

Tropical Fungi. VIII.

By C. G. Hansford.

(Waite Research Institute, Adelaide, Australia.)

(670) *Parodiopsis clusiicola* Hansf. sp. n.

Plagulae hypophyllae, usque ad 25 mm. diam., densae, subinde concentricae zonatae, brunneae. Hyphae rubro-brunneae vel atrobrunneae, dense radiantes, subrectae, irregulariter ramosae, septatae, 6—8 μ cr., exhyphopodiatæ. Macroconidia clavulata, hyalina, recta, apice rotundata, basi truncata, transverse 2—3-septata, haud constricta, 74—92 $\Rightarrow$ 16—19 μ , paries 1.5—2 μ cr. Microconidiophora simplicia, atrobrunnea, septata, usque ad 270 $\Rightarrow$ 6—7 μ , sursum asperulata. Microconidia subhyalina, ellipsoidea, continua, levia, 10—12 $\Rightarrow$ 5—6 μ . Perithecia subaggregata, primo rufa, nigrescentia, usque ad 240 μ diam. et ad 300 μ alt., cylindræa, clavata, obconoidea vel globosa, leniter verrucosa, demum apice irregulariter rupta. Asci basali, paraphysati, clavati, apice rotundati incrassatique (—10 μ), basi breviter nodoso-stipitati, 8-spори, usque ad 150 $\Rightarrow$ 60 μ . Sporae 2—3-seriatae, hyalinae, fulvescentes, subfusoidæ utrinque rotundatae, 1—(2)-septatae, non vel vix constrictæ, leves, 50—75 $\Rightarrow$ 18—24 μ .

Hab. in foliis *Clusiae krugianae*, Porto Rico, Stevens 816 (typus), 3615, 285 a, 8826, 8862.

The whole structure is typical of the genus, the asci being formed at the base of the hyaline ground tissue of the perithecium, and gradually replacing this as they develop, until only a few thin partitions remain between them, simulating septate paraphyses. Stomopodia are few on the mycelium, ovate to irregularly lobate, mostly about 25 $\Rightarrow$ 12 μ .

(671) *Perisporina portoricensis* (Stev.) Hansf., comb. n.

= *Perisporium portoricensis* Stev., Trans. Illin. Acad. Sci. 10: 169. 1917.

Colonies hypophyllous only, thin to subdense, somewhat velvety, effuse, not zonate, to 15 mm. diam. or widely confluent. Hyphae pale brownish, substraight, irregularly branched, reticulate, not closely radiating as in most species of Parodiellinaceae, 8—10 μ wide, septate, not constricted at the septa, containing a little red dye. Stomopodia scattered, ovate or irregularly lobate, to 20 $\Rightarrow$ 15 μ . Macroconidia pro-

duced singly and terminal on short erect conidiophores, hyaline, cigar-shaped, rounded and slightly attenuate towards apex, truncate at base, 3-septate, smooth, not constricted, $80-90 \Rightarrow 15-18 \mu$, wall 1.5μ thick. Microconidiophores scattered, erect, flexuous, simple, reddish brown, paler at apex, and in upper part with scattered, slightly projecting conidial scars, septate, to $300 \Rightarrow 8-9 \mu$. Microconidia ellipsoid, continuous, apiculate at the base, smooth, hyaline, about $12 \Rightarrow 7 \mu$. Perithecia loosely and irregularly scattered, more or less globose, nearly smooth, brown to black (when young with red dye in outer wall), to 270μ diam.; wall $10-15 \mu$ thick, of 2-3 layers of angular parenchyma, reddish brown, enclosing at first a solid hyaline inner ground tissue. Asci basal, paraphysate, (separated by compressed layers of the remains of the ground tissue, simulating septate paraphyses ellipsoid, widely rounded and thickened to 8μ at apex, contracted at base into short, wide stipe, bitunicate, the wall $3-4 \mu$ thick below, 8-spored, up to $120 \Rightarrow 50 \mu$, elongating at full maturity to discharge the spores through the irregularly broken apex of perithecium. Spores parallel, cylindric to slightly clavulate with rounded ends, 3-septate, not or very slightly constricted, smooth, hyaline, becoming yellowish brown, $60-75 \Rightarrow 9-11 \mu$ (not found separating into single cells as described by Stevens).

On *Calophyllum calaba*, Porto Rico, Stevens 7489, type, 4310.

Stevens described the fungus as amphigenous, but in his specimens the only colonies found on the upper leaf surface belong to *Trichasterina calophylli* Hansf.

(672) ***Armatella tetradeniae*** Hansf., sp. n.

Plagulae hypophyllae, tenues, leves, late confluentes. Hyphae brunneae, tortuosae, irregulariter ramosae, laxe intertexto-reticulatae, cullulis plerumque $25-40 \Rightarrow 5-7 \mu$. Hyphopodia capitata alternata vel dispersa, patentia, irregulariter curvata; cellula basali $10-80 \mu$ longa, cylindracea, saepe 1-4-septata; cellula apicali ovata vel irregulariter sublobata, versiformi, $12-17 \Rightarrow 9-15 \mu$. Perithecia laxa dispersa, nigra, globosa, verrucosa, usque ad 350μ diam., apice irregulariter disrupta. Asci numerosi, basali, paraphysati, clavati, apice late rotundati, deorsum attenuati, brevissime stipitati, tenuiter tunicati, 8-sporei, usque ad $90 \Rightarrow 30 \mu$. Sporae oblique 2-3-seriatae, ellipsoideae, obtusae, brunnescentes, leves, $28-35 \Rightarrow 12-14 \mu$, demum 1-septatae, haud vel vix constrictae.

Hab. in foliis *Tetradeniae*, sp., Ceylon, typus in Herb. Kew.

This species represents part of the type of „*Dothidea tetradeniae* Berk.“ and is mixed with the immature and denser colonies of *Meliola tetradeniae* (Berk.) Theiss. & Syd. The spores remain long hyaline and continuous, but eventually turn dark brown and become 1-septate; they germinate in the usual manner of *Armatella*, by collapse

of one cell, while the other forms the primary hyphopodium and then the beginnings of the mycelium.

(673) **Amazonia erythroxyli** Hansf., sp. n.

Plagulae plerumque epiphyllae, densae, leves, usque ad 1 mm. diam. vel numerosae confluentesque. Hyphae brunneae, subrectae vel undulatae, oppositae vel irregulariter ramosae, dense reticulatae, cellulis plerumque $20-25 \approx 7-8 \mu$. Hyphopodia capitata alternata, subantrorsa, recta vel curvata, $16-25 \mu$ longa; cellula basali cuneata vel cylindracea, $4-9 \mu$ longa; cellula apicali piriformi, subintegra vel rotundata-angulosa, raro irregulari, $11-17 \approx 11-15 \mu$. Hyphopodia mucronata illis capitatis commixta, numerosa, opposita vel alternata, ampullacea, $18-22 \approx 7-10 \mu$. Perithecia pauca, depresso-globosa, sursum strato mycelii radiato tecta, margine leniter fimbriato, usque ad 300μ diam. et ad 100μ alt., levia. Sporae oblongae, obtusae, atrobrunneae, 4-septatae, fortiter constrictae, $37-45 \approx 15-19 \mu$.

Hab. in foliis *Erythroxyli* spec., Jamaica, Thaxter 7427 (typus), 7206, 7207, 7080, 7426, in Herb. Farrow.

(674) **Irenopsis aristolochiella** Hansf., sp. n.

Plagulae amphigenae, tenues vel subdensae, usque ad 3 mm. diam., leves. Hyphae brunneae, undulatae, oppositae vel irregulariter ramosae, laxae vel dense reticulatae, cellulis plerumque $20-30 \approx 6-8 \mu$. Hyphopodia capitata alternata, antrorsa vel patentia, saepe curvata, $18-25 \mu$ longa; cellula basali cylindracea vel cuneata, $5-8 \mu$ longa; cellula apicali subglobosa, integra, $12-18 \approx 11-14 \mu$. Hyphopodia mucronata illis capitatis commixta, alternata vel opposita, ampullacea, $16-20 \approx 6-8 \mu$. Perithecia laxae dispersa, nigra, globosa, verrucosa, usque ad 160μ diam.; setae peritheciales $4-10$, rectae vel flexuosae, apice obtusae et tortuosae, atrobrunneae, leves, $1-2$ -septatae, usque ad $130 \approx 7.5 \mu$, paries $1.5-2 \mu$ cr. Sporae oblongae vel subellipsoideae, obtusae, 4-septatae, constrictae, atrobrunneae, $35-42 \approx 13-15 \approx 11 \mu$.

Hab. in foliis *Aristolochiae* sp., Tumatumari, Br. Guiana, Stevens 107 (typus in Herb. Univ. Illinois 4640).

(675) **Irenopsis oreocnidae** Hansf., sp. n.

Plagulae epiphyllae, tenues, leves. Hyphae brunneae, subrectae vel undulatae, alternatim vel irregulariter ramosae, laxae reticulatae, cellulis plerumque $25-35 \approx 6-7 \mu$. Hyphopodia capitata alternata, subantrorsa, recta vel curvula, $23-32 \mu$ longa; cellula basali cuneata, $7-12 \mu$ longa; cellula apicali ovata vel clavata, integra vel angulosa, $15-21 \approx 11-15 \mu$. Hyphopodia mucronata in hyphis distinctis evoluta, plerumque alternata, ampullacea, $18-26 \approx 8-10 \mu$. Perithecia dispersa, nigra, globosa, leniter verrucosa, usque ad 160μ diam.; setae

peritheciales 4—12, erectae, rectae vel curvulae, atrobrunneae, continuae, leves, obtusae, usque ad $110 \pm 9-11 \mu$, paries $2-2.5 \mu$ cr. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, $39-45 \pm 15-17 \mu$.

Hab. in foliis *Oreocnidae* sp., Luzon, Philippine Is., Stevens 1204 (typus in Herb. Univ. Illinois 6529).

(676) ***Asteridella casimiroae*** Hansf., sp. n.

Plagulae epiphyllae, tenues vel subdensae, leves, usque ad 3 mm. diam. Hyphae brunneae, subrectae vel undulatae, oppositae vel irregulariter acuteque ramosae, laxae vel dense reticulatae, cellulis plerumque $30-40 \pm 7-9 \mu$. Hyphopodia capitata alternata, subantrorsa, curvula, $25-35 \mu$ longa; cellula basali cuneata, $5-12 \mu$ longa; cellula apicali oblonga vel ovata, integra, $19-25 \pm 11-13 \mu$. Hyphopodia mucronata in centro plagularum illis capitatis commixta, opposita, alternata vel ternata, ampullacea, $17-23 \pm 7-9 \mu$. Perithecia dispersa, atra, globosa, verrucosa, usque ad 170μ diam., cellulis parietis rotundatis, usque ad 12μ alt. Sporae ellipsoideae, obtusae, 4-septatae, constrictae, atrobrunneae, $39-44 \pm 16-18 \pm 14-15 \mu$.

Hab. in foliis *Casimiroae tetrameriae*, El Alto, Costa Rica, Stevens 233 (typus in Herb. Univ. Illinois 4002).

(677) ***Asteridiella cleistanthi*** Hansf., sp. n.

(= *Irenina cleistanthi* Stev. in Herb., ined.)

Plagulae amphigenae, plerumque hypophyllae, usque ad 8 mm. diam. vel confluentes, leves, tenues. Hyphae brunneae, subrectae vel undulatae (in hypophyllo tortuosae), oppositae vel irregulariter ramosae, laxae reticulatae, cellulis plerumque $20-30 \pm 7-9 \mu$. Hyphopodia capitata alternata, curvata, patentia, $24-33 \mu$ longa; cellula basali cylindracea vel cuneata, $5-10 \mu$ longa; cellula apicali oblonga, saepe curvata, integra vel rotundato-angulosa, $18-25 \pm 10-13 \mu$. Hyphopodia mucronata illis capitatis commixta, alternata vel opposita, ampullacea, $25-32 \pm 8-9 \mu$. Perithecia dispersa, atra, globosa, verrucosa, usque ad 180μ diam., cellulis parietis obtuse conoideis, usque ad 17μ alt. Sporae atrobrunneae, oblongae vel ellipsoideae, obtusae, 4-septatae, constrictae, $40-46 \pm 17-20 \mu$.

Hab. in foliis *Cleistanthi* sp., Malangas, Zamboanga, Mindanao, Philippine Is., Ramos & Edano in Phil. Bur. Sci. 36385 (typus in Herb. Univ. Illinois).

(678) ***Asteridiella entebbeensis*** (Hansf. & Stev.) Hansf., var. ***codiaci*** Hansf., var. n.

Plagulae amphigenae, usque ad 2 mm. diam., densae, leves. Hyphae brunneae, subrectae vel leniter sinuosae, oppositae vel irregulariter ramosae, dense reticulatae, cellulis circa $20 \pm 8-9 \mu$. Hypho-

podia capitata alternata, antrorsa vel patentia, recta vel curvata, 23—32 μ longa; cellula basali cylindracea vel cuneata, 5—10 μ longa; cellula apicali recta vel curvata, versiformi, irregulariter lobata, 18—26 $\Rightarrow$ 14—20 μ . Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, 15—20 $\Rightarrow$ 6—8 μ . Perithecia in centro plagularum laxè aggregata, atra, globosa, verrucosa, usque ad 200 μ diam., cellulis parietis obtuse conoideis, —25 μ alt. Sporae atrobrunneae, oblongae vel subellipsoideae, obtusae, 4-septatae, constrictae, 42—48 $\Rightarrow$ 18—22 μ .

Hab. in foliis *Codiaei variegati*, Keravat, New Britain, D. S h a w 1204 (WARI 7770).

(679) **Asteridiella leecicola** Hansf., sp. n.

Plagulae amphigenae, usque ad 2 mm. diam. vel late confluentes, leves, densae. Hyphae brunneae, subrectae vel leniter undulatae, opposite lateque ramosae, dense reticulatae, cellulis plerumque 12—20 $\Rightarrow$ 6—7 μ . Hyphopodia capitata alternata, subantrorsa, recta vel curvula, 12—19 μ longa; cellula basali cuneata vel cylindracea, 2—8 μ longa; cellula apicali subglobosa vel oblonga, integra, 8—13 $\Rightarrow$ 8—11 μ . Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, 12—17 $\Rightarrow$ 6—7 μ . Perithecia dispersa, atra, globosa, verrucosa, usque ad 145 μ diam., cellulis parietis convexis, usque ad 10 μ alt. Sporae ellipsoideae, obtusae, 4-septatae, constrictae, atrobrunneae, 29—35 $\Rightarrow$ 13—16 μ .

Hab. in foliis *Leeae* sp., Malangas, Zamboanga, Mindanao, Philippine Is., Phil. Bur. Sci. 36411 (typus in Herb. Univ. Illinois).

(680) **Asteridiella margravilcola** Hansf., sp. n.

Plagulae amphigenae, tenues vel densae, usque ad 1 mm. diam. vel confluentes. Hyphae brunneae, tortuosae, opposite vel irregulariter lateque ramosae, laxè evl dense reticulatae, cellulis plerumque 20—38 $\Rightarrow$ 6—8 μ . Hyphopodia capitata alternata vel dispersa, antrorsa vel patentia, recta vel curvata, 22—32 μ longa; cellula basali cylindracea vel cuneata, 5—13 μ longa; cellula apicali subglobosa, ovata, clavata. Perithecia laxè dispersa, atra, globosa, usque ad 160 μ diam., cellulis parietis conoideis, usque ad 14 μ alt. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, 39—45 $\Rightarrow$ 15—18 μ .

Hab. in foliis *Marcgraviae* spec., Grenada, T h a x t e r 7407, typus in Herb. F a r l o w.

(681) **Asteridiella olmediae** Hansf., sp. n.

Plagulae amphigenae, usque ad 1 mm. diam. vel numerosae et confluentes, subdensae, leves. Hyphae brunneae, undulatae, opposite ramosae, dense reticulatae, cellulis plerumque 20—30 $\Rightarrow$ 6—7 μ . Hyphopodia capitata alternata, antrorsa vel patentia, recta vel curvata,

19—25 μ longa; cellula basali cylindracea vel cuneata, 3—9 μ longa; cellula apicali ovata, oblonga vel piriformi, integra vel leniter rotundato-angulosa, 13—17 $\Rightarrow$ 9—13 μ . Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, 15—20 $\Rightarrow$ 6—7 μ . Perithecia dispersa, atra, globosa, rugosa, usque ad 170 μ diam., cellulis parietis obtuse conoideis, curvatis, usque ad 18 μ alt. Sporae ellipsoideae, obtusae, 4-septatae, constrictae, atrobrunneae, 31—37 $\Rightarrow$ 13—15 μ .

Hab. in foliis *Olmediae asperae*, Fort Sherman, Panama, Stevens 1068 (typus), 1065, (in Herb. Univ. Illinois 4050, 4015.).

(682) **Asteridiella simarubicola** Hansf., sp. n.

Plagulae epiphyllae, usque ad 5 mm. diam., tenues, leves. Hyphae brunneae, subrectae, oppositae lateque ramosae, laxae reticulatae, cellulis plerumque 20—30 $\Rightarrow$ 6—7 μ . Hyphopodia capitata alternata, antrorsa vel patentia, recta vel curvula, 17—23 μ longa; cellula basali cylindracea vel cuneata, 3—10 μ longa; cellula apicali subglobosa, integra, 11—15 $\Rightarrow$ 10—13 μ . Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, 18—22 $\Rightarrow$ 7—8 μ . Perithecia dispersa, atra, globosa, verrucosa, usque ad 130 μ diam. Sporae atrobrunneae, oblongae vel subellipsoideae, obtusae, 4-septatae constrictae, 31—37 $\Rightarrow$ 13—15 μ .

Hab. in foliis *Simarubae* sp., Wismar, British Guiana, Stevens 309, typus in Herb. Univ. Illinois.

(683) **Asteridiella uncarilicola** Hansf., sp. n.

Plagulae epiphyllae, tenues vel subdensae, usque ad 3 mm. diam. Hyphae brunneae, subrectae, alternatim vel irregulariter ramosae, laxae radiato-reticulatae, cellulis plerumque 30—40 $\Rightarrow$ 7—9 μ . Hyphopodia capitata alternata vel dispersa, subantrorsa, subrecta, 26—40 μ longa; cellula basali cuneata, 6—15 μ longa; cellula apicali ovata vel piriformi, integra vel leniter rotundato-angulosa, 18—28 $\Rightarrow$ 14—19 μ . Hyphopodia mucronata in hyphis distinctis evoluta, opposita vel alternata, ampullacea, 12—15 $\Rightarrow$ 7—9 μ . Perithecia dispersa, globosa, atra, verrucosa, usque ad 200 μ diam., cellulis parietis conoideis vel mammillatibus, usque ad 22 μ alt. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, 35—43 $\Rightarrow$ 15—17 $\Rightarrow$ 13 μ .

Hab. in foliis *Uncariae perrottetii*, Quezon Forest Park, Tayabas, Luzon, Philippine Is., Stevens 424 (typus in Herb. Univ. Illinois).

(684) **Asteridiella vacciniicola** Hansf., sp. n.

Plagulae amphigenae, tenues vel subdensae, leves, usque ad 2 mm. diam. vel confluentes. Hyphae brunneae, subrectae vel undulatae, oppositae lateque ramosae, laxae vel subdense reticulatae, cellulis plerumque 15—25 $\Rightarrow$ 7—8 μ . Hyphopodia capitata alternata vel raris-

sime opposita, patentia, curvata, 16—21 μ longa; cellula basali cuneata vel cylindracea, 3—6 μ longa; cellula apicali oblonga vel clavulata, integra, 12—16 $\Rightarrow$ 10—12 μ . Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, 20—25 $\Rightarrow$ 7—8 μ . Perithecia dispersa, nigra, globosa, rugosa, usque ad 120 μ diam. (immatura), cellulis parietis obtuse conoideis, usque ad 20 μ alt. Sporae atrobrunneae, oblongae vel subellipsoideae, obtusae, 4-septatae, constrictae, 33—38 $\Rightarrow$ 16—19 μ .

Hab. in foliis *Vaccinii benguetensis*, Mt. San Thomas, Benguet, Luzon, Philippine Is., Stevens 1342 (typus in Herb. Univ. Illinois 6521).

(685) ***Asteridiella vismiae*** Hansf., sp. n.

Plagulae epiphyllae, densae, leves, usque ad 1 mm. diam. Hyphae brunneae, undulatae, opposite vel irregulariter lateque ramosae, dense reticulatae, cellulis plerumque 20—30 $\Rightarrow$ 6—7 μ . Hyphopodia capitata alternata, saepius irregulariter curvata, antrorsa vel patentia, 22—30 μ longa; cellula basali cuneata vel cylindracea, 5—8 μ longa; cellula apicali piriformi vel irregulariter angulosa, subinde sublobata, saepe curvata, versiformi, 16—23 $\Rightarrow$ 11—17 μ . Hyphopodia mucronata nina visa. Perithecia dispersa, globosa, atra, verrucosa, immatura. Sporae ellipsoideae, obtusae, atrobrunneae, 4-septatae, constrictae, 48 $\Rightarrow$ 22 μ .

Hab. in foliis *Vismiae latifoliae*, Wismar, British Guiana, Stevens 299 p. p.

(686) ***Asteridiella vismiicola*** Hansf., sp. n.

Plagulae epiphyllae, tenues vel subdensae, usque ad 2 mm. diam. Hyphae brunneae, subrectae vel leniter undulatae, opposite lateque ramosae, laxae vel subdense reticulatae, cellulis plerumque 20—30 $\Rightarrow$ 5—6 μ . Hyphopodia capitata alternata, patentia vel subantrorsa, recta vel curvula, 13—17 μ longa; cellula basali cylindracea, 3—5 μ longa; cellula apicali oblonga vel clavulata, integra, 10—13 $\Rightarrow$ 7—10 μ . Hyphopodia mucronata illis capitatis commixta, alternata vel opposita, ampullacea, 18—22 $\Rightarrow$ 6 μ , collo elongato. Perithecia dispersa, atra, globosa, verrucosa, immatura. Sporae oblongae, obtusae, 4-septatae, constrictae, 37—44 $\Rightarrow$ 14—15 μ .

Hab. in foliis *Vismiae latifoliae*, Wismar, British Guiana, Stevens 299 p. p., typus in Herb. Univ. Illinois.

(687) ***Meliola acanthacearum*** Hansf. var. ***occidentalis*** Hansf., var. n.

Plagulae amphigenae, usque ad 1 mm. diam., densae, velutinae. Hyphae brunneae, leniter undulatae vel flexuosae, opposite acuteque ramosae, dense reticulatae, cellulis plerumque 10—25 $\Rightarrow$ 5—7 μ . Ch. alternata, antrorsa, recta vel curvula, 19—27 μ longa; cellula

basali cuneata, 4—9 μ longa; cellula apicali tenuiter ovata, apice rotundata vel subattenuata, integra, 15—21 $\Rightarrow$ 7—10 μ . Hyphopodia mucronata pauca, illis capitatis interspersa, alternata vel opposita, ampullacea, 15—24 $\Rightarrow$ 7—9 μ . Setae myceliales dispersae, numerosae, rectae, simplices, plerumque acutae, usque ad 400 $\Rightarrow$ 7—8 μ . Perithecia in centro plagularum laxe aggregata, atra, globosa, verrucosa, —170 μ diam. Sporae oblongae, obtusae, atrobrunneae, 4-septatae, constrictae, 29—33 $\Rightarrow$ 13—14 μ .

Hab. in foliis *Ruelliae coccineae*, Finca Maria, Yanco, Porto Rico, W h e t z e l 2871 (typus), 2780, 2782, in Herb. Univ. Cornell, Dept. Plant Path.; in foliis Acanthacearum spec. indet., Jamaica, T h a x t e r 7205 in Herb. Farlow.

.(688) *Meliola acristae* Hansf. var. **cocoos** Hansf., var. n.

Plagulae epiphyllae, usque ad 1 mm. diam., tenues vel subdensae, tenuiter velutinae. Hyphae brunneae, subrectae, oppositae ramosae, laxae vel dense reticulatae, cellulis plerumque 20—30 $\Rightarrow$ 7—9 μ . Hyphopodia capitata alternata, antrorsa vel patentia, recta vel curvata, 25—35 μ longa; cellula basali cylindracea vel cuneata, 7—13 μ longa; cellula apicali ovata vel oblonga, integra vel leniter angulosa, 16—23 $\Rightarrow$ 12—15 μ . Hyphopodia mucronata in hyphis distinctis evoluta, alternata, ampullacea, 20—25 $\Rightarrow$ 8—10 μ . Setae myceliales dispersae, etiam juxta perithecia aggregatae, rectae, usque ad 400 μ longae, apice 2-furcatae (—90 μ) vel irregulariter 2—4-dentatae —30 μ . Perithecia dispersa, nigra, globosa, verrucosa, usque ad 240 μ diam. Sporae atrobrunneae, ellipsoideae, obtusae, 4-septatae, constrictae, 40—50 $\Rightarrow$ 16—22 μ .

Hab. in foliis *Cocoos nuciferae*, Pernambuco, Brazil, B a t i s t a in IMUR 5708.

.(689) *Meliola argentina* Speg. var. **hawaiiensis** Hansf., var. n.

Plagulae amphigenae, plerumque hypophyllae, ellipticae vel lineares, usque ad 5 $\Rightarrow$ 2 mm., densae, velutinae. Hyphae brunneae, rectae vel tortuosae, alternatim vel irregulariter ramosae, dense reticulatae, subsolidae, cellulis plerumque 10—20 $\Rightarrow$ 7—9 μ . Hyphopodia capitata alternata, antrorsa vel patentia, recta vel curvata, 18—25 μ longa; cellula basali cylindracea vel cuneata, 5—10 μ longa; cellula apicali irregulariter subglobosa, margine subintegra vel leniter lobata, 11—18 $\Rightarrow$ 10—18 μ . Hyphopodia mucronata non visa. Setae myceliales numerosae, dispersae, rectae, simplices, acutae, usque ad 800 $\Rightarrow$ 11—13 μ . Perithecia in centro plagularum aggregata, nigra, globosa, verrucosa, usque ad 170 μ diam.; setae peritheciales 0—6, circinatae, simplices, acutae, septatae, usque ad 130 $\Rightarrow$ 8—9 μ . Sporae atrobrunneae, ellipsoideae, obtusae, curvatae, 4-septatae, constrictae, 38—45 $\Rightarrow$ 15—17 μ .

Hab. in foliis *Gahniae leptostachyae*, Hawaii, Stevens 672 (typus), 361, 435, 226.

The bent spores are most characteristic, with the greater part of the curvature in the central cell, much like conidia of some species of *Curvularia*.

(690) *Meliola artocarpicola* Stev. ex Hansf., sp. n.

Plagulae amphigenae, tenues vel densae, usque ad 5 mm. diam. vel confluentes, breviter velutinae. Hyphae brunneae, subrectae, alternatim vel irregulariter acuteque ramosae, dense intertexto-reticulatae, cellulis plerumque $35-60 \approx 7-9 \mu$. Hyphopodia capitata alternata vel dispersa, antrorsa vel patentia, recta vel curvata, $30-45 \mu$ longa; cellula basali cuneata vel cylindracea, $8-15 \mu$ longa; cellula apicali subglobosa, piriformi vel irregulari et sublobata, $20-34 \approx 18-25 \mu$. Hyphopodia mucronata plerumque in hyphis distinctis evoluta, alternata vel opposita, conoidea vel ampullacea, $20-28 \approx 7-9 \mu$. Setae myceliales dispersae, etiam juxta perithecia aggregatae, rectae vel curvulae, simplices, obtusae vel clavulatae, usque ad $330 \approx 8-9 \mu$, apice usque ad 13μ cr. Perithecia dispersa, nigra, globosa, verrucosa, usque ad 230μ diam., superne setis $4-12$ ornata; setae radiant erectae, rectae, simplices, obtusae vel clavulatae, septatae, atrobrunneae, leves, usque ad $200 \approx 7-9 \mu$. Sporae oblongae, obtusae, 4-septatae, constrictae, atrobrunneae, $48-56 \approx 19-22 \mu$.

Hab. in foliis *Artocarp* sp., Malangas, Zamboanga, Mindanao, Philippine Is., Ramos & Edano in PBS 36433 (typus); Philippine Is., PBS 35861, 24617.

(691) *Meliola asclepiadacearum* Hansf. var. **brasiliensis** Hansf., var. n.

Plagulae plerumque epiphyllae, densae, velutinae, usque ad 3 mm. diam. Hyphae brunneae, subrectae, oppositae acuteque ramosae, dense reticulatae, cellulis plerumque $15-25 \approx 7-8 \mu$. Hyphopodia capitata alternata, antrorsa, recta vel curvula, $20-25 \mu$ longa; cellula basali cylindracea vel cuneata, $3-8 \mu$ longa; cellula apicali ovata, integra vel subinde leniter angulosa, $13-18 \approx 10-13 \mu$. Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, $18-24 \approx 6-8 \mu$. Setae myceliales dispersae, etiam juxta perithecia aggregatae, rectae, simplices, obtusae, usque ad $330 \approx 8-10 \mu$. Perithecia dispersa, nigra, globosa, verrucosa, usque ad 200μ diam. Sporae oblongae vel subellipsoideae, obtusae, 4-septatae, constrictae, $40-48 \approx 16-18.5 \approx 14-15 \mu$, atrobrunneae.

Hab. in foliis *Asclepiadis* sp., Pernambuco, Brazil, Maia in IMUR 5705.

(692) **Meliola banksiae** Hansf., sp. n.

Plagulae epiphyllae, usque ad 5 mm. diam. vel confluentes, tenues vel subdensae. Hyphae brunneae, leniter undulatae, oppositae lateque ramosae, dense reticulatae, cellulis plerumque $20-30 \Rightarrow 7-8 \mu$. Hyphopodia capitata alternata vel usque ad 3% opposita, antrorsa, patentia vel raro retrorsa, recta vel curvata, $18-23 \mu$ longa; cellula basali cylindracea vel cuneata, $4-8 \mu$ longa; cellula apicali subglobosa vel oblonga, integra, $13-18 \Rightarrow 9-11 \mu$. Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, $15-25 \Rightarrow 7-8 \mu$, interdum numerosa. Setae myceliales tenuiter dispersae, etiam juxta perithecia ggregatae, rectae, usque ad $330 \Rightarrow 7-8 \mu$, obtusae, acutae vel $2-3$ -dentatae (-10μ). Perithecia dispersa, atra, globosa, verrucosa, usque ad 170μ diam. Sporae oblongae vel subellipsoideae, obtusae, atrobrunneae, 4-septatae, constrictae, $40-46 \Rightarrow 16-19 \mu$.

Hab. in foliis *Banksiae dentatae*, Hombrum Bluff, Papua, D. S h a w 830 p. p. (WARI 7758).

(693) *Meliola burseracearum* Stev. var. **major** Hansf., var. n.

Plagulae epiphyllae, subdensae, velutinae, usque ad 4 mm. diam. Hyphae subrectae vel leniter undulatae, oppositae lateque ramosae, dense reticulatae, cellulis plerumque $15-25 \Rightarrow 6-8 \mu$. Hyphopodia capitata alternata, patentia, recta vel curvula, $20-28 \mu$ longa; cellula basali cylindracea, $5-9 \mu$ longa; cellula apicali cylindracea, integra, recta vel subinde leniter sinuosa, apice rotundata, $17-24 \Rightarrow 7-10 \mu$. Hyphopodia mucronata illis capitatis commixta, alternata vel opposita, ampullacea, $20-35 \Rightarrow 6-9 \mu$, collo elongato. Setae myceliales paucae vel numerosae, rectae, usque ad $510 \Rightarrow 9-10 \mu$, apice varie dentatae usque ad 15μ . Perithecia dispersa, atra, globosa, verrucosa, usque ad 220μ diam. Sporae atrobrunneae, cylindraceae vel subelliptsoideae, obtusae, 4-septatae, fortiter constrictae, $45-50 \Rightarrow 20-22 \mu$.

Hab. in foliis *Tetragastris balsamiferae*, San Domingo, C i f e r r i, Micofl. doming. exs. 197.

This form occurs mixed with the species type on *Icica* sp., Trinidad, S t e v e n s 936, and is distinguishable by its coarser mycelium, longer hyphopodia and wider spores, even when the colonies of the two forms are intergrown.

(694) **Meliola caricis** Hansf., sp. n.

Plagulae amphigenae, usque ad 1 mm. diam. vel confluentes, tenues vel subdensae. Hyphae brunneae, subrectae vel tortuosae, alternatim vel irregulariter ramosae, dense reticulatae, cellulis plerumque $20-30 \Rightarrow 6-8 \mu$. Hyphopodia capitata alternata, curvata, $20-48 \mu$

longa; cellula basali cylindracea vel cuneata, saepe irregulariter curvata, 5—28 μ longa; cellula apicali ovata vel ellipsoidea, integra vel irregulariter lobata, versiformi, 16—22 $\Rightarrow$ 11—19 μ . Hyphopodia mucronata in hyphis distinctis evoluta, opposita vel alternata, ampullacea, 15—19 $\Rightarrow$ 6—8 μ . Setae myceliales dispersae, etiam juxta perithecia aggregatae, rectae, simplices, acutae, usque ad 540 $\Rightarrow$ 9—11 μ . P. in centro plagarum laxè aggregata, verrucosa, usque ad 200 μ diam., glabra. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, 39—46 $\Rightarrow$ 15—17 μ .

Hab. in foliis *Caricis* sp., Santa Maria, Guatemala, Standley 65274 (Typus in Herb. Farlow).

(695) *Meliola caseariae-arborea* Hansf. var. **jamaicensis** Hansf., var. n.

Plagulae epiphyllae, usque ad 1 mm. diam., tenues. Hyphae brunneae, undulatae, oppositae vel irregulariter acuteque ramosae, laxè radiato-reticulatae, cellulis plerumque 20—35 $\Rightarrow$ 6—8 μ . Hyphopodia capitata alternata vel usque ad 10% opposita, subantrorsa, recta vel curvula, 14—20 μ longa; cellula basali cuneata, 3—6 μ longa; cellula apicali subglobosa vel piriformi, integra, 11—15 $\Rightarrow$ 10—13 μ . Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, 15—20 $\Rightarrow$ 7—9 μ . Setae myceliales paucae, juxta perithecia aggregatae, subrectae, simplices, obtusae, usque ad 270 $\Rightarrow$ 7 μ . Perithecia laxè aggregata, globosa, nigra, verrucosa, usque ad 195 μ diam. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, leniter constrictae, 33—39 $\Rightarrow$ 15—17 μ .

Hab. in foliis *Caseariae guianensis*, Jamaica, Thaxter 7256 in Herb. Farlow.

(696) *Meliola clavata* Wint. var. **jamaicensis** Hansf., var. n.

Plagulae amphigenae, plerumque hypophyllae, usque ad 2 mm. diam., densae, velutinae, parasiticae. Hyphae brunneae, subrectae vel leniter undulatae, alternatim vel irregulariter acuteque ramosae, dense reticulatae et subsolidae, cellulis plerumque 11—25 $\Rightarrow$ 7—9 μ . Hyphopodia capitata alternata, subantrorsa, recta vel curvata, 18—26 μ longa; cellula basali cylindracea vel cuneata, 5—9 μ longa; cellula apicali versiformi, irregulariter angulosa vel lobata, 12—17 $\Rightarrow$ 10—16 μ . Hyphopodia mucronata illis capitatis commixta, alternata vel opposita, ampullacea, 13—19 $\Rightarrow$ 7—9 μ . Setae myceliales numerosae, rectae, simplices, apice clavatae, usque ad 330 $\Rightarrow$ 8—9 μ , apice usque ad 12 μ cr. Perithecia subaggregata, atra, globosa, verrucosa, usque ad 200 μ diam. Sporae atrobrunneae, oblongae vel subellipsoideae, obtusae, 4-septatae, constrictae, 42—50 $\Rightarrow$ 17—20 $\Rightarrow$ 13—15 μ .

Hab. in foliis *Ipomoeae* spec., Kingston, Jamaica, Thaxter 7250, typus in Herb. Farlow.

Each colony causes a slight invagination of the host leaf, and is marked on the opposite surface by a definite dark brown leafspot.

(697) **Meliola cuscutae** Hansf., sp. n.

Plagulae caulicolae, confluentes, densae, usque ad 5 mm. longae. Hyphae brunneae, subrectae vel leniter undulatae, alternatim vel irregulariter ramosae, dense reticulatae, cellulis plerumque $20-30 \Rightarrow 7-9 \mu$. Hyphopodia capitata alternata, subantrorsa, recta vel curvata, $18-26 \mu$ longa; cellula basali cuneata vel cylindracea, $4-10 \mu$ longa; cellula apicali subglobosa, integra, angulosa vel sublobata, $11-17 \Rightarrow 11-17 \mu$. Hyphopodia mucronata pauca, illis capitatis interspersa, plerumque alternata, ampullacea, $17-28 \Rightarrow 9-10 \mu$, collo elongato. Setae myceliales dispersae, subrectae vel flexuosae, simplices, obtusae, usque ad $330 \Rightarrow 7-9 \mu$. Perithecia dispersa, atra, globosa, leniter verrucosa, usque ad 180μ diam. Sporae atrobrunneae, oblongae, obtusae, curvulae, 3-septatae, constrictae, $42-48 \Rightarrow 15-17 \mu$.

Hab. in caulibus *Cuscutae* spec., Arepo, Cumuto, Trinidad, Thaxter 7381 (typus), 7475, in Herb. Farlow.

(698) **Meliola dalbergiae** Hansf., sp. n.

Plagulae plerumque hypophyllae, densae, usque ad 2 mm. diam., subvelutinae. Hyphae brunneae, subrectae vel undulatae, oppositae vel irregulariter lateque ramosae, dense reticulatae, subsolidae, cellulis plerumque $20-25 \Rightarrow 7-9 \mu$. Hyphopodia capitata alternata vel opposita, curvata, patentia, $20-29 \mu$ longa; cellula basali cylindracea, $3-10 \mu$ longa; cellula apicali versiformi, irregulariter angulosa vel sublobata, saepe curvata, $15-22 \Rightarrow 9-15 \mu$. Hyphopodia mucronata plerumque in hyphis distinctis evoluta, opposita vel alternata, ampullacea, $20-25 \Rightarrow 9-11 \mu$. Setae myceliales dispersae, etiam juxta perithecia aggregatae, rectae, simplices, obtusae vel subacutae, raro minute denticulatae, usque ad $330 \Rightarrow 9-10 \mu$. Perithecia in centro plagarum aggregata, nigra, globosa, verrucosa, usque ad 180μ diam. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, $37-43 \Rightarrow 15-17 \mu$.

Hab. in foliis *Dalbergiae* sp., Mayaguez, Porto Rico, Stevens 7476 (typus), 7577, 3658 p. p., 9016 p. p.

(699) **Meliola elephantopi** Hansf., sp. n.

Plagulae amphigenae, tenues, usque ad 2 mm. diam. Hyphae brunneae, tortuosae, oppositae vel irregulariter acuteque ramosae, laxae reticulato-intertextae, cellulis plerumque $20-30 \Rightarrow 6 \mu$. Hyphopodia capitata alternata, antrorsa vel patentia, saepe curvata, $13-18 \mu$ longa; cellula basali cuneata, $3-6 \mu$ longa; cellula apicali subglobosa, integra, $10-13 \Rightarrow 9-11 \mu$. Hyphopodia mucronata illis capitatis commixta, ampullacea, opposita vel alternata, $15-20 \Rightarrow 6-8 \mu$. Setae

myceliales paucae, plerumque juxta perithecia aggregatae, rectae vel flexuosae, simplices, obtusae, usque ad $200 \pm 6-7 \mu$. Perithecia dispersa, nigra, globosa, verrucosa, usque ad 140μ diam. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, $26-33 \pm 10-12.5 \mu$.

Hab. in foliis *Elephantopi* sp. Nueva Ecija, Luzon, Philippine Is., Stevens 1732 (typus in Herb. Univ. Illinois 6527).

(700) *Meliola gouldiae* Hansf., sp. n.

Plagulae hypophyllae, tenues, usque ad 8 mm. diam. Hyphae brunneae, subrectae vel undulatae, oppositae acuteque ramosae, laxae reticulato-intertextae, cellulis plerumque $40-60 \pm 5-6 \mu$. Hyphopodia capitata alternata vel dispersa, antrorsa, recta vel curvula, $15-22 \mu$ longa; cellula basali cuneata, $3-7 \mu$ longa; cellula apicali ovata, integra vel leniter angulosa, apice rotundata vel attenuata, $12-15 \pm 8-10 \mu$. Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, $14-19 \pm 6-7 \mu$. Setae myceliales bifformes: (a) dispersae et juxta perithecia aggregatae, $-670 \pm 9-10 \mu$, (b) juxta perithecia aggregatae, $-300 \pm 6-7 \mu$; omnes simplices, acutae. Perithecia dispersa, nigra, globosa, verrucosa, usque ad 160μ diam. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, $31-36 \pm 10-11 \mu$.

Hab. in foliis *Gouldiae coriaceae*, Hawaii, Stevens in USDA 71011.

(701) *Meliola grevilleae* Hansf., sp. n.

Plagulae amphigenae, usque ad 2 mm. diam., densae, subleves, in hypophyllo sub tomento folii abditae. Hyphae brunneae, subrectae vel undulatae, in hypophyllo tortuosae, oppositae vel irregulariter lateque ramosae, dense reticulatae, cellulis plerumque $12-25 \pm 7-9 \mu$. Hyphopodia capitata alternata, subantrorsa vel patentia, recta vel curvata, $19-27 \mu$ longa; cellula basali cylindracea vel cuneata, $5-9 \mu$ longa; cellula apicali globosa vel piriformi, integra, $14-19 \pm 12-14 \mu$. Hyphopodia mucronata pauca, illis capitatis commixta, alternata, ampullacea, $18-24 \pm 7-9 \mu$. Setae myceliales plerumque juxta perithecia aggregatae, paucae, saepe nullae, subrectae, simplices, obtusae, $-180 \pm 7-8 \mu$. Perithecia dispersa, atra, globosa, verrucosa, -200μ diam. Sporae atrobrunneae, oblongae vel subellipsoideae, obtusae, 4-septatae, constrictae, $45-51 \pm 20-22 \pm 15-17 \mu$.

Hab. in foliis *Grevilleae robustae*, Garaina, New Guinea, D. Shaw 672 (WARI 7773).

(702) *Meliola grewilcola* Hansf., sp. n.

Plagulae amphigenae, tenues vel subdensae, subvelutinae, usque ad 3 mm. diam. vel confluentes. Hyphae brunneae, subrectae vel

undulatae, opposite vel irregulariter lateque ramosae, dense reticulatae, cellulis plerumque $25-30 \approx 6-8 \mu$. Hyphopodia capitata alternata, patentia vel subantrorsa, recta vel curvula, $22-35 \mu$ longa; cellula basali cuneata, $5-15 \mu$ longa; cellula apicali subglobosa vel ovata, integra, $15-22 \approx 11-17 \mu$. Hyphopodia mucronata pauca, illis capitatis commixta, alternata, ampullacea, $16-24 \approx 7-8 \mu$, collo elongato. Setae myceliales dispersae, etiam juxta perithecia aggregatae, rectae, simplices, acutae, usque ad $900 \approx 10-11 \mu$. Perithecia dispersa, nigra, globosa, verrucosa, usque ad 180μ diam. Sp. ellipsoideae, obtusae, 4-septatae, constrictae, atrobrunneae, $41-48 \approx 16-19 \approx 11-13 \mu$.

Hab. in foliis *Grewiae* sp., Laguna, Luzon, Philippine Is., Stevens 496-a (typus in Herb. Univ. Illinois 6531).

(703) **Mellola hellicicola** Hansf., sp. n.

Plagulae amphigenae, plerumque hypophyllae, densae, subvelutinae, usque ad 2 mm. diam. Hyphae brunneae, undulatae vel tortuosae, alternatim vel irregulariter acuteque ramosae, dense reticulatae, cellulis plerumque $20-25 \approx 7-8 \mu$. Hyphopodia capitata alternata, subantrorsa, saepius irregulariter curvata, $22-35 \mu$ longa; cellula basali cuneata vel cylindracea, $6-14 \mu$ longa; cellula apicali ovata vel clavata, versiformi, angulosa vel sublobata, $15-22 \approx 12-20 \mu$. Hyphopodia mucronata in hyphis distinctis evoluta, plerumque alternata, ampullacea, $20-26 \approx 8-10 \mu$. Setae myceliales dispersae, etiam juxta perithecia aggregatae, rectae, simplices, acutae, usque ad $430 \approx 9-10 \mu$. Perithecia dispersa, nigra, globosa, verrucosa, usque ad 160μ diam. Sporae atrobrunneae, oblongae vel subellipsoideae, obtusae, 4-septatae, constrictae, $44-50 \approx 18-22 \mu$.

Hab. in foliis *Heliciae* sp., Luzon, Philippine Is., Stevens 1196 (typus in Herb. Univ. Illinois 6533).

(704) **Mellola mussaendae-arcuatae** Hansf., sp. n.

Plagulae epiphyllae, subdensae, velutinae, usque ad 4 mm. diam. Hyphae subrectae, brunneae, opposite acuteque ramosae, laxae vel subdense radianto-reticulatae, cellulis plerumque $25-35 \approx 7-8 \mu$. Hyphopodia capitata alternata, subantrorsa, recta, $15-20 \mu$ longa; cellula basali cuneata, $4-6 \mu$ longa; cellula apicali ovata vel subglobosa, integra, $12-15 \approx 8-12 \mu$. Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, $15-22 \approx 7-9 \mu$. Setae myceliales numerosae, dispersae, rectae, simplices, obtusae, usque ad $330 \approx 8-9 \mu$. Perithecia dispersa, atra, globosa, verrucosa, usque ad 180μ diam. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, $34-39 \approx 13-15 \mu$.

Hab. in foliis *Mussaendae arcuatae*, Uganda, Hansford 1441 (typus), 3184, 3463, 3615; in foliis *Craterispermii laurini*, Uganda,

Hansford 2629, 3196, 3225; in foliis *Rubiacearum* spec. indet., Panama, Standley 25711, 29646 (F).

(705) **Meliola palaquicola** Hansf., sp. n.

Plagulae epiphyllae, subdensae, usque ad 5 mm. diam. Hyphae brunneae, undulatae vel tortuosae, opposite vel irregulariter lateque ramosae, dense reticulatae, cellulis plerumque $20-35 \Rightarrow 7-10 \mu$. Hyphopodia capitata alternata, subantrorsa vel patentia, saepius curvata, $23-30 \mu$ longa; cellula basali cylindracea vel cuneata, $6-12 \mu$ longa; cellula apicali piriformi vel oblonga, apice rotundata vel truncata, subinde rotundato-angulosa, versiformi, $16-22 \Rightarrow 10-15 \mu$. Hyphopodia mucronata pauca, illis capitatis commixta, alternata, conoidea, $19-23 \Rightarrow 9-10 \mu$. Setae myceliales juxta perithecia aggregatae, rectae, simplices, acutae, usque ad $800 \Rightarrow 11-13 \mu$. Perithecia dispersa, nigra, globosa, verrucosa, usque ad 150μ diam. Sporae ellipsoideae, obtusae, 4-septatae, constrictae, atrobrunneae, $38-45 \Rightarrow 18-20 \mu$.

Hab. in foliis *Palaquii* sp., Laguna, Luzon, Philippine Is., Stevens 1884 (typus in Herb. Univ. Illinois 6530).

(706) **Meliola Rechingeri** Hansf., sp. n.

Plagulae amphigenae, tenues, usque ad 2 mm. diam. vel confluentes. Hyphae subrectae vel flexuosae, opposite lateque ramosae, laxae reticulatae, cellulis plerumque $20-30 \Rightarrow 4.5-6 \mu$. Hyphopodia capitata opposita vel alternata, plerumque curvata, antrorsa vel patentia, $10-13 \mu$ longa; cellula basali cylindracea, $2-4 \mu$ longa; cellula apicali ovata, oblonga vel subconoidea, apice attenuato-rotundata, integra, $7-10 \Rightarrow 4.5-6 \mu$. Hyphopodia mucronata illis capitatis commixta, opposite vel alternata, ampullacea, $15-19 \Rightarrow 5-6 \mu$. Setae myceliales paucae, tenuiter dispersae, etiam juxta perithecia aggregatae, simplices, rectae, acutae, usque ad $330 \Rightarrow 5-6 \mu$. Perithecia laxae dispersa, atra, globosa, leniter verrucosa, usque ad 150μ diam. Sporae atrobrunneae, oblongae vel ellipsoideae, obtusae, 4-septatae, constrictae, $26-32 \Rightarrow 13-14 \mu$.

Hab. in foliis *Psychotriae* spec., Samoa, 1905, leg. Rechinger (Herb. von Hoehnel in Farlow Herb., socio *Meliola longiseta* Hoehn.).

(707) **Meliola semecarpicola** Hansf., sp. n.

Plagulae epiphyllae, tenues, subvelutinae, usque ad 8 mm. diam. Hyphae brunneae, rectae, opposite acuteque ramosae, laxae radiantoreticulatae, cellulis plerumque $20-25 \Rightarrow 6-7 \mu$. Hyphopodia capitata alternata, subantrorsa, recta vel curvula, $22-35 \mu$ longa; cellula basali cuneata, $4-12 \mu$ longa; cellula apicali ovata, integra, $16-23 \Rightarrow 10-14 \mu$. Hyphopodia mucronata plerumque in hyphis distinctis evo-

luta, opposita vel alternata, ampullacea, 18—25 $\Rightarrow$ 7—10 μ . Setae myceliales dispersae etiam juxta perithecia aggregatae, rectae, simplices, acutae, usque ad 750 $\Rightarrow$ 8—9 μ . Perithecia dispersa, nigra, globosa, verrucosa, usque ad 120 μ diam. (immatura). Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, 40—48 $\Rightarrow$ 16—18 μ .

Hab. in foliis *Semecarp*i sp., Mt. Maquiling, Luzon, Philippine Is., Stevens 1921 (typus in Herb. Univ. Illinois 6523).

(708) ***Meliola strychni-multiflorae*** Hansf., sp. n.

Plagulae hypophyllae, tenues, usque ad 10 mm. diam. Hyphae brunneae, subrectae vel tortuosae, oppositae vel irregulariter acuteque ramosae, laxae intertexto-reticulatae, cellulis plerumque 25—35 $\Rightarrow$ 5—7 μ . Hyphopodia capitata alternata, antrorsa vel patentia, saepe irregulariter curvata, 18—28 μ longa; cellula basali cuneata vel cylindracea, 5—10 μ longa; cellula apicali ovata vel cylindracea, subinde angulosa, saepe curvata, 14—21 $\Rightarrow$ 8—12 μ . Hyphopodia mucronata illis capitatis commixta, plerumque alternata, ampullacea, 18—24 $\Rightarrow$ 6—8 μ . Setae myceliales tenuiter dispersae, etiam juxta perithecia aggregatae, rectae, simplices, obtusae, usque ad 600 $\Rightarrow$ 7—8 μ . Perithecia dispersa, atra, globosa, verrucosa, usque ad 130 μ diam. Sporae oblongae, obtusae, 4-septatae, constrictae, atrobrunneae, 30—34 $\Rightarrow$ 13—14 μ .

Hab. in foliis *Strychni multiflorae*, San Jose, Nueva Ecija, Luzon, Philippine Is., Stevens 1806 (typus in Herb. Univ. Illinois 6300).

(709) ***Meliola tabernaemonticola*** Hansf. & Thirum., var. ***luzonensis*** Hansf., var. n.

Plagulae epiphyllae, usque ad 1 mm. diam., rarius vel subdensae. Hyphae brunneae, subrectae vel leniter undulatae, oppositae ramosae, radiato-reticulatae, cellulis plerumque 20—25 $\Rightarrow$ 6—7 μ . Hyphopodia capitata alternata, antrorsa, recta vel curvula, 20—25 μ longa; cellula basali cuneata, 4—8 μ longa; cellula apicali ovata, sursum rotundata vel subacuta, integra, 13—18 $\Rightarrow$ 8—10 μ . Hyphopodia mucronata in hyphis distinctis evoluta, alternata, ampullacea, 13—18 $\Rightarrow$ 6—8 μ . Setae myceliales plerumque juxta perithecia aggregatae, rectae, simplices, abrupte acutae, usque ad 350 $\Rightarrow$ 8—9 μ . Perithecia dispersa, atra, globosa, verrucosa, usque ad 140 μ diam. Sporae oblongae, obtusae, 4-septatae, constrictae, atrobrunneae, 32—37 $\Rightarrow$ 15—17 μ .

Hab. in foliis *Tabernaemontanae* sp., Nueva Ecija, Luzon, Philippine Is., Stevens 788, type; l. c., Stevens 1689.

(710) ***Meliola thomandersiae*** Hansf., sp. n.

Plagulae epiphyllae, usque ad 2 mm. diam., densae. Hyphae brunneae, subrectae, oppositae acuteque ramosae, dense reticulatae, cellulis plerumque 15—28 $\Rightarrow$ 7—10 μ . Hyphopodia capitata alternata, antrorsa, subrecta, 17—24 μ longa; cellula basali cuneata, 4—8 μ long.;

cellula apicali subglobosa vel piriformi, apice late rotundata, integra, 11—17 $\Rightarrow$ 10—13 μ . Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, 18—22 $\Rightarrow$ 7—9 μ . Setae myceliales juxta perithecia aggregatae, paucae, subrectae, simplices, obtusae, usque ad 170 $\Rightarrow$ 7—9 μ . Perithecia in centro plagularum aggregata, nigra, globosa, leniter verrucosa, usque ad 160 μ diam. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, leniter constrictae, 30—37 $\Rightarrow$ 13—15 $\Rightarrow$ 11—13 μ .

Hab. in foliis *Thomandersiae laurifoliae*, Congo Belge, Steyaert 44102, typus; l. c., Meyer 232 (IMI 62447).

(711) *Meliola trifurcata* Cif. var. **philippinensis** Hansf., var. n.

Plagulae amphigenae, plerumque hypophyllae, tenues, subvelutinae, usque ad 10 mm. diam. vel confluentes. Hyphae brunneae, undulatae vel tortuosae, opposite vel irregulariter acuteque ramosae, laxe reticulato-intertextae, cellulis plerumque 20—30 $\Rightarrow$ 5—6 μ . Hyphopodia capitata opposita vel alternata, patentia, saepe curvata, 13—20 μ longa; cellula basali cylindracea vel cuneata, 2—5 μ longa; cellula apicali cylindracea vel obtuse conoidea, integra, 10—14 $\Rightarrow$ 6—7 μ . Hyphopodia mucronata illis capitatis commixta, numerosa, opposita vel alternata, ampullacea, 16—20 $\Rightarrow$ 6—8 μ . Setae myceliales biformes: (a) in mycelio dispersae, rectae, simplices, acutae, usque ad 900 $\Rightarrow$ 9—11 μ , (b) juxta perithecia aggregatae, rectae, usque ad 200 $\Rightarrow$ 9 μ , apice irregulariter 2—4-dentatae vel breviter furcatae et dentatae (—15 μ). Perithecia dispersa, globosa, nigra, verrucosa, usque ad 150 μ diam. Sporae atrobrunneae, ellipsoideae vel oblongae, obtusae, 4-septatae, constrictae, 32—38 $\Rightarrow$ 16—19 μ .

Hab. in foliis *Dysoxylum* sp., Nueva Ecija, Luzon, Philippine Is., Stevens 1771 p. p. (typus in Herb. Univ. Illinois).

(712) **Meliola voacangicola** Hansf., sp. n.

Plagulae epiphyllae, densae, usque ad 3 mm. diam. vel confluentes. Hyphae brunneae, subrectae vel leniter undulatae, opposite acuteque ramosae, dense reticulatae, cellulis plerumque 20—25 $\Rightarrow$ 6—7 μ . Hyphopodia capitata alternata, antrorsa, recta vel curvula, 18—25 μ longa; cellula basali cuneata vel cylindracea, 4—10 μ longa; cellula apicali ovata vel piriformi, integra, apice late rotundata, 12—16 $\Rightarrow$ 8—11 μ . Hyphopodia mucronata in hyphis distinctis evoluta, opposita vel alternata, ampullacea, 15—18 $\Rightarrow$ 6—7 μ . Setae myceliales tenuiter dispersae, etiam juxta perithecia aggregatae, rectae vel leniter flexuosae, simplices, obtusae, usque ad 280 $\Rightarrow$ 8—10 μ . Perithecia subaggregata, atra, globosa, verrucosa, usque ad 140 μ diam. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, 34—39 $\Rightarrow$ 14—16 μ .

Hab. in foliis *Voacangae africanae*, Mano, Sierra Leone, Deighton 1335 (IMI 23412, typus).

(713) *Meliola walsurae* Stev. ex Hansf., sp. n.

Plagulae hypophyllae, usque ad 15 mm. diam. vel late confluentes, tenues, velutinae. Hyphae brunneae, subrectae vel tortuosae, oppositae vel irregulariter lateque ramosae, laxae reticulato-intertextae, cellulis plerumque $20-30 \approx 5 \mu$. Hyphopodia capitata alternata vel opposita, patentia, subrecta vel curvata, $20-35 \mu$ longa; cellula basali cylindracea, $6-15 \mu$ longa; cellula apicali cylindracea vel irregulari, integra vel sublobata, versiformi, $12-20 \approx 6-12 \mu$. Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, $23-37 \approx 7-8 \mu$, collo elongato. Setae myceliales numerosae, dispersae, rectae, simplices, acutae, usque ad $330 \approx 7-8 \mu$. Perithecia dispersa, atra, globosa, verrucosa, usque ad 165μ diam. Sporae oblongae vel subellipsoideae, obtusae, atrobrunneae, 4-septatae, constrictae, $44-54 \approx 16-21 \mu$.

Hab. in foliis *Walsurae* sp., Malangas, Mindanao, Philippine Is., Ramos & Edano in PBS 36500 (typus in Herb. Univ. Illinois 6430).

(714) *Meliola wardii* Stev. var. **minor** Hansf., var. n.

Plagulae amphigenae, densae, velutinae, usque ad 2 mm. diam. Hyphae brunneae, subrectae, oppositae lateque ramosae, dense reticulatae, cellulis plerumque $10-15 \approx 6-7 \mu$. Hyphopodia capitata alternata, dense stipata, antrorsa, recta vel curvula, $14-18 \mu$ longa; cellula basali cuneata, $3-6 \mu$ longa; cellula apicali ovata vel oblonga, integra, $10-14 \approx 7-9 \mu$. Hyphopodia mucronata in hyphis distinctis evolute, opposita vel alternata, ampullacea vel conoidea, $15-20 \approx 6-8 \mu$. Setae myceliales paucae vel numerosae, dispersae, uncinatae, obtusae, usque ad $230 \approx 8-9.5 \mu$. Perithecia dispersa, atra, globosa, verrucosa, usque ad 140μ diam. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, $29-36 \approx 13-15 \mu$.

Hab. in foliis *Malouetiae panamensis*, Panama, Stevens 1287 p. p. (typus in Herb. Univ. Illinois 6434).

In this collection the variety is mixed with other colonies of the type.

(715) *Meliola wardii* Stev. var. **tabernaemontanae** Hansf., var. n.

Plagulae amphigenae, densae, velutinae, usque ad 3 mm. diam. Hyphae brunneae, subrectae vel undulatae, oppositae lateque ramosae, dense reticulatae, cellulis plerumque $20-25 \approx 6-7 \mu$. Hyphopodia capitata vel rarissime opposita, subantrorsa, recta vel curvula, $13-18 \mu$ longa; cellula basali cuneata vel cylindracea, $3-7 \mu$ longa; cellula

apicali subglobosa, integra, $9-13 \Rightarrow 8-12 \mu$. Hyphopodia mucronata illis capitatis commixta, opposite vel alternata, ampullacea, $14-19 \Rightarrow 7-8 \mu$. Setae myceliales numerosae, dispersae, usque ad $250 \Rightarrow 9-10 \mu$, sursum late arcuatae vel uncinatae, simplices, obtusae. Perithecia dispersa, atra, globosa, verrucosa, usque ad 165μ diam. Sporae atrobrunneae, oblongae, obtusae, 4-septatae, constrictae, $35-40 \Rightarrow 13-15 \Rightarrow 11 \mu$.

Hab. in foliis *Tabernaemontanae* sp., British Guiana, Stevens 503 typus, 474, 452, in Herb. Univ. Illinois.

(716) *Meliola wikstroemiicola* Hansf., sp. n.

Plagulae amphigenae, tenues, usque ad 2 mm. diam. vel confluentes. Hyphae brunneae, subrectae vel undulatae, opposite vel irregulariter acuteque ramosae, laxe reticulatae, cellulis plerumque $25-35 \Rightarrow 6 \mu$. Hyphopodia capitata alternata, subantrorsa, recta vel curvula, $14-22 \mu$ longa; cellula basali cuneata, $3-5 \mu$ longa; cellula apicali globosa vel ovata, integra, $9-15 \Rightarrow 8-11 \mu$. Hyphopodia mucronata illis capitatis commixta, opposita vel alternata, ampullacea, $18-22 \Rightarrow 7 \mu$. Setae myceliales tenuiter dispersae, etiam juxta perithecia aggregatae, rectae, simplices, acutae vel subacutae, usque ad $530 \Rightarrow 7-8 \mu$. Perithecia dispersa, atra, globosa, verrucosa, -150μ diam. Sporae atrobrunneae, oblongae vel subellipsoideae, obtusae, 4-septatae, constrictae, $33-37 \Rightarrow 12-14 \mu$.

Hab. in foliis *Wikstroemiae* sp., Paete, Laguna, Luzon, Philippine Is., Stevens 987 (typus in Herb. Univ. Illinois 6520); Phil. Bur. Sci. 29517.

(717) *Meliola wismarensis* Stev. var. *besleriae* Hansf., var. n.

Plagulae amphigenae, atrae, velutinae, densae, usque ad 5 mm. diam. vel confluentes. Hyphae brunneae, subrectae vel undulatae, opposite lateque ramosae, laxe vel dense reticulatae, cellulis $15-30 \Rightarrow 5-7 \mu$. Hyphopodia capitata alternata vel opposita, antrorsa vel patentia, $11-16 \mu$ longa; cellula basali cylindracea, $2-5 \mu$ longa; cellula apicali ovata vel oblonga, integra, $8-12 \Rightarrow 6-9 \mu$. Hyphopodia mucronata illis capitatis commixta, ampullacea, opposita vel alternata, $15-20 \Rightarrow 6-9 \mu$. Setae myceliales numerosae, dispersae, rectae vel flexuosae, usque ad $310 \Rightarrow 9-11 \mu$, apice simplices, acutae, vel plerumque 2-3-dentatae (-12μ), raro 2-furcatae (-25μ), ramis dentatis. Perithecia dispersa, nigra, globosa, verrucosa, usque ad 180μ diam. Sporae atrobrunneae, cylindraceae vel ellipsoideae, obtusae, 4-septatae, constrictae, $36-42 \Rightarrow 15-17 \Rightarrow 13-14 \mu$.

Hab. in foliis *Besleriae unbrosae*, Tijuca, Brazil, Ule 2408.

(718) *Meliola xylopiiae* Stev. var. *leonensis* Hansf., var. n.

Plagulae amphigenae, plerumque hypophyllae, tenues, usque ad 15 mm. diam. Hyphae undulatae vel sinuosae, brunneae, opposite vel

irregulariter ramosae, laxe reticulatae, cellulis plerumque $20-30 \Rightarrow 6-7 \mu$. Hyphopodia capitata alternata, patentia, recta vel curvata, $16-22 \mu$ longa; cellula basali cylindracea, $4-9 \mu$ longa; cellula apicali subglobosa vel ovata, integra, $11-16 \Rightarrow 10-14 \mu$. Hyphopodia mucronata illis capitatis commixta, alternata vel opposita, ampullacea, $21-27 \Rightarrow 7-10 \mu$, collo elongato. Setae myceliales dispersae, etiam juxta perithecia aggregatae, subrectae vel late hamato-reflexae, simplices, obtusae vel subacutae, $200-300 \Rightarrow 8-10 \mu$. Perithecia laxe dispersa, nigra, globosa, verrucosa, usque ad 210μ diam. Sporae atrobrunneae, cylindraceae vel subellipsoideae, obtusae, 4-septatae, constrictae, $42-53 \Rightarrow 15-19 \mu$.

Hab. in foliis *Xylopiæ aethiopicae*, Sierra Leone, Deighton 1539, 2201, 2254.

(719) **Asterolibertia thaxteri** Hansf., sp. n.

Plagulae hypophyllae, tenues, leves, usque ad 20 mm. diam., in tomento folii abditae. Hyphae brunneae, tortuosae, laxe reticulatae, irregulariter ramosae, $3-5 \mu$ cr. Hyphopodia intercalata, irregulariter dispersa, $6-7 \Rightarrow 4-7 \mu$. Thyriothechia laxe dispersa, rotundata, primo applanato-radiata, demum subglobosa et late aperta, usque ad 250μ diam. Asci non visa. Sporae opace atrobrunneae, clavulatae utrinque late rotundatae, 1-septatae, leniter constrictae, $50-55 \Rightarrow 21-24 \mu$, cellula superiore globosa, inferiore elongata.

Hab. in foliis plantae ignotae, Grand Etang, Grenada, Thaxter 7399, in Herb. Farlow.

The colonies are always hypophyllous, the mycelium hidden beneath the tomentum of the leaf, and there forming a network of rounded meshes $25-30 \mu$ diam. The hyphopodia are scattered along the hyphae, and are little different from other cells, save for the large pore in the lower surface. The thyriothechia commence as rounded, radiate plates, but become elevated through the leaf tomentum and are then widely open to the margin, containing a subglobose mass of spores.

(720) **Trichasterina calophylli** Hansf., sp. n.

Plagulae epiphyllae, tenues vel subdensae, atrae, usque ad 4 mm. diam. vel confluentes. Hyphae brunneae, subrectae, irregulariter acutaeque ramosae, laxe vel dense radianto-reticulatae, cellulis plerumque $20-30 \Rightarrow 4 \mu$. Hyphopodia alternata vel unilateralia, continua, concolorata, subglobosa vel ovata, subantrorsa, $7-10 \Rightarrow 5-6 \mu$, integra. Setae myceliales dispersae, erectae, 2-3-septatae, brunneae, basi truncata, apice plus minusve uncinata et saepe incrassata, ad septa haud constricta, levia, $39-47 \Rightarrow 7-8 \mu$, decidua. Thyriothechia in centro plagularum dense stipata, rotundata, nigra, convexa vel hemisphaerica, $70-90 \mu$ diam.; paries superior atrubrunneus, radiatus, non vel

leniter fimbriatus, mox stellatim dehiscens. Asci 4—8. aparaphysati, globosi vel ovati, sessili, 8-spori, usque ad $35 \approx 24 \mu$. Sporae conglobatae, oblongae utrinque rotundatae, 1-septatae, constrictae, leves, $18-20 \approx 8-10 \mu$, brunnescentes, cellulis aequalibus.

Hab. in foliis *Calophylli calabae*, Mayaguez, Porto Rico, Stevens 7489 p. p. (typus in Herb. Univ. Illinois 6591).

The choice of a genus to contain this is a matter of some difficulty; the „conidia“ or „mycelial setae“ are of very peculiar shape, and are usually very numerous, being formed singly and erect on swellings of the mycelial hyphae, quite distinct from the hyphopodia. Each „seta“ consists of two or three basal cells forming a straight cylindrical, dark brown axis with truncate base, and a terminal apical cell which is bent to uncinat, usually somewhat paler than the other cells and often swollen to almost globose. After detachment from the mycelium, fallen „setae“ or „conidia“ on the leaf surface germinate by means of a tube from the apex alone. The thyriothecia are of normal pattern, with an indistinct, hyaline lower wall, and a radiate, dark brown upper wall, which is stellate-dehiscent at an early stage, the triangular segments remaining almost erect and surrounding the central mass of brownish, structureless mucus in which the asci are embedded.

(721) **Acanthostigma floridensis** Hansf., sp. n.

Mycelium hypophyllum, ex hyphis tortuosis, exhyphopodiatis, brunneis, septatis, 3μ cr. compositum. Perithecia superficialia, atrobrunnea, globosa vel ovoidea, usque ad 170μ diam. et alt., poro apicali indistincto; paries tenuiter membranaceus, atrobrunneus, parenchymaticus, cellulis angulosis, $5-8 \mu$ diam., sursum setosus; setae circa 20, erecto-patentes, simplices, obtusae, bruneae, septatae, leniter flexuosae, usque ad $140 \approx 5-6 \mu$. Asci numerosi, basali, cylindricei, subsessili, apice rotundati, bitunicati, 8-spori, usque ad $80 \approx 15 \mu$. Sporae 1—2-seriales, clavulato-fusoideae utrinque rotundatae, apice obtusae, deorsum attenuatae, transverse 3-septatae, leniter constrictae, leves, $19-22 \approx 8-9 \mu$, episporio tenui, ex hyalino lenissime brunnescentes.

Hab. in foliis *Lantanae* spec., Coconut Grove, Florida, Thaxter 7525 (typus in Herb. Farlow).

There are no visible colonies, and the perithecia are loosely and irregularly scattered over the lower surface of the leaf, usually single. The interior of the young perithecium is at first filled with a tissue of erect, septate, hyaline, very thin-walled hyphae; the asci grow up between these from the base, and eventually almost completely replace this tissue. No true paraphyses are present.

(722) *Acanthostigma lantanae* Theiss., Beih. Bot. Centralbl.,
Abt. II, **27**: 397. 1910.

= *Perisporium lantanae* P. Henn., Hedwigia **48**: 6. 1908.

= *Perisporina lantanae* Stev., Trans. Illin. Acad. Sci., **10**: 170.
1917.

Colonies covering the whole lower surface of the host leaf, pale brownish, smooth save for the scattered perithecia. Mycelium of crooked, irregularly branched, septate, pale brown to subhyaline hyphae, 3—4 μ thick, not constricted at the septa, thin-walled, loosely reticulate, without hyphopodia or stomopodia and without any red dye; not apparently associated with the host stomata. Perithecia irregularly scattered, globose, to 240 μ diam., clothed around the sides and base with radiating, flexuous, pale brown, septate, simple „setae“, which are usually reflexed to the leaf surface, over which they may grow out as mycelial hyphae of indefinite length. From the setose sides of the perithecial wall the apical, truncate conoid, ostiole projects, glabrous and with a central round pore to 30 μ diam. Perithecial wall parenchymatous, thinly membranous, of polygonal dark brown cells in 1—2 layers, smooth on the exterior save for the „setae“. Asci numerous, basal, cylindric to ellipsoid, rounded and slightly thickened at the apex to 3 μ , subsessile, 8-spored, aparaphysate, 90—110 μ $\Rightarrow$ 18—24 μ , separated by the remains of the original hyaline ground tissue as thin layers, simulating septate paraphyses. Spores 2—3-seriate and overlapping, fusoid, straight or slightly bent, pale olivaceous when mature, smooth, the ends obtuse-attenuate, 3-septate, slightly constricted at one or more septa, 38—46 μ $\Rightarrow$ 9—11 μ , the end cells often slightly paler.

On *Lantana camara*, Leares, Porto Rico, Stevens 4924, type of *P. lantanae* Stev.

I have not had an opportunity of direct comparison of this specimen with authentic material of Theissen's and Henning's species, but it satisfies both their descriptions, and there is little doubt that all three represent the same fungus. The internal development is typical of the *Pseudosphaeriaceae* and there are no true paraphyses.

(723) *Aphanostigma vandersytii* Hansf., sp. n.

Plagulae hypophyllae, tenues, effusae. Hyphae mycelii dilute brunneae, 2—3 μ cr., septatae, exhyphopodiatæ, irregulariter ramosae, laxe reticulatae. Setae myceliales nullae. Perithecia dispersa, subglobosa, atrobrunnea, 60—80 μ diam.; paries unistratosus, parenchymaticus, cellulis 6—8 μ diam., apice poro rotundato perforatus; setae peritheciales numerosae, subrectae, atrobrunneae, rectae vel curvatae, 0—1-septatae, —50 μ $\Rightarrow$ 3—4 μ , apice irregulariter noduloso-furcatae,

obtusae. Asci numerosi, basales, aparaphysati, clavulato-ellipsoidei, apice rotundati, sessiles, tenuiter tunicati, 8-spori, $40-45 \approx 12-18 \mu$. Sporae multiseriatae, hyalinae, ellipsoideae, obtusae, rectae, leves, transverse 7-9-septatae, haud constrictae, $13-15 \approx 4-5.5 \mu$.

Hab. in foliis plantae ignotae Kisanu, Congo Belge, V a n d e r s t 37879, typus in Herb. Jard. Bot. Bruxelles.

(724) **Hyalomeliolina linderi Hansf., sp. n.**

Plagulae caulicolae, atrae, densae, velutinae, late confluentes. Hyphae brunneae, tortuosae, irregulariter ramosae, laxae vel dense reticulatae, exhyphopodiatæ, septatae, $4-8 \mu$ cr. Conidiophora numerosa, erecta, laxae fasciculata, rectiuscula, simplicia, septata, atrobrunnea, sursum pallidiora, usque ad $200 \approx 6-7 \mu$. Conidia singula, terminalia, fusoidea utrinque rotundata, brunnea utrinque pallidiora, 4-5-septata, haud constricta, levia, $30-40 \approx 7-9 \mu$.

Perithecia inter conidiophora dispersa, superficialia, globosa, nigra, levia, usque ad 190μ diam. et alt.; poro apicali indistincto; paries ex stratis 1-2 cellularum angulosarum $5-7 \mu$ diam. compositus, atrobrunneus, subopacus. Asci numerosi, basali, cylindracei vel tenuiter ellipsoidei, apice rotundati, haud incrassati, sessiles, 8-spori, aparaphysati, usque ad $105 \approx 19 \mu$, unitunicati. Sporae oblique 2-seriatae, clavulatae, apice late rotundatae, deorsum ad basim attenuatae, transverse 3-septatae, leniter constrictae, leves, brunnescentes, cellula basali subhyalina vel dilutissime olivacea, cellula secunda saepius maxima, $22-28 \approx 7-9 \mu$.

Hab. in caulibus ? *Vismiae* sp., British Guiana, L i n d e r 719 (typus in Herb. Farlow).

The hyphae penetrate the outer bark layers and emerge through minute cracks to extend over the surface, there forming the perithecia and conidiophores. The conidia represent each the blown-out end of the conidiophore, which grows through the terminal scar to form others in succession; each scar remains on the main axis as a slightly inflated area.

(725) ***Mycophaga guianensis* Stev., Illin. Biol. Monogr. 8: 197. 1923.**

The type of this in Herb. Univ. Illinois (Stevens 253) has been re-examined; the leaves bear epiphyllous colonies of what is probably *Schiffnerula* sp., but they are all parasitised and show no conidia or perithecia of the host fungus, though a few bear the perithecia of the *Mycophaga* parasite, on a closely reticulate, subhyaline mycelium forming a thin pellicle, without conidia. The perithecia are loosely scattered, pale brown, to 140μ diam., globose with a flat conoid ostiole pierced by a round pore about 20μ diam.; wall of

several layers of pale brown parenchyma, soft in texture and almost subhyaline on the exterior, with many loose cells or short hyphae on the surface; the next layers are darker brown, and these are lined with a hyaline layer of compressed cells; the whole wall 15–20 μ thick. Asci basal, apophysate, clavate-saccate, rounded at the apex, attenuate below into a short stipe, 8-spored, 50–65 $\Rightarrow$ 18–23 μ when mature, thin-walled. Spores parallel, clavulate, rounded at the apex, attenuate downwards, 3-septate, not constricted, hyaline, 33–38 $\Rightarrow$ 4.5–5 μ , smooth, thin-walled (possibly immature, as Stevens described 5-septate spores).

The fungus is clearly allied to *Phaeophragmeriella clavispora* (Syd.) Hansf., found on *Schiffnerula* spp. in Uganda, differing in the absence of colour from the host colony, and also from the spores, though the latter may be due to immaturity. As the original description of Stevens is accurate in most particulars, his genus and species stand for the present, until further collections in more mature state indicate whether it should be merged with *Phaeophragmeriella* (which it antedates) and whether the species is identical with *P. clavispora*.

Specimen: On ? *Schiffnerula* sp. on *Anacardium occidentale*, Rockstone, British Guiana, Stevens 253 (type).

Stevens 65, on same host, also from British Guiana, shows the same host colonies, but these are now parasitised by only *Dimerium* sp. Both specimens also contain *Meliola anacardii* Zimm., parasitised by several different fungi, but none in sufficient quantity to determine with certainty. A number of other fungi are present on and in the leaves (cf. Petrak, Sydowia: 5: 188. 1951).

(726) **Phyllachora cinnamomi** Hansf., sp. n.

Stromata dispersa, amphigena, nigra, nitentia, usque ad 1 mm. diam. Perithecia immersa, in tuberculis folii 1–4-aggregata, subglobosa, usque ad 550 μ diam. et alt.; paries circa 10 μ cr., concentric fibrosus, hyalinus, ex cullulis fortiter compressibus compositus, extus strato stromatico brunneo, circa 20 μ cr. transeuns, sursum ad apicem clypeo atrobrunneo adnatus. Asci numerosi, cylindracei, apice rotundati, haud incrassati, deorsum in stipite attenuati, 8-sporei, usque ad 200 μ longi, p. sp. circa 80 $\Rightarrow$ 10 μ . Paraphyses numerosae, filiformes, simplices, hyalinae, 1.5 μ cr., dubiter septatae. Sporae oblique 1-seriatae, ellipsoideae, hyalinae, continuae, leves, 15–19 $\Rightarrow$ 6–8 μ .

Hab. in foliis *Cinnamomi* sp., Pangalengan, Java, BO. 4484.

The perithecia occur in groups of 1–4 in swollen tubercles of the leaf, which are convex and slightly rugulose on the upper surface over the perithecia, marked by a black, epidermal clypeus around each ostiole and sometimes confluent over the whole group of peri-

thecia; on the lower surface the leaf is invaginated, with tubercular swellings beneath the perithecia, most of which open on the upper surface. Perithecia wholly immersed, more or less globose, with the loculus up to $550\ \mu$ diam., each surrounded by a brown stromatic layer $10\text{--}20\ \mu$ thick, thickened around the apex up to $80\ \mu$ and confluent with the epidermal clypeus; away from the perithecia this stromatic layer passes into loose intercellular, hyaline, septate hyphae in the mesophyll. The true perithecial wall is composed of several layers of strongly compressed, hyaline, parenchyma, appearing concentrically fibrous in section, about $10\ \mu$ thick. Asci numerous, formed over the lower two-thirds of the internal surface, cylindric above, rounded at apex, not thickened, contracted below into a long, narrow stipe, the whole up to $200\ \mu$ long, p. sp. $80\text{--}100 \Rightarrow 10\ \mu$. Paraphyses numerous, hyaline, filiform, simple, $1.5\ \mu$ thick, doubtfully septate. Spores 8, obliquely 1-seriate, ellipsoid, hyaline, continuous, smooth, $15\text{--}19 \Rightarrow 6\text{--}8\ \mu$.

(727) **Stomatogene yuccae** Hansf., sp. n.

Maculae amphigenae, acute delimitatae, brunneolae, rotundatae vel ellipticae, usque ad $15 \Rightarrow 10\ \text{mm.}$, saepe plus minusve confluentes, nigrescentes, elevatae. Hyphae externae flexuosae, atrobrunneae, irregulariter ramosae, reticulatae, septatae, $3\text{--}4\ \mu$ cr. Ascstromata dispersa, singula vel 2—4-aggregata, nigra, rugosa, usque ad $160\ \mu$ diam. et ad $130\ \mu$ alt., apice irregulariter disrupta. Asci aparaphysati, basali, ellipsoidei vel saccati, apice rotundati et incrassati ($\text{--}5\ \mu$), subsessili, 8-spori, usque ad $60 \Rightarrow 30\ \mu$. Sporae parallelae, cylindraceae utrinque rotundatae, hyalinae, demum brunneolae, 1-septatae, constrictae, $30\text{--}35 \Rightarrow 8\text{--}10\ \mu$, cellulis aequalibus vel superiore leniter brevior, exosporio lenissime granuloso.

Hab. in foliis *Yuccae mohavensis*, California, Parks 3379 (Calif. Fungi no 576), (typus in Herb. Univ. Illinois 6617); in foliis *Y. whipplei*, California, Parks 3400-b.

Leafspots amphigenous, definite, elevated, brownish, becoming black from the development of the external mycelium, circular to elliptic, to $15 \Rightarrow 10\ \text{mm.}$, or numerous and smaller, often more or less confluent. The external mycelium develops from small stromata formed in the outer cavities of the stomata of the leafspots, radiating outwards to cover the whole spot with reticulate, dark brown, exhyphopodiate hyphae. The stromata fill the outer stomatal cavities, and enlarge outside these, eventually bearing one to four subglobose ascstromata, each up to $160\ \mu$ diam. by $130\ \mu$ high, black, rugose. Each ascstroma consists of an outer wall of dark parenchyma in several layers, enclosing an inner tissue of hyaline, smaller, thin-walled cells; most of this inner tissue disappears as the asci are

formed and enlarge, but a thin layer may remain as an lining to the dark wall cells; finally the outer wall ruptures irregularly at the thinner apex. Asci basal, paraphysate, ellipsoid to saccate, rounded and thickened to $5\ \mu$ at the apex, sessile, 8-spored, to $60 \pm 30\ \mu$, separated at first by the remains of the hyaline ground tissue, simulating septate paraphyses. Spores parallel, cylindric with rounded ends, hyaline, finally becoming pale brown and slightly granulose, 1-septate, constricted, the cells equal or the upper very slightly shorter and wider, $30-35 \pm 8-10\ \mu$.

The species is very similar in structure to *S. agaves* (E. & Ev.) Theiss, but differs in larger spores and less distinction of their cells, also in the causation of definite leafspots.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sydowia](#)

Jahr/Year: 1957/1958

Band/Volume: [11](#)

Autor(en)/Author(s): Hansford C. G.

Artikel/Article: [Tropical Fungi. VIII. 44-69](#)