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FUNGUS FLORA OF THE DOMINICAN REPUBLIC. VIII.
SOME UNRECORDED POLYPOROID, CORTICIOID, STEREOID AND CLAVARIOID FUNGI

Abstract

Four polyporoid (*Fuscopostia leucomallella*, *Inonotus rickii*, *Cubamyces menziesii*, *Loweomyces fractipes*), four corticioid (*Auricularia brasiliana*, *Gyrodontium sacchari*, *Asterostroma cervicolor*, *Steccherinum ochraceum*) and six clavarioid (*Clavulinopsis laeticolor*, *Clavulina connata*, *C. fuscolilacina*, *Lachnocladium schweinfurthianum*, *L. tubulosum*, *Pterula multifida*) neotropical fungi all collected in the Dominican Republic are here represented and annotated.

Riassunto

Vengono qui rappresentate con brevi note a commento quattro specie poliporoidi (*Fuscopostia leucomallella*, *Inonotus rickii*, *Cubamyces menziesii*, *Loweomyces fractipes*), quattro specie corticioidi (*Auricularia brasiliana*, *Gyrodontium sacchari*, *Asterostroma cervicolor*, *Steccherinum ochraceum*), sei specie clavarioidi (*Clavulinopsis laeticolor*, *Clavulina connata*, *C. fuscolilacina*, *Lachnocladium schweinfurthianum*, *L. tubulosum*, *Pterula multifida*) di funghi neotropicali raccolti in Repubblica Dominicana.

Key words Basidiomycota, Aphyllophorales, sub-tropical zone, Caribbean.

Introduction

Following our previous contributions to the knowledge of fungi of Dominican Republic (ANGELINI & LOSI 2013a, 2013b, 2014, 2015, 2016, 2018 and 2021), here are represented other fourteen records not previously annotated. The collecting and research areas in the Dominican Republic have been described in detail in our previous works (ANGELINI & LOSI 2013a, 2013b, 2014) and on the website "Neotropical fungi - Hongos de la República Dominicana" (www.neotropicalfungi.com).

Legend ANGE: Angelini C., personal herbarium, JBSD: Jardín Botánico Santo Domingo (National Garden of Santo Domingo, Dominican Republic) herbarium.

TAXONOMY

POLYPOROID FUNGI

Family Fomitopsidaceae Jülich (as defined in Angelini & Losi 2015)

Genus *Fuscopostia* B.K. Cui, L.L. Shen & Y.C. Dai 2019

Basidiomata soft and white when fresh, fragile and brownish when bruised or dried. **Context** white. **Hyphal system** monomitic, hyphae with clamp connections. **Basidiospores** cylindrical to allantoid, hyaline, thin-walled, smooth, IKI-, CB- (CUI *et al.* 2019).

Fuscopostia leucomallella (Murrill) B.K. Cui, L.L. Shen & Y.C. Dai

Basidioma effused-reflexed to resupinate, soft, throughout white when fresh, fragile and brownish when dried. Upper **surface** smooth to tuberculate, radially fibrillose, azonate,



Fig. 1. *Fuscopostia leucomallella*

Foto di Claudio Angelini

margin thin, undulate; margin of resupinate parts cottonose-fibrillose or even rhizomorphic. **Pore surface** with circular to angular pores, 3-5 (6) per mm, at first cupulate, with thin dissepiments; **tubes** layer up to 3 mm thick; **context** 1 mm thick. **Hyphal system** monomitic; hyphae hyaline, thin- to thick-walled, 2-4 μm wide, with clamps. **Gloeocystidia** frequent, mostly enclosed, rarely projecting, pedunculate, cylindrical to clavate, sometimes slightly constricted, subhyaline, thin-walled or somewhat thick-walled towards the base, 18-32 $\times$ 4-6,4 μm . **Basidia** narrowly clavate, 4-sterigmate, 10-16 $\times$ 4-5,2 μm . **Basidiospores** suballantoid, hyaline, guttulate, thin-walled, 3,6-5,4 $\times$ 1-1,6 μm . **Distribution** in the Neotropics reported from Mexico, Costa Rica, Dominican Republic, Portorico (The Global Biodiversity Information Facility). **Material studied** on fallen branches, in a mountain forest with pine trees (*Pinus occidentalis* Sw.), 13 Dec. 2021 - Jarabacoa (La Vega) DR. *Exiccatum*: ANGE1718 (Fig. 1).

Family Hymenochaetaceae Imazeki & Toki (as defined in ANGELINI & LOSI 2013a)

Genus *Inonotus* s.s.

Hyphal system monomitic in booth context/subiculum and trama; **setal hyphae** present, **hymenial setae** present or absent; **basidiospores** yellow to brown, thick-walled (DRECHSLER-SANTOS *et al.* 2016).

Inonotus rickii (Pat.) D.A. Reid

Basidioma pileate, appanate, ungulate or nodulose, imbricate, firm to crumbly and dusty as chlamydospore formation progresses. Upper **surface** velutinate to smooth somewhat rimose, azonate to faintly zonate, rough, radially striate, golden brown, rusty brown to black.

Pore surface whitish, yellowish to brown, pores circular to angular, 2-4 per mm, becoming irregular in places; **tubes** concolorous, up to 6 mm deep. **Context** rusty brown, dense, fibrous. **Setal hyphae** frequent, thick-walled, brown-ferruginous, up to 300 μm long, narrow basal portion up to 4 μm in diam, widest portion towards the pointed apex up to 14,4 μm in diam. **Hymenial setae** scattered, ventricose, subulate, thick-walled, reddish brown, straight, 30-40 $\times$ 10-12 μm . **Basidiospores** more or less broadly ellipsoid, thick-walled, subhyaline to yellowish, IKI-, 5,6-9,8 $\times$ 4,8-7,2 μm . **Chlamydospores** present, brown, thick-walled, globose, and 7-12 μm in diameter, ellipsoid, fusiform, ovoid, and 12-22 $\times$ 8-9,6 μm . **Distribution** pantropical, known from southern United States to central Argentina (MAUBET *et al.* 2020). **Ptychogastric stage** see ANGELINI & LOSI (2013a). **Material studied** near the beach, on fallen trunk in a man-made wood with deciduous trees, 6 Dec. 2021 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE1627 (**Fig. 2**)



Fig. 2. *Inonotus rickii*

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Family **Polyporaceae** Fr. Ex Corda 1839 (as defined in ANGELINI & LOSI 2014)

Genus *Cubamyces* Murrill 1905

Basidiomata of trametoid or coriolioid habitus, annual; **hymenophore** poroid with small pores; **context** white to ivory, suberose. **Hyphal system** dimitic. **Generative hyphae** clamped, hyaline. **Skeletal hyphae** hyaline, sympodially branched. **Basidiospores** cylindrical, thin-walled, IKI-, CB- (ZMITROVICH 2018).

Cubamyces menziesii (Berk.) Lücking

Basidioma pileate, solitary or gregarious, at first tough and somewhat flexible, hard and rigid on drying, up to 6 cm long and 8 cm wide; single, imbricate, applanate with fused base or connate, dimidiate to semicircular or even circular. Upper **surface** velvety to glabrous, whitish to brown, vinaceous brown, fuscous brown, greyish in different shades to black,



Fig. 3. *Cubamycetes menziesii*

Foto di Claudio Angelini

narrowly zonate, slightly concentrically sulcate, radially rugulose, otherwise smooth to warted or with weakly outgrowths from the base. Margin thin and acute, wavy, entire or slightly incised, white or pale brown. **Pore surface** white to creamish, pores round to angular, (2-) 3-4 (-5) per mm with entire dissepiments; tubes white to paler than pore surface, up to 4 mm deep. **Context** white, suberose, up to 8 mm thick. **Basidiospores** cylindrical, slightly curved or cylindrical ellipsoid, thin-walled, hyaline, $5-6,8 \times 1,8-2,4 \mu\text{m}$. **Remarks** *C. menziesii* is a rather variable species as pore size and colour of the pileus (RYVARDEN, pers. comm.) and turned out to be a complex of more than one species with numerous heterotypic synonyms (LÜCKING *et al.* 2020). **Distribution** first reported from the Neotropics in 2012 [(WELTI *et al.* 2012, as *Leiotrametes menziesii* (Berk.) Welti & Courtec.], *C. menziesii* (originally described from Sumatra) seems to be a quite common neotropical species. **Material studied** on fallen trunk in a man-made wood with deciduous trees, 14 Feb. 2021 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE1436 (Fig. 3).

Family **Steccherinaceae** Parmasto 1968 (as defined in ANGELINI & LOSI 2021)

Genus *Loweomyces* (Kotl. & Pouzar) Jülich 1982

Basidiomata resupinate to stipitate, monomitic to dimitic hyphal system with presence of pseudoskeletal hyphae. It also presents thin-walled **hymenial cystidioid elements**, and **cyanophilous spores** and **hyphal walls** (WESTPHALEN *et al.* 2016).

Loweomyces fractipes (Berk. & M.A. Curtis) Jülich

Basidioma single, laterally stipitate, at first tough and somewhat flexible, coriaceous and rigid when dry. **Pileus** flabelliform to reniform, up to 3 cm wide and 2 mm thick, margin thin, regular to slightly undulate; upper **surface** spongy, finely and adpressed villose to glabrous, uneven,

whitish to yellowish or greenish yellow, azonate; **stipe** irregularly cylindrical, expanded towards the pileus, possibly branched, concolorous with the cap, up to 6 cm long and 5 mm wide. **Pore surface** white, pores angular, 6-9 per mm, decurrent on the stipe; **tubes** concolorous, up to 2 mm deep. **Context** 1-2 mm thick, white, duplex, with a firmer layer next to the tubes. **Hyphal system** monomitic, hyphae with clamps, thin- to slightly thick-walled, hyaline, 2,4-6 μm wide; pseudoskeletal hyphae present in the context. **Cystidia** absent; broadly fusoid cystidioles present in the hymenium, thin-walled, not encrusted, 12-16 $\times$ 6-6,5 μm , with a basal clamp. **Basidia** broadly clavate, with 4 sterigmata and basal clamp, 15-18 $\times$ 5-9 μm . **Basidiospores** broadly ellipsoid, ovoid, subglobose or globose, hyaline, slightly thick-walled, smooth, usually uniguttulate, 4,5-6,4 $\times$ 4-6 μm . **Distribution** a rare species in the Neotropics (RYVARDEN 2015). **Material studied** in the home garden with shrubs and ornamental deciduous plants, 14 Feb. 2021 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE1429 (**Fig. 4**).



Fig. 4. *Loweomyces fractipes*

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CORTICIOID FUNGI

Family Auriculariaceae Fr.

[as 'Auricularini' in *Epicr. syst. mycol.* (Upsaliae): 530 (1838) [1836-1838]]

Basidiomata resupinate to pileate, gelatinous. **Hyphae** with clamps connections. **Basidia** interspersed with hyphidia, cylindrical, transversely septate; **basidiospores** hyaline, smooth, allantoid, not staining in iodine, germinating by repetition (CANNON & KIRK 2007).

Genus *Auricularia* Bull. 1780

Basidiomata tough to gelatinous, resupinate to pileate; superior **surface** pilose, hymenium smooth to reticulate. **Probasidia** aseptate, cylindrical; **metabasidia** cylindrical, becoming transversely 3-septate; **basidiospores** curved-cylindrical, hyaline, germinating by repetition or by germ tube (Lowy 1971).

Auricularia brasiliiana Y.C. Dai & F. Wu

Basidioma solitary, imbricate or confluent, tough-gelatinous, drying coriaceous; resupinate, effused reflexed to pileate with lobed often upturned white margins. Upper **surface** tomentose, concentrically zoned with whitish, greyish, olivaceous and blackish bands; **hymenium** nearly smooth to strongly veined, greyish blue with purple tints. **Hyphal system** monomitic; hyphae clamped, hyaline, more or less thick-walled, inflated in KOH 5% up to 13 μm in diam. **Basidia** not observed. **Basidiospores** allantoid to suballantoid, hyaline, thin-walled, smooth, with one large guttula, 10-13,6 $\times$ 4-5,6 (-7) μm . **Remarks** *A. brasiliiana* is distinguished from *A. mesenterica* s. str. and *A. orientalis* Y.C. Dai & F. Wu by its shorter basidia and distinctly inflated hyphae in KOH up to 13 μm , 6,5 μm and 7 μm respectively; the hyphal diameter is a good character for distinguishing species within the *A. mesenterica* complex and *A. mesenterica* complex from other species of *Auricularia* (Wu *et al.* 2015). *A. mesenterica* complex is also distinguished from other species in the genus by its resupinate to effused-reflexed basidiomata, free lobed pileus, and tomentose to hispid upper surface with concentric zones (Wu *et al.* 2015). **Distribution** in subtropical areas of Brazil (Wu *et al.* 2015). **Material studied** near a river, on fallen trunk in a man-made wood with deciduous trees, 1 Feb. 2021 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE1441 (Fig. 5).



Fig. 5. *Auricularia brasiliiana*

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Family Coniophoraceae Ulbr. 1928

Basidiomata resupinate to pileate; **hyphal system** monomitic, **hyphae** simple- or nodose-septate, **basidiospores** indextrinoid or weakly dextrinoid (ZMITROVICH *et al.* 2019).

Genus *Gyrodontium* Pat. 1900

Basidiomata resupinate to pileate, **hymenophore** as ceraceous teeth field; **hyphal system** monomitic, hyphae simple- or nodose-septate; **cystidia** absent; **basidia** 4-spored, without

a basal clamp connection; **basidiospores** with smooth one-layered brownish wall, CB+, dextrinoid; on wood in warm regions of the world, causes a brown rot (ZMITROVICH *et al.* 2019).

Gyrodontium sacchari (Spereng.) Hjortstam

Basidioma easily separable, mostly pileate, sessile, up to 10 × 8 cm, broadly attached, rarely resupinate, soft, rather brittle when dried. **Pileus** surface glabrous, smooth to rugose or slightly sulcate, azonate or faintly zonate, whitish to brownish; margin obtuse, whitish. **Hymenophore** sulphur yellow, yellowish green to olivaceous brown, hydroid with dense blunt aculei of varying shape, cylindrical, conical or flattened, up to 1 cm long. **Context** or subiculum whitish, 3-5 mm thick. **Hyphal system** monomitic; hyphae hyaline, thin- to slightly thick-walled, without clamps, 2-6,4 µm wide, sometimes inflating towards the septa up to 10 µm. **Cystidia** none.



Fig. 6. *Gyrodontium sacchari*

Foto di Claudio Angelini

Basidia clavate to subclavate, with four sterigmata, 16-25 × 4-6 µm. **Basidiospores** abundantly present, ellipsoid, smooth, thick-walled, pale brownish, variously dextrinoid, 4-6 × 2,4-3,4 µm. **Remarks** this peculiar species is characterized by the yellow hymenophore, simple-septate hyphae, and small, golden-brown spores (LARSSON & RYVARDEN 2021). **Distribution** mainly pantropical species; however, it was reported also from subtropical and temperate areas in both hemispheres (ROBLEDO *et al.* 2014). **Material studied** on fallen trunk in a man-made wood with deciduous trees, 27 Nov. 2020 - Sosua (P.to Plata) DR. *Exiccatum*: JBSD133397; at the base of a palm tree in a pine forest, 16 Jan. 2020 - Jarabacoa (La Vega) DR. *Exiccatum*: JBSD133384 (Fig. 6).

Family Lachnocladiaceae D.A. Reid 1965

Basidiomata resupinate to erect and then spathulate or coralloid; **flesh** typically yellowish to brown. **Hyphal system** dimitic with branched **skeletal hyphae** (dichohyphydia) that stain

brown in jodine, and sometimes also stellate setae; **generative hyphae** clamped or simple septate. **Cystidia** usually present (CANNON & KIRK 2007).

Genus *Asterostroma* Massee 1889

Basidiomata effused, hypchnoid to membranaceous, even, cream, yellowish to brownish. **Hyphal system** monomitic or dimitic, septa without clamps; **gloeocystidia** present in most species, **asterohyphidia** always present; **basidia** utriform, with (2-) 4 sterigmata; **basidiospores** hyaline, smooth or warted to echinulate, amyloid or not amyloid (STALPERS 1996).

Asterostroma cervicolor (Berk. & M.A. Curtis) Massee

Basidioma effused, adnate, soft, hypchnoid; hymenial surface smooth, yellowish, cream to ochraceous; margin white, arachnoid fibrillose. **Hyphal system** monomitic; hyphae hyaline, thin- to slightly thick-walled, 1,8-3 μm wide, septa without clamps. **Gloeocystidia** cylindrical, ventricose or fusoid, somewhat sinuous and/or constricted, thin- to slightly thick-walled, hyaline, whit resinous contents, 30-50 $\times$ 4-10 μm . **Asterohyphidia** very numerous in both subiculum and subhymenium, golden brown, rays thick-walled, sharply pointed, usually up to 45 μm long and 1,6-5 μm wide. **Basidiospores** ellipsoid to subglobose, rarely globose, slightly angular, hyaline, thin-walled, amyloid, sparsely tuberculate, 4,2-6,4 $\times$ 4-5 μm without the blunt tubercles which may be up to 1 μm long. **Distribution** apparently pantropical (HJORTSTAM & RYVARDEN 2007). **Remarks** many species have been described based on basidiospores measurements and ornamentation (BOIDIN *et al.* 1997) but it is not clear whether these variations reflect true species differences (LARSSON & RYVARDEN 2021). A close neotropical species is *A. muscicola* (Berk. & M.A. Curtis) Massee with larger spores (6-8 μm in diam.) with dense, long (up to 2 μm) tubercles (HALLENBERG 1985) and extensively branching contextual asterosetae (WELDEN 1966). **Material studied** on fallen trunk in the hotel garden with shrubs and ornamental deciduous plants, 1 Dec. 2021 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE1657 (**Fig. 7**).



Fig. 7. *Asterostroma cervicolor*

Foto di Claudio Angelini

Family **Steccherinaceae** Parmasto 1968

Genus *Steccherinum* Gray (as defined in ANGELINI & LOSI 2021)

Steccherinum ochraceum (Pers. ex J.F. Gmel.) Gray

Basidioma resupinate, hymenium dense odontoid, white to pale ochraceous, aculei conical, up to 1 mm long. **Hyphal system** dimitic, **generative hyphae** with clamps. **Skeletocystidia** abundant, clavate, encrusted in the upper part. **Basidiospores** ellipsoid, hyaline, thin-walled, $3,2-3,4 \times 1,8-2,2 \mu\text{m}$. **Distribution** cosmopolitan species. **Material studied** on fallen branches in a man-made wood with deciduous trees, 23 Jan. 2021 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE1463 (Fig. 8).



Fig. 8. *Steccherinum ochraceum*

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CLAVARIOID FUNGI

Family **Clavariaceae** Chevall. 1826

Basidiomata cylindrical to clavate, simple or branched. **Hyphal system** monomitic, **clamp connections** present or absent. **Cystidia** usually absent. **Basidia** 2- to 4- (6) spored. **Basidiospores** smooth or echinulate, not staining in iodine (CANNON & KIRK 2007).

Genus *Clavulinopsis* Overeem 1923

Basidiomata clavarioid, solitary or gregarious to caespitose, simple or branched, variously coloured. **Hyphal system** monomitic, **hyphae** clamped, mostly inflating. **Basidiospores** inamyloid (BEGEROW *et al.* 2018).

Clavulinopsis laeticolor (Berk. & M.A. Curtis) R.H. Petersen

Basidioma solitary to fasciculate-caespitose in small tufts, up to 3 cm high, simple, pale yellow, bright golden yellow, yellow-orange, orange to orange-red, drying deep orange, subcylindric to fusiform, becoming flattened and longitudinally sulcate, apex acute to blunt. **Basidiospores** 5-7 × 4-5 µm, elongate-ovate, ellipsoid to subglobose, hyaline, mostly 1-guttate, smooth, slightly thick-walled, with prominent, often sublateral, apiculus. **Distribution** widespread in the Neotropics (Holotype Cuba). **Material studied** on litter, in a mountain mixed forest with pine trees (*Pinus occidentalis*), 16 Nov. 2020 - Constanza (La Vega) DR. **Exiccatum**: ANGE1454 (**Fig. 9**).



Fig. 9. *Clavulinopsis laeticolor*

Foto di Claudio Angelini

Family *Clavulinaceae* Donk 1970

Basidiomata resupinate to cylindrical and often branched. **Hyphal system** monomitic, **clamp connections** present or absent; **basidia** elongate with 2 to 4 curved sterigmata; **basidiospores** ellipsoid to subglobose, smooth, not staining in iodine (CANNON & KIRK 2007).

Genus *Clavulina* J. Schröt. 1888

Clavulina is characterized by its clavarioid basidiomes, but several new species have been recognized with **effused-coralloid**, **cerebriform** and **cantharelloid** basidiomes. The cylindrical to subclavate **basidia** usually with two incurved sterigmata is considered a main characteristic of the ectomycorrhizal genus (PEREZ-PAZOS *et al.* 2020).

Clavulina connata (Berk.) Corner

Basidioma up to 6 cm high, gregarious to caespitose, white to buff or pale pink, sparingly to much branched, stem generally distinct and often rugulose, tips elongate or cristate.

Hyphal system monomitic, hyphae simple septate, hyaline, thin- to slightly thick-walled, 3,2-11,2 μm wide. **Cystidia** none. **Basidia** cylindrical to subclavate, 2 sterigmata, seldom only 1 sterigma. **Basidiospores** broadly ovoid to subglobose or rarely globose, hyaline, thin- to slightly thick-walled, mostly uniguttulate, 7-8,8 $\times$ 5,6-7,2 μm . **Distribution** Brazil (CORNER 1950). **Material studied** on litter, in a hilly mixed deciduous forest under *Coccoloba diversifolia* Jacq., 19 Dec. 2013 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE215; *ibidem*, 5 Mar. 2020. *Exiccatum*: ANGE1159; near the beach, on litter, in a mixed deciduous forest under *Coccoloba uvifera* (L.) L., 15 Dec. 2021 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE1655 (**Fig. 10**).



Fig. 10. *Clavulina cornuta*

Foto di Claudio Angelini

Clavulina fuscolilacina (Berk.) Overeem

Basidioma up to 6 cm high, simple or with some undivided short branches, often antler-like, solitary, gregarious, or fasciculate-caespitose in small tufts; **stem** cylindric, whitish to very pale pink or cream; **hymenium** greyish, cylindric to more or less clavate, longitudinally faintly rugulose-sulcate, apex blunt. **Hyphae** clamped, hyaline, thin- to slightly thick-walled; uninflated tramal hyphae 3,6-8 μm wide, inflated hyphae up to 16 μm wide. **Cystidia** frequent to rare, enclosed to more or less projecting, tubular with obtuse apex, somewhat constricted, sometimes sinuos, thin- to slightly thick-walled, with homogeneous or finely granular content, 100-170 $\times$ 8-12 μm . **Basidia** subcylindrical, up to 70 μm long, sterigmata 2, rarely 1. **Basidiospores** broadly ellipsoid to globose, hyaline, slightly thick-walled, mostly uniguttulate, 7-9,6 $\times$ 6,4-8,6 μm . **Distribution** neotropical exact distribution unknown. **Remarks** this epithet is used here sensu PETERSEN (1983). **Material studied** on litter, in a hilly mixed deciduous forest under *Coccoloba diversifolia*, 17 Dec. 2020 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE1435; *ibidem*, *Exiccatum*: ANGE1640 (**Fig. 11**).



Fig. 11. *Clavulina fuscolilacina*

Foto di Claudio Angelini

Family **Lachnocladiaceae** D.A. Reid 1965 (as reported above).

Genus *Lachnocladium* Lév. 1849 nom. cons.

Basidioma annual, often caespitose, usually strongly ramified with rather slender branches; hymenium unilateral on the underside. Section shows distinct medulla and paler cortex. Colour pale ochre, yellowish to brown; apices paler and sterile. **Hyphal system** dimitic; **generative hyphae** simple septate, **dichophyses** abundant. **Gloeoplerous hyphae** often present; **gloeocystidia** always present, hyaline, thin-walled. **Basidia** small, with (2-) 4 sterigmata. **Basidiospores** hyaline, very small, smooth, not amyloid (CORNER 1950).

Lachnocladium schweinfurthianum Henn.

Basidioma up to 7 cm high, solitary to caespitose, much branched; lower branches more or less flattened, upper branches nearly cylindrical, subulate. **Hymenium** whitish to pale fawn, abhymenial surface ochraceous, ochraceous-yellow to yellowish-brown. Sterile apices mostly white. **Stipe** up to 15 × 6 mm, ochraceous, cylindrical, the base sometimes subbulbous with yellowish, pale ochre or whitish mycelial strands. **Medulla** as wide as or wider than the cortex. **Generative hyphae** 2,4-4,8 µm wide. **Dichophyses** not coralloid. **Gloeocystidia** hyaline, thin-walled, 4-11 µm wide. **Basidiospores** 4-5,5 × 2,2-3,4 µm, broadly ellipsoid to ovoid with prominent apiculus. **Distribution** reported from Mexico (PEREZ-MORENO & VILLARREAL 1989) and frequently from Brazil. **Material studied** on litter, in a mountain forest with pine trees (*Pinus occidentalis*), 21 Dec. 2013 - Jarabacoa (La Vega) DR. *Exiccatum*: ANGE102; *ibidem*, *Exiccatum*: JBSD127121 (Fig. 12).



Fig. 12. *Lachnocladium schweinfurthianum*

Foto di Claudio Angelini

Lachnocladium tubulosum (Fr.) Sacc.

Basidioma up to 8 cm high, solitary to caespitose, much branched; lower branches terete to scarcely flattened, upper branches cylindrical to attenuate. Hymenium cream to fawn-ochraceous: abhymenial surface yellowish to brownish. Sterile apices usually paler or white; stipe often indistinct. Medulla much narrower than the cortex. **Generative hyphae** thin- to slightly thick-walled, without clamps; 1,6-2,6 μm wide in the subhymenium, 2,4-4 μm wide in the medulla. **Dichophyses** coralloid. **Gloeocystidia** scattered, tubular, subflexuous, thin-walled, hyaline, 8-9 μm wide. **Basidia** cylindrical to subclavate, 12-18 $\times$ 4-5 μm . **Basidiospores** broadly ellipsoid to subglobose, thin-walled, hyaline, 2,6-3,6 $\times$ 2,4-3,2 μm . **Distribution** common tropical species (CORNER 1970). **Material studied** on litter in the hotel garden with shrubs and ornamental deciduous plants, 3 Dec. 2014 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE455; *ibidem*, *Exiccatum*: ANGE1268 (Fig. 13).

Family Pterulaceae Corner 1970.

Basidiomata clavarioid rarely corticioid with filiform dimitic construction (CORNER 1970).

Genus *Pterula* Fr. 1825.

Basidiomata much branched to simple; **hyphal system** dimitic; **basidiospores** hyaline and smooth (asperulate in *P. grandis* Syd. & P. Syd.) (CORNER 1950).

Pterula multifida (Chevall.) Fr.

Basidioma solitary, gregarious to caespitose, white to pallid brownish; branches multifid, not anastomosing, not conspicuously flattened with subulate tips; **stem** cylindrical, whitish



Fig. 13. *Lachnocladium tubulosum*

Foto di Claudio Angelini



Fig. 14. *Pterula multifida*

Foto di Claudio Angelini

to indistinct. **Hyphal system** dimitic. **Generative hyphae** hyaline thin-walled, with clamps, 3-4 µm wide; **skeletal hyphae** thick-walled, 2,4-5,6 µm wide. **Basidia** clavate, 12-16 × 4-6 µm. **Basidiospores** pip-shaped, hyaline, thin-walled, 4,6-6,4 × 2,8-3,4 µm. **Distribution** temperate to subtropical species (CORNER 1970). **Material studied** on litter, in a hilly mixed deciduous forest, 17 Dec. 2020 - Sosua (P.to Plata) DR. *Exiccatum*: ANGE1434 (**Fig.14**).

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Literature cited

- ANGELINI C. & LOSI C. – 2013a: Polyporoid fungi in the Dominican Republic. First part. Ganodermataceae & Hymenochaetaceae. *Rivista Micologica Romana, Bollettino AMER* 89: 27-39.
- ANGELINI C. & LOSI C. – 2013b: Annotated list of stereoid fungi in Dominican Republic. II. *Bollettino AMER* 90: 31-38
- ANGELINI C. & LOSI C. - 2014: Annotated list of Polyporaceae in the Dominican Republic. III. *Rivista Micologica Romana, Bollettino AMER* 91: 31-45.
- ANGELINI C. & LOSI C. - 2015: Annotated list of polyporoid fungi in the Dominican Republic. IV. *Rivista Micologica Romana, Bollettino AMER* 96: 3-19.
- ANGELINI C. & LOSI C. – 2018: Annotated list of fungus flora of the Dominican Republic. VI. *Rivista Micologica Romana, Bollettino AMER* 103: 3-22.
- ANGELINI C. & LOSI C. – 2021: Fungus flora of the Dominican Republic. VII. Some unreported polyporoid, stereoid and corticioid fungi. *Rivista Micologica Romana, Bollettino AMER* Sp. Edition: 3-33.
- BEGEROW D., McTAGGART A. & AGERER R. – 2018: Engler's Syllabus der Pflanzenfamilien Part 1/3: Basidiomycota and Entorrhizomycota. *Syllabus of Plant Families*. Bontrager Science Publisher: 483.
- BOIDIN J., LANQUETIN P. & GILLES G. – 1997: Contribution a la connaissance du genre *Asterostroma* Masee 1889 (Basidiomycotina). *Bulletin de la Société Mycologique de France*, 113: 269-301.
- CANNON P.F. & KIRK P.M. – 2008: Fungal Families of the World. *The Lichenologist*. Wallingford, Oxfordshire, UK, CAB International. Vol. 40 (5): 463.
- CORNER E.J.H. – 1950: A Monograph of *Clavaria* and allied genera. *Annals of Botany Memoirs* No.1: 1-pp 740. Oxford.
- CORNER E.J.H. – 1970: Supplement to "A monograph of *Clavaria* and allied genera". *Beihefte zur Nova Hedwigia*: 33.
- CUI B.K., SHEN L.L. & DAI Y.C. – 2019: Taxonomy and phylogeny of *Postia*. Multi-gene phylogeny and taxonomy of the brown rot-fungi: *Postia* (Polyporales, Basidiomycota) and related genera. *Persoonia* 42: 101-126.
- DRECHSLER-SANTOS E.R., ROBLEDO G.R., LIMA-JÚNIOR N.C., MALOSSO E., RECK M.A., GIBERTONI T.B., DE QUEIROZ CAVALCANTI M.A. & RAJCHENBERG M. – 2016: *Phellinotus* a new neotropical genus in the Hymenochaetaceae (Basidiomycota, Hymenochaetales). *Phytotaxa* 261: 218-239.
- HALLENBERG N. – 1985: The Lachnocladiaceae and Coniophoraceae of North Europe. *Fungiflora*, Oslo.
- HJORTSTAM K. & RYVARDEN L. - 2007: Checklist of corticioid fungi (Basidiomycotina) from the tropics, subtropics, and the southern hemisphere. *Synopsis fungorum* 22: 27-146.
- LARSSON K-H. & RYVARDEN L. – 2021: Corticioid Fungi of Europe. Vol. 1. *Acanthobasidium-Gyrodontium*. *Synopsis Fungorum*: 43, Oslo.

- LOWY B. – 1971: *Flora neotropica. Monograph No 6*. Tremellales. Hafner Publishing Company, New York. 153 p.
- LÜCKING R., TRUONG B.V., HUONG D.T.T., LE N.H., NGUYEN Q.D., NGUYEN V.D., VON RAAB-STRAUBE E., BOLLENDORFF S., GOVERS K. & DI VINCENZO D. – 2020: Caveat of fungal barcoding: a case study in *Trametes* s. lat. (Basidiomycota: Polyporales) in Vietnam reveals multiple issues with mislabelled reference sequences and calls for third-party annotations. *Willdenowia* 50: 383-403.
- MAUBET Y., CAMPI M. & ROBLEDÓ G. – 2020: Hymenochaetaceae from Paraguay: revision of the family and new records. *Current Research in Environmental and Applied Mycology (Journal of Fungal Biology)* 10: 242-261.
- PÉREZ-MORENO J. & VILLARREAL L. – 1989: First report of the clavarioid genera *Lachnocladium* and *Pterula* (Holobasidiomycetes) from the Mexican Tropic. *Micologia Neotropical Aplicada* 2: 123-130.
- PÉREZ-PAZOS E. *et al.* – 2020: Fungal diversity notes 1277-1386: taxonomic and phylogenetic contribution to fungal taxa. Note 1325, *Fungal Diversity* 104: 1-266.
- PETERSEN R.H. – 1983: Notes on Clavarioid Fungi XVIII. A Preliminary Outline of *Clavulina* in Southeastern Australia. *Nova Hedwigia* 37: 19-35.
- ROBLEDÓ G.R., GIORGIO E.M., FRANCO C.R.P., POPOFF O. & DECOCK C. – 2014: *Gyrodontium sacchari* (Spreng.:Fr.) Hjortstam (Boletales, Basidiomycota) in America: New records and its geographic distribution. *Check List* 10: 1514-1519.
- RYVARDEN L. – 2015: Neotropical polypores. Part 2. Polyporaceae *Abortiporus-Nigroporus*. *Synopsis Fungorum* 34. *Fungiflora*. Oslo.
- STALPERS J.A. – 1996: The Aphyllophoraceous fungi II. Keys to the species of the Hericiales. *Studies in Mycology*, n. 40.
- WELDEN A.L. – 1966: West Indian Species of *Asterostroma*, with Notes on Extralimital Species. *The American Midland Naturalist* 76: 222-229.
- WELTI S., MOREAU P.-A., FAVEL A., COURTECUISSÉ R., HAON M., NAVARRO D., TAUSSAC S. & LESAGE-MEESSEN L. – 2012: Molecular phylogeny of *Trametes* and related genera, and description of a new genus *Leiotrametes*. *Fungal Diversity* 55: 47-64.
- WESTPHALEN M.C., TOMŠOVSKÝ M., RAJCHENBERG M. & GUGLIOTTA A.M. – 2016: Morphological and phylogenetic studies of two neotropical species of *Loweomyces* (Polyporales, Basidiomycota). *Mycological Progress* 15: 967-975.
- WU F., YUAN Y., RIVOIRE B. & DAI Y.-C. – 2015: Phylogeny and diversity of the *Auricularia mesenterica* (Auriculariales, Basidiomycota) complex. *Mycological Progress* 14: 42.
- ZMITROVICH I.V. – 2018: Conspectus Systematis Polyporacearum v 1.0. *Folia Cryptogamica Petropolitana* n° 6.
- ZMITROVICH I.V., KALINOVSKAYA N.I. & MYASNIKOV A.G. – 2019: Funga photographica, Boletales I: Coniophoraceae, Hygrophoropsidaceae, Paxillaceae, Serpulaceae, Tapinellaceae boreales. *Folia Cryptogamica Petropolitana* 2019, n. 7: 58 p.