

Phelloriniaceae Ulbr. in Ber. bayer. bot. Ges. 64: 264. 1951.

Montagneaceae Singer in Revue mycologique 40: 61. 1976.

Leucocoprinaceae Jülich, Higher Taxa Basidiomycetes (Bibl. mycol. 85): 376. 1981.

The Genera, Alphabetically Arranged

- *Abstoma* G. Cunn. in Trans. & Proc. New Zealand Inst. 57: 206. 1926. Type species *Abstoma purpureum* (Lloyd) G. Cunn. {GAST}
- *Agaricus* L. : Fr., Syst. mycol. 1: 8. 1821; *Agaricus* L., Sp. Plant. 2: 1171. 1753. Type species *Agaricus campestris* L. : Fr. {AG}
- *Allopsalliota* Nauta & Bas in Belg. J. Bot. 131: 189. ('1998') 1999. Type species *Agaricus geesterani* Bas & Heinem. {AG}
- *Amylolepiota* Harmaja in Karstenia 42: 39. 2002. Type species *Lepiota lignicola* P.A. Karst. {AG}
[probably synonym of *Leucopholiota*, in *Tricholomataceae*]
- *Arachnion* Schwein., Syn. Fungorum Carpol. 59. 1822. Type species *Arachnion album* Schwein. {GAST}
- *Arachniopsis* W.H. Long in Mycologia 9: 272. 1917 (non Spruce 1882). Type species *Arachniopsis albicans*. W.H. Long {GAST}
- *Araneosa* W.H. Long in Mycologia 33: 353. 1941. Type species *Araneosa columellata* W.H. Long {GAST}
- *Attamyces* Kreisel in Z. allg. Mikrobiologie 12: 648. 1972. Type species *Attamyces bromatificus* Kreisel
[anamorph]

- *Battarraeastrum* R. Heim & T. Herrera, 1960. Type species *Battarraeastrum diguetii* R. Heim & T. Herrera {GAST}
[synonym of *Battarreoides* T. Herrera]
- *Battarrea* Pers. : Pers., Syn. meth. Fung. (Göttingen): xiv, 129. 1801 (as *Batarrea*). Type species *Battarrea phalloides* (Dicks.) Pers. : Pers. (as *Batarrea phalloides*) {GAST}
[Walley, pers. comm. 2005 commented: At least five variants of the spelling used for this genus have been published in the literature. The name is dedicated to [Giovanni] Antonio Battarra, Italian clergyman, physician and mycologist (1714-1789). However, Persoon used the spelling "*Batarrea*" in the original description of the genus, published in his *Synopsis Methodica Fungorum* (1801: 129), which is the sanctioning work for the Gasteromycetes. Rauschert (1986) suggested the conservation of *Battarraea*, which is the only correct spelling, since it follows both the spelling of the name of Battarra and the Rec. 60B.1 (a) of the Code of Nomenclature concerning the endings of generic names dedicated to persons. This proposition has been rejected at the Berlin Congress, in 1987 (see Korf, 1988: 463, and Coetzee & Eicker, 1992). It is not possible to use the Art. 60.11 of the ICBN to change the suffix "-ea" into "-aea", because it only refers to Rec. 60C.1, which concerns the specific and infraspecific epithets, and doesn't refer to Rec. 60B.1, which deals with the generic names. On the other hand, the Art 60.1 allows the correction of typographical or orthographical errors in names or epithets. Many authors are now using this article to correct Persoon's name into "*Battarrea*" (e.g. Martin & Johannesson 2000: 67)].
- *Battarreoides* T. Herrera in Anales Inst. Biol. Univ. nac. México 24: 41. 1953. Type species *Battarreoides potosinus* T. Herrera {GAST}
- *Battarreopsis* Hennings in Hedwigia 41 Beibl.: 212. 1902. Type species *Battareopsis artini* Hennings {GAST}

- *Bovista* Pers. in Roemer's Neues Magazin für die Botanik 1: 86. 1794; *Bovista* Pers. : Pers., Syn. meth. Fung.: 136. 1801. Type species *Bovista plumbea* Pers. {GAST}
- *Bovistaria* P.A. Karst., Bidrag Kännedom Finlands Natur. Folk 48: 9. 1889; *Lycoperdon* subgenus *Bovistaria* (P.A. Karst.) Fr., Summa Veg. Scand. 442. 1849. Type species not designated {GAST}
- *Bovistella* Morgan in J. Cincinnati Soc. nat. Hist. 14: 141. 1892; *Lycoperdon* subgenus *Bovistella* (Morgan) Jeppson & E. Larss. in Mycological Research 112: 12. 2008. Type species *Mycenastrum ohiense* Ellis & Morgan {GAST}
- *Bovistina* Long & Stouffer in Mycologia 33: 270. 1941. Type species *Bovistina atrogleba* Long & Stouffer {GAST}

- *Calbovista* Morse ex M.T. Seidl in Mycotaxon 54: 389.1995. Type species *Calbovista subsculpta* Morse ex M.T. Seidl {GAST}
- *Calvatia* Fr., Summa Veg. Scand.: 442. 1849. Type species *Calvatia craniiformis* (Schwein.) Fr. {GAST}
[conserved against *Langermannia* Rostk. and against *Hippoperdon* Mont.; proposals to conserve *Calvatia* against *Omylascus* and *Lanopila* resp. have been put forward (Coetzee & Van Wyk 2005 and 2007)]
- *Calvatiella* C.H. Chow in Bull. Fan Mem. Inst. Biol., Bot. 7: 91. 1936. Type species *Calvatiella sinensis* C.H. Chow {GAST}
[synonym of *Bovistella* Morgan, see Kreisel & Calonge, 1993]
- *Catastoma* Morgan in J. Cincinnati Soc. Nat. Hist. 14: 142. 1892. Type species *Catastoma circumscissum* Berk. & M.A. Curtis {GAST}
- *Chainoderma* Masee in Cooke in Grevillea 19: 46. 1890. Type species *Chainoderma drummondii* Masee {SEC}
[as *Chaenoderma* in Saccardo, Syll. Fung.]
[synonym of *Podaxis* Desv.]
- *Chamaemyces* Batt. ex Earle in Bull. N.Y. bot. Gdn 5: 446. 1909. Type species *Chamaemyces fracidus* (Fr.) Donk {AG}
[see Donk, 1962]
- *Chitonia* (Fr.) P. Karst. in Bidr. Finl. Nat. Folk. 32: 274. 1879, non *Chitonia* D. Don, 1823; *Agaricus* subgenus *Chitonia* Fr., Hymen. eur.: 277. 1874; *Chitoniella* Masee, Brit. Fung. Fl. 1: 418. 1892; *Chitoniella* Henn. in Engler & Prantl, Nat. Pfl.-Fam. I, 1^{**}: 240. 1898; *Chitonis* Clements, Gen. Fungi: 114. 1909. {AG}
[synonym of *Clarkeinda* Kuntze]
- *Chlamydopus* Speg. in An. Mus. nac. Hist. nat. B. Aires 6 [= ser. 2, 3]: 189.1898. Type species *Chlamydopus clavatus* Speg. {SEC}
- *Chlorolepiota* A.V. Sathe & S.P. Deshpande in Current Science 48: 693. 1979. Type species *Chlorolepiota mahabaleshwarensis* A.V. Sathe & S.P. Deshpande {AG}
- *Chlorophyllum* Masee in Kew Bull. 1898: 136. 1898, not *Chlorophyllum* Murrill, 1910 (= *Chloroneuron* Murrill, 1911); *Macrolepiota* section *Chlorophyllum* (Masee) Moreno et al. in Mycotaxon 55: 469. 1995 (not valid). Type species *Chlorophyllum esculentum* Masee {AG}
[conserved against *Endoptychum* Czern.]
[a note on “*Chlorophyllum*” (*Sapotaceae*) – Liais (1872: 612-615) commented on the tree species “*glycyphlœa*” – described in *Lucuma* by Miquel (in Martius, Flora brasiliensis) (*Sapotaceae*), and by De Candolle in *Chrysophyllum*. Liais erroneously wrote that the species

is treated by DC as *Chlorophyllum glycyphlœum*. This is not the case; De Candolle treated the species in the Addenda under *Chrysophyllum*, and did not use the name *Chlorophyllum*. Liais was not convinced that the species in question belongs to *Lucuma*, and also did not reckon it to be a *Chrysophyllum* species; consequently he described a new genus for it, *Pradosia*, and made the new combination, *Pradosia glycyphlœa*, with an elaborate description. Govaerts (2001) in his checklist on *Sapotaceae* treated *Chlorophyllum* as an orthographic variant of *Chrysophyllum*]

- *Chlorosperma* Murrill in Mycologia 14: 96. 1922. Type species *Agaricus olivaesporus* Ellis & Everhardt {AG}
[synonym of *Melanophyllum* Velen.]
- *Chlorospora* Masee in Kew Bull. 1898: 136. 1898, non *Chlorospora* Speg., 1891; *Glaucospora* Rea, Brit. Basidiomyc.: 62. 1922. Type species *Schulzeria eyrei* Masee {AG}
[synonym of *Melanophyllum* Velen.]
- *Clarkeinda* Kuntze, Rev. Gen. Pl. 2: 848. 1891. Type species *Clarkeinda poderes* (Berk. & Broome) Kuntze. – *Chitonia* (Fr.) P. Karst. in Bidr. Finl. Nat. Folk. 32: 274. 1879, non *Chitonia* D. Don, 1823; *Agaricus* subgen. *Chitonia* Fr., Hymen. eur.: 277. 1874; *Chitoniella* Masee, Brit. Fung. Fl. 1: 418. 1892 (as nom. prov.); *Chitoniella* Henn. in Engler & Prantl, Nat. Pfl.-Fam. I, 1^{**}: 240. 1898; *Chitonis* Clements, Gen. Fungi: 114. 1909. {AG}
[see Donk, 1962 for notes on nomenclature]
- *Cocobotrys* Boud. & Pat. in Bull. Soc. mycol. Fr. 16: 141. 1900. Type species *C. xylophilus* (Fr.) Boud. & Pat.
[according to Van Bambeke (1900) sclerotium of *Leucoagaricus meleagris*]
- *Coprinus* Pers., Tent. Disp. Meth. Fung.: 62. 1797. Type species *C. comatus* (O.F. Müll. : Fr.) Pers. {AG}
- *Crucispora* E. Horak in N.Z. J. Bot. 9: 489. 1971. Type species *Crucispora naucorioides* E. Horak {AG}
- *Cystoagaricus* Singer in Mycologia 39: 85. 1947. Type species *Cystoagaricus strobilomyces* (Murrill) Singer {AG}
[in *Psathyrellaceae*; see Vellinga 2004]
- *Cystoderma* Fayod in Anns Sci. Nat., Bot., Sér. VII, 9: 350. 1889. Type species *Agaricus amianthinus* Scop. {AG}
[tribus *Cystodermateae*, not in *Agaricaceae*]
- *Cystodermella* Harmaja in Karstenia 42: 43. 2002. Type species *Agaricus granulatus* Batsch. : Fr. Syst. Mycol. 1: 24. 1821. {AG}
[tribus *Cystodermateae*, not in *Agaricaceae*]
- *Cystolepiota* Singer in Singer & Digilio in Lilloa 25: 281. ('1951') 1952; *Lepiota* subgenus *Sphaerocystae* Wasser in Ukr. bot. Zh. 35: 517. 1978. Type species *Cystolepiota constricta* Singer {AG}
- *Dictyocephalos* L.M. Underwood ex V.S. White in Bull. Torrey bot. Club 28: 441. 1901. Type species *Dictyocephalos curvatus* L.M. Underwood ex V.S. White {GAST}
- *Disciseda* Czern. in Bull. Soc. Imp. nat. Moscou 18(2): 153. 1845. Type species *Disciseda collabescens* Czern. (as 'collabescens') {GAST}
- *Dissoderma* (A.H. Sm. & Singer) Singer in Beih Sydowia 7: 69. 1973; *Cystoderma* subgenus *Dissoderma* A.H. Sm. & Singer in Mycologia 40: 454. 1948. Type species *Cystoderma*

- paradoxum* A.H. Sm. & Singer {AG}
[tribus *Cystodermateae*, not in *Agaricaceae*]
- *Drosella* Maire in Kühner & Maire in Bull. trimest. Soc. mycol. Fr. 50: 15. Aug. 14, 1934 (nomen nudum). Type species *Lepiota irrorata* Quél. {AG}
[see under *Chamaemyces*]
 - *Echinoderma* (Locq. ex Bon) Bon in Doc. mycol. 21 (82): 61. 1991; *Cystolepiota* subgenus *Echinoderma* Locq. ex Bon in Doc. mycol. 11 (43): 23. 1981. Type species *Lepiota aspera* (Pers. : Fr.) Quél. {AG}
 - *Endolepiotula* Singer in Sydowia 16: 260. ('1962') 1963. Type species *Endolepiotula ruizlealii* Singer {SEC}
 - *Endoptychum* Czern. in Bull. Soc. imp. Nat. Moscou 18 (2): 146. 1845. Type species *Endoptychum agaricoides* Czern. {SEC}
[the proposal to conserve *Chlorophyllum* Masee against *Endoptychum* Czern. by Vellinga & De Kok, 2002 was accepted in 2005]
 - *Fusispora* Fayod in Ann. Sc. nat., Bot. Sér. VII, 9: 351. 1889. Type species *Lepiota sistrata* (Fr.) Quél. sensu Fayod {AG}
[synonym of *Lepiota* (Pers.) Gray]
 - *Gastropila* Homrich & J.E. Wright in Mycologia 65: 780.1973; nom. nov. for *Pila* Speg. in Rev. Chil. Hist. nat. 25: 77-78. 1921, non *Pila* Bertrand & Renault, 1892. Type species *Gastropila fragilis* (Lév.) Homrich & J.E. Wright {GAST}
[synonym of *Disciseda* Czern.]
 - *Globaria* Quél. in Mém. Soc. Emul. Montbéliard, Sér. II, 5: 370. 1873; *Bovista* subgenus *Globaria* (Quél.) Kreisel in Feddes Repert. 69: 200. 1964. Type species not designated. {GAST}
[the correct name is *Bovista* Pers.]
 - *Gyrophragmium* Mont. in Ann. Sci. nat., Bot., Sér. II, 20: 77. 1843. Type species *Gyrophragmium delilei* Mont. {SEC}
[synonym of *Agaricus* L. : Fr.]
 - *Handkea* Kreisel in Nova Hedwigia 48: 282.1989. Type species *Handkea utrififormis* (Bull. : Pers.) Kreisel {GAST}
[synonym of *Lycoperdon* subgenus *Bovistella* (Morgan) Jeppson & E.Larss. – see Larsson & Jeppson, 2008]
 - *Heinemannomyces* Watl. in Belg. J. Bot. 131: 133. ('1998') 1999. Type species *Heinemannomyces splendidissimus* Watl. {AG}
 - *Hiatula* (Fr.) Mont. in Ann. Sci. nat., Bot., Sér. IV, 1: 107. 1854; *Agaricus* subgenus *Hiatula* Fr. in Nova Acta Soc. Sci. upsal. III, 1: 27. 1851 (Nov. Symb. mycol. 11). Type species *Agaricus discretus* Fr. : Fr. {AG}
 - *Hiatulopsis* Singer & Grinling in Persoonia 4: 364. 1967. Type species *Hiatulopsis amara* (Beeli) Singer & Grinling {AG}
 - *Hippoperdon* Mont. in Ann. Sci. nat., Bot., Sér. II, 17: 121. 1842. Type species *Hippoperdon crucibulum* Mont. {GAST}
[N.B. *Calvatia* has been conserved against *Hippoperdon*]

- *Horakia* Oberwinkler in Sydowia 28: 359. ('1975') 1976, superfluous nom nov. for *Verrucospora* E. Horak. Type species *Lepiota verrucospora* Beeli {AG} [tribus *Cystyodermateae*, [not in Agaricaceae](#); but *V. flavofusca* is a member of the *Agaricaceae* (Matheny et al., 2007)]
- *Hymenagaricus* Heinem. in Bull. Jard. bot. nat. Belg. 51: 465-466. 1981. Type species *Hymenagaricus hymenopileus* (Heinem.) Heinem. {AG}
- *Hypoblema* C.G. Lloyd in Mycol. Writings 1 (Gen. Gasteromycetes): 11. Jan 1902; Mycol. Writings 1: 140. Mar 1903. Type species *Hypoblema lepidophorum* (Ellis) C.G. Lloyd {GAST}
- *Janauaria* Singer, Agar. mod. Taxon., Ed. 4: 495. 1986. Type species *Janauaria amazonica* Singer {AG}
- *Langermannia* Rostk. in Sturm, Deutschl. Flora, III (Pilze) 5: 23. 1839; *Calvatia* subgenus *Langermannia* (Rostk.) Jepsso & E. Larss. in Mycological Research 112: 14. 2008. Type species *Langermannia gigantea* (Batsch : Pers.) Rostk. {GAST} [N.B. *Calvatia* has been conserved against *Langermannia*]
- *Lanopila* Fr., Fung. Natal.: 31. 1848. Type species *Lanopila wahlbergii* Fr. {GAST} [proposal to conserve *Calvatia* against *Lanopila* by Coetzee & Van Wyk, 2007]
- *Lepiota* (Pers.) Gray, Nat. Arr. Br. Pl. 1: 601. 1821; *Agaricus* sectio *Lepiota* Pers., Tent. Disp. meth. Fung.: 68. 1797. – *Fusispora* Fayod in Ann. Sc. nat., Bot. Sér. VII, 9: 351. 1889. – *Lepiotula* (Maire) Locq. ex E. Horak, Syn. Gen. Agar.: 337. 1968. Type species *Agaricus colubrinus* Pers. {AG}
- *Lepiotasporites* T.-C. Huang in Taiwania 26: 47. 1981. Type species *Lepiotasporites taiwanensis* T.-C. Huang. {FOSSIL}
- *Lepiotella* (E.J. Gilb.) Konrad in Schweiz. Z. Pilzk. 12: 177. Dec. 15, 1934, non *Lepiotella* J. Rick, 1938; *Lepiota* subgenus *Lepiotella* E.J. Gilb., Genre *Amanita*: 159. 1918. Type species *Lepiota irrorata* Quél. {AG} [synonym of *Chamaemyces* and see there]
- *Lepiotella* J. Rick in Lilloa 2: 251. 1938, non *Lepiotella* (E.J. Gilb.) Konrad, 1934. Type species *Lepiotella brunnea* J. Rick {AG} [see under *Volvolepiota*]
- *Lepiotophyllum* Locq. in Bull. mens. Soc. linn. Lyon 11: 42. 1942. Type species *Lepiota procera* (Scop. : Fr.) S.F. Gray {AG} [Locquin introduced the infrageneric name *Leucocoprinus* subgenus *Lepiotophyllum* Locq. as a new name for *Leucocoprinus* Pat. sensu Heim & Romagnesi (in Bull. trimest. Soc. mycol. Fr. 50: 186. 1934), with a French description only. However, throughout the paper (pp 39-47) "*Lepiotophyllum*" was used as the 'generic' appellation in specific names (Donk, 1962). nom. inval.]
- *Lepiotula* (Maire) Locq. ex E. Horak in Beitr. Kryptog. Fl. Schweiz 13: 337. 1968; *Lepiota* subgenus *Lepiotula* Maire in Treballs Mus. Cienc. nat. Barcelona 15: 82. 1933 (invalid); *Lepiotula* (Maire) Locq. in Bull. mens. Soc. linn. Lyon 14: 88. 1945 (invalid). Type species *Agaricus cristatus* Bolton : Fr. {AG} [synonym of *Lepiota* (Pers.) Gray]
- *Leucoagaricus* (Locq.) ex Singer in Sydowia 2: 35. 1948; *Leucocoprinus* subgenus *Leucoagaricus* Locq. in Bull. mens. Soc. linn. Lyon 12: 92. 1943 (without Latin descr.). Type species *Leucoagaricus macrorhizus* (Locq.) Singer {AG}

- *Leucocoprinus* Pat. in J. Bot., Paris 2: 16. 1888. Type species *Lepiota cepaestipes* (Sow. : Fr.) P. Kumm. {AG}
- *Leucopholiota* (Romagn.) O.K. Mill., T.J. Volk & Bessette in Mycologia 88: 138. 1996. Type species *Leucopholiota decorosa* (Peck) O.K. Mill., T.J. Volk & Bessette {AG}
[not in *Agaricaceae*]
- *Longia* Zeller in Mycologia 35: 655. 1943, non *Longia* Sydow, 1921; *Longula* Zeller, 1945. Type species *Longia texensis* (Berk. & M.A. Curtis) Zeller {SEC}
- *Longula* Zeller in Mycologia 37: 636. 1945, nom. nov. for *Longia* Zeller, 1943, non *Longia* Sydow, 1921. Type species *Longula texensis* (Berk. & M.A. Curtis) Zeller {SEC}
[synonym of *Agaricus* L. : Fr.]
- *Lycogalopsis* E. Fisch. in Ber. deutsche bot. Ges. 4: 197. 1886. Type species *Lycogalopsis solmsii* E. Fisch. {GAST}
- *Lycoperdon* Pers. : Pers., Syn. meth. Fung. (Göttingen): 140. 1801. Type species *Lycoperdon perlatum* Pers. : Pers. {GAST}
[Index Fungorum cites *Lycoperdon perlatum* from 1796, before the genus had been erected]
[for a definition and typification of the genus see Demoulin, 1973]
- *Lycoperdopsis* Henn. in Warburg, Monsunia. Beiträge zur Kenntnis der Vegetation des süd- und ostasiatischen Monsungebietes (Leipzig) 1: 158. 1899. Type species *Lycoperdopsis arcyrroides* Henn. & E. Nyman {GAST}
[synonym of *Lycoperdon* Pers., see Pegler & Young, 1994]
- *Macrolepiota* Singer in Papers Mich. Acad. Sc. Arts Letters 32: 141. ('1946') 1948. Type species *Macrolepiota procera* (Scop. : Fr.) Singer {AG}
- *Melanophyllum* Velen., České Houby: 569. 1921; *Agaricus* subgenus *Melanophyllum* (Velen.) Pilát in Acta Mus. natn Pragae 7B: 26. 1951. Type species *Melanophyllum canali* Velen. {AG}
- *Micropsalliota* Höhn. in Sitzungsber. math.-naturwissensch. Kl. Akad. Wissensch. 123: 79. (Fragm. Mykol. 16) 1914. Type species *Micropsalliota pseudovolvulata* Höhn. (as *pseudovolvata*) {AG}
- *Montagnea* Fr., Fl. Scan.: 339. 1836. Type species *Montagnea arenarius* (DC.) Zeller {SEC}
- *Montagnites* Fr., Epicrisis: 240. 1838. Type species *Montagnea arenarius* (DC.) Zeller {SEC}
[superfluous name change for *Montagnea* Fr.]
- *Morganella* Zeller in Mycologia 40: 650. 1948; *Lycoperdon* subgenus *Morganella* (Zeller) Jeppson & E. Larss. in Mycological Research 112: 12. 2008. Type species *Morganella mexicana* Zeller {GAST}
- *Morobia* E. Horak in Beih. Sydowia 8: 205. 1979. Type species *Morobia rhizomorphica* E. Horak {AG}
[not in *Agaricaceae*, close to *Marasmius*]
- *Mycenastrum* Desv. in Anns Sci. nat., Bot., Sér. II, 17: 147. 1842. Type species *Mycenastrum corium* (Guers.) Desv. {GAST}
- *Neosecotium* Singer & A.H. Sm. in Madroño 15: 154. 1960. Type species *Secotium macrosporum* Lloyd {SEC}

- *Notholepiota* E. Horak in N.Z. J. Bot. 9: 479. 1971. Type species *Secotium areolatum* Cunningham {SEC}
[not in *Agaricaceae*, but in *Boletales* (Vellinga, 2004)]
- *Omalycus* Raf., Précis Découv. Trav. somiologiques Palermo: 52. 1814. Lectotype species *Omalycus violacinus* Raf. {GAST}
[proposal to conserve *Calvatia* against *Omalycus* by Coetzee & Van Wyk, 2005]
- *Pachyderma* Schulzer in Hedwigia 16: 44. 1877, non *Pachyderma* Blume, 1826. Type species *Pachyderma strossmayeri* Schulzer {GAST}
- *Phaeolepiota* Maire ex Konrad & Maublanc, Icon. sel. Fungorum 6: 111. 1928. Type species *Phaeolepiota aurea* (Mattuschka :Fr.) Maire ex Konrad & Maublanc {AG}
[not in *Agaricaceae*]
- *Phellorinia* Berk. in London J. Bot. 2: 521 [‘421’]. 1843. Type species *Phellorinia inquinans* Berk. {GAST}
- *Podaxis* Desv. in J. Bot., Paris 2: 97. 1809. Type species *Podaxis senegalensis* Desv. {SEC}
- *Podaxon* (Desv.) Fr., Syst. mycol. 3: 62. 1829. {SEC}
[Fries explained that the name is derived from the Greek πους and αξων and hence should be spelled *Podaxon*]
[synonym of *Podaxis* Desv.]
- *Polyplocium* Berk. in London J. Bot. 2: 202. 1843. Type species *Polyplocium inquinans* Berk. {GAST}
[synonym of *Gyrophragmium*, hence synonym of *Agaricus* L. : Fr.]
- *Psalliota* (Fr. : Fr.) P. Kumm., Führ. Pilzk.: 23. 1871. Type species *Agaricus campestris* L. : Fr. {AG}
[synonym of *Agaricus* L. : Fr.]
- *Pseudobaeospora* Singer in Lloydia 5:129. 1942. Type species *Pseudobaeospora oligophylla* (Singer) Singer {AG}
[not in *Agaricaceae*, position not yet clear]
- *Pulverolepiota* Bon in Doc. mycol. 22 (88): 30. 1993; *Leucoagaricus* section *Pulverulenti* Bon in Doc. mycol. 8 (30): 71. 1978; *Cystolepiota* section *Pulverolepiota* (Bon) Vellinga in Vellinga & Huijser in Persoonia 16: 525. 1998. Type species *Lepiota pulverulenta* Huijsman {AG}
- *Queletia* Fr. in Öfversigt af Kongelige Vetenskaps-Akademiens Förhandlingar 28: 171. 1872. Type species *Queletia mirabilis* Fr. {SEC}
- *Rickella* Locq. in Bull. trimest. Soc. mycol. Fr. 68: 168. 1952, non *Rickiella* Sydow ex J. Rick, 1904. {AG}
[see *Volvolepiota*]
- *Ripartitella* Singer in Mycologia 39: 85. 1947. Type species *Ripartitella squamosidisca* (Murrill) Singer {AG}
[not in *Agaricaceae*]
- *Rugosospora* Heinem. in Bull. Jard. bot. nat. Belg. 43: 12. 1973. Type species *Rugosospora ochraceobadia* Heinem. {AG}
[with the inclusion of the American species *R. pseudorubiginosa*, *Leucoagaricus* sect.

Sculpturati Singer becomes a synonym; see Franco-Molano 1995 (but the conclusion about the section is mine]

- *Schizostoma* Ehrenb. ex Lév. in *Annls Sci. nat., Bot., Sér. III*, 5: 165.1846. Type species (according to Index of Fungi) *Schizostoma montelicum* Sacc. {SEC}
- *Secotium* Kunze in *Flora, Jena* 23: 322. 1840. Type species *Secotium gueinzii* Kunze {SEC}
- *Sericeomyces* Heinem. in *Bull. Jard. bot. nat. Belg.* 48: 401. 1978; *Lepiota* section *Sericellae* Kühner in *Bull. trimest. Soc. mycol. Fr.* 52: 182, 188. 1936 (invalid); *Lepiota* section *Sericellae* Kühner ex Wasser in *Ukr. bot. Zh.* 35: 517. 1978; *Leucoagaricus* section *Sericelli* (Kühner ex Wasser) Bon & Boiffard; *Leucoagaricus* subgenus *Sericeomyces* (Heinem.) Bon in *Doc. mycol.* 11 (43): 51. 1981. Type species *Lepiota serena* (Fr.) Quél. sensu Kühner in *Bull. trimest. Soc. mycol. Fr.* 52: 213. 1936. {AG}
- *Smithiogaster* J.E. Wright in *Beih. Nova Hedwigia* 51: 360. 1975. Type species *Smithiogaster volvoagaricus* J.E. Wright {SEC}
- *Smithiomyces* Singer in *Mycologia* 36: 366. 1944. Type species *Leucomyces mexicanus* Murrill {AG}
- *Sphaericeps* Welwitsch & Currey in *Trans. linn. Soc. London* 26: 290. 1868. Type species *Sphaericeps lignipes* Welwitsch & Currey {GAST}
- *Squamanita* Imbach in *Mitt. naturf. Ges. Luzern* 15: 81.1946. Type species *Squamanita schreieri* Imbach {AG}
[not in *Agaricaceae*]
- *Termiticola* E. Horak in *Beih. Sydowia* 8: 207. 1979. Type species *Termiticola rubescens* E. Horak {AG}
- *Tulasnodea* Fr., *Summa Veg. Scand.*: 440. 1849. Type species ????. {GAST}
[synonym of *Tulostoma* Pers. : Pers.]
- *Tulostoma* Pers. : Pers., *Syn. meth. Fung. (Göttingen)*: 139. 1801. Type species *Tulostoma brumale* Pers. : Pers. {GAST}
- *Utraria* Quél. in *Mém. Soc. Émul. Montbéliard, Sér. II*, 5: 366. 1873; *Lycoperdon* subgenus *Utraria* (Quél.) Jeppson & E. Larss. in *Mycological Research* 112: 12. 2008.
- *Vascellum* F. Smarda in *Pilát in Bull. int. Acad. pol. Sci. Letters* 1: 760. 1958; *Lycoperdon* subgenus *Vascellum* (F. Smarda) Jeppson & E. Larss. in *Mycological Research* 112: 12. 2008. Type species *Vascellum depressum* (Bonorden) F. Smarda {GAST}
- *Verrucospora* E. Horak in *Bull. Soc. bot. Suisse* 77: 363. 3 August 1967, non *Verrucispora* Shaw & Alcorn, 22 December 1967 (*Verrucisporata* Shaw & Alcorn, 1993). Type species *Lepiota verrucospora* Beeli {AG}
[not in *Agaricaceae*; but *V. flavofusca* is a member of the *Agaricaceae* (Matheny et al. 2007)]
[for a discussion on the names *Verrucospora*, *Horakia* and *Verrucispora*, see Kuyper, 1990]
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[synonym of *Macrolepiota* Singer, see Vellinga & Yang, 2003]

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