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Species Diversity of the Genus *Psilocybe* (Basidiomycotina, Agaricales, Strophariaceae) in the World Mycobiota, with Special Attention to Hallucinogenic Properties

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This article is dedicated to the outstanding mycologist, colleague, and friend, Professor Shu-Ting Chang

ABSTRACT: An exhaustive world revision of all names considered in the genus *Psilocybe* s.l. is presented, of which the hallucinogenic species were treated with special emphasis. Seven hundred eighteen names related to *Psilocybe* were found reported in the bibliography, of which only 227 are accepted taxa in *Psilocybe*. The concept of the genus followed here is that of Guzmán 1983; therefore *Hypholoma, Melanotus,* and *Stropharia* were excluded. Moreover, 53 species of *Psathyrella,* many times related with *Psilocybe,* were also excluded. The hallucinogenic species are 144, which are distributed in all the continents, of which Latin America (including the Caribbae), has the top, with more than 50 species. There are only 22 species in Canada and the US, while Mexico is the country with the higest number in the world, with 53 species. Europe has only 16 species, Asia 15, Africa 4, and Australia and eastern islands 19. Some *Psilocybe* species are common in several countries or regions, as are *P. cubensis* and *P. subcubensis* in all the tropics; *P. coprophila* in many temperate and tropical regions; *P. argentina* in several high mountains or in the Austral and Boreal regions; and *P. fimetaria* and *P. semilanceata* in Europe, Canada, and the US, but unknown in Mexico.

KEY WORDS: *Psilocybe*, species diversity, hallucinogenic species, world distribution

INTRODUCTION

Since the first descriptions and concepts of *Psilocybe* (Fr.) P. Kumm. (e.g., Fries, 1821, 1836; Kummer, 1871; Quélet, 1888; Ricken, 1915), it was involved with several genera, such as *Agaricus* L., *Agrocybe* Fayod, *Hypholoma* (Fr.) P. Kumm., *Panaeolina* Maire, *Panaeolus* (Fr.) Quél., *Psathyrella* (Fr.) Quél. and *Stropharia* (Fr.) Quél., among others. Fries (1821) described 22 taxa as *Agaricus*, tribus *Psilocybe* Fr., of which only two are now recognized in *Psilocybe: P. merdaria* and *P. montana*. Later, Fries (1836) described 27 species, of which *P. atrobrunnea, P. bullacea, P. coprophila, P. physaloides* and *P. semilanceata* are only recognized, but *P. montana* was confusedly related with *P. atrorufa; P. merdaria* was considered in *Psalliota* (Fr.) P. Kumm. (a synonym of *Agaricus* L.), and *Psilocybe luteonitens* and *P. squamosa* were considered also in *Psalliota*. Kummer (1871) and Ricken (1915) recognized the genus *Psilocybe,* but still they confused several genera in it. Quelét (1888) described the genus *Geophila* Quél., where he involved *Psilocybe, Psathyrella* and others. Kühner and Romagnesi (1953) followed Quelét.

The modern studies in the genus began mainly with Singer (1949), but the interest in the genus started with the descovery of the hallucinogenic

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fungi in Mexico, through the works of Wasson and Wasson (e.g., Wasson and Wasson, 1957).

Heim (1956) published the first taxonomic record of the hallucinogenic *Psilocybe* in Mexico gathered by the Wassons, although Schultes (1939) and Singer (1949, pp. 472 and 506) briefly and confusedly had reported these mushrooms. However, the taxonomic studies in *Psilocybe* were consolidated with the works of Heim and Wasson (1958) and Singer and Smith (1958), both on the hallucinogenic species.

Guzmán (1983) wrote the first world monograph on the genus, with 144 accepted taxa of 467 names reported in the bibliography. However, he described 52 taxa as new. The hallucinogenic species considered by Guzmán were 91 taxa (no. 81 was reported by mistake). Later, Guzmán (1995) published a supplement with 29 additional taxa described by other specialists including himself, and 5 new species. After that, Guzmán and his colleagues published several papers with more new species, hallucinogenic and not hallucinogenic mushrooms (Guzmán et al., 1997a,b, 1999, 2002, 2003a,b, 2004a,b; Guzmán, 1998, 2000, 2004a, 2005; Guzmán and Castro, 2003; Guzmán and Kasuya, 2004).

Also Johston and Buchanan (1995), Reid and Eicker (1999), and Thomas et al. (2002) described new species. Singer (1986) considered 86 species in *Psilocybe*. Watling and Gregory (1987) discussed all the species of *Psilocybe* in Great Britain. Stamets (1996) presented a compilation of the knowledge of the genus in the world. Noordeloos (1999, 2001) revised the Neerlandica species and a taxonomic study of the section *Psilocybe* s. Singer. Noordeloos in the above papers considered *Psilocybe* p.p. in the Friesian sense to include *Hypholoma, Melanotus* Pat., and *Stropharia*, criterion not followed here. Boekhout et al. (2002) made molecular studies in the section *Psilocybe* s. Singer. Bon and Roux (2003) revised in a key all the European species of *Psilocybe* s.s., and Krieglsteiner (1984, 1986) and Gartz (1998) revised the complex *P. cyanescens* both in Europe and North America. All the contributions of Pegler (e.g., Pegler, 1983, 1989, 1997) were considered in this paper.

Other important revised works were Heim et al. (1967), Smith (1949), and Wu et al. (1997). Recently, Moncalvo et al. (2002) in a molecular study of several Agaricales, divided the genus *Psilocybe* in *Psilocybe* s.s. and psychedelia, to be considered in this last group the hallucinogenic species of *Psilocybe*. The author reserves his opinion on this new genus in another paper.

Previous to this report, Guzmán and Vergeer (1978) presented a checklist of 390 names considered in *Psilocybe*, with their bibliographic reference in each one. The present paper is part of the second edition of The Genus *Psilocybe*, which the author has in preparation to publish through Koeltz Scientific Books (Germany).

THE TAXA OF *PSILOCYBE* REPORTED IN THE BIBLIOGRAPHY

A careful revision of all the species or names reported in *Psilocybe* or related to it by the bibliography was made, based first in Guzmán (1983, 1995), Guzmán and Vergeer (1978), and in all the available works discussed above, including Rea (1922), Smith (1908), and others, as well as in the *Index Fungorum* (Kirk, 2004), as shown in Appendix 1 (see page 313). There are 718 names, of which only 227 are recognized in *Psilocybe* s.s. Kirk (2004) reported 506 names, but 51 were repeated because he considered twice the type species in those cases where there are varieties or forms (example, *Psilocybe agrariella* one time and *P. agrariella* var. *agrariella* another). It is interesting to observe that after 1983 there was an increase of 83 accepted species in the genus.

Guzmán (1995) considered *Psilocybe* divided in 16 sections, of which *Cordiporae* and *Semilanceatae* presented the highest number of species, with around 20 for each. However, the classification of Singer (1986) distinguished seven sections: *Merdariae* (Fr.) Singer, *Caerulescentes* Singer, *Tenaces* (Fr.) Sacc., *Atrobrunnea* Singer, *Septembres* Singer, *Psilocybe*, and *Chrysocystidiatae* Singer, of which *Caerulescentes* and *Psilocybe*, with 34 and 18, respectively, are the bigest sections.

Some species are recognized in the present paper in a concept different from that of Guzmán (1983, 1995), in order to follow some recent taxonomic or nomenclatural changes as those of Singer (1986),

Watling and Gregory (1987), Noordeloos (1999, 2001), and Bon and Roux (2003). These species are *P. alfofimbriata, P. caeruleoannulata, P. callosa, P. chionophila, P. fagicola, P. strictipes, P. thrausta, P. velifera, P. xalapensis,* and *P. wassoniorum.*

Psilocybe coprophila, P. cubensis, and *P. subcubensis* are the most common species; they are reported from all the continents. Certainly they are fimicolous fungi, but *P. cubensis* and *P. subcubensis* grow only in tropical and subtropical regions, and *P. coprophila* in all the regions. However, *P. merdaria, P. fimetaria, P. moelleri* and *P. subfimetaria*, also fimicolous species, have distribution restricted to temperate regions. Another fimicolous fungus is *P. argentina*, which grows only in the Austral and Boreal regions of the world or in the high mountains of the temperate, tropical, and subtropical regions.

There are still taxonomic problems in several species, mainly in *P. cynescens* complex, divided in the European species: *P. cyanescens* s.s., *P. arcana, P. bohemica, P. liniformans* var. *liniformans,* and *P. serbica,* and in the North African species: *P. maire,* and in the complex from the US as *P. azurescens* and the American *P. cyanescens*. It is probable that the *P. cyanescens* reported from the US is a complex of species.

EXCLUDED SPECIES

As stated above, the genera *Hypholoma* (= *Naematoloma* P. Karst.), *Melanotus,* and *Stropharia* considered by Noordeloos (1999, 2001) in *Psilocybe* were excluded to consider the concept of *Psilocybe* s.s. following the criterion of Guzmán (1983, 1995) and Singer (1986). *Deconica* (W.G. Smith) P. Karst. is merely a synonym of *Psilocybe,* following many authors (e.g., Guzmán, 1983; Singer, 1986; Watling and Gregory, 1987).

Almost 200 taxa were excluded from *Psilocybe* (Appendix 1) because they belong to other genera (see above). Doubtful names or species and varieties in *Psilocybe* are around 100, including nomen nudum, and more than 200 are synonyms of species of *Psilocybe*.

The species of *Hypholoma, Melanotus,* and *Stropharia* considered by the bibliography as *Psilocybe* are 31, 4, and 13, respectively. There are 53 species of *Psathyrella* described as *Psilocybe*. Other genera confusedly related to *Psilocybe* are *Astylospora* Fayod (as *Atylospora* by Murrill), *Clitopilus* (Fr. ex Rabenth.) P. Kumm., *Conocybe* Fayod, *Galerina* Earle, *Galeropsis* Velen., *Kuehneromyces* Singer et A.H. Smith, *Lacrymaria* Pat., *Marasmiellus* Murrill, *Mythicomyces* Readhead et A.H. Smith, *Naucoria* (Fr.) P. Kumm., *Phaeogalera* Kühner, *Phaeomarasmius* Scherff., *Pholiota* (Fr.) P. Kumm., *Pholiotella* Speg., and *Tubaria* (W.G. Smith) Gillet.

THE HALLUCINOGENIC SPECIES AND THEIR DISTRIBUTION

The known hallucinogenic or neurotropic species in *Psilocybe* are 144 (Appendix 1), which represent an increase of 53 species in comparison with those reported in 1983. The criterion to distinguish the neurotropic species used by Guzmán (1983) considered the bluing (caerulescent) to blackish feature in the basidioma, as well as the farinaceous taste and odor. However, these features—the bluing and blackish—are not easy to find, because they depend on the development of the basidioma. For instance, in *P. fagicola, P. galindii, P. mexicana,* and *P. semilanceata* it is often difficult to find the bluing (that is the reason that *P. semilanceata* was considered for a long time as a non-bluing fungus, except in its variety *P. semilanceata* var. *caerulescens*, which Singer (1986) considered as *P. cookei*, now merely a synonym of *P. semilanceata*).

In the taxonomic point of view, the hallucinogenic species are considered as belonging to 10 sections of *Psilocybe,* following Guzmán's (1995, 2004b) taxonomy, according to the form and the wall thickness of the spores and the absence or presence of pleuro- and cheilocystidia, their size, form, and structure. However, Singer and Smith (1958) and Singer (1986) considered all the hallucinogenic species in the section *Caerulescentes* for the bluing feature, and recently Moncalvo et al. (2002) placed the hallucinogenic species in the group psychedelia.

The hallucinogenic species were considered at first as Mexican fungi (e.g., Heim, 1956; Heim and Wasson, 1958), but these fungi grow in all conti-

nents, both in temperate and tropical regions (Fig. 1), as was shown first by Singer and Smith (1958) and discussed by Guzmán (1983) and Guzmán et al. (1998). However, the traditional use of the hallucinogenic fungi is only found in Mexico and in Papua New Guinea (Heim et al., 1967).

Concerning the distribution of the neurotropic species (Guzmán et al., 1998), there are more species in the Austral hemisphere in comparision with the Boreal one. About the new records there are around 50 vs. 20 species, respectively. It is surprising to observe that, in spite of the mycological explorations in Europe begun three centuries ago, there are only 16 neurotropic species of *Psilocybe* in europe vs. 53 in Mexico.

Another important observation is that in Canada and in the US there are only 22 hallucinogenic species, although recently Guzmán (2000), Guzmán et al. (1997b, 2003a), and Guzmán and Trappe (2005) described new species. However, in Latin America, where there have not been sufficient explorations, there are more than 50 hallucinogenic species. From Africa there are only four known neurotropic species, so obviously more explorations are necessary. From temperate Asia there are no records, except in Japan with four species. From tropical Asia (India, Nepal, Vietnam, Thailand, Java) there are 15 species, and from Australia and eastern islands such as Papua New Guinea, New Zealand, and New Caledonia, there are 19 hallucinogenic species (Horak and Deskjardin have in preparation an article with four new hallucinogenic species of *Psilocybe* from Indonesia). In relationships with this abundance of the hallucinogenic species in the Austral hemisphere, it is supposed that the hallucinogenic species of *Psilocybe* had their origin in the Austral hemisphere, at least in South America or in the old Gondwanian Continent. It is interesting to observe that *P. semilanceata* is known only from the temperate Boreal and Austral meadows, such as Canada, the US, Chile, Europe, and New Zealand, but is unknown in Mexico and Central America; *Psilocybe fimetaria* is common in Europe, North America (but not in Mexico), and Chile.

In relationship with the ecological distribution of the hallucinogenic species of *Psilocybe,* it had been observed that in Mexico these fungi have a strong relationship with the subtropical slope mountains of the Gulf of Mexico and sometimes with the slopes of the Pacific Ocean. These regions present an altitude between 900 and 1400 m and a high humidity with around 2500 mm of rainfall precipitation annually. The vegetation of these regions is subtropical humid forest, known also as cloud forest, mesophytic forest of mountain, and hygrophytic forest. The map of Figure 2 shows the distribution of the hallucinogenic *Psilocybe* in Mexico. It is possible to see in this figure that the majority of the localities are on or around the line of 1000 m of altitude, except those localities with an arrow, a cross, and a triangle, which are in the coniferous forests of high mountains (as *P. aztecorum*), in tropical meadows (as *P. cubensis* and *P. subcubensis*), and in tropical rain forests (as *P. uxpanapensis*), respectively.

This distribution of the Mexican hallucinogenic species in relationship with the subtropical humid forests, cloud forests, mesophytic forests, or hygrophytic forests was also observed by other authors, such as Singer (pers. comm. in 1957 in Mexico), with *Psilocybe yungensis* in Bolivia (it grows in the Yungas region, which is covered with a subtropical humid forest), and then was found in Mexico in the same vegetation (Heim and Wasson, 1958; Singer and Smith, 1958). Pegler (1983) observed that *P. caerulescens* (= *P. caribae*) in the Lesser Antilles grows in high lands with hygrophytic forests, also observed by Guzmán et al. (2003b) in Puerto Rico with the distribution of this species and with *P. portoricensis* and *P. guilartensis*.

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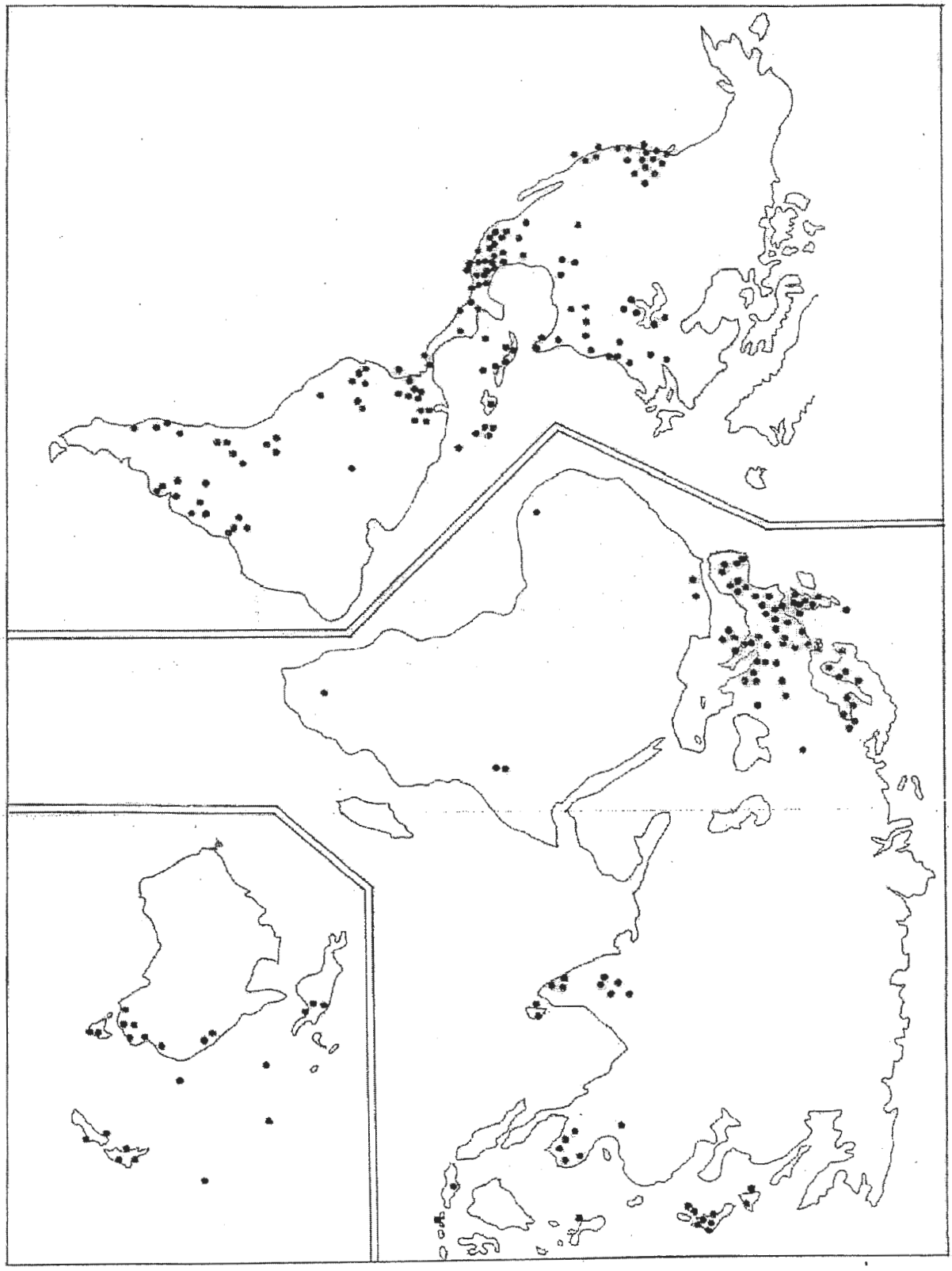

FIGURE 1. World distribution of the hallucinogenic *Psilocybe*. Each dot means one or several localities. Note the high concentration of dots in Mexico, South America, and Europe; Latin America has the highest number of species, with more than 50, vs. Europe, Canada, and the US, which have no more than 20 species.

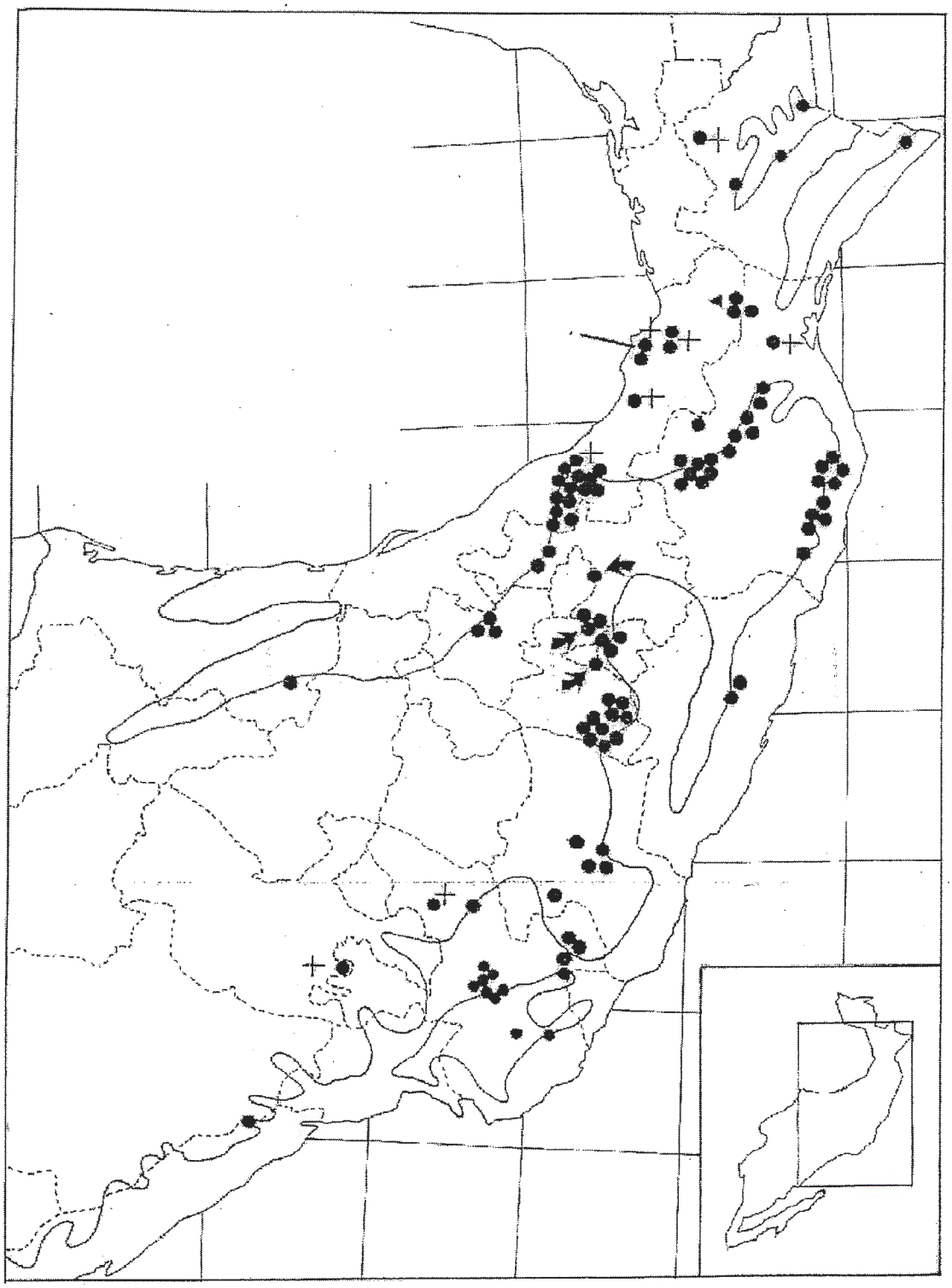

FIGURE 2. Distribution of the hallucinogenic species of *Psilocybe* in Mexico. Note that great majority of localities are on the line of the 1000 m of altitude in slopes of both Gulf of Mexico and Pacific Ocean. Those localities with an arrow, a cross, and a triangle are in coniferous forests of high mountains, tropical meadows, and tropical rain forests, respectively. The locality with a point is an isolated one of the 1000 m altitude region. The discountinous lines show the political division in states of the country.

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APPENDIX 1. Described or Reported Taxa of *Psilocybe* in Bibliography

Names in bold are accepted, those with * are hallucinogenic species.
[In some special cases bibliographic references are quoted.]

1. ***Psilocybe acadiensis* A.H. Smith**
*2. ***Psilocybe acutipilea* (Speg.) Guzmán**; = *Deconica acutipilea* Speg.
3. *Psilocybe acutissima* R. Heim; = *P. yungensis* Singer et A.H. Smith
4. *Deconica acutiuscula* Singer = ***Kuehneromyces vernalis* (Peck) Singer et A.H. Smith**
5. *Psilocybe adnata* Velen. (doubtf. sp.)
*6. Psilocybe aequatoriae Singer; = ***Hypholoma aequatoriae* (Singer) Guzmán**
7. *Stropharia aerofulfus* (Berk.) Sacc.; ? = *Psilocybe*
*8. ***Psilocybe aerugineomaculans* (Höhn.) Singer et A. H. Smith**, = *Stropharia aerugineomaculans* Höhn.
9. *Psilocybe aeruginosa* (M.A. Curtis : Fr.) Noordel., = ***Stropharia aeruginosa* (M.A. Curtis) Quél.**
10. *Stropharia aeruginosa* var. *calolepis* Pilát, = *Psilocybe squamulosa* (Massee) Noordel.
11. *Psilocybe agariella* G.F. Atk., a misspelling of *P. agrariella*
12. *Hypholoma agaves* Maire; = *Psilocybe conissans* Peck
13. *Psilocybe aggericola* Singer et A.H. Smith, = *P. zapotecorum* R. Heim emend. Guzmán
14. *Psilocybe aggericola* var. *alvaradoi* Singer, = *P. zapotecorum* R. Heim emend. Guzmán
15. *Psilocybe aggregata* Cleland et Cheel (doubtf. sp.)
16. *Agaricus* (*Psilocybe*) *agnarius* Fr. (doubtf. sp.)
17. *Psilocybe agnata* (Britzelm.) Sacc. (doubtf. sp.)
18. *Psilocybe agraria* (Fr.) P. Karst. (doubtf. sp.)
19. *Agaricus* (*Psilocybe*) *agraria* Fr. s. Cooke Illustr. 597 (622); ? = *Mycena*
20. *Psilocybe agraria* var. *longipes* Killerm. (doubtf. var.)
21. *Psilocybe agrariella* G. F. Atk., = ***Psathyrella agrariella* (G.F. Atk.) A.H. Smith**
22. *Psilocybe agrariella* var. *vaccinii* Charles (doubtf. var.)
23. *Agaricus* (*Psilocybe*) *agrarioides* Schulzer (doubtf. sp.)
24. *Psilocybe alachuana* Murrill; = ***Naucoria alachuana*(Murrill) Singer**
25. *Psilocybe albobrunnea* Beeli; = ***Psathyrella candolliana* (Fr.) Maire**
26. *Psilocybe albobrunnea* Luz (doubtf. sp.)
27. *Stropharia albocyanea* (Fr.) Quél. = *Psilocybe pseudocyanea* (Desm. : Fr.) Noordel.
*28. ***Psilocybe albofimbriata* (Rick) Singer**
29. *Psilocybe albonitens* (Fr.) Noordel.; = ***Stropharia albonitens* (Fr.) P. Karst.**
30. *Psilocybe alboquadrata* (Berk.) Sacc. (doubtf. sp.)
31. *Stropharia albosulfurea* (Pat.) Z. L. Yang, ? = *Naematoloma caerulescens* Pat. s. Z.L. Yang ? = *Hypholoma caerulescens* (Pat.) Sacc. et Trotter, = *H. albosulphureum* Pat.
32. *Psilocybe aleuriata* R. Heim et L. Remy; = ***Panaeolus guttulatus* Bres.**
33. *Psilocybe alnetorum* (Singer) Singer, = ***Naematoloma alnetorum* (Singer) Guzmán**
34. *Psilocybe alpestris* Singer = *P. xeroderma* Huijsman, = *P. physaloides* s. auct. pp.
35. ***Psilocybe alpina* Guzmán, Tapia et P. Navarro**
36. *Naematoloma amazonica* Singer; ? = *Psilocybe*
37. *Psilocybe ammophila* (Mont.) Fr.; = *Hypholoma ammophillum* (Mont.) Quél. = *Psilocybe ammophila* (Durieu et Lév.) Gillet
38. *Psilocybe ammophila* Gillet s. Rea; = *P. ammophila* (Durieu et Lév.) Gillet
39. *Psilocybe ammophila* (Durieu et Lév.) Gillet (*Geophila* s. Kühner and Romagensi); = *P. ammophila*, Sacc. 1887 = ***Psathyrella ammophila* (Durieu et Lév.) P. D. Orton**
40. *Psilocybe ammophila* var. *ecaudata* Maire (doubtf. var.)
41. ***Psilocybe andina* Guzmán**

42. *Psilocybe anellariformis* Murrill s. A.H. Smith;= *P. subanellariiformis* Guzmán
43. ***Psilocybe anellariiformis* (Murrill) Singer,** = *Stropharia anellariformis* Murrill, non *S. anellareiformis* s. A.H. Smith 1939 (= *Psilocybe subanellariiformis* Guzmán)
44. *Psilocybe angulata* (Pers.) Singer; = ***Maramiellus vaillantii* (Pers.) Singer**
*45. ***Psilocybe angustipleurocystidiata* Guzmán**
46. ***Psilocybe angustispora* A. H. Smith**
47. *Psilocybe antillarum* (Fr.) Sacc.; = ***Panaeolus antillarum* (Fr.) Dennis**
48. *Psilocybe antillarum* var. *praelonga* Fr.; = *Panaeolus antillarum* (Fr.) Dennis
*49. ***Psilocybe antioquensis* Guzmán et al.**
50. ***Psilocybe apelliculosa P. D. Orton***
51. *Psilocybe appendiculata* Rick (doubtf. sp.)
*52. ***Psilocybe aquamarina* (Pegler) Guzmán;** = *Stropharia aquamarina* Pegler
53. *Psilocybe araucana* Singer (doubtf. sp.)
*54. ***Psilocybe arcana* Borovicka et Hlaváèek**
55. *Psilocybe arenulina* (Peck) Sacc.; = ***Psathyrella arenulina* (Peck) A.H. Smith**
56. *Psilocybe areolata* (Klotzch) Sacc.; = ***Lacrymaria lacrymabunda* (Bull.) Pat.**
= *Psilocybe cernua* var. *areolata* (Klotzch) Sacc. Massee referred to *Agaricus* (*Psilocybe*) *areolata* (Klotzsch) Sacc., to Cooke's Illustr. 1187 (1177) (Watling and Gregory, 1987)
57. *Psilocybe areolata* s. Cooke [Cooke Illustr. 596 (570)], ? = *Hypholoma capnoides* (Fr.) P. Kumm., ? = *H. fasciculare* (Huds. : Fr.) Quél.
58. *Psilocybe areolata* var. *virescens* Massee (doubtf. var.)
59. ***Psilocybe argentina* (Speg.) Singer,** = *Deconica argentina* Speg., = *Psilocybe merdicola* Huijsman
*60. ***Psilocybe argentipes* K. Yokoy.**
*61. ***Psilocybe armandii* Guzmán et S. H. Pollock**
62. *Agaricus* (*Psilocybe*) *arrosus* Schulz. (doubtf. sp.)
63. *Psilocybe asperospora* Cleland; = ***Psathyrella* sp.**
*64. ***Psilocybe atlantis* Guzmán, Hanlin et C. White**
65. *Psilocybe atomantoides* Thom et Lathrop (doubtf. sp.)
66. *Psilocybe atomatoides* (Peck) Sacc., = ***Psathyrella atomantoides* (Peck) A.H. Smith**
67. *Psilocybe atrobrunnea* Beeli, = *P. fuscofulva* Peck, non *P. turficola* Fávre
68. ***Psilocybe atrobrunnea* (Lasch) Gillet** s. Kauffman, 1918 and A.H. Smith 1949 pp., s. Guzmán 1983 pp. = *P. dichroa* s. S. Lundell, = *P. fuscofulva* Peck, = *P. nigrella* Peck non *P. turficola* Fábre, non *P. dichroa* (Pers.) P. Karst.
69. *Psilocybe atrobrunnea* s. Watling et Gregory (1987) (doubtf. sp.)
70. *Psilocybe atrorufa* (Schaeff. :Fr.) Quél.;= *P. montana* (Pers.) P. Kumm. s. auct.
71. *Psilocybe atrorufa* Schaeff. : Fr. s. Quél.;= *P. bullacea* (Bull.) P. Kumm.
72. *Deconica atrorufa* (Schaeff. : Fr.) P. Karst. s. F.H. Møller, = *Psilocybe bullacea* (Bull.) P. Kumm.
73. *Psilocybe atrorufa* f. *brevipes* Killerm. (doubtf. f.)
74. *Psilocybe atrorufa* f. *longipes* Killerm.;? = *P. montana* (Pers.) P. Kumm. s. auct.
*75. ***Psilocybe aucklandii* Guzmán, C. C. King et Band.-Muñoz**
76. *Psilocybe aurantiaca* (Cooke) Noordel. = *Agaricus squamosus* Fr. f. *aurantiacus* Cooke, = *Stropharia aurantiaca* (Cooke) S. Imai, = *S. aurantiaca* (Cooke) P.D. Orton, = *Naematoloma aurantiaca* (Cooke) Guzmán ex Singer, = ***Hypholoma aurantiaca* (Cooke) Faus,** ? = *Psilocybe ceres* (Cooke et Massee) Sacc.
*77. ***Psilocybe australiana* Guzmán et Watling**
78. *Deconica australis* E. Horak; = *P. subcoprophila* (Britzelm.) Sacc.

*79. ***Psilocybe aztecorum* R. Heim emend. Guzmán**, = *P. mexicana* var. *longispora* R. Heim nom. nud. non *P. aztecorum* var. *aztecorum* s. Natarajan et Raman
80. *Psilocybe aztecorum* var. *bonetii* (Guzmán) Guzmán, = *P. bonetii* Guzmán, non *P. aztecorum* var. *bonetii* s. Natarajan et Raman (= *P. natarajanii* Guzmán)
*81. ***Psilocybe azurescens* Stamets et Gartz** (it needs a revision)
*82. ***Psilocybe baeocystis* Singer et A. H. Smith emend. Guzmán**
*83. ***Psilocybe banderillensis* Guzmán**
84. *Psilocybe banderillensis* var. *paulensis* Guzmán et Bononi, = *P. paulensis* (Guzmán et Bononi) Guzmán
*85. ***Psilocybe barrerae* Cifuentes et Guzmán emend. Guzmán**
86. *Psilocybe bifrons* (Berk.) Henn.; = ***Psathyrella bifrons* (Berk.) A.H. Smith**
87. *Psilocybe bipellis* (Quél.) Pereira-Coutinho = ***Psathyrella bipellis* (Quél.) A.H. Smith**
*88. ***Psilocybe blattariopsis* (Speg.) Singer** = *Pholiotella blattariopsis* Speg., = *Conocybe blattariopsis* (Speg.) Rogers
*89. ***Psilocybe bohemica* Šebek**
*90. ***Psilocybe bolivari* Guzmán,** non *P. zapotecorum* Heim emend. Guzmán
*91. ***Psilocybe bonetii* Guzmán,** = *P. aztecorum* var. *bonetii* (Guzmán) Guzmán, non *P. aztecorum* var. *bonetii* s. Natarajan et Raman (= *P. natarajanii*)
92. ***Psilocybe borealis* Guzmán**
*93. ***Psilocybe brasiliensis* Guzmán**
*94. ***Psilocybe brunneocystidiata* Guzmán et E. Horak**
95. *Deconica bryophila* Peck (= *P. montana* (Pers.) P. Kumm.)
96. ***Psilocybe bulbosa* (Peck) A. H. Smith** (= *Deconica bulbosa* Peck)
97. *Agaricus* (*Psilocybe*) *bulbosulus* Schulzer (doubtf. sp.)
98. ***Psilocybe bullacea* (Bull. : Fr.) P. Kumm.** (it needs a revision)
99. *Psilocybe bullacea* s. Bres. = *P. muscorum* (P.D. Orton) M.M. Moser, = *P. atrorufa* s. Quél.
100. *Psilocybe bullacea* s. auct. (e.g. Murrill); = *P. coprophila* (Bull. : Fr.) P. Kumm.
101. *Psilocybe bullacea* s. Noordel.; = *P. subviscida* var. *velata* Noordel. et Verduin
102. *Agaricus bullaceus* s. Berk. et Broome; = *Psilocybe pseudobullacea* (Petch) Pegler s. Pegler 1986 non s. Pegler 1977, see *P. pegleriana* Guzmán
*103. ***Psilocybe cabiensis* Guzmán, M. Torres et Ramírez-Guillén**
104. *Psilocybe caerulea* (Kreisel) Noordel. = *Agaricus politus* Bolton, = ***Stropharia caerulea* Kreisel**
*105. ***Psilocybe caeruleoannulata* Singer ex Guzmán,** = *P. uruguayensis* Singer ex Guzmán, = *Stropharia siccipes* var. *lugubris* Rick
106. *Naematoloma caerulescens* Pat. = *Hypholoma caerulescens* (Pat.) Sacc. et Trotter, = *Psilocybe cubensis* (Earle) Singer, see *Stropharia albosulfurea* (Pat.) Z.L. Yang
*107. ***Psilocybe caerulescens* Murrill var. *caerulescens*** = *P. mazatecorum* R. Heim, = *P. caerulescens* var. *albida* R. Heim = *P. caerulescens* var. *mazatecorum* R. Heim = *P. caerulescens* var. *mazatecorum* f. *heliophila* R. Heim = *P. caerulescens* var. *mazatecorum* var. *nigripes* R. Heim
108. *Psilocybe caerulescens* var. *albida* R. Heim, = *P. caerulescens* var. *caerulescens*
109. *Psilocybe caerulescens* var. *mazatecorum* R. Heim, = *P. caerulescens* Murrill var. *caerulescens*
110. *Psilocybe caerulescens* var. *mazatecorum* f. *heliophila* R. Heim, = *P. caerulescens* var. *caerulescens*
111. *Psilocybe caerulescens* var. *mazatecorum* f. *ombrophila* R. Heim, = *P. caerulescens* var. *ombrophila* (R. Heim) Guzmán
112. *Psilocybe caerulescens* ssp. *mazatecorum* var. *ombrophila* R. Heim, = *P. caerulescens* var. *ombrophila* (R. Heim) Guzmán

*113. ***Psilocybe caerulescens* var. *ombrophila* (R. Heim) Guzmán,** = *P. caerulescens* ssp. *mazatecorum* var. *ombrophila* R. Heim = *P. caerulescens* var. *mazatecorum* f. *ombrophila*, = *P. mixaeensis* P. Heim
114. *Psilocybe caerulescens* var. *nigripes* R. Heim = *P. caerulescens* var. *caerulescens*
115. *Stropharia caerulescens* S. Imai = *Psilocybe venenata* (S. Imai) Imazequi et Hongo
*116. ***Psilocybe caerulipes* (Peck) Sacc.**
117. *Psilocybe caerulipes* var. *gastonii* Singer = *Psilocybe hoogshagenii* P. Heim var. *hoogshagenii*
118. *Psilocybe caesioannulata* Singer = *Psilocybe fimetaria* (P.D. Orton) Watling
119. *Psilocybe caespitosa* (Berk.) Sacc. (= ***Psathyrella* sp.)**
120. *Psilocybe caespiticia* Berk. (a misspelling for *P. caespitosa* (Berk.) Sacc.)
121. *Psilocybe caespitosa* Murrill (= *P. physaloides* (Bull. : fr.) Quél.)
122. *Psilocybe californica* Earle (= *P. castanella* Peck var. *Castanella*)
123. *Psilocybe callosa* (Fr. : Fr.) Quél., ? = *Panaeolus papilionaceous* (Bull. : Fr.) Quél.
124. *Psilocybe callosa* s. auct. (doubtf. sp.)
125. *Psilocybe callosa* (Fr. : Fr.) Quél. s. Guzmán = *P. strictipes* Singer et A.H. Smith
126. *Psilocybe callosa* s. P. Karst. = *Psathyrella* sp. and *P. semilanceata* (Fr.) P. Kumm.
127. *Psilocybe callosa* s. Bres. (= ***Psathyrella* sp.)**
128. *Psilocybe calongei* G. Moreno et Esteve-Rav., = *P. laetissima* Hausknecht et Singer
129. *Psilocybe campanulatus* (Bull. : Fr.) P. Kumm., = *Panaeolus campanulatus* s. auct.
130. *Naematoloma campestre* A. H. Smith (? = *Psilocybe*)
131. *Psilocybe camptopoda* (Peck) Sacc. (= *P. cavipes* House, = *P. unicolor* Peck
= ***Psathyrella camptopoda* (Peck) A.H. Smith)**
*132. ***Psilocybe candidipes* Singer et A. H. Smith** non *P. zapotecorum* R. Heim emend. Guzmán
133. *Psilocybe canificans* (Cooke) Sacc. (= *P. canofaciens* Cooke)
134. *Psilocybe canobrunnea* (Batsch : Fr.) P. Kumm. (doubtf. sp.)
135. *Psilocybe canofaciens* Cooke; ? = *Psilocybe helobia* (Kalchbr.) Henn. (doubtf. sp.)
136. *Psilocybe canoruber* (a misspelling for *canorubra*)
137. *Psilocybe canorubra* (Berk. et Broome) Sacc. = ***Agaricus alphitochrous* Berk. et Broome**
138. *Psilocybe capnoides* (Fr.) Noordel. = ***Hypholoma capnoides* (Fr.) P. Kumm.**
139. ***Psilocybe carbonaria* Singer**
140. *Psilocybe caricicola P. D. Orton* = *Melanotus phillipsii* (Berk. et Broome) Singer
= ***Melanotus carcicola* (Berk. et Broome) Guzmán**
*141. ***Psilocybe caribaea* Guzmán, T. J. Baroni et Tapia** = *P. caerulescens* s. Pegler 1983
142. *Psilocybe castaneicolor Murrill* = ***Psathyrella conopilea* (Fr.) A. Pearson et Dennis**
143. *Psilocybe castaneifolia* Murrill; = *Panaeolus castaneifolius* (Murrill) A.H. Smith,
= ***Psathyrella castaneifolius* (Murrill) A.H. Smith**
144. ***Psilocybe castanella* Peck var. *castanella*;** = *P. californica* Earle
145. ***Psilocybe castanella var. subhyperella* (Singer) Guzmán** = *P. subhyperella* Singer
146. *Psilocybe catervata* Massee, = ***Psathyrella catervata* (Massee) P.D. Orton**
147. *Psilocybe catervata* Massee s. A. Pearson et P.D. Orton = ***Psathyrella cernua* (Vahl : Fr.) Quél.**
148. *Psilocybe cavipes* House; = *P. camptopoda* Peck (Murrill, 1923)
149. *Psilocybe ceres* (Cooke et Massee) Sacc. (doubtf. sp.) ? = *P. aurantiaca* (Cooke) Noordel.
150. *Psilocybe cernua* (Vahl : Fr.) Quél.;= *P. farinulenta* Sacc., = ***Psathyrella cernua* (Vahl : Fr.) M.M. Moser**
151. *Psilocybe cernua* Vahl : Fr. s. J.E. Lange, = ***Psathyrella lactea* J.E. Lange**
152. *Psilocybe cernua* var. *areolata* (Klotzch.) Sacc., = *P. areolata* (Klotzsch) Sacc.,
= ***Lacrymaria lacrymabunda* (Bull.) Pat.**
153. *Agaricus* (*Psilocybe*) *cernuus* Müll. s. Berk. et Broome related with *Psilocybe cernua*

*154. ***Psilocybe chaconii* Guzmán, Escalona et Ram.-Guill.**
*155. ***Psilocybe chiapanensis* Guzmán**
156. ***Psilocybe chilensis* Singer**
157. ***Psilocybe chionophila* Lamoure,** non *P. semistriata* (Peck) Guzmán
158. *Psilocybe chondroderma* (Berk. et Broome) Sacc., = ***Psathyrella chondroderma* (Berk. et Broome) A.H. Smith**
159. *Psilocybe chrysocystidiata* Singer (doubtf. sp.)
160. *Atylospora cinchonensis* Murrill; = *Psathyra cinchonensis* (Murrill) Murrill, = *Psilocybe mammillata* (Murrill) A.H. Smith
161. *Psilocybe citrina* Massee (= ***Psathyrella* sp.)**
162. ***Psilocybe clavata* Guzmán**
163. *Psilocybe clivensis* (Berk. et Broome) Sacc. = ***Psathyrella clivensis* (Berk. et Broome) P. D. Orton**
164. *Agaricus clivularis* Letell. (= *Agaricus* (*Psilocybe*) *subericaceus* Fr.)
165. *Psilocybe cokeri* Murrill; = ***Psathyrella cokeri* (Murrill) A.H. Smith**
166. *Psilocybe cokeriana* A. H. Smith et Hesler, = ***Hypholoma cokeriana* (A.H. Smith et Hesler) Guzmán**
*167. ***Psilocybe collybioides* Singer et A. H. Smith**
*168. ***Psilocybe columbiana* Guzmán**
169. *Agaricus* (*Psilocybe*) *compactus* Fr. (doubtf. sp.)
170. *Psilocybe compta* (Fr.) Sacc. (doubtf. sp.), Cooke Illustr. 603 (589) suggests a Bolbitiaceae fungus, about Watling and Gregory, 1987
171. *Psilocybe comta* (Fr.) Sacc. (a misspelling for *compta*)
172. *Agaricus* (*Psilocybe*) *comptulus* Berk. et Broome (doubtf. sp.)
173. *Psathyra conica* Peck ; = *Psilocybe phyllogena* (Peck) Peck
174. *Psilocybe conissans* (Peck) Peck; = *Clitopilus conissans* Peck, = ***Psathyrella conissans* (Peck) A.H. Smith,** = *Psathyrella subcernua* (Schulz.) Singer,= *Hypholoma agaves* Maire, see *Agaricus subcernuus* Schulz.
175. *Psilocybe cookei* Sacc. (doubtf. sp.)
176. *Psilocybe cookei* Singer; = *P. semilanceata* var. *caerulescens* (Cooke) Sacc.
177. *Psilocybe coprinifacies* (Roll.) Pouzar (doubtf. sp.)
178. ***Psilocybe coprophila* (Bull. : Fr.) P. Kumm.** = *P. coprophila* var. *vomiticola,* = *P. siccipes* s. auct. (e.g., Murrill), = *Agaricus fimicola* Pers. : Fr., = *Panaeolus digressus* Peck, ? = *Psilocybe mutans* Mckinght, = *P. bullacea* s. auct. (e.g. Murrill), ? = *P. praetervisa* Singer
179. *Stropharia coprophila* f. *etiolata* J.E. Lange ? = *P. coprophila* var. *coprophila*
180. *Stropharia coprophila* f. *subetiolata* J.E. Lange ? = *P. coprophila* var. *coprophila*
181. *Psilocybe coprophila* var. *vomiticola* Killerm. ? = *P. coprophila* var. *coprophila*
*182. ***Psilocybe cordispora* R. Heim**
183. *Psilocybe cordobensis* Singer (doubtf. sp.)
184. *Psilocybe corneipes* (Fr.) P. Karst. s. Smith 1949, = ***Mythicomyces corneipes* (Fr.) Redhead et A.H. Smith**
185. *Psilocybe coronilla* (Bull.) Noordel.; = ***Stropharia coronilla*** Bull. : Fr.
186. ***Psilocybe crobula* (Fr.) Singer** = *Naucoria crobula* (Fr.) Ricken, = *Tubaria crobula* (Fr.) Sacc., ? = *Psilocybe simulans* P. Karst.
*187. ***Psilocybe cubensis* (Earle) Singer,** = *Stropharia cubensis* Earle, = *S. caerulescens* (Pat.) Singer, = *S. cyanescens* Murrill, = *S. subacyanescens* Rick = *Naematoloma caerulescens* Pat.,= *Hypholoma caerulescens* (Pat.) Sacc. et Trotten, = *Psilocybe cubensis* var. *caerulescens* (Pat.) Singer et A.H. Smith, = *P. cubensis* var. *cyanescens* (Murrill) Singer et A.H. Smith

188. *Psathyra cubispora* Murrill a named related with *Psilocybe plutonia* s. Murrill, 1918
*189. ***Psilocybe cyanescens* Wakef.**
190. *Stropharia cyanescens* Murrill; = *Psilocybe cubensis* (Earle) Singer
191. *Hypholoma cyanescens* Maire, = *Geophila cyanescens* (Maire) Kühner et Romag.,= *Psilocybe maire* Singer
*192. ***Psilocybe cyanofibrillosa* Guzmán et Stamets** = *P. rhododendonensis* Stamets nom. nud.
193. *Psilocybe cylindrispora* A. Pearson
194. *Psilocybe cystidiosa* Peck; = ***Psathyrella cystidiosa* (Peck) A.H. Smith**
195. *Psilocybe delita* (Britzelm) Sacc. (doubtf. sp.)
196. *Psilocybe depauperata* (Singer et A.H. Smith) s. Singer, = *Pholiota depauperata* Singer et A.H. Smith (doubtf. sp.)
197. *Stropharia depilata* (Pers.) Fr.; = *Psilocybe hornemanii* (Fr. : Fr.) Noordel.
198. *Psilocybe desertorum* Velen. (doubtf. sp.)
199. *Psilocybe dichroa* (Pers.) P. Karst. (doubtf. sp.)
200. *Psilocybe dichroa* s. J.E. Lange; = ***Hypholoma subericaceum* (Fr.) Kühner**
201. *Psilocybe dichroa* s. Murrill; = *P. fuscofulva* Peck
202. *Psilocybe dichroa* s. S. Lundell; = *P. atrobrunnea* (Lasch) Gillet)
203. *Psilocybe dichroa* s. auct.; = *Stropharia dilapitata* Pers. : Fr. = ***Hypholoma subericaceum* (Fr.) Kühner**
204. *Psilocybe dichroa* var. *tenuior* P. Karst. (doubtf. var.)
205. *Psilocybe dichroma* (Berk. et M. A. Curtis) Sacc. = ***Psathyrella dichroma* (Berk. et M. A. Curtis) A.H. Smith**
206. *Panaeolus digressus Peck;* = *Psilocybe coprophila* (Bull. : Fr.) P. Kumm.
207. *Stropharia dilapilata* Pers. : Fr.; = *Psilocybe dichroa* s. auct. see *P. hornemanii* (Fr.) Noordel.
208. *Psilocybe discordabilis* (Britzelm.) Sacc. (doubtf. sp.)
209. *Psilocybe discordans* (Britzelm.) Sacc. (doubtf. sp.)
210. *Psilocybe dispersa* (Fr.) R. Heim, = ***Naematoloma dispersum* (Fr.) P. Karst.**
211. *Stropharia distans* (Pers.) Morgan s. A. Blytt, non s. Murrill (see *Agaricus subcernuus*); = *Psilocybe squamosa* (Pers. : Fr.) P.D. Orton
212. *Psilocybe dorsipora* (Esteve-Rav. et Barassa) Noordel. = ***Stropharia dorsipora* Esteve-Rav. et Barassa**
*213. ***Psilocybe dumontii* Singer ex Guzmán**
214. *Psilocybe dunicola* (Speg.) Singer; = *P. sabulosa* Peck
215. *Psilocybe ecbola* (Fr.) Singer; ? = *P. inquilina* (Fr. : Fr.) Bres., = *P. muscorum* s. Bon et Roux
216. *Psilocybe echinata* Cleland (***Psathyrella* sp.)**
217. ***Psilocybe egonii* Guzmán et T. J. Baroni**
218. *Psilocybe elongata* (Pers. : Fr.) Sacc., = ***Hypholoma elogatum*** (Pers. : Fr.) Ricken
219. *Psilocybe elongatipes* (Peck) Sacc., = ***Nematoloma elongatipes*** (Peck) Singer
220. *Psilocybe ericacea* (Pers. : Fr.) Quél. = ***Hypholoma ericaceum* (Pers. : Fr.) Kühner**
221. *Psilocybe ericacea* var. *dichroa* P. Karst.; = *P. dichroa* (Pers.) P. Karst.
222. *Psilocybe ericaceoides* (P.D. Orton) Noordel., = ***Hypholoma ericaceoides* P.D. Orton**
*223. ***Psilocybe eucalypta* Guzmán et Watling**
224. *Deconica examinata* (Britzelm.) Sacc. (doubtf. sp.)
225. *Psilocybe exerrans* (Britzelm.) Sacc. (doubtf. sp.)
*226. ***Psilocybe fagicola* R. Heim et Cailleux emend. Guzmán** = *P. fagicola* var. *mesocystidiata* Guzmán, = *P. wassoniorum* Guzmán et S.H. Pollock, = *P. xalapensis* Guzmán et A. López
227. *Psilocybe fagicola* var. *mesocystidiata* Guzmán, = *P. fagicola* R. Heim et Cailleux emend. Guzmán
228. *Psilocybe falkandica* Cotton s. E. Horak (doubtf. sp.)

*229. ***Psilocybe farinacea* Rick ex Guzmán** (= *P. tenax* s. Rick)
230. *Psilocybe farinulenta* Sacc. (= *P. cernua* (Vahl : Fr.) Quél.)
231. *Psilocybe fascista* Hongo; = *P. venenata* (S. Imai) Imazequi et Hongo
232. *Psilocybe fasciculare* (Huds. : Fr.) Noordel., = ***Hypholoma fasciculare* (Huds. : Fr.) Quél.**
233. *Psilocybe fasciculare* var. *pusilla* (J. E. Lange) Noordel., = ***Hypholoma fasciculare* var. *pusillum* J.E. Lange**
234. *Psilocybe fatua* (Fr.) Sacc.; = ***Psathyrella fatua* (Fr.) P. Kumm.**
235. *Psilocybe fatua* f. *minor* Couterc. (doubtf. f.)
236. *Psilocybe februaria* Singer (doubtf. sp.)
237. *Stropharia ferrii* Bres.;= *Psilocybe rugosoannulata* (Farl. ex Murrill) Noordel.
238. *Stropharia ferrii* var. *lutea* Hongo = *Psilocybe rugosoannulata* (Farl. ex Murrill) Noordel.
239. *Psilocybe ferrugineolateritia* Voglino (doubtf. sp.)
240. *Psilocybe fibrillosa* (Pers.) Henn. (= ***Psathyrella fibrillosa* (Pers.) Maire**)
*241. ***Psilocybe fimetaria* (P. D. Orton) Watling;** = *P. caesioannulata* Singer
242. *Agaricus* (*Psilocybe*) *fimicola* Pers. : Fr., = *Psilocybe coprophila* (Bull. : Fr.) P. Kumm.
243. ***Psilocybe fimicola* Guzmán**
244. *Psilocybe flammuliformis* Singer (=***Pholiota* sp.**)
245. *Agaricus* (*Psilocybe*) *flaccens* Schulzer (doubtf sp.)
246. *Psilocybe floccipes* (Fr.) Killerm. (doubtf. sp.)
247. ***Psilocybe flocculosa* Bas et Noordel.**
248. *Psilocybe floridana* Murrill (= ***Psathyrella* sp.**)
249. *Psilocybe foenisecii* (Pers. : Fr.) Quél.;= ***Panaeolina foenisecii* (Pers.) Maire**
250. *Psilocybe fortunata* (Cooke) Sacc.; = ***Panaeolus antillarum* (Fr.) Dennis**
251. *Psilocybe frustulenta* (Fr.) Henn.;= ***Psathyrella frustulenta* (Fr.) A.H. Smith**
252. ***Psilocybe fuegiana* (E. Horak) Singer;** = *Deconica fuegiana* E. Horak
*253. ***Psilocybe fuliginosa* (Murrill) A. H. Smith**
*254. ***Psilocybe furtadoana* Guzmán**
255. *Psilocybe fuscofolia* Peck; = ***Psathyrella fuscofolia* (Peck) A. H. Smith**
256. *Psilocybe fuscofulva* Peck; = *P. atrobrunnea* Beeli, = *P. atrobrunnea* (Lasch) Gillet, = P. *dichroa* s. Murrill
*257. ***Psilocybe galindii* Guzmán**
258. *Psilocybe galindoi* Guzmán s. Singer; = *P. galindii* Guzmán
*259. ***Psilocybe gallaeciae* Guzmán et M. L. Castro**
260. *Psilocybe gigaspora* Natarajan et Raman, = ***Hypholoma gigaspora* (Natarajan et Raman) Guzmán**
261. *Psilocybe gilletii* P. Karst. (= ***Hypholoma* sp.**)
262. ***Psilocybe glutinosa* Arnold**
263. *Psilocybe glutinosa* Velen. (= ***Galerina* sp.**)
264. *Psilocybe goniosperma* (Berk. et Broome) Singer, ?= *P. goniospora* (Berk. et Broome) Singer
*265. ***Psilocybe goniospora* (Berk. et Broome) Singer**
266. *Psilocybe gossypina* (Bull. : Fr.) Henn. = ***Psathyrella gossypina* (Bull. : Fr.) Konrad et Maubl.**
267. ***Psilocybe graminicola* (P. D. Orton) P. D. Orton**, = *Deconica graminicola* P. D. Orton
268. *Psilocybe graminicola* s. Singer 1986; = *P. subviscida* (Peck) Kauffm.
269. *Psilocybe granulata* Naveau (doubtf. sp.)
*270. ***Psilocybe graveolens* Peck**
271. *Psilocybe griseobadia* (Pat.) Z. L. Yang; = *Psathyrella griseobadia* Pat.
*272. ***Psilocybe guatapensis* Guzmán, Saldarr., Pineda, G. García et L. F. Velásquez**
*273. ***Psilocybe guilartensis* Guzmán, F. Tapia et Nieves-Riv. emend. Guzmán**

274. *Psilocybe guzmanii* Natarajan et Raman = ***Hypholoma guzmanii* (Natarajan et Raman) Guzmán**
275. *Psilocybe halophila* (Pacioni) Noordel.;= ***Stropharia halophila* Pacioni**
276. *Stropharia halophila* f. *occidentalis* Courtec., = *Psilocybe halophila* (Pacioni) Noordel.
277. *Psilocybe hebes* (Fr.) Sacc. (doubtf. sp.)non *Psathyrella obtusata* (Fr.) A.H. Smith s. Guzmán and Vergeer, 1978
278. *Psilocybe hebes* f. *major* Bres. (doubtf. f.)
*279. ***Psilocybe heimii* Guzmán**
*280. ***Psilocybe heliconiae* Guzmán et al.**
281. *Psilocybe helobia* (Kalchbr.) Henn.; = *Agaricus* (*Psathyra*) *helobius* Kalchbr., see *P. canofaciens* Cooke (doubtf. sp.)
282. *Psilocybe helvola* (Schaeff.) Massee; ? = *Panaeolus*
283. *Psilocybe henningsi* Jungh. (doubtf. sp.)
*284. ***Psilocybe herrerae* Guzmán**
285. ***Psilocybe heterosticha* (Fr.) Singer**
*286. ***Psilocybe hispanica* Guzmán**
*287. ***Psilocybe hoogshagenii* P. Heim var. *hoogshagenii*,** = *P. caerulipes* var. *gastonii* Singer
*288. ***Psilocybe hoogshagenii* var. *convexa* Guzmán;** = *P. semperviva* R. Heim
289. ***Psilocybe horakii* Guzmán**
290. *Psilocybe horizontalis* (Bull.) Vellinga et Noordel. = ***Melanotus horizontalis* (Bull.) P. D. Orton**
291. *Psilocybe hornemannii* (Fr.) Noordel., = ***Stropharia hornemannii* (Fr.) S. Lundell et Nannf. ?**, = *S. dilapilata* (Pers.) Fr.
292. *Psilocybe hydrophila*, a misspelling for *hydrophila*
293. *Naucoria hydrophila* Massee = *Psilocybe semilanceata* s. A. Pearson & Dennis
294. *Psilocybe hygrophila* (Fr.) Gillet = ***Psathyrella hygrophila* (Bull. : Fr.) Maire**
295. *Geophila hyperella* (Fr.) Kühner et Romag., about Singer = *Psilocybe xeroderma* Huijsman
296. *Psilocybe hypsipoda* Fr. (doubtf. sp.)
*297. ***Psilocybe inconspicua* Guzmán et E. Horak**
*298. ***Psilocybe indica* Sathe & J. T. Daniel** (it needs a revision)
299. ***Psilocybe inquilina* (Fr. : Fr.) Bres.** = *Agaricus* (*Naucoria*) *inquilina* var. *ecbolus* Fr., = *Tubaria inquilina* s. auct. = *Naucoria inquilina* (Fr.) P. Kumm., = *Psilocybe muscorum* pp.
300. *Psilocybe inquilina* s. J.E. Lange ; = *P. ecbola* (Fr.) Singer (Singer, 1986)
301. *Psilocybe inquilina* s. Nooderl. ; = *P. muscorum* (P.D. Orton) M.M. Moser
302. *Psilocybe insiliens* (Britzelm.) Sacc. (doubtf. sp.)
303. *Agaricus* (*Psilocybe*) *insipidus* Schultz. (doubtf. sp.)
304. *Hypholoma intermedium* Arnolds; = *Psilocybe olivaceotincta* Kauffm.
305. *Psilocybe interjungens* (Britzelm.) Sacc. (doubtf. sp.)
306. *Psilocybe inuncta* (Fr.) Kühner; = *P. inuncta* (Fr.) Noordel., = ***Stropharia* inuncta (Fr.) Quél.**
307. *Stropharia inuncta* Fr. s. F.H. Møller = *Psilocybe luteonitens* (Vahl) Park.- Rhodes
308. *Psilocybe iodoformica* Pat. (doubtf. sp.)
*309. ***Psilocybe isabelae* Guzmán**
310. *Psilocybe isauri* Singer; = *P. yungensis* Singer et A.H. Smith
311. *Stropharia islandica* Kytöv.;= *Psilocybe luteonitens* (Vahl) Park.- Rhodes
*312. ***Psilocybe jacobsii* Guzmán**
*313. ***Psilocybe jaliscana* Guzmán**
314. *Agaricus januarensis* Mont.; ? = *Psilocybe* s. Pegler
315. *Psilocybe johnsoniana* (Peck) G.F. Atk., = ***Pholiota johnsoniana* (Peck) Hesler et A.H. Smith**
*316. ***Psilocybe josecastilloae* Guzmán**

317. *Psilocybe jujugensis* Singer (doubtf. sp.)
318. *Psilocybe kashmeriensis* S. P. Abraham (doubtf. sp.)
*319. ***Psilocybe keralensis* K.A. Thomas, Manim. et Guzmán**
320. *Psilocybe kolya* Grgur.
321. *Psilocybe korra* Grgur.
322. *Psilocybe kramburkicola* Grgur.
*323. ***Psilocybe kumaenorum* R. Heim**
324. *Psilocybe laeticolor* (F. H. Møller) Noordel. = ***Hypholoma laeticolor* (F.H. Møller) P.D. Orton**
325. ***Psilocybe laetissima* Hauskn. et Singer** = *P. calongei* G. Moreno et Esteve-Rav.
326. *Psilocybe larga Kauffm.;*= ***Psathyrella larga* (Kauffm.) A.H. Smith**
327. *Psilocybe lateritia* (Schaeff. : Fr.) Noordel.; = ***Hypholoma lateritium* (Schaeff. : Fr.) P. Kumm.,** = *H. perplexum* (Peck) Sacc.
328. *Psilocybe lateritia* (Murrill) A. H. Smith = *Atylospora lateritia* Murrill, = *Psathrya lateritia* (Murrill) Murrill = *Psilocybe montana* (Pers. : Fr.) P. Kumm.
329. ***Psilocybe laticystis* Guzmán et A. H. Smith**
330. ***Psilocybe latispora* Murrill**
*331. ***Psilocybe laurae* Guzmán**
332. *Psilocybe lazoi* Singer; ? = *P. zapotecorum* R. Heim emend. Guzmán
333. *Psilocybe leechii* A. H. Smith; = ***Agrocybe leechi* (A.H. Smith) Watling**
334. *Psilocybe libertatis* (Batsch : Fr.) F.H. Møller doubtf. sp. (good species about Bon and Roux, 2003)
335. *Psilocybe limicola* (Peck) Sacc.; = ***Psathyrella limicola* (Peck) A.H. Smith**
336. *Psilocybe limophila* Peck; = ***Psathyrella limophila* (Peck) Guzmán**
*337. ***Psilocybe liniformans* Guzmán et Bas var. *liniformans***
*338. ***Psilocybe liniformans* var. *americana* Guzmán et Stamets**
339. *Psilocybe lipophila* (Oudem.) Sacc. (doubtf. sp.)
*340. ***Psilocybe lonchophora* (Berk. et Broome) E. Horak**
341. *Psilocybe lonchopora*, a misspelling of *lonchophora*
342. *Psilocybe longinqua* Singer (doubtf. sp.)
343. *Psilocybe longispora* Murrill = ***Naematoloma longispora* (Murrill) A.H. Smith**
344. ***Psilocybe luteonitens* (Vahl) Park.-Rhodes** = *P. umbonatescens* Peck, = *Agaricus nitens* Vahl : Fr., = *Stropharia islandica* Kytöv, = *S. inuncta* s. F. H. Møller
345. *Psilocybe lysiophylla* (L. : Fr.) Sacc. (doubtf. sp.)
346. *Psilocybe macquarensis* s. E. Horak nom. nud.
347. *Psilocybe macrocystis* R. Heim nom. nud.
348. ***Psilocybe magica* Svrček**
349. *Psilocybe magnivelaris* (Peck) Knudsen = *P. percevalii* (Berk. et Broome) P.D. Orton
*350. ***Psilocybe mairei* Singer;** = *Hypholoma cyanescens* Maire, = *Geophila cyanescens* (Maire) Kühner et Romag.
*351. ***Psilocybe makarorae* P. R. Johnst. et P. K. Buchanan**
*352. ***Psilocybe mammillata* (Murrill) A. H. Smith;** = *Atylospora cinchonensis* Murrill, = *Psathyra cinchonensis* (Murrill) Murrill
353. *Psilocybe marginata* (Pers. : Fr.) Noordel. = ***Galerina marginata* (Batsch : Fr.) Kühner**
354. ***Psilocybe marthae* Singer**
355. *Psilocybe maulensis* Singer nom. nud. ?, = *P. sierrae* Singer, ? = *P. subfimentaria* Guzmán et A.H. Smith
356. *Psilocybe maxima* Velen. (doubtf. sp.)
357. *Psilocybe mazatecorum* R. Heim, = *Psilocybe caerulescens* Murrill var. *caerulescens*

358. *Psilocybe melanosperma* (Bull.) Noordel., = ***Stropharia melanosperma* (Bull.) Bres.**
359. *Geophila melanosperma* (Bull. ex Pers. : Fr.) Quél., = *Psilocybe melanosperma* (Bull. ex Pers. : Fr.) Noordel.
360. ***Psilocybe merdaria* (Fr.) Ricken**, = *Stropharia merdaria* var. *exigua* F.H. Møller
361. *Psilocybe merdaria* f. *macrospora* (F. H. Møller) Singer, = *Stropharia merdaria* Fr. f. *macrospora* F. H. Møller = *P. moelleri* Guzmán
362. *Geophila merdaria* (Fr.) Kühner et Romag., = *Psilocybe moelleri* Guzmán
363. *Stropharia merdaria* s. Rea; = *Psilocybe moelleri* Guzmán
364. *Stropharia merdaria var. exigua* F.H. Møller = *Psilocybe merdaria* (Fr.) Ricken
365. *Agaricus* (*Psilocybe*) *merdarius* var. *laevis* Schulzer (doubtf. var.)
366. *Stropharia merdaria* var. *major* (Fr.) Rea; = *Psilocybe moelleri* Guzmán
367. *Psilocybe merdicola* Huijsmann; = *P. argentina* (Speg.) Singer
*368. ***Psilocybe meridensis* Guzmán**
*369. ***Psilocybe mesophylla* Guzmán, J.Q. Jacobs et Escalona**
370. *Psilocybe mesospora* Singer (doubtf. sp.)
*371. ***Psilocybe mexicana* R. Heim** = *P. mexicana* f. *angulata-olivacea* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *distorta-intermedia* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *galericulata-convex* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *galericulata-viscosa* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *grandis-gibbosa* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *naviculata-viscosa* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *reflexa-conica* R. Heim et Cailleux nom. nud.
372. *Psilocybe mexicana* f. *angulata-olivacea* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *mexicana*
373. *Psilocybe mexicana* var. *brevispora* R. Heim nom. nud., = *P. muliercula* Singer et A.H. Smith
374. *Psilocybe mexicana* f. *distorta-intermedia* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *mexicana*
375. *Psilocybe mexicana* f. *galericulata-convexa* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *mexicana*
376. *Psilocybe mexicana* f. *galericulata-viscosa* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *mexicana*
377. *Psilocybe mexicana* f. *grandis-gibbosa* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *mexicana*
378. *Psilocybe mexicana* var. *longispora* R. Heim et Cailleux nom. nud., = *P. aztecorum* P. Heim emend. Guzmán
379. *Psilocybe mexicana* f. *naviculata-viscosa* R. Heim et Cailleux nom. nud., = *P. mexicana* f. *mexicana*
380. *Psilocybe mexicana* f. *reflexa-conica* R. Heim. et Cailleux nom. nud., = *P. mexicana* f. *mexicana*
*381. ***Psilocybe microcystidiata* Guzmán et Bononi**
382. ***Psilocybe micropora* Noordel. et Verduin**
383. *Psilocybe microrrhiza* (Lasch) Henn. = ***Psathyrella microrhiza* (Lasch) Konrad et Maubl.**
384. *Psilocybe microsperma* Speg. = ***Psathyrella spegazzini* Guzmán,** = *Psathyrella microsperma* (Speg.) Guzmán non *Psathyrella microsperma* (Peck) A.H. Smith
385. *Psilocybe microsporum* Speg. (a misspelling for *microsperma*)
386. *Psilocybe mixaeensis* R. Heim = *P. caerulescens* var. *ombrophila* (R. Heim) Guzmán
387. *Psilocybe modesta* (Peck) A. H. Smith; = *P. phyllogena* (Peck) Peck
388. *Psilocybe modesta* s. Dennis (doubtf. sp.)
389. ***Psilocybe moelleri* Guzmán** = *Stropharia merdaria* f. *macrosperma* F.H. Møller, = *S. merdaria* s. Rea, = *S. merdaria* var. *major* (Fr.) Rea, = *S. ventricosa* Massee s. Rea, = *Geophila merdaria* (Fr.) Kühner et Romag., = *Psilocybe merdaria* var. *macrospora* (F.H. Møller) Singer
390. ***Psilocybe montana* (Pers. : Fr.) P. Kumm.**; = *P. atrorufa* s. auct., = *P. lateritia* (Murrill) A.H. Smith, = *P. physaloides* s. Noordel., = *P. physaloides* s. Watling et Gregory, about Noordeloos, = *Deconica bryophila* Peck, = *D. polytricophila* (Peck) Sacc.
391. ***Psilocybe montana* var. *macrospora* Noordel. et Verduin**
392. *Psilocybe montana* f. *plana* Arnolds

*393. ***Psilocybe moravica* Borovièka**
*394. ***Psilocybe moseri* Guzmán**
*395. ***Psilocybe muliercula* Singer et A. H. Smith**, = *P. wassonii* R. Heim, = *P. mexicana* var. *brevispora* R. Heim
396. *Psilocybe murcida* (Fr.) P. Karst., = ***Psathyrella murcida* (Fr.) Kits. van Wav.**
397. *Psilocybe musci* Cleland et Cheel (doubtf. sp.)
398. ***Psilocybe muscorum* (P. D. Orton) M. M. Moser** = *Deconica muscorum* P.D. Orton, = *Psilocybe bullacea* s. Bres., = *P. inquilina* s. Noordel., = *P. physaloides* s. M.M. Moser
399. *Psilocybe muscorum* s. auct. ; = *P. inquilina* (Fr. : Fr.) Bres.
400. *Psilocybe mutabilis* P. Karst. ? = ***Kuehneromyces mutabilis* (Fr.) Singer et A.H. Smith**
401. *Psilocybe mutans* Mckinght, ? = *P. coprophila* (Bull. : Fr.) P. Kumm.
402. *Psilocybe myosotis* Fr. s. J.E. Lange, = ***Naematoloma myosotis* (Fr.) A.H. Smith**
403. *Agaricus* (*Psilocybe*) *myosotis* Fr. s. Singer, = ***Pholiota myosotis* (Fr.) Singer**
404. *Agaricus* (*Psilocybe*) *myosotis* Fr. s. M.M. Moser, = *Hypholoma myosotis* (Fr.) M.M. Moser , there are other interpretations of this Friesian name
*405. ***Psilocybe naematoliformis* Guzmán** = *Naematoloma naematoliformis* (Guzmán) Guzmán, = *Hypholoma naematoliformis* (Guzmán) Guzmán
*406. ***Psilocybe natalensis* D.A. Reid et Eicker**
*407. ***Psilocybe natarajanii Guzmán,*** = *P. aztecorum* var. *bonetii* s. Natarajan et Raman
408. *Naucoria nausuta* Kalchbr.; = *Psilocybe semilanceata* s. A. Pearson et Dennis based on a Cooke illustration
409. *Psilocybe nemophila* (Fr.) Gillet (doubtf sp.)
*410. ***Psilocybe neocaledonica* Guzmán et E. Horak**, = *Hypholoma neocaledonica* (Guzmán et E. Horak) Guzmán
*411. ***Psilocybe neorhombispora* Guzmán** = *Hypholoma rhombisporum* (Guzmán) Guzmán
412. *Psilocybe nigrella* Peck; = *P. atrobrunnea* (Lasch) Gillet
413. *Agaricus* (*Psilocybe*) *nigrosporus* Schulzer (doubtf. sp.)
414. *Psilocybe nigrosporus var. nemoreus* Schulzer (doubtf. sp.)
415. *Agaricus nitens* Vahl : Fr. = *Psilocybe luteonitens* (Vahl : Fr.) Park.- Rhodes
416. *Psilocybe nitidum* (Pers.) P. Karst. (doubtf. sp.)
417. *Psilocybe nitidipes* (Peck) Morgan (doubtf. sp.)
418. *Psilocybe nolitangere* (Fr.) Henn. = ***Psathyrella nolitangere* (Fr.) A. Pearson et Dennis**
419. *Deconica notha* (Britzelm.) Sacc. (doubtf. sp.)
420. ***Psilocybe nothofagensis* Guzmán et E. Horak**
421. ***Psilocybe novaezelandiae* Guzmán et E. Horak**
*422. ***Psilocybe novoxalapensis* Guzmán et J.Q. Jacobs**
423. *Psilocybe nuciseda* (Fr.) Massee (doubtf. sp.)
424. *Psilocybe nuciseda* (Fr.) Massee s. Cooke Illustr. 601 (609) maybe is a *Tubaria inquilina* or *T. crobula* (Watling and Gregory, 1987)
*425. ***Psilocybe oaxacana* Guzmán, Escalona et J.Q. Jacobs**
426. *Psilocybe obscura* Peck; = ***Psathyrella obscura* (Peck) Guzmán**
427. *Naucoria obtusata* Cooke ex Massee, ? = *Psilocybe sarcocephala* s. A. Pearson et Dennis
428. *Psilocybe obtusata* (Fr.) P. Kumm.; = ***Psathyrella obtusata* (Fr.) A.H. Smith**
429. *Psilocybe obtusissima* Kauffm. et A. H. Smith; = *P. elongata* (Pers.) Sacc.
430. *Psilocybe ochraeceps* Kauffm.; = ***Hypholoma dispersun* (Fr.) Quél.**
*431. ***Psilocybe ochreata* (Berk. et Broome) E. Horak**
432. *Stropharia ochrocyana* Bon;= *Psilocybe pseudocyanea* (Desm. : Fr.) Noordel.

433. *Psilocybe oedipus* Massee (doubtf. sp.)
434. *Psilocybe olivaceotincta* Kauffm.; = ***Naematoloma olivaceotinctum* (Kauffm.) A.H. Smith,** = *Hypholoma intermedium* Arnolds
435. ***Psilocybe omniumsanctorum* Singer**
436. ***Psilocybe oregonensis* Guzmán**
437. *Psilocybe orizabensis* Murrill, = ***Psathyrella* orizabensis (Murrill) A.H. Smith**
438. ***Psilocybe pallidispora* (Murrill) A. H. Smith** = *Atylospora pallidispora* Murrill
439. *Psilocybe palmigena* (Berk. et M.A. Curtis) Sacc. = ***Psathyrella palmigena* (Berk. et M.A. Curtis) Guzmán**
440. ***Psilocybe panaeoliformis* Murrill**
441. *Psilocybe papyracea* (Bolt.) J.E. Lange, = ***Psathyrella cernua* (Fr.) Kits. van Wav.**
442. *Psilocybe parabilis* (Britzelm.) Sacc. (doubtf. sp.)
443. *Psilocybe particularis* (Britzelm.) Sacc. (doubtf. sp.)
444. *Psilocybe parviducta* (Britzelm.) Sacc. (doubtf. sp.)
*445. ***Psilocybe paulensis* (Guzmán et Bononi) Guzmán,** = *P. banderillensis* var. *paulensis* Guzmán et Bononi
*446. ***Psilocybe paupana* Guzmán et E. Horak**
447. ***Psilocybe paupera* Singer;** = *P. uda* s. Singer 1953, = *P. uda* s. Ricken, s. M.M. Moser (non *P. uda* s. Guillet, s. Rea), = *P. tortipes* s. Rick
448. *Psilocybe peckiana* (Kauffm.) A.H. Smith nom. nud., = ***Hypholoma peckianum* Kauffm.**
449. *Agaricus (Psilocybe) pediades* Fr.;= ***Agrocybe pediades* (Fr.) Fayod**
450. ***Psilocybe pegleriana* Guzmán** = *P. pseudobullacea* (Petch) Pegler s. Pegler, 1977, *Agaric of E. Africa*, non s. Pegler, 1986, *Agaric of Sri Lanka* = *P. merdaria* s. Guzmán *et al.* 1977 (*Bol. Soc. Mex. Mic.* **11**: 30) = *P. pseudobullacea* s. Guzmán, 1983, pp.
451. *Psilocybe peladae* Singer; = ***Hypholoma* sp.**
*452. ***Psilocybe pelliculosa* (A. H. Smith) Singer et A. H. Smith,** = *Psathyra pelliculosa* A.H. Smith 1937
453. *Psilocybe pellosperma Voglino* (doubtf. sp.)
454. *Psilocybe pennata* (Fr.) Pereira-Coutinho, = ***Psathyrella pennata* (Fr.) Konrad et Maubl.**
455. ***Psilocybe percevalii* (Berk. et Broome) P. D. Orton,** = *Stropharia magnivelaris* Peck
*456. ***Psilocybe pericystis* Singer**
457. *Hypholoma perplexum* (Peck) Sacc. = *Psilocybe lateritia* (Schaeff. : Fr.) Noordel.
458. *Psilocybe pertinax* (Fr.) Sacc. (doubtf. sp.)
459. *Psilocybe pertinax* (Fr.) P. Karst. (doubtf. sp.)
460. ***Psilocybe peruviana* Singer**
461. *Psilocybe phillipsii* (Berk. et Broome) Vellinga et Noodel., = ***Melanopus phillipsii* (Berk. et Broome) Singer**
462. *Psilocybe phillipsii* f. *megaspora* Vellinga = ***Melanotus phillipsii* f. *megaspora* M.M. Moser**
463. *Psilocybe phoenix* (Fr.) Gillet (doubtf. sp.)
464. ***Psilocybe phyllogena* (Peck) Peck;** = *P. modesta* (Peck) A.H. Smith, = *P. rhombispora* (Britzelm.) Sacc., = *P. sphagnicola* A.H. Smith, = *Psathyra conica* Peck, = *Stropharia rhombispora* Höhn. = *Naucoria tenax* (Fr.) Ricken s. Høil.
465. ***Psilocybe physaloides* (Bull. : Fr.) Quél.** = *P. caespitosa* Murrill (a critical revision is necessary)
466. *Psilocybe physaloides* s. Bres.; = *P. xeroderma* (Noordeloos, 2001)
467. *Psilocybe physaloides* s. Cooke; = *P. pratensis* (Noordeloos, 2001)
468. *Psilocybe physaloides* s. Noordel. ; = *P. montana* (Pers. : Fr.) P. Kumm.
469. *Psilocybe physaloides* s. Lange ;? = *P. subviscida* (Noordeloos, 2001)
470. *Psilocybe physaloides* s. M.M. Moser = *P. muscorum* (P.D. Orton) M.M. Moser

471. *Psilocybe physaloides* s. Ricken ; = *Deconica muscorum* (Noordeloos, 2001)
472. *Psilocybe physaloides* s. Watling and Gregory, = *P. montana* (Noordeloos, 2001)
473. *Psilocybe physaloides* var. *discordans* Britzelm. (doubtf. var.)
474. *Psilocybe physaloides* var. *substerilis* J.E. Lange (doubtf. var.)
*475. ***Psilocybe pileocystidiata* Guzmán et Ram.-Guill.**
476. *Psilocybe piluliforme* (Bull.) auct. = ***Psathyrella piluliformis* (Bull.) P.D. Orton**
*477. ***Psilocybe pintonii* Guzmán**
478. *Psilocybe piterbargii* Singer (doubtf. sp.)
479. *Psilocybe plana* Rick = ***Psathyrella plana* (Rick) Guzmán**
*480. ***Psilocybe pleurocystidiata* Guzmán**
*481. ***Psilocybe plutonia* (Berk. et M.A. Curtis) Sacc.,** = *Agaricus* (*Psilocybe*) *plutonius* Berk. et Cooke, see *Psathryra cubispora* Murrill
482. *Agaricus politus* Bolton, non Pers.:Fr.;= *Psilocybe caerulea* (Kreisel) Noordel.
483. *Psilocybe polycephala* (Fr.) Peck;= ***Psathyrella polycephala* (Fr.) A.H. Smith**
484. *Psilocybe polytrichi* (Fr.) Sacc.; = ***Hypholoma polytrichi* (Fr.) Ricken**
485. *Psilocybe polytrichophila* (Peck) Pomerl.; = *P. montana* (Pers.) P. Kumm.
486. *Hypholoma poperianum* (Singer) Guzmán; = *Naematoloma poperianum* Singer, ? = *Psilocybe*
*487. ***Psilocybe portoricensis* Guzmán, Nieves-Riv. et F. Tapia**
488. *Psilocybe praetervisa* Singer; = *P. coprophila* (Bull. : Fr.) P. Kumm. s. Singer
489. ***Psilocybe pratensis* P. D. Orton;** = *P. physaloides* s. Cooke
490. *Psilocybe pratensis* s. Guzmán et Trappe (from the U.S.A.); = ***Psilocybe* sp.**
491. ***Psilocybe pseudoaztecorum* Natarajan et Raman 1985** = *P. aztecorum* var. *aztecorum* s. Natarajan et Raman 1983, it needs a revision
492. ***Psilocybe pseudobullacea* (Petch) Pegler, s. Pegler, 1986**, = *Agaricus bullaceus* s. Berk. et Broome, see *P. pegleriana* Guzmán
493. *Psilocybe pseudocyanea*(Desm. : Fr.) Noordel. = ***Stropharia pseudocyanea* (Desm. : Fr.) Morgan,** = *S. albocyanea* (Fr.) Quél., = *S. ochrocyana* Bon, = *S. worthingtonii* (Fr.) Sacc., = *Pholiota subcoerulea* A.H. Smith et Hesler
494. *Psilocybe pseudocyanea* f. *ochrocyanea* (Bon) Noordel. = ***Stropharia ochrocyanea* Bon**
495. ***Psilocybe pteridophytorum* Singer**
*496. ***Psilocybe puberula* Bas et Noordel.**
497. *P. pugetensis* B. Harris nom. nud.; = *P. stuntzii* Guzmán et J. Ott
498. *Psilocybe pulicosa* (Mont.) Sacc.; = ***Psathyrella pulicosa* (Mont.)** Guzmán
499. ***Psilocybe pyrispora* (Murrill) A. H. Smith;** = *Deconica pyrispora* Murrill
500. *Galeropsina pyrispora* Velen.; = *Psilocybe* según Singer (1986, p. 565)
*501. ***Psilocybe quebecensis* Ola'h et R. Heim**
502. *Psilocybe radicosa* (J.E.Lange); Noordel., = ***Hypholoma radicosum* J.E. Lange**
*503. ***Psilocybe ramulosa* (Guzmán et Bononi) Guzmán,** = *P. zapotecorum* var. *ramulosum* Guzmán et Bononi
504. *Psilocybe recognita* (Britzelm.) Sacc. (doubtf. sp.)
505. *Psilocybe rhododendronensis* Stamets nom. nud., = *P. cyanofibrillosa* Stamets et Guzmán
506. *Psilocybe rhodophaea* (Mont.) Sacc. = ***Psathyrella rhodophaea* (Mont.) Guzmán**
507. *Psilocybe rhombispora* (Britzlem.) Sacc.; = *P. phyllogena* (Peck) Peck
508. *Psilocybe rhombispora* s. M.M. Moser; = *P. tenax* s. Ricken
509. *Hypholoma rhombispora* (Guzmán) Guzmán, = *Psilocybe neorhombispora* Guzmán
510. ***Psilocybe rhomboidospora* (G. F. Atk.) A. H. Smith ex Guzmán**
511. *Stropharia rhombispora* Höhn.; = *Psilocybe phyllogena* (Peck) Peck

512. *Psilocybe rhombospora* Massee (doubtf. sp.)
513. *Agaricus rhytopilus* Mont., ? = *Psilocybe cubensis* (Earle) Singer (about Pegler, 1977)
*514. ***Psilocybe rickii* Guzmán et Cortez;** = *P. schaeferi* Rick nom. nud.
515. *Naucoria ? rigidipes* Speg.; ? = *Psilocybe* sp. (about Pegler)
*516. ***Psilocybe rostrata* (Petch) Pegler;** = *Stropharia rostrata* Petch
517. *Psilocybe rufa* Bres. (doubtf. sp.)
518. *Psilocybe rugosa* Velen. (doubtf. sp.)
519. *Psilocybe rugosoannulata* (Farl. ex Murrill) Noordel.; = ***Stropharia rugosoannulata* Farl. ex Murrill,** = *S. ferrii* Bres., = *S. ferri* var. *lutea* Hongo
*520. ***Psilocybe rzedowski* Guzmán**
521. *Psilocybe sabulicola* Speg.; = ***Psathyrella* sp.**
522. ***Psilocybe sabulosa* Peck;** = *P. dunicola* (Speg.) Singer, = *P. squarrosipes* Singer
523. *Psilocybe samoensis* Henn. (doubtf. sp.)
*524. ***Psilocybe samuiensis* Guzmán, Band.-Muñoz et J. W. Allen,** = *P. samuiensis* Guzmán, J.W. Allen et Merlin s. Stamets nom. nud.
525. *Psilocybe samuiensis* Guzmán, J.W. Allen et Merlin s. Stamets nom. nud.
*526. ***Psilocybe sanctorum* Guzmán**
527. *Psilocybe sarcocephala* (Fr.) Gillet; = ***Psathyrella sarcocephala* (Fr.) Singer**
528. *Psilocybe sarcocephala* s. J.E. Lange = ***Psathyrella spadicea* (Schaeff.) Singer**
529. *Psilocybe sarcocephala* var. *cookei* (Sacc.) C. Rea; = ***Psathyrella* sp.**
530. *Agaricus* (*Psilocybe*) *sardellus* Fr. (doubtf. sp.)
*531. ***Psilocybe sardoa* Guzmán et Contu**
532. ***Psilocybe scatigena* (Berk. et M. A. Curtis) Guzmán** = *Deconica scatigena* (Berk. et M.A. Curtis) Sacc.
533. *Psilocybe schaeferi* Rick nom. nud.; = *P. rickii* Guzmán et Cortez
534. ***Psilocybe schoenetii* Bresinsky**
*535. ***Psilocybe schultesii* Guzmán et S. H. Pollock**
536. *Psilocybe sclerotifera* (Speg.) Singer (doubtf. sp.)
537. *Psilocybe scobicola* (Berk. & Broome) Sacc.; = ***Psathyrella candolliana* (Fr.) Maire,** = *Psathyrella scobicola*, Guzmán, 1978 (*Mycotaxon,* **6**: 474)
538. *Psilocybe scocholmica* Park.-Rhodes (doubtf. sp.)
539. *Psilocybe sellae* Bres. et Mattir. (doubtf. sp.)
*540. ***Psilocybe semiangustipleurocystidiata* Guzmán, Ram.-Guill. et M. Torres**
541. *Psilocybe semiglobata* (Brasch) Noordel.;= ***Stroph*aria *semiglobata* (Brasch.) Quél.,** (see in *S. stercoraria* several synonyms)
*542. ***Psilocybe semiinconspicua* Guzmán et Trappe**
*543. ***Psilocybe semilanceata* (Fr.) P. Kumm. var. *semilanceata*** = *P. semilanceata* var. *caerulescens* (Cooke) Sacc., = *P. cookei* Singer
544. *Psilocybe semilanceata* s. Peck, s. Murrill (doubtf. sp.)
545. *Psilocybe semilanceata* var. *caerulescens* (Cooke) Sacc., = *P. semilanceata* var. *semilanceata*, non *P. strictipes* Singer et A.H. Smith
546. *Psilocybe semilanceata* var. "*coerulescens*" a misspelling for var. *caerulescens*
547. *Psilocybe semilanceata* var. *microspora* Singer; = *Psilocybe strictipes* Singer et A.H. Smith, non *P. pelliculosa* Singer et A.H. Smith
548. *Psilocybe semilanceata* var. *obtusata* Bon = *P. strictipes* Singer et A.H. Smith
549. ***Psilocybe semistriata* (Peck) Guzmán;** = *Deconica semistriata* Peck, = *Psilocybe tenax* (Fr.) Kühner et Romag. s. Fábry, non *P. chionophila* Lamoure

550. *Psilocybe semivestita* (Berk. et Broome) Henn., = ***Psathyrella semivestida* (Berk. et Broome) A.H. Smith**
551. *Psilocybe semperviva* R. Heim; = *P. hoogshagenii* var. *convexa* Guzmán
552. *Psilocybe senex* Peck; = ***Psathyrella senex* (Peck) A.H. Smith**
553. *Psilocybe septembris* (Singer) Singer; = ***Pholiota septembris* Singer**
*554. ***Psilocybe septentrionalis*(Guzmán) Guzmán**, = *P. subaeruginosa* var. *septentrionalis* Guzmán
555. *Deconica sepulchrorum* (Zoll.) Sacc. (doubtf. sp.)
*556. ***Psilocybe serbica* M. M. Moser et E. Horak**
557. *Psilocybe siccipes* P. Karst. (doubtf. sp.)
558. *Psilocybe siccipes* s. auct.(e.g. Murrill);= *P. coprophila* (Bull. : Fr.) P. Kumm.
559. *Stropharia siccipes var. lugubris* Rick, = *P. caeruleoannulata* Singer et Guzmán
560. *Strohpharia siccipes* var. *radicata* Peck (doubtf. var.)
561. *Psilocybe sierrae* Singer (doubtf. sp.); ? = *P. maulensis* Singer
*562. ***Psilocybe silvatica* (Peck) Singer et A. H. Smith;** = *Psathyra silvatica* Peck, = *Hypholoma silvaticum* (Peck) A.H. Smith, = *Psilocybe tenax* pp. s. auct.
563. *Psilocybe simulans* P. Karst. (doubtf. sp.), see *P. crobula*
*564. ***Psilocybe singeri* Guzmán**
565. ***Psilocybe singeriana* Guzmán**
*566. ***Psilocybe singularis* Guzmán, Escalona et J.Q. Jacobs**
567. ***Psilocybe smithiana* Guzmán**
568. *Deconica sordida* (Speg.) Singer; = ***Agrocybe* sp.**
569. *Psilocybe spadicea* (Schaeff. : Fr.) P. Kumm. = ***Psathyrella spadicea* (Schaeff. : Fr.) Singer**
570. *Psilocybe spadicea* (Fr.) Singer, s. J. E. Lange, s. Dennis, s. P.D. Orton et Hora; = ***Psathyrella sarcocephala* s. J. E. Lange**
571. *Psilocybe spadicea var. hydrophila* (Fr.) P. Karst., = *P. spadicea* (Schaeff. : Fr.) P. Kumm.
572. *Psilocybe spadicea* var. *polycephala* (Fr.) Sacc. = ***Psathyrella polycephala* (Fr.) A.H. Smith**
573. *Psilocybe spadiceogrisea* (Schaeff. : Fr.) Boud. = ***Psathyrella spadiceogrisea* (Schaeff. : Fr.) Maire**
574. *Psilocybe sphagnicola* A.H. Smith; = *P. phyllogena* (Peck) Peck
575. *Deconica sphagnorum* Darimont; = ***Hypholoma* sp.**
576. *Psilocybe squalens* (Fr.) P. Karst. (=doubtf. sp.)
577. *Psilocybe squalidella* (Peck) Peck; = ***Hypholoma squalidellum* (Peck) Sacc.,** = *Naematoloma squalidella* (Peck) A.H. Smith
578. *Psilocybe squalidella* var. *caespitosa* Peck, = ***Hypholoma squalidellum* (Peck) Sacc.**
579. *Psilocybe squalidella* var. *deformata* Peck, = ***Hypholoma uda* (Pers. : Fr.) Kühner**
580. *Psilocybe squalidella* var. *macrosperma* Peck = ***Hypholoma uda* (Pers. : Fr.) Kühner**
581. *Agaricus squalidelus* var. *umbonatus* Peck = ***Hypholoma uda* (Pers. : Fr.) Kühner** = *Naematoloma squalidellum* (Peck) A.H. Smith
582. ***Psilocybe squamosa* (Pers.) P. D. Orton;** = *Agaricus subcernuus* Schm., s. Murrill, = *Stropharia distans* (Pers.) Morgan, s. Murrill, s. A. Blytt, non *Agaricus squamosus* Schaeff., non *Psilocybe distans* (Pers.) Morgan
583. *Psilocybe squamosa* var. *thrausta* (Schulzer ex Kalchbr.) Guzmán = *P. thrausta* (Schulzer ex Kalchbr.) Bon, = *Stropharia squamosa* var. *thrausta* (Schulzer ex Kalchbr.) Massee, = *Agaricus squamosus* ssp. *thraustus* Fr.
584. *Psilocybe squamulosa* (Massee) Noordel., = ***Stropharia squamulosa* (Massee) Massee,** = *S. aeruginosa* var. *calolepsis* Pilát
585. *Psilocybe squarrosipes* Singer, = *P. sabulosa* Peck
586. "*Psilocybe squarrosa*" a misspelling for *P. squamosa*, in a color plate of G. Moreno et al., 1986

587. *Psilocybe stagnina* (Fr.) M. Lange ; = ***Phaeogalera stagnina* (Fr.) Kühner**
588. *Psilocybe stercicola* Cleland, = ***Hypholoma* sp.**
589. *Stropharia stercoraria* (Bull. : Fr.) Quél., = ***Stropharia semiglobata* (Batsch : Fr.) Quél.**
590. *Stropharia stercoraria* var. *minor* F.H. Møller, = *Psilocybe semiglobata* (Batsch : Fr.) Noordel.
591. *Stropharia stercoraria* var. *radicata* F.H. Møller, = *Psilocybe semiglobata* (Batsch : Fr.) Noordel.
592. *Stropharia stercoraria* f. *sterelis* F.H. Møller, = *Psilocybe semiglobata* (Batsch : Fr.) Noordel.
593. *Psilocybe strichper* a misspelling for *P. strictipes* (in Moore-Landecker, 1972. Fundamentals of Fungi)
*594. ***Psilocybe strictipes* Singer et A. H. Smith;** = *Psilocybe callosa* s. Guzmán = *Psilocybe semilanceata* var. *obtusa* Bon, = *Psilocybe semilanceata* var. *microspora* Singer
*595. ***Psilocybe stuntzii* Guzmán et J. Ott,** = *P. pugetensis* nom. nud.
*596. ***Psilocybe subacutipilea* Guzmánet al.**
*597. ***Psilocybe subaeruginascens* Höhn.**
598. *Psilocybe subaeruginascens* var. *septentrionalis* Guzmán, = *P. septentrionalis* (Guzmán) Guzmán
*599. ***Psilocybe subaeruginosa* Cleland**
600. *Psilocybe subagraria* G. F. Atk. = ***Psathyrella subagraria* (Atk.) A.H. Smith**
601. *Psilocybe subagrariella* G.F. Atk. (doubtf. sp.)
602. ***Psilocybe subalnetorum* Guzmán et E. Horak**
603. *Psilocybe subammophila* Cleland = ***Psathyrella ammophila*** (Durieu et Lév.) P.D. Orton
604. ***Psilocybe subanellariiformis* Guzmán** = *P. anellariformis* Murrill s. A.H. Smith non *P. anellariiformis* (Murrill) Singer
605. ***Psilocybe subborealis* Guzmán et A. H. Smith**
606. ***Psilocybe subbrevipes* A. H. Smith et Hesler**
*607. ***Psilocybe subcaerulipes* Hongo**
608. *Agaricus subcernuus* Schulz.; = *Psilocybe conissans* (Peck) Peck, = ***Psathyrella subcernua* (Schulz.) Singer**
609. *Agaricus subcernuus* Schum., s. Murrill, = *Stropharia distans* (Peck) Morgan, s. Murrill, s. A. Blytt, see *Psilocybe conissans* (Peck) Peck
610. *Pholiota subcoerulea* A.H. Smith et Hesler, = *Psilocybe pseudocyanea* (Desm. : Fr.) Noordel.
611. ***Psilocybe subcoprophila* (Britzlem.) Sacc.;** = *Deconica australis* E. Horak
*612. ***Psilocybe subcubensis* Guzmán**
613. *Stropharia subcyanescens* Rick; = *Psilocybe cubensis* (Earle) Singer
614. *Psilocybe subericaea* (*Fr.*) Sacc.; = ***Hypholoma subericaceum* (Fr.) Singer,** = *Agaricus clivularis* Letell.
*615. ***Psilocybe subfimetaria* Guzmán et A. H. Smith**
*616. ***Psilocybe subheliconiae* Guzmán, Ram.-Guill. et M. Torres**
*617. ***Psilocybe subhoogshagenii* Guzmán, M. Torres et Ram.-Guill.**
618. *Psilocybe subhyperella* Singer = *P. castanella* var. *subhyperella* (Singer) Guzmán
619. *Psilocybe submaculata* G. F. Atk. = ***Psathyrella submaculata* (G.F. Atk.) A.H. Smith**
620. ***Psilocybe submaritima* Contu et Guzmán**
621. ***Psilocybe subpsilocybioides* Guzmán, Lodge et S.A. Cantrell**
*622. ***Psilocybe subtropicalis* Guzmán**
623. *Psilocybe subuda* (Britzelm.) Sacc. (doubtf. sp.)
624. *Psilocybe subuda* Cleland (doubtf. sp.)
625. *Psilocybe subumbonatescens* (Murrill) Singer nom. nud., = *Stropharia subumbonatescens* Murrill; = ***Naematoloma subumbonatescens* (Murrill) Singer,** = *N. ericaceum* (Pers. : Fr.) A.H. Smith
626. *Psilocybe subviride* (Berk. et M. A. Curtis) Sacc. = *Naematoloma subviridis* (Berk. et M.A. Curtis) A.H. Smith

627. ***Psilocybe subviscida* (Peck) Kauffm.**; = *Deconica subviscida* Peck, = *Psilocybe graminicola* P.D. Orton, about Singer (1986)
628. ***Psilocybe subviscida* var. *velata* Noordel. et Verduin;** = *P. bullacea* s. Noordel.
*629. ***Psilocybe subyungensis* Guzmán**
*630. ***Psilocybe subzapotecorum* Guzmán**
631. *Psilocybe sullivantii* (Mont.) Sacc. ;= ***Pathyrella sullivantii* (Mont.) Singer**
632. *Psilocybe taediosa* (Kalchbr.) Sacc.; = *Stropharia taediosa* (Kalchbr.) D.A. Reid, ? = *Psilocybe* sp.
*633. ***Psilocybe tampanensis* Guzmán et S.H. Pollock**
*634. ***Psilocybe tasmaniana* Guzmán et Watling**
635. *Psilocybe tegularis* (Schumach. : Fr.) Gillet (doubtf. sp.)
636. *Psilocybe tenax* Fr. s. Fábry; = *P. semistriata* (Peck) Guzmán
637. *Psilocybe tenax* Fr. s. Rick; = *P. farinacea* Rick ex Guzmán
638. *Psilocybe tenax* Fr. s. Ricken; = *P. rhombispora* s. M.M. Moser
639. *Psilocybe tenax* pp. s. auct.; = *P. silvatica* (Peck) Singer et A.H. Smith
640. *Naucoria tenax* (Fr.) Ricken s. Høil.; = ***Psilocybe phyllogena* (Peck) Peck**
641. *Geophila tenax* (Fr.) Kühner et Romag. (doubtf. sp.)
642. *Deconica tenerrima* Wichanský = ***Panaeolus subbaltetus* (Berk. et Broome) Sacc.**
*643. ***Psilocybe teofilae* Guzmán**
644. *Psilocybe testaceofulva* (Britzelm.) Sacc. (doubtf. sp.)
645. *Psilocybe testaceogilva* (Britzelm.) Sacc. (doubtf. sp.)
646. *Psilocybe thailandensis* Guzmán et J.W. Allen nom. nud (a mispelling of *P. samuensis* Guzmán Band.-Muñoz et J.W. Allen)
647. ***Psilocybe thrausta* (Schulzer ex Kalchbr.) Bon** = *Stropharia squamosa* var. *thrausta* (Kalchbr.) Massee = *Psilocybe squamosa* var. *thrausta* (Schulzer ex Kalchb.) Guzmán
648. *Stropharia thrausta* s. Cooke, Rea, non Kalchbr., = *Psilocybe squamosa* (Pers.) P.D. Orton
649. *Psilocybe tibetensis* Massee; = ***Agrocybe tibetensis* (Massee) Guzmán**
650. *Psilocybe togoënsis* Henn. (doubtf. sp.)
651. ***Psilocybe tolucensis* Guzmán**
652. *Psilocybe tomentosa* (Murrill) A.H. Smith; = *Deconica tomentosa* Murrill, = ***Phaeomarasmius* sp.**
653. *Psilocybe toogaadyalis* Grgur
654. *Psilocybe torpens* (Fr.) Pereira-Coutinho (doubtf. sp.)
655. *Psilocybe tortipes* Speg.; = ***Naematoloma tortipes* (Speg.) Guzmán**
656. "*Psylocybe*" tortipes, a misspelling for *Psilocybe tortipes*
657. ***Psilocybe tortipes*** s. Rick; = *P. paupera* Singer, ? = *Naematoloma subumbonatescens* (Murrill) Singer (see *Psilocybe subumbonatescens*)
658. *Hypholoma trinitensis* (Dennis) Pegler; = *Naematoloma amazonica* Singer, ? = *Psilocybe*
659. *Psilocybe tristis* Henn. (doubtf. sp.)
660. *Deconica tropicalis* Speg.; = ***Agrocybe tropicalis* (Speg.) Guzmán**
661. ***Psilocybe trufemiae* Guzmán et Bononi**
662. *Psilocybe tuberosa* P. Karst.; = ***Psathyrella* sp.**
663. *Psilocybe tuberosa* (Redhead et Kroeger) Walleyn, = *Hypholoma tuberosum* Redhead et Kroeger
664. ***Psilocybe turficola* J. Favre,** non *P. atrobrunnea* (Lasch) Gillet
665. ***Psilocybe tuxtlensis* Guzmán**
666. *Psilocybe uda* (Pers. : Fr.) Gillet; = ***Hypholoma uda* (Pers. : Fr.) Quél.**
667. *Psilocybe uda* s. Singer, s. Ricken, s. M.M. Moser, = *Psilocybe paupera* Singer
668. *Psilocybe uda* s. Rea; = ***Hypholoma elongatum* (Pers.) Ricken**
669. *Psilocybe uda* subsp. *elongata* (Pers. : Fr.) Sacc., = ***Hypholoma elongatum* (Pers. : Fr.) Ricken**

670. *Psilocybe uda* var. *elongata* (Pers.) Gillet, = ***Hypholoma elongatum* (Pers. : Fr.) Ricken**
671. *Psilocybe uda* var. *polytrichi* (Fr. : Fr.) Gillet, = ***Hypholoma polytrichi* (Fr.) Ricken**
672. *Psilocybe uda* f. *sphagnicola* J.E. Lange (doubtf. f.)
673. *Psilocybe umbonatescens* (Peck) Sacc., = *P. luteonitens* (Vahl : Fr.) Park.-Rhodes
674. *Psilocybe umbrospora* Velen. (doubtf. sp.)
675. *Psilocybe unicolor* Peck; = *P. camptopoda* Peck
676. *Psilocybe uruguayensis* Singer ex Guzmán, = *P. caeruleoannulata* Singer ex Guzmán
677. *Psilocybe utricicola* (Berk. et Broome) Henn. (doubtf. sp.)
678. *Psilocybe urticicola,* a misspelling for *utricicola*?
*679. ***Psilocybe uxpanapensis* Guzmán**
680. *Psilocybe uspanapensis,* a misspelling for *uxpanapensis* (see above)
681. *Psilocybe valdiviensis* Singer (doubtf. sp.)
682. ***Psilocybe valenzuelae* Guzmán**
683. *Psilocybe vanhoeffenii* (Henn.) Sacc. (doubtf. sp.)
684. ***Psilocybe velifera* (J. Fávre) Singer**
*685. ***Psilocybe venenata* (S. Imai) Imazeki et Hongo;** = *P. fasciata* Hongo, = *Stropharia caerulescens* S. Imai, = *S. venenata* S. Imai
686. ***Psilocybe venezuelana* Dennis,** it needs a revision
687. *Psilocybe ventricosa* (Bull. : Fr.) P..Kumm. (doubtf. sp.)
688. *Stropharia ventricosa* Massee s. Rea; = *Psilocybe moelleri* Guzmán
*689. ***Psilocybe veraecrucis* Guzmán et Pérez-Ortíz**
690. *Psilocybe vernalis* Velen. (doubtf. sp.)
691. *Psilocybe vialis* Murrill; = ***Naematoloma vialis* (Murrill) Guzmán**
692. *Psilocybe vicina* (Fr.) Sacc. (doubtf. sp.)
*693. ***Psilocybe villarrealiae* Guzmán**
694. *Psilocybe violacea* J.W. Allen nom. nud.
695. *Psilocybe virescens* (Cooke et Massee) Massee (doubtf. sp.)
696. *Psilocybe virescens* s. Cooke Illustr. 1181 (1177) ? = *Psilocybe cyanescens*-group (Watling et Gregory, 1987)
697. ***Psilocybe washingtonensis* A. H. Smith**
698. *Psilocybe wassonii* R. Heim, = *Psilocybe muliercula* Singer et A.H. Smith
699. *Psilocybe wassoniorum* Guzmán et S. H. Pollock, = *P. fagicola* R. Heim emend. Guzmán
*700. ***Psilocybe wayanadensis* K.A. Thomas, Manim. et Guzmán**
*701. ***Psilocybe weilii* Guzmán, Stamets et F. Tapia**
*702. ***Psilocybe weldenii* Guzmán**
703. *Stropharia worthingtonii* (Fr.) Sacc., = *Psilocybe pseudocyanea* (Desm. : Fr.) Noordel.
*704. ***Psilocybe wrightii* Guzmán**
705. *Psilocybe xalapensis* Guzmán & A. López, = *P. fagicola* R. Heim emend. Guzmán
706. *Psilocybe xanthocephala* (P. D. Orton) Noordel., = ***Hypholoma xanthocepha* P. D. Orton**
707. *Psilocybe xeroderma* Huijsman; = *P. alpestris* Singer; = *P. physaloides* s. Bres., = *Geophila hyperella* (Fr.) Kühner et Romagn.
708. *Deconica xylaria* Secr.; = ? *Psilocybe nuciseda* (Fr.) Massee
*709. ***Psilocybe yungensis* Singer et A. H. Smith;** = *P. yungensis* var. *acutopa-pillata* Singer et A.H. Smith, = *P. yungensis* var. *diconica* Singer et A.H. Smith, = *P. acutissima* R. Heim, = *P. isaurii* Singer
710. *Psilocybe yungensis* var. *acutopapillata* Singer et A.H. Smith non nud. = *P. yungensis* var. *yungensis*
711. *Psilocybe yungensis* var. *diconica* Singer et A.H. Smith, = *P. yungensis* var. *yungensis*
*712. ***Psilocybe zapotecoantillarum* Guzmán, T. J. Baroni et Lodge**

*713. ***Psilocybe zapotecocaribaea* Guzmán, Ram.-Guill. et T. J. Baroni**

*714. ***Psilocybe zapotecorum* R. Heim emend. Guzmán;** = *P. zapotecorum* var. *elongata* R.Heim, = *P. aggericola* Singer et A.H. Smith, = *P. aggericola* var. *alvaradoi* Singer, non *P. bolivari* Guzmán, non *P. candidipes* Singer et A.H. Smith

715. *Psilocybe zapotecorum* var. *elongata* R. Heim, = *P. zapotecorum* var. *zapotecorum*

716. *Psilocybe zapotecorum* var. *ramulosum* Guzmán et Bononi, = *P. ramulosa* (Guzmán et Bononi) Guzmán

717. *Psilocybe zonalis* Velen. (doubtf. sp.)

718. ***Psilocybe zoncuantlensis* Guzmán et Ram.-Guill.**