

Beihefte

zur

Sydowia

Annales Mycologici, Ser. II.

Herausgegeben

von

F. Petrak † (Wien)

VII. Beiheft

R. Singer

Diagnoses Fungorum Novorum Agaricalium III.

1973

VERLAG VON FERDINAND BERGER & SÖHNE OHG.,
HORN, NÖ., AUSTRIA

An die Abonnenten und Mitarbeiter der „Sydowia“

Die bis jetzt erschienenen Jahrgänge der unter dem Titel „Sydowia“ neu herausgegebenen, von H. Sydow begründeten „Annales mycologici“ dürften den Beweis dafür erbracht haben, dass sie ihre Bedeutung als internationale mykologische Zeitschrift behaupten konnten.

Mit Rücksicht auf die hohen Druckkosten können Arbeiten in der „Sydowia“ nur unter folgenden Bedingungen aufgenommen werden:

1. Die Manuskripte müssen sorgfältig, möglichst mit der Maschine geschrieben und in fehlerfreier Sprache verfaßt sein.
2. Werden nachträglich kleine Korrekturen im Manuskript mit Handschrift vorgenommen, so sind vor allem die lateinischen Pflanzennamen, alle Fachausdrücke und Autornamen möglichst deutlich zu schreiben. Durch nachträgliche Einschaltungen, Streichungen und sonstige Korrekturen ganz unübersichtlich gewordene Manuskripte können nicht gedruckt werden. Es wird dringend gebeten, alle Manuskripte locker, d. h. mit zeilenbreiten Zwischenräumen zu schreiben.
3. Werden von den Autoren nachträglich in den Bürstenabzügen oder in den Umbruchkorrekturen Änderungen im Satze vorgenommen, so müssen sie die dadurch entstehenden Mehrkosten des Druckes tragen.
4. Die Herren Autoren werden gebeten, ihre Arbeiten möglichst kurz zu fassen. Weitschweifige Einleitungen, Erörterungen und Wiederholungen sind zu vermeiden. Bei Arbeiten rein systematischen Inhaltes sind Zusammenfassungen ganz überflüssig und können daher auch nicht gedruckt werden. Bei nicht systematischen Arbeiten können Zusammenfassungen gebracht werden, sollen aber sehr kurz und womöglich in einer anderen Sprache als der Originaltext verfaßt sein.
5. Arbeiten für die Sydowia können in lateinischer, englischer, französischer, italienischer oder spanischer Sprache verfaßt sein.
6. Im eigenen Interesse werden die Herrn Autoren gebeten, ihren Arbeiten nur unbedingt notwendige, naturgetreue Abbildungen beifügen zu wollen. Mit Rücksicht auf die hohen Herstellungskosten für Tafeln und Abbildungen müssen diese von den Autoren getragen werden.
7. Die Autoren werden gebeten, bei Anfertigung aller Abbildungen und Tafeln auf die Größe des Satzspiegels (11 × 18,5 cm) Rücksicht zu nehmen.
8. Für Form und Inhalt der Arbeiten sind nur ihre Autoren verantwortlich.

Zusendungen von Werken und Abhandlungen, deren Besprechung in der „Sydowia“ gewünscht wird. Manuskripte und alle die Redaktion betreffende Anfragen sind an den Herausgeber, Bestellungen und geschäftliche Mitteilungen an den Verlag zu richten.

Der Preis für den Jahrgang beträgt öS 510.—.

Von Arbeiten bis zu einem Druckbogen Umfang erhalten die Autoren 100, von längeren Artikeln 50 Separata kostenlos. Außer diesen Freixemplaren werden auf Wunsch noch weitere Separata hergestellt, wenn sie spätestens bei der Einsendung der letzten Korrektur beim Verlage bestellt werden.

Nachforderungen fehlender oder verloren gegangener Hefte können nur berücksichtigt werden, wenn sie spätestens beim Empfang des nächstfolgenden Heftes erfolgen.

Der Verleger:
Ferdinand Berger,
Buchdruckerei,
Horn, Niederösterreich, Austria.

Der Herausgeber:
Dr. F. Petrak †

To the Authors and Subscribers of „Sydowia“

Dr. Franz Petrak, the founder and for a long period editor of „Sydowia“ died on October 9, 1973 in his 87th year. An agreement has been reached with the publisher to continue publication of the journal and accordingly an editorial committee has been formed consisting of the following members:

Prof. Dr. Emil Müller
Institut für Spezielle Botanik
der Eidgen. Technischen Hochschule
Universitätsstraße 2
CH-8006 Zürich

Dr. Egon Horak
Institut für Spezielle Botanik
der Eidgen. Technischen Hochschule
Universitätsstraße 2
CH-8006 Zürich

Dr. Harald Riedl
Naturhistorisches Museum
Botanische Abteilung
Burgring 7
A-1014 Wien

Volume 26 now in press has still been prepared under the auspices of late Dr. Petrak while from volume 27 onwards the new editorial committee will be in charge. A leaflet containing minor alterations of the instructions for authors will be issued with volume 26.

The publisher

The editorial committee

Beihefte

zur

Sydowia

Annales Mycologici, Ser. II.

Herausgegeben

von

F. Petrak † (Wien)

VII. Beiheft

R. Singer

Diagnoses Fungorum Novorum Agaricalium III.

1973

VERLAG VON FERDINAND BERGER & SÖHNE OHG.,
HORN, NÖ., AUSTRIA

Diagnoses Fungorum Novorum Agaricalium III.

von

R. Singer

University of Illinois at Chicago Circle and
Field Museum of Natural History, Chicago, Illinois, USA

1973

VERLAG VON FERDINAND BERGER & SÖHNE OHG.,
HORN, NÖ., AUSTRIA

**Druck: Ferdinand Berger & Söhne OHG., A-3580 Horn, NÖ.,
Wiener Straße 21—23.**

ISBN 3 85028 014 4

Diagnoses Fungorum Novorum Agaricalium III.¹⁾

Polyporaceae

Lentinus sectio *Edodes* Sing. sect. nov. Metuloidibus et hyphis sceleticis absentibus. Typus sectionis: *L. edodes* (Berk.) Sing.

Lentinus panziensis Sing. spec. nov. — Pileo roseolo-griseoochreo, hygophano, radiatim sulcato, sicco, glabro, margine lacerato-dentato, campanulato, mox convexo, in maturis centro depresso, 40—100 mm lato. Lamellis albidis vel concoloribus pileo sed pallioribus, acie integris, vix nevis intervenosis, latis, distantibus, sursum crassiusculis, sinuato-adnatis vel subdecurrentibus, sporis in massa albis. Stipite atrocastaneo, sursum pallidiore, glabro sed fibroso, rugoso vel longitudinaliter sulcato, basin versus incrassato sed ad ipsam basin reangustato, solido, demum interdum nonnihil excavato, 60—90 × 7—15 mm; velo nullo visibili. — Carne pilei albida vel pallide sordida, in stipite ruditer fibroso et superficiei concolori; odore forti; sapore acri dicto. — Sporis (7.5)—8.2—9.5 × 3.8—4.5 μ, oblongis vel oblongo-cylindraceis, hyalinis, depressione suprahilari praeditis, levibus, inamyloideis. Basidiis 24—30 × 5.5—7.3 μ, 2—4-sporis; basidiolis saepe difformibus vel appendiculatis, cystidiis veris haud visis. Hyphis inamyloideis, vix dilatatis, fibulatis, haud gelatinosis. Epicute paullum differente, hyphis repentibus hyalinis et subhyalinis levibus efformata; tramate hymenophorali ex hyphis tenuitunicatis tantum efformato, his intertextis, sed subregulari; subhymenio bene evoluto, dense ramoso. — Ad lignum emortuum caespitose. Zaire: Panzi Kivu, March 1956, Goossens-Fontana 5559 (BR), typus.

Hygrophoraceae

Hygrophorus quercuum Sing. spec. nov. — Pileo albido, viscido, centro pallide gilvo, sicco albido sed in disco exiguo „samovar“ M & P, vel pallidiore, glabro, nudo, convexo, haud depresso, 45—60 mm lato. — Lamellis albis, umbra pallide aurantiaca gaudentibus, subconfertis vel subdistantibus, aciebus horizontaliter strictis vel arcuatis, lamellulis permultis longitudine variabili gaudentibus, haud intervenosis, crassiusculis, ceraceis, in siccis subcartilagineis, adnexis, demum decurrentibus. — Stipite candido ad apicem, sub apice sordide albo vel albido, glabro (apice incluso), sed velifero, levi, sicco, basin versus attenuato, in aliis ventricosus, sed basi plus minusve acuminato, solido, 110—125 × 10—33 mm; velo apicali, tenui, albo vel albido, anguste annuliformi in plurimis juvenilibus sed mox reducto ita ut in adultis plerumque linea circulari tantum apicali notato. — Carne alba, in

¹⁾ Series I v. Sydowia 2 : 26—42 (1948); series II Sydowia 15 : 45—83 (1961).

pileo et stipite crassa, carnosa, inodora. — Sporis 5—6.8 \times 3.5—4 μ , hyalinis, levibus, ellipsoideis, 1—3 guttulis rotundis vel elongatis repletis, inamyloideis. Basidiis 35—50 \times 5—5.2 μ , tetrasporis. Cystidiis et cheilocystidiis nullis. Hyphis hyalinis, inamyloideis, fibulatis; tramate hymenophorali divergente-bilateralis, in parte exteriori gelatinoso, ex hyphis filamentosis 2—5 μ latis constituto; subhymenio filamentoso-ramoso, bene evoluto. Epicute pilei ixotrichodermiali, hyalina, ex hyphis filamentosis ascendentibus vel suberectis apice rotundato praeditis, 2—4 μ latis efformata. — Ad terram sub Quercubus humboldtianis gregatim. COLUMBIA, Bojacá, Bosque de La Mercedes, 8—IV—1968 Singer B 6020, typus (F).

Camarophyllus section *Adonidi* Sing. sect. nov.

Lamellis aut pileo, lilacinis, carneo-rosellis, virescentibus; pileo opaco, haud viscoso. Typus sectionis: *C. adonis* Sing. — Subsectio *Adonidini* Sing. subsectio nov. Fibulati. Typus subsectionis: *C. adonis* Sing. — Subsectio *Aeruginospora* Sing. stat. nov. (*Aeruginospora* Höhnelt, S. B. K. Akad. Wiss. Math. 117: 1012.1908.)

Camarophyllus section *Viscidi* (Hesl. & Smith) comb. nov.

Subsect. *Viscidi* Hesl. & Smith, *Lloydia* 5: 17. 1942.

Camarophyllus section *Virginiei* (Bat.) Sing. comb. nov.

Subsect. *Virginiei* Bat., *Fl. Mongr. Hygr.* p. 43, 1910.

Camarophyllus grinlingii Sing. — Pileo violaceo-biso, dein atrobrunneo violaceo-sericeo, haud viscoso, demum atrobrunneo-areolato in fundo luteolo (Seguy 246—250, sed sordidiore) sed persistenter brunneo-biso in depressione centrali, margine primum involuto, primum levi et integro dein sulcato et undulato, convexo centro depresso, dein infundibuliformi, 45—60 mm lato. — Lamellis ochreo-cremeis (Seguy 199, magis ochreo), crassiusculo-ceraceis, distantibus, fortiter intervenosis, ad marginem saepe bifurcatis. Sporis in cumulo albis, possibiliter leviter cremeo-tinctis. — Stipite concolori vel nonnihil atriore pileo, violaceotincto praesertim apicem versus, glabro, vel fibrilloso-sericeo, leniter basin versus attenuato, usque ad 50 \times 9 mm; velo nullo. — Carne grisea, sat molli in pileo tenui, sapore leniter acidulo vel subpiperato; odore nullo. — Sporis 6—7.5 (8) \times 3—3.5—(4) μ , breviter cylindraceis vel leniter curvatis, hyalinis, inamyloideis. — Basidiis 41—69 \times 5.5—8.5 μ , plerumque \pm 50—52 \times 7.5—8 μ , basidiolis anguste clavatis. Tramate hymenophorali irregulariter intertexto, ex hyphis filamentosis 1—8 μ latis efformato. — Epicute pilei cutiformi, ex hyphis filamentosis, elongatis, paullum vel vix intertextis 5—8 μ latis, cellulis terminalibus sparsis cystidiformibus, clavatis e. gr. 40 \times 6—8 μ . — Ad quisquillas silvestres in silva tropicali virginea. — Typus a

K. Grinling (no. 71106) in RPC (CONGO-Brazzaville): Rte. de Linzolo: Djoumouna lectus et in F conservatus. — Paratypi in herb. *Grinling* (no. 71219, 80110).

Camarophyllus ferrugineoalbus (Sing.) Sing. comb. nov.
Clitocybe ferrugineoalba Sing., Sydowia 9: 371. 1955.

Omphalia bicolor Baker & Dale, Comm. Myc. Inst. Myc. Pap. 33: 91. 1951. non *Camarophyllus bicolor* Karst. (1879).

Clitocybe bicolor (Baker & Dale) Dennis, Kew Bull. 1952: 490. 1952.

Camarophyllus singularis (Höhnelt) Sing. comb. nov.
Aeruginospora singularis Höhnelt, Sitzb. K. Akad. Wiss., math. nat. Kl. 117: 1012. 1908.

Hygrotrama leucopus Sing. spec. nov. — Pileo griseo, opaco, apparenter subvelutino, leniter et haud profunde sulcato ad marginem, manifeste sulcato in siccis, convexo, dein repando, in siccis centro manifeste depresso, 12 mm cc. lato. — Stipite ex integro albo, niveo ad apicem pruinato, solido, aequali, $\pm 30 \times 2$ mm. — Carne tenerima in margine pilei, alba in stipite, inodora. — Sporis 5.5—8.5—(9) \times 4—5.5—(6) μ , versiformibus, ellipsoideis vel subglobois, levibus, hyalinis, inamyloideis. — Basidiis 26—47 \times 6.8—8—(9) μ , 2—4—sporis. Cstddidiis nullis, sed interdum nonnullis filamentosis inconspicuis e. gr. 22 \times 2.5 μ visis; cheilocystidiis nullis sed prope marginem pilei corpusculis sterilibus 16 \times 12 μ , vesiculososis, hyalinis interdum obviis. — Hyphis fibulatis, hyalinis vel subhyalinis in KOH inamyloideis, haud gelatinosis. Tramate hymenophorali ex hyphis 1—6—(9) μ latis, intertextis sed multis locis fasciculariter parallelis efformato. — Epicute pilei supra cutem hypodermii intermittente, ex elementis 16—32 \times (7) —9—25 μ hyalinis ampullaceis vel vesiculososis, interdum capitatis, hic illinc condensatis ceterum sparsis consistente; elementis hypodermii filamentosis, pigmento intracellulari pallidissime fuscidulo coloratis. Tegumento stipitis ad apicem eius epicuti structura sua simili, elementis 12—50 \times 4—16 μ . — Ad terram in silva tropicali. — Typus a R. Singer (B 3344) in Brasilia: Paraibo: João Pessoa 11 VI 1960 lectus et in BAFC conservatus.

Hygrotrama subfuscescens (Smith & Hesler) Sing. comb. nov. *Hygrophorus subfuscescens* Smith & Hesler, Sydowia 8: 318. 1954.

Hygrotrama foetens (Phill. apud Berk. & Br.) Sing. comb. nov. *Hygrophorus foetens* Phill. apud Berk. & Br.

Hygrotrama atropunctum (Pers. ex Fr.) Sing. comb. nov. *Agaricus atropunctus* Pers. ex Fr., Syst. Mycol. 1: 195. 1821.

- Hygrotrama rugulosum* (Smith & Hesl.) Sing. comb. nov.
Hygrophorus rugulosus Smith & Hesler, Sydowia 8 : 330. 1954.
- Hygrotrama* subgenus *Camrophyllopsis* (Herink) Sing.
stat. nov. *Camrophyllopsis* (ut genus) Herink, Acta Mus. Boh. sept.
Liberac. 1 : 61. 1959.
- Hygrotrama schulzeri* (Bres.) Sing. comb. nov.
Hygrophorus schulzeri Bres., Fung. Trid. 1: 57. 1884.
- Hygrotrama rugulosoides* (Hesl. & Sm.) Sing. comb. nov.
Hygrophorus rugulosoides Hesl. & Sm., N. Am. Spec. Hygr. p. 106.
1963.
- Hygrotrama paupertinum* (Smith & Hesler) Sing. comb. nov.
Hygrophorus paupertinus Smith & Hesler, Lloydia 5: 13. 1942.
- Hygrotrama peckianum* (Howe) Sing. comb. nov.
Hygrophorus peckianus Howe, Bull. Torr. Bot. Cl. 5: 43. 1874.
- Hygrotrama deceptivum* (Smith & Hesler) Sing. comb. nov.
Hygrophorus deceptivus Smith & Hesler, Lloydia 5: 42. 1942.
- Hygrotrama hiemale* (Sing. & Cléménçon) Sing. comb. nov.
Aeruginospora hiemalis Sing. & Cléménçon, Schweiz. Zeitschr.
Pilzk. 49: 118. 1971.

Hygrotrama albipes Sing. spec. nov. — Pileo brunneoatro („Negro“ M & P) in centro, marginem versus dilutiore, sub lente sub-tomentoso, haud viscoso, haud hygrophano, levi, margine incurvato, superficie opaca subvelutina in vegetis, convexo, mox centro depresso, \pm 23 mm lato. — Lamellis pallide griseolis, aciebus obtusiusculis gaudentibus, angustis, haud intervenosis, arcuatis, decurrentibus. — Stipite albo, glabro, in siccis albo vel albedo, levi, haud viscoso, aequali, solido, $55 \times 4-5$ mm. — Carne alba, inodora, latices destituta. — Sporis $5-6.5 \times 4-5 \mu$, subglobosis vel breviter ellipsoideis, levibus, hyalinis, tenuiter tunicatis, inamyloideis. — Basidis $33-48 \times 5-6.5 \mu$. Cystidiis et cheilocystidiis nullis. — Hyphis fibulatis, inamyloideis. Tramate hymenophorali subregulari, ex hyphis intertextis, tenuibus, $1-3-(4) \mu$ latis haud gelatinosis, mediostrato a strato laterali differente pigmento (fuscidulo pallidissimo) intracellulari tantum sed haud forma distributioneque hypharum, in strato laterali omnibus hyphis hyalinis, (pigmentatione bene visibili sub lente in siccis sed minime per lentes immersionis magnificatione maxima). — Strato cuticulari pilei griseo e pigmento intracellulari (vel etiam incrustationibus tenuissimis paullum manifestis?), ex hyphis trichodermium haud gelatinosum formantibus, filamentosis efformato, parietibus tenuibus vel leniter subincrassatis (usque ad 0.4μ) hyalinis; cellulis terminalibus ninnuliis cystidiformi-

bus, ad apicem inflatis $9-30 \times 5-7.5 \mu$, omnibus hyphis ex toto inamyloideis, strato hymeniformi nullo. — Ad terram humosam in silva tropicali pluviali. — Typus a R. Singer (M 8734) in Mexico: Veracruz: Estación Biológica de las Tuxtlas prope Montepío 29 VII 1969 lectus et in F conservatus.

Hygrocybe sectio *Minutulae* Sing. sect. nov. Pileo stipiteque glutinoso; epicute ixocutiformi. Typus sectionis: *H. minutula* (Peck) Murr. — Est sectio *Subglutinosae* Sing. (1943) typo excluso.

Hygrocybe sectio *Transformabiles* Sing. sect. nov. Pileo glutinoso, epicute ixocutiformi, subhymenio plerumque haud vel paululum gelatinoso. Sporibus plerumque uninucleatis, interdum heterogeneo — tunicatis. Typus sectionis:

Hygrocybe transformabilis Sing. spec. nov. — Pileo laete rubro, deinde, decolorante, pallescente usque ad rubrum pallidum, cum aurantiaco-flavo mixto et ad marginem flavo, siccando atrobrunneo („Vandyke br.“ + „Cattail“ M & P), immo nigrescente, ut minime in parte media, per unam vel duas tertias radii pellucide striato, glabro, glutinoso, convexo, subumbonato aut convexo et centro leniter depresso, 10—16 mm lato. — Lamellis flavis, mediocriter densis, latis, ventricosis, horizontalibus, adnexis. — Stipite ex toto flavo, interdum ad apicem aurantiaco, glabro, levi, glutinoso, in siccis nitente concolorique pileo, haud radicante, farcto vel cavo, aequali, $19-30 \times 1.5-1.8 \mu$; velo nullo. — Carne inodora. — Sporibus (6.5)— $7.5-9.5 \times 4-6.5 \mu$, plerumque $8-8.5 \times 5-5.5 \mu$, ellipsoideis, in multis depressione suprahilari leniter evoluta, tenui-vel moderatim tenuitunicatis, hyalinis, levibus sed pariete in multis sporibus haud homogenea sed magis et minus densa substantia alternante ita ut obscure punctulatae appareant (ornamentatione typi XI), at multis sporibus ornamentatione ulla carentibus, omnibus inamyloideis, contentu guttuloso vel coscinoideo gaudentibus. — Basidiis $23-40-(45) \times 8-10-(11.5) \mu$, i. e. minus longis quam in aliis speciebus generis, clavatis vel superne ventricosis, hyalinis, tetrasporis, ad basin fibulatis. Cystidiis nullis sed prope aciem haud heteromorpham paucis elementis inconspicuis filamentosis obviis. — Hyphis tramatis hymenophoralis fuscidulis et leniter aurantio-tincti in siccis, admodum regularis, haud gelatinosi (neque in mediostrato neque in strato laterali) parallelis vel subparallelis $3-14 \mu$ latis, e cellulis longis efformatis; hyphis in strato externo stipitis haud gelatinosis, parallelis vel subparallelis, aurantiofuscidulis, nonnullis aurantiotunicatis, fibulatis. Subhymenio haud gelatinoso. — Epicute pilei moderatim profunda et moderatim sed manifeste gelatinosa (ixocutis!), nonnullis cellulis terminalibus hypharum subfusoides e. gr. $40 \times 7 \mu$. Tegumento stipitis nullo viso in siccis neque gelatinisatione in siccis demonstrabili. — Ad terram sterilem ad marginem viae in zona subtropici-

cali-submontana gregatim. — Typus a R. Singer (T 3149) in Argentina: Tucumán: Sierra de San Javier, Ciudad Universitaria 20 XII 1958 lectus et in F conservatus. — Species aberrans, habitu et glutine, colore vegeti *Hygrocybe* typicam simulans, sed sporis et basidiis ad Tricholomataceas spectans.

Hygrocybe rubroflava Sing. spec. nov. — Pileo rubro, in duobus tertiis radii pellucide striato, glabro vel subglabro (interdum vix sericeo, sed numquam *H. miniatae* modo squamuloso), haud viscoso, convexo, centro depresso, 37 mm lato. — Lamellis aurantiacis, aciem versus flavis, moderatim latis, subdistantibus, adnexis. — Stipite flavo, haud viscoso, glabro, levi, aequali sed ad basin leniter attenuato et ad apicem vix nevis dilatato, $\pm 47 \times 5 \mu$. 8 Sporis $5.5-6.5 \times 3-3.5 \mu$, oblongis vel ellipsoideis, levibus, hyalinis, inamyloideis. — Basidiis (20)—25—45 $\times 5-6 \mu$, (2)—4—sporis. Cystidiis et cheilocystidiis nullis. — Hyphis anguste filamentosis (2—2.5 μ latis) et voluminosis (longissimis et 27—39 μ latis) mixtis, fibulatis, inamyloideis; tramate hymenophorali regulari, ex hyphis subparallelis efformato, in KOH flavidis (ita ut est hymenium in praeparationibus exsiccati in KOH). — Epicute pilei cutem praestante, a carne pilei paullum differente, ex hyphis appressis horizontalibus subparallelis haud galatinosis efformata. — Ad terram humosam in silva tropicali pluviali solitario. — Typus a R. Singer (B 6276) in Columbia: Valle: Buenaventura, San Joaquín 22 IV 1968 lectus et in F conservatus.

Hygrocybe rhodoleuca Sing. spec. nov. — Carpophoris magnitudine sua *H. coccineam* in mentem revocantibus; pileo saturate roseo (2—J—5 vel 2 K 6 M & P) in siccis sordide aurantiaco, squamulis vel fibrillis erectis vel recurvatis tecto sub lente, praesertim in centro, ex integro subtiliter tomentoso, haud viscoso, estriato, convexo, mox applanato, dein frequenter centro depresso. — Lamellis albis, horizontalibus, latis, distantibus, adnatis, dente decurrente. — Stipite roseo ad apicem, siccando sordide aurantiaco, basin versus alba, haud viscoso, glabro, interdum canaliculato, subaequali, quam pilei diam. longiore. — Carne inodora. — Sporis $8.5-14 \times 6-7.5 \mu$, plerumque $10-12 \times 6.5-7 \mu$, haud dimorphis, versiformibus sed plerumque subellipsoideis, hyalinis, inamyloideis. — Basidiis $46-70 \times 8.5-9.5 \mu$, haud dimorphis, 2—4—sporis. Cystidiis nullis. — Hyphis hyalinis, in mediostrato lamellarum regulari, nec non in strato laterali subregulari filamentosis, haud gelatinosis, fibulatis sed nonnullis septis defibulatis visis. — Tomento pilei ex hyphis trichodermium efformantibus haud gelatinosis efformato; cellulis terminalibus $27-78 \times 5-12 \mu$ cylindraceis, frequentius autem clavatis, ad basin fibulatis. — Ad terram in silva humida tropicali pluviali. — Typus a R. Singer (B

3345) in Brasilia: Paraibo: João Pessôa, 11—VII—1960 lectus et in LIL, BAFC conservatus.

Hygrocybe pallida (Smith) Sing. comb. nov.

Hygrophorus laetus f. *pallidus* Smith, Pap. Mich. Acad. Sc. Arts & Lett. 38: 59. 1953.

Hygrocybe arechavaletii (Speg.) Sing. comb. nov.

Omphalina arechavaletii Speg., An. Mus. Nac. Hist. Nat. B. A. 24: 168. 1913.

A. H. laeta differt stipite brevior, sporis majoribus, fibulis sparsis, pileo juvenili aurantiorubro dein roseo vel aurantio-pallido.

Tricholomataceae

Lyophyllum sectio *Heterosporae* (Sing.) comb. nov.

Agaricus circinatus Fr., Epicrisis p. 132. 1838.

Lyophyllum sect. *Lyophyllum* subsect. *Semitalini* Sing. subsect. nov. Sporis elongatis fusoides vel ellipsoideis vel fusoido-cylindraces, semper pro ratione elongatis, levibus. Typus subsectionis: *L. semitale* (Fr.) Kühner

Lyophyllum sectio *Heterosporae* (Sing.) comb. nov.

Calocybe sect. *Heterosporae* Sing. Sydowia 15: 46. 1961.

Lyophyllum heterosporum (Sing.) comb. nov.

Calocybe heterospora Sing. l. c.

Lyophyllum venezuelanum (Dennis) Sing. comb. nov.

Tricholoma venezuelanum Dennis, Kew Bull. 15: 80. 1961.

Lyophyllum sect. *Lyophyllum* subsect. *Buxeiina* Sing. subsectio nov. Sporis ellisoideis vel ovoideis, exiguis ($< 5 \mu$); lamellis flavidulis. Typus subsectionis: *L. buxium* (Maire) Kühner & Romagnesi.

Laccaria calospora Sing. spec. nov. —

Pileo lemellis sodidius purpureo-violaceo, dein margine excepto sodide violaceo-brunneo, in siccis depurpurato (initio „vinaceous purple“, demum „fawn clor“ vel „army brown“ Ridgway), minute vel minutissime fibrilloso-asperulato, hygrophano, haud viscido, ad marginem frequenter breviter sulcato, centro mox depresso, demum interdum concavo, 15—26 mm lato. — Lamellis laete amaranthinis („Amaranth“ vel „wild Aster“ M & P) vel pileo concoloribus, distantibus, demum pallide pruinosis, horizontalibus, interdum subventricosis, polydymis, distantibus, moderatim latis (e. gr. 2—3 mm latis), adnatis, interdum subsinuatis dente leniter decurrentibus. Sporis in cumulo violacellis („pale verbena violet“ Ridgway). — Stipite pileo concolori,

superne striatulo vel ex todo innate sericeo-striato, demum cavo, apicem versus attenuato, 38—50 \times 3—9 mmß velo nullo; mycelio basali subconcolori, tomentoso Sporis 8.5—12.5 \times 7.7—11.5 μ cum spinulis), subglobois, spinulis 0.7—2.8 μ , plerumque 1.3—1.8 μ longis ornatis, inamyloideis. — Basidiis 35—48 \times 7.7—14 μ , omnibus tetrasporis vel nunnallis 2—3—sporis intermixtis. Cystidiis nullis; cheilocystidiis sparsis, \pm 50 \times 4—6 μ , cylindraceis sed ad basin frequenter leniter incrassatis, ad apicem interdum subcapitatis vel attenuatis nec non nihil recurvatis, hyalinis, integris. — Hyphis inamyloideis, haud gelatinosis, in tramate hymenophorali admodum regulari subparallelis vel parallelis, ubique densis, in KOH hyalinis. — Epicute pilei hyphis repentibus vel hinc inde ascendentibus, levibus, haud gelatinosis, fibulatis constituta. — Lamellis ammoniaci ope rubido-rosellis; carne phenolicae solutionis causa rubido-brunnea. — Ad vel inter Monocotyledones in zona nebularum humidissima et locis humidis vel palustribus solitario. — Typus a cl. Southwick in U.S.A.: Massachusetts: Waban 21 VI 1945 lectus et inFH conservatus. Etiam in Canton, Mass. et in Arcabuco, Tunja, Boyacá 29 VII 1960 a R. Singer lectus (FH et F). — Typica *L. amethystina* simillima sporas in cumulo vegeto albas et spinulas \pm 1 μ longas habet et pileus tomentosus est et ad amethystino-pallidum colorem decoloratur dehydratatione. Probabiliter in Asia tropicali etiam adest (Tjibodas, Java. FH).

Laccaria farinacea (Hudson ex Pers.) Sing. comb. nov.

Agaricus farinaceus Huds. ex S. F. Gray Nat. Arr. Br. Pl. 1: 612. 1821.

Haec species Persooniana (cf. *Persoonia* 2: 24. 1961) est species *L. bicolori* (Maire) Orton similis, affinis, sed lamellis pallide venterubido-rosellis (haud amethystino-lilaceis) differt. A *L. laccata* differt mycelio basali amethystino sed siccando albescente.

Laccaria montana Sing. spec. nov.

Pileo aurantiaco-brunneo („persimmon“ vel „terrapin“ usque ad „chutney“ vel „caldera“, mox rivuloso-rimuloso, in centro saepe asperulato-fibrilloso, hygrophano vel subhygrophano, usque ad ochraceum (11—F—7 M & P) decolorante demum saepe diffracto vel squamuloso, sub lente plus minusve subtomentoso, margine dein breviter vel per quintam partem externam radii sulcato, plerumque demum profunde sulcato, convexo, interdum primum papillato, dein profunde umbilicato vel infundibuliformi, 7—35 mm lato. — Lamellis roseolo-carneis (11 A 8 M & P), demum cinnamomeocarneis (5 D 10 vel 5 F 11), frequenter transversaliter costatis, interdum anastomosantibus, siccis atrioribus (purpureobrunneis et albopulverulentis e sporis), praesertim ad acies,

moderatim latis vel latis, subconfertis vel distantibus, adnatis vel decurrentibus demum interdum descendentibus. Sporis in cumulo candidis. — Stipite pileo pallidioribus vel subochreo, dein brunnescente et frequenter variegato („gypsy“ et „Arabian br.“ M & P), glabro vel demum innate fibrilloso, aequali, levi, $15-55 \times 2-5$ mm plerumque $16-20 \times \pm 4$ mm i. e. pro ratione breviusculo; mycelio basali albo. — Carne multum pallidioribus superficiebus sed haud violacea, subinodora, miti. — Sporis (ornamentatione inclusa) $8.8-15.3 \times (6.7)-7.5-12.5$ μ , plerumque $9-12.3 \times 8-9.2$ μ , sine ornamentatione $8.5-14.5 \times (6)-7-12$ μ , plerumque $8-11 \times 7-9$ μ spinulis $0.4-1.5$ μ , plerumque $0.7-1$ μ longis, subglobois vel breviter ellipsoideis frequentius breviter ellipsoideis, hyalinis, ad aciem interdum e pigmento lamellarum sordide rubescentibus), inamyloideis. — Basidiis $34-48 \times 10-15-(17)$ μ , omnibus tetrasporis vel nonnullis mono-vel bisporis intermixtis (et tunc sporis 12 μ majoribus), sterigmatibus cornutis $5.5-7 \times 2.7-3.3$ μ , hyalinis sed ad aciem in solutiobus alcalinis aequaliter ut sporae sordide rubescentibus. Cystidiis nullis sed cystidiolis cheilocystidiis simillimis ad latera lamellarum interdum frequentibus. Cheilocystidiis $17-47.5 \times 5.5-9.5$ μ , versiformibus, clavatis, ventricosis, cylindratis vel flexuosis, frequenter pedicellatis, hyalinis vel rubescentibus, sat numerosis. — Hyphis fibulatis, in stipite pigmento partim interparietali interdum coloratis et interdum vix nevis incrustatulis, in tramate hymenophorali regulari filamentosis, $2-7$ μ latis, inamyloideis, sed in mediostrato leniter subintertextis et frequenter inflatis ($4-17$ μ laits). — Epicute pilei cutem efformatibus sed certis locis ascendentibus et membris terminalibus cheilocystidiis similibus. Tegumento stipitis ex hyphis ascendentibus, membro terminali $17-60 \times 3-3.7$ μ sparsis moxque evanescentibus efformato vel nullo. — Ad terram nudam, aut inter muscos et Hepaticas et gramina, frequenter prope Salices herbaceas gregatim, iam vernalis sed frequentius aestate et autumno in zona montana et alpina, praecipue prope torrentes et glaciales. — Typus A R S i n g e r (C 5442) in Helvetia: Valais: prope flumen Borgne de Ferpècle, 1955—1960 m alt., 11 VII 1971 lectus et in F conservatus. — Paratypi: Italia: Savoia: La Doire prope Pra Sec., 1630 m alt. R. S i n g e r C 5380 (F), 8 VI 1971; Helvetia: Valais: Supra Brig, Aletschwald, J. P o e l t 6721 (pars), 1800—1900 m alt., 12 IX 1968. — S i n g e r C 5442, M 5464 (F). — Etiam habemus collectiones e Groenlandia in Bull. Soc. Myc. Fr. 83: 109. 1967 citatas. — *L. laccata* var. *pusilla* (Christiansen) Sing. et var. *montana* Møller pro parte identicae sunt. Species alpina *L. altaicae* f. tetraspora posse judicamus.

Laccaria laccata var. *moelleri* Sing.

Pileo ferrugineo-aurantiaco-fulvo vel fulvido-rufo, siccando pallidioribus in centro et circum discum demum crustoso-rimuloso laceratoque,

sub lente tomentosus, macroscopice minute fibrilloso-scabriusculo, sub lente ad marginem minute fibrillo-squamulosus, levi vel breviter sulcatus, raro plicatus vel lobatus, convexus, mox centro manifeste depressus et in depressione frequenter minute papillatus, 30—69 mm lato. — Lamellis carneosellis, demum albofarinosis, mediocriter vel satis latis (6 mm, interdum usque ad 8 mm), subconfertis vel subdistantibus, arcuatis ut minime in parte marginali, adnatis, frequenter dente decurrentibus, interdum a stipitis apice separantibus. Sporis in cumulo candidis. — Stipite fulvo-brunneo vel brunneo-innatefibrilloso supra fundamentum lamellis concolor, ad apicem subtiliter fibrilloso, demum glabrescente, farcto, demum cavo, aequali vel apicem versus lenter attenuato, $100-155 \times 5-6-(11)$ mm; mycelio basali statu humido et sicco albo; velo nullo. — Carne in partibus periphericis superficiebus subconcolori sed intus pallidiore, in pileo interdum ex toto superficiei concolori sed aquosa; odore subnullo; sapore miti. — Sporis (ornamentatione inclusa) $7.8-9.8-(10) \times 6.7-8.5 \mu$; (sine ornamentatione) ca. $7-9 \times 5-8 \mu$, in maturis plerumque breviter ellipsoideis, paucis subglobosis, paucis ellipsoideis, aculeolatis, aculeis isolatis (0.3)—0.5—0.9—(1.1) μ projicientibus, hyalinis, inamyloideis, acyanophilis. — Basidiis (20)—29.5.—38 \times 8.8—10.5 μ , tetrasporis. Cheilocystidiis 27—40 \times 2.5—3.7 μ hinc inde fascicularibus, hyalinis, filamentosis, ad apicem saepe subincrassatis; ad latera lamellarum filamentis similibus rarissime praesentibus. — Hyphis fibulatis, inamyloideis, hyalinis, haud gelatinosis; tramate hymenophorali regulari, hyphis filamentosis parallelis, multiseptatis. — Epicute trichodermiali ex elementis 5—18.5 μ latis, ad apicem liberum rotundatis, firme vel usque ad 1 μ crasse tunicatis, fulvidulis efformata. — Locis humidis, plerumque inter muscos sed interdum in humo vel ad acus accumulatas in silvis pineis, laricinis et frondosis gregatim. — Typus a R. Singer (C 5227) in ČSSR: Bohemia australi: Chlum prope Treboň 30 IX 1970 lectus et in F conservatus. — A var. *laccata* differt carpophoris majoribus, praecipue stipite longiore, pileo in centro haud applanato. Est *L. laccata* var. *proxima* sensu Møller Fungi Faröes 1: 271. 1945. *L. laccata* f. *carboniphila* Veselsky differt habitatione et cheilocystidiis et cystidiis latioribus (e carpophoris authenticis). *L. proxima* vera sporas habet (10) 11—12.8 \times 7.5—9.5 μ spinulis (1.2)—1.5—(2) projicientibus.

Clitocybe subgen. *Clitocybe* sect. *Disciformes* subsectio *Odo-rae* (Harmaja) Sing. stat. nov.

Clitocybe subgen. *Roseispora* Harmaja subsect. *Odo-rae* Harmaja, Karstenia 10: 86. 1969.

Clitocybe subgen. *Clitocybe* sect. *Disciformes* subsectio *Clavipedes* (Harmaja) Sing. stat. nov.

Clitocybe subgen. *Clitocybe* sect. *Clavipedes* Harmaja, Karstenia 10: 58. 1969.

Clitocybe subgen. *Clitocybe* sect. *Clitocybe* subsect. *Infundibuliformes* (Fr.) Sing. stat. nov.

Agaricus trib. *Clitocybe* sect. *Infundibuliformes* Fr., Epicr. p. 67. 1938.

Clitocybe subgenus *Clitocybe* sect. *Clitocybe* subsect *Gilvaoidaea* (Harmaja) Sing. stat. nov.

Clitocybe subgen. *Clitocybe* sect. *Gilvaoidaea* Harmaja, Karstenia 10: 70. 1969.

Clitocybe subgen. *Clitocybe* sect. *Infundibuliformes* subsectio *Sinopicae* (Harmaja) Sing. stat. nov.

Clitocybe subgen. *Clitocybe* sect. *Sinopicae* Harmaja, Karstenia 10: 69. 1969.

Clitocybe subgen. *Clitocybe* sect. *Lignatiles* (Konr. & Maubl.) Sing. comb. nov. *Pleurotus* sect. *Lignatiles* Konr. & Maubl. Enc. myc. 14: 420. 1948.

A sectione *Candicantium* differt habitu pleurotoideo.

Clitocybe asema Sing. spec. nov.

Pileo ochreo vel ochreo-carneo, ochraceo, margine pullucide striatulo, glabro, hygrophano, siccando albido vel sordide albido vel sordide ochraceo-cremeo, convexo, centro haud produnde umbilicato, dein subapplanato vel margine recurvato, 16—39 mm lato. Lamellis sordide albidis, demum fusco-grisellis, paullum ochreatis, usque ad 3.5 mm latis, confertis, manifeste decurrentibus. — Stipite pallido, sericeo, glabrescente, aequali vel apicem versus attenuato, frequenter ad basin dilatato, vel compresso, subcavo, 12—20 × 1.5—5 mm, elevato. — Carne aquosa alba, alba in siccis, immutabili; odore *C. gibbam* in mentem revocante. — Sporis 3.5—5. × 2.2—2.8 μ, ellipsoideis, levibus, hyalinis; basidiis tetrasporis; cheilocystidiis cystidiisque nullis; tramate hymenophorali typi *Clitocybarum* typicarum; epicute densa ex hyphis filamentosis efformata, hyphis fibulatis. — Ad terram alluvialem in apricis prope silvulas marginales, inter Gramineas. Typus in Argentina, prov. tucumanensi, ad flumen Salí prope Aguadita a R. Singer T 1328 lectus 25 II 1951 (LIL). Typus in Singer & Digilio, Lilloa 25: 33. 1951 (1952) descriptus sub nomine *C. brumalis* a qua differt nonnullis notulis.

Clitocybe columbiana Sing. spec. nov.

Pileo griseo haud hygrophano, glabro, sub lente subtiliter submentoso-fibrillosulo, fibrillis appressis, haud viscido, convexo dein

applanato, circum umbonem obtusissimum, subnitente in siccis 60—75 mm lato. — Lamellis albis, confertis, angustis, paullum subinter-venosis, decurrentibus. Sporis in cumulo albis, candidis. — Stipite griseo, subtomentoso, obclaviformi, 60—62×16—17 mm, ad apicem ± 10 mm lato; velo nullo. — Carne alba vel albida, inodora, miti sed sapore dulcidulo-subaromatico. — Sporis 5.5—6.5 × 2.5—3.2 μ, oblongis, vel subfusiformi-ellipsoideis, levibus, inamyloideis. Basidiis 16 × 5 μ, tetrasporis. Cystidiis cheilocystidiisque nullis. Tramate hymenophorali regulari, ex hyphis tenuibus (1—3 μ diam.) hyalinis efformato; hyphis et basi basidiorum fibulatis. Epicute densa, ex hyphis subparallelis vel subintertextis tenuitunicatis pallide melleis (KOH) 0.5—2 μ latis consistente, hyphis externis superficialibus primum subgelatinisatis et subrecurvatis vel flexuosis, dein absentibus. — Ad terram in silvis typi „Páramo“ inter ligna delapsa. Typus a. R. Singer B 6967 (F) lectus in Columbia: regione Gabriel Lopez, San Pedro, 5—V 1967. — Habitu *C. espinosae* in mentem revocat; *C. alexandri* affinis.

Clitocybe lignicola Sing. spec. nov. —

Pileo albo, centro griseo-tomentoso, ceterum glabro vel subglabro, in siccis brunneo (inter „cocoa“ at „burnt umber“, marginem versus „cooky“ M & P), convexo, profunde et persistente umbilicato, 22—25 mm lato. — Lamellis albis, confertis, 4 mm latis, horizontalibus, late adnatis vel subdecurrentibus. — Stipite albo, in siccis pileo concolori sed pallidore, cavo, centrali vel subexcentrico, cylindraco, 40—50 × 2.5—3 mm, mycelio basali in siccis brunneo; velo nullo. — Carne inodora. — Sporis 4.8—7.5 × 3.2—6.2 μ, plerumque 5.2—6.5 × 3.2—3.8 μ, levibus vel sublevis, ellipsoideis, inamyloideis. Basidiis 17—20 × 4.8—6.3 μ, tetrasporis. Cystidiis 18—40 × 6—14 μ, ventricosis, interdum subampul-laceis, crasse tunicatis, hyalinis vel subhyalinis, haud manifeste in-crustratis, in azureo cresylico vix coloratis. Tramate hymenophorali regulari, hyphis 2—9 μ latis, filamentosis, parallelis, nonnullis cum cystidiis confluentibus et crassiuscule tunicatis, inamyloideis, fibuli-feris. Epicute ex hyphis jacentibus, parallelis 2—3 μ latis levibus et inamyloideis efformata. — Ad ligna dicotyledonea in silva pluviali, virginali, fasciculariter congregati. Typus in Bolivia: Beni: Vaca Diez: prope Guyaramerín a. R. Singer, B 1900 (LIL) lectus. Habitu *Lactocollybiam angiospermarum*, in siccis *Collybiam* in mentem revo-cans. A *Pleurotis* structura et sporarum forma differt et *Clitocybi sub-tili* affinis.

Clitocybe podocarpi (Sing.) Sing. comb. nov.

Marasmius podocarpi Sing., Lilloa 25: 188, 1952.

Corpuscula epicuticularia globosa eis *Clitocybis adirondackensis*

homologa sunt et ex ea re ad *Clitocybem*, subgenus *Cystoclitum* Sing. transferenda species. Ab *hydrogramma* et *C. adirondackensi* differt lamellis intervenosis minus confertis, sapore iucundo, odore nullo vel farinaceo, epicute subhymeniformi.

Clitocybe subscyphoides (Murr.) Sing. comb. nov.

Omphalina subscyphoides Murr., North Am. Flora 9: 348. 1916.

Tricholomopsis totilivida (Murr.) Sing. comb. nov.

Cortinellus totilividus Murr., Mycologia 35: 424. 1943.

Tricholomopsis elegans Dennis var. *minor* Sing. var. nov.

Pileo flavo („primulin y“ vel „Spanish y“), demum e margine coriicolore („tan“ M & P), vix nevis hygrophano exsiccando laetius flavo, haud viscido, levi, glabro macroscopice sed subtiliter pustulato-flocculoso in tota superficie sub lente, e convexo applanato, saepe leviter umbilicato, usque ad 30 mm lato. Lamellis chromeis („narcissus“ vel „light chrome“, demum e margine stipitem versus coriicoloribus („tan“), confertissimis, angustis, subdecurrentibus. — Stipite flavo (inter „primulin y“ et „lime y“ M & P), glabro macroscopice sed sub lente fibrilloso-pubescente, mox glabrescente, nudo, cavo in adultis, aequali vel subaequali usque ad 60×5 mm, plerumque minus voluminoso; mycelio basali byssaceo, albo; velo nullo. — Carne pallidiore vel alba in siccis, linea aquosa in siccis obscuriore supra lamellas insigni, immutabili, inodora, miti. — Sporis $4.8-5 \times 3.3-4 \mu$ breviter ellipsoideis, inamyloideis, levibus, in ammoniaco hyalinis, depressione suprahilari destitutis. Basidiis $21-23 \times 5.5-6 \mu$, clavatis, tetrasporis, hyalinis vel flavidis; cheilocystidiis ad aciem heteromorpham $18-40 \times 4.5-8.2 \mu$, ventricosis, rarius constrictis et subtus clavatis, saepe septo basali secundario praeditis, integris, flavidis, tenuitunicatis. Cystidiis sparsis inconspicuisque, angustioribus quam cheilocystidia, e. gr. $32 \times 4.5 \mu$ Tramate hymenophorali regulari, hyalino in ammoniaco, ex hyphis fibulatis inamyloideis composito. Tegumento pilei ex hyphis ascendentibus dermatocystidiiformibus terminalibus efformato quae connivent fasciculariter in flocculis, flavis, levibus, vel minime granulosis, pariete tenui (usque ad 0.5μ crasso) praeditis, subclavatis vel ventricosis, $18-60 \times 3.5-11 \mu$; inter flocculas hyphis terminalibus sparsis repentibus vel subsacendentibus elementis floccularum simillimis praesentibus, septis secundariis notatis. — Ad truncum dicotyledoneum (Lecidithaceae?) in silva tropicali. Typus a R. Singer (B 4196), prope Belem, Pará, Brasiliae 5—VI—1966 lectum et in BAFC conservatus est. — A var. *elegante* (typica) lamellis angustis et omnibus partibus carpophori minoribus differt.

Gerronema subgenus *Gerronema* sect. *Umbilicata* (Sing.) Sing.
Clitocybe subgenus *Pseudolyophyllum* sect. *Umbilicatae* Sing. *Sydowia* 2: 26. 1948.

Gerronema grossulum (Pers.) Sing. comb. nov.
Agaricus grossulus Persoon, *Mycologia Europ.* 3: 110. 1828.

Gerronema rosellum (Lange) Sing. comb. nov.
Omphalia rosella Lange, *Dansk. Bot. Ark.* 6(5): 14. 1930.

Gerronema ericetorum (Fr. ex Fr.) Sing. comb. nov.
Agaricus ericetorum (Fr. ex Fr.), *Syst. Mycol.* 1: 165. 1821, non *A. ericetorum* Pers. (qui in Friesio varietatem *grisellum* sistit, et ad *Omphalinam* pertinet)

Gerronema splendidissimum (Kotlaba & Pouzar) Sing. comb. nov.
Haasiella splendidissima Kotl. & Pouzar, *Česka Mycol.* 20: 136. 1966.

Gerronema theophili Sing. spec. nov.

Pileo griseo („soapstone“ M & P), debiliter subhygrophano, per tres quartas vel quatuor quintas partes radii ad marginem sulcato, innate radiatim fibrilloso, haud viscido, nudo, convexo, umbilico centrali rotundato dein applanato umbilicoque profunde crateriformi, 6—17 mm lato. — Lamellis griseis, angustis, arcuatis, haud intervenosis, versus acies integras gradatim pallidioribus, confertis, decurrentibus. — Stipite candido, glabro vel subglabro, lenissime basin candido-myceliosam versus attenuato vel ex toto aequali. — Carne alba, sub superficiem pilei zona subgrisella praedita, immutabili; odore nullo; sapore miti. — Sporis 6.3—9.5 × 4.2—6 μ, ellipsoideis, levibus, hyalinis, inamyloideis. Basidiis 25—26.5 × 6—7.8 μ, (2)—4—sporis; basidiolis haud fusiformibus. Cystidiis nullis; cheilocystidiis haud manifestis nonnullis filamentosis inconspicuis ± 2 μ latis projicientibus exceptis. — Hyphis pilei radiatim dispositis sed intertextis, haud gelatinosis, inamyloideis, fibulatis, 3—12 μ latis, parietibus 0.4—0.8 μ crassis, tramate hymenophorali regulari, hyalino, intertextis hyphis tenuitunicatis vel subtenuitunicatis consistente. Epicute pilei ex hyphis applicatis raro subascendentibus, 1.5—5 μ latis, hyalinis (KOH), levibus, tenuitunicatis efformata; hypodermio fuscidulo pigmenta intracellularem causa, ceterum epicuticularibus simillimis; dermatocystidiis in pileo nullis. — Ad lignum dicotyledoneum in silva tropicali pluviali. Typus a R. Singer (M 8121) in Mexico: Veracruz: Estación Biológica de las Tuxtlas prope Montepío, 21 VI 1969 lectus et in F conservatus.

Omphalina subandina Sing. nom. nov.

Omphalina subumbratilis Sing., Flora Neotropica 3: 23. 1970; non
Omphalina subumbratilis Murr., Lloydia 8: 278. 1945.

Omphalina mostnyae Sing. spec. nov.

Pileo griseo vel fusco-griseo („racquet“ vel „chukker Br.“ M & P) per medium radium pellucide striato, glabro, convexo, umbilico forti instructo, ± 15 mm lato. — Lamellis griseis, subconfertis, latiusculis, arcuatis, haud intervenosis, decurrentibus. — Stipite concolori, glabro, aequali, cc. 40×2.5 mm. — Carne inodora, tenui. — Sporis $5.5\text{--}7 \times 3\text{--}3.5$ μ , plerumque $6\text{--}6.8 \times 3\text{--}3.3$ μ , ellipsoideis vel oblongis, rarius ovoideis, levibus, hyalinis, inamyloideis. Basidiis $25\text{--}28 \times 5\text{--}5.8$ μ , clavatis, hyalinis, tetrasporis. Cystidiis inconspicuis, sed nonnullis corpusculis filamentosis inconspicuis inter basidia visis. — Hyphis in tramate hymenophorali subregulari haud gelatinosis, hyalinis, vel subhyalinis, pigmento incrustante nullo praeditis, tenuitunicatis vel subtenuitunicatis (pariete usque ad 0.5 μ crassa), fibulatis, inamyloideis. — Epicute pilei ex hyphis filamentosis haud gelatinosis efformata; hyphis eis cutem efformantibus, tenuiter subtiliter granuloso pigmento melleo-brunneo vel melleo-hyalino incrustatis et in parietibus aequaliter coloratis. — Ad humum lignosum et ad lignum putridissimum in silva subxerophytica solitario. Typus a R. Singer (M 7130) in Chile: Santiago: Quebrada Diego 6 VII 1967 lectus et in SGO conservatus est. — Ab aliis sporis parvis et pigmentis sparsis distinguitur. *O. subobscuratae* affinis. Cl. Dr. Grete Mostny dedicata species.

Lactocollybia holophaea (Mont.) Sing. comb. nov.

Marasmius holophaeus Mont., Ann. Sc. Nat. Bot. IV 1: 113. 1854.

Haec species in Bolivia Amazonica recollecta hyphas fibulatas et pseudocystidia in azureo cresylicum partim caerulescentia, stipitem minutissime pubescentem in vegetis et sporas $4.2\text{--}5.8 \times 2.7\text{--}3.8$ μ habet. Cf. Floram Neotropicam 3: 63. 1970.

Macrocyttidia africana Sing. spec. nov.

Pileo rubido-ferrugineo („roux“), hygrophano, intensius colorato marginem versus, maculis tomentosulis concoloribus tecto, levi vel leniter striatulo, convexo, dein convexo-applanato, centro umbone vel papilla obtusa paullum manifesta ornato, $15\text{--}25$ mm lato. — Lamellis carneo-ochreis, sordide coloratis, vix confertis, emarginato-subliberis, vel profunde sinuato-adnexis, latis vel moderatim latis, sporis in cumulo carneolis (12 C 10 M & P). — Stipite concolori, cavo, tomentosofibrilloso, subaequali vel basin aut apicem versus attenuato, $25\text{--}30 \times 2\text{--}3$ mm; mycelio basali albo. — Carne alba; odore forti; sapore

raphanaceo. — Sporis (6.3)—7.8—8.3 \times (3)—3.5—3.7 μ , oblongis, ellipsoideis, vel cylindraceis, parietibus firmis, subhyalinis, inamyloideis. Basidiis 23—25 \times 6.7—7.7 μ , tetrasporis. Gloeocystidiis 36—50 \times 10—16 μ , late fusoides, ad apicem acutis vel subacutis, flavidis e contentu azurei cresylici ope laete caeruleis, ad acies gloeocystidiis similibus sed saepe ad apicem rotundatis, sulfovanillinae et sulfoformalinae ope haud discolorantibus. — Hyphis fibuligeris. Tramate hymenophorali regulari ex hyphis filamentosis efformato. Epicute pilei ex hyphis iacentibus septa saepe constrictis efformata ex qua gloeocystidia numerosa nascunt his dermatocystidiis ita ut hymenialia azureo cresylico vivide caeruleo contentu instructis, hymenialibus similibus sed paullum brevioribus latioribusque: 30—40 \times 12—21.5 μ ; dermatocystidiis apicis stipitis etiam gloeocystidiformibus et eis pilei simillimis. — Ad terram in plantationibus *Coffeae* gregatim. Typus a G o o s s e n s F o n t a n a (5548) in Zaire prope Panzi Kivu Februario 1956 lectus et in BR conservatus. — Haec species *M. cucumi* affinis sed sporis minoribus et coloribus differt.

Macrocystidia incarnata Sing. spec. nov.

Pileo incarnato, lenissime striatulo, ad marginem pallidiorem, in siccis carneo-brunneo, plus minusve levi vel haud manifeste irregulariterque plicato, glabro, late umbonato, 5—30 mm lato. — Lamellis albis vel cremeis, angustis vel sat latis, confertis vel confertissimis, adnatis, vel in vetustis saepe a stipite separatis, aciebus integris. Sporis in cumulo haud visis. — Stipite dilute flavido vel pileo subconcolori, pruinoso, saepe canaliculato, cavo, leniter basin versus incrassato vel basi dilatato, ceterum aequali vel subaequali, 7—30 \times 0.5—2.5 mm. Carne pilei alba, stipitis superficiei concolori; sapore miti. — Sporis 6.7—8.2 \times 3.3—4.3 μ , ellipsoideis, hyalinis, levibus, inamyloideis. Basidiis 16—17 \times 5—6.8 μ , tetrasporis. Gloeocystidiis typicis numerosis ad aciem et latera lamellarum, 28—46 \times 10—13 μ , flavidis, opacis, versiformibus, frequenter clavatis vel ventricosomucronatis, mucrone plerumque obtuso rarius subacuto e. gr. 4 μ lato, interdum subcapitato. — Hyphis stipitis rigidiusculis, fibulatis, inamyloideis; endocystidiis typi gloeocystidorum interdum evolutis. Subhymenio ex hyphis angustioribus breviusculis efformato. — Epicute pilei densa ex hyphis tenuibus efformata; gloeocystidiis (dermatocystidiis) plerumque sparsis, nec non gloeocystidiis (dermatocystidiis) stipitis, magis numerosis, eis hymenii similibus, longioribus et angustioribus quam gloeocystidia hymenii et saepe inter fascicula hyphalia crescentibus. — Ad quisquillas et ramulos in silva sicca vel umbrosa. Typus a G o o s s e n s F o n t a n a 30 V 1928 (ut *Lentinus*) prope Binga, Zaire lectus; paratypus: H. F r é d é r i c q (9439) prope Hoysha 17 VI 1953 lectus; ambo in BR conservati. — Species *Lactocollybiis* comparanda cum sporae in massa ignotae sunt. Videtur *M. carneipedi* affinis quae sporas paullum majores habet.

Pleurocollybia brunnescens (Earle) Sing. comb. nov.

Micromphale brunnescens Earle, Inf. An. Est. Centr. Agron. Cuba 1: 235. 1906.

Pleurotus brunnescens (Earle) Dennis, Kew Bull. 1953. 33: 1953.

Gymnopus densifolius Murr. North Am. Flora 9: 371. 1916.

Armillariella melleorubens (Berk. & Curt.) Sing. comb. nov.

Agaricus melleorubens Berk. & Curt., Journ. Linn. Soc., Bot. 10: 283. 1868.

Tricholoma moseri Sing. spec. nov. — Pileo atosquamuloso supra superficiem pallidiorum, in siccis subalbam, levi sed interdum sparse rimoso, haud viscido neque hygrophano, subconico-convexo margine magis declivi, dein magis repando, umbonato, cca. 25 mm lato. — Lamellis cinereo-albidis, confertis, latiusculis, sinuosis, sporis in cumulo albis. — Stipite albo, glabro, levi, sicco demum sordescente, cavo, aequali, cca. 22×5 mm; pseudorrhiza veloque nullis. — Carne alba, inodora. — Sporis $7.3-8.8 \times 3.5-4.3 \mu$, ellipsoideis vel oblongis, $Q=1.8-2.2$, pariete hyalina, levi, inamyloidea instructis. Basidiis $28-29 \times 7.5 \mu$, (2)—4—sporis (perpaucis basidiorum bispororum pseudoamyloideis). Cystidiis nullis sed cystidiolis versiformibus, saepe centro constrictis, e. gr. $25 \times 6.5 \mu$, hyalinis, tenuitunicatis visis. Hyphis defibulatis, inamyloideis. Epicute pilei ex hyphis iacentibus vel ascendentibus $5-14 \mu$ latis, cutem efformantibus, haud gelatinosis, pigmento intracellulari umbrino repletis consistente; hypodermio vix differente, ex hyphis paullum angustioribus aequaliter pigmentatis cutem efformantibus efformato. — Ad terram sub *Pino hartwegii*. Typus a R. S i n g e r (M 8521) in Mexico; Mexico, Paso de Cortes, 23 VII 1969 lectus et in F conservatus. — *T. gausapato* affinis. — Dr. Meinhard M o s e r dedicata species.

Pseudoomphalina arsitophylli Sing. spec. nov.

Pileo brunneo (inter „Arab“ et „Russian calf“ M & P), subhygrophano, subtiliter pellucide striatulo glabro convexo, umbilicato, demum concavo vel applanato, 6—11 mm lato. — Lamellis sordide carneis („rose beige 2“ M & P), interdum pallidioribus vel sordidioribus, distantibus, crassiusculis, furcatis, decurrentibus. — Stipite pallido, aequali, glabro, mox tubuloso, $7-20 \times 1-1.5$ mm. — Carne inodora vel subinodora. — Sporis $8-9.5$ (11) $\times 3.7-4.5 \mu$, oblongis, tenuitunicatis, hyalinis, amyloideis. Basidiis $23-28 \times 4.3-6.5 \mu$, plerumque tetrasporis. Cystidiis nullis; cheilocystidiis paucis, filamentosis, inconspicuis. Hyphis tramatis hymenophoralis tenuifilamentosis, axialiter currentibus sed intertextis, subhymenio ex elementis exiguis intertextis, pigmento intraparie-

tali brunnescentibus sed haud visibilter incrustatis eformato, omnibus inamyloideis, fibulatis. Epicute pilei ex hyphis cutem fomantibus, tenui-filamentosis, parallelis vel subparallelis efformata. — Ad terram inter raumulos *Arsitophylli* (Rubiaceae) in vegetatione „páramo“ 3000 m alt. solitario vel laxe gregario crescentes. Typus a R. S i n g e r (B 3530) in Columbia: Boyacá, Páramo Guerrero supra Pacho, 26 VII 1960, lectus et in LIL conservatus.

Clitocybula azurea Sing. spec. nov. —

Pileo atro-griseocaeruleo vel azureo, centro ruguloso maturitate striatulo et interdum sulcolato ad marginem, glabro, in siccis fusco-griseo, griseo radialiter plus minusve pallido-variegato, haud viscido, convexo dein applanato, interdum umbonato vel umbilicato, 29—32 mm lato. — Lamellis caerulescentibus, angustis vel latis, confertissimus, subliferis vel adnatis. — Stipite pallido vel concolori, praesertim ad apicem plus minusve caeruleo vel ad apicem albo et basin versus caerulescente, glabro levi, cavo, vel apicem versus leniter albo-pruinoso, apicem versus leniter attenuato vel subaequali, usque ad 33 mm longo, 2—3 mm lato; mycelio basali tomentoso; rhizomorphis nullis. — Carne concolori vel alba, immutabili, vix fragili; odore nullo. — Sporis 5—6 × 3—5 μ , e polo visis interdum leniter 4—6—angularibus angulis rotundato-obtusis, sporis aliis teretis, late ellipsoideis vel subglobosis, levibus, pariete tenui homoganeo amyloideo instructis, in ammoniaco hyalinis. Basidiis 17—22 × 5.5—6.6 μ , tetrasporis vel nonnullis (1)—2—(3)—sporibus intermixtis, basidiolis haud fuscoideis. Cheilocystidiis et pleurocystidiis sparsis et inconspicuis, interdum magis numerosis ad aciem, basidiomorphis vel filamentosis, 16—26 × 2.5—10.5 μ , interdum lateraliter sublobatis vel apicaliter subcapitatis. — Hyphis fibulatis haud gelatinosis, inamyloideis, in tramate hymenophorali manifeste regulari tenuitunicatis, subhymenio tenui ex elementis exiguis subisodiametricis apparentibus, sed elongatulis irregulariter, subhyalinis cum eis tramatis hymenophoralis in KOH. — Tegumento pilei cutiformi, ex hyphis compactis flavidofuscidulis vel subhyalinis (KOH) levibus, efformato, raro sparse hyphis terminalibus subcystidiiformibus cheilocystidiis comparandis et excrescentiis verruciformibus hic illinc ornato, sed generatim appresse filamentoso. Tegumento apicis stipitis e dermatocystidiis aggregatis vel solitariis 24—35 × (4)—5.5—11 μ , levibus et integris, inamyloideis ventricosis vel clavatis, obtusis, tenuitunicatis, numerosis efformato et supra hyphas longitudinales haud gelatinosas parallelas moderatim crasse-tunicatis vel tenuitunicatis superimpositis efformato, in media stipitis parte sparsioribus. — Caespositi sed haud conrescentes aut gregarii ad truncos delapsos Dicotyledonum in silva tropicali vel subtropicali. — Typus a R. S i n g e r (B 4115) in Brasilia: São Paulo: Serra de Cantareira, 17 XII 1964 lectus et in BAFC con-

servatus; paratypus a J. A. Steyermark & J. J. MURDAK (81) in Venezuela: Bolivar: infra Urimán prope flumen Caroní 11 I 1955 lectus et in F, NY conservatus. — *Collybiae cyanophilae* Pat. comparanda species sed haec terrigena. *Clitocybulae familiae* affinis.

Popoloma metapodium (Fr.) Sing. comb. nov.

Hygrophorus metapodius Fr. ex Fr., *Epicrisis* p. 228. 1938.

Porpoloma elytroides (Scop. ex Fr.) Sing. comb. nov.

Agaricus elytroides Scop. ex Fr., *Epicrisis* p. 39. 1938, em. Roma-gnesi 1944.

Nothopanus porrigens (Pers. ex Fr.) Sing. comb. nov.

Agaricus porrigens Pers. ex Fr., *Systema Mycol.* 1: 184. 1821.

Pleurotus porrigens (Pers. ex Fr.) Gillet *Champ. Fr.* 1: 334. 1876.

Pleurocybella porrigens (Pers. ex Fr.) Sing. *Mycologia* 39: 41. 1947.

Geopetalum abietinum (Schrad. ex) Murr. *North Am. Flora* 9: 300. 1916.

Pleurotus albolanatus Peck ex Kauffman, *Agar. Mich.* 1: 672. 1918.

Nothopanus noctilucens (Lev.) Sing. comb. nov.

Agaricus noctilucens Lev., *Ann. Sc. Nat.* III 2: 171. 1844.

Nothopanus pannelloides (Dennis) Sing. comb. nov.

Pleurotus pannelloides Dennis, *Kew Bull.* 15: 82. 1961.

Nothopanus tropicalis Sing.

Pileo olivaceo-isabellino (13—L—6 M & P, ex toto uniformiter pallide fibrilloso, ad marginem perpallido, involuto, haud radialiter innate fibrilloso, margine acuto circiter evoluto vel prope substratum cum basi confluyente, in siccis albido partim alutaceo-brunneolo-discolorato, levi, convexo, circumferentia ovali vel subcirculari, subpendulo, 20—23 mm diametro. — Lamellis cremeis vel flavis („cream“ „ecru beige“ usque ad „lime y“ M & P), confertis vel confertissimis, angustis vel angustissimis, integris, concurrentibus-attenuatis versus aream albam subcentralem vel sublateralem subtomentosam. — Sporis in cumulo albis. — Stipite nullo, sed pileo interdum lateraliter extenso formante corpusculum album carnosum mycelio basali albido vel stramineo, byssino-sericeo abundante tectum. — Carne aquosa albida, subtenacella, sed in siccis perfragili; sapore miti; odore nullo. Sporis 5—5.5 × 3.5—4 μ, breviter ellipsoideis, interdum subglobosis, levibus, tenuitunicatis, inamyloideis, ad interius latus saepe applanatis sed in aliis convexulis. Basidiis 21—23 × 5—5.8 μ, clavatis, tetrasporis. Cy-

stidiis $35\ \mu$ cc longis, cystidioliformibus, parte media ventricosis ($4.5\ \mu$ diametro), in apicem cylindraceum ($7.7\ \mu$) sursum attenuatis, ex hyphis oleiferis interdum natis, hyalinis, opacis, sparsis. Hyphis tramatis hymenophoralis irregularis brunneolo-hyalini tenui vel crassiuscule ($0.7\ \mu$) tunicatis, filamentosis vel interdum usque ad $14\ \mu$ inflatis, haud visibilter axillariter currentibus sed irregulariter intertextis, inamyloideis, fibulatis. Strato superiore pilei cuticulam crassam trichodermialem praesentante hyphis ascendantibus cylindraceis. — Ad truncum putrescentem dicotyledoneum gregatim. Typus a R. Singer (B 2081) in Bolivia: Beni; Vaca Diez, Guayaramerín 17 III 1956 lectus et in LIL, BAFC conservatus est.

Nothopanus amarescens Sing. spec. nov.

Pileo pallido et partim subaurantiaco, dein brunnescente, glabro, haud viscido, levi, convexo, 26—40 mm lato. — Lamellis albis, dein subaurantiacis ad acies, demum brunnescentibus, angustis, nonnullis furcatis, haud intervenosis, sat tenacibus, ad extensionem pilei lateralem decurrentibus. — Stipite albo extensionem tomentosam pilei lateralem sistente sed quando pilei stipitem communem habent, centrali vel excentrico, glabro, ad basin e mycelio basali subtomentoso vel substrigoso nato, solido, aequali, frequenter curvato, $10\text{--}30 \times 3\text{--}6$ mm. — Carne alba, demum brunnescente, in siccis durissima, odore nullo, sapore miti amarascente. — Sporis $5\text{--}5.5 \times 3.8\text{--}4\ \mu$, ellipsoideis vel late ellipsoides, hyalinis, inamyloideis, levibus. Basidiis $22\text{--}23 \times 4.5\text{--}6\ \mu$, tetrasporis, basi fibulata. Cystidiis nullis; sed nonnullis extensionibus hypharum oleiferarum per hymenium rumpentibus, versiformibus, fusoideo-ventricosis vel usque ad $8.5\ \mu$ dilatatis; nonnullis ex eis hymenium haud perforantibus et endocystidia sistentibus. — Hyphis tramatis hymenophoralis subregularis hyalinis vel subhyalinis, leniter crassiuscule tunicatis, inamyloideis, fibuligeris, hyphis oleiferis subtiliter intus granulatus intermixtis. Hyphis pilei crassiuscule tunicatis, radiatim dispositis, haud gelatinosis sed densis tenacibusque, paucifibulatis, plerumque pertenuibus, in epicutem undulatim transgressantibus, sed paullum differentiatis in epicute. — Ad ligna. — Typus a R. Singer (B 5502) in Brasilia: Pernambuco, Dois Irmãos prope Recife 21 VII 1964 lectus et in BAFC conservatus.

Collybia pseudocalopus (Henn.) Sing. comb. nov.

Marasmius pseudocalopus Henn., Engler's Bot. Jahrb. 30: 46. 1901.
Typus (Genevensis) visus.

Collybia ixotrama Sing. spec. nov.

Pileo ochraceo-cinnamomeo vel coriicolore, pellucide, striato, interstrias pallidiore, profunde radiatim sulcato, glabro, semigloboso-con-

vexo, papilla exigua instructo, 17—20 mm lato. — Lamellis dilute brunneis, angustis, confertis vel subconfertis, haud intervenosis, lamellis numerosis longitudine variabili intermixtis, integris, adnatis ad apicem stipitis dilatatum. — Stipite pallido-stramineo sed areis obscure porphyriis in parte inferiore variegato, subtiliter innate fibrilloso longitudinaliter sed nec pruinato nec velutino pubescenteque, sicco, aequali vel leniter apicem versus attenuato sed ipso apice dilatato, $30-32 \times 2-3$ mm; mycelio basali fibrilloso-strigoso; pseudorrhiza rhizomorphisque nullis. — Carne stramineo-subbrunneola, atroporphyrina in parte inferiore stipitis; odore nullo. — Sporis $4-5.5 \times 1.5-1.8$ μ , oblongis vel claviculatis, levibus, inamyloideis, hyalinis. — Basidiis $11-13.5 \times 4-4.5$ μ , (2)—4—sporis. Cystidiis nullis; cheilocystidiis ad aciem numerosis, cum basidiolis intermixtis, $14-22 \times 2.5-7.5$ μ , versiformibus, hyphalibus vel ventricosis aut fusoides, saepe mucronatis, hyalinis, multis ex eis nodulosis, appendiculatis vel ramosulis. Hyphis in tramate hymenophorali fibuligeris, inamyloideis; in parte infraepicutulari carnis pilei gelatinosis, laxe dispositis, irregulariter directis, tenuitunicatis et filamentosis, hyalinis, zonam 100—150 μ diam. formantibus; infra zonam gelatinosam hyphis leniter melleo-ochraceo pigmentatis, tenuibus, omnibus inamyloideis et fibulatis. — Epicute pilei ex hyphis pallide ochraceis vel melleo brunneolis, haud gelatinosis, externis undulato-nodulosis vel sparse diverticulatis vel ramulis ascendentibus appendiculatis, pigmento intraparietali instructis, admodum sparse incrustatis efformata. Hypodermio ab epicute et strato gelatinoso vix differentiato, in epicute radialiter dispositis sed leniter intertextis vel subparallelis. — Ad lignum putrescens. Typus a. R. Singer (B 2202) in Bolivia: Pando: Manuripi, Conquista 25 III 1956 lectus et in BAFC conservatus. *Marasmius viticola* Berk & Curt. (Ann. Mag. Nat. Hist. III 4: 295. 1859) similis sporis multum maioribus differt. Hic et *M. dichrous* (qui sec. Murrill synonymi sunt) ad *Collybiam* spectant. — Sect. *Ixotrama* Sing. sect. nov. Strato subhypodermiali gelatinoso. Typus sectionis: *C. ixotrama* Sing. (vide supra).

Neoclitocybe viridilutea (Rick) Sing. comb. nov.

Omphalia viridilutea Rick, Lilloa 2: 291. 1938.

Neoclitocybe alnetorum (Favre) Sing. comb. nov.

Clitocybe alnetorum Favre, Res. Rech. sc. entrepr. Parc. Nat. Suisse 6: 586. 1960.

Neoclitocybe euomphala (Berk.) Sing. ex Sing. comb. nov.

Agaricus euomphalos Berk., Hooker's Journ. Bot. 8: 131. 1856.
Omphalia euomphalos (Berk.) Sacc. Syll. 5: 334. 1887.

Omphalina euomphalos (Berk.) Dennis, Kew Bull. 1952: 495. 1952.
Micromphale euomphalum (Berk.) Sing., Acta Inst. Mycol. Recife
 2: 31. 1965.

Neoclitocybe latispora Sing. spec. nov.

Pileo fusco („chukker br.“, centro usque ad „autumn“ M & P), glabro, levi, haud vel vix hygrophano, convexo vel applanato, profunde umbilicato, 22—46 mm lato. — Lamellis griseis („grey 34“ M & P), ad aciem pallidis, angustis, confertissimis, arcuatis, decurrentibus. — Stipite fusco („winter leaf“ M & P) tomento concolori vel pallidiore tecto prope basin, ceterum glabro, levi, farcto, subaequali, vel leniter apicem versus attenuato, 33—39 × 2.5—5 mm; mycelio basali infra tomentum stipitis sordide pallido. — Carne alba, immutabili, inodora, miti. — Sporibus (7)—8.5—8.8—(11.3) × (5.5)—7—7.3—(9.3) μ, subglobosis, appendiculo hilari bene evoluto sed haud voluminoso, saepe facile collabentibus, vel un oloco callapsis, levibus, pariete homogenea hyalina, inamyloidea instructis, contentu oleagineo amorpho saepe gaudentibus (NH₄OH). Basidiis 32—36 × 9.2—10.7 μ, (1)—2—(3)—4—sporis, clavatis, hyalinis, sterigmatibus longissimis 8—16 μ, cylindratis et strictissimis (apparenter typi *Hiatulopsis* cf. *Persoonia* 4: 367, fig. 22—23. 1967). Cystidiis nullis; cheilocystidiis ad aciem heteromorpham 20—27 × 4.7—8.5 μ fusoides, appendiculo apicali simplici vel ramoso furcato ornatis, hyalinis, appendiculo frequenter obliquo, interdum subcapitato vel undulato-noduloso, 5—7 × 0.5—1.5 μ. 8 Hyphis tramatis hymenophoralis subregularis pallidis intertextis fibulatis, inamyloideis; tramatis pilei hyalinis, subparallelis; subhymenio ex elementis admodum intertextis sed haud densissimis, exiguis, hyalinis efformatis. Epicute pilei cutem praesentante, saepe hyphis hyalino-incrustatis, hyalinis tenuitunicatis consistente, sed epicute intermittente; hypodermio simili sed hyphis filamentosis hic dense parallelis, repentibus, bene pigmentatis, pigmento intraparietali atrobrunneo et incrustatione atrobrunnea manifesta, sed pigmentis intracellularibus haud visis, diametro hypharum hypodermii nonnihil latiore eis epicutis. In zona infrahypodermiali hyphis laxe dispositis et subgelatinosis; ceterum hyphis gelatinosis haud visis. Hyphis tomenti brunnei brunneis vel succineis, in fasciculis hypharum parallelarum currentibus, tenui-filamentosis. — Ad truncum *Piptadeniae*. — Typus a R. Singer (T 2082) in Argentina: Tucuman: Quebrada de la Higuera, 25 I 1955 lectus et in BAFC conservatus. — Sterigmata ea a cl. Heim (Revue Myc. 33: 291. 1969) in *Hygrophoro* spec. descripta in mentem revocant.

Micromphale griseum Sing. spec. nov.

Pileo griseo („manon“ vel 5 A 8, M & P), tomentoso in centro, subtomentoso et sulcolato ad marginem, convexo, centro depresso, 6 mm

lato. — Lamellis concoloribus, subdistantibus, angustis, adnexis (lamellis integris — 14, ex eis 4 furcatis). — Stipite concolori, subtomentoso, solido, excentrico, insitio, 3×0.4 mm. — Carne hyalina vel alba, inodora. — Sporis $7.5-10 \times 4-5$ μ , hyalinis, levibus. Basidiis $27 \times 6-8$ μ , tetrasporis. Basidiolis fusoides. Cystidiis $9-34 \times 7-14$ μ , late ventricosis vel clavatis vel vesiculosis, ad apicem late rotundatis, raro subacutis, tenuitunicatis; etiam nonnullae hyphae filamentosae hymenium percurrunt. Cheilocystidiis $27-28 \times 7.8-10$ μ , basidiis et cystidiis ad aciem lamellarum intermixtis, versiformibus et irregulariter formatis, interdum lobatis, saepe ampullaceis. — Hyphis tramatis hymenophoralis gelatinosis, tenuiter filamentosis, tenuitunicatis, laxe dispositis, fibulatis. Hyphis tramatis pilei partim subgelatinosis, filamentosis et tenuitunicatis, hyphis stipitis hyalinis, crasse tunicatis, parallelis, haud gelatinosis, omnibus inamyloideis. — Epicute pilei trichodermium efformante, sed trichodermio saepe applicato-depresso et ad marginem in cutem transiente, ex hyphis $5-7$ μ latis, saepe crusta resinacea brunnea pigmenti tectis, nonnullis ramulis recurvatis vel diverticulis ornatis sed structura Ramealium haud bene evoluta. Tegumento stipitis hyphis filamentosis vel dermatocystidioideis (ultimis $18-30 \times 9.5-11.5$ μ , ampullaceis vel vesiculosis), consistente; filamentosis 3 μ latis, omnibus tenuitunicatis, hyalinis. — Ad lignum dicotyledoneum. Typus a R. Singer (M 8752) in Mexico: Veracruz: prope Montepío 30 VII 1969 lectus et in F conservatus.

Micromphale latisporum Sing. spec. nov.

Pileo castaneo-brunneo, glabro vel subglabro, juventute sub lente leniter pruinato ad marginem, in adultis striato, sulcato, convexo, subdepresso in parte distali, circumferentia ovali, diametro 7—12 mm. — Lamellis pallide alutaceis, acie integris, mediocriter latis, subdistantibus vel distantibus, lamellulis longitudine irregularibus insertis, 5—8 lamellis integris praesentibus, haud intervenosis sed lamellulis interdum cum lamellis confluentibus, adnexo-subdecurrentibus-angustatis. — Stipite castaneo, primum albosericeo, in siccis satis atro, curvato vel stricto, laterali vel sublaterali, insitio, $1-3.5 \times 1-1.2$ mm. — Carne inodora. — Sporis $9-12 \times 6.5-7$ μ , ellipsoideis, levibus, saepe guttulis exiguis olei repletis, hyalinis. Basidiis $25-41 \times 6.5-10$ μ tetrasporis. Cystidiis nullis. Cheilocystidiis numerosis, $23-37 \times 7.5-8.5$ μ , filamentosis vel late clavatis, saepe duobus vel nonnullis appendiculis apicalibus interdum diverticulatis instructis, hyalinis, satis irregularibus. — Hyphis tramatis hymenophoralis regularis fibulatis; infra epicutem pilei strato lato gelatinoso hyalino praesente, ex hyphis crasse et aliis tenuiter tunicatis efformato, ultimis undulosis. Hyphis stipitis filamentosis, haud gelatinosis. — Epicute pilei haud gelatinoso, tenui (20 μ cc) ex hyphis filamentosis stramineis, nonnullis undulatoasperu-

latis, tenuiter tunicatis efformata; structura Ramealium haud evoluta; incrustationibus pigmenti absentibus. Tegumento stipitis ex hyphis filamentosis hinc inde nodoso-subdiverticulatis, sed structura Ramealium obsoleta. — Ad ramos ligneos Dicotyledonum in silva typi „subpáramo“. Typus a R. Singer (B 6983) in Columbia, loco San Pedro regionis Gabriel López supra Tutorá 3000 m alt. 5 V 1968 lectus et in F conservatus.

Micromphale macrosporum Sing. spec. nov.

Pileo albo, siccando fulvescente, longe pellucide striato, glabro, convexo, dein applanato, 9—11mm lato. — Lamellis albidis, subconfer-tis, angustis, laxe intervenosis, nonnullis brevioribus et nonnullis furcatis, \pm 18 lamellis integris, adnexis. — Stipite sicco fulvescente, glabro, levi, insitio 15—20 \times 0.5—1 mm (in nonnullis ad basin annulo gelatinisante substrato appresso praesente sed artefactum esse suspicor. — Sporis 12—14.5 \times 4—5.5 μ , fusoido-oblongis, levibus, hyalinis, inamyloideis. Basidiis 25—35 \times 8.5 μ tetrasporis. Cystidiis nullis. Hyphis tramatis hymenophoralis regularis et pilei hyalinis, tenuiter tunicatis, vitreis, haud notabiliter laxe dispositis, vix dissociabilibus, sed ut minime subgelatinosis, hyphis oleiferis sat numerosis, flavidulis, 3—4.5 μ latis. Hymenopodio ex hyphis axillariter dispositis parallelis subhyalinis tenuiter tunicatis efformato, omnibus anguste filamentosis nec gelatinosis. — Epicute pilei nulla vera vel densa, nonnullis hyphis terminalibus recurvatis. — Ad truncum arboris dicotyledoneae. — Typus a G. T. Prance, D. F. Coello, J. F. Ramos, et L. G. Farias (7896) in Brasilia, Acre, Municipalidad Madureira, 12 km supra ostia Rio Caete 7 X 1968 lectus et in F, NY conservatus.

Micromphale occidentale Sing. spec. nov. — Pileo ad marginem pallido sed brunnescente siccando, cinnamomeo in centro, hygrophano, pallescente dehydratatione in vegeto, sicco alutaceo-pallido in centro, levi sed per tres quartas partes radii pellucide striato et sulcato, glabro, haud glutinoso, convexo, dein applanato, obtuso, 25—28 mm lato. — Lamellis cinnamomeo-pallidis, satis angustis, subdistantibus, paullum intervenosis (venis interconnectantibus sparsis in adultis tantum), lamellis percurrentibus decem, lamellis numerosis, collario angusto quo lamellae adnatae sunt. — Stipite obscure castaneo, ad apicem pallido, tomento pallido, subtus frequenter subbrunneolo tecto, subaequali vel leniter attenuato apicem versus, insitio, 22—24 \times 2—3.2 mm, ad apicem 2—2.3 mm diam. — Carne tenui vel subnulla; odore nullo; sapore miti. — Sporis 6—8 \times 3.8—4.5 μ , plerumque 7—7.5 \times 4—4.5 μ , ellipsoideis, levibus, inamyloideis. Basidiis 29 \times 6.5 μ , tetrasporis. Basidiolis fusoides. Cystidiis nullis; cheilocystidiis numerosis, 13—21 \times 2—3 μ , rarius nonnullis ventricosis et usque ad 3.5 μ latis,

generatim filamentosis sed brevibus et irregularibus, saepe sinuoso-crenulatis unum ad latus vel furcatis, interdum ad basin usque ad $4.5\ \mu$ dilatatis, obtusis, hyalinis. — Hyphis tramatis pilei radiatim dispositis, fuscidulis, filamentosis, frequenter incrustatis pigmento resinaceo melleo; subhymenio ramoso-hyphali, possibiliter subgelatinoso; hyphis omnibus fibuligeris, inamyloideis. — Epicute pilei usque ad $30\ \mu$ in diametro, (KOH 5%), hyalina, gelatinosa, ex hyphis strictis vel undulatis, haud diverticulatis, laxe dispositis, efformata, ixocutem praestantibus. — Tegumento stipitis trichodermiali, hyphis trichodermii longis, latis ($6-0\ \mu$, plerumque $7\ \mu$ diam.), frequenter constrictis, praesertim ad septa, hyalinis vel stramineis frequenter pigmento stramineo vel melleo leniter incrustatis, apice rotundatis, tenuiter vel leniter crassiuscule tunicatis ($0.3-1\ \mu$), inamyloideis, levibus. — Ad lignum emortuum dicotyledoneum in silva tropicali-montana. Typus a R. Singer (B 6902) in Columbia: Valle, Cordillera Occidental, Cerro Horqueta (Municipalidad Cali) 2 V 1968 lectus et in F conservatus.

Micromphale separatum Sing. spec. nov. — Pileo dilute cinnamomeo margine pallidiore, levi, glabro, convexo, obtuso, 5 mm diametro. — Lamellis albis, in siccis pallide avellaneis ad aciem, albidis ceterum, haud intervenosis, distantibus, angustis, acie integris, attenuato-attingentibus, interdum subcollariatis. — Stipite atrocastaneo, subtiliter sed dense pubescenti-subvelutino de apice ad basin insititiam, subglabrescente (macroscopice), opaco, cavo, aequali, $20-21 \times 0.5$ mm rhizomorphis atris associatis sed stipite haud connexis. — Carne tenuissima. — Sporis $7-8.5 \times 3.5-5\ \mu$, ellipsoideis, hyalinis, levibus, inamyloideis. Cystidiis nullis; cheilocystidiis haud visis sed probabiliter nonnullis praesentibus in speciminibus integrioribus. — Hyphis pilei partim subgelatinosis, hyalinis, fibulatis, inamyloideis, stipitis ochraceis vel brunneolis, in parte medullari magis hyalinis, inamyloideis, tenuis vel crasse tunicatis, $4-8\ \mu$ latis. — Epicute pilei ixocutem repraesentante, hyphis angustissimis subparallelis haud incrustatis, tenuitunicatis, inamyloideis; hypodermio paullum differente, ex hyphis similibus subhyalinis vel hyalinis (KOH), saepe plus minusve ramosis efformato et hyphis nonnullis interdum in epicute insertis. Tegumento stipitis ex elementis cystidiformibus erectis efformato; his $6-52 \times 7-8.5\ \mu$, cylindraceutis, integris, levibus crasse tunicatis, inamyloideis, opacis, ad apicem rotundatis. — Ad folia decidua in silva tropicali. Typus a R. Singer (M 8943 A) in Mexico: Chiapas, inter Sospiro et El Pozo. 4 VIII 1969 lectus et in F conservatus.

Calyprella epibrya Sing. spec. nov. — Carpophoris cupuliformibus-campanulatis, profunde concavo ad latus inferius hymeniale, pendulis, $3-3.5$ mm altis, $2-3$ mm latis, superficie sterili levi, albida, subtiliter tomentosa sub lente; tramate subhyalino, hymenium versus

fusco-griseo, tenerrimo, inodoro; pseudostipite brevissimo vel subnullo, albo e mycelio basali tomentosio; superficie hymeniali levi, griseofusca. — Sporis 5.2—6 \times 3.5—5 μ , breviter ellipsoideis, hyalinis, inamyloideis. — Basidiis 19—21.5 \times 5.2—6.5—(7) μ , clavatis, hyalinis vel pallide fuscidulis, ad apicem hyalinis, tetrasporis. Cystidiis nullis. — Hyphis prope hymenium et in subhymenio plus minusve fuscidulis e pigmento incrustante, ceterum hyalinis, parallelis vel subparallelis, a basi ad marginem carpophori currentibus, filamentosis, tenuiter vel rarius firme tunicatis, inamyloideis, 3—5 μ latis, stratum 30 μ crassum eformantibus (in parte media inter marginem et basin); tramate monomitico. — Epicute (tomento superficiali) ex hyphis superne nodosinuato-flexuosis, in parte plus minusve obtuse breve-diverticulatis (structura Ramealium), in parte breviter ramulosis, obtusis, intertextis, haud gelatinosis efformata. — Ad muscos vivos gregatim sed haud dense congregatim nec concrecentes. Typus a R. Singer T 3743 in Argentina: Sierra de San Javier, prope San Agustín, 1450—1500 m alt. 14 V 1961 lectus et in LIL conservatus.

Calyptella pteridophytorum Sing. spec. nov. — Carpophoris cupuliformi-campanulatis, profunde concavis ad latus inferius hymeniale, pendulo-subcurvatis, 2—3 mm altis, 1—1.5 mm latis. Superficie sterili alba, subcinerascente in siccis, levi, subtomentoso; tramate albo vel albido, in siccis subcinerascente, inodoro, tenerrimo. Superficie hymeniali levi, superficiei sterili concolori. Stipite et pseudostipite nullis. — Sporis 6—7 \times 3—3.5—(4) μ , ellipsoideis vel ellipsoideo-oblongis, levibus, hyalinis, ad latus interius saepe applanatis, inamyloideis. — Basidiis 17—21 \times 5—6 μ tetrasporis. Cystidiis nullis. — Hyphis tramatis tenuissimis a basi marginem versus currentibus, filamentosis, sat latiusculis (4.5—6 μ diam.) prope epicutem, anguste filamentosis prope hymenium, fibuligeris, inamyloideis, haud gelatinosis, hyalinis. — Epicute structuram Ramealium repraesentante, nonnullis cellulis cystidiiformibus laceratis praesentibus. — Ad Pteridophyta emortua. — Typus a R. Singer (B 6413) in Columbia: Valle: Dagua: El Vergel: Finca La Araucana 1600 m alt. 27 IV 1968 lectus et in F conservatus.

Cyphellopsis volkensis (Henn.) Sing., comb. nov.

Cyphella variolosa Kalchbr. var. *volkensis* Henn. Pilze Ostafrikas in Engler, Die Pflanzenwelt Ostafrikas und der Nachbargebiete, Teil C p. 55. 1895.

Calyptella subgenus *Syncyphella* Sing. sub gen. nov. — A *Calyptellis* typicis differt carpophoris quae e massa sclerotoidea protocarpica versiformi apicaliter ecrescunt. — Typus generis:

Calypotella bonairensis Sing. spec. nov. — Carpophoris e corpusculis amorphis vel clavatis insititiis vel raro in substrato insititiis caespitose vel seriatim erumpentibus, oblongis-cupuliformibus ostiolo apicali mox dilatato ± 1 mm lato; superficie sterili alba, tomentosa, levi. Superficie hymeniali concava, alba, levissima. Stipite nullo, pseudostipite nullo. Massa subiculi sordide crenea, annua; contexto haud gelatinoso, inodoro. — Sporis $4.8-6 \times 2.6-3 \mu$ vel vix majoribus, ellipsoideis vel oblongis, raro subreniformibus, levibus, hyalinis, inamyloideis. — Basidiis $18 \times 5.1-6 \mu$, tetrasporis. — Hyphis haud gelatinosis, filamentosis, fibulatis, hyalinis, inamyloideis. — Epicute ex hyphis leniter nodosodiverticulatis et hyphis terminalibus breviter bifurcatis efformata (structura Ramealium) — Ad ramos emortuos arboris frondosae. — Typus a R. Singer (S 206) in Argentina: Buenos Aires: La Plata: Parque Pereira 20 VI 1962 lectus et in BAFC conservatus. — Hic spectat etiam collectio fungorum similium a W. Lazo in mina chilensi 14 XII 1961 et alia species a W. B. Cooke descripta sub nomine *Glabrocypbella ailanthi*.

Cheimonophyllum stypticoides (Speg.) Sing. comb. nov.

Panus stypticoides Speg., Bol. Acad. Nac. Cordoba 25 : (13). 1921.

Pleuromycenula Sing. gen. nov. — Ab *Hemimycena* stipite subnullo vel irregulari lateralique et hymenophori absentia vel lamellarum numero latitudineque reductis aberrat. — Typus generis. *P. ellipsoidea*.

Pleuromycenula ellipsoidea Sing. spec. nov. — Pileo albo, glabro, sicco, circumferentia subovali, ostreata vel linguiformi, aequaliter membranaceo, frequenter in stipitem lateralem extenso, usque ad 11 mm lato. — Superficie hymeniali alba, levi vel vix nevis subvenosa perpaucis venis. — Stipite nullo aut laterali, tunc albo, glabro, usque ad 1×1 mm. — Carne subnullo; odore nullo. — Sporis $6.2-7.5 \times 3.5-4.5 \mu$, si breves sunt: $6.2 \times 4.5 \mu$, si longae sunt: $7.5 \times 4 \mu$, ellipsoideis, levibus, inamyloideis. Basidiis $19-26 \times 6-7.5 \mu$, tetrasporis, paucis (1)—2—sporis. Cystidiis nullis. — Hyphis tramatis eis *Hemimycenarum* similis, tenuibus vel latiusculis (usque ad 15μ latis), intertextis, tenuitunicatis, fibulatis, inamyloideis. — Superficie sterili (semper directa caelum versus), subangustioribus quam hyphae tramatis hyphis consistente quae cutem formant; his nodulos sparsos monstrantibus sed haud structuram Ramealium efformantibus; in zona marginali nonnullis hyphis terminalibus cystidiformibus, his cellulis cystidiformibus e basi (4μ diam.) angustatis usque ad 2μ diam. et apice interdum redilatatis (usque ad 3.2μ), hyalinis, haud incrustatis, levibus, tenuitunicatis, inamyloideis. — Ad thallum musci (*Thuidium*

delicatulum) gregatim, in Abieteto. Typus a R. Singer (MA 0007) in Mexico: Mexico: Inter San Pedro de Nexapa et Paso de Cortes prope Barranca de Ameyalco 16 VII 1969 lectus et n F conservatus. — *Leptoglossum* sp. Reid, *Persoonia* 3: 146, 1963 forsán identicum.

Pleuromyconula circularis Sing. spec. nov. — Pileo albo, hygrophano, levi, glabro, sed sub lente subscabriusculo subfloculosoque, convexo, interdum umbone laterali ornato, et zona applanata circum eum gaudente, membranaceo, circumferentia circulari, 4—6 mm diametro. — Superficie hymeniali alba, levi vel perpauca venis siccandro conspicuioribus, subconca. — Stipite laterali vel sublaterali, horizontali, albo, glabro, haud insititio, $2-4.5 \times 0.7-1$ mm; mycelio basali albo, fibrilloso. — Carne subnulla, odore nullo. — Sporis 6—8 \times 4—6 μ , late ellipsoideis, interdum subglobosis fere, depressione suprahilari destitutis, hyalinis, levibus, inamyloideis. Basidiis 26—31 \times 7—10 μ tetrasporis. Cystidiis nullis. — Hyphis tramatis pilei tenerrimi horizontalibus, e cellulis latis catenulatis Hemimyconarum modo, hyalinis, haud gelatinosis, e. gr. 36—55 \times 19—30 μ efformatis, inamyloideis, fibuligeris. Subhymenio subcellulari vel cellulari, haud gelatinoso, inamyloideo, hyalino. — Epicute vix a tramate differente, e catenulis supernis repentibus consistente et superficie ipsa intermittenter filamentis tenuioribus applicatis tecta; dermatocystidiis admodum sparsis, 56—70 \times 21—22 μ , ventricosis et interdum sub apicem constrictis (ibi \pm — μ diam.), apice tunc \pm 12 μ diam.), tenuitunicatis, hyalinis, hud incrustatis, cellulis terminalibus hypharum filamentosarum interdum dilatatis ventricosis et e. gr. 30—104 \times 12—27 μ , sparsis. — Ad quisquillas ligneas inter muscos in silva tropicalimontana. — Typus a R. Singer (B 6961) in Columbia: Valle: Rio Pance 1750 m alt. 3 V 1968 lectus et in F conservatus. — Haec species inter Mniopetalas nonnihil aberrans habitatione et hyphis perlatis, qua re separanda.

Phaeodepas nutans Sing. spec. nov. — Pileo albo, dein pallide grisello-luteolo, glabro vel subglabro, cupiliformi vel longitudinaliter protracto, convexulo, levi, margine acuto, 4.5—5.5 mm lato. — Superficie hymeniali alba, profunde concava, solum versus directa, levi, interdum elevationibus veniformibus perpauca radialibus instructa, glabra. — Stipite griseo prope basin, albo prope apicem, demum nigricante ad basin, subglabro nutante, aequali, insititio, 14—15 \times 0.4—0.7 mm. — Carne tenerrima, alba vel hyalina, inodora. — Sporis 6—8 \times 2.8—3.5 μ , oblongis levibus, hyalinis, inamyloideis, frequenter appendiculo sterigmatico longo ornatis. Basidiis 19—21.5 \times 4.5—5 μ , tetrasporis, hyalinis ad basin defibulatis. Cystidiis nullis, Hyphis tramatis pilei elongatis, latis, hyalinis vel subhyalinis, tenuiter et crasse tunicatis (parietibus crassis 0.5—1 μ diam.), inamyloideis, tenuitunicatis filamentosis et multiseptatis, crassotunicatis sparsius septatis et latioribus,

neque his neque illis gelatinosis, omnibus horizontalibus, crasse tunicatis superficiem sterilem versus dominantibus, tenuiter tunicatis hymenium versus frequentioribus, tramate monomítico quamquam duo typi hypharum obvii sunt. Subhymenio paulum delimitato, elementis breviusculis minoribus efformato sed haud cellulari vel subcellulari. Hyphis stipitis parallelis inamyloideis, defibulatis. — Epicute pilei paulum differente sed hyphis terminalibus emittentibus sparsos nodulos vel spinulas minutas, sed structura Ramealium carente; tegumento stipitis ex hyphi terminalibus strati superficiali efformato, paucas sparsasque excrescentias erectas vel ascendantes emittentibus, vel per paucis nodulis spinulisque ornatis, sed in areis restrictis structuram intermittentem Ramealium formantibus. Nonnullis elementis in ammoniaco caerulescentibus visi sed artefacta videantur. — Ad folia dicotyledonea in silva tropicali-montana gregatim. — Typus a R. Singer (B 6155) in Columbia: Valle: Mun. Cali, Saladito, 15 IV 1968 lectus et in F conservatus. — A specie typica generis absentia mycelii basalis, carpophoris, praesertim stipite, multo majoribus nec non pigmento dilutiore minus abundante differi.

Aphyllotus Sing. gen. nov. — Basidiomycetes leucospori oti-deiformes, Campanellis similes a quibus absentia hymenophori distinguí possunt. Typus generis: *A. campanelliformis* Sing. Generi *Stromatocyphellae* affines.

Aphyllotus campanelliformis Sing. spec. nov. — Pileo cupuliformi, dein auriformi latere sterili convexulo superficie sterili grisello-pallida, grisea in siccis, margine acuto integro, glabra, haud viscida, levi, diametro 1.5—3 mm. — Superficie hymeniali terram versus directa sed profunde excavata, concolori, levi. — Stipite nullo, sed pseudostipite excentrico, subcentrali vel laterali praesente, glabro, subinsititio vel insititio, 1—3 × 0.2—:8 mm — Tramate gelatinoso, inodoro. — Sporis (in typo paucis), e. gr. 6.5 × 3.5 μ, asymmetricis, lateraliter visis ellipsoideis sed ad latus exterius prope partem hilarem excrescentia umboniformi ornatis, levibus, tubum germinationis in situ latiusculum emittentibus, tenuitunicatis, hyalinis, inamyloideis. Cystidiis nullis visis. — Hyphis supra hymenium filamentosis et pigmento atro inncrustatis, fibulatis, tramate cupuli maxima e parte gelatinoso, ex hyphis inamyloideis irregulariter sed praecipue superficiem sterilem versus oblique currentibus, ± 1 μ latis, hyalinis, inamyloideis efformato. — Superficie sterili structuram *Campanellae* vel *Ramealium* intermittens exhibente, ramulis curtis obtusis notatis. — Ad caules ligneos Boehmeriae sp. in silva tropicali-montana. — Typus a R. Singer (B 6034) in Columbia Cundinamarca: Futagasuga 11 IV 1968 G lectus et in F conservatus.

Resupinatus subgenus *Asterotus* (Sing.) Sing. status nov.

Asterotus Sing. Mycologia 35 : 161. 1943.

Resupinatus dealbatus (Berk.) Sing. comb. nov.

Panus dealbatus Berk., London Journ. Bot. 6: 317. 1847.

Asterotus dealbatus (Berk.) Sing. Mycologia 35: 161. 1943.

Resupinatus bicolor (Mont.) Sing. comb. nov.

Panus bicolor Mont. Ann Sc. Nat. IV. 1 : , no. 329. 1954.

Asterotus bicolor (Mont.) Sing., Sydowia 6: 376. 1952.

Resupinatus argentinus (Sing. in Sing. & Digilio) Sing. comb. nov.

Asterotus argentinus Sing. in Singer & Digilio, Lilloa 25: 107. 1952.

Resupinatus graminum (Sing.) Sing. comb. nov.

Asterotus graminum Sing. Beih. Nova Hedwigia 29: 57. 1969.

Hohenbuehelia cubensis (Murr.) Sing., Lilloa 22: 255. 1951.

Resupinatus cubensis Murrill, North Am. Fl. 9: 240. 1915.

Hohenbuehelia calongei Sing. spec. nov. — Pileo pallide fumoso-griseolo, dein pallescente prope marginem, sicco murino margine pallidiore, subtiliter pubescente, glabrescente, convexo, demum zona marginali applanata, substrato area superficiei sterilis affixo, circumferentia subelliptica sinuata in parte distali, 13—14 mm lato. — Lamellis albis, confertis, vel confertissimis fere, angustis, attenuato-concurrentibus in parte distali. Stipite nullo. — Carne alba, inodora. — Sporis 5.5—7 × 2.2—2.8 μ, cylindratis vel oblongis, frequenter leniter curvulis, levibus, hyalinis, inamyloideis. — Basidiis 14—22.5 × 3.5—5.7 μ, clavatis, tetrasporis. Metuloideis 30—68 × 11—17 μ, fusoides, crasse (3.5—7 μ) tunicatis, stramineis, granulis hyalinis crystallinis ex toto incrustatis, praesertim ad apicem acutum vel subacutum, numerosis sed haud densissime dispositis. Cheilocystidiis 12—23 × 5—10 μ, fusioideo-ventricosis, vel clavatis multis ex eis ad apicem parvo-mucronatis, contentu hyalino frequenter subtiliter granuloso vel corpusculo interno amorpho instructis, pariete firma sed vis incrassata hyalina sed in KOH interdum tumescente praeditis. — Hyphis tramatis pilei hyalinis, in parte superiore pilei gelatinosis filamentosis, 0.6—1.2 μ latis stratum prope marginem ± 100 μ crassum formantibus et horizontaliter currentibus in parte inferiore pilei filamentosis sed haud gelatinosis stratum prope marginem ± 60 μ crassum formantibus. — Epicute flocculosa ex hyphis intertextis efformata, in vetustis epicute

obsolescente. — *Ad lignum putridum in silva tropicalimontana.* — Typus a R. Singer (B 6116 a) in Columbia: Valle, Mun. Dagua, Corr. Vergel, ad Doctoris Julii Calonge Finca La Araucana 14 IV 1968 lectus et in F conservatus.

Panellus belangeri (Mont. ex Fr.) Sing. comb. nov.

Trogia belangeri Mont. ex Fr., *Epicr.* p. 402. 1838.

Agaricus belangeri Mont., in Belanger, *Voy. Ind. Or., Botan.* 2: 145. 1846.

Pleurotus belangeri (Mont.) Denn. in *Indian Phytopath.* 4: 121. 1952.

Panellus pteridophytorum Sing. spec. nov. — Pileo albo, siccando incrustatione flavida tecto, levi, convexo 1.5—(7) mm lato. — Lamellis albis, subdistantibus, siccando incrustatis et flavescenscentibus vel brunnescentibus, praesertim ad acies obtusiuscalis sed intgeras, simplicibus vel \pm furcatis, haud anastomosantibus, angustis vel latusculis, intermixtis, attenuato-adnexis vel subdecurrentibus. — Stipite albo, subgiabro vel subtomentosulo, primum centrali vel excentrico, dein excentrico vel sublaterali, demum frequenter laterali et substrato appresso, frequenter obliquo et curvulo, subaequali, 1—1.5—(7) \times $<$ 1 mm; mycelio basali sparso vel moderatim abundante, albo, fibrilloso. — Carne alba, sat tenui, inodora. — Sporis 5.5—7.3—(8.3) \times 2.5—3.8—(4.2) μ , ellipsoideis, nonnullis oblongis, levibus, amyloideis, hyalinis sed incrustationibus lamellarum adhaerentibus flavescenscentibus. — Basidiis 17—21—(30) \times 4—6 μ , (2)—4—sporis vel omnibus tetrasporis, basidiolis subfusoideis. Cystidiis ad latera sparsis, ad aciem numerosis, 37—63 \times 4.5—6.5—(9) μ , versiformibus, cylindraccis vel ampullaccis, vel ventricososubcapitatis, apice obtusis, tenui vel subtenuitunicatis, interdum furcatis, constrictione, ubi praesente, 3—4.5 μ in diametro, inamyloideis. — Hyphis tramatis hymenophoralis subregularis intertextis, crasse tunicatis, prope hymenium (hymenopodii) et subhymenii leniter pseudoamyloideis sed ceterum inamyloideis, eis pilei in strato inferiore hyphis tramatis hymenophoralis simillimi sed nonnihil radiatim dispositis, in strato subhypodermiali abrupte hyphis tenuibus tenuitunicatis gelatinosis notis, quae in massa gelatinosa laxe inseruntur, stratum quam inferius formantibus, omnibus fibulatis, inamyloideis. — Epicute pilei ab hypodermio paullum differentiat, ex hyphis tenuibus (e. gr. 1 μ latis), inamyloideis, laxe dispositis, hic illinc furcatis vel nodulis diverticulisque haud persistenter sed intermittenter ornatis. Hypodermio ex hyphis similibus sed longis, levibus, simplicibus efformato. Incrustatione levi in epicute et ad elementa hymenii praesente. — Ad rachin frondesque Pteridophytorum emortuorum in silvis tropicali-montanis. — Typus a R. Singer (M 8437) in Mexico: Oaxaca: San Agustín 10 VII 1969 lectus et in F

conservatus. Paratypus a. R. Singer (B 1235) in Bolivia: La Paz: Nor-Yungas, Carmen Pampa 17 II 1956 lectus et in LIL conservatus. — Species ita ut *P. mirabilis* (a Miller frustra ad *Mycenas ductus*) hyphis partim debiliter pseudoamyloideis insignis sed authenticus *Panellus*.

Panellus luteolus (Speg.) Sing. comb. nov.

Cantharellus luteolus Speg., An. Mus. Nac. Bs. As. 19: 263. 1909.

Panellus luteus (Dennis) Sing. comb. nov.

Panus luteus Dennis, Kew Bull. 1953: 44. 1953.

Panellus stenocystis Sing. spec. nov. — Pileo cum lamellis et stipite colore et forma simillimo, pallide coriicolore-brunneo, tomentosus, hygrophano, in siccis tomento albo supra fundum brunneum emergente, haud viscido, circumferentia ovalielliptica et superficie convexa gaudente, 29—31 mm lato. — Lamellis concoloribus confertissimis, angustis, integris, intermixtis. — Stipite a pileo haud delimitato, a latere superno haud visibili, a latere lamellarum extensione pilei levem disciformem formare apparet, exiguo lateralique, tomentoso. — Carne alba, tenaci, immutabili, sapore miti, odore nullo. — Sporis 3.5—4.5 × 2.2—2.5 μ, ellipsoideis vel late fusoideis, levibus, hyalinis, amyloideis. Basidiis 20 × 3.3—3.5 μ, tetrasporis. Cystidiis 28—35 × 2—3.3 μ, rarius usque ad 5 μ latis, lanceolato-fusoideis vel subulatis, apice attenuato acuto vel subacuto vel angustissime obtusato 0.5—1.5 μ lato instructis, inamyloideis, tenuitunicatis, hyalinis, ad latera sparsis. — Hyphis in tramate pilei et hymenophori subregularis intertextis, hyalinis, haud gelatinosis, fibulatis, inamyloideis. — Epicute (tomento) et acie lamellarum (cheilocystidia!) ex elementis ramosis vel saepe furcatis laxe dispositis et subintertextis, elongatis in apicem effilatum, subhyalinis vel hyalinis, crassiuscule tunicatis in parte inferiore, tenuitunicatis ad apices, efformatis et stratum profundum sistentibus. — Ad lignum *Alni jorullensis*. Typus a R. Singer (T 4055) in Argentina: Jujuy: Lagunas de Yala 13 II 1965 lectus et in F conservatus. — Species *P. styptico* simillima et cystidiis, gelatinisatione reducta, sapore miti distinguitur.

Mycenella cooliana (Oort) Sing. comb. nov.

Mycena cooliana Oort, Med. Nederl. Myc. Vereen. 16—17: 248. 1928.
(*Mycena trachyspora* Rea sensu A. H. Smith; sensu Reai sec. Orton
= *Mycena olida*)

Strobilurus esculentus (Wulf. apud Jacquin ex Fr.) Sing. var.
montezumae Sing. var. nov. A var. *esculento* differt cystidiis

triformibus (1) $31-49 \times 5.5-13 \mu$, crasse tunicatis, rarius tenuiter tunicatis, ampullaceis, ad apicem subcapitatis, apice incrustatis massa amorpha, resinacea ad quam sporae ($5-5.8 \times 2.5-3 \mu$) adhaerent, (2) $40-46 \times 8.5-10 \mu$, tenuiter tunicatis vel rarius moderatim crasse tunicatis (pariete $0.2-0.5 \mu$ crassa), cylindraceo-subventricosus vel ventricosus-fusoideis, apice haud vix leniter incrustatis obtusisque, (3) haud projicientibus $\pm 30 \times 7.5 \mu$, crasse tunicatis vel rarius tenuiter tunicatis, clavatis, rotundatis ad apicem, in hymenio immersis vel basidia haud superantibus, sparsis, inconspicuis. Dermatocystidiis pilei inter elementa hymeniformiter disposita (clavata vel late ventricosa $12-45 \times 7-17 \mu$) sparsis, $32-42 \times 4-11 \mu$, ampullaceis, apice $3-4 \mu$ latis et obtusis, ochraceis, pariete $0.3-0.7 \mu$ crassa instructis. — Ad conos Pini montezumae, aestate. — Typus varietatis a R. Singer in Mexico, 10 km occidentem versus a Rio Frio, D. F. 13 VII 1969 lectus et in F conservatus.

Pseudohiatula guzmaniana Sing. spec. nov. — Pileo fuligineo, subgranulato-punctato sed glabro levique, minute subrimuloso trama album inter areas cuticulares monstrante, convexo-campanulato dein applanato, centro plano vel depresso, 6–15 mm cc. lato. — Lamellis albidis (?), sordescentibus, minime vel haud intervenosis subdistantibus vel distantibus (± 17 lamellis percurrentibus), anguste adnexis, demum separantibus ab apice stipitis. — Stipite albo, sub lente hirsuto-pubescente, cavo, subaequali vel ad basin lenissime dilatato, insititio. — Carne tenui, albida. — Sporis $7-8 \times 3.7-4.3-4.5 \mu$, ellipsoideis, levibus, intus minute granulosis, hyalinis, inamyloideis. Basidiis $25 \times 6.5 \mu$, tetrasporis. Metuloideis $47-82 \times 8-27 \mu$, ampullaceis vel ventricosus (in ampullaceis apice $4-9 \mu$ lato), interdum subcapitulatis, hyalinis, crasse tunicatis, corpusculis resinosis muricatis, inamyloideis. — Hyphis tramatis pilei gelatinosis, $2-7 \mu$ latis, hyalinis, fibulatis. Hyphis tramatis hymenophoralis bilateralis in mediostrato melleo-hyalinis et subgelatinosis, in strato laterali divergentibus, hyalinis, admodum gelatinosis. Hyphis stipitis parallelis, nonnullis crasse tunicatis, allis tenuiter tunicatis. — Epicute pilei stratum subhymeniforme praesentante, elementis $26-43 \times 16-31 \mu$, vesiculosus, pigmento spadiceo-fusco vacuolari repletis firme vel moderatim subcrassiuscule tunicatis, nonnullis pariete interna subgelatinosa falsa instructis; dermatocystidiis $30-100 \times 6.5-12 \mu$, ventricosus, rarius ampullaceis, vel e basi inflata attenuatis, obtusis, crasse tunicatis, hyalinis, inamyloideis. — Pubescentia stipitis e dermatocystidiis simillimis efformato. — Ad lignum (*Berberis* ?) in silva conifera. — Typus a G. Guzman (2978) in Mexico, Morelos, Parque Nacional de Lagunas de Zampoala 3 VII 1962 lectus et in herbario Instituto Politécnico Nacional in Mexico D. F. conservatus. — *A. P. dorotheae* differt cystidiis

magis crassitunicatis, sporis magis regulariter ellipsoideis et habitatione.

Cyptotrama sect. *Xerulina* (Sing.) Sing. status nov.

Xerulina Sing. *Sydowia* 15 : 59. 1964 (ut genus)

Cyptotrama chrysopeplum (Berk. & Curt.) Sing. comb. nov.

Lentinus chrysopeplus Berk. & Curt., *Journ. Linn. Soc., Bot.* 10: 301. 1869.

Cyptotrama verruculosum (Sing.) Sing. comb. nov.

Xerula verruculosa Sing., *Rev. Mycol.* 18: 6. 1953.

Cyptotrama lachnocephalum (Pat.) Sing. comb. nov.

Collybia lachnocephala Pat., *Bull. Soc. Mycol. Fr.* 18: 299 bis, 1902.

Cyptotrama costesii (Speg.) Sing. comb. nov.

Collybia costesii Speg., *Rev. Chil. Hist. Nat.* 1 : 118. 1917.

Cyptotrama dennisii Sing. — Pileo atropadiceo, subsepiaceo, haud viscoso, per medium radium haud profunde sulcato et striato, sed levi in siccis, appresse subsquamuloso-fibrilloso radiatim et inter fibrillas hypodermium pallide alutaceum exponente, sed haud vere rimoso, convexo, obtuso vel subumbonato, 19—25 mm lato. — Lamellis albis vel albidis, siccis pallide aurantiaco-alutaceis, lamellis percurrentibus 13, venoso-costulatis, lamelluli angustioribus crispulis intermixtis et intervenosis, immo inderdum anastomosantibus, mediocriter vel sat latis, aciebus integris, concoloribus, adnatis, demum secendentibus et subcollariatis, fundo lamellarum in juvenilibus griseolis. — Stipite biso vel sordide coriicolori-fulvescente, sed pileo concolori ad apicem, glabro vel subglabro, haud viscoso, aequali vel apicem versus attenuato, insititio, 22—25 × 1.5—2.5 mm; mycelio basali vix evoluto. — Carne alba vel albida, inodora. — Sporis 10—16 × 3.5—6 μ, plerumque 12—14 × 4—5 μ, oblongis, eas *Crinipellis carecomoeis* in mentem revocantibus, levibus, hyalinis, tenuitunicatis, inamyloideis. — Basidiis 22.5—31 × 7—9.5 μ, plerumque ± 7.5 μ latis, hyalinis, clavatis. Cystidiis gloeovel coscinocystidiformibus, 23—40 × 8—12.5 μ, haud vel paullum pro-jicientibus, ita ut inconspicuis in KOH et phloxina coloratis, sed in solutione Melzeri et azurei cresylici ope manifestis quod contentus spongiosus et granulatus est pseudocystidiorum *H. lipocystidis* modo, sparse sed intense azureo-granulatis azureo cresylici ope, clavatis et basidiomorphis, raro uno appendiculo exiguo obliquo sterigmatiformi ornatis, hyalinis vel flavidis in KOH 5%. — Hyphis hyalinis, fibulatis,

inamyloideis; hyphis oleiferis paucis, 3—4 μ diam. Tramate hymenophorali hyalino, hyphis in mediostrato et strato laterali paullum differentibus sed in parte aciebus proxima subgelatinosis, ceterum haud gelatinosis, prope trama pilei nonnullis leniter subcrasse tunicatis, usque ad 12 μ latis, ceterum tenuitunicatis et tenuioribus (nonnullis partibus inflatis usque ad 12 μ exceptis), initio in parte aciebus proxima subbilateralibus dein (in adultis) regulariter dispositis. Subhymenio apparenter subcellulari-muriformi, ex elementis exiguis, irregularibus haud gelatinosis efformato, hyalino. Hyphis tramatis pilei hyalinis vel alutaceo-hyalinis in KOH et NH₄OH, radiatim dispositis, tenuitunicatis (nonnullis leniter subcrasse tunicatis), haud vel vix geatinosis sed prope hypodermium subgelatinosis et omnibus tenuiter tunicatis in speciminibus juvenilibus. — Epicute pilei repraesentata trichodermio profundo, trichodermio ex catenulis cellularum hyphalium saepe longissimarum ad apicem distalem obtusarum efformato; elementis illis usque ad 75 \times 7—12 μ , levibus, pigmento vacuolari spadiceo vel brunneo repletis, tenuiter vel crasse tunicatis (parietibus hyalinis 0.2—1 μ crassis, plerumque usque ad 0.7 μ), subintertextis et ascendentibus et frequenter in fascicula piliformia agglutinatis, subvitreis in KOH. — Ad radicem lignosam Dicotyledonum in silva tropicali pluviali. Typus a R. Singer (M 8763) in Mexico: Veracruz 30 VII 1969 lectus et in F conservatus. — Species *Hydropodibus sabalis*, *lipocystidi*, *H. bolivianae* cystidiorum typo analogae, Dr. R. G. W. Dennis dedicata.

Chaetocalathus paradoxus (Henn.) Sing. comb. nov.

Panus paradoxus Henn., Engler Bot. Jahrb. 23: 547. 1897.

Typus berolinensis in medio alcoholico conservatus cystidia plerumque simplicia rarius bifurcata habet quare a *C africano* differre apparet.

Chaetocalathus sect. *Meristocystis* subsectio *Intermedii* Sing. subsect. nov. — Carpophoris albis pigmento omnino fere absente. — Typus subsectionis: *C. pachytrichius* Sing. — Subsectio *Colorati* Sing. subsect. nov. — Carpophoris pigmentatis. — Typus subsectionis: *C. africanus* (Pat.) Sing.

Hemimyccena crispuliformis Sing. spec. nov. — Pileo albo, hygrophano, haud viscido, glabro vel subglabro, levi vel sulcato, convexo, dein repando, centro depresso vel umbonato, 3.5—5.5 mm lato. — Lamellis albis, veniformibus, saepe incompletis vel nullis, distantibus, simplicibus. — Stipite albo, macroscopice glabro vel subglabro, sub lente in parte inferiore pubescente, in parte superiore pruinato, haud insititio, glabrescente, subaequali, 3—5 \times 0.4—0.6 mm;

mycelio basali ex protuberantiis strigosis vel hyphis radialibus basalibus consistente, albo. — Carne alba, tennerrima, inodora vel subinodora. — Sporis $5.5-7.5 \times 3-3.7$ (4) μ , frontaliter breviter fusiformibus vel subellipsoideis, lateraliter ellipsoideis et oblongis et saepe nonnihil curvatis, et ad latus interius applanatis, tenuitunicatis, hyalinis, levibus, inamyloideis. — Basidiis $16-24 \times 4.5-5.7$ μ , tetrasporis, basidiolis haud fusiformibus. Cystidiis summopere sparsis, $20-28 \times 3-8$ μ , filamentosis vel fusioideis et tunc mucronatis (1.5 μ diam.), hyalinis. — Hyphis haud gelatinosis, hyalinis, fibulatis, inamyloideis. — Epicute pilei, e hyphis crasse tunicatis natis hyphis terminalibus obtusis, interdum claviculatis, sed nonnullis — epicuticularibus — aequaliter crasse tunicatis sed acutis, integris, appressis vel ascendentibus, raro erectis paucis obtusato-attenuatis, aliis acutissimis, parietibus $1-2$ μ crassis, diametro $4-8$ μ . Tegumento stipitis subpiloso, pilis versiformibus, usque ad 60 μ longis, cylindraceutis vel brevioribus et clavatis, pariete 0.5 μ crassa, hyalina, interdum tenuiore praeditis, integris, interdum ad apicem digitaliter bifurcatis vel uno vel tribus diverticulis digitiformibus instructis, $17-20 \times 6-14$ μ . — Ad radices emortuas et frustula lignea in silva pluviali tropicali gregatim. — Typus a R. Singer (B 6263) in Columbia: Valle: Buenaventura, Calima, 20 IV 1968 lectus et in F conservatus.

Hemimycena herrerae Sing. spec. nov. — Pileo albo, glabro, levi, sed sub lente minutissime puberulo, convexo, 2–3 mm lato. — Lamellis albis, in siccis saepe acie coriicolore gaudentibus, mediocriter densis vel subdistantibus, simplicibus vel nonnullis furcatis, subangustis vel mediocriter latis, arcuatis, subliberis vel subdecurrentibus. — Stipite albo, glabro, levi, haud viscido, subaequali, haud insititio, plus minusve excentrico plus minusve curvato, $0.7-1.2 \times 0.2-3$ mm; mycelio basali albo byssoideo, ad basin pubescente, tenui. — Carne tenerrima, alba, inodora. — Sporis $9-11 \times 3.2-3.6$ μ , fusioideo-oblongis, levibus, hyalinis, inamyloideis. — Basidiis $15-21 \times 6$ μ , maxima e parte ad basin fibulatis, tetrasporis. Cystidiis paucis $17-18 \times 5-6$ μ , ventricososubulatis, acutis, integris, tenuitunicatis, haud conspicuis. — Hyphis dense compressis, nonnullis latiusculis haud gelatinosis, tenuitunicatis, in pileo inamyloideis. — Epicute pilei structura Ramealium gaudente, ex hyphis manifeste diverticulatis vel ramulosis, haud gelatinosis, tenuitunicatis, inamyloideis efformata. — Ad quisquiliis coniferas in Abieteto religiosae gregatim. — Typus a R. Singer et T. Herrera in Mexico: prope viam a San Pedro de Nexapa versus Paso de Cortes 16. VII 1969 lectus et in F conservatus.

Hemimycena setulosipes (Murr.) Sing. comb. nov.

Marasmius setulosipes Murr., N. Amer. Flora 9: 257. 1915.

Mycena abieticola Sing. — Pileo melleo-brunneo („Centennial br.“ in centro, „sombbrero“ M & P ad marginem), haud viscido, ad marginem sulcato, macroscopice glabro sed sub lente minutissime et sparsim pilosulo, sicco unicolore, alutaceo-ochraceo, margine primum ad stipitem appresso, ceterum convexo, obtuso, 5 mm lato. — Lamellis albidis vel albis, mediocriter latis, ascendentibus, late adnatis, mediocriter densis, ad aciem integris. — Stipite centro pilei concolori, in siccis dilute ochraceobrunneo, pilis sparsis hyalinis in parte inferiore adperso, pruinoso in parte superiore, glabrescente, cavo, apicem versus attenuato, $15 \times 0.5-0.8$ mm; mycelio basali pilis numerosis piloso. — Carne tenui inodora. — Sporis $10.5-13.5 \times 8.5-12 \mu$, subglobosis, tenuiter tunicatis, levibus, in ammoniaco hyalinis vel flavido-hyalinis, amyloideis. — Basidiis $25-35.5 \times 8-13.5 \mu$, clavatis vel constrictis, basi defibulata instructis, sterigmatibus $4-10.5 \times 3-4 \mu$, nonnullis spiculo ornatis. Cystidiis nullis; cheilocystidiis numerosis, usque ad 30μ longis corpore basali claviformi, tenuitunicato, rarius ventricoso $7-20 \times 5-10 \mu$ instructis et setulis apicalibus digitiformibus, $2-12 \times 0.7-2.5 \mu$, interdum immediate e cellula subhymeniali natis et tunc filiformibus sed tenuibus $1.5-3 \mu$ diam. acie heteromorpha. — Hyphis plerumque defibulatis, perpaucis fibulis visis, in strato supralamellari angustrioribus, in pileo voluminosis (cellulis $5-22 \mu$ crassis et frequentissime admodum inflatis, radialiter dispositis, prope epicutem frequenter plus minusve crasse tunicatis (e. gr. 1μ diam.), fortiter pseudoamyloideis. — Epicute pilei inamyloidea, cutem efformante, ex hyphis appressis, subparallelis hyalinis vel flavidis et interdum flavo- vel melleo-incrustatis, externis setulas eis cheilocystidiorum simillimas emittentibus, haud gelatinosis efformata; pilis longioribus e. gr. $70 \times 3 \mu$ visis, sphaerocystibus in epicute immersis nec non in regione acieis tramatis hymenophoralis et superficieis stipitis sparsis, $21-30 \times 15-22 \mu$, crasse ($1.5-2 \mu$) tunicatis, plerumque globosis vel elongatis, interdum flavidis et nonnumquam setulas eis cheilocystidiorum simillimas emittentibus. Stipitis tegumento e pilis saepe fasciculatis, plus minusve diverticulatis laceratis efformato. — Ad corticem Abietis religiosae. — Typus a R. Singer (MA 33) in Mexico: inter San Pedro de Nexapa et Paso de Cortes prope Barranca de Ameyalco 3200 m alt. 16 VII 1969 lectus et in F conservatus. — *M. melinocephalae* affinis sed basidiis haud tetrasporis et fibulis admodum sparsis et cheilocystidiis longioribus differt.

Mycena americana (A. H. Smith) Sing.

Mycena olida var. *americana* A. H. Smith, Univ. Mich. Stud. 17: 153. 1947.

Mycena aosma Sing. spec. nov. — Pileo griseo-fusco, haud viscido, longe pectinato, convexo vel convexo-umbilicato, 6—11 mm

lato. — Lamellis albis, confertis, moderatim latis, liberis haud collariatis. — Stipite albo, ad basin fusco, glabro, levi, haud viscido, aequali, $15-27 \times 1$ mm; substrato affixo hyphis discum fere formantibus, basi discoideo-dilatata radianter fibrillosa, levi, alba; supra discum basi stipitis leniter albofibrilloso-pilosa. — Carne tenerrima, alba, inodora. — Sporis $6-9 \times 4-5 \mu$, plerumque $9 \times 5 \mu$, ellipsoideis, levibus, lenissime amyloideis. — Basidiis $20-34 \times 9-9.5 \mu$, pluribus tetrasporis quam bisporis, initio subglobosis. Cystidiis praecipue ad acies lamellarum visis $33-39 \times 9-10 \mu$, fusioideo-ventricosis, levibus vel una protuberantia noduliformi ad latus, uniappendiculatis appendiculo mucroniformi subacuto, hyalinis. — Hyphis tramatis hymenophoralis latis et brevibus, haud gelatinosis, hyalinis, fibulatis, pseudoamyloideis. — Epicute pilei ex agglomeratione elementorum brevisculorum vel ventricosoclavatorum haud gelatinosorum efformata; elementis his simpliciter tunicatis rarius pariete subinflata instructis, acanthophysoide diverticulatis, hyalinis vel subhyalinis, $30-40 \times 12-18 \mu$, ascendentibus, late rotundatis ad apicem, sed ubi elementa illa absunt, (in sulcis) hyphis diverticulatis, nonnullis ex eis fuscidulis, aliis hyalinis obviis. Hypodermio gelatinoso, filamentoso, ex hyphis laxè dispositis $1.5-5 \mu$ latis efformato. Pilis basis stipitis $80-140 \times 10-13 \mu$ e basi attenuatis apicem angustum sed haud acutum versus. — Ad lignum emortuum. — Typus a R. Singer (B 4265) in Brasilia: Pará: Belem 10 VI 1966 lectus et in BAFC conservatus.

Myцена biornata Sing. spec. nov. — Pileo albo, pulverulento, in siccis maculis fulvis ornato, quae sub lente verrucae laxè affixae apparent, sicco, campanulato-convexo, 3 mm alto et lato. — Lamellis albis, mediocriter densis, mediocriter latis, ascendentibus, rotundatis. — Stipite albo, tenuiter filamentoso, pulverulento-pubescente, prope basin fibrilloso-pubescente, aequali, 43×2 mm; disco basali bene evoluto, albo, profunde sulcato. — Carne admodum tenui, alba, inodora. — Sporis (8)— $9-10.5 \times (3)-4-4.5 \mu$, cylindraceis vel longe ellipsoideis et saepe subreniformibus, levibus, hyalinis, minime amyloideis. — Basidiis $13-19 \times 6 \mu$, tetrasporis. Cystidiis $20-25 \times 9-10 \mu$, clavatis vel clavato-ventricosis, rarius subvesiculososis, hyalinis, levibus. — Hyphis fibulatis, pseudoamyloideis. — Epicute pilei ex elementis globosis vel elongatis acanthophysoideis consistente; elementis his ex toto tectis diverticulis setulosis $1-2 \times 0.7-1 \mu$ cylindraceis, contentu, pariete, setulis omnibus ex toto hyalinis. Verrucis superpositis apparenter e velo primordiali natis, ex duobus elementis compositis (1) massis cellularum irregularibus, cellulis crasse tunicatis, intus fulve vel ochraceo tunicatis, asperulatis externe, $19 \times 12 \mu$, polymorphis, (2) cellulis numerosis insignibus, isodiametricis vel subisodiametricis, ab elementis epicuticularibus differentibus quia non solum diverticulatae sunt sed etiam excrescentiis usque ad 50μ longis acutis, subhyalinis vel rarius fulvidulis vel fulvis, frequenter ramosis, crasse tunicatis, prope cellulam basa-

lem crassioribus quam prope apices ornatae sunt, corpore centrali 22—30 μ diam., fulvidulis vel fulvis vel rarius subhyalinis. Tegumento stipitis in parte superiore stipitis ex elementis epicuticularibus pilei simillimis efformato, sed in parte inferiore his elementis magis elongatis et pilositatem fibrillosam zonae supra discum basalem formantibus, hic usque ad 8—17 μ latis et longissimis. Supra tegumentum illud etiam elementis veli ea pilei simulantibus praesentibus. — Elementis omnibus tegumenti epicuticularis et velaris inamyloideis. — Ad folia dicotyledonea in silva tropicali marginali. — Typus a R. Singer (B 4267) in Brasilia: Pará: Belem 10 VII 1966 lectus et in BAFC conservatus. Species mirabilis, *Mycenam discobasem* et *Amparoinam* in mentem revocat.

Mycena boninensis (Berk. & Curt.) Sing. comb. nov.

Hiatula boninensis Berk. & Curt., Amer. Ac. Arts Sc. 4: 1858.

Mycena carminis Sing. spec. nov. — Pileo aurantiaco-rubello („burnt orange“ M&P), flavo in parte inferiore, ad apicem pruilion“ M&P) vel ex toto aureo, glabro, per medium radium vel per duas tertias marginis pellucide striato, in siccis manifeste sulcato, haud viscoso, semiglobato, dein convexo, dein margine revurvo, in siccis margine incurvo, 6—19 mm lato. — Lamellis margini pilei concoloribus, moderatim densis, sat latis, arcuatis, decurrentibus. — Stipite ad apicem aurantiaco („sunburst“ M&P), flavo in parte inferiore, ad apicem pruinato, ceterum glabro, levi, apicem versus subattenuato et basi saepe bulbilloso, 35—55 \times 1—1.7 mm, basi interdum usque ad 2.5 mm lato; mycelio basali sparso vel abundante, strigoso vel fibrilloso, albo. — Carne tenui, inodora. — Sporis 6.3—8.2 \times 4—4.8 μ , ellipsoideis, levibus, hyalinis, amyloideis. — Basidiis 28—29 \times 7—7.5 μ , tetrasporis. Cystidiis nullis; cheilocystidiis 18—27 \times 6.7—8.2 μ , cylindraceutis, clavatis ventricosos-ampullaceis, uno vel multis appendiculis apicalibus et subapicalibus divergentibus ornatis (his in magnitudine indicata haud inclusis). — Hyphis in ammoniaco pallide aurantiacis, multis ex eis pseudoamyloideis, haud gelatinosis. — Epicute pilei ex hyphis filamentosis diverticulis rotundato-obtusis abundanter acanthophysiformiter ornatis efformata; hypodermio ita ut tramate pilei et mediostrati elementis hyphosis late inflatis formato (13—18 μ diam.). Typus a R. Singer in Bolivia, La Paz, Nor-Yungas, Carmen Pampa 1 II 1956 lectus (LIL).

Mycena cuticolor (Murr.) Sing. comb. nov.

Omphalopsis cuticolor Murr., North Am. Flora 9: 317. 1915

Mycena dinae Sing. spec. nov. — Pileo griseo, centro sordide fulvo-brunneo vel brunneo-grisello, ad marginem ruditer sulcato,

glabro, centro levi, haud viscoso, convexo, dein margine recurvato-elevato, umbilicato umbilico exiguo parvo, 3—4 mm lato. — Lamellis albis, sat latis, distantibus, decurrentibus. — Stipite sordide fulvo-brunneo, ad apicem albo, glabro, haud viscoso, subaequali, tenerrimo, $\pm 9 \times 0.1-0.2$ mm; mycelio basali tomentosio. — Carne tenui, inodora. — Sporis $6.3-8.2 \times 3.3-4$ μ , ellipsoideis vel frequentius oblongis ($Q = 1.8-2.2$), hyalinis, leniter amyloideis, levibus. — Basidiis $21-22 \times 7-9$ μ , (2—3—) 4— sporis. Cystidiis nullis. Cheilocystidiis ad aciem intermittenter heteromorpham (et ubi desunt — cellulae tramales ad aciem percurrunt), $10-15$ μ longis, densissimis, diverticulatis, interdum filamentosis, aliis clavariiformiter ramulosis, ramulis digitiformibus, omnibus hyalinis. — Hyphis tramatis pilei ex elementis cellularibus latis, curtis, voluminosis efformatis, haud gelatinosis, fortiter pseudo-amyloideis. — Epicute pilei hyphosa, ex hyphis diverticulis longis (2—10 μ) erectis, densis, inamyloideis ornatis efformata. — Ad uvam angiospermarum in silva submontana solitario. — Typus a R. Singer & Dina Sejzer in Argentina; Jujuy, 15 km NE a Posta de Lozano 20 II 1966 lectus (no T 5310) et in F conservatus.

Mycena fimetaria (Murr.) Sing.

Gymnopus fimetarius Murr., North Am. Flora 9: 372. 1916

Mycena heterotrama Sing. spec. nov. — Pileo, subviscido, per duas tertias radii pellucide striato, glabro, convexo. papillato, 10—15 mm lato. — Lamellis albis, dein griseis, latis, subdistantibus dein distantibus, subascendentibus, dein horizontalibus, adnatis vel arcuato-subdecurrentibus. — Stipite dilute griseo, ad apicem albo, subviscido, glabro, apicem versus attenuato, curvato $40-47 \times 1.5-2$ mm; mycelio basali albo, lanoso-byssaceo. — Carne tenerrima, superficiebus subconcolori, inodora. — Sporis $7.5-9.5$ (10.5) $\times 5-6$ μ , ellipsoideis, nonnullis ovoideis, levibus, hyalinis, amyloideis, Basidiis $35 \times 7-8$ μ , tetrasporis. Cystidiis nullis. Cheilocystidiis ad aciem heteromorpham $30-44 \times 8-15$ μ (appendiculis inclusis), vesiculososo-pedicellatis vel clavatoventricosis, plerumque (sed non semper) ad apicem appendiculis erectis ($6-12 \times 2-3$ μ) interdum furcatis, digitiformibus obtusis ornatis, omnibus hyalinis. — Hyphis fibulatis, inamyloideis (vel lento in superpositione minime vel perpauillum subpseudoamyloideis), haud gelatinosis (superficialibus exceptis), in tramate hymenophorali regulari et in pileo e cullulis catenulatis voluminosis ($\times 20-29$ μ) consistentibus, in stipite parallelis. — Epicute pilei ex hyphis iacentibus filamentosis gelatinosis tenuitunicatis levibus efformata; hypodermio ex hyphis cutem formantibus haud gelatinosis, partim latis vel latissimis efformato; pigmento in hypodermio nec non in tramate pilei vacuolari, intracellulari, fuscobrunneo, sed in hyphis epicuti proximis interdum absente. — Ad lignum Laureliae in silva subxerophytica sed locis humi-

dis, gregatim. — Typus a R Singer (M 7153) in parte centrali chilensi, provincia Santiago, 2 km a Ranque 6 VII 1967 lectus et in SGO conservatus.

Mycena idroboi Sing, spec. nov. — Pileo fusco, sulcato, haud hygrophano, convexo, fortiter et abrupte sed obtuse papillato, 23 mm lato. — Lamellis albis, latis anstomosanti-intervenosis, decurrentibus. — Stipite fusco, apice fuscidulo-pallido, viscido, glabro, ad apicem leniter incrassato, $37 \times 1.5-2$ mm; mycelio basali strigoso albo. — Carne tenui, inodora. — Sporis (6)— $6.5-9-(8.5) \times 4.5-6.3 \mu$, ellipsoideis vel late ellipsoideis, tenuitunicatis, gutta olei ampla impletis, levibus, plerumque inamyloideis sed paucis lenissime amyloideis. Basidiis $18-27-(37) \times 5-7.5 \mu$, bisporis. Cystidiis nullis; cheilocystidiis ad aciem gelatinosam heterormorpham ex cellulis terminalibus hypharum in massa gelatinosa immersarum efformatis, $11-17 \times 6-7 \mu$ (diverticulis exculsis), inamyloideis, e corpore clavato-ventricoso appendiculis digitiformibus apicalibus vel subapicalibus plus minusve divergentibus $1.5-4.5 \times 1.5-(2) \mu$ natis. — Hyphis tramatis pilei in zona lata (100 μ) superiore (sub hypodermio) gelatinosis, tenuibus (0.5—2 μ), hyalinis, inamyloideis, eis tramatis hymenophoralis in strato laterali etiam in matrice gelatinosa laxe dispositis, inamyloideis, 0.5—2 μ latis, sed in mediostrato vix gelatinosis, 3—6 μ latis et pseudoamyloideis; eis zonae supralamellaris haud gelatinisatis, sed hoc stratum superiore angustius est. Hyphis stipitis parallelis, hyalinis, nonnullis pigmento intraparietali vel incrustante fuligineo gaudentibus; hyphis omnibus non-gelatinosis pseudoamyloideis, fibulatis. — Epicute pilei ex hyphis repentibus filamentosis, diverticulatis, subgelatinosis, hyalinis efformata, diverticulis obtusis, densis; dermatocystidis paucis sparsis cheilocystidiis similibus hic inde visis. Vestimento stipitis ex hyphis tenuibus, filamentosis in matrice gelatinosa immersis hyalinis efformato. — Ad ramulum lignum delapsus in silva tropicalimontana solitario. Typus a R. Singer & J. Idrobo in Columbia: Valle, Mun. Cali, via Dagua versus prope Saladito 16 IV 1968 1700 m alt. lectus et in F conservatus (no. B 6157).

Mycena ixoleuca Sing. spec. nov. — Pileo albo, siccando rutilo-brunneo, profunde sulcato, glabro, viscido, convexocampanulato, 1—2 mm lato. Lamellis albis, mediocriter latis, moderatim densis, acie integris, adnato-subdecurrentibus. — Stipite albo, in tertia parte inferiore stramineo, glabro, viscido, subtiliter puberulo e dermatocystidiis sub lente visibilibus, insititio vel subsinititio, 20×0.1 mm. — Carne tenuissima, inodora. — Sporis $5-5.5 \times 3 \mu$, ellipsoideis, levibus, amyloideis. — Basidiis exiguis. Cheilocystidiis filamentosoramosis gelatinisatis, echinulato-nodosis, hyalinis. — Hyphis in tramate pilei et stipitis haud gelatinosis, fibulatis, in pileo latis et multiseptatis et modice sed manifeste pseudoamyloideis, in stipite sortiter pseudoamyloideis et parallelis. — Epicute pilei profunde gelatinosa, hyphis cheilocystidiis simillimis inamyloideis consistente. Tegumento stipitis tenui,

gelatinoso, ex hyphis firme tunicatis, inamyloideis, in matrice gelatinosa immersis, versiformibus (filamentosis vel ventricosis vel ampullaceo-mucronatis) efformato. — Ad folia delapsa dicotyledonea in silva pluviali tropicali dense gregario sed haud caespitose. — Typus a R. Singer in Bolivia: Beni: Vaca Diez, Guayaramerin, 7—III 1956, lectus et in BAFC conservatus.

Mycena ixoxantha Sing. spec. nov. — Pileo citrino-flavo, glabro vel subglabro, in tertia externa radii sulcato, alte campanulato, 3 mm alto, 2.5 mm lato. — Lamellis albis, latissimis, acie paullum extensa, integra, subarcuata, octo lamellis percurrentibus, lamellis nullis, distantibus, haud intervenosis, late adnatis vel leniter subdecurrentibus. — Stipite succineo, in parte inferiore sub lente subtiliter pruinoso, parte superiore glabro, nitido, ad basin attenuato sed in parte superiore aequali, $16 \times 0.1-0.2$ mm; mycelio basali nullo viso. — Carne tenerrima, inodora. — Sporis $5.3-6.5 \times 3.5-3.8$ μ , ellipsoideis, levibus, amyloideis. — Basidiis $13-17 \times 4.8-6.2$ μ , tetrasporis. Cystidiis nullis; cheilocystidiis $13 \times 6-9$ μ , vesiculososis vel ventricosos-clavatis et ad apicem appendiculis apicalibus tantum erectis vel suberectis digitiformibus $3-6$ μ longis laceratis, hyalinis, ex eis acie gelatinosa lamellarum heteromorpha; ad basin cheilocystidiis in hyphas gelatinosas prolongatis. — Hyphis haud gelatinisatis, pseudoamyloideis, latis, multi-septatis, e cellulis voluminosis efformatis, catenulatis in zona supralamellari et in tramate hymenophorali tantum praesentibus; gelatinosis autem in zona superiore pilei latissima filamentosis, in matrice gelatinosa immersis, inamyloideis, omnibus fibulatis. — Epicute ex hypharum zonae superioris tramatis pilei prolongationibus efformata, his prolongationibus hyphalibus diverticulatis. — Ad Pteridophytorum frondes emortuos in silvulis „subparamo“. — Typus a R. Singer (B 6476) in Columbia: Caua: prope vulcanum Puracé 30 IV 1968 2800 m alt. lectus et in F conservatus.

Mycena leucoxantha Sing. spec. nov. — Pileo dilute citrino-flavo, leniter striato, subviscido, glabro, convexo, usque ad 6 mm lato. — Lamellis albis, distantibus, latis, adnato-subdecurrentibus. — Stipite dilute flavo, subviscido, levi, glabro, $12 \times 0.5-0.8$ mm; mycelio basali albo, fibrilloso. — Carne tenerrima, inodora. — Sporis $8-11 \times 7.5-10.3$ μ , globosis vel subglobosis, levibus, hyalinis, amyloideis. — Basidiis 29×9.7 μ . Cystidiis nullis. Cheilocystidiis $13-14 \times 8-10.5$ μ , subvesiculososis, appendiculis apicalibus in tertia superiore cellulae divergentibus erectis setuloidiformibus $1-2$ μ longis ornatis, acie heteromorpha. — Hyphis fibulatis, pseudoamyloideis. — Epicute pilei ex hyphis repentibus, parallelis vel subparallelis filamentosis, levibus, in parte externa possibiliter subgelatinascentibus efformata. — Ad frustula lignea ad marginem plantationis novae in zona tropicali-montana. Typus a R. Singer (B 742) in Bolivia: La Paz: Nor-Yungas, Charombamba, 30 I 1956 lectus et in LIL, BAFC conservatus.

Mycena melandeta Sing. spec. nov. — Pileo fuligineo-griseo vel cinnamomeobrunneo, haud hygrophano, siccando nigrescente, in vegetis per medium radium striato, glabro, haud viscido, campanulato-subumbonato vel centro leniter depresso, 9.5—10 mm lato. — Lamellis vinaceo-avellaneis vel cinereis, subdistantibus, arcuatis, subhorizontalibus, latis, sparse intervenosis vel haud intervenosis, acie integris et concoloribus, decurrentibus. — Stipite pileo concolori sed multum pallidiore, apicem versus nigricante in vetustis, glabro, haud viscido, in siccis frequenter longitudinaliter nigro-striatis, sed levibus, nudo, cavo, haud insititio, aequali vel leniter gradatim apicem versus subattenuato, 44—92 × 0.8—1.5 mm; mycelio basali albido vel sordido, vinaceo-purpurascente, fibrilloso et saepe strigoso; velo nullo. — Carne albida vel alba, in siccis partim nigricante, sapore miti; odore nullo; latice in stipite purpureo. — Sporis 7—9 × 3.2—5 μ, ellipsoideis, cylindraceis, oblongis, levibus hyalinis, debiliter sed sine dubitatione amyloides. — Basidiis 30—44 × 6.5—7.8 μ, tetrasporis. Cystidiis veris nullis, sed pseudocystidiis et cheilocystidiis praesentibus. Pseudocystidiis paulum vel nonnihil projicientibus, elongatis, 5.5—7 μ latis, apice obtusis, cylindraceis vel leniter anguste ventricosus, interdum constrictione subapicali haud profunda gaudentibus, firme sed haud crasse tunicatis, tunica hyalina, contentu granulati vel vermiculari vel amorpho nigro repletis, sine septis profunde continuis in tramate hymenophorali. Cheilocystidiis ad aciem heteromorpham 18—28 × 6—8 μ, versiformibus, clavatis, ventricosus, cylindraceis, ampullaceis, semper ad apicem rotundatis, subhyalinis vel pallidissime fuscidulis, ad apicem et frequenter ad latera spinulis divergentibus acutis 5—9 × 1 μ compluribus vel numerosis obsitis.—Hyphis haud gelatinosis, tenuiter vel moderatim crassiuscule tunicatis, fibulatis, pseudoamyloideis, sursum latissimis, multiseptatis, 5—15 μ latis, elementis conductoribus 4—7 μ latis longis conspicuis, saepe cum pseudocystidiis confluentibus. — Tramate hymenophorali regulari, ex hyphis in mediostrato latioribus (3—12 μ), in strato laterali angustioribus, haud gelatinosis efformato. — Epicute pilei haud gelatinosa, ex hyphis angustis repentibus, ad latus exterius diverticulatis, fuscidulis; diverticulis 5—8 μ longis, cylindraceis, subacutis vel subobtusis, interdum fuliginosis. Hypodermio e catenulis cellularum hyphalium latis fuscidulis efformato; dermatocystidiis in epicute et in superficie stipitis spiculatis sparsis vel raris. — Ad muscos et acus abietinas in Abieteto religiosae in zona montana. — Typus a R. Singer (MA 051) in Mexico: secundum viam a San Pedro de Nexapa versus Paso de Cortes prope Barranca de Ameyalco, 21 VII 1969 3200 m alt. lectus et in F conservatus. — Paratypus ipso ibidem lectus (no MA 045, F).

Mycena melinocephala Sing. spec. nov. — Pileo melleo („rattan“ vel „honey“ M&P), sulcato, sicco, glabro, convexo, in siccis umbilico praedito, ± 7 mm lato. — Lamellis dilute griseis („Long-

beach“ M&P), sat latis distantibus, arcuatis, adnatis, dente leniter decurrente. — Stipite concolori pileo, ex integro subtiliter pruinato-sericello, haud viscido, haud insititio, aequali vel ad basin attenuato, 15—22 × 1 mm; mycelio basali albo, fibrilloso. — Carne moderatim fragili, inodora. — Sporis (8)—9—10.5 × (6)—7—9.5 μ, subglobosis vel globosis, paucis late ellipsoideis, levibus, tenuiter tunicatis, hyalinis, amyloideis. — Basidiis 21—29 × 7—11 μ, tetrasporis. Cystidiis nullis; cheilocystidiis ± 20 × 9 μ, clavatis, setulis divergentibus in parte superiore typi Rotalis modo diverticulatis, hyalinis, setulis 1—2 μ altis. — Hyphis haud gelatinosis, in pileo et tramate hymenophorali regulari filamentosis et aliis typi Mycenae i. e. inflatis, fibulatis, moderatim sed sine dubitatione pseudoamyloideis, in KOH flavis. — Epicute ex hyphis repentibus flavidis, superficiem versus diverticulatis; diverticulis usque ad 10 μ longis, hyalinis, interdum ramosis. — Ad ligna in Alnetis montanis. — Typus a R Singer (T 5032) in Argentina: Jujuy, Lagunas de Yala 11—II—1966 lectus et in BAFC conservatus. — *M. supinae* et *M. leucoxanthae* affinis.

Mycena multicaudata Sing. spec. nov. — Pileo aureo-brunneo („gold brown“ M&P), ad marginem pallidiore, in parte centrali subtiliter obscurius squamuloso, sub lente pubescente, longe radiatim rimoso-pectinato, convexo, centro depresso, papillato, 37 mm lato. — Lamellis albis, ad acies sub lente fimbriatis, latis, liberis vel subliberis, interdum leniter collariatis. — Stipite albo, ad basin brunneo 10 („oak wood“ M&P), pruinato, subinsititio, aequali, 50 × 3—4 mm; mycelio basali sparso, fibrilloso. — Carne alba; odore chlorinaceo. — Sporis 6.3—7.7 × 4—4.3 μ, ellipsoideis, levibus, amyloideis. — Basidiis 17.5—21 × 6.5—7 μ, tetrasporis. Cystidiis nullis. Cheilocystidiis ad et prope aciem heteromorpham filamentosam densis, 7—95 μ longis, hyalinis, pilosis, ad basin frequenter fusoides vel ventricose dilatatis et ibi usque ad 6.8 μ latis. — Hyphis filamentosis et inflatis tramatis fibulatis, inamyloideis; hyphis oleiferis praesentibus. — Epicute pilei ex hyphis haud gelatinosis, subhyalinis, radiatim currentibus et crines typi Crinipellis emittentibus; crinibus unicellularibus, raro septis secundariis visis, neque amyloideis nec pseudoamyloideis, levibus et integris vel sparse excrescentiis nodulosis ornatis, longissimis vel sublongis, ad basin 7.5—10 μ latis, et subtenuiter tunicatis, supra basin filamentosis et 5—6.5 μ latis, hic crasse tunicatis (1.8—2.5 μ diam.), ad apicem gradatim attenuatis et acutissimis, ad pilei superficiem ita ut ad stipitis numerosis. — Ad lignum dicotyledoneum in silva Clusiis et quercubus compositis, solitario. Typus a B. Singer (B 3501) in Columbia: Cundinamarca: Salto de Tequendama 24 VII 1960 lectus, in BAFC conservatus. — *M. lentae* Mre affinis.

Mycena neospeirea Sing. spec. nov. — Pileo griseo („metallique“, „Pampa“ M & P), inter strias paullum dilutiore, interdum aequaliter dilute griseo ex toto, glebro, haud viscoso, per quattuor

quintas partes radii pellucide striato, convexo dein applanato, interdum concavo, 5—7.5 mm lato. — Lamellis albis, satis angustis, subhorizontalibus vel aciebus arcuatis, subconfertis vel subdistantibus, adnatis. — Stipite albo, albo-pruinato ad apicem, ad basin siccando sordide biso, subaequali, 5×0.8 —1.1 mm; mycelio basali in vegetis vix visibili, in siccis sub lente breviter pubescente. — Carne tenerrima in pileo, alba in stipite, inodora. — Sporis 8—11 \times 4—5.5 μ , ellipsoideis vel irregularibus, densis sed inconspicuis. — Hyphis fibulatis, in tramate hymenophorali fortiter inflatis, inamyloideis; in tramate pilei subpseudoamyloideis, in stipitis tramate debiliter sed manifeste pseudoamyloideis, a tramate pilei distinctis. — Epicute pilei tenerrima, ex hyphis uni- vel tristratis filamentosis repentibus ad superficiem minute sed manifeste diverticulatis efformata; hypodermio paullum pigmentato sine incrustationibus, ex hyphis voluminosis inflatis, multiseptatis consistente quae cutem formant. Ad apicem stipitis dermatocystidiis cheilocystidiis simillimis, numerosis. — Ad lignum in silva tropicali-montana. Typus a R. S i n g e r (B 1023) in Bolivia: La Paz: Nor-Yungas, Rio Yariza, 16 II 1956 lectus et in BAFC conservatus.

Mycena oreadeoides Sing. spec. nov. — Pileo ochraceo-aurantiaco (inter 10 L 7 et 11 L 12 M & P), opaco, vix subvelutino, semiglobato, dein irregulariter curvato, margine stricto, 50—80 mm lato. — Lamellis pallide roseis, dein ochraceis (11 L 9, M & P), crassiusculis, sat latis, subdistantibus, lamellulis intermixtis, haud intervenosis, adnexis, rotundatis vel sinuatis ad stipitem. Sporis in cumulo albis. — Stipite pallido dein pallide aurantioflavido nec obscurius colorato in parte inferiore, sed ibi-rosaceo-ochraceo (10 B 8, M & P), fibrillis aurantiacis obsito, subpruinato ad apicem, cylindraceo, interdum canaliculato, fistuloso, 70—90 \times 4—9 mm. — Carne firma, in centro pilei sat crassa; odore forti iucundo fructuum. — Sporis 11.7—12.2 \times 3.5—4.5 μ , levibus, hyalinis, amyloideis. — Basidiis (24)—31—32 \times 6.3 μ , bisporis. Cystidiis nullis aut perpaucis. Cheilocystidiis 32—33 \times 5.8—6.3 μ , versiformibus, clavatis, ventricosis, subcapitatis, levibus, hyalinis, numerosis, haud metuloideis. — Hyphis tramatis hymenophoralis regularis et pilei ex elementis brevibus voluminosis catenulatis consistente, haud gelatinosis, usque ad 25 μ latis, omnibus fibulatis et pseudoamyloideis (tegumentis exclusis). — Epicute tenerrima et intermittente, ex hyphis sparsis densis vel acutis et dermatocystidiis sparsis latis, brevibus, inconspicuis, ascendentibus efformata et minime vel vix gelatinosa. Hypodermio ex hyphis horizontalibus latis et a tramate pilei vix differentibus efformato, diverticulis typicis non visis. — Tincturae guaiacalis ope in carne reactio nulla observata; item FeSO_4 , sed phenoli ope purpurea-, guaiacoli ope nigro-purpurea reactio a collectrice observata. — Ad terram sub Eucalyptis et Grevilleis in plantatione gregatim. — Typus a G o o s s e n s - F o n t a n a (5068) in Zaire: Kivu: Panzi-kivu, Novembri 1948 lectus et in BR conservatus.

Mycena pratensis Sing. spec. nov. — Pileo fuscidulo-griseo, subopimo, haud viscoso, per medium radium vel duas tertias eius pellucide striato et sulcolato, glabro, obtuse conico, 9 mm lato. — Lamellis albis, at latis, ventricosis, subdistantibus, ample profundeque sinuatis. — Stipite albo ad apicem, subconcolori pileo ad basin, glabro, nitido, levi, aequali, 25×1 mm. — Carne tenui, alba, inodora. — Sporis $7-9.2 \times 5-7.2 \mu$, breviter ellipsoideis vel subglobosis vel subovoideis, levibus, intus subtiliter granulosis vel guttula olei centrali impletis, hyalinis, amyloideis. — Basidiis $23.5-35 \times 8-9.5 \mu$, tetrasporis (sterigmatibus $6-9 \times 2 \mu$), perpauca bisporis. Cystidiis nullis vel perpauca. Cheilocystidiis ad acies heteromorphas dense agglutinatis, $28-45 \times 6-8-(15) \mu$, versiformibus, ventricoso-mucronatis, subcapitatis, rarius fusoides vel basidiomorphis, integris levibusque, hyalinis, azureo cresylico haud metachromaticis. — Hyphis fibulatis, pseudoamyloideis, in tramate pilei et hymenophori ex elementis voluminosis inflatis catenulatis efformatis, cellulis e. gr. $30 \times 21 \mu$. — Epicute ex hyphis cutem formantibus, hyalinis tenuibus inamyloideis, vix vel intermittenter diverticulatis, diverticulis hyalinis, exiguis. Hypodermio etiam cutiformi sed hyphis latis, pigmento fusco dissoluto impletis. — Ad terram et quisquillas herbaceas in prato pascuo. — Typus a R. Singer (B 4191) in Uruguay: Maldonado 27 V 1966 lectus et in BAFC conservatus.

Mycena pseudostylotabes Sing. spec. nov. — Pileo atrogriseobrunneo, inter strias pallidiore, per $6/7$ radii pellucide striato, haud viscido, campanulato, obtuso, 4–5 mm alto et lato. — Lamellis griseis, ad acies albis, ascendentibus, mediocriter distantibus, mediocriter latis, adnexis, haud collariatis. — Stipite ad apicem albo, pallide biso basin versus, subglabro, sed subpruinoso vel subpubescente prope discum basalem, aequali, $8-9 \times 0.8-1$ mm; disco basali subvolvaceo, 2 mm lato, albo, estrio — Carne alba, tenui, inodora. — Sporis $8-9 \times 4-4.5 \mu$, ellipsoideis vel subcylindraceutis, levibus, hyalinis, amyloideis. — Basidiis $25-30 \times 7 \mu$, tetrasporis. Cystidiis nullis; cheilocystidiis $18-19 \times 10-12 \mu$ (setulis exclusis), vesiculosis vel clavatis, in parte superiore quinque vel pluribus setulis $1-4 \times 0.5-0.9 \mu$ divergentibus obsitis, ex toto hyalinis, ex eis acie lamellarum heteromopha. — Hyphis in tramate hymenophorali et pilei ex catenulis cellularum voluminosarum efformatis, fibulatis, pseudoamyloideis. — Epicute pilei ex hyphis haud gelatinosis vel paullum gelatinosis, inamyloideis, minute diverticulatis, hyalinis, stratum tenue formantibus efformata; hypodermio in strato superiore gelatinoso, ex hyphis filamentosis inamyloideis hyalinis efformato, in strato inferiore tenui hyphas fusco-pigmentatas monstrante. — Ad lignum abietinum in Abietetu religiosae solitario. Typus a R. Singer (MA 042) in Mexico: prope Barranca

Ameyalco km 14 viae Paso de Cortes versus 16 VI 1969 ad 3200 m alt. lectus et in F conservatus.

Mycena rosaceifolia Sing. spec. nov. — Pileo fusco („Chukker br.“ M & P) vel pallidiore, ad marginem multum pallidiore nec non pallido vel albo, haud viscoso, breviter striato, glabro, margine stricto, convexo, dein frequenter plus minusve umbilicato, 9—12 mm lato. — Lamellis roseis („opera pink“ M & P), arcuatis, confertis vel subconfertis, decurrentibus. Sporis in cumulo candidis. — Stipite albo, interdum sordide griseo ad basin, levi glabro, haud viscoso, cavo, leniter basin versus attenuato, 10—17 × 1—2 mm. — Carne alba, in stipite cartilaginea, inodora. — Sporis 4—5 (6) × 2.3—2.8 μ , ellipsoideis, levibus, hyalinis, amyloideis. — Cystidiis ad acies lateraque lamellarum sparsis, 30 × 5.5—7 μ , fusoides, tenuitunicatis, hyalinis, inamyloideis, integris, levibus. — Hyphis pilei et hymenophori ex cellulis inflatis catenulatis efformatis, pseudoamyloideis, fibulatis; tramate hymenophorali regulari, haud gelatinoso; — Epicute pilei haud gelatinosa, in parte superficiali ex hyphis filamentosis repentibus, manifeste diverticulatis hyalinis efformata; infra eam hypodermio hyphis moderatim latis partim pigmento diluto impletis, cutem formantibus efformato. — Ad ligna emortua gregatim. in silva tropicali montana. Typus a R. Singer (T 1102) in Bolivia: La Paz: Nor-Yungas, Coroico, 12 II 1956 lectus et in BAFC conservatus. — *M. laevigata* affinis.

Mycena trichocephala Sing. spec. nov. — Pileo albo, piloso, haud viscido, sulcolato, convexo, 2.5—3.5 mm lato. — Lamellis albis, sat latis, subdistantibus, ad discum apicalem stipitis adnexis. — Stipite albo, glabro, sed laxe piloso prope discum basalem, filamentoso-aequali, cavo, 15 × 0.1 mm; disco basali 1—1.2 mm lato, fortiter suleta. — Carne tenerrima; odore haud notato. — Sponsis 5—9.2 × 2.5—3.5 μ , oblongis, levibus, hyalinis, amyloideis. — Basidiis tetrasporis. Cystidiis ad acies lateraque lamellarum 12—17 × 7—7.5 μ , vesiculosus, pedicellatis, appendiculis spiniformibus sparsis de apice usque ad mediam longitudinem obsitis, hyalinis, inamyloideis; cheilocystidiis acanthophysoideis sparsis 14.5—21 × 8—11 μ . — Hyphis pseudoamyloideis, fibulatis, in tramate pilei et hymenophori catenulis cellularum inflatarum laterum compositis. — Epicute pilei cellulis acanthocystoides subisodiametricis laxe dispositis et corpusculis bulbiformibus in excrescentiam longam piliformem extensis; illis setulis 0.5 μ altis, his setulis 1—2.5 μ altis diverticulatis, omnibus hyalinis; pilis e bulbis nascentibus haud setulosis, 80—314 × 5—16 μ , gradatim attenuatis, apice acutissimis, rarius subacutis, parietibus e quattuor stratis compositis et 1—4 μ crassis instructis, inamyloideis, erectis; bulbo e quo nascunt 23—29 μ diam. Tegumento stipitis e crinibus longis, 50—140 × 5—10 μ acanthophysoideis (setulis 1—1.5 μ altis sed haud ubique

densis) efformato. — Ad folia emortua delapsa in hylaea. — Typus a R. Singer (B 4232) in Brasilia: Pará: Estancia Pirelli 7 VI 1966 lectus et in BAFC conservatus.

Mycena xanthocephala Sing. spec. nov. — Pileo flavo, in siccis pallide flavido-alutaceo in centro, albo in margine, sulcato, hygrophano, subumbilicato in vegetis, manifeste umbilicato in siccis, subglabro, convexo, 8—9 mm lato. — Lamellis albis, latis, 13 percurrentibus, distantibus, decurrentibus. — Stipite flavobrunneo, ad apicem albo, subglabro haud viscoso, cavo, leniter basin versus attenuato, 7×1 mm; mycelio basali albo. — Carne tenerrima. — Sporibus $7-9 \times 3.5-5 \mu$, ellipsoideis vel oblongis, levibus, amyloideis. — Basidiis $30 \times 7 \mu$, tetrasporis. Cystidiis numerosis ad acies et latera lamellarum, $35-46 \times 8-12 \mu$ subcylindratis vel subclavatis, late rotundatis ad apicem, apparenter crasse tunicatis sed parietibus ex incrustatione externa fulva resinacea tantum incrassatis. — Hyphis in tramate pilei ex catenulis cellularum inflatarum laterum multiseptatarum efformatis, pseudoamyloideis, haud gelatinosis, fibulatis. Hyphis stipitis tenuitunicatis vel subcrasse (usque ad 1μ) tunicatis, parallelis. — Epicute pilei ex hyphis filamentosis, manifeste sed haud alte diverticulatis (diverticulis verruciformibus nec regulariter dispositis), incrustationibus flavidis vel fulvis resinaceis hic inde tectis. Dermatocystidiis et pilis in pileo et stipite absentibus, sed elementis inflatis exiguis (e. gr. $11 \times 9 \mu$) obviis, interdum aggregatis, interdum resinaceoincrassatis. — Ad ramulos in silva tropicali-montana. — Typus a R. Singer (B 6148) in Columbia: Valle: Mun. Cali, Saladito 15 IV 1968 lectus et in F conservatus.

Mycena xanthopoda (Dennis) Sing. comb. nov.

Hemimycena xanthopoda Dennis, Kew Bull. 15: 86. 1961.

Haec species in Columbia recollecta ad *Mycenas* melius referenda.

Mycena yalensis Sing. spec. nov. — Pileo albo, plerumque demum grisello-albido, striato, pulverulento, campanulato, usque ad 5 mm lato. — Lamellis albis, ascendentibus, satis angustis, adnexis. — Stipite albo, pulverulento-pubescente, magis pulverulento basin versus, pilei diametro multum longiore, filamentoso sed leniter gradatim basin versus incrassato sed bulbo et disco basalibus nullis, pubescentia basis in mycelium basale transiunte. — Carne alba, tenerrima, inodora. — Sporibus $6-7 \times 5.5-6 \mu$, subglobois, levibus, hyalinis, leniter amyloideis. — Basidiis tetrasporis. Cystidiis nullis; cheilocystidiis $18 \times 9 \mu$, vesiculosoclavatis, hyalinis, diverticulatis setulis parvis divergentibus. Hyphis tramatis pilei et hymenophori e cellulis inflatis, latis catenulatis efformatis, multispetatis, pseudoamyloideis. — Epicute pilei ex hyphis diverticulatis filamentosis (diverticulis 1μ projicien-

tibus), hyalinis efformata; ex his elementis longis cylindraceis nec non vesiculosis sat tenuitunicatis nascentibus; his elementis demum liberis, si globosis $22-30 \times 17-25 \mu$, etiam setulis densis 1μ altis obsitis. Tegumento stipitis ex pilis in parte inferiore stipitis consistente; pilis elongatis, hyphosis vel cylindraceis vel ventricosis vel claviculatis, plerumque $50-180 \times 6-14 \mu$, late rotundatis ad apicem, omnibus hyalinis. — Ad corticem *Alni jorullensis* vivae gregatim. — Typus a R. Singer (T 3909 a) in Argentina: Jujuy: Lagunas de Yala 9 II 1965 lectus et in F conservatus. — A *M. osmundicola* sporis brevioribus differt.

Mycena sect. *Hygrocybeoidea* (Fr.) Sing. comb. nov.

Agaricus trib. *Mycena*, sect. *Hygrocyboideae* Fr., Syst. Myc. 1: 155. 1821.

Mycena rhizogea (Pers.) Sing. comb. nov.

Agaricus rhizogeus Pers., Mycol. Europ. 3: 249. 1828.

Hydropus amazonicus Sing. spec. nov. — Pileo badiospadiceo vel subsepiaceo (colore Lactarium lignyotum in mentem revocante vel prope 8 J 12 vel „chocolate“ M & P), hygrophano, pallescente versus avellaneo-isabellinum („Almond“ M & P) quo colore saepe radiatim variegato, radiatim innate fibrilloso-sulcolato et plus minusve subfuligineo-scrabriusculo sub lente, et tunc vix hygrophano, convexo, profunde umbilicato, $57-1000$ m lato. — Lamellis griseoflavidis vel brunneo-pallente marmoratis, in spatiis interlamellaribus frequenter fuscis vel brunneis („brown sugar“ M & P), mediocriter vel sat latis (e. gr. 5 mm latis), subconfertis vel subdistantibus, interdum leniter intervenosis, arcuatis, profunde decurrentibus. — Stipite fumoso-subfuligineo, („London smoke“ vel „chaetura black“ M & P), plus minusve atroscribriusculo, tramate inter particula scabriuscula apparente albedo, Leccinorum modo, saepe spiralter contorto, subaequali vel basin versus attenuato, $50-160 \times 7-10$ mm; mycelio basali pallido, saepe sparso. — Carne pallida vel partim sordida, odore raphanaceo. — Sporis $6-8 \times 3.5-5 \mu$, ellipsoidis, levibus, hyalinis, inamyloideis. — Basidiis tetrasporis. Cystidiis nullis; cheilocystidiis summopere versiformibus, numerosis vel sparsis, usque ad $37 \times 8 \mu$ metientibus, interdum succo fuscidulo repletis. — Hyphis filamentosis nec non latissimis inflatis obviis, nonnullis crassiuscule tunicatis, inamyloideis in tramate pilei nec non in tramate hymenophorali regulari, fibulatis sed nonnullis septis secundariis defibulatis praesentibus. Hyphis stipitis subparallelis, nonnullis purpureo-metachromaticis azurei cresylici ope. Hyphis oleiferis sparsis, sed praesentibus in tramate. — Epicute pilei fragmentaria, ex fasciculis dermatocystidiorum vesiculosorum (e. gr. $37 \times 8 \mu$) vel ventricosorum vel subclavatorum, pigmento disso-

luto intracellulari atrofusco repletorum sed parietibus hyalinis, erectorum efformata. Tegumento stipitis similiter constructo. — Ad ligna emortua in hylaea amazonica. Typus a R. Singer (B 1639) in Bolivia: Beni: Vaca Diez, Guayaramerín 7—III 1956 lectus et in BAFC conservatus. Paratypus a R. Singer (B 2217 a) in Bolivia: Pando: Manuripi: Conquista, 25 III 1956 lectus et in BAFC conservatus. — Species inter *Hydropodes* magnitudine eximia carpophororum insignis, *H. platensi* et *H. subspodoidi* affinis.

Hydropus bolivianus Sing. spec. nov. — Pileo biso-griseo vel fusco, fortiter reticulato-rugoso, ad marginem (per medium radium) fortiter sulcato, glabro vel glabrescente, haud viscoso, convexo, late obtuseque umbonato, 27 mm lato. — Lamellis candidis, mediocriter latis vel latis, haud vel sparse intervenosis, distantibus, lemellis crispis intermixtis, secendentibus et remotis (zona alba fibrillosa inter lamellas et stipitis apicem visibili). — Stipite hyalino-albo, demum ad basin pileo concolori, hirsuto-piloso, leniter gradatim ad apicem attenuato vel subaequali sed ad basin bulboso, 40—46 × 1—2 mm (ad apicem), bulbo usque ad 4 mm lato; mycelio basali albido tomentoso. — Carne stipitis alba, odore Apii vel alcalino debili notato. — Sporis 4—5—(6.5) × 2.8—3.5 μ, ellipsoideis, hyalinis, levibus, inamyloideis. — Basidiis 20—22 × 6 μ, tetrasporis. Cystidiis ad acies et latera lamellarum, 25—55 × 5—15 μ, ventricosis, rarius ampullaceis, interdum constrictis, semper late rotundatis ad apicem, hyalino-tunicatis, tenuitunicatis vel parietibus subincrassatis vel duplicatis, frequenter incrustatione hyalina vel ochracea ornatis, rarissime apiculo subacuto vel nodulis irregularibus ad apicem visis, inamyloideis, cententu suo insigni et *H. lipocystidem* in mentem revocante, plerumque flavido, granuloso, colloideo. — Hyphis in tramate pilei hyalinis, inamyloideis, interdum in strato subhypodermiali lenissime subgelatinosis sed ceterum haud gelatinosis, fibuligeris sed septis secundariis sat frequentibus; tramate hymenophorali regulari hyalino, in mediostrato ex hyphis parallelis haud gelatinosis filamentosis efformato, in strato laterali gelatinosis in matrice gelatinosa immersis, filamentosis, axialiter dispositis sed subintertextis, omnibus tenuitunicatis. — Epicute pilei apparenter epithelium sistente, e cellulis usque ad 50 μ diam. hyalinis vel sepiaceis, interdum pigmento vacuolari fuscatis, tenuitunicatis sed interdum parietibus hyphiformiter duplicatis 1—4 μ crassis; dermatocystidiis piliformibus, quam 100 μ longioribus et 5—30 μ latis, ventricosis in parte inferiore et gradatim effilatis plerumque obtusis, inamyloideis vel perpauillam subpseudoamyloideis. Stipitis pubescentia ex dermatocystidiis simillimis crasse tunicatis 100—250 × 5—30 μ efformata. — Ad lignum in silvis tropicali-montanis. — Typus a R. Singer (B 802) in Bolivia: La Paz: Nor-Yungas, Carmen Pampa, 1 II 1956, in 2000 m alt. lectus et in BAFC conservatus. — Species

inedita similis congolensis sporis latioribus et pileo papillato a Grinling 70303 lectus sed pseudocystidiis minus evolutis.

Hydropus camaragibensis Sing. spec. nov. — Pileo griseo macroscopice glabro, opaco, levi, convexo, papillato, 9 mm lato, 5 mm alto. — Lamellis albidis, latis, crassiusculis, ventricosis, subdistantibus, rotundatis, adnexis. — Stipite albo, ad apicem subpruinato, glabro versus basin, aequali, evelato, 43×1.5 mm. — Carne alba, inodora. — Sporis $5.5-6.5 \times 4-4.5$ μ , breviter ellipsoideis, levibus, hyalinis, amyloideis. — Basidiis $19-30 \times 5.5-7.5$ μ , 4-spored. Cystidiis ad acies lateraque lamellarum praesentibus, moderatim numerosis, $45-90 \times 10-15$ μ , ventricosis, plerumque ad apicem obtusis, tenerime tunicatis. — Hyphis tramatis haud gelatinosis, inamyloideis, fibulatis. — Epicute pilei ex elementis sparsis inflatis $20-42 \times 6-25$ μ , stratum hymeniforme epicuticulare continuum haud formantibus, tenuitunicatis, hyalino-tunicatis, rarius pigmento dissoluto fuscidulo intracellulari coloratis, iacentibus, ascendentibus, suberectis, erectis. Hypodermio haud gelatinosis, hyphis cutem efformantibus, repentibus, parallelis, fuscidulis (incrustatione pigmenti tenerrima inconspicua) in parte epicuti proxima tenuibus $1-4$ μ latis, in parte tramate pilei proxima latis, $10-17$ μ diam. constituto. — Ad terram in silva tropicali. — Typus a R. Singer (B 3298) in Brasilia: Pernambuco: Camaragibe, 7 VII 1960 lectus et in BAFC conservatus.

Hydropus cylindrosporus (Dennis) Sing. comb. nov.

Omphalina cylindrospora Dennis, Kew Bull. 1952: 494. 1952.

Hydropus depauperatus Sing. spec. nov. — Pileo brunneo („burnt umber“ M & P), ad marginem pallidiore et striato, macroscopice glabro sed sub lente subtomentoso, sicco levi, convexo, centro haud profunde depressulo vel applanato, 17 mm cc. lato. — Lamellis albis in vegetis et siccis, aciebus partim sordescensibus vel brunnescentibus sed haud ex integro discoloribus, confertis, lamellulis intermixtis, ad acies integris, spatiis interlamellaribus rugulosis vel parpaullum intervenosis in adultis, moderatim latis, rotundato-adnexis vel adnato-subdecurrentibus. — Stipite nigro, pallidius asperulo sed macroscopice subglabro, ad apicem autem brunneolo-pallido, lenissime basin versus attenuato, $19 \times 0.8-1$ mm; mycelio basali vix evoluto. — Carne inodora. — Sporis $(4)-5-6 \times 2.5-3$ μ , ellipsoideis, levibus, hyalinis, inamyloideis. — Basidiis $18-29 \times 4.2-5.3$ μ , clavatis, tetrasporis; basidiolis subcylindraceis haud fusoides, ad basin defibulatis. Cystidiis nullis; cheilocystidiis numerosis, $13-18 \times 8-13$ μ , ventricosis vel subcylindraceis, ad apicem late rotundatis, firme sed haud crasse tunicatis. — Hyphis defibulatis, haud gelatinosis, in pileo et tramate hymenophorali et in stipite inamyloideis. Tramate hymeno-

phorali hyphis oleiferis destituto, hyalino, regulari, ex hyphis intertextis 2—9 μ latis efformato; hyphis stipitis e pigmento intraparietali maxima e parte atrobrunneis, nonnullis pigmento incrustatis, pallelis, multiseptatis. — Epicute e numerosis elementis solitariis vel agglutinatis, in fasciculis subhymeniformibus vel concretescentibus, sed haud stricte hymeniformiter dispositis, efformata, his elementis vesiculosis vel cystidiiformibus, his subcylindraceutis vel subampullaceutis et 8.5—26 \times 4—8 μ , illis e. gr. 20 \times 14 μ , ambobus plerumque pigmento griseo-brunneo diluto dissoluto intracellularem repletis sed rarius incrustatis, iacentibus et ascendentibus et erectis. Tegumento stipitis bene evoluto sed intermittente, ex elementis vesiculosis, erectis 19—25 \times 13.5—14.5 μ et cystidiformibus usque ad 100 \times 12 μ , ambobus erectis vel rarius ascendentibus, plerumque hyalinis vel subhyalinis efformato, parietibus haud crassis. — In silva tropicali pluviali marginali ad ligna putrida et ad folia dejecta. — Typus a R. Singer (B 4263) in Brasilia: Pará: Belem, IAN, 10 VI 1966 lectus et in BAFC conservatus. — Absentia fibularum unica species aberrans generis huc usque cognita.

Hydropus dusenii (Bres.) Sing. ssp. *nivifugus* Sing. subspec. nov. — Lamellis colore griseo formae *griseolamellatae* Sing. subspecieis *dusenii* gaudentibus, haud vel admodum sparse intervenosis, sed differt pileo subtiliter tomentosulo sub lente, margine plus minusve sulcato et stipite albido, primum bulbilloso dein e basi tomentoso nato, ceterum subtiliter tomentosulo sub lente. — Aliis notis typo simillimus sed ad ramos emortuos *Erythrinae crus-galli* in Argentina centrali: prov. Buenos Aires prope La Plata, Punta Lara maio 1966 lectus. Typus R. Singer S 734 (BAFC).

Hydropus eitenianus Sing. — Pileo albo, in siccis sparse hyalino-pubescente, et striis brunneolis radialibus gaudente, striis usque ad centrum fere ductis, convexo, centro profunde depresso, in vegetis 27 mm lato. — Lamellis pallidis, angustis vel moderatim latis, confertis, sparse et haud persistenter intervenosis in adultis, acie sub lente e cheilocystidiis sparse pubescentibus, adnexis vel adnatis et plerumque denticulo breviter decurrentibus. — Stipite aut nigrescente aut siccando atro, breviusculo, minutissime pubescente ita ut pileus sed glabrescente, aequali, usque ad 35 mm longo, 3 mm lato; mycelio basali e fibrillis mycelialibus subtilibus frequenter in substrato immersis consistente. — Carne pallida. — Sporis 4.5—5.5—(7) \times 3—3.8—(4) μ , ellipsoideis, hyalinis, firme homogeneo-tunicatis, levibus, inamyloideis. — Basidiis 12—19 \times 5—5.5 μ , tetrasporis. Cystidiis paucis prope acies lamellarum et cheilocystidiis simillimis; cheilocystidiis 27—49 \times 2—13 μ , versiformibus, fortiter projicientibus, hyalinis vel stramineo-hyalinis, tenuitunicatis, rarius parietibus usque ad 1 μ crassis instructis, filamentosis basi incrasatis claviculatis, ampullaceutis, saepe agglutinatis ita ut fascicula conniventia efforment. Pseudocystidiis 19—20 \times 6—9 μ , breviter ventricosis vel cylindraceutis vel clavatis, contentu homogeneo vel amorpho vel

vermiformi repletis, vix vel paullum projicientibus et ex ea re inconspicuis, ad apicem rotundatis, sat sparsis. — Hyphis inamyloideis, fibulatis, in tramatis pilei strato superiore (110 μ cc. profundo) flavidis vel subhyalinis, haud gelatinosis, filamentosis, radiatim dispositis, sat densis; in parte inferiore pilei (\pm 70 μ profunda) hyalinis, gelatinosis, subundulatis, subhorizontalibus subparallelis. Tramate hymenophorali ex integro gelatinoso, sed minus gelatinoso densioreque dorsum quam aciem versus, ex hyphis filamentosis, hyalinis efformato, regulari typi Clitocybarum. Subhymenio tenerrimo, haud gelatinoso; hymenopodio haud differentiato et strato laterali a mediostrato vix differente. — Epicute pilei ex hyphis terminalibus hypodermii efformata; his e strato cutiformi haud gelatinoso hypodermii (quod a strato superiore tramatis pilei vix differt) natis, fasciculatim aggregatis, dermatocystidiiformibus; dermatocystidiis similibus cheilocystidiis, 25—55 \times 2—13 μ , parietibus dermatocystidiorum et hypharum hypodermii 0.3—0.9 μ crassis. Pubescentia stipitis e dermatocystidiis similibus efformata. — Ad arbores emortuas in ligno putrido silvae tropicalis pluvialis. — Typus a G. Eiten, L. T. Eiten, G. M. Felipe (No 5205) in Brasilia: Amazonas: Mun. Manaos, ad ripam septentrionalem fl. Rio Negro lectus et in NY conservatus.

Hydropus grevilleae Sing. nom. nov.

Prunulus sabali Murr., N. Am. Flora 9: 325. 1961, non *Hydropus sabalis* Sing., Lloydia 9: 119. 1946.

Haec species in Louisiana (Murr.), in insula Trinitatis (Dennis) et in Africa congolensi, G o o s e n s F o n t a n a 5117, BR, det. Singer) visa et ad quisquilias varias (haud autem palmarum tantum) crescit.

Hydropus heterocystis Sing. spec. nov. — Pileo brunneo (inter „Cochin“ et „burnt umber“ M&P), per tertiam partem radii sulcato, subglabro, convexo mox applanato, 8 mm cc. lato. — Lamellis cinnamomeo-brunneolis, („Tuscan tan“ M&P) mediocriter latis, subdistantibus, subrotundato-adnatis vel late adnatis, siccando adnato-subdecurrentibus. — Stipite atrocastaneo, subtiliter velutino, in parte inferiore tomentosus, \pm 21 \times 1.5 mm; mycelio basali praesente. — Carne tenui, inodora. — Sporis 6.5—7.5 \times 4.5—5.5 μ , ellipsoideis vel late ellipsoideis, levibus, hyalinis, inamyloideis. — Basidiis clavatis, tetrasporis. Cystidiis nullis; cheilocystidiis 17—29 \times 9.5—18 μ , late clavatis vel vesiculosis, numerosis, hyalinis. — Hyphis tramatis pilei intertextis, haud Mycenarum modo voluminosis sed filamentosis vel sublatiusculis vel latis, haud gelatinosis, inamyloideis; in tramate hymenophorali regulari subintertextis, brunnescentibus, filamentosis vel sublatiusculis; hyphis omnibus inamyloideis, fibulatis. — Epicute pilei ex hyphis hyalinis tenuibus repentibus, firme tunicatis, cutem formantibus efformata; haud gelatinosa. Hypodermio manifeste fuscidulo, partim ex elementis cuti-

formiter dispositis catenulatis, cellulis terminalibus saepe late clavatis vel vesiculosis, latis, haud gelatinosis efformato. Tegumento stipitis ex elementis summopere irregulariter dispositis et formatis, curvatis, saepe furcatis vel nodosis efformato. — Ad quisquillas herbaceas inter muscos in zona alpina andina. — Typus a S l e u m e r & S p a r r e (comm. S i n g e r T 1914) in Argentina, Catamarca: inter Minas Capillitas et Cerro Negro in 3600 m alt., 2 III 1952 lectus et in MICH conservatus (duplicatum in LIL).

Hydropus hygrophilus Sing. spec. nov. — Pileo griseo, per duas tertias radii striato, glabro, haud viscoso, convexo, obtuso, haud umbilicato, 11 mm cc lato. — Lamellis cinereo-pallidis, haud intervenosis, latis, distantibus, decurrentibus. — Stipite albo, glabro, sicco, aequali, 17×1 mm cc.; mycelio basali praesente. — Carne inodora. — Sporis $5.5-6.5 \times 4.7-5.5 \mu$, globosis vel subglobosis, multis etiam breviter ellipsoideis, levibus, hyalinis, inamyloideis. — Basidiis $23-30 \times 5-7.7 \mu$, clavatis, angustioribus bisporis, latoribus (et plurimis) tetrasporis. Cystidiis nullis; cheilocystidiis paucis inconspicuis. — Hyphis in tramate hymenophorali hyalinis, inamyloideis, fibulatis. — Epicute ex hyphis strati superioris hypodermii nata sed admodum sparsa, dermatocystidiis consistente; his raris vel sparsis, hyalinis, ventricosis, subvesiculosis, ad apicem late rotundatis, tenuitunicatis usque ad $20 \times 13 \mu$. Hypodermio in strato superiore ex hyphis filamentosis efformato quae ad superficiem, ubi dermatocystidia desunt, interdum inflatae sunt sed haud catenulatae Mycenarum modo, sectionibus inflatis cellularum hyphalium $9-14 \mu$ diam.; in parte inferiore hypodermii hyphis tramatis pilei similibus sed firme tunicatis et pigmento vacuolari sepiaceo impletis, hic haud gelatinosis, sed epicutem versus leniter subgelatinosis et hyphis filamentosis saepe undulatis. — Ad ligna in silva humidissima tropicali solitario. — Typus a R S i n g e r (B 6396) in Columbia: Valle: Anchicayá 26 IV 1968 lectus et in F conservatus.

Hydropus marasmioides Sing. spec. nov. — Pileo fusco („cattail“ M&P), rugoso, ad discum e margine striato, inter sulcos pallidior, sub lente pubescente, convexo, dein applanato et in adultis frequenter centro depresso, $29-30$ mm lato. — Lamellis albis, sed spatiis interlamellaribus pileo concoloribus, mediocriter latis, haud intervenosis, subconfertis, tetradymis, adnatis. — Stipite ad apicem albo, ceterum fulvo, macroscopice subglabro sed sub lente piloso-pubescente, ad apicem interdum subtomentoso, frequenter lateraliter compresso, tubuloso, leniter basin versus attenuato, $39-43 \times 1-3$ mm; mycelio basali pubescente, sparso. — Carne inodora. — Sporis $6.7-7.3 \times 3.5-4 \mu$, ellipsoideis, levibus, inamyloideis. — Basidiis $20-26 \times 4-6.5 \mu$, clavatis vel rarius cylindraceo-clavatis tetrasporis. Cystidiis numerosis ad acies et ad latera lamellarum, $50-93 \times 13-22 \mu$, crasse tunicatis bistratis, pariete externa $0.5-1 \mu$ crassa, interna $1.8-2.5 \mu$, ambobus inamyloideis, ad apicem obtusis, interdum e constrictione levi infraapicali subcapi-

tatis plerumque ventricosus vel ventricosus-ampullaceus, raro excrescentiis uno vel duobus bacillaribus inconspicuis ornatis, in apice interdum crystallis stelliformibus (KOH) et corpusculis hyalinis resinaceis incrustatis, profunde radicanibus, pedicellatis. — Hyphis hyalinis, inamyloideis, in parte inferiore stipitis tantum vix pseudoamyloideis et ibi perietibus crassiuculis, ceterum tenuitunicatis, in tramate hymenophorali regulari debiliter tantum subgelatinosis (mediostrato speciminum adultorum trama pilei versus excepto) quamquam hyphae tenuis et crassitunicatae adsint, omnibus hyphis hyalinis, filamentosis vel leniter tantum inflatis, intertextis sed praecipue axillariter dispositis. Subhymenio haud gelatinoso, elementis exiguis muriformiter fere dispositis. Hyphis stipitis parallelis nonnullis crasse tunicatis. — Epicute pilei hymeniformiter vel subhymeniformiter constructa, eius elementis vesiculosus sat tenuiter tunicatis, sepiaceis e pigmento vacuolari, levibus, rotundato-obtusis, saepe pedicellatis, $24-70 \times 17-21 \mu$; dermatocystidiis sparsioribus, cylindraceutis vel leniter apicem versus attenuatis, dilatatis ad basin, e. gr. $330 \times 25 \mu$, hyalinis vel stramineo-hyalinis, plus minusve crasse tunicatis. Tegumento stipitis e dermatocystidiis erectis $55-245 \times 11-21 \mu$ efformato, dermatocystidiis numerosis, inamyloideis, forma et parietibus suis ea pilei simulantibus, hyalinis. — Ad lignum dicotyledoneum in zona subalpina „subparamo“, solitario. — Typus a R. Singer (B 3628) in Columbia: Boyacá: inter Ramiriquí et Rondón 30 VII 1960 lectus et in BAFC conservatus. — Habitus *Marasmiorum* sectionis *Siccorum*.

Hydropus nigrita (Berk. & Curt. Sing. comb. nov.

Agaricus nigrita Berk. & Curt. Journ Linn. Soc. Bot. 10: 285. 18868

Collybia nigrita (Berk. & Curt.) Sacc. Sy 111 5: 225. 1887.

Gymnopus nigrita (Berk. & Curt.) Murr. North Am. Flora 9: 373. 1916.

Hydropus omphaliniformis Sing. spec. nov. — Pileo in centro et striis griseo vel rarius griseo-albo, inter striae pallidiores vel pallido, hygrophano, convexo, dein applanato, in siccis depresso in centro, margine integro, demum saepe lobato, 3—21 mm lato. — Lamellis albis, in siccis sordescens, distantibus, arcuatis vel descendens, mediocriter latis vel sat latis, vix vel manifeste intervenosis, decurrentibus. — Stipite albo, subtiliter pruinato, glabrescente, frequenter curvato sed semper centrali, equali vel basin versus attenuato, $12-21 \times 0.5-1.5$ mm; mycelio basali pallido, minute radiatum strigello. — Carne alba vel sordida, immutabili, inodora. — Sporis $5.5-6.8 \times 3.5-4.5 \mu$, ellipsoideis, levibus, hyalinis, amyloideis. — Basidiis $14.5-15 \times 6-7 \mu$, (1)—4—spored. Cystidiis nullis; cheilocystidiis sat numerosis, $15-35 \times 8-15 \mu$, late clavatis, ventricosus, rarius constrictis, late rotundatis ad apicem, inamyloideis, duplicatione parietis interdum crassiuscule tuni-

catis, ceterum parietibus 0.8μ diametri haud superantibus. Pseudocystidiis nullis. — Hyphis tramatis hyalinis, sat latis vel inflatis, hyphis oleiferis tenuitunicatis ntus giranulosis, $2.5-3 \mu$ latis, intermixtis, hyphis omnibus inamyloideis, haud gelatinosis, subtenuiter vel crassiuscule tunicatis (parietibus $0.5-0.8-(1.2) \mu$); hyphis pilei radiatim dispositis; stipitis subparallelis, hyalinis, inamyloideis. — Epicute pilei dermatocystidiis sat numerosis sed singulis, subsparsis, efformata; dermatocystidiis $23-60 \times 6-14 \mu$ versiformibus, plerumque ventricosis, rarius late cylindraceis, raro prope apicem nodoso appendiculatis, contentu homogenero hyalino vel pallide fumoso repletis. Hypodermio haud gelatinoso cutiformi, pigmento pallide fumoso dissoluto intracellulari. Tegumento stipitis dermatocystidiis numerosis efformato; dermatocystidiis $15-50 \times 6-22 \mu$, ventricosis vel vesiculosus vel cylindraceis, late rotundatis ad apicem, parietibus $0.6-0.8 \mu$ diam., hyalinis. — Ad lignum Dicotyledonum in silva tropicali pluviali gregatim. Typus a R. Singer (B 6240) in Columbia: Valle: Buenaventura, San Joaquín 19 IV 1968 lectus et in F conservatus. — Habitus Omphalinae.

Hydropus papillatus Sing. spec. nov. — Pileo atrobrunneo, glabro, haud viscoso, ad marginem striato, convexo, dein applanato circum papillam, papilla acuta vel ut minime abrupta instructo, 4 mm alto, 4—5 mm lato. — Lamellis pallide griseolis, moderatim vel admodum latis, subdistantibus, subascendentibus in parte marginali, horizontalibus, vix arcuatis, late adnatis. — Stipite pileo subpallidiore, ad apicem manifeste pallidiore vel subpallido, subtiliter pruinoso, haud viscoso, aequali, prope basin leniter vel vix attenuato, $19-21 \times 0.8-1$ mm; mycelio basali sparso, albo, fibrilloso. — Carne inodora. — Sporis $6.5-6 \times 4-5 \mu$, breviter ellipsoideis vel ellipsoideis, levibus, hyalinis, inamyloideis. — Basidiis $28 \times 6.5-8 \mu$, tetrasporis, rarius bisporis, numquam omnibus tetrasporis. Cystidiis nullis, sed cheilocystidiis ad acies heteromorphas et prope acies numerosis, $40-65 \times 6-10 \mu$, anguste ventricosis vel clavatis, saepe constrictis, ad apicem rotundatis, tenuitunicatis, contentu homogenero limpidulo hyalino repletis sed paucis pigmento fuscidulo vacuolari dissoluto intracellulari gaudentibus. — Hyphis fibulatis, inamyloideis. — Epicute e cellulis terminalibus hypodermii et dermatocystidiis paucis sparsis efformata; his plerumque pigmento dissoluto intracellulari repletis, $7-17 \mu$ latis, clavatis, ventricosis, subvesiculosus, ad apicem late rotundatis. Hypodermio e cellulis prostratis latis vel latissimis (usque ad 24μ diam.), cutem formantibus, haud gelatinosis efformato. — Ad caudices (herbaceas?) solo arenoso immersas in silva humida Pinorum cum quercubus minimis paucis immixtis („flat-woods“), carpophoris caespitosis vel gragatis. Typus a R. Singer (F 2857) in USA: Florida: Alachua Co., 2 km orientem versus a Gainesville, 20 VII 1943 lectus et in F conservatus.

Hydropus paraensis Sing. spec. nov. — Pileo obtuse brunneo („bronze“ M & P), sicco fusco, in vegetis per tres quartas partes radii striato, in sicco subrugoso, haud viscoso, convexo, ± 10 mm lato. — Lamellis albis, perlatis, ventricosis, distantibus, sinuato-adnatis et dente decurrente affixis. — Stipite albo, levi, macroscopice glabro sed sub lente pruinato, $\pm 10 \times 0.8$ mm; mycelio basali albo, fibrilloso. — Carne alba, inodora. — Sporis (5.5)—6—8.5 \times 3.5—4.5 μ , plerumque 7—7.5 \times 4.3—4.5 μ ellipsoideis, levibus, hyalinis, inamyloideis. — Basidiis 24—25 \times 5—7 μ , tetrasporis. Cystidiis ad acies lateraque lamellarum sat numerosis et conspicuis, 42—125 \times 7.5—13 μ , typi pseudocystidiorum quod contento oleoso hyalino repleta sunt, ampullaceis, subtus ventricosis, in parte superiore elongatis, cylindraceutis vel apicem obtusum versus attenuatis, it hic 5—9.5 μ diam., inamyloideis, parietibus tenuibus (0.4—0.5 μ crassis) instructis, simplicibus, pulchre rubro-metachromaticis in azureo cresylico (sed contentu haud intense azureo qualis in gloeocystidiis typicis esse solet). — Hyphis in pileo et tramate hymenophorali vix vel lenissime pseudoamyloideis, in stipite leniter et lento pseudoamyloideis, fibulatis; hyphis oleiferis numerosis, latis, longis, cententu oleoso gaudentibus. — Epicute pilei e dermatocystidiis dense aggregatis et solitariis numerosis erectis vel ascendentibus efformata; dermatocystidiis 25—55 \times 7.5—10 μ , plerumque cylindraceutis vel subcylindraceutis, ad apicem late rotundatis. Hypodermio cutiformi, elementis longis et latis (usque ad 32 μ), pigmento dissoluto intracellulari fusco repletis. Tegumento stipitis dermatocystidiis eis pilei et pseudocystidiis hymenialibus similibus sed 50 μ haud longioribus, saepe capitatis, tenuitunicatis, numerosis consistente. — Ad ligna Dicotyledonum emortua in silva humida tropicali pluviali. Typus a R. Singer (B 4257) in Brasilia: Pará: Belem, IAN 10 VI 1966 lectus et in BAFC conservatus. — Inter Mycenoideos pseudocystidiorum contentu insignis species.

Formam huius (an varietatem?) e Venezuela (Miranda: Guatopo, Dumont-VE 948, NY) habemus, ubi foliicola, paullum maior, lamellis minus distantibus. In ambobus hymenopodium angustum gelatinascens adest.

Hydropus pinetorum Sing. spec. nov. — Pileo atrogriseo-brunneo, hygrophano, pellucide striato, convexo, profunde umbilicato, 22 mm lato. — Lamellis cremeo-alutaceis vel isbellinis („Isabella color“ Ridgway), subdistantibus, 3.5 mm latis, breviter decurrentibus. — Stipite lamellis concolori, sed paullum dilutiore, subglbro, cavo, subaequali vel basin versus subattenuato, 20 \times 4 mm. — Carne inodora. — Sporis (5.5)—7—4.5—(4.8) μ , ellipsoideis, ad latus interius frequenter applanatis, levibus, hyalinis, inamyloideis. — Basidiis 27—28 \times 4.5—7 μ , tetrasporis. Cystidiis praecipue ad acies et prope acies lamellarum obviis ita ut acies heteromorpha evadat, ventricosis vel clavatis,

34—41 × 8—11 μ , ad apicem late rotundatis, dense agglutinatis, nonnullis longe pedicellatis, tenuitunicatis, cententu nullo visibili — Hyphis haud gelatinosis, inamyloideis, fibulatis. Tramate hymenophorali regulari, ex hyphis subparallelis vel parallelis filamentosis, hyalinis, nonnullis usque ad 14 μ diam. inflatis efformato. Subhymenio lato, subcellulari, elementis exiguis. — Epicute pilei ex elementis dermatocystidiformibus fasciculatis vel nonnullis solitariis sat numerosis efformata; dermatocystidiis clavatis vel ventricosis, 17—28 × 6—12 μ , nonnullis obtuse mucronatis, ceteris late rotundatis ad apicem, multis ex eis pigmento dissoluto intracellulari fusco repletis. — Ad quisquilias in pinetis subtropicalibus sub Pino caribaea solitario vel gregatim. Typus a R. Singer (F 1290) in USA: Florida, Miami, lectus et in F conservatus.

Hydropus platensis Sing. spec. nov. — Pileo griseo vel fuscogriseo, levi, demum subsulcato in zona marginali, macroscopice subglabro sed sub lente fortiter fibrilloso-pustulato e furfure nigricante, haud viscoso, haud vel vix hygrophano, convexo, umbilicato, dein profunde infundibuliformi, 20—40 mm lato. — Lamellis albidis, dein candidis, confertis, nonnullis furcatis, irregulariter lamellulis intermixtis, satis angustis, arcuatis, demum descendentes, primum haud intervenosis, demum lenissime vel manifeste intervenosis, decurrentibus. — Stipite pilei concolori, sub lente fortiter fibrilloso subsquamuloso, ita ut in pileo, fundamentum pallidius inter furfuracea particula monstrante, farcto, aequali vel basi incrassata praedito, 15—20 × 2—2.5 mm; mycelio basali albo, interdum sparso, subtiliter fibrilloso; bulbulo, si adest, usque ad 5 mm diam. — Carne alba, in zona peripherica aquose pallida, carnosio-elastica, inodora. — Sporis 7.5—9.5—(10.5) × 4.5—5.5 μ , ellipsoideis, levibus sed ad latus interius parietis interdum asperulis, applanatione vel depressione suprahilari praeditis, hyalinis, inamyloideis. — Basidiis 25—37 × 5—7 μ , 2—4-sporis, plerumque tetrasporis. Cystidiis veris nullis, cheilocystidiis sparsis inter basidia et basidiola, basidiomorphis, sed forma magis irregulari. — Hyphis hyalinis in tramate, fibulatis, nonnullis septis secundariis defibulatis praesentibus, inamyloideis. — Epicute pilei e fasciculis dermatocystidiorum subhymeniformibus vel haud hymeniformiter dispositis efformata; dermatocystidiis furfur formantibus, 32—80 × 7—12 μ , utriusformibus vel subcylindraceis vel constrictis vel ampullaceis (et tunc apice \pm 3.5 μ in diam.), aliis vesiculosis vel clavatis vel ventricosis et brevioribus, 14—32 × 7.5—14 μ , omnibus ad apicem late rotundatis, plurimis pigmento intracellulari repletis. — Ad folia delapsa et frustula lignea putrida in silva marginali, paucis individuis gregatim crescentibus. — Typus a R. Singer (S 741) in Argentina: Buenos Aires: Punta Lara 1 V 1966 lectus et in BAFC conservatus.

Hydropus semimarginellus Sing. spec. nov. — Pileo fuscogriseo vel subsepiaceo, ad marginem frequenter pallidiore, in vegetis per medium radium pellucide striato, convexo, obtuso, haud umbilicato, 12—13 mm lato. — Lamellis albis, confertis vel subconfertis, angustis, horizontalibus, haud intervenosis, ad aciem sub lente subfimbriatis et albis, interdum in siccis aciebus vix nevis subfuscidulis, decurrentibus. — Stipite ad apicem hyalino-albo, ceterum sordide griseo vel griseo-pallido, macroscopice glabro, sed sub lente fortiter pubescente ut minime in parte superiore, subaequali, haud viscoso, $20 \times 1-1.5$ mm. — Carne inodora. — Sporis $5-7.2 \times 3-5$ μ , ellipsoideis, levibus, hyalinis, amyloideis. — Basidiis $20-25 \times 6-7$ μ , nonnullis bisporis, plurimis tetrasporis. Cystidiis nullis; cheilocystidiis ad et rarissime prope acies lamellarum, $32-62 \times 6-13$ μ , ampullaceis, in parte infera ventricosis, apice usque ad 49 μ longis et $3.5-5$ μ latis, obtusis, hyalinis, sed in parte infera interdum pallide melleis (KOH in siccis), tenuitunicatis, inamyloideis. — Hyphis fibulatis, inamyloideis, plerumque filamentosis, nonnullis latis, tramate hymenophorali regulari. — Epicute pilei ex elementis dermatocystidiformibus efformata; dermatocystidiis numerosis, sed haud hymeniformiter et continue dispositis, ascendentibus vel suberectis ventricoso-subclavatis, saepe mucronatis, $11-25 \times 9.5-22$ μ , aliis elongatis, subventricosis vel subampullaceis, $18-29 \times 7-14.5$ μ , interdum pigmento vacuolari fuscis, sed haud incrustatis et parietibus hyalinis instructis. Tegumento stipitis e dermatocystidiis efformato; dermatocystidiis cheilocystidiis similibus. — Ad ramulos emortuos in silva tropicali humido pluviali solitario. Typus a R. Singer (B 4251) in Brasilia: Pará: Belem, IAN 10 VI 1966 lectus et in BAFC conservatus. Etiam in Horto Botanico Universitatis, Amsterdam Hollandiae a Reijnders (WR 792) in viridario cum Orchideis lectus.

Hydropus subcartilagineus (Murr.) Sing. comb. nov. —

Omphalina subcartilaginea Murr., North Am. Flora 9: 345. 1916.

Haec species *H. marginello* affinis et in Florida, Alabama et Argentina centrali (hic adventiva?) crescit.

Hydropus subspodoides (Murr.) Sing. comb. nov.

Heliomyces subspodoides Murill, North Am. Flora 9: 248. 1915.

Haec species in Brasilia recollecta est (Singer B 4211, BAFC).

Hydropus veraecrucis Sing. spec. nov. — Pileo fuligineo, centro nigricante, marginem versus pallidiore, pallide brunneo, in siccis subgriseo papilla nigra, ad marginem sulcato, innate radiatim fibrilloso, convexo, circum papillam subapplanato, 14 mm lato. — Lamellis griseis, mediocriter distantibus vel distantibus, latis, lamellis permultis intermixtis, arcuatis, haud intervenosis, aciebus inte-

gris subdecurrentibus vel decurrentibus. — Stipite fuligineo vel griseo, glabro vel leniter tropunctulato prope basin, aequali, saepe curvato, sed centrali vel lenissime excentrico, cavo, 14—17 × 1.5—3 mm; mycelio basali albo, fibrilloso, sparso. — Carne alba vel grisella, inodora. — Sporis 6.3—8.5 × 4.8—6.2 μ , ellipsoideis vel breviter ellipsoideis, paene subglobois, levibus, hyalinis, amyloideis. — Basidiis 25—33 × 6.5—7 μ , clavatis, tetrasporis. Cystidiis nullis; cheilocystidiis sparsis, basidiomorphis hyalinis, e. gr. 30 × 8 μ . Hyphis fibulatis, inamyloideis. — Epicute pilei ex dermatocystidiis erectis vel decumbentibus, saepe fasciculatim congregatis efformata; dermatocystidiis 25—45 × 6—20 μ , vesiculosus vel subcylindraceis vel subclavatis, late rotundatis ad apicem, pigmento dissoluto intracellulari fusco repletis. — Ad truncum arboris dicotyledoneae emortuum in silva tropicali pluviali. Typus a R. Singer (M 8102) in Mexico: Veracruz: Estación Biológica de las Tuxtlas prope Montepío 21 VI 1969 lectus et in F conservatus. *H. erinensi*, *H. umbrino*, *H. arenario* affinis.

Hydropus xerophilus Sing. spec. nov. — Pileo griseo vel murino, leniter radiatim rimuloso vel fastigiato et innate fibrilloso, subglabro, in siccis radiatim lineato sub lente, haud viscoso, convexo, umbilicato, 12—13 mm lato. — Lamellis albis, sat latis, mediocriter confertis, adnatis, in siccis subdecurrentibus. — Stipite albo, levi, subtiliter pruinosulo, ad basin attenuato, 27 mm longo, ad apicem 2 mm, ad basin 1 mm diam. — Carne tenui, inodora. — Sporis 6.8—7.5 × 4.8—5.5 μ , ellipsoideis, hyalinis, massis refringentibus repletis vel leniter (haud omnibus et tunc lento et debiliter sed manifeste) amyloideis. — Basidiis 25—35 × 6—8.5 μ , clavatis, tetrasporis, paucis bisporis intermixtis, hyalinis, saepe massis resinaceis amorpho-granulosis incrustatis. Cystidiolis 25—31 × 4.5—7 μ , inconspicuis, versiformibus, basidiomorphis vel cylindraceis vel subulatis vel clavato-filiformibus, levibus, contentu nullo visibili, ex toto hyalinis. Cystidiis veris nullis, sed cheilocystidiis numerosis, \pm 45 μ longis et 6—11 μ latis, tenuitunicatis, fusideo-ventricosis, levibus, contentu nullo visibili, ex toto hyalinis. — Hyphis in tramate hymenophorali regulari filamentosis, intertextis, sed axillariter dispositis, haud gelatinosis, hyalinis, omnibus fibulatis, inamyloideis vel lentissime lenissime pseudoamyloideis (subcarneis in stipite iodii ope). Subhymenio subcellulari, hyalino, ex elementis exiguis haud gelatinosis nec pseudoamyloideis efformato. — Epicute pilei et dermatocystidiis numerosis, nonnullis in areis stratum subhymeniforme formantibus, aliis locis hypodermium nudum exponentibus; dermatocystidiis 11—43 × 6—12 μ , late cylindraceis vel clavatis vel ampullaceis, ad apicem late rotundatis, pigmento dissoluto, intracellulari fusco repletis. — Ad Lycopodia delapsa emortua inter Lycopodia viva in terra molli sicca sub arbustis in vegetatione xerophytica, solitario. Typus a R. Singer (T 2971) in

Argentina: Salta: Güemes, Estancia Yaquiásmé 7 II 1957 lectus et in BAFC conservatus. *H. xuthophyllo* affinis, lamellis minus confertis, minus decurrentibus, albis et elementis epicuticularibus magis pigmentatis, sporis minus consistententer amyloideis, minus elongatis et habitatione differt. Praeterea colore stipitis et sporis optice „vacuis“ distinguitur.

Hydropus xuthophyllus Sing. spec. nov. — Pileo cremeo-grisello („sheepskin“, „Longbeach“, „polo tan“ M & P) in adultis, magis grisello („blondine“ M & P) in juvenilibus, sub lente pubescente, convexo, profunde et subacute umbilicato, 8—11 mm lato. — Lamellis cremeis, arcuatis, nonnullis furcatis, subconfertis vel confertis, profunde decurrentibus. — Stipite pallido vel albido vel apici concolore, ad apicem flavido („popcorn“), pubescente, anguste farcto, demum cavo, 22—28 × 1—3.5 mm; mycelio basali forti, candido, tomentoso. — Carne pallida, inodora. — Sporis 6.3—7.8 × 5—6—(6.3) μ, breviter ellipsoideis vel ellipsoideis, levibus, tenuitunicatis sed interdum incrustatione tenuissima rigida hyalina inconspicua refirmatis, hyalinis, amyloideis. — Basidiis 23—46 × 7.5—7.8 μ, Cystidiis ad acies lamellarum numerosis, ad latera subsparsis, 11—42 × 3.5—6.3 μ, plerumque projicientibus, paucis brevibus et immersis in hymenio, cylindraceis vel anguste clavatis vel anguste ventricosis, interdum subcapitatis, hyalinis, integris. — Hyphis haud gelatinosis, in pileo et stipite inamyloideis, fibulatis. Tramate hymenophorali regulari. — Epicute pilei e fasciculis dermatocystidiorum, fragmentaria; dermatocystidiis cystidiis hymenialibus simillimis, haud vel vix pigmentatis. Tegumento stipitis dermatocystidiis simillimis consistente. — Ad lignum emortuum in silva xerophytica planitieis gregatim. — Typus a R. Singer (T 2991) in Argentina: Tucumán: Burruyacu 19 II 1957 lectus et in LIL, BAFC conservatus.

Filoboletus staudtii (Henn.) Sing. comb. nov.

Favolaschia staudtii Henn., Engl. Jahrb. 23: 544. 1897.

Dermoloma yungense Sing. spec. nov. — Pileo atrobadiospadiceo vel subfuligineo („seal“ vel „chocolate“ M & P), centro subnigro, levi, centro rugoso, haud viscoso, conico-applanato vel convexo-papillato, 16—30 mm lato. — Lamellis albis umbra leniter grisella tinctis, latis, ventricosis vel subventricosis, haud cuneiformibus, subconfertis, ad acies concoloribus, integris, lamellulis intermixtis, profunde sinuatis. — Stipite cinereopallida vel lamellis subconcolori leniter pruinosulo vel fibrilloso sub lente, glabrescente, cavo, cylindraceo, sed ad basin et interdum ad apicem angustato sed basi obtusa praedito, 38—56 × 4—4 mm. — Carne in pileo atra („seal“ M & P), in stipite pallida; odore et sapore farinaceo. — Sporis 4.5—5.5 × 2.7—3.2 μ, elli-

psoides. levibus, hyalinis, amyloideis. — Basidiis 15—20 × 5.4—5.7 μ, tetrasporis, basi fibulatis. Cystidiis et cheilocystidiis nullis. — Hyphis fibulatis, inamyloideis. Tramate hymenophorali regulari, mediostrato ex hyphis inflatis, multiseptatis 13—23 μ latis, in strato laterali ex hyphis subfilamentosis efformato. Subhymenio ex elementis exiguis irregulāriter elongatulis efformato, irregulārī. — Epicute pilei ex elementis subhymeniformiter vel hymeniformiter dense aggregatis sphaerocystiformibus efformata, sphaerocystibus plerumque pigmento cinnamomeo-fusco intracellulārī coloratis, sed ad apicem aut basin saepe hyalinis, plerumque globosis vel subglobosis, paucis clavatis. Hypodermio ex hyphis cutem efformantibus, angustis vel latissimis inflatis, magis intense et obscure pigmentatis quam epicutis et trama pilei efformato. — Ad terram in silva tropicali-montana. — Typus a R. Singer (B 700) in Bolivia: La Paz: Nor-Yungas, Charobamba, in 1200 m alt., 30 I 1956 lectus et in LIL, BAFC conservatus.

Pluteaceae

Pluteus horridus Sing. spec. nov. — Pileo atrobrunneo interdum breviter sulcato, innate minute radiatim fibrilloso sed haud superficialiter fibrilloso nec spinuloso nec squamoso, raro radialiter rimoso, opaco aut nitente, convexo-campanulato, subumbonato, ex convexo-applanato vel lenissime depresso circum discum subumbonatum, 32—73 mm lato. — Lamellis albis dein roseis, aciebus albis, latis, confertis, liberis. — Stipite pallido sed longitudinaliter innate griseofibrilloso, haud superficialiter fibrilloso, subaequali vel apicem versus attenuato, 55—75 × 5—8 mm. — Carne alba, immutabili, inodora. — Sporis 6.5—7 × 5—5.5 μ, breviter ellipsoideis vel subglobosis, pallide stramineo-carneis. — Basidiis 25 × 7 μ, tetrasporis. Metuloideis prope acies 54—85 × 12—18 μ, fusoideis, appendiculis lateralibus uno vel compluribus acutis vel rarius obtusis 0.3—4 μ longis ornatis, apice acutis, crasse (1.5—2 μ) tunicatis, basin versus tenuius tunicatis, metuloideis ab aciebus remotis (trama pilei versus) similibus sed neque apicaliter nec lateraliter appendiculatis, cornubus nullis, plerumque 65 μ longioribus et 15 μ latioribus, omnibus hyalinis. Cheilocystidiis trimorphis (1) ± 22 × 11 μ, subvesiculosus, ad apicem latissime rotundatis, tenuitunicatis, integris, hyalinis, (2) metuloideis acieis simillimis sed tenuitunicatis, (3) 32—57 × 5—10 μ, appendiculis et spinulis ex toto destitutis, cylindraceutis vel fusoideis, tenuitunicatis, ad apicem acutis vel rotundatis, hyalinis. — Hyphis tramatis hymenophoralis inversi hyalinis, fibulatis, hyphis oleiferis numerosis vel sparsis, conspicuis. — Epicute pilei cutiformi, hyphis repentibus fibulatis 3—18 μ latis, appendiculis destitutis, cellulis terminalibus subcylindraceutis vel fusoideis vel ventricosis ad apicem obtusis, pigmento vacuolari, brunneo-fusco. — Ad truncum arboris dicotyledoneae in silva tropicali pluviali. Typus a R. Singer (M 8177) in Mexico: Veracruz: Esta-

ción Biológica de las Tuxtlas prope Monte Pío 23 VI 1969 lectus et in F conservatus.

Pluteus leaianus (Berk. ex Cooke) Sing. comb. nov.

Pluteolus leaianus Berk. ex Cooke apud Sacc., Syll. 11:60. 1895.

Pluteus triplocystis Sing. spec. nov. — Pileo griseo in sicco et vegeto, subtiliter innate fibrilloso-sericeo, minutissime verruculoso in centro, demum subtiliter nec semper manifeste radiatim rimosulo, convexo-campanulato, subumbonato, dein vel siccando manifestius umbonato, 30 mm alto, 40 mm lato. — Lamellis albis, dein roseis ad aciem albis, confertis, confertissimis fere, angustis, liberis, siccando haud atris. — Stipite ex integro sed magis versus basin bisovelutino, inter particula velutina trama album monstrante, ita ut macroscopice pileo concolorem judices, basin versus attenuato, 100×9 mm, ad apicem 4.4 mm diam.; velo nullo. — Carne alba, immutabili, inodora. — Sporis $5.5-7.5 \times 4.5-5.5 \mu$ in specimine juvenili. — Basidiis $21-30 \times 6.5-8 \mu$, ventricosis, tetrasporis. Metuloideis usque ad mediam longitudinem vel duas tertias a basi tenuitunicatis, in parte apicali parietibus $0.5-1.5 \mu$, ad ipsum apicem usque ad 2μ crasis, $62-72 \times 11-23 \mu$, hyalinis, ventricosis, in parte media vel paullum infra eam latissimis, interdum sub apice constrictis, ad apicem rotundatis vel acutis, ad apicem cornutis vel cornubus appendiculisque destitutis (si prope aciem evolvunt, frequentius sine cornubus, in ceteris frequentius cornuta sunt); cornubus vel appendiculis, ubi praesentes sunt, $1-3 \times 1-2 \mu$, uno, duobus vel tribus subacutis vel obtusis. Cheilocystidiis $35-60 \times 9-14 \mu$, ventricososubcylindraceis vel clavatis, frequentius clavatis, ad apicem late rotundatis, numquam subvesiculososis, hyalinis, haud mucronatis, tenui-tunicatis. — Hyphis fibulatis. — Epicute prope marginem pilei cutiformi ex hyphis filamentosis, haud gelatinosis, tenuitunicatis repentibus, pigmento umbrino dissoluto intracellularem repletis, levibus efformatis; cullulis $\pm 160-170 \times 8-15 \mu$. Tegumento stipitis flocculoso-velutino, e cellulis hyphalibus multi-septatis fasciculatis catenulatis efformato, cellula terminali dermatocystidiformi; dermatocystidiis $37-60 \times 7-17 \mu$, paucis e. gr. $30 \times 16 \mu$ et breviter ventricosis ad apicem rotundatis, ceteris subulatis vel fusoides, ad apicem subacutis vel acutis, diametro parietum $0.3-0.8 \mu$, pigmento vacuolari umbrino-brunneo vel fusco. — Ad lignum arborum Dicotyledonearum in silva tropicali. Typus a R. Singer (M 8141) in Mexico: Veracruz: Prope Montepío lectus et in F conservatus.

Pluteus minor (Sing.) Sing. comb. nov.

Pluteus cervinus var. *minor* Sing., Collectanea Botanica 1 (III, 14): 228. 1947 (publ. 1950) (P. „(cervinus var.?) minor“).

Pluteus minor var. *quercuum* Sing. var. nov. — Sporis minoribus ($5.3-6.5 \times 4-4.5 \mu$) differt. Ad ligna emortua *Quercuum* in quercetis. — Typus varietatis a R. Singer (B 6770) in Columbia: Cauca: via a Cali Popayán versus, km 100, 28 IV 1968 lectus et in F conservatus. Ad *P. xylophilum* var. *tucumanensem* ducit, sed cheilocystidiis omnibus brevibus $11-25 \times 7.7-15 \mu$ differt.

Pluteus albostipitatus (Dennis) Sing. var. *poliobasis* Sing. var. nov. — A var. *albostipitato* stipite ad basin griseo differt. — Ad ligna dicotyledonea in silvis tropicalibus. — Typus varietatis a R. Singer (M 8117) in Mexico: Veracruz: Estación Biológica de las Tuxtlas 21 VI 1961 lectus et in F conservatus.

Pluteus leucocyaneus Sing. spec. nov. — Pileo albo, haud glutinoso, glabro, per 3 mm marginales striato, nudo, campanulatoconvexo, 11 mm lato. — Lamellis albis, demum roseolis, confertis vel confertissimis, moderatim latis, liberis. — Stipite albo, innate sericeo, nitente, ad apicem attenuato, 33×3 mm, ad apicem 2 mm lato. — Carne alba, tactu caerulescente. — Sporis $5.3-7-2 \times 4.5-5 \mu$ in juvenilibus, usque ad $7 \times 5 \mu$ in adultis. — Basidiis $21-29 \times -7 \mu$, tetrasporis, Cystidiis ad latera lamellarum a cheilocystidiis differentibus, $14-57 \times 11.5-21 \mu$, saccato-ventricosis vel subvesiculosus, ad apicem late rotundatis, tenuitunicatis, hyalinis, raro mucrone apicali obtuso. Cheilocystidiis numerosis ad acies heteromorphas, $22-44 \times 8-15 \mu$, ventricosis vel ventricoso-mucronatis vel ampullaceis, raro ad mucronem crasse tunicatis, ceterum tenuitunicatis, mucrone apicali tenui obtuso, $3-3.5 \mu$ lato, omnino hyalinis. — Hyphis hyalinis, defibulatis. — Epicute pilei ex hyphis repentibus appressis cutem haud gelatinosam formatibus, tenuitunicatis, hyalinis; dermatocystidiis paucis e. gr. $45 \times 11 \mu$, cheilocystidiis similibus; aliis cellulis terminalibus hypharum epicuticularium cylindraceis vel subventricosis, ad apicem obtusis, $6-10 \mu$ latis — Ad lignum dicotyledoneum in silva tropicali pluviali. Typus a R. Singer (M 8130) in Mexico: Veracruz: Estación Biológica de las Tuxtlas propeMontepío 21 VI 1969 lectus et in F conservatus.

Pluteus paraensis Sing. spec. nov. — Pileo fuligineo, inter elevationes costatas pallidiore vel pallido, glabro, radiatim rugoso ut minime in siccis, per medium radium sulcato in vegetis, brevissime sulcato in siccis, haud viscoso, convexo, obtuso, 12 mm lato. — Lamellis albis, dein roseolis, aciebus concoloribus lateribus, latis, ventricosis, subconfertis, liberis. — Stipite albo, in parte inferiore fusco-fibrilloso fibrillis ascendentibus, in vegetis griseolo ex eis, subaequali vel lenissime attenuato versus apicem, interdum subcurvato, centrali, 15×1 mm. — Carne alba, tenui, inodora. — Sporis $4.5-6 \times 4-5 \mu$, $0-0.9 \mu$ longioribus latitudine, sed perpauca perfecte globosis, plerumque $0.3-0.6 \mu$ longioribus quam latitudo — Basidiis $16-20 \times 6-7.5 \mu$, tetrasporis. Cystidiis ad latera aciesque lamellarum moderatim numerosis, $17-32 \times 8.5-15 \mu$, late ventricosis, frequentius autem subvesiculosus et

pedicellatis, ad apicem late rotundatis, hyalinis, tenuitunicatis. X Hyphis defibulatis. — Epicute pilei supra hyphas iacentes elongatas hymeniformi; cellulis hymenii (ita ut subiacentes) pigmentatis pigmento uniformiter dissoluto fusco-brunneo intracellulari et ventricosis vel clavatis, ad apicem late rotundatis, integris, 14—35 μ lates — Ad ligna emortua solitario in silva tropicali pluviali. — Typus a R Singer (B 4238) in Brasilia: Pará: Estancia Pirelli 7 VI 1966 lectus et in BAFC conservatus.

Pluteus paraensis var. *mexicanus* Sing. var. nov. — A varietate paraensi supra descripta pigmento intracellulari vacuolari haud aequaliter dissoluto fusco, colloideo-condensato nec non pileo umbonato differt. — Ad ligna emortua (*Quercus cuiusdam*) in silva quercuum tropicali-montana. Typus a R Singer (M 8487) in Mexico: Morelos: prope Tepoxtlán 1800 m alt. 16 II 1969 lectus et in F conservatus.

Volvariella stercoraria (Peck) Sing. comb. nov.

Pluteus stercorarius Peck, Bull. Torr. Cl. 22: 488: 1895.

Agaricaceae

Cystoagaricus jujuyensis Sing. spec. nov. — Pileo purpureorubro („ember“ M&P) dein sordide brunneo vel sordide griseo, macroscopice glabro, in siccis sub lente haud polito, subtiliter verrucosulo-ruguloso, subglabro, demum subfibrilloso, opaco in vegetis et siccis, semiglobato, dein convexo, demum convaco, 6—7 mm lato. — Lamellis atrogriseis, in siccis fuliginis, ventricosis, latis, subdistantibus, subliberis vel liberis. — Stipite pileo concolori, opaco, demum fuligineo, apparenter nudo (specimen juvenile 1 mm latum velum non habet), subaequali, 13—15 \times 0.7—1 mm; mycelio basali pallido, fibrilloso. — Carne subconcolori superficiebus, inodora. — Sporis 4.5—5 \times 2—2.5 μ , cylindraceis vel ovoideo-cylindraceis, levibus, homogeno-tunicatis, endosporio pallido et episporio fuligineo instructis, ita ut griseae appareant, haud magis rubido-brunneis in solutione Melzeri (i. e. inamyloideis), subtenuitunicatis (ambobus stratis junctis 0.3 μ crassis), poro germinativo destitutis. — Basidiis 13—16.5 \times 4.5—4.7 μ , tetrasporis. Cystidiis ad acies et latera lamellarum inconspicuis basidiomorphis, 15.3—17 \times 5—6 μ . — Hyphis pilei et tramatis hymenophoralis elongatis sed latis, fibulatis, fuscis. — Epicute pilei ex elementis subglobovesiculososis, aliis cylindraceis vel breviter fusoideis, omnibus brevibus et latis, 9—21 \times 7—12 μ (aliis 15 \times 12 μ , aliis 20 \times 9 μ), fuscogriseis efformata. — Ad terram in silvis alneis montanis zonae tropicalis. Typus a R. Singer (T 5012/21) in Argentina: Jujuy: Lagunas de Yala 1950 m alt. 10 II 1966 lectus et in F conservatus.

Cystolepiota aurantiaca Sing. spec. nov. — Pileo saturate aurantiaco, ferrugineo-aurantiaco („bittersweet o.“ vel 4 B/C 12, M&P),

umbone „Ginger, Kaiser br“ M&P, macroscopice glabro, haud viscoso, sub lente minute granulati, subrivuloso in vetustis, subruguloso circum umbonem, convexo dein subapplanato, umbonato, 16—24 mm lato. — Lamellis pallide sordideque subaurantiocremais latis, ventricosis, confertis, liberis. — Stipite obtuse brunneolo-aurantiaco, (11 F 8 M&P) in vetustis rubrobrunneo, interdum spiraliter torto, glabro et (annulo excepto) nudo, aequali, 33—39 × 1—3 mm; annulo initio apicali, demum interdum infero vel mediano, sed admodum fugaci, stipitis superficiei subconcolori, flocculoso-lanoso, frequenter fragmentario, incompleto; mycelio basali byssaceo, albo. — Carne tenuiuscula, odore nullo vel debili. — Sporis 4.2—5 × 2.5—3.5 μ ellipsoideis, levibus, homogonitunicatis, hyalinis, nonnullis in KOH pallide stramineis, inamyloideis. — Basidiis 17—15 × 5.5—6—(7) μ, tetrasporis. Cystidiis rarissimis, ad latera lamellarum inconstanter et admodum sparse visis, cheilocystidiis similibus; cheilocystidiis sparsis, in juvenilibus interdum absentibus, (9)—14—20 × 7—15 μ, vesiculosis, interdum corpusculo interno stramineo instructis aut tenuiter stramineo-incrustatis, tenuitunicatis, levibus et integris, hyalino-tunicatis. — Hyphis defibulatis, hyalinis in tramate et haud gelatinosis, inamyloideis. Tramate hymenophorali regulari vel subregulari, hyphis subintertextis. — Epicute ex elementis subhymeniformiter dispositis vel in catenulis suberectis seriatis vel e hyphis filamentosis racemose ramificatis lateraliter et apicaliter natis, epithelium fere repraesentantibus; his elementis isodiametricis vel late ventricosis vel vesiculosis et tunc plerumque pedicellatis, sphaericis (6)—20—24 μ diam., ceteris 25—50 × 13.5—20 μ pedicello 3—20 μ longo, aut hyalinis aut stramineis aut aureo-flavidis. — Ad terram in silvis subxerophyticis sub Persea, Peumo, Myrtaceis. — Typus a R. S i n g e r (M 7122) in Chile Centrali: Santiago: prope Ranque 6 VII 1967 lectus, in SGO in herbario W L a z o i conservatus.

Cystolepiota pumanquensis Sing. spec. nov. — Pileo albo ad marginem, vinaceo inter centrum et marginem, roseobrunneo-fusco in centro, subtiliter furfuraceo-pruinato, levi, convexo, dein magis repando, late obtuseque umbonato, usque ad 35 mm lato. — Lamellis albis, latis, confertis, liberis. — Stipite pileo concolori, subtiliter granulati vel farinaceo-subfurfuraceo usque ad veli circulum apicalem, subaequali vel aequali, 55 × 4 mm; velo exiguo, etiam ad marginem appendiculato. — Carne alba, in stipite subduriuscula, inodora. — Sporis (3)—4—5 × 2—2.6 μ, cylindraceutis vel subcylindraceutooblongis, levibus, hyalinis, inamyloideis. — Basidiis 18—20 × 5—6 μ, tetrasporis. Cheilocystidiis et cystidiis nullis visis, sed prope marginem interdum sphaerocystibus pilei ad acies descendentibus. — Hyphis fibulatis, sed nonnullis septis secundariis defibulatis visis; inamyloideis hyalinis, tramate hymenophorali regulari. — Epicute pilei e sphaerocystibus epithelium fere repraesentantibus efformatis; his 20—45 μ diam. — Ad terram inter folia delapsa in silva anectotrophica. Typus a W. L a z o

(PU—104) in provincia chilensi Colchagua, prope Pumanque, 25 VII 1967 (hieme) lectus et in SGO conservatus est.

Cystolepiota violaceogrisea (Rick) Sing. comb. nov.
Mycena violaceogrisea Rick, Lilloa 2: 281. 1938.

Cystolepiota hetieri (Boud.) Sing. comb. nov.
Lepiota hetieri Boud., Bull. Soc. Mycol. Fr. 18: 135. 1902.

Cystolepiota sororia (Huijsman) Sing. comb. nov.
Lepiota sororia Huijsman, Persoonia 1:326. 1960.

Lepiota xanthophylla Sing. spec. nov. Pileo pallide flavido, granulis rubescentefulvis dense tecto breviter sulcato ad marginem, convexo, centro applanato vel leniter depresso in adultis, 23 mm lato. — Lamellis flavis, latis, minute serrulatis ad aciem, confertis vel subconfertis, liberis. — Stipite flavido ad apicem, pallide fulvo- corrii-colori basin versus, aequali vel lenissime apicem versus attenuato, 46×3 mm; annulo minutissimo, e cingulo mediano granulari efformato. — Carne albida, inodora, — Sporis $5.5-6 \times 3-3.3 \mu$, ellipsoideis, levibus, hyalinis, guttulis compluribus vel una guttula oblonga repletis pseudo-amyloideis. — Basidiis $18-26 \times 6-7 \mu$, tetrasporis. Cystidiis nullis; cheilocystidiis numerosis, $18.-25 \times 5-9 \mu$, versiformibus plerumque cylindraceis, subventricosis, interum leniter constictis, ad apicem late rotundatis, hyalinis, tenuitunicatis. — Hyphis in tramate hyalinis, fibulatis. — Epicute pilei a trichodermio haud profundo efformata; hyphis eius erectis vel semierectis, obliquis vel usque ad positionem horizontalem depressis, membris terminalibus $23-110 \times 7-10 \mu$, hyalino-tunicatis, pigmento intracellulari brunneo dissoluto repletis. — Ad folia delapsa putrescentia in silva tropicali humida. Typus a R. Singer (B 4249) in Brasilia: Pará: Belem, IAN 10 VI 1966 lectus et in BAFC conservatus.

Leucoagaricus acaciarum Sing. spec. nov. — Pileo sordide griseo vel fusco, in siccis magis castaneoferrugineo, centro integro velutino, per tres quartas partes radii pectinato et subinde subrimoso, sed in zona restricta marginali tantum, circum discum squamuloso squamulis appressis, campanulato dein convexo, demum applanato, subumbonato vel umbonato, $20-30$ mm lato. — Lamellis albis dein roseis, siccando vinaceoseis, aciebus discoloribus fuscis, 6 mm latis, confertis, liberis et a stipite remotis, zona sterili ad stipitem in adultis saepe roseo-fimbriata. — Stipite albo, basin versus fuliginascente, glabriusculo, subaequali sed ad basin fusiformiter incrassato, $\pm 42 \times 2$ mm, supra basin incrassato usque ad 5 mm; velo ad marginem pilei appen-

diculato (hic membranaceo-floccoso-roseo), ad stipitem apicali et annul-formi; annulo bene evoluto, demum libero et mobili, ad latus interius albo, ad exterius fuligineo, roseo-fimbriato ad marginem floccosum. — Carne alba, hic inde fuliginascente, sed inter squamulos pilei subalbido in siccis, tramate annuli fuliginascente. Odore subnullo vel cuminum in mentem revocante. — Sporis 6—6.5 × 4.5—5 μ, ellipsoideis, depressione suprahilari destitutis, crassiuscule tunicatis, fortiter pseudoamyloideis, manifeste endosporio roseo-metachromaticis azurei cresylici ope, poro germinativo destitutis et ad apicem nullo modo discontinuis, in KOH hyalinis. — Basidiis 22—25 × 8—8.5 μ, tetrasporis; pseudoparaphysibus haud visis. Cheilocystidiis 14—36 × 10—22 μ, versiformibus, vesiculososis aut 33—68 × 8.5—12 μ, ventricososis vel uteriformibus, interdum excrescentiis lateralibus furcatis, raro subcapitatis, omnibus corpusculis fuligineis pigmenti intracellularibus solidis insignibus. — Hyphis tramatis initio hyalinis, defibulatis, inamyloideis. — Epicute pilei trichodermiali ex elementis cheilocystidiis similibus sed haud vel rarissime spaerocystoideis, 55—95 × 11—16 μ compositis, elemento terminali ad apicem late rotundato; hypodermio frequenter pigmento incrustante colorato. — Ad terram inter gramina sub Acaciis extra silvam gregatim. — Typus a Martha Singer in Argentina: Corrientes: Curuzú Cuatiá 7 XI 1965 lectus, comm. Singer S 564, in BAFC conservatus.

Leucoagaricus rickianus (Speg.) Sing. comb. nov.

Lepiota rickiana Speg., An. Acad. Cienc. Cordoba 23: (reprint pag.): 9. 1919.

Leucoagaricus sect. *Sphaerocystophori* Sing. sect. nov.

A ceteris sectionibus epicute pilei sphaerocystophora differt. — Typus sectionis: *L. exannulatus* Sing.

Leucoagaricus exannulatus Sing. spec. nov. — Pileo Pileo luteo (in primordiis „old bronze,“ dein „Empire y“ vel „brass,“ demum subpalescente et areis flavido-luteis ornato, guttas aureas exsudante, subtiliter grauloso-squamuloso sed glabro in centro, ad marginem levi nec striato nec pectinato-fisso, integro, convexo, dein concavo, umbonato, margine demum recurvato, 5—20 mm lato. — Lamellis albis, haud lacrimantibus, sat confertis, sat latis, subventricososis, liberis, remotis a stipite; sporis in cumulo albis. — Stipite supra basin luteo, ceterum albo, sed usque ad zonam glabram apicalem granuloso-squamuloso ita ut pileus, linea abrupta apicali delimitato sed exannulato, sed in primordiis tegumentis pilei et stipitis confluentibus, guttas aqueas exsudante, apicem versus attenuato, 15—30 × 1—3 mm; mycelio basali albo. — Carne alba; odore nullo. — Sporis

5.8—6.5 × 3.5—4.5 μ (e basidiis tetrasporis), usque ad 8.5 × 4.5 μ e basidiis bisporis, ellipsoideis, raro subcylindraceis stramineo-hyalinis in KOH, levibus, poro germinativo haud visibili, endosporio azurei cresylici ope anguste rosascente- vinoso, metachromatico, pseudoamyloideis. — Basidiis tetra- vel bisporis. Cystidiis nullis. Cheilocystidiis 35—44 × 11—16 μ, elongato-vesiculosus vel ovalibus. — Hyphis hyalinis, defibulatis, inamyloideis. — Epicute pilei et squamulis stipitis epitheliiformibus, e catenulis cellularum globosarum vel ovali-subcylindracearum sed brevium, 11.5—22 × 11—17.5 μ, rarius 28—32 × 17—19 μ, mox separatarum et individualium epithelium formantium efformatis; inter epithelium crinibus dermatocystidiformibus e fundo epithelii nascentibus obviis, his 58—87 × 6.5—8.7 μ, flavis, raro hyalinis, cylindraceis vel ad basin ventricosis vel ad apicem capitatis, integris, levibus, tenuitunicatis. Pigmento cellularum tegumenti plerumque nullo sed in nonnullis flavido vel flavido-umbrino, intracellulari et dissoluto. — Ad humum sub arboribus silvae subtropicalis gregatim. — Typus a R. Singer (T 211) in Argentina, Tucumán: Parque Aconquija 12 III 1949 lectus et in LIL conservatus sub nom. „*Leucoagaricus* spec. (*Schulzeria flavidula* Rick?). *Schulzeria flavidula* Rick est *Lepiota* genuina.

Leucoagaricus sect. *Sculpturati* Sing. sect. nov. — A sectione *Rubrotinctorum* differt sporis adultis grosse, immo insigniter ornamentatis. Typus sectionis *L. rubrosquamosus* (Rick) Sing. sensu Sing. (cp. Lilloa 26: 67. 1593, publ. 1954).

Species representativae in Africa Tropicali, America subtropicali et tropicali adsunt.

Leucoagaricus sect. *Piloselli* (Kuhner) Sing. comb. nov. — A sectione *Leucoagaricorum* differt lamellis rosascentibus, massa sporarum roseola vel aurantiocrema; pileo albo vel lilacino; ammoniaci ope superficies virescit. Typus sectionis: *L. georginae* W. G. Smith

Leucoagaricus sect. *Annulosi* (Fr.) Sing. comb. nov. — *Agaricus* tribus *Lepiota* sect. *Annulosi* Fr., *Epicrisis* p 15, 1838 Typus sectionis est *A. naucinus* Fr.

Dissoderma (Smith & Sing.) Sing. stat. nov. (= *Cystoderma* subgenus *Dissoderma* Smith & Singer, *Mycologia* 40: 454. 1948). A genere *Cystodermate* differt notis publicatis in diagnosi typonyma, a genere *Squamanita* differt stipite et velo externo sphaerocystibus tectis. Typus: *D. paradoxum* (Smith & Sing.)

Dissoderma paradoxum (Smith & Sing.) Sing. comb. nov. (*Cystoderma paradoxum* Smith & Sing l. c.).

Coprinaceae

Coprinus herbivorus Sing. spec. nov. — Pileo albo, dein griseo, subtiliter pubescentifarinaceo, dein albomaculato maculis farinaceis, atrogriseo-pectinato in adultis, disco remanente pallido, sub lente coriicolori-stramineo-pectinato fundo atro, in primordio globuloso, dein ellipsoideo dein plano-conico subumbonato vel umbonato, 6—23 mm lato. — Lamellis albis dein nigris, confertissimis, angustis, liberis. — Stipite albo, primum ad basin subtiliter albo-pubescente, aequali, cavo, sub lente ex toto sutiliter pubescente, glabrescente, 17—27 × 1—1.5 mm; annulo volvaque nullo, praeter pubescentiam (velarem?) velo absente. — Carne in pilei tenuissima, alba, fragili, inodora. — Sporis 7—8.5 × 5.5—7 × 4.5—4.7 μ, frontaliter ovoideis vel ovoideis-subangularibus (hexagonalibus), lateraliter visis ellipsoideis, levibus, crasse tunicatis, atrofuscis vel subfuliginis in NH₄ OH, poro germinativo distali interdum leniter obliquo 2—2.2 μ lato truncatis, appendice hilari apiculatis, — Basidiis 13—20 × 7—8 μ, tetrasporis, pseudoparaphysibus et cystidiis vesiculosis, tenuitunicatis, hyalinis, cystidiis praecipue ad acies. — Hyphis defibulatis, hyalinis. — Epicute pilei hymenio destituta sed ex hyphis cutiformiter dispositis, filamentosis levibus efformata ex quibus elementa nascuntur terminaliia; his cystidioideis, elongatis, frequenter subclavatis, 4—13 μ latis, irregulariter ramulis lateralibus brevibus ornatis, crasse (1—2.7 μ) tunicatis et pigmento intraparietali flavido-hyalino vel stramineo (NH₄ OH), frequenter ad basin bifurcatis vel multiple divisis, contentu hyalino gaudentibus. Tegumento stipitis e pilis tenuitunicatis hyphalibus 30—75 × 4 (ad basin) μ, usque ad 1 μ ad apicem longe effilatis efformato. — Ad caudices herbarum (e. gr. *Digitalis*) in silvis montanis zonae tropicalis sub Alnis. — Typus a R. Singer (T 3929) in Argentina: Jujuy: Lagunas de Yala 2000 m cc. alt., 9 II 1965 lectus et in F conservatus.

Psathyrella annulosa Sing. — Pileo brunneolo, hygrophano, dehydratione rubidoisabellino vel isabellino, leniter radiatorugoso in siccis, glabro, nudo, haud viscoso, ad margem leniter sulcatulo, 12—17 mm lato. — Lamellis violaceobrunneis, confertis, mediocriter latis, leniter ventricosis, ad acies albis, adnatis. — Stipite albo, glabro, levi, apicem versus attenuato, 45 × 2.5 mm. (ad basin), × 1.5 mm (ad apicem.); anulo mediano, albo pendulo, levi, tenuiter membranaceo. — Carne alba, odore levi, haud definiendo. — Sporis 7.5—8.5 × 4.5—5 μ, ellipsoideis haud reniformibus, levibus, sat crasse tunicatis, poro germinativo apicali instructis, dilute fuscis. — Basidiis tetrasporis. Cystidiis ad latera lamellarum sparsis, ad acies numerosis, 25—40 × 7.5—13 μ, utriformibus vel subampullaceis, sed apice latis, obtusis, haud incrustatis, tenuitunicatis, hyalinis. — Hyphis fibulatis, hyalinis in tramate hymenophorali regulari. — Epicute pilei cellulis typicis *Psathyrellarum* consistente, setis et pilis nullis. — Ad folia delapsa putrescentia in silva

tropicali. — Typus a R. Singer (B 4192) in Brasilia: Belem 5 VI 1965 lectus et in BAFC conservatus.

Psathyrella argillospora Rick ex Sing. spec. nov. — Pileo brunneo, hygrophano, dehydrato coriicolori vel alutaceo umbone sordide ferrugineo, opaco, subtomentoso in vegetis sed interdum glaberrimo in siccis sub lente, subsemiglobato, dein convexo, leniter vel fortiter umbonato, umbone interdum subumbilicato 12—33 mm lato. — Lamellis dilute fuscidulis dein atrobrunneis, ad acies pallidis, vel pallidioribus, sublatis vel angustis, confertis, adnexis vel adnatis, interdum a stipite separatis. Stipite sordide brunneo, pallide sericeotecto vel subpruinato glabrescente, sub aequali, 12—45 × 1.5—4 mm; velo nullo viso; mycelio basali strigoso albo. — Sporis 7—9 × 4—5 μ, ellipsoideis, levibus, pallide argillaceis vel argillaceo-griseis, poro germinativo destitutis. — Basidiis 14—18 × 7.5—8.5 μ, tetrasporis. Cystidiis nullis; cheilocystidiis 20—35 × 8.5—15 μ, subhyalinis vel pigmento intraparietali pallide brunneis (KOH) vesiculosus vel ventricosis vel late cylindraneo-ventricosis tenuitunicatis. — Hyphis tramatis hymenophoralis regularis e cellulis sat voluminosis, catenulatis, dilute fulvidis vel melleis sed incrustatione pigmenti destitutis, fibulatis efformatis, in tramate pilei aequaliter pigmentatis, — Epicute pilei e cellulis subglobosis vel globosis, ad basin vel ex integro fusco-brunneo-tunicatis, crasse tunicatis (0.7—1.3 μ diam.), 30—40 × 25—35 μ, subhymeniformiter dispositis. — Ad cortices lignorum delapsorum nec non ad humum lignosum locis umbris, in silvis montanis typi „subparamo“ nec non in silvis subtropicalibus et tropicali-montanis. — Typus a R. Singer (B 6992 a) in Columbia: Cauca: in regione „Gabriel López“ 4 IV 1968 lectus et in F conservatus. — Paratypus (Singer B 6165 in Columbia: Valle, Mun. Cali, Saladito, 15 IV 1968 lectus et in F conservatus. — Sub hoc epitheto etiam in herbario Rickii (PACA) specimen in Brasilia: Rio Grande do Sul, São Salvador, Januario 1943 a Rick lectum existit. Absentiae pori germinativi sporarum causa *P. apora* Sing. chilensis comparanda.

Psathyrella crinipellis Sing. spec. nov. — Pileo fulvo-lignicolori, hygrophano, grisello pallido dehydratatione, fortiter pallido-fibrilloso-piloso, praesertim ad marginem ubi pili transcendunt marginem, levi, convexo, umbone vel papilla exiguis sed abruptis, 4—5 mm lato. — Lamellis argillaceis dein brunneis, mediocriter latis, subdistantibus, anguste adnexis. — Stipite concolori, glabro nunnulis pilis eis pilei similibus exceptis, nudo, aequali vel apicem versus attenuato, 9—19 × 0.8—1.2 mm; velo nullo viso; mycelio basali strigoso albido, rhizomorphis albis et atris praesentibus sed tenerrimis. — Carne tenerima, inodora. — Sporis 6.2—7 × 4.5—5 μ, ellipsoideis vel ovoideis vel amygdaliformibus, levibus, gutta oleacea elongata repletis, endosporio crasso subhyalino, ferrugineo-brunneo-lineato, et episporio spadiceo tenui instructis, inamyloideis, poro germinativo anguste tunicato vel

haud truncato vix conspicui instructis. — Basidiis 20—30 × 6.2—7—(9) μ, hyalinis, clavatis, tetrasporis se nonnullis bisporis intermixtis, nonnullis latis (9 μ) ab aliis distinctis visis. Cystidiis metuloidis typi *Inocybes*, 39—62 × 10—20 μ, ampullaceis, inamyloideis, azurei cresylici ope haud metachromaticis (omnino caerulescentibus), crasse (1—2 μ, ad apicem cystidii 2.5—3 μ) tunicatis, basin versus gradatim tenuius tunicatis, hyalinis, rarius pallide flavido-melleis, ad apicem abundanter crystalline murinatis; cheilocystidiis haud differentibus, sed cystidiis metuloidis ad acies saepe tenuius murinatis et tunicatis et minoribus, hyalinis. — Hyphis fibulatis, in tramate hymenophorali regulari subhyalinis. — Epicute pilei haud hymeniformi sed intermittere subhymeniformi vel fasciculatim elementa inflata emittente; his 18—26 × 6—12.5 μ, clavatis vel ventricosis et interdum ampullaceis vel tenuiter mucronatis, inter ea crinibus *Crinipellium* modo in tramate pilei aut in hypodermio ortis conspicuis projecientibus, his 55—200 × ± 5 μ, crasse (0.5—1 μ) tunicatis inamyloideis, haud metachromaticis (azurei cresylici ope), septis destitutis, ad apicem obtusis interdum dense aggregatis fascicula formantibus, ad basin frequenter brunneolis vel melleis, sed ceterum omnino hyalinis. Hypodermio cutiformi, fusco, haud gelatinoso, pigmento incrustante sparso tenerrimoque resinaceo spadiceo. Crinibus eis pilei simillimis ad superficiem stipitis etiam visis, sed sparsis. — Ad ligna putridissima vel putrescentia solitario, in silva tropicali et tropicali-montana. Typus a Ringer (M 8825) in México: Chiapas, 15 km ad occidentem a San Cristobal de las Casas, 2400 m alt. 2 VIII 1969 lectus et in F conservatus. Etiam inter Finca Sospiro et El Pozo 4 VIII 1969 (F).

Psathyrella metuloidophora Sing. spec. nov. — Pileo coriicolori, brunneo-fibrilloso fibrillis spinuloso-subhispidis ex toto tecto, marginem versus pallidiore, hygrophano, in siccis ex toto dilute coriicolori, ruditer sulcato ad marginem, inter marginem et discum scrobiculato, ad discum levi, fibrillis detersilibus, velaribus, campanulato, usque ad 50 mm lato. — Lamellis dilute fuscis, in siccis vinaceofuscis, initio subascendentibus, confertis satis angustis, adnatis. — Stipite albo, longitudinaliter striato, farinoso-pruinato, ad basin ruditer sed minute subscabro, cavo, subaequali vel leniter ventricoso, 50—55 × 6—7 mm; mycelio pallido; velo nullo. — Carne in pileo pro ratione subcrassa, in stipite alba, inodora. — Sporis 9—10.3 × 5.5—6.2 μ, ellipsoideis, plerumque subreniformibus vel phaseoliformibus lateraliter visis, poro germinativo haud protracto, manifesto, exiguo paullum truncato praeditis, rubido-griseo-brunneis, moderatim atris, levibus, inamyloideis, parietibus pro ratione tenuibus sed episporio et endosporio bene distinctis. — Basidiis tetrasporis. Cystidiis ad acies et latera lamellarum numerosis, ad acies densioribus et paullum minoribus quam ad latera, ubi 56—95 × 11.5—20.5 μ, fusoides, crasse tunicatis (2—2.8 μ, ad apicem, 1.2—2 μ ad medium), interdum ad apicem aut in pedicello subsoli-

dis tenuiter muricatis ad apicem extremum subacutis vel obtusatis sed haud collo late rotundato praeditis, contentu et pseudomembrana amyloideis (lilaceis). — Hyphis brunneolis in tramate, fibuligesis. — Flocculis veli in pilei superficie ex hyphis filamentosis et sphaerocystibus efformatis, omnibus pigmento flavo intracellulari repletis. — Ad terram nudam prope truncum in dumeto arbustivo zonae subtropicali-montanae solitario. — Typus a R. Singer (T 3538) in Argentina: Tucumán: Sierra de San Javier, Ciudad Universitaria 16 I 1960 lectus et in LIL conservatus. — Characteribus cystidialibus *Homophron* cum *Lacrimaria* jungit.

Psathyrella phaeocystidiata Sing. spec. nov. — Pileo fuscobrunneo vel dactylobrunneo (e. gr. „„burnt umber“ M&P), per medium radium pellucide striato, hygrophano, glabro sed ad marginem extremum albobloccoso e velo convexo-campanulato, dein convexo-subapplanato et subumbonato vel conico-applanato et obtuso, 24—35 mm lato. — Lamellis umbrino-fuscis („„Vandyke br.“ M&P), angustis vel satis angustis, confertis, adnexis vel adnatis. — Stipite albo, ad apicem subsericeo vel pruinoso, ceterum glabro, annulato, leniter apicem versus attenuato, 50—62 × 3.5—5 mm. ad apicem 2.5—3.5 mm lato; velo albo, crasse membranaceo sed fragili, ad marginem pilei appendiculato et floccoso, annulo initio apicali et bene evoluto, sulcato sursum, levi deorsum (ad latus interius), mox fragmentario vel fugaci; — Carne alba vel albida, inodora. — Sporis 8—10.3 × 4.2—4.5 μ, plerumque 8.5—9.5 × 4.5 μ, Boletorum sporas forma sua aemulantibus, oblongis, vix nevis rarius lenissime reniformibus, levibus, parietibus duplicibus, atrocastaneis vel subpurpureofuscis, poro germinativo lato truncato praeditis, depressione vel applanatione suprahilari instructis, rarius sine ullis. — Basidiis 13—15 × 6.7—8 μ, clavatis. Basidiolis perbrevibus, vesiculosis, hyalinis, interdum ex eis basidiis, interdum pseudoapapophysibus enascentibus, his ± 13 × 9 μ, basidiis (2)-4- sporis. Cystidiis metuloideis 35—78 × 9.5—17—(20) μ, moderatim crasse vel crasse tunicatis (ut minime prope apicem), fusiformibus, ad apicem subacutis vel acutis aut appendiculo acuto munitis, raro obtusis sed semper attenuatis apicem versus e parte mediana, fuscis, in parte superiore ammoniaci ope virescentibus sed haud manifeste incrustatis, ad acies et latera lamellarum numerosis, sed ad acies saepe minoribus. Cheilocystidiis 13—35 × 9—31 μ, vesiculosis, hyalinis, levibus, tenuitunicatis, late rotundatis ad apicem nec mucronatis. — Hyphis in tramate hymenophorali regulari dilute stramineis vel fuscidulo-hyalinis, sine pigmentis incrustantibus, omnibus fibulatis. — Epicute pilei hyalina, e cellulis isodiametricis vel subsodiametricis efformata, cellulis e. gr. 30—35 μ diam.. Hypodermio cutiformi sed in epicutem gradatim transeunte, brunneo vel fusco, sine incrustationibus. — Ad terram et detritum terrae mixtum in Alnetis superioribus. — Typus a R. Singer (T 5138) in Argentina: Jujuy: Lagunas de Yala

2350 m alt. 14 II 1966 lectus et in F conservatus. Paratypus a R. Singer (T 3896) ibidem 8 II 1965 lectus et in F conservatus.

Psathyrella rhizophorae Sing. spec. nov. — Pileo dilute brunneo, siccis fusco-brunneo, pellucide striato et leniter sulcatulo, convexo, centro subumbonato et subobscurius colorato, 4—7 mm alto et 7—21 mm lato. — Lamellis brunneolis, argillaceis, latis interdum rugulosis vel in spatio interlamellari subrugulosis, ad acies paulisper pallidis et integris, rarius partim minutissime crenulatis, adnexis. — Stipite albo vel albido, mox e basi sordide pallideque melleo, glabro, levi, sed ad apicem manifeste pruinato, cavo, aequali, 6—30 × 1—2,5 mm; velo nullo viso. — Sporis (8)—9,5—12—(13) × 6—7,5—(8) μ, ellipsoideis, ad latus interius aequaliter (ut in exteriori) convexis vel minus convexis, immo lateraliter raro subreniformibus, poro apicali vix vel haud evoluto, appendice hilari vix vel haud protracto, levibus, parietibus 0,4—0,6 μ crassis, complexis, episporio pallide biso, endosporio hyalino provisus, in parte interiore corpusculo subfusoidio interno apparenter schizogeno visibili et inter id et parietes opacis et corpusculo interno membrana hyalina a contentu exteriori delimitato, guttulis exiguis oleiferis plerumque repletis, inamyloideis, — Basidiis 15—18,5 × 6,5—10 μ tetrasporis. Cystidiis irregulariter et saepe sparse occurrentibus ad latera lamellarum sed numerosis ad acies, 12—48 × 4,5—12 μ, facile collabentibus, tenuitunicatis, versiformibus cylindraceutis vel vesiculosis, subcapitatis vel centro constrictis, ventricosis vel clavatis, saepe excrescentiis perbrevis lateralibus vel apicalibus ornatis, his 1—2,5 μ altis. — Hyphis stipitis parallelis vel subparallelis, ad apicem stipitis hyalinis, ad basin submelleis, fibulatis, 2—22 μ latis, tenuiter raro usque ad 1,2 μ crasse tunicatis. Hyphis tramatis pilei et tramatis hymenophoralis regularis aut hyalinis aut pigmenti intraparietalis causa melleis, inamyloideis. — Epicute pilei *Psathyrellarum* modo cellulari, corii-colori vel brunnea. Hypodermio cutiformi, concolori. Tegumento apicis stipitis e dermatocystidiis cystidiis hymenialibus similibus, versiformibus efformato. — Ad plantulas et plantas juveniles emortuas *Rhizophorae* mangle in aqua dulci, in palude. — Typus a J. K o h l m e y e r 2564 in Hawai: Oahu 4 VI 1968 lectus et in Herbario K o h l m e y e r conservatus. — Species habitatione et sporarum constructione insignis.

Psathyrella riparia Sing. spec. nov. — Pileo dactylibrunneo vel fulvobrunneo, hygrophano, dehydratatione albido vel gilvo, praeterea decolorante, pallescente ita ut in maturis fere semper albo vel albido appareat, velo sparso prope (supra) marginem per duas tertias pellucide striatum sed in siccis levem subtili, sericeo, fibrillis minutissimis appressis formato sed fugacissimo ornato, haud appendiculato, campanulato-convexo, dein applanato, 40—42 mm lato. — Lamellis dilute cinnamomeo-alutaceis, in adultis sepiaceis, angustis, confertis, ad acies pallidis, adnexis. — Stipite albo, glabro, nudo, cavo, aequali, usque ad 45 × 3 mm; velo sparso in pileo tantum visibili. — Carne

alba vel juventute partim brunneola, inodora. — Sporis $7.3-8.2 \times 4.8-5.3 \mu$, ellipsoideis vel ovoideis, levibus, maturis sepiaceis, poro germinativo lato truncato munitis. — Basidiis tetrasporis. Cystidiis nullis. Cheilocystidiis ad et prope acies numerosis (sed basidiis intermixtis), sat tenuiter tunicatis, $26-34 \times 9.7-14 \mu$, ventricosus vel ampullaceis (sed mucrone vel collo apicali breviusculo vel perbrevis et aut vel fortiter apicem versus attenuato munitis), interdum constrictione infraapicali sucapitatis ($6.5-7.5 \mu$ diam), hyalinis vel subhyalinis. — Hyphis tramatis pilei satis irregularibus forma sua, e pigmento intraparietali brunneolis in juvenilibus (KOH), in tramate hymenophorali regulari etiam brunneolis aut brunneolo-hyalinis, fibulatis. — Epicute cellulari, strato superiore subhymeniformi, hyalinis vel brunneolohyalinis, cellulis subcrasse (usque ad 1.5μ) tunicatis levibus, densis, clavato-vesiculosis, e. gr. $31 \times 22 \mu$; dermatocystidiis et setis nullis. Hypodermio atrofulvobrunneo. — Ad terram nudam inter gramina sub Salicibus humboldtii prope ripam rivae gregatim. — Typus a R. Singer (S 422) in Argentina: Corrientes: Curuzú Cuatiá 8 II 1964 lectus et in BAFC conservatus.

Psathyrella sugenus *Drosophila* (Quél.) Sing. stat. nov.

Drosophila Quél. (ut genus) Enchiridion p. 115. 1883.

Typus subgeneris: *P. candolliana* (Fr.) Maire in Maire & Werner
Psathyrella (subgenus *Drosophila*) sectio *Argillosporae* Sing. sect. nov. A reliques sectionibus subgeneris differt sporis poro germinativo destitutis. — Typus sectionis *P. argillospora* Rick ex Sing.

Psathyrella (subgenus *Psathyra*) sectio *Apora* Sing. sect. nov. — A reliquis speciebus subgeneris differt sporis poro germinativo destitutis. Typus sectionis: *P. aporpa* Sing.

Psathyrella subgenus *Heterocystis* Sing. subgen. nov. — A reliquis subgeneribus generis differt cystidiis mucum vel substantiam resinosa in ammoniaco virescentem exsulantibus, saepe parietibus incrassatis aut pigmento intraparietali brunnescentibus acutis vel digitiformiter apicaliter cornutis vel appendiculatis. Sporis magnitudine mediocribus $6.5-12.5 \times 4.2-7 \mu$, poro apicali praevisis, generatim bene pigmentatis. *Psathyrella* (subgenus *Heterocystis*) sectio *Silvestres* Sing. sect. nov. — Cystidiis utriformibus vel ampullaceis et ad apicem latis rotundatisque, integris et levibus, hyalinis vel subhyalinis. Typus sectionis: *P. silvestris* (Gillet) Moser in Gams.

Bolbitiaceae

Agroclybe platysperma (Peck) Sing. comb. nov.

Naucoria platysperma Peck, Bull. Torr. Bot. Cl. 25: 324. 1898.

Agroclybe lenticeps (Peck) Sing. comb. nov.

Agaricus lenticeps Peck, Ann. Rep. N. Y. State Mus. 31: 34. 1879.

Agroclybe paradoxa Sing. spec. nov. — Pileo sat saturate fulvo, haud viscoso, haud hygrophano, lentiformi-convexo, margine incurvo, velo appendiculato, 16—23 mm lato. — Lamellis argillaceo-griseis, dein brunneis, latis, moderatim confertis, ad acies pallidis, rotundatoadnatis. — Sporis in cumulo atroferrugineo-brunneis (ita ut in Pholiota). — Stipite fulvo, subtomentoso-fibrilloso, ad basin albo, aequali vel leniter basin versus attenuato, aequali, 31—37 × 3—3.5 mm; velo nullo vel raro incospicuo subfibrilloso in stipitis apice; rhizomorphis albis haud conspicuis. — Carne alba, odore levi, farnioso, sapore farinaceo. — Sporis 13.3—17.8 × 9.5—12.5 μ , late ellipsoideis, raro abnormaliter triangularibus vel allantoides (et tunc bi-poratis), poro germinativo lato truncato munitis, levibus, crasse et tripliciter tunicatis, brunneolo-ochraceis, in KOH ferrugineo-ochraceo-brunneis, — Basidiis 28—32 × 8.2—10 μ , bisporis. Cystidiis inconspicuis (cystidiolis) cheilocystidiis simillimis, prope acies tantum occurrentibus, aliis basidioliformibus, 29—41 × 7.5—10 μ , ventricosus vel subcylindraces, hyalinis, uno vel duobus appendiculis digitiformibus vel sterigmatiformibus apicalibus ornatis, his 6.5—7 × 2.6—3.5 μ . Cheilocystidiis inter pseudoparaphyses sparsis sed sat numerosis, hyalinis vel nonnullis melleis intermixtis, (18.5)—24—40 × 7.3—14.5 μ , ampullaceis, in parte inferiore ventricosus, in parte superiore frequenter subcapitulatis vel capitatis (capitulo usque ad 6, interdum usque ad 8.2 μ diam. et raro duplicato). — Pseudoparaphysibus e. gr. 13.8 × 7 μ . — Hyphis tramatis hymenophoralis regularis hyalinis, filamentosis, fibulatis, haud gelatinosis. — Epicute pilei haud persistenter nec manifeste hymeniformi, sed multis elementis vesiculosus erectis saepe parallele aggregatis e gr. 21 × 12 μ , pseudoparaphysibus similibus, hyalinis vel brunneolis, frequenter pedicellatis, ad apicem late rotundatis, saepe intermittenter hyphis velaribus filamentosis hyalinis tecta quae intertextae et haud gelationsae sunt. Hypodermio ex hyphis intertextis irregularibus tangetialibus sed interdum inter elementa epicuticularia intercalatis, pigmento ferrugineo frequenter incrustatis efformato. — Ad terram in apricis montanis vel subalpinis. — Typus a R. Singer (T 3767) in Argentina: Tucumán: prope viam a Tafi del Valle versus Infiernillo 2500 m alt. 29 I 1962 lectus et in BAFC conservatus. — Etiam prope San Pedro de Colalao (Singer T 2060) visa.

Agroclybe tucumana Sing. spec. nov. — Pileo ad marginem ochraceo-cremeo („Leghorn“ M & P) ad centrum angustum fusco („coffee“ M & P), subhygrophano, ad marginem haud striato nec sulcato sed debiliter unum ad latus rugososulcato, glabro, nudo convexo, centro depresso, 23 mm lato. — Lamellis aeneo-brunneis („bronze“ M & P), latis, distantibus, adnatis. Sporarum massa brunnea („clove“ M & P). — Stipite multum pallidore pileo, pallide fibrilloso in tertia parte superiore, subaequali vel ad basin incrassato, 36 × 3—4.5 mm; annulo nullo. — Carne pallida, subinodora. — Sporis 6.5—7.3 × 4.5—4.7 μ , e basidiis

bisporis natis usque ad $9.3 \times 6 \mu$, ellipsoideis, levibus, complexo-tunicatis, bene pigmentatis subferrugineo ochraceis, poro germinativo nullo vel angusto nec truncatis. — Basidiis (1—2—3—)4-sporis, $26.5—34.5 \times 5—7.3 \mu$, Cystidiis ad latera lamellarum $30—44 \times 13—15.3 \mu$, ampullaceis, rarius late cylindraceis vel vesiculososis, apice ampullaceorum e. gr. 10μ diam., interdum subcapitato, hyalinis tenuitunicatis. Cheilocystidiis a cystidiis aliis haud morphologice differentibus, sparsis. Hyphis pilei et stipitis fibulatis. — Epicute pilei hymeniformi, ex elementis vesiculoso-clavatis et pedicellatis vel obpiriformibus flavido-hyalinis vel (in areis limitatis pilei) ad bases suas ferrugineis efformata; dermatocystidiis nullis visis. Hypodermio in areis limitatis pilei fortiter ferrugineoincrustato, ex hyphis inaequalibus subfilamentosis efformato, cutem repraesentante. Tegumento stipitis e dermatocystidiis fasciculatis vel aggregatis $33—61 \times 10.7—16 \mu$ efformato, his ventricosis vel subvesiculoso-ventricosis, rarissime vesiculososis aut subcapitatis efformato. — Ad humum in silva tropicali. Typus a R. Singer (T 2130) in Argentina: Tucumán: Rio de los Sosa 4 II 1955 lectus et in BAFC conservatus. — Ab affini *A. firma* differt colore pilei nec non absentia dermatocystidiorum elongatrum subcapitatorum et lamellis distantibus.

Pholiotina mycenoides (Fr. sensu Overholts) Sing. comb. nov.
Agaricus mycenoides Fr., Syst. Mycol. 1: 246. 1821.

Haec diagnosis debet interpretari sensu Overholts (probabiliter etiam Boudier), quod nostris collectionibus maxime et plene convenit. *Galerina „mycenoides“* sensu Jaap, Kühner est *Agaricus mycenoides* β *applanatus* Lasch, Linnaea 3: 409. 1828 et recte *G. jaapii* Smith & Sing. nominanda. *P. mycenoides* nobis semper muscicola, saepe sphagnicola, sporis $9—11 \times 5—6 \mu$, basidiis tetrasporis, cheilocystidiis ampullaceis, apice claviculatis vel aequalibus.— *Conocybe flexipes* Watling (1971) probabiliter eadam.

Pholiotina arrhenii (Fr.) Sing. comb. nov.
Agaricus arrhenii Fr. Epicrisis p. 161. 1838.

Conocybe arrhenii (Fr.) Kits von Waveren, Persoonia 6: 147. 1970. Clari Kits van Waveren (1970) nomenclatura specifica nobis correcta, rationalis acceptabilis apparet ita ut epitheta „togularis“ et „blattaria“ huic speciei (sensu nostro 1950 et annis sequentibus) haud conveniunt, sed eius systematica generica incorrecta, superficialis, rejicienda.

Pholiotina tucumana Sing. spec. nov. — Pileo ochraceo-brunneo (centro „burnt umber“ vel „Hispano“ M & P, margine vel inter strias „oher br. P“ vel „Yucatan“ M & P), hygrophano, in humidis per quartam partem vel medium radium pellucide striato, glabro, levi

campanulato-convexo, dein convexo, obtuso, 8—9 mm alto, 12—22 mm lato. — Lamellis brunneolis („café creme“ M & P) dein brunneis („chip-monk“ M & P) demum e sporis ferrugineis („Ginger, Kaiser br.“) M & P), moderatim confertis vel confertissimis, sat latis vel latis subventricosis vel ventricosis, adnexis. Sporibus in cumulo laetius intensiusque coloratis quam „Ginger“ M & P. — Stipite ad apicem hyalino-albido, dein pallide alutaceo (10 C 2, M & P), ceterum pileo vix vel haud pallidiore et subconcolori, ad apicem pruinoso, sub annulo fibrilloso vel sericeo striatulo, cavo, aequali vel apicem versus attenuato, sed haud bulboso, 36—42 × 1.5—2 mm, prope basin usque ad 3—4 mm lato in nonnullis; annulo bene evoluto, albido, cremeo („Pond lily“ M & P) vel partim stipite concolori, crasse membranaceo, infundibuliformi, dein distante vel pendulo, ad marginem frequentius fimbriato, sursum sulcato, plerumque persistente: mycelio basali albo. — Carne albida vel albido-brunneola, in stipite brunnea („burnt umber“) inodora. — Sporibus (8)—9—11—(12.5) × (4.8)—5—6—(7) μ , ellipsoideis, crasse et stratosae tunicatis, poro apicali germinativo truncato lato munitis, intense ferrugineis, ochraceis (NH₄OH) levibus. — Basidiis 14—25 × 7.2—9.2 μ , (1-2-3)-4-sporibus vel omnibus fere tetrasporibus, ventricosis vel clavatis. Cystidiis nullis. Cheilocystidiis 13—27 × 6—13 μ , versiformibus, ampullaceis, ventricososubvesiculosus, clavatis, cylindraceis, sepe inconspicuis. — Hyphis fibuligeris, tenuibus vel crassiusculis. Tramate hymenophorali *Pholiotinae* modo regulari. — Epicute pilei cellulari, hyalina, hymeniformi, ex elementis erectis 15—32 × 11—21 μ , piriformibus vel obpiriformibus vel subglobosis, saepe pedicellatis, hyalinis vel incrustatione pigmenti ferruginea tectis efformata. — Ad humum et ligna putrida in silvis alneis zonae subtropicalis et in silvis subtropicali-montanis, gregatim. — Typus a R. Singer (T 1199) in Argentina: Tucumán: Tafi del Valle 2050 m alt., 1 V 1949 lectus et in LIL sub nomine *P. filaris* depositus; paratypi ibidem ipso 15 I 1950 (T 879) et sub Paso de San Javier, 1050 m alt. 13 II 1951 lecti (LIL). — Olim sub *P. filari* descripta species a *P. filari* sensu meo et K u h n e r i (*P. filaris* var. *kuhneri* mihi Trud. Bot. Otd. Inst. Kom. Ak. Nauk 2 (6): 431. 1950) differt carpophoris maioribus, cheilocystidiis haud constanter ampullaceis et praecipue sporibus poro germinativo lato munitis et paulum maioribus. Kits van Waveren *P. filarem* sporibus interdum (in speciminibus 2—4 sporibus) maioribus et poro germinativo lato conspicuoque (1—1.5 μ lato) descripsit (*P. filaris* var. *recedens*¹⁾ f. *subochracea* mihi olim, Trudy Bot. Otd. Inst. Komm. Ak. Nauk 2 (6): 430. 1950!). Haec *P. tucumanae* peraffinis, sed forma pilei, stipite minore, sporibus plus minusve minoribus in speciminibus tetrasporibus, lamellis minus numerosis, habitu gregario differt et speciem separatam vel subspeciem

¹⁾ *Agaricus recedens* typus = *Descolea recedens* (Cooke & Mass.) Singer cp. Singer, Sydowia 9: 407. 1955.

P. tucumanae repraesentat. *Galera vestita* var. *pusilla* Quél.²⁾ = *Pholiotia pusilla* (Quél.) Maire apud Kuhner ad *P. filarem* pertinet. Donec, *P. filaris* sensu Kits van Waveren = *P. rugosa* (Peck) Sing.

Pholiotina sect. *Cyanopodae* Sing. sect. nov. — Stipite laeso cyanescente vel virescente; dermatocystidiis plerumque praesentibus vel absentibus in epicute pilei; velo paullum evolutu vel haud persistente; fibulis praesentibus. Typus sectionis: *P. cyanopoda* (Atk.) Sing.

Pholiotina sect. *Verrucisporae* Sing. sectio nov. — Sporibus verrucosis vel marmoratis exosporii ornamentatione causa. Dermatocystidiis praesentibus vel absentibus in epicute pilei; velo paullum evolutu, si adest, mox gelatinascit et disparet. Fibulis praesentibus. Typus sectionis: *P. verrucispora* Sing.

Pholiotina sect. *Intermediae* (Watling) Sing. comb. nov.

Conocybe subg. *Pholiotina* sect. *Intermediae* Watling, *Persoonia* 6: 328. 1971.

Pholiotina brunnea (J. E. Lange & Kuhner ex Watling) Sing. comb. nov.

Conocybe brunnea Lange & Kühner ex Watling, *Persoonia* 6: 318. 1971.

Pholiotina appendiculata (Lange & Kühner ex Watling, *Persoonia* 6: 329. 1971 ut *Conocybe*) c. n.

Stropharia pendolae (Speg.) Sing.

Pilosace pendolae Speg., *Bol. Acad. Nac. Cienc. Cordoba* 28: 332. 1926.

Naematoloma amazonicum Sing. spec. nov. — Pileo uniformiter badiobrunneo („Mohawk“ M&P), dein badiobrunneo in centro tantum, sed pallidius brunneolo ad marginem, nudo, dein subtiliter appresse fibrillososquamuloso (?) — in siccis nudo glabroque sed minute verruculoso vel levi, convexo, centro applanato vel umbonato, 28—48 mm lato. — Lamellis grisello-albis dein griseo-murinis („Arizona“ M&P), mediocriter latis vel latis (4.5 mm vel latioribus) confertis vel subconfertis, rotundatoadnatis vel plane adnatis. Sporibus in cumulo spadiceoumbrinis („chocolate“ M&P). — Stipite velo concolori dein dilute ochraceo-cinnamomeo („Pablo“ M&P), usque ad lineam veli apicalem pallide fibrilloso, apice glabro vel subfibrilloso, pilei diametro longiore vel aequali leniter attenuato apicem versus, solido vel angustissime cavo-tubuloso; velo fibrilloso-flocculoso, apicem stipitis cum pileo connectante, fugacissimo, ad marginem pilei tenuiter

²⁾ Flore Mycologique, p. 81 (haud Enchiridion p. 81 citatum a Kits van Waveren).

floccoso-appendiculato, sat persistente, ad stipitem zona velari tenuiter cingulato, sed zona fugacissima, haud annuliformi, fibrillosa, toto cremeo-albido; rhizomorphis candidis tenuibus praesentibus. — Carne alba, miti, inodora. — Sporis 6—7 × 4 μ, cuneiformibus vel ovatis, rarius ellipsoideis, levibus, lateraliter visis ad latus interius applanatis vel frequentius concavis, ita ut reniformibus videantur, poro apicali germinativo plus minusve manifesto, angusto, haud truncato munitis, brunneis vel fuscobrunneis, in accumulationibus umbra castanea accedit, parietibus illis N. fascicularis haud crassioribus. — Basidiis 15 × 6 μ, tetrasporis. Chrysocystidiis numerosis, v 26—34 × 9—11.5 μ, vesiculosis vel clavatis vel ventricosis, interdum mucronatis, plerumque obtusis et late rotundatis, tenuitunicatis, corpusculo amorpho interno in KOH flavido-hyalino repletis. — Hyphis fibuligeris; pigmento intercellulari nullo. — Epicute pilei haud gelatinosa, hyphis repentibus. Hypodermio debiliter subcellulari, pigmento debiliter incrustante, vel haud incrustante. — Ad truncum dicotyledoneum fasciculatim vel gregario. Typus a R. Singer (B 1802) in Brasilia: Guaporé: Guajará mirim 10 III 1056 lectus et in BAFC conservatus. —

A ceteris sectionis *Naematolomatis* speciebus coloribus differt.

Naematoloma nudum Sing. spec. nov. — Pileo ochraceobrunneo, brunneomelleo, margine flavido, vel sordide cremeo-pallido in vetustis, haud viscoso, in vetustis tenuioribus pellucide striato, interdum subsulculato, convexo, obtuso, demum frequenter centro depresso, (5)—13—13—(21) mm lato. — Lamellis pallide cremeo-griseis vel griseis vel griseis, mediocriter latis vel subangustis, confertis, adnatis. — Stipite hyalino-albido ad apicem, cinnamomeo vel fulvo ad basin, sub lente leniter pallido-fibrilloso, minute fibrilloso ad apicem, demum denudescente et glabrescente apice excepto, aequali, (3)—20—24—(47) × (0.7)—1.5—(2) mm; velo ad marginem pilei nullo visibili, ad stipitem fibrillis appressis fugacibus notato, numquam annulari. Carne flavidoalbedo, odore nullo, sed sapore miti, dein lenissime adstringente. — Sporis 5.6—6.3—(7.5) × 3.5—3.7—(4) μ, ellipsoideis vel ellipsoideo-subamygdaliformibus, levibus, poro germinativo lato tuncato munitis, haud lentiformibus, melleo-fuscidulis. — Basidiis 15—20 × 4—6.5 μ, tetrasporis. Chrysocystidiis numerosis 17—27—(40) × 6—12 μ clavatoventricosis, subinde vesiculoso-ventricosis vel constrictis, multis ex eis mucronatis aliis obtusis, corpusculo interno amorpho in KOH flavido-hyalino repletis, nonnullis incrustationibus intense vitellinis gaudentibus. Cheilocystidiis 15—29 × 5—6 μ, cylindraceo-ampullaceis, ventricoso-constrictis, raro clavatis vel subfilamentosis, hyalinis, aliis sulphureis. — Hyphis fibulatis, in strato superiore pilei sulphureis sed pigmento intercellulari granuloso haud notabili in KOH, in strato inferiore pilei et in tramate hymenophorali regulari sulphureohyalinis vel hyalinis; parallelis sed diametro variabili gaudentibus. — Epicute

pilei haud gelatinosa, pigmento incrustante vitellino gaudente, cutiformi, hyphis filamentosis. Hypodermio fulvo-brunneo, cutiformi sed subcellulari praesertim in centro pilei, pigmento fulvo incrustante abundante vel sparso. — Ad lignum putridum vel putrescens inter muscos, fasciculatim vel fasciculis 2—3—dymis subcaespitose in silvis tropicalibus pluvialibus planitieis et zonae montanae. Typus a R. Singer in Brasilia: Pará: Estancia Pirelli 7 III 1966 lectus et in BAFC conservatus. Forma cheilocystidiis magis inconspicuis versiformibusque et pigmento hypodermii subnullo incrustante in Columbia in zona „subpáramo“ obvia (Singer B 3649, BAFC) an conspecifica?

Naematoloma popperianum Sing. spec. nov. — Pileo gilvo, areis exiguis brunneolis, glabro, viscido, nitente, convexo demum subapplanato, in adultis centro haud profunde, depresso margine primum et subpersistenter incurvato, levi, 30 cm cc. lato. — Lamellis albo, albidopallido, uniformiter pigmente destituto, albo-flocculoso usque ad annulum, supra annulum glabro, aequali vel leniter ventricosco, 24—26 × 4—5 mm; velo annulari apicali; annulo albo, simplici, levi, membranaceo; rhizomorphis albis praesentibus. — Carne alba vel albida, caerulescente; odore nullo. — Sporis 7—9.5 × 4—5.3 μ, subellipsoideis, haud lentiformibus, saepe plus minusve attenuatis a parte centrali versus partem distalem, frequenter minus convexis ad latus interius quaim ad exterius, haud reniformibus, depressione suprahilari leni vel nulla munitis, endo- + episporio junctis usque ad 0.5 μ crassis (H₂O), in KOH linea castanea ad latus interius endosporii visibili, fuscomelleis in ammoniaco, aureobrunneis vel aureomelleis in NaOH 10%, poro germinativo angusto vel perangusto haud truncato, raro truncato munitis. — Basidiis 21—22 × 5.5—7.5 μ, tetrasporis. Chrysocystidiis 26—35 × 10—12—(15) μ, ventricosis, apicaliter mucronatis, in KOH et NH₄OH corpusculo interno amorpho vel globoso flavo, rarius pallide flavo et laxe granulati vel resinaceo-homogeneo repletis, tenuitunicatis, ad latera lamellarum sat numerosis et conspicuis, ad acies numerosis vel densis. Cheilocystidiis 30—42 × (5.5)—7—9.5 μ, fuscoideis vel ampullaceis, etiam gloeocystidiiformibus ex corpusculo interno, sed minus conspicuo, aut corpusculo interno omnino destitutis. — Hyphis fibulatis; tramate hymenophorali regulari, ex hyphis haud gelatinosis, stramineis vel stramineo-hyalinis, usque ad 24 μ latis vel tenuiter filamentosis, subparallelis vel parallelis consistente. Hymenopodio ex hyphis filamentosis tenuibus consistente, haud gelatinoso. — Epicute pilei 500 μ diametri, gelatinosa (ixocutis) hyphis 2—3 μ latis ad superficiem nonnullis hyphis ad septum quodlibet arthrosporibus chlamydosporibormibus melleis adjunctis sed an huius specieis nescimus. Hypodermio leniter subcellulari. — Ad terram ruderalem in aggere prope viam extra silvam, solitario. — Typus a R. Singer (N 2041) in U. S. A. California: San Francisco lectus et in F conservatus. — Prima species caerulescens Stropharioi-

dearum cognota quae *Psilocybibus* haud reunienda sed e strutura sua et chrysocystidiorum abundantia ad *Naematoloma* pertinet amico Hans Popper dedicata.

Psilocybe anellariformis (Murr.) Sing. comb. nov.

Stropharia anelariformis Murr., *Mycologia* 14: 129. 1922.

Psilocybe chrysocystidiata Sing. spec. nov. — Pileo auran-tiobrunneo vel brunneo („Tarragona“ M&P, ad marginem „kis kilim“ M&P), ad marginem pellucide striato, subtiliter hyalino-fibrilloso praesertim ad marginem, convexo, papillato, 5 mm alto, 6 mm lato. — Lamellis luride brunneolis („Aztec“ M&P), sublatis (2 mm), subascen-dentibus, confertis, adnatis. — Stipite ad apicem lamellis conco-lori, brunneo („Cochin“ M&P) basin versus, fibrilloso ex integro, ad apicem fibrilloso-pruinato e dermatocystidiis, aequali, 17×1 mm; velo subtiliter fibrilloso, appresso ad pileum et stipitem, haud annuli-formi. — Carne superficiebus subconcolori, tenui; odore haud notato. — Sporis $4-5 \times 2.5-3 \mu$, vix vel haud lentiformibus, levibus, fuscidiulis, (NH_4OH), — Basidiis $11-17 \times 3.5-5.5 \mu$, tetrasporis. Cystidiis ad latera et acies lamellarum dimorphis: (1) chrysocystidiis numerosis, $14-5-23.5 \times 8-9 \mu$, vesiculosus vel clavatis, frequenter mucronatis vel ampullaceis, tenuitunicatis, corpusculo interno amorpho pallide-mel-leo-aureo (NH_4OH) repletis; (2) cystidiolis $17-18 \times 4.5-5.2 \mu$, ampulla-ceis apice subcapitato (capitulo $2.5-3 \mu$ diam.), hyalinis, tenuitunicatis. — Hyphis fibulatis, tramate hymenophorali regulari ex hyphis brun-neolis (NH_4OH) parallelis vel subintertextis efformato. — Epicute pilei haud gelatinosa, pigmento incrustante sparsiore quam in hypo-dermio vel subnullo, ex hyphis filamentosis $1.5-3 \mu$ latis, hyalino-tunicatis efformata. Hypodermio magis irregulari, atrocastaneobrunneo e pigmento incrustante, haud subcellulari sed elementis multis brevi-bus et latiusculis. Dermatocystidiis cystidiolis simillimis in pileo sparsis, in apice stipitis sat numerosis. — Ad lignum emortuum in silva tropicali pluviali. — Typus a R. Singer (B 1747) in Bolivia: Beni Vaca Diez: Guayaramerín 8 III 1956 lectus et in BAFC conservatus. — Species inter chrysocystidiophoras sporis admodum exiguis insignis.

Psilocybe jujuyensis Sing. spec. nov. — Pileo brunneo, ceobrunneo, viscido, levi, convexo, subumbonato, 6 mm lato. — Lamellis pallide argillaceis, dein trioribus, sat latis, confertis, adnatis. — Stipite pallide ochreo, sicco, $\pm 35 \times 2$ mm; velo flocculoso-lanato ad marginem pilei appendiculato et primum ad stipitis superficiem etiam obvio, tenui, sordide pallido, annulo nullo. — Carne inodora. — Sporis $6.2-7 \times (3.5)-4-4.5 \mu$ leniter lentiformibus, haud rhom-boideis, ellipsoideis, raro leniter reniformibus in positione laterali. levibus, fuscobrunneolis. — Basidiis $18-38 \times 6-6.5 \mu$, tetrasporis. Cystidiis in forma chrysocystidiorum ad latera lamellarum nec non ad

acies numerosis, 25—34 × 8.5—11.2 μ, clavatis vel clavato mucronatis, plerumque mucrone exiguo vel nullo, hyalinis, corpusculo interno amorpho pallide flavido (NH₄OH) repletis, tenuitunicatis, Cheilocystidiis 19—30 × 5.5—7.5 μ, ampullaceis, vel ventricosus-constrictis, plerumque subampullaceis (apice latis: 4.5—7 μ diam.) late rotundatis ad apicem, hyalinis, corpusculis internis destitutis, tenuitunicatis. — Hyphis tramatis hymenophoralis regularis hyalinis, fibulatis. — Epicute pilei ixocutiformi, fortiter gelatinosa, hyphis hyalinis, aliis pigmento castaneofusco incrustatis, filamentosis, 1.5—2.5 μ latis. Hypodermia haud subcellulari, pigmento castaneobrunneo fortiter incrustato. — Ad fimum in apricis montanis. — Typus a R. Singer (B 4313 a) in Argentina: Cordoba: Pampa de Achala 31 XII 1966 lectus et in F conservatus. — *P. lazoi* Sing. affinis.

Psilocybe septembris (Sing.) Sing. comb. nov.

Pholiota septembris Sing., Nov. Hedw. Beih. 29: 275. 1969.

Psilocybe graminicola (Orton) Sing. comb. nov.

Deconica graminicola Orton, Notes Roy. Bot. Gard. Edinb. 26: 49 1966.

Psilocybe cordobensis Sing. spec. nov. — Pileo ochrahygrophano, glabro, haud viscoso, margine striato, convexo, haud manifeste papillato, ± 10 mm lato. — Lamellis grisello-brunneis, cinnamomeo-brunneis in siccis, satis angustis, confertis, adnexis. — Stipite brunneolo sed pallide sericeo-fibrilloso, aequali; velo e fragmentis membranaceis albidis ad marginem appendiculatis marginali nec non ad stipitem anuliformi; annulo apicali, mox lacerato, firme membranaceo, gradatim fragmentato. — Carne inodora. — Sporis 7—7.3 × 4.3—4.7 × 3.8—4.3 μ, leniter lentiformibus, ellipsoideis, parietibus complexis 0.3—0.5 μ crassis tunicatis, ex epi- et endosporio consistentibus, melleis in aqua, olivaceo-aureo in KOH poro germinativo truncato praeditis, levibus. — Basidiis 20 × 6.5—7.5 μ tetrasporis. Cystidiis ad latera et acies lamellarum numerosis, 31—55 × 8—14 μ, 10—30 μ projicientibus, ampullaceis vel ventricosis, magis ampullaceis ad acies, magis ventricosis ad latera lamellarum, in ampullaceis apice ± 5 μ lato, omnibus tenuitunicatis et hyalinis, haud gloeocystidiformibus. — Hyphis fibulatis. — Epicute pilei haud gelatinosa, pigmento epicutulari et hypodermiali et hypharum tramatis hymenophoralis regularis brunneo, incrustante. — Ad ligna emortua muscosa, solitario vel gregatim, in silvis montanis alneis. — Typus a R. Singer (T 4059) in Argentina: Jujuy, Lagunas de Yala, 13. II. 1965 lectus et in F conservatus.

Psilocybe subhyperella Sing. spec. nov. — Pileo aurantio-brunneo vel brunneo (inter „Tarragona“ et „Alamo“ M&P), hygro-

phano desiccatione pallidiore, in humidis per tertiam partem radii pellucide striato, e campanulato convexo, obtuse sed constanter umbonato, 6—14 mm lato. — Lamellis argillaceo-brunneolis (inter „toast“ et „bure“ M&P), moderatim latis, confertis, adnatis, saepe ab apice stipitis separatis. — Stipite brunneo („tawny“ M&P), sed in adultis atrocastaneo-brunneo basin versus, sericeo, aequali, 15—24 × 1—1.5 mm; velo sericeo, in juvenilibus zonam vix annuliformem diffractam vel linearem medianam formante, pallido, fugaci; annulo nullo. — Carne inodora. — Sporibus eis *P. omniumsanctorum* simillimis, (6)—6.5—7.5 × 4—4.3 × 3.5—4.2 μ, leniter lentiformibus, frontaliter rotundato-subrhomboideis, lateraliter ellipsoideis vel oblongis, poro germinativo truncato lato munitis, episorio atro et endosporio hyalino instructis, levibus, — Basidiis 15.5—18 × 6—7 μ, clavatis, hyalinis, tetrasporis. Cystidiis nullis. Cheilocystidiis 17—22 × 4.5—6 μ, apice 2.5—8 × 1.2—2 μ, obtuso vel rarius subacuto praeditis, subulatis vel ampullaceis, hyalinis. — Hyphis fibuligeris. — Epicute tenui, haud gelatinosa, hyalina, cutiformi, hyphis tenuissimis. Hypodermio atrobunneo pigmento fortiter incrustante, elementis nonnullis sat brevibus, omnibus intertextis. — Ad culmos *Chusqueae* et ad hospites alios transiens. — Typus a R. Singer (B 3502) in Columbia: Cundinamarca: Salto de Tequendama, 24. VII. 1960 lectus et in F conservatus.

Psilocybe cookei Sing. nom. nov.

Agaricus semilanceatus var. *caelulescens* Cooke, Illustr. Brit. F. no 605, pl. 573 1884—1886.

Psilocybe sectio *Chrysocystidiatae* Sing., sect. nov. — A sectione *Psilocybi* praesentia chrysocystidiorum differt. — Typus sectionis: *P. chrysocystidiata* Sing.

Psilocybe sectio *Septembres* Sing. sect. nov. — Velo plerumque annulari; pleurocystidiis conspicuis; sporibus quam 10.5 μ brevioribus. Typus sectionis: *P. septembris* (Sing.) Sing.

Psilocybe mairei Sing. nom. nov.

Hypholoma cyanescens Maire, Bull. Soc. Myc. Fr. 44: 51. 1928.

Melanotus phillipsii (Berk. & Br.) Sing. comb. nov.

Agaricus phillipsii Berk. & Br., Ann. Mag. Nat. Hist. 5 (1): 21 1878.

Crepidotus phillipsii (Berk. & Br.) Sacc., Syll. 5: 878. 1887.

Pleuroflammula phillipsii (Berk. & Br.) Sing., Sydowia 5: 473, 1951.

Melanotus polylepidis Sing. spec. nov. — Pileo ex toto brunneo, pallescente usque ad ochropallidum vel flavido-ochreum, viscido,

glabro, nudo, convexo, dein supra locum stipitis affixionis leniter depresso, 4—10 mm lat. — Lamellis brunneis (neque porphyriis neque lilaceis neque ferrugineis), confertis vel subdistantibus, mediocriter latis, adnexis. — Stipite brunneo, sed albo-fibrilloso-arachnoideo et ex eo siccando pallescente, fortiter excentrico, curvato, subaequali, 1—2 × 0.2—0.3 mm; mycelio basali albo; velo nullo visibili. — Carne pallide brunneola, tenui, carnosa, inodora. Sporis 5—5.5—(6.5) × 3.3—4 μ, ellispsoides, rarius ovoideis, lateraliter raro subcurvatis sed haud reniformibus, haud lentiformibus, paucis sporis giganteis usque ad 8 × 4.5 μ, poro germinativo apicali perangusto vel truncato immo late truncato munitis, in aqua melleo-hyalinis, in ammoniaco et KOH melleis, in cumulis ochraceobrunneis, sine umbra rufa, levibus. — Basidiis 15—19 × 4.5—5 μ, hyalinis, clavatis et constrictis. Cystidiis nullis. Cheilocystidiis numerosis, 20—29 × 4.2—5.5 μ, ampullaceis vel subulatis, tenuitunicatis, numquam clavatis vel capitatis, apice ad basin 3 μ lato superne 1.5—1.7 μ lato, attenuato sed anguste obtuso. — Hyphis fibulatis. — Epicute pilei hyalina, gelatinosa, 25 μ profunda, hyphis repentibus, 1 μ latis. Hypodermio melleo, cutiformi, haud gelatinoso, hphis multiseptatis, usque ad 15 μ latis. — Ad corticem *Polylepidis* in zona montana. — Typus a R. Singer (T 5215) in Argentina: Jujuy: Lagunas de Yala, 200 m alt. 16 II 1966 lectus et in F conservatus.

Pholiota spinulifera (Murr.) Sing. comb. nov. —

Naucoria spinulifera Murr., Mycologia 4: 79. 1912.

Haec species *P. tottenii* (Murr.) Hesler & Smith affinis.

Pholiota amara (Bull ex St-Amans) Sing. comb. nov.

Agaricus amarus Bull. ex St-Amans, Flore Agen. p 569. 1821

Pholiota subg. *Flammula* sectio *Subsiccæ* (Lange „*Flammula* sect. *Subsiccæ*“ 1939) ex Sing. sect. nov. Epicute pilei ± ixocutiformi; stipite exannulato; sporis neque apicaliter truncatis nec pseudoamyloideis; chrysocystidiis praesentibus; cystidiis fusoides aut metuloideis conspicuis ad latera lamellarum absentibus. Typus sections: *P. astragalina* (Fr.) Sing.

Subsectio *Astragalinae* Sing. subsect. nov. Pileo haud glutinoso; hymenopodio haud gelatinoso. Ad ligna et gramina etc. Typus subsectionis: *P. astragalina* (Fr.) Sing.

Subsectio *Gummosinae* Sing. subsect. nov. Pileo glutinoso vel viscido; hymenopodio gelatinoso. Frequenter caespiotose ad terram et ad ligna et folia emortua. Typus subsectionis: *P. gummosa* (Lasch) Sing. sensu Romagnesi

Pholiota sg. *Flammula* sect. *Lubricæ* subsect. *Privignae* (Sign.) Sing stat. nov.

Pholiota sect. *Privignae* Sing., Sydowia 15: 70. 1961.

Pholiota sg. *Phaeonematoloma* sect. *Novembres* Sing. sect. nov. — *Cystidiis* conspicuis (cum vel sine chrysocystidiis), interdum metuloideis praesentibus. Typus sectionis: *P. novembris* Sing.

Pleuroflammula fluminensis Sing. spec. nov. — Pileo fulvo, in siccis radiatim fibrilloso vel flocculoso-subtomentoso (flocculis fibrillisque ochraceo fulvis), ad marginem humidum striatulo in vegetis, estriato in siccis, convexo, dein applanato ad latus anterius protractum, obtuso, umbilicato vel haud umbilicato, usque ad 30 mm lat. — Lamellis fulvis, ferrugineo-brunneis in siccis, confertis vel subdistantibus, latis adnatis vel adnexis. — Stipite albo, in siccis flavido-alutaceo-pallido, aequali, vel ventricoso, solido excentrico curvato, 5—7 × 2—3 mm; vello nullo visibili. — Carne stipitis pallida. — Sporis 6.8—7.3—(8.3) × 4.5—5.1 μ, subellipsoideis, latere interno subappanatis vel minus convexis quam in latere externo, levibus poro germinativo angusto haud truncato munitis, depressione suprahilari destitutis ferrugineo-ochraeeo-brunneis. — Basidiis tetrasporis, *Cystidiis* nullis. *Cheilocystidiis* 23—46.2 × (5.7)—7.8—10.2 μ, ad acies heteromorphas numerosis, cylindraccis vel leniter ventricosis in parte inferiore, claviculatis et late rotundatis in parte latiore superiore, saepe ad basin geniculatis. — Hyphis fibulatis, haud gelationis. — Epicute pilei ut in *P. flavomarinata*. — Ad cortices et ligna monocotyledonea in silva subtropicali. Typus a W. A. Murrill (246) in Brasilia: Guanabara: Corcovado, Februario-Martio 1924 lectus et in NY („*Crepidotus*“) conservatus.

Pleuroflammula squarrulosa Sing. spec. nov. — Pileo e aureoflavo ferrugineo, saepe ferrugineo et flavo variegato, aut magis ferrugineo in maculis squarrulosis in centro densis et magis aureoflavo ad marginem, ubi minute flocculoso-squarruloso e velo, materia velari detersibili, neque striato neque sulcato, squarruloso-squamuloso vel squarruloso-minute-maculato vel ruditer tomentosum, sicco, elliptico vel suborbiculari vel reniformi vel conchato in circumferentia, convexo, 6—13 mm lato. — Lamellis flavis, dein ochraceobrunneis, latis vel mediocriter latis, mediocriter distantibus vel subdistantibus, raro distantibus, ad latera interdum pallido maculatis, ad aciem albido-vel flavomarginatis, haud intervenosis sed lamellis nonnullis cum lamellis integris anastomantibus. Stipite flavo vel citrino-lurido subpulverulento-fibrilloso dein saepe tomentosum-rugosum vel subsquarrosum et hic sordide brunneo vel ferruginascente, demum ferrugineo a basi apicem versus, sicco, aequali vel basin versus attenuato, solido, excentrico vel sublaterali, curvato aut obliquo et tunc ad latus inferius marginis pilei saepe appresso, 1.5—6 × 0.7—1.5 mm; vello manifesto flavido, ad marginem pilei obvio sed praesertim ad partem superiorem stipitis (ab apice ± 1 mm distante) annuliformi; annulo in stipitibus majoribus praesertim bene evoluto et plus minusve persistente, membranaceo — Carne flavido-alba, sub cuticula pilei ochracea; sapore miti; odore nullo. — Sporis 6.8—8.5 × 5—6.8 μ. breviter ellipsoideis vel ovoideis, depres-

sione suprahilari destitutis, levibus parietibus homogeneis, crassis, complexis, munitis, callo et poro germinativo destitutis, endosporio dilute ochraceo, linea castanea sublineato episporio laetissime ferrugineo-ochraceo in NH OH et KOH, haud mucronatis. — Basidiis 22—25 × 6—7.8 μ , hyalinis, in praeparationibus alcalicis demum pigmento dissoluto propriae sectionis flavescentibus, tetrasporis. Cystidiis nullis. Cheilocystidis 26—47—(60) × 3—7 μ , plerumque × 4—5 μ , irregulariter cylindraceutis vel anguste clavatis vel anguste subulatis, ad apicem obtusis, interdum appendiculis exiguis lateraliter semel vel bis vel apicaliter oblique ornatis, raro ad basin subventricosis sed plerumque tenuibus (2—3 μ) ad basin, saepe flexuosis in parte inferiore, rarius in parte mediana, hyalinis, interdum contentu fulvo gaudentibus, demum pigmento flavo flavescentibus, tenuiter tunicatis, numerosis. — Hyphis hyalinis in tramate hymenophorali regulari, fibulatis, haud gelatinosis; hyphis tramatis pilei similibus, radiantibus. — Epicute pilei ex fasciculis hypharum ascendentium ochracearum vel atroferruginearum (KOH) e pigmento membranae externae vel incrustationis applicatae ceterum saepe incrustatione crassa rudi hyalina vel flavida gaudentium sat irregulariter vel subparallele currentium filamentosarum vel subfilamentosarum efformata, haud gelatinosa. Hypodermio flavido-ochraceo, cutiformi ex hyphis radiatim currentibus, haud gelatinosis, haud incrustatis vel hyalino- vel flavido-incrustatis, haud crasse tunicatis, haud subcellularibus efformato. — KOH cum superficie pilei reactionem immediatam et persistentem castaneam provocat. — Ad lignum dicotyledoneum in silvis tropicali-montanis. — Typus a R. Singer (B 6915) in Columbia: Valle: Mun. Cali, Cerro Horqueta 2 V 1968 lectus et in F conservatus. — Collectio altera (Singer M 8257) e Mexico: Morelos: NW a Tepoztlan in quercetis, F.

Phaeomarasmius eucalypti (Earle) Sing. comb. nov.

Tubaria eucalypti Earle, Bull. N. Y. State Mus. 3: 300. 1904

Phaeomarasmius subechinatus (Smith & Hesler) Sing. comb. nov.

Pholiota subechinata Smith & Hesler, North Am. Spec. Pholiota p 66. 1968.

Phaeomarasmius suberinaceellus Sing., Schweiz. Zeitschr. Pilzk. 34: 62. 1956, ad int.

Haec species a nobis (Lilloa 25: 395. 1952) descripta secundum specimina tucumanensia (T 1131, LIL) et ad interim nominata (l. c.), et illustrata, ab A. H. Smith & L. R. Hesler valide redescripta sub *Pholiota*. *P. suberinaceellus* ab his auctoribus partim ad *P. granulosa* (Peck) Smith & Hesler („more than likely“) ducitur, sed descriptio nostra (Singer & Digilio, l. c.) ad specimina austroamericana refert. *P. granulosa* (Peck) S. & H. in *Phaeomarasmius* transferre non possu-

mus *P. granuloso* (Lange) Sing. iam existente. *P. proximans* Smith & Hesler est *P. limulatus* (Fr.) Sing.; *P. pseudosiparia* Smith & Hesler nobis *P. muricatus* (Fr.) Sing.

Naucoria mexicana Murr., collectio typica, ut diximus (Sydowia 11: 368. 1957) cum *Phylloporo* et *Gerronemate* mixta et confusa, ambobus xanthophyllis, ita ut „pallid to fulvous“ flavum colorem indicare supponamus; ex ea re cum *P. muricato* etiam identificatur.

Phaeomarasmius spadiceospinulosus Sing. spec. nov. Pileo brunneo („buckthorn br.“ vel „Antique bronze“, spinulis „Mandalay“ M & P), dense spinuloso, haud viscoso, obtuse conico-campanulato (forma sua *Conocybes teneras* revocat), 7—8 mm alto, 9.5—11.5 mm lato. Lamellis sordide isabellinis („khaki“ M & P), confertis, subascendentibus, adnatis. — Stipite pileo concolori, spinuloso, sed apicem versus minus spinuloso et ad apicem glabro, cavo, apicem versus attenuato, 21—25 mm cc. longo, cum spinulis 1.8—2 mm lato.; velo nullo. — Carne superficiebus (haud spinulis) concolori, inodora. — Sporis 7—8.2—(9.5) × 4.2—4.8—(5.5) μ , frontaliter ellipticis, lateraliter reniformibus levibus, poro germinativo angusto, haud tuncato munitis melleo-ferrugineis. — Basidiis 20—21 × 5.5 μ , tetrasporis. Cystidiis nullis. Cheilocystidiis 23—41 × 2.7—5.5 μ , sed capitulo usque ad 7 μ diametri, cylindraceis et subtus semel vel bis inflatis et interdum constrictis, ad apicem subcapitatis vel capitatis, raro irregulariter lateraliter asymmetricice ventricosis, hyalinis, nonnullis autem atroferrugineo-incrustatis, numerosis; acie lamellarum heteromorpha. — Hyphis e pigmento flavo dissolvente flavidotinctis, in tramate hymenophorali regulari, usque ad 20 μ et magis inflatis, fibuligeris. — Epicute pilei (spinulis) ex elementis plerumque subsodiametricis vel isodiametricis efformata, his elementis 28.8—41 × 18.5—31.7 μ , nonnullis obpiriformibus vel irregularibus et asymmetricis, paucis fusiformiter elongatis (e. gr. 37 × 18 μ), primum catenulas parallelas formatibus, dein multis isolatis et liberis. Tegumento stipitis simillimo sed catenulis ex elementis magis elongatis, cellula terminali cylindrica vel rarius filamentosa, rarius late fusiformibus, nonnullis liberis sed pluribus catenulatis. — Ad lignum emortuum dicotyledoneum in silva tropicali-montana, subgregatim (paucis carpophoris individualibus praesentibus) — Typus a R. Singer (B 1047) in Bolivia: La Paz: Nor-Yungas, Río Suapi, 1250—1300 m alt., 9 II 1956 lectus et in BAFC conservatus.

Phaeomarasmius terrigenus Sing. spec. nov. — Pileo ochraceobrunneo, hygrophano, statu sicco appresse pallide ochraceo-brunneolo-fibrilloso, umbilicato, convexo, obtuso — Lamellis atroferrugineis in siccis, concoloribus pileo in vegetis, latissimis subdistantibus, adnatis. — Stipite pileo vel lamellis concolori, glabro vel subglabro, aequali 15—25 × 0.8 mm; annulo nullo. — Carne tenui. — Sporis 6—7 × 4.3—4.8 μ , si e basidiis bisporis natis: 7.5 × 5.5 μ , ellipsoideis, vel ovoideis haud reniformibus, singulis brunneis, accumulatis laete cinnamomeo-

ferrugineis (NH_4OH), levibus, sed frequenter guttulis minutissimis intus granulosis, rarius gutta unica globosa repletis, parietibus $0.3\text{--}0.4\text{--}(0.5)\ \mu$ crassis, homogeneis veil duplicibus gaudentibus, episporio subatro, endosporio subhyalino, poro germinativo angusto vel moderatim lato haud vel paullum truncato (sed in illis quae e basidiis bisporis nascunt semper fere moderatim lat et substruncato) munitis, inamyloideis (magis flavis in solutione Melzeri). Basidiis tetrasporis, rarius bisporis, $15\text{--}22 \times 5.5\text{--}9\ \mu$. Pseudoparaphysibus numerosis ad et prope acies, $18.5\text{--}28 \times 10\text{--}13\ \mu$. Cystidiis nullis. Cheilocystidiis ad et prope acies numerosis, $22\text{--}30 \times 6\text{--}8\text{--}(10)\ \mu$, ventricosis et leniter constrictis vel ampullaceis, tenuitunicatis, obtusis, hyalinis. — Hyphis haud gelatinosis in ulla parte, fibulatis. — Epicute pilei cutiformi ex hyphis filamentosis, subtiliter e pigmento granulosis efformata. Hypodermio etiam cutiformi, e hyphis cellulis brevibus voluminosis catenulatis compositis efformato, incrustatione pigmenti granulosa brunneola vel ferruginea. — Ad terram arenosam humosam. Typus a R. Singer (M 8198 in México: Verracruz: Tlilapan secundum flumen Asseradero 24 VI 1969 lectus et in F conservatus.

Cortinariaceae

Galerina columbiana Sing. spec. nov. — Pileo ochraceo vel ochraceobrunneo, hygrophano, glabro, haud viscido, longe pellucide striato, convexo, dein appanato, papillato, $5\text{--}5.5\ \text{mm}$ lato. — Lamellis ochraceo-brunneis, ventricosis, latis subdistantibus vel distantibus, albo marginatis, ad acies subdenticulatis, sinuatolate-adnatis. — Stipite brunneolo-pallido, uniformiter subferrugineo in siccis, glabro, subaequali vel leniter basin versus attenuato, $7 \times 0.4\ \text{mm}$; velo nullo. — Carne tenui, inodora. — Sporis $11\text{--}12.5 \times 5\text{--}6.6\ \mu$, fusiformibus, levibus sed leniter marmoratis, zona perlevi suprahilari bene limitata munitis, poro germinativo destitutis, episporio homogeno, parietibus junctis sat crassis ($1\text{--}1.3\ \mu$) provisus, melleis vel dilute aureobrunneis. — Basidiis 2—4-sporis, plerumque tetrasporis $18\text{--}27 \times 5.5\text{--}9.5\ \mu$. Cystidiis nullis. Cheilocystidiis $33\text{--}45 \times 1.5\text{--}3\ \mu$, sed ad apicem saepe subcapitatis vel capitatis (capitulo $4.5\text{--}6\ \mu$ diam., rarius usque ad $8.5\ \mu$ diam.), et/aut ad basin reincrassatis (ibi $3.5\text{--}5\ \mu$ diam., rarius usque ad $10\ \mu$ diam.), si in basi etin apice dilatata sunt, constrictione mediana $1.5\text{--}3\ \mu$ diam. praeditis, omnibus hyalinis, tenuitunicatis, numerosis. — Hyphis fibulatis. — Epicute pilei a hypodermio paullum differente haud gelatinoso cutiformi, ex hyphis filamentosis $1\text{--}2.2\ \mu$ latis, aureomelleo-incrustatis efformata, stratum tenue repraesentante. Hypodermio etiam cutiformi sed ex hyphis nonnihl latioribus efformato. — Ad corticem putridam inter muscos in silva quercina tropicali solitario. Typus a R. Singer (B 3608) in Columbia: Boyacá: Arcabuco 29 VII 1960 lectus et in F conservatus. — *G. pseudocamerinae* affinis.

Galerina discernibilis Sing. spec. nov. — Pileo ochraceo vel brunneolo-ochraceo, centro concolori vel ochraceobrunneo, breviter sulcato in maturis, ceterum levi, glabro, subviscido in humidis, margine primum fortiter incurvato praedito, convexo dein applanato, subumbonato vel umbone haud elevato obtuso praedito, 8—14 mm lato. — Lamellis ochraceis, siccis brunneolis, mediocriter latis, haud ventricosis, subconfertis vel subdistantibus., late adnatis vel dente decurrentibus. — Stipite concolori pileo, sed partim hyalino-sericeo e fibrillis minutissimis applicatis caducis, ceterum glabro, annulato, aequali vel leniter apicem versus attenuato, 15—38 × 2—3 mm; annulo albo, membranaceo, infundiculiformi, demum zonam cingularem angustissimam formante; mycelio basali strigoso, pallido. Carne ochraceo-albida, carnosa; inodora. — Sporis 7.7—8.5 × 4.5—5.5 μ, plerumque (perisporio excluso) 8 × 4.5—4.8 μ, ellipsoideis, zona levi suprahilari bene delimitata praeditis, poro germinativo destitutis, callo apicali in maturis bene visibili, bene pigmentatis ochraceobrunneis, perisporio brunneolo plerumque ab episporio separato praeditis, ornamentatione exosporiali forti, cristatoverrucosa ornatis. — Basidiis 17—28 × 6—8 μ, tetrasporis. Cystidiis numerosis, tenuitunicatis, 32—49 × 8.5—11.5 μ, ventricosis prope basin, ampullaceis, late rotundatis sed apice subaequali angustiore, interdum leniter attenuato, vel leniter subcapitato (5 μ diam.) praeditis, hyalinis. Cheilocystidiis a pleurocystidiis paullum differentibus, sed raro ventricosis haud ampullaceis et tunc e gr. 15 × 7 μ et generatim paullum minoribus quam pleurocystidia. — Hyphis fibulatis, in tramate hymenophorali regulari pallide ochraceis e pigmento subtili vel levissimo incrustante, haud gelatinosis. — Epicute pilei sat tenui (10—20 μ) plus minusve gelatinosa, ex hyphis filamentosis sat laxe dispositis hyalinis filamentosis ixocutem formantibus efformata. Hypodermio cutiformi, ex hyphis pigmento densiore ornatis latioribus haud gelatinosis efformato. — Ad lignum emortuum dicotyledoneum in silva tropicali-montana. Typus a R. Singer (B 6150) in Columbia: Valle: Mun. Cali: Saladito 15 IV 1968 lectus et in F conservatus. Inter *G. autumnalem* et *G. helvolicipitem* fere intermedia species.

Galerina subhypnorum (Atk.) Sing. comb. nov.

Galerula subhypnorum Atk., Proc. Am. Phil. Soc. 57: 363. 1918.

Galerina oinodes (Berk. & Curt.) Sing. comb. nov.

Agaricus oinodes Berk. & Curt., Journ. Linn. Soc., Bot. 10: 291. 1968.

In sectione *Calyptosporarum* inserenda species.

Galerina annulata (Favre) Sing. comb. nov.

Galera rubiginosa var. *annulata* Favre, Erg. wiss. Unters. Schweiz. Nat.-Park 5: 204, 1955.

Galerina sanctixaverii Sing. spec. nov. — Pileo brunneo-luteo („Antique gold“ M & P), inter strias subochraceis („homeysweet“ M & P), hygrophano, longe pellucide striato, glabro, nudo, semiglobato-convexo, obtuso, 10 mm lato. — Lamellis ochraceis („samovar“ vel „burnished gold“ M & P) latis, ventricosis, oblique subascendentibus, vix confertis, adnexis, sinuatis. — Stipite alutaceo-griseo („india buff“, satis uniformiter et haud intense colorato, sed haud pallido-hyalino nec biso tactu, ex integro pruinato, filamentosos, haud bulboso, 30×1 mm; velo nullo. — Carne concolori, tenui, inodora. — Sporis $11-11.2 \times 6-6.5$ μ , paucis elongatis et giganteis exceptionalibus, normaliter ellipsoideis vel amygdaliformi-ellipsoideis, subtiliter punctulatis vel levibus, depressione suprahilari praeditis, sat bene pigmentis, zona ornamentatione destituta suprahilari et linea delimitationis (plage) nullis, poro germinativo nullo. — Basidiis tetrasporis. Cystidiis nullis. Cheilocystidiis numerosis, $23-33 \times 8-9$ μ , ventricosis, sub apice constrictis, apice capitatis (capitulo $6.8-7$ μ diam.), hyalinis, tenuitunicatis, Acie lamellarum heteromorpha. — Hyphis tramatis pilei usque ad 35 μ diam. inflatis, in stipite parallelis, defibulatis, pigmento incrustante destitutis, pigmento flavo dissolubili nullo. — Epicute pilei hyalina, ex hyphis tenuibus, haud gelatinosis, filamentosis efformata; dermatocystidiis nullis. Tegumento stipitis e dermatocystidiis numerosis efformato, his cheilocystidiis similibus, sed interdum sine basi dilatata, hyalinis. — Ad truncum dicotyledoneum loco humido inter muscos in silva subtropicali-montana solitario. — Typus a R. Singer (T 3776) in Argentina: Tucumán: San Javier, 900 m alt., 28 II 1962 lectus et in BAFC conservatus.

Pyrrhoglossum ferruginatum (Lloyd) Sing. comb. nov.
Paxillus ferruginatus Lloyd, Mycol. Writ. 7: 1196. 1923.
Crepidotus sarawakensis Pilát, Trnas. Brit. Myc. Soc. 33: 238. 1950.

Pyrrhoglossum recedens Sing. spec. nov. — Pileo albo, demum flavo-brunneo-maculato et sordide brunneo ubi rehumectatus est, tomentoso, convexo, 5–6 mm lato. — Lamellis ferrugineo-brunneis „Martinique“, laete ferrugineis in siccis, subdistantibus, medio-criter latis vel latis, paullum pallide fimbriatis ad acies, adnatis vel dente decurrentibus. — Stipite albo vel avellaneo, tomentoso, aequali vel basin versus attenuato, centrali, mox escentrico, brevi, stricto, mox curvato, $2-3 \times 0.5-0.8$ mm; mycelio basali tomentoso, albo; velo nullo sed primordiis lamellis inclusis hemiangiocarpicis. — Carne tenui, inodora. — Sporis $6.5-8.5 \times 4.5-5.3$ μ , ellipsoideis vel amygdaliformibus, zona levi suprahilari destitutis, omnino ornamentatione exosporiali humili verrucosa vel scabriusculo-maculosa interdum catenulata munitis, poro germinativo nullo, sed callo apicali levi plus minusve manifesto instructis, ochraceo-flavis sed ornamentatione laete et intense fer-

rugineo-brunnea obscuratis, perisporio interdum bene evoluto, leniter pseudoamyloideis (ex endosporio). Basidiis $17-20.5 \times 6.5-7.6 \mu$, clavatis, hyalinis, tetrasporis. Cystidiis nullis. Cheilocystidiis $20-30 \times 4-6.5 \mu$, ad basin ventricosis, sursum lange effilatis ($11 \times 1-1.5 \mu$) et ad apicem capitatis vel claviculatis ($2-4 \mu$ diam.) breviter pedicellatis, hyalinis vel flavidis. Acie lamellarum heteromorpha. — Hyphis fibulatis. — Epicute pilei trichodermiali, cellulis terminalibus saepe nodosis vel furcatis et ad apicem capitulatis (cheilocystidiorum modo), praesertim prope marginem pilei. — Ad ligna emortua alnea (*Alnus jorullensis*), in silvis alneis montanis zonae tropicalis. — Typus a R. Singer (T 5143) in Argentina: Jujuy: Lagunas de Yala, 2400 m alt. 14 II 1966 et in F conservatus.

Pyrhoglossum macrosporum Sing. spec. nov. — Pileo atroferrugineo-tomentoso supra fundum flavoochreum („yellow ocher“ M & P), inter fibrillas tomenti ad marginem et nunnumquam etiam in centro denudatum, ad marginem extremum primum incurvatum chromeo („chrome lemon“ M & P), convex, obtuso, sicco, usque ad 27 mm lato. — Lamellis chromeis („chrome lemon“ M & P), brunnescentibus fractu, angustis vel sat latis, confertis, subventricosis ad extremitatem interiorum in maturis, sinuato-adnatis. Sporis in cumulo laete ferrugineis. — Stipite siennobrunneo (13 K 10 M & P), dein atrius brunneo a basi apicem versus, praesertim ubi tactus est, fibrilloso-lanato vel subtomentoso, leniter costato, solido, dein cavo, curvato vel horizontali, semper leniter excentrico, usque ad 31×4.5 mm; velo nullo; — Carne brunnea in pileo (tiffin“ M & P, in stipite „buckthorn br. vel „chipmunk“ M & P). — Sporis $9-10.5 \times 6.5-8.5 \mu$, ellipsoideis, apice leniter mucronato vel callato, sed poro germinativo destitutis, ornamentatione exosporiali verrucosa vel verrucoso-cristata alta ($1, \mu$) munitis, ex ea KOH ope intense ferrugineo-brunneo-tinctis. — Basidiis $24-26.5 \times 7-9 \mu$, flavidis vel hyalinis, tetrasporis. Cystidiis ad acies et latera lamellarum (acie sterili) numerosis, $12-27 \times 4.5-7.5 \mu$, ampullaceo-subcapitatis vel capitatis, apice $1.5-2.5 \mu$ lata, capitulo $2-3.5 \mu$ lato, hyalinis, interdum flavidis. — Hyphis fibulatis, pigmento brunneo incrustante in KOH partim dissoluto et solutionem flavam producente. — Epicute et hypodermio pilei paullum differentibus, illa e fasciculis fragmentatis ascendentibus hypharum consistente, cuticula tota ex hyphis elongatis fortiter pigmento brunneo incrustatis efformata. — KOH ope pilei superficie atrius ferruginescente; NH_4OH ope pileo sicco atrocastaneo, lamellis ferruginascentibus. — FeSO_4 ope lamellis glaucescentibus. — Ad ligna putrida in silva tropicali. — Typus a R. Singer (B 1229) in Bolivia: La Paz: Nor-Yungas: Carmen Pampa 17 II 1956, in 2000 m alt. lectus et in BAFC conservatus est. — Speciem ob stipitem longum et sporas magnas ad *Gymnopilum* fere transeuntem consideres.

Crepidotaceae

Melanomphalia baeospora Sing. spec. nov. — Pileo brunneo-fulvo-squamuloso in fundo pallidiore fulvido-coriicolore, centro ochraceo-brunneo, sicco, neque hygrophano neque viscoso, subtiliter tomentosofibrilloso fibrillis in squamulas minutas coalescentibus, convexo, dein applanato circum umbonem minutum sed manifestum, 45 mm lato. — Lamellis sordide fulvis, aciebus flavidis, latis, subconfertis, haud intervenosis, rotundato-adnatis vel rotundato-adnexis. — Stipite flavo, squamulis subtilibus fibrillosis flavobrunneis ex toto ornato, sicco, cavo, subaequali, 55×5 mm; annulo. — Carne concolori et stikitis coloribus fundamentalibus (nec squamulis); sapore leniter amaro; odore nullo. — Sporis $4.5-4.8-(6) \times 3.2-3.5-(4) \mu$, ellipsoideis, endosporio ochreo-pallido tenerrimo et episporio plerumque heterogeneo dilute ochraceo (ornamentatione typi XI), spinulis atroferugineis subtus in episporio immersis et sursum leniter ($0.2-0.3 \mu$) projicientibus ornato instructis, perisporio saepe fragmentario et haud constanter persistente munitis, poro germinativo destitutis, zona levi suprahilari destitutis, depressione suprahilari nulla. — Basidiis $12-25 \times 4-5.5 \mu$, (2)—4 sporis, flavis vel brunneis, nonnullis hyalinis, clavatis vel centro constrictis. Cystidiis cheilocystidiis simillimis sed in hymenio plus minusve numerosis vel haud projicientibus, sparsis, inconspicuis, Cheilocystidiis $19-42 \times 4-7 \mu$, versiformibus, plerumque cylindraceutis, ventricosis, subulatis, ampullaceis, apice nonnumquam contortis vel curvatis, appendiculatis vel toto flexuosis, interdum incrustatione aureo-flava ad apicem cingulatis, tenuitunicatis, flavis vel brunneis vel subhyalinis. — Hyphis in tramate hymenophorali regulari luteo, haud gelatinoso filamentosis, parallelis vel subparallelis, $2.8-8 \mu$ latis, fibulatis. — Epicute pilei (fibrillis tomenti) ex hyphis aureo-flavo- vel brunneo-incrustatis parallelis ascendentibus, apicibus obtusis efformata, haud gelatinosa, inter squamulas pilei hyphis solitariis ascendentibus his e. gr. $17 \times 4 \mu$, hyalinis vel pallide flavidis. Hypodermio cutiformi, ex hyphis filamentosis hyalinis vel flavis $2.5-8 \mu$ latis efformato sed his hyphis nonnullis locis usque ad 22μ inflatis. — KOH ope lamellis atrocastaneis sed haud nigris; NH_4OH ope pileo atrocastaneo. — Ad lignum emortuum in silva tropicali pluviali, — Typus a R. Singer (B 6231) in Columbia: Valle: Buenaventura: San Joaquín, 130 m alt. 19 IV 1968 lectus et in F conservatus.

Melanomphalia hymenocephala Sing. spec. nov. — Pileo atropadiceo subfulgineo, inter strias „kalabash“ M&P, viscido, centro leniter rugoso, margine primum incurvato, convexo, mox leniter depresso in centro, $10-27$ mm lato. — Lamellis subolivaceis („syrup“ M&P), sat latis, ventricosis, confertis, rotundato-adnexis. — Stipite sordide griseo („Airedale“ M&P), glabro, aequali, vel leniter et gradatim apicem versus attenuato, $12-29 \times 1-2$ mm; velo nullo viso. —

Carne multum pallidiore superficiebus, moderatim fragili, odore nullo. — Sporis $6.3-7.5 \times 4.3-5.2 \mu$, subamygdaliformibus vel ovoideis, depressione vel applanatione suprahilari destitutis vel rarius praevisis, lateraliter interdum leniter phaseoliformibus, sine mucrone distali, subtiliter punctulatis ex ornamentatione (typi XI) haud exsporiali sed partim immersa spinulis minutissimis vix visibilibus, sed externe levibus vel sublevibus, area levi bene delimitata suprahilari destitutis, poro germinativo nullo, intense ochraceis. — Basidiis $13-21 \times 4.2-9 \mu$, plerumque $6.5-8 \mu$ latis, sterigmatibus leniter curvatis $3.5 \times 1.5 \mu$, fibula basali praesente. Cystidiis nullis. Cheilocystidiis $12-25 \times 5.5-7.5 \mu$, clavatis, rarius cylindraceis vel ampullaceis, hyalinis vel pallide melleo-ochraceis, parietibus firmis, immo interdum subincrassatis, late rotundatis ad apicem, numerosis; acie lamellarum heteromorpha. — Hyphis tramatis pilei fibulatis, pigmento intracellulari dissoluto fuscidulo coloratis, sed pigmento incrustante vel intraparietali destitutis. Tramate hymenophorali regulari, pallide fusciduloochreo, ex hyphis elongatis sed latis (usque ad 15μ) multiseptatis efformato. Subhymenio ex elementis exiguis in sectionibus apparenter subcellularibus, sed irregulariter congregatis efformato. — Epicute pilei hymeniformi, ex elementis late saccatis vel subglobosis, parietibus crassis ($1-1.5 \mu$) hyalinis paraeditis, $10-25 \times 7-22 \mu$, parietibus in aqua gelatinascente et ex eo viscosis efformata. Tegumento stipitis e fasciculis dermatocystidiorum efformato; dermatocystidiis $15-37 \times 5-12 \mu$, cheilocystidiis simillimis sed saepius pallide melleis et tunc parietibus tenuibus vel subincrassatis, ornamentatione ita ut in sporis gaudentibus. — Ad lignum putridum dicotyledoneum in silva tropicali pluviali. — Typus a R. Singer (M 8092) in México; Veracruz: Estación Biológica de las Tuxtlas prope Montepío 20 VI 1969 lectus et in F conservatus.

Melanomphalia mazatecorum Sing. spec. nov.

Pileo atrobrunneo, ex toto fibrilloso-squarruloso, haud viscoso, conico vel conico-applanato, centro obtusato, vel subumbonato vel latissime obtuseque umbonato, $10-20$ mm lato. — Lamellis atrobrunneis, ad acies flavis, latis, confertis vel subdistantibus, adnatis vel adnato-subdecurrentibus. — Stipite ad apicem primum pallido, basin versus brunneo, demum ex toto brunneo, in parte inferiore subtiliter pallide ferrugineo- vel submelleo-armillato ($1-3$ cingulis), haud viscoso, aequali vel apicem versus attenuato, $18-24 \times 2-2.5$ mm, ad apicem $0.8-2.2$ mm lato; annulo bene evoluto nullo. — Carne subconcolori, inodora. — Sporis $6-7.2 \times 4.3-4.5 \mu$, ellipsoideis, applanatione suprahilari gaudentibus, punctulatis (indistincte vel manifeste) e columnis minutissimis in episporio immersis atrobrunneis (ornamentatione typi XI), haud altis sed tenerrimis, poro germinativo nullo et perisporio paullum evoluto munitis, levibus vel lenissime asperu-

latis. — Basidiis 17—22 × (5)—6.5—7.2 μ, hyalinis vel brunneis, (2)—4—sporis. Cystidiis nullis; cheilocystidiis 16—40 × 8—20 μ, vesiculosus vel subvesiculosus, pedicellatis vel haud pedicellatis, hyalinis vel pigmento brunneo incrustatis, levibus, ad apicem late rotundatis, parietibus firmis vel lenissime incrassatis, raro septo mediano secundario praeditis, continuis ad aciem heteromorpham vel pro ratione sparsis. — Hyphis tramatis hymenophoralis regularis brunneis ex incrustatione pigmenti, haud gelatinosis, latis (usque ad 20 μ diam.), fibulatis. Pigmento brunneo in NH₄OH et NaOH atrobrunneo vel subviolaceo vel purpureobrunneo, in medio fortiter acido flavo-ferrugineum evadit. — Cuticula pilei e strato supero (velari?) fibrilloso et cute subiacente consistente; illo e catenulis fasciculatis vel parallelis ascendentibus efformatis, cellulis multiseptatis, elongatis sed saepe brevibus, parietibus subhyalinis, incrustatione levi brunneolis; cute e catenulis iacentibus parallelis, saepe latis (2—20 μ latis), parietibus subhyalinis vel brunneis, incrustatione pigmenti abundante ornatis efformata; dermatocystidiis membro ultimo terminali catenularum strati externi repraesentatis, his 26—55 × 11—17 μ, ventricosis vel ampullaceis, plerumque late rotundatis, sed interdum subacutis. — Ad lignum emortuum quercinum in silva tropicali montana gregatim. Typus a R. Singer (M 8385) in Mexico; Oaxaca: Sierra Mazateca: San Andrés Hidalgo 9 VII 1969 lectus et in F conservatus.

Melanophalia pellucida (Murr.) Sing. comb. nov.

Naucoria pellucida Murr., Mycologia 4: 78. 1912.

Galerina pellucida (Murr.) Smith & Sing., Sydowia 11: 449. 1957.

Rhodophyllaceae

Rhodocybe sect. *Rhodophana* (Kühn. ex Kühner apud Kühner & Lamour) Sing. stat. nov.

Rhodocybe subgenus *Rhodophana* Kühn. ex Kühn. apud Kühner & Lamour Bull. Soc. Myc. Fr. 87: 23. 1971.

Rhodocybe crepidotoides Sing. spec. nov.

Pileo albo vel grisello-pallido vel dilute griseo siccando brunnescente, pallide sericeo-pruinato vel tenuiter tomentosulo, sub lente arachnoideo-tomentoso vel subvillosulo, praesertim prope marginem, linguiformi, e. gr. 9 × 7 mm. — Lamellis albis vel griseolis, demum brunneis („Oak“ M&P), crassiusculis vel normaliter tenuibus, acie obtusis in nonnullis speciminibus, angustis vel moderatim latis, (2—2.5 mm latis) e attenuato-attingentibus vel decurrentibus demum lateraliter attenuato-concurrentibus. — Stipite pileo concolori, villosulo, excentrico vel laterali, minuto et demum subnullo, oblitterato, plerumque substrato appresso; rhizomorphis albis saepe praesentibus. — Carne alba, tenui, dein discolorata; sapore miti; odore nullo. — Sporis 5—8 × 3.3—

4.8 μ , ellipsoideis et frequenter subangularibus, sublevibus vel spinulosulis, pallide roseolo-stramineis, e polo visis angularibus, inamyloideis. — Basidiis 12.5—15 \times 5.5 μ , ad basin defibulatis. Cystidiis typi pseudocystidiorum, cum appendiculo (si adest) 18—35 \times 3—7 μ , cylindraceis vel clavatis vel clavato-mucronatis, aut mucrone vel appendiculo (usque ad 13 μ longo) apicali munitis aut late rotundatis ad apicem distalem, contentu saepe subtiliter granuloso brunneolo-aurantiaco repletis sed in medio alkalino gradatim hyalescente. — Hyphis hyalinis, plerumque filamentosis, defibulatis. — Epicute pilei paulum differentia, hyphosa in tomento. — Ad cortices dicotyledoneos et ad truncos lauraceos (*Phoebe porphyria*) nec non ad quisquillas ligneas in silvis subtropicalibus et tropicalibus. — Typus a R. Singer (B 3333) in Brasilia: Paraibo: João Pessôa 11 VII 1960 lectus et in BAFC conservatus. — Etiam collectus in Bolivia: Pando: Manuripi: Conquista Singer B 2267, 26 III 1960 et in Argentina: Catamarca: Cuesta del Totoral, Singer T 3370, 26 V 1959. — In statu vegeto *Crepidotum* simulans.

Rhodocybe sectio *Crepidotoides* Sing. sect. nov. — A sectione *Rhodocybi* differt habitu pleurotoideo. Typus sectionis: *R. crepidotoides* Sing.

Rhodocybe leucopaxilloides (Bigelow & Smith) Sing. comb. nov.

Clitocybe leucopaxilloides Bigelow & Smith, Mich. Botan. 5: 222. 1966.

Lyophyllum leucopaxilloides (Big. & Sm.) Clemençon, Nova Hedw. 16: 418. 1968.

Rhodocybe subtenerima (Murr.) Sing. comb. nov.

Lyophyllum suburens Clemençon, Nov. Hedw. 16: 420. 1968.

Rhodophyllum arachnoides (Berk. & Curt.) Sing. comb. nov.

Marasmius arachnoides Berk. & Curt., Journ. Linn. Soc., Bot. 10: 299. 1868.

Rhodophyllum ferrugineogranulatus Sing. spec. nov.

Pileo umbrino, ad marginem dilutiore quam in centro, minute radiatim innate fibrilloso et sub lente minutissime asperulato, margine interdum fisso, plerumque integro sed nonnumquam breviter pectinato, ceterum levi et macroscopice glabro et nudo, conico, acuto, 18—19 mm lato. — Lamellis flavido-albis in vegetis cinnamonmeo-brunneis in sicangustis, confertissimis, ad aciem sub lente pallidis, anguste adnexis. — Stipite colore *Lactarii lignyoti* pilei gaudente sicco, glabro, levi, sub-

aequali, vel apicem versus leniter attenuato, 26—37 × 2.5—3.5 mm; velo nullo. — Carne tenui; odore subnullo. — Sporis 7—8 × 6 μ, pentagonis, axialiter symmetricis, guttula globosa centrali repletis, parietibus firmis sed haud fortiter incrassatis, amyloideis. — Basidiis 30 × 9.5 μ, basi defibulata et 4 sterigmatibus munitis. Cystidiis typi pseudocystidiorum, ad lateral lamellarum numerosis et conspicuis, pseudocystidiis 30—61 × 12—21 μ, ventricosos-clavatis, vel late clavatis, interdum ampullaceis ad apicem rotundatis, tenuitunicatis, contentu guttuloso ferrugineo-brunneo denso (guttulis 2—3 μ diam.) repletis. Cheilocystidiis ad aciem heteromorpham 34—51 × 7—16 μ, ventricosos vel clavatis, ad apicem rotundatis, tenuitunicatis, contentu homogeneo haud guttuloso hyalino vel pallide brunneolo-melleo repletis. — Hyphis defibulatis, sed hyphis oleiferis (contentu ei pseudocystidiorum simillimo repletis) inter hyphas normales abundanter intermixtis. Tramate hymenophorali regulari. — Epicute pilei cutiformi, sed non-nulis fasciculis hypharum parallelarum, ad apicem rotundatarum ascendentibus vel erectis praesentibus, hyphis hyalinis, subhyalinis, rarius ochraceo-brunneolis, defibulatis, haud gelatinosis; cellula terminali saepe cystidiformi; dermatocystidiis his cheilocystidiis similibus. — Ad lignum emortuum in silva tropicali pluviali. — Typus a R. Singer (B 6325) in Columbia: Valle: Buenaventura: Quinta La Flora inter Cisneros et Cordoba, 23 IV 1968 lectus et in F conservatus.

Rhodophyllus fraternus Sing. spec. nov. — Pileo atro-griseo, pellucide striato, haud viscoso, glabro, convexo dein margine recurvato, 17 mm lato. — Lamellis griseis, distantibus, sat latis, adnatis. — Stipite griseo, glabro, apicem versus attenuato, 40 × 1.5 mm (ad apicem, × 4 mm ad basin). Carne inodora. — Sporis 8—11 × 8—9.5 μ, cubico-cruciformibus, symmetricis, pallide carneo-stramineis, parietibus firmis, inamyloideis. — Basidiis 35 × 14 μ, tetrasporis contentu oleo-guttuloso. — Cystidiis et cheilocystidiis nullis. — Hyphis tramatis hymenophoralis regularis oleoguttulosis, defibulatis. — Epicute ex hyphis repentibus, etiam frequenter oleo-guttulatis et pigmento tenerrime fuligineo-incrustante haud conspicuo tectis efformata. — Tegumento stipitis nullo. — Ad terram in silva tropicali pluviali. Typus a R. Singer (B 3074) in Brasilia: Pernambuco: Dois Irmãos 5 VII 1960 lectus et in BAFC conservatus.

Rhodophyllus lowyi Sing. spec. nov. var. *lowyi*.

Pileo griseo (15 A 1 vel 31 C 1 in striis, 13 A 1 M&P inter strias), convexo, profunde umbilicato, glabro vel subglabro, sub lente in centro minute et interdum haud manifeste fuligineo-punctato, striato-sulcolato, 24 mm lato. — Lamellis albis dein roseis, sat latis, sat distantibus, tridymis, lamellulis brevioribus partim angustis et cum lamellis integris anastomosantibus, sed plerumque simplicibus, sinuatis

vel sinuato-subdecurrentibus. — Stipite griseo, levi, glabro, subcurvato, subexentrico vel centrali, aequali, 17×1.5 mm. — Carne inodora. — Sporis $10.5-14 \times 6-7.2 \mu$, irregulariter elongatis et nodoso-subangulatis, vel hexagonalibus, axialiter symmetricis vel subsymmetricis, tetrahedro basali anguste angulato, parietibus roseolo-stramineis, firmis. — Basidiis $30-42 \times 9-10.5 \mu$, tetrasporis, ad basin defibulatis. Cystidiis nullis. Cheilocystidiis nullis vel inconspicuis. — Hyphis defibulatis. Hyphis oleiferis numerosis. — Epicute pilei cutiformi, in KOH hyalina vel subhyalina, ex elementis hyphosis repentibus efformata ut minime in parte marginali pilei, nonnullis elementis pigmento dissoluto vacuolari fuscidulis, incrustationibus nullis. — Ad lignum emortuum in silva inundabili marginali tropicali planitiis solitario. Typus a R. Singer, B. Lowy, A. Riveira Teixeira (Singer B 4271) in Brasilia: Para: Belem, IAN 10 VI 1966, lectus et in F conservatus.

var. *microsporus* Sing. var. nov. — A var. lowyi differt sporis brevioribus ($9-10 \times 6-7.5 \mu$), lamellis angustioribus (1.5 mm), strato cuticulari intensius pigmentato et ex ea re pileo nonnihili atriore. — Ad truncum Bryophytis tectum in silva tropicali pluviali „alto“. — Typus a R. Singer, L. Emigdio de Melo filio (Singer B 4227) in Brasilia: Pará: Estancia Pirelli 7 VI 1966 lectus et in BAFC conservatus,

Rhodophyllus lyophylliformis Sing. spec. nov.

Pileo griseo-umbrino, atrogriseo et subtomentoso in centro, ceterum minutissime radialiter innate fibrilloso sed levi, sicco, convexo, subumbonato, 40—42 mm lato. — Lamellis pallidis, subconfertis, denticulato-crenulatis ad acies, latis (6 mm), sinuato-subliberis. — Stipite albo, glabro, sicco, solido, in parte inferiore incrassato, $57-58 \times 8-9.5$ mm (ad apicem) $14-15$ mm ad basin. — Carne alba, immutabili, carnosa, inodora. — Sporis $6-7.5 \times 5-5.5 \mu$, 5—6-angulosis, pluries hexagonalibus, angulis plerumque subrotundatis, parietibus inamyloideis, firmis (0.3μ diam.) et siderophilis instructis, basi haud obtusata munitis sed vix dihedrica, vix axialiter symmetricis, in KOH carneostramineis vel carneis. — Basidiis $25-48 \times 9-10.5 \mu$ i. e. pro ratione grandibus, ad basin defibulatis, tetrasporis. Cystidiis nullis sed cheilocystidiis sparsis filiformibus vel subcapitatis $4-5.5-(8) \mu$ latis praesentibus et plerumque projicientibus. — Hyphis defibulatis, inamyloideis. Tramate hymenophorali regulari vel subregulari, in mediostrato haud gelatinoso, ex hyphis mediocriter latis efformato; in strato laterali gelatinoso ex hyphis tenuiter filiformibus partim leniter divergentibus sed laxe intertextis efformato. — Epicute pilei profunda, cutiformi, ex hyphis subparallelis 4μ diam., sed interdum inflatis pigmento intracellulari vacuolari, saepe hic inde condensato colloideo spadiceo-brunneo efformatis; cellulis terminalibus frequenter sed sparse ascendentibus vel subrectis e. gr. $18 \times 6.5 \mu$, pigmento identico vacuolari repletis. — Ad ter-

ram in silva virginea tropicali pluviali. — Typus a R. Singer (B 6275) in Columbia: Valle: Buenaventura: San Joaquín, 180 m alt., 22 IV 1968 lectus et in F conservatus.

Rhodophyllus perbrevisporus Sing. spec. nov.

Pileo olivaceo-brunneo, in vegetis 15 L 8 vel („old bronze“ M&P) in siccis atriore, haud viscoso, glabro, leniter breviterque sulcato, convexo mox applanato vel concavo, margine demum recurvato, neque umbilicato neque umbonato, 52 mm lato. — Lamellis albis dein roseolis, sat latis, confertis, sinuatis. — Stipite aeneo-luteo vel luteo-olivaceo (12 L 5/6 M&P) in parte superiore, albo in parte inferiore, glabro, fortiter basin versus attenuato, 82×11 (ad apicem) $\times 4$ mm (ad basin). — Sporis 6—6.5 \times 5—6 μ , i. e. parvis, hexagonis, angulis saepe subrotundatis, ad basin angulum 90° formantibus, parietibus, firmis sed haud intrassatis (0.2—0.4 μ crassis), siderophilis instructis, asymetricis axialiter visis, pallide subcarneostamineis. — Basidiis 28—39 \times 8—10 μ , i. e. pro ratione magnis, ad basin fibulatis, tetrasporis, granulatione minutissima siderophila in adultis obvia repletis. Cystidiis raris, filamentosis, ad apicem interdum subcapitatis vel claviculatis (et ibi usque ad 3.5 μ latis), 21—23 \times 3 μ in parte inferiore. — Hyphis ad nonnulla septa fibulatis, ad alia defibulatis, hyalinis. — Epicute pilei cutiformi, pigmento intracellulari praeditis, sat pallido. — Ad terram in silva tropicali pluviali. — Typus a R. Singer (B 4217) in Brasilia: Pará: Estancia Pirelli, 7 VI 1966 lectus et in F conservatus.

Paxillaceae

Paxillus serbicus (Pilát) Sing. comb. nov.

Crepidotus serbicus Pilát, Bull. Soc. Mycol. Fr. 53: 82. 1937.

Boletaceae

Suillus chiapasensis Sing. spec. nov.

Pileo variabili et complexe colorato coloribus ambobus plerumque praesentibus: ochraceo-flavo et grisello-biso, in siccis inter fuscogriseum et fuscum („blondine“ vel „Santos“ M&P) et in partibus pallidioribus interdum pallide scrobiculatis, sed in vegetis glabro, levi, nudo, viscido, margine primum leniter incurvato et subprojiciente, convexo, late obtuseque umbonato vel subumbonato, 45—51 mm lato. — Hymenophoro tubuloso, tubulis moderatim longis, flavis, poris parvis (0.5—0.9 mm diam.), angularibus brunneolo-aurantiacis, sub lente atropunctatis e maculis glandulosis, fraxtis vel tactis sordide grisello-bisis, adnato-subdecurrentibus. — Stipite flavo, maculis interdum emergentibus brunneis vel atris exiguis glandulosis per totam fere longitudinem ornato sed in vegetis mediocriter manifestis, in siccis sub lente valde conspicuis, 0.2—1 mm uno ab vicinis distantibus, ventricosus, dein elongatiore, subcylindraco, saepe curvato, centrali, solido, 85—13 mm; velo

nullo; mycelio basali albo. — Carne in pileo flava, in parte inferiore stipitis aurantiaca, immutabili fractu, sapore miti, odore leniter fructuum. — Sporis (7)—8—8.5—(9) \times (3.3)—3.5—3.7—(4) μ , pallide melleis, levibus, poro apicali destitutis, fusoideis. — Basidiis 18—20 \times 4.5—7 μ , tetrasporis. Cystidiis 25—70 \times 7—9 μ , clavatis, nonnullis mucronatis, multis late rotundatis ad apicem, hyalinis, sed ubi in glandulis aggregata sunt, ex toto involutis incrustatione resinosa fuliginea crustacea praesertim ad poros. — Hyphis defibulatis. Tramate hymenophorali laterali typi Boleti, hyphis in strato laterali fortiter divergentibus, 4—9 μ latis et in massa gelatinosa laxe dispositis, plerumque hyalinis, elongatis efformato. — Epicute pilei subhyalina vel sordide cinnamomea in KOH, ixotrichodermium repraesentante ex hyphis 3—9 μ latis, levibus efformata. Tegumento stipitis glanduloso; glandulis e dermatocystidiis ex hyphis verticalibus subparallelis filamentosis tramatis stipitis natis efformatis; dermatocystidiis in fasciculis subhymeniformibus vel fragmentis trichodermialibus aggregatis, basidiis stipitis intermixtis (sed his plerumque nec semper sterilibus-pseudoparaphysoideis), elongatis, numerosis, forma, colore, incrustatione cystidia hymenialia simulantibus. — Ad terram sub Pino patula gregatim. — Typus a R. Singer (M 8908) in Mexico: Chiapas: 5 km occidentem versus a San Cristobal de las Casas 2 VIII 1969 lectus et in F conservatus.

Phylloporus purpurellus Sing. spec. nov.

Pileo opace purpureo, canescente, velutino, margine acuto, convexo, deum subdepresso in centro, 26 mm lato. — Lamellis flavis, descendens, leniter et sparse anastomosantibus, sed multis lamellis in lamellas integras furcatis, moderatim latis, subdistantibus, decurrentibus. Sporis in cumulo olivaceo-brunneis. — Stipite purpureo-pustulato-flocculoso-punctato, sed in parte inferiore plerumque albido et subglabro, aequali, vel basin versus attenuato, 30 \times 4—4.5 mm, ad basin 3—4 mm lato; velo nullo; mycelio basali albido. — Carne pallide alutacea in pileo, pallide purpurascens in stipite, pallide purpurascens sub cuticula pilei, caerulescens fractu, ibi demum rubescens. Sapore miti. Odore nullo. — Sporis 7.5—11.3 \times 3.3—4 μ , fusiformibus, depressione suprahilari gaudens, levibus, stramineo-ochraceis, sat pallide coloratis, maturis interdum aureo-ochraceis. — Basidiis 35 \times 7.5 μ tetrasporis. Cystidiis ad acies et latera lamellarum, 48—65 \times 8.5—12 μ , fusiformibus vel ventricosis, rarius subcylindraceis, hyalinis, haud incrustatis, tenuitunicatis. — Hyphis defibulatis. — Epicute pilei trichodermiali elementis subincoloribus in KOH, tenuitunicatis, 4—10 μ latis, elongatis, rotundatis vel mucronatis ad apicem membri terminalis. — Cuticula pilei in vegetis ammoniaci ope cito caerulescens. — Ad terram sub Quercubus in silva tropicali montana quercina. — Typus a R. Singer (B 6775) in Columbia: Cauca: Prope viam a Cali Popayán versus, km 100, 29 VI 1968 lectus et in F conservatus.

Phylloporus caballeroi Sing. spec. nov.

Pileo atroolivaceo vel sepiaceo („Rembrandt“) ad marginem interdum rubello-brunneo („Casserole“ M&P) tomentosovelutino, levi, convexo, demum applanato, 17—32 mm lato. — Lamellis flavis („light chrome y“) M&P), subventricosis, moderatim confertis vel confertis, latis vel latusculis, tridymis vel tetradymis haud anastomosantibus, sinuosis. Sporibus in cumulo olivaceobrunneis. — Stipite pallido in parte inferiore, frequenter cinnamomeo-brunneo („Mindoro“ M&P) in parte superiore vel mediana, levi, glabro, aequali, solido, demum cavo, 24—35 × 2.5—7 mm; mycelio basali albo, velo nullo. — Carne flavida vel alboflavida in peleo, albida vel pallide flavida in stipite, ibi in cavitate saepe ferrugineoochracea, fractu immutabili, inodora. — Sporibus 10.5—12 × 4.5—5 μ , fusoides, depressione suprahilari praeditis, raro ellipsoideis, (e basidiis bisporis natis) et 10.5 × 6 μ , levibus, pallide melles vel brunneo-melles. — Basidiis 2—3—4-sporibus vel tetrasporibus, 30.5—40 × 7.5—11 μ , clavatis, ad basin haud fibuligeris. Cystidiis 60—100 × 8—14 μ , ventricosis vel ampullaceis, interdum in parte mediana constrictis, si ampullacea sunt, apice 4.5—8 μ latis, hyalinis vel subhyalinis, tenuitunicatis ad apicem plerumque rotundatis, rarius attenuato-subobtusis. — Hyphis defibulatis. Tramate hymenophorali bilateralis typi Phyllopororum, hyalino, interdum flavomaculato, haud vel vix gelatinoso. — Epicute pilei palisadam trichodermialem ex se praestante, cellula terminali 12—26 × 6—15.8 μ , tenuitunicata, dilute brunnea e pigmento dissoluto intracellularem, ad apicem rotundata. — Cuticula pilei ammoniaci ope fortiter caerulescit. Ad terram sub *Alnojorullensi* var. *spachii*, in silvis alneis declivibus montanis zonae tropicalis solitario. — Typis a R. Singer (T 5150) in Argentina: Jujuy: Lagunas de Yala, 2400 m alt., 14 II 1966 lectus et in F conservatus. Alia collectio cl. B. Caballero gratia studiata ibidem (Singer T 4062) lectus (BAFC). Haec pileo olivaceo, illa pileo sepiaceo gaudet, ceterum haud differunt. Prima nobis cognata species cum alnis mycorrhizam ectotrophicam formans! *Phylloporo sulcato* (Pat.) Gilbert affinis.

Boletus fuliginetomentosus Sing. spec. nov.

Pileo atro, fuligineo, velutino, demum velutinoso-tomentoso et tomento spinoso-squarrose separante sed haud rimoso, haud viscoso, margine tenuiusculo, subacuto vel acuto, levi, convexo, demum applanato vel centro depresso, 18—52 mm lato. — Hymenophoro tubuloso, tubulis canariflavis vel aureoflavis et in vegetis siccisque concoloribus, laetis, fractu immutabilibus, molli-ceraceis, mediocriter longis, fortiter depresso circum apicem stipitis, poris concoloribus in vegetis et siccis, concoloribus tubulis, immutabilibus, primum exiguis sed subgyrosis, dein mediocriter amplis et anguloso-compositis, \pm 1 mm latis. Sporibus in cumulo olivaceis. — Stipite pileo concolori, primum partim flavotincto, velutino, demum tomentoso squarrosulo ut pileus, sicco, sublevi

vel longitudinaliter subtiliter nigrocostato, ventricoso, rarius subaequali, demum aequali sed ad basin plerumque breviter attenuato vel acuminato, solido, diametro pilei brevior vel paullum longior, 21—54 × 8—12 mm; velo nullo; mycelio basali flavo. — Carne flava, immutabili, in zona peripherica lignicolori e pigmento superficiali pilei et stipitis paullum penetrante, sapore miti; odore nullo. — Sporis 8—11—(15) × 4—4.8 μ , fusoidis, levibus, depressione suprahilari praeditis, pallide melleis vel melleis, poro germinativo destitutis, haud truncatis sed angustatis ad apicem, guttula olei exiguo plerumque repletis. — Basidiis 16—21 × 5.5—7.5 μ , clavatis, tetrasporis, basi defibulatis. Cystidiis ad poros et interiorem partem tubulorum numerosis, 27—32 × 7—8 μ , ventricosis, ad apicem obtusis, tenuitunicatis, haud vel vix incrustatis. — Hyphis defibulatis, inamyloideis in stipite. Tramate hymenophorali laterali typi Boletorum, in KOH hyalino vel subhyalino, mediostrato paullum gelatinoso vel subgelatinoso, ex hyphis filamentosis axillariter dispositis 2—4 μ latis efformato; strato laterali fortiter gelatinoso, ex hyphis separatis massa gelatinosa et fortiter divergentibus filamentosis efformato. — Epicute pilei trichodermiali, e catenulis cellularum hyphalium plerumque verticalium vel subverticalium et inter se parallelarum vel subparallelarum, tenuiter vel moderatim crassiuscule tunicatarum efformata; cellula terminali subcystidiiformi, 23—50 × 6.5—13 μ , cylindracea vel plus minusve ventricosa ad apicem obtusa; pigmento cinamomeobrunneo, in medio alkalino flavescente. Tegumento stipitis simili. — NH_3 et NH_4OH in superficiebus haud provocante reactionem caeruleam. — Ad terram in silvis quercinis (*Quercus humboldtii*), subsolitario vel gregatim, haud caespitose. — Typus a R. Singer (B 6958) in Columbia: Valle: Rio Pance, 1800 m alt. 3 V 1968 lectus et in F conservatus. — Paratypus: Singer B 6466, Cauca: via a Cali Popayán versus, km 100, 29 IV 1968. — Etiam B 6790, El Guayabo, 29 IV 1968, omnes in F. — *Boleto subsolitario* affinis.

Pulveroboletus mazatecorum Sing. spec. nov.

Pileo cinnamomeo-brunneo, viscoso, macroscopice glabro, sed in siccis sub lente minutissime pallidius subtomentoso, levi margine anguste incurvulo, convexo, mox subapplanato in centro, obtuso, 60—61 mm lato. — Hymenophoro tubuloso, tubulis pro ratione breviusculis, sordide viridulo-flavis, fractu immutabilibus, ad stipitem sinuosis; poris tubulis concoloribus, usque ad 1.1 mm latis, sed diametro sat variabilibus, superficiem subrugulosam efformantibus, forma sua variabilibus. Sporis in cumulo subolivaceobrunneis. — Stipite ad apicem flavo, in duabus tertiis partibus inferioribus sordide olivaceo vel pallide olivaceo-melleo sed rubescente-brunneo-punctato, ceterum (i. e. ad apicem) glabro, subviscido, lenissime venosulo in partibus sed haud reticulato, solido, aequali sed in parte inferiore ventricosus et ad ipsam basin attenuato, 55—56 × 12—13 mm, ad apicem ± 7 mm lato; mycelio ba-

sali albo, tomentosus; velo nullo. — Carne flava, immutabili fractu; in stipite subcartilagina, durissima in siccis; odore nullo; sapore miti vel lenissime acri. — Sporis 9.5—11.5 × 4—4.8 μ, fusoides, levibus, depressione suprahilari praeditis, melleis, poro germinativo destitutis, ad apicem distalem haud truncatis. — Basidiis 22—27 × 9.5—11 μ, i. e. pro ratione brevibus, tetrasporis. — Cystidiis moderatim numerosis, e. gr. 40 × 8 μ, ampullaceis vel fusoides vel ad basin ventricosis et apicem versus attenuatis, (apice ± 3 μ latis), obtusis vel subacutis, tenuiter tunicatis. — Cheilocystidiis inter basidiola sat numerosis, 20.5—27 × 6—8 μ, cylindraceis vel ventricosis, mucronatis, mucrone anguste cylindraceo vel acuminato apicali praeditis, hyalinis. — Hyphis defibulatis, in stipite omnibus inamyloideis. Tramate hymenophorali laterali typi Boleto-
torum; mediostrato pallide melleo, gelatinoso, axillariter disposito; strato laterali magis gelatinoso, ex hyphis divergentibus, laxe dispositis, tenuibus, 2—4 μ latis efformato. — Epicute pilei ixotrichodermiali, ex hyphis et hyalinis et citrinis filamentosis 2—4 μ latis efformatis; cellula terminali catenularum saepe cystidiformi vel sphaerocystiformi, his 20—35 × 18—25 μ, haylinis, vesiculososis vel globosis, parietibus 0.2—0.5 μ crassis instructis, illis 20—30 × 4 μ, cylindraceis vel subclaviculatis, obtusis. Tegumento stipitis macularum punctiformium partis inferioris stipitis e catenulis brevibus elementorum brevium (e. gr. 7—15 × 5—10 μ) efformato; cellula terminali (12)—15—30 × 7—14 μ, cylindracea vel vesiculosa vel late clavata, rarius ampullacea (et tunc e. gr. 30 × 12 μ), parietibus 0.2—0.5—(1) μ crassis, umbrino-olivaceo-mellea; catenulis e hyphis repentibus corticis stipitis hyalinis, saepe multiseptatis natis. — NH₃ in superficie pilei reactionem sordide obscureque griseam, in apice stipitis laete et dilute caeruleam et in poris nullam provocante. — P. viscidulo (Pat. & Baker) Sing. affinis. — Ad terram in silvis sub *Alno*, et prope quercus (8 m distantiae) solitario. — Typus a R. S i n g e r (M 8361) in Mexico: Oaxaca: San Andrés Hidalgo, 9 VII 1969 lectus et in F conservatus.

Tylopilus lividobrunneus Sing. spec. nov.

Pileo livido, dein dilute grisello-brunneo, glabro vel subglabro, haud viscoso, convexo, obtuso, 55—60 mm lato. — Hymenophoro tubuloso, tubulis et poris roseis, circum stipitem depressis, poris angustis, immutabilibus. — Stipite atrobrunneo, leniter costatulo longitudinaliter sed haud manifeste reticulato, glabro, vel subglabro, sub lente leniter piloso, cylindraceo sed ad apicem attenuato, 100 m longiore, 15 mm cc. ad basin, 10 mm ad apicem lato. — Carne alba, immutabili, sapore miti; odore nullo. — Sporis 10—12—(13) × 5—6—(7) μ, fusoides, applanatione suprahilari instructis, gutta olei elongata repletis, levibus. — Basidiis 18.5 × 8 μ, tetrasporis. Cystidiis 40—52 × 9—13 μ, ampullaceis, apice e. gr. 22 × 2—3.5 μ, obtuso gaudentibus, in parte ventricosa corpusculis amorphis et granulosis flavidis repletis, tenuitunicatis. Chei-

locystidiis 19—26 × 6.2—6.5—(8) μ, ventricosis vel ampullaceis, obtusis, hyalinis, tenuitunicatis. — Hyphis defibulatis, in tramate hyalinis. Tramate hymenophorale laterali typi Boletorum. — Epicute pilei trichodermiali, ex hyphis et dermatocystidiis (et cheilocystidiis et pleurocystidiis simillimis) dense aggregatis, cystidiformibus contentu chrysocystidioideo gaudentibus 40—55 × 9—12 μ, ampullaceis vel fusoides, hyphis 4—7 μ latis, elongatis, saepe pigmento flavido vel aureobrunneo incrustatis, parietibus in nonnullis usque ad 1 μ incrassatis. Tegumenta stipitis simili. — NH₄OH in superficie pilei negativa, in hymenophoro flavidam reactionem provocante. — Ad terram in quercetis. Typus a R. Singer (M 8393) in Mexico: Oaxaca: San Agustín 10 VII 1969 lectus et in F conservatus. — *Tylopilo plumbeoviolaceo* Snell affinis sed mitis et sporarum forma nec non cystidiis differt.

Russulaeaceae

Lactarius veraecrucis Sing. spec. nov.

Pileo aurantiaco („orange peel“, „Sunburst“, in centro 3-C-12 vel 4 B 12 M&P), levi, sed ad marginem demum per medium radium vel brevius ruditer sulcato, opaco, subglabro vel glabro, haud viscoso, margine primum fortiter incurvato, convexo, centro mox depresso, demum concavo, 40 mm lato. — Lamellis cremeis, satis angustis, subdistantibus, haud intervenosis, attingentibus-subdecurrentibus. Sporis in cumulo tenui subcandidis. — Stipite pileo concolori sed paullum pallidior vel minus laeto apicem versus aequali vel subaequali, 30—70 × 7—9 mm; velo nullo; mycelio basali albo. — Carne alba, immutabili fractu, carnosio-firma dein elastico-subtenacella; latice candido, in juvenilibus abundante, immutabili; sapore miti; odore nullo, demum piscino. — Sporis 7—8.3 × 6.5—7 μ (ornamentatione inclusa), subglobosis, asperulis, ornamentatione exosporiali typi IV, IV—VIII, IV—II, III b—II, III a—II, III b—VIII, i. e. aculeis verrucosis 0.2—0.5—0.7 u altis sparse vel abundanter sed raro complete reticulatum connexis lineis finis, rarius cristis brevissimis, hyalinis, amyloceis. — Basidiis 60—73.5 × 7.5—10.5 μ, 2—4-sporis, clavatis, hyalinis, ad basin defibulatis, sed interdum septo secundario septatis. — Macroscystidiis 60—85 × 4.5—7 μ sine contentu optice visibili vel contentu vermicoso vel granuloso repletis, versiformibus, sed plerumque longe clavatis, constrictionibus saepe irregulariter praeditis, rarius apice angustato praeditis, ad apicem obtusis vel acutis vel lobatis. — Hyphis defibulatis, hyalinis, sphaerocystibus subcrasse vel crasse (parietibus 0.5—1.5 μ crassis) numerosissimis vel densis intermixtis in pileo ita ut in stipite. — Epicute pilei e dermatocystidiis pallisadice dispositis efformatis; dermatocystidiis 16—50 × 4—6 μ, plerumque plus minusve incrassatis ad apicem, interdum leniter incrassatis ad apicem, ceterum filiformibus vel cylindratis, rarius ampullaceis vel clavatis, in parte angusta 2.5—4.5 μ latis, parietibus 0.5—1.3 μ, crassis, flavis. Hypodermio ex hyphis e

quibus dermatocystidia nascunt et numerosissimis sphaerocystibus flavis efformato. — NH_3 ope superficie pilei intensius colorata („henna“ M&P) evadit. — Ad terram in silva anectotrophica tropicali pluviali virginea haud destructa gregatim. — Typus a R. Singer (M 8025) in Mexico: Veracruz: Estacion Biologica de las Tuxtlas prope Montepio 19 VI 1969 lectus, in F conservatus. — Lactario dennisii affinis sed Russulam dennisii in mentem revocat, praesentia laticis abundantis sporis minus reticulatis cristatisque minoribus, coloribus magis aurantiacis in pileo, obscuriore in stipite, qui basin attenuatam monstrat, differt. Praesentia numerosarum sphaerocystium in tramate hymenophorali cum *R. dennisii* congruit et a majoritate Lactariorum differt. *R. dennisii* possibiliter ad Lactarios melius referenda.

Lactarius caucae Sing. spec. nov.

Pileo atrobrunneo, hygrophano, subglabro vel glabro, pallidiore in dehydratatis, haud viscoso, longe radialiter pellucide striato, sed in dehydratatis multum brevius sulcato, convexo, mox leniter depresso circum papillam haud altam sed satis acutam, 10—12 mm lato. — Lamellis brunneis, ad acies alutaceis, subconfertis vel subdistantibus, lamellis numerosis intermixtis, ad marginem acutis mediocriter latis, in siccis e sporis pallidis pulverulentis, adnatis, unum ad latus interdum subdecurrentibus. — Stipite brunneo, glabro, apicem versus attenuato, pilei diametro plus minusve aequali longitudine, 1—2 mm lato; velo nullo; mycelio basali abundante, strigoso, albido-fulvescente. — Carne pallidiore vel partim subpallida, latices sparso, subhyalino-albido; sapore mitiusculo; odore nullo. — Sporis 8—9 × 7.5—8.5 μ (ornamentatione inclusa) 6.5—7 × 5.5—6.5 μ (sine ornamentatione), subglobosis, ornamentatione amylacea e spinulis cylindraceutis, 1—1.5 × 0.3—1 μ isolatis vel rarius sparse lineis tenuibus connexis vel appendiculatis, typi VI, rarius IV, V, hyalinis vel flavidis in NH_4OH et KOH, heterotropis. — Basidiis 14—36 × 6—8 μ , hyalinis vel flavis, cylindraceutis vel clavatis, ad basin defibulatis. Cystidiis contentu visibili ex toto destitutis, 20—32 × (7)—8—11.2 μ , parietibus firmis instructis raro subcrasse tunicatis, cylindraceutis vel vesiculososis vel ventricososis. — Epicute pilei vix differentiatam, e strato tenerrimo elementorum filamentosorum efformata, cellulis terminalibus filamentosis et obtusis vel frequentius clavicularibus (e. gr. 22 × 4.5—5.5 μ), hyalinis, contentu visibili destitutis, numerosis sed vix erectis. Hypodermio subnullo, elementis epicuticularibus et tramate pilei inter sphaerocystes 20—40 μ diam. numerosissimas natis quae interdum usque ad superficiem pilei inveniuntur, his parietibus 0.2—0.7 μ crassis instructis. — Hyphis undique defibulatis, sphaerocystibus numerosissimis intermixtis, subhyalinis inamyloideis. Tramate hymenophorali inter basidia cliniformi, subhyalino, in mediostrato regulari et hyphoso, in strato laterali hyphis multis sphaerocystibus intermixtis. Lactiferis sat numerosis, 5—8 μ

latis. Subhymenio e cellulis exiguis efformato. — Ad lignum emortuum in silvis mixtis (nonnullis quercubus praesentibus), solitario. — Typus a R. Singer (B 6059) in Columbia: Cauca: Los Araoz 12 IV 1968 lectus et in F conservatus. — L. tabido et L. obscurato affinis.

Lactarius sect. *Polysphaerophori* Sing. sect. nov.

Lactarii sapore mites, pileo sicco sed haud barbato, latice in adultis saepe sparso, epicute e dermatocystidiis plus minusve crassotunicatis pallisadice dispositis, e cellulis sphaerocystoideis hypodermii natis vel inter eas nascentibus; sporis heterotropicis; sporis in cumulo pallidis vel subcremeis; sphaerocystibus in tramate hymenophorali numerosis, etiam prope acies. Species tropicales.

Typus: *L. veraecrucis* Sing.

Subsect. *Polysphaerophorini* Sing. subsect. nov.

Lacte albo. Hic typus subsectionis: *L. veraecrucis* Sing.; etiam *L. dennisii* Sing., ambo neotropicales.

Subsect. *Rubroviolascetini* Sing. (1942); ad hanc sectionem spectat *L. rubroviolascens* Heim.

Russula zenkeri (Henn.) Sing. comb. nov.

Phaeohygrocybe zenkeri Henn. Engler's Bot. Jahrb. 30 50. 1901.

Russula fuscoviridis (Bres.) Sing. comb. nov.

Russula queletii var. *fuscoviridis* Bres. Icon. Myc. 7—9 tab, 431. 1929.

To the Subscribers and Contributors of the „Sydowia“

The ten volumes of „Sydowia“, published in continuation of Sydow's well known „Annales Mycologici“ have certainly proved their importance as an international periodical of mycology.

Due to the high printing costs only those works can be printed in the „Sydowia“ which fulfill the following requirements:

1. The manuscripts have to be written out carefully, if possible in type and have to be composed in faultless language.
2. If in addition small corrections in the manuscript are made by handwriting, it is important that the Latin names of the plants, all technical terms and names of authors are written clearly. Manuscripts which have become difficult to read by additional insertions, erasings and other corrections cannot be printed. It is kindly requested to write the manuscripts double spaced.
3. Should authors make any alterations of the composition either in the brush-proofs or page-proofs subsequently, they will have to defray the additional costs incurred thereby.
4. Authors are requested to write their works in as concise a style as possible. All lengthy prefaces, explanations and repetitions should be avoided. With works of pure systematic contents summaries are absolutely superfluous and therefore cannot be printed. In case of any other than systematic works summaries may be given but these, should be written in a language other than the original text if possible.
5. Articles for Sydowia may be written in the Latin, English, French, Italian or Spanish languages.
6. In their own interest authors are requested to add to their articles only those illustrations which are absolutely necessary and true to nature. Due to the high production costs for plates and illustrations, these expenses have to be defrayed by the authors.
7. Authors are requested to consider the size of the page (11 × 18,5 cm) when making their illustrations and plates.
8. Only the authors themselves are responsible for the style and contents of their works.

Works and treatises of which a review has to be printed in the „Sydowia“ as well as manuscripts and all inquiries to the editor should be addressed to the editor; orders and business communications should be sent to the publisher.

The price for the yearly subscription is öS 510.—.

Authors are offered 100 reprints of papers not exceeding 16 pages in length or 50 reprints of longer articles free of charge. Except these free copies further separata will be supplied upon request if they have been ordered with the editor together with the definite proof at the latest.

Subsequent requests for missing or lost publications can be considered only if they are made at the receipt of the following publication at the latest.

Publisher

**Ferdinand Berger,
Horn, N.-Ö., Austria.**

Editor

Dr. F. Petrak †

Beihefte zur „Sydowia“

Für die rasche Veröffentlichung größerer Arbeiten stehen den Autoren die „Beihefte zur Sydowia“ zur Verfügung, von denen bereits die Beihefte I—VI erschienen sind. In dieser Serie sollen selbständige, größere Arbeiten ohne Rücksicht auf ihren Umfang so schnell als möglich unter den für die Zeitschrift geltenden Bedingungen veröffentlicht werden, von denen nur Punkt 6 für die Beihefte folgendermaßen abgeändert wird: 6. Die Kosten für Strichzeichnungen werden vom Verlag bestritten, die für Autotypien müssen von den Autoren getragen werden. Von den Beiheften werden den Autoren 5 Exemplare gratis geliefert. Darüber hinaus können die Autoren weitere Exemplare ihrer Arbeit in beliebiger Anzahl, jedoch nur direkt vom Verlage, für den um 25% ermäßigten Ladenpreis des betreffenden Beiheftes beziehen.

Für die Abonnenten der Sydowia, welche alle in Zukunft erscheinenden Beihefte beziehen, wird der Preis — je nach Umfang — festgesetzt und für den Druckbogen öS 33,—, DM 4,70, sfr 5,50, \$ 1,70 betragen. Für jede Druckseite Strichzeichnungen wird ein Zuschlag von öS 5,— = DM —,70 = \$ —,25 berechnet werden. Einzelne Beihefte können nur mit einem Zuschlag von 25% auf den oben genannten Abonnentenpreis abgegeben werden. Die Beihefte werden allen Abonnenten der „Sydowia“ regelmäßig sofort nach Erscheinen zugesendet, sofern sie den Bezug der Beihefte nicht ausdrücklich ablehnen.

Der Preis dieses Beiheftes VII beträgt öS 231,—.

For publication of longer papers there will be edited the „Beihefte zur Sydowia“. In this supplementary series monographs and other extensive papers of importance will be published as quickly as possible disregarding their extent. Publication will take place under the same conditions as for „Sydowia“, changing only point 6 as follows: The costs for reproduction of line drawings will be paid by the publisher, the costs for autotypies by the authors. The authors will receive 5 copies of the „Beihefte“ free of charge. Moreover the authors may order any number of copies of their papers only directly from the publisher at the sales price less 25%.

For subscribers ordering all the volumes of „Beihefte“ to be edited in the future, the price of the single volumes will be fixed according to their size, i. e. per printing sheet (= 16 pages) Austrian Shillings = 33,— = DM 4,70 = sfr 5,50 = \$ 1,70. For each page of figures the price will be Austrian Shillings = 5,— = DM —,70 = \$ —,25. Single volumes of the „Beiheft“ can be supplied only at the subscription price plus 25%. Immediately after publication the „Beiheft“ will be distributed regularly to all subscribers of „Sydowia“, as far as they do not decline expressively.

The price for Beiheft VII is öS 231,—.

Der Verleger:

F. Berger

Buchdruckerei,
Horn, Niederösterreich Austria

Der Herausgeber:

Dr. F. Petrak †