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Rosellinia species (Xylariaceae) from South and Central America – An annotated list

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Summary

L. E. Petrini & O. Petrini. 2012. *Rosellinia* species (Xylariaceae) from South and Central America - An annotated list. *Kurtziana* 37 (1): 127-139.

A list of *Rosellinia* species collected in South and Central America and deposited in international and private herbaria is presented. For some of them, the correct identity could be determined, while the taxonomic status of other specimens will have to be assessed in separate studies.

Key words: *Helicogermslita*, *Hypoxylon*, *Rosellinia*, *Stilbohypoxylon.*

Resumen

L. E. Petrini & O. Petrini. 2012. Especies del género *Rosellinia* (Xylariaceae) de América del Sur y Central– Una lista con notas. *Kurtziana* 37 (1): 127-139.

Se presenta una lista de las especies del género *Rosellinia* a partir de colecciones depositadas en herbarios internacionales y privados. Para algunas de ellas, se pudo determinar la identidad correcta, mientras que el estatus taxonómico de otros ejemplares tendrá que ser evaluado en estudios separados.

Palabras clave: *Helicogermslita*, *Hypoxylon*, *Rosellinia*, *Stilbohypoxylon.*

Introduction

Rosellinia species (Xylariales, Xylariaceae) have been reported mainly from wood, dicotyledonous plants, coniferous litter, and occasionally also from monocotyledonous hosts (e. g. Hino and Katumoto, 1958; Kale, 1967; Martin, 1967; Pande and Rao, 1995; Petrini, 1992, 2003; Petrini and Petrini, 2005; Petrini et al., 1989a; Petrini et al., 1989b; Rick, 1932; Roger, 1953; Rogers, 1979; Saccas, 1956; Teng, 1964).

Stromata of *Rosellinia* spp. are usually uniperitheciate and embedded in a persistent or fugacious subiculum. The paraphyses and asci disintegrate quickly and only the spore bearing part of the asci can usually be observed. The amyloid ascus apical structure is well developed, especially in species with large ascospores. The anamorphs so far known can be assigned to *Geniculosporium* Chesters & Greenhalgh or *Dematophora* R. Hartig. They are found in the subiculum while the perithecia are still immature and sometimes they are also formed in culture.

Rosellinia species are cosmopolitan in their distribution. They have been described from Europe (Petrini, 1992; Petrini et al., 1989a), the Indian subcontinent (Dargan and Thind, 1979; Pande and Rao, 1995), Mexico (SanMartìn Gonzalez and Rogers, 1995), New Zealand (Petrini, 2003), the Far East (Vasilyeva, 1998), and Taiwan (Ju and Rogers, 1999). For South

America, only Rick's publication (Rick, 1932) provides some information that may be used as a basis for a more comprehensive taxonomic review of *Rosellinia* species from South and Central America.

We have examined the specimens conserved in 37 herbaria and 2 private collections worldwide and prepared a list of species that have been collected in Central and South America, providing preliminary information on their taxonomy, with the aim of preparing a more in-depth evaluation of their taxonomic status.

Four *Rosellinia* species have been described from Argentina: *Rosellinia bonaerensis*, *R. smilacina, Hypoxylon goliath* (now synonym of *R. bunodes*) by the South American mycologist Spegazzini and *R. breensis* by Starbäck. Most specimens of South American *Rosellinia* species were collected in Brazil, São Leopoldo, or St. Catharina, Blumenau, where the European mycologists Hennings, Rick, Starbäck, and Theissen were very active, either by participating in expeditions or by residing in the area. The French mycologist Patouillard (*R. canzacotoana, R. pepo*) and the North Americans Ellis and Everhardt (*R. gigantea, R.gigaspora*) described species from the Northern areas of South America or from Central America. Some species (e.g. *R. arcuata s.l.*, *R. gigantea, R. griseo-cincta, R. hyalospora, R. longispora, R. rickii, R. smilacina*) are represented by several collections.

Species described from elsewhere (e.g. *R. arcuata* from Sri Lanka, *R. asperata* from Africa*, R. bunodes* from Sri Lanka) are present also in South America; *R. arcuata* s. l. seems to be more common than others.

For the time being *R. smilacina, R. amblystoma, R. sublimbata*, all species described from bamboo, are still listed as *Rosellinia*. In fact, these taxa were transferred to *Astrocystis* (Læssøe and Spooner, 1994). The ascal apical plugs, however, are more angular than those of typical *Rosellinia* and *Astrocystis* species; they also differ in size from species in the latter genus. In addition, so far no splitting stromata could be observed. These species form a homogenous group and delimitation from *Rosellinia* and *Astrocystis* is warranted.

Species listed here and not belonging to *Rosellinia* refer mainly to *Astrocystis*, *H. lenormandii*, *Annulohypoxylon bovei* var. *microspora*, *Annulohypoxylon* spp., and *Stilbohypoxylon* spp.

Material and Methods

We studied dried herbarium specimens obtained from 37 Herbaria worldwide and by some individuals who kindly provided us with their collections. Herbarium abbreviations follow Index Herbariorum (Thiers).

Macroscopic features were examined with a dissecting microscope; microscopic characters were observed in bright field or interference contrast. Ascospores were examined and measured in water. Melzer's reagent was used to study the structure of the ascal apical plugs, when present (Petrini, 1992, 2003, 2004).

Whenever possible, 5 stromata, 30 ascospores, 5 apical plugs and, where applicable, 10 germ slits and conidia were measured for each specimen. Minimum and maximum values mean and standard deviation (std) were calculated for each species (Petrini, 1992, 2003, 2004).

Numeric calendar dates read dd.mm.yyyy.

The list is divided in two parts: (a) specimens identified as *Rosellinia*; and (b) specimens not belonging to *Rosellinia*.

Results and Discussion

List of material examined

(a) Specimens identified as Rosellinia

Hypoxylon culmorum Cooke

1. On *Arthrostylidium*. COSTA RICA. Am Rio Poos zwischen Salanilla de Alajuela und San Pedro, 10.01.1925. Leg. H. Sydow (ZT!, ex herb Dr. F. Petrak).

   This is *Rosellinia smilacina*.

Hypoxylon goliath Speg., *Bol. Acad. Nac. Ci. Córdoba* 11: 505. 1889. Figure 1 a-b.

R. goliath (Speg.) v. Höhn., *Denkschr. Kaiserl. Akad. Wiss. Wien. Math.-Naturwiss. Kl.* 83: 23. 1907.

1. S/ troncos podridos de tallos. BRAZIL. Apiahy, S. Pauol, July 1888. Leg. J. Puiggari no 2380, type (LPS 1137!, Fungi Puiggariani #352).

This is *Rosellinia bunodes*.

Rosellinia amblystoma Berl. & Sacc.

1. In culmis *Arthrostylidii*. COSTA RICA. La Capa pr. San José, 21.12.1924. Leg. H. Sydow (ZT!, ex Herb. Dr. F. Petrak).

This is *Rosellinia smilacina*.

Rosellinia aquila var. *palmicola* Theiss., *Beih. Bot. Centralbl.* 27, Abt. 2: 393. 1910.

1. In palma. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. Rick (PACA, 19003!).

The printed label outside reads *R. aquila*. The handwritten label states *Rosellinia aquila* var. *palmicola* Theiss. In palma, São Leopoldo Rick. This is very likely the type specimen.

This is no *R. aquila*; it belongs to Sect. *Corrugata* because of its stromatal characters. No ascospores were seen.

Rosellinia bonaerensis Speg., *An. Mus. Nac. Buenos Aires* 6: 258. 1898 (Petrini, 1992).

1. Host not given. ARGENTINA. Buenos Aires, maderas de barricas, 29.04.1881. Leg. C. Spegazzini, type (LPS 3587!).

2. On wood. ARGENTINA. La Plata, 15.10.1904. Leg. C. Spegazzini [LPS 3583, sub *R. australis*, type (Petrini, 1992)].

Rosellinia breensis Starb., Starb., *Arkiv f. Bot.* 5: 17. 1905. Figure 1 c-d.

1. In trunco arboris sicco. ARGENTINA. Jujuy, Quinta prov. Laguna de la Brea, 05.08.1901. Leg. Rob. E. Fries, type (S!, Herb. Brasil. Regnell. Musei Bot. Stockholm; Exped. Suec. in reg. Chaco-Andinis Fungi #165).

This is a small spored *Rosellinia* with ascospores 9–10.5 x 4.5–5.5 µm.

Rosellinia bunodes (B. & Br.) Sacc., *Syll. F.* 1: 254. 1882.

1. On rotten wood. PUERTO RICO. El Verde, 01.04.1974. Leg. J. D. Rogers (WSP!).

Rosellinia canzacotoana Pat., *Bull. Soc. Myc. Fr.* 9: 151. 1893.

1. Vieux tronc (old tree trunk). ECUADOR. Prov. Pichincha, Canzacoto, July 1892. Leg. Lagerheim, type (FH!).

Rosellinia chusqueae Speg., *Bot. Acad. Nac. Sci. Córdoba* 25: 51. 1921.

Valid name: *R. chusqueae* Pat., Bull. Soc. Myc. France 11: 224. 1985 (Petrini, 1992).

1. On *Chusqueae* sp. CHILE. Victoria, Mariluan, May 1918. Leg. C. Spegazzini, type (LPS 3584!).

2. On dead twigs of *Chusquea*. ECUADOR. San Jorge, July 1892. Leg. von Lagerheim, type (FH!).

Rosellinia desmazieresii

Valid name: *Rosellinia arcuata* Petch, *Ann. R. Bot. Gard. Peradeniya* 6: 175. 1916.

1. Host not given. COLOMBIA. La Esperanza, Cundinamarca, 1936. Leg. R. Obregon (BPI!).

The ascospores are larger than those of *R. arcuata* and smaller than those of *R. gigantea*.

Rosellinia desmazieresii

1. Host not given. COSTA RICA. Columbiana Farm, Jan 1922. Leg. P. V. Siggers (M!).

The range of ascospore and stroma dimensions is at the lower limit of those of *R. arcuata.* The ascospore size matches *Rosellinia bothryna* Petch, but the stromata are larger than the only one left of the type material.

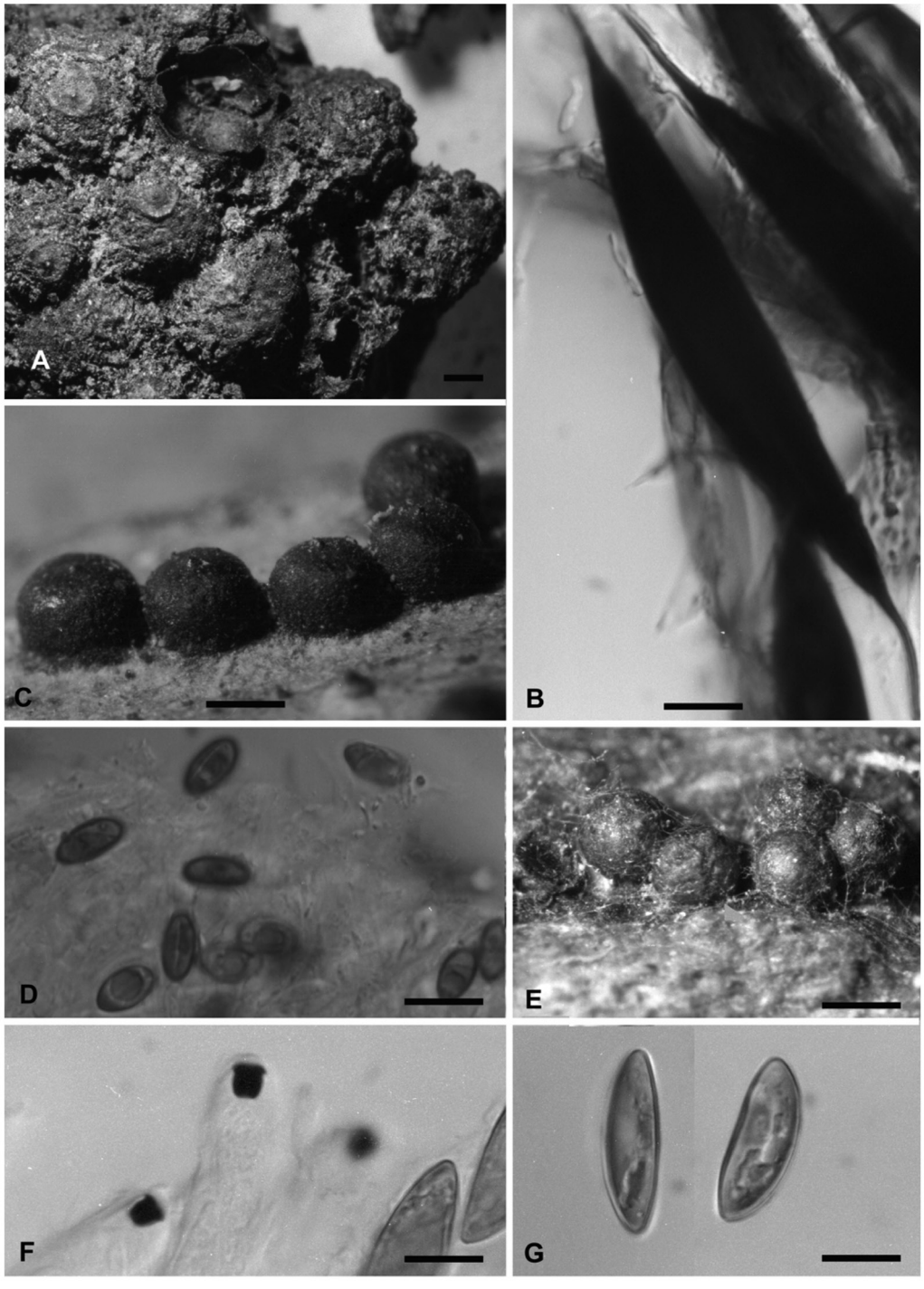

Fig. 1.- A, B. *Rosellinia bunodes* (= *Hypoxylon goliath*) from type, LPS 1137: A. stromata B. ascospores. C, D. *Rosellinia breensis* from type S Chaco-Andinis Fungi no 165: C. stromata D. ascospores. E-G. *Rosellinia hyalospora* from isotype PACA 19012: E. stromata F. ascal apical plug G. ascospores. Scales: A, C, E: 0.5 mm. B, D, F, G: 10 µm.

Rosellinia desmazieresii

Valid name: *Rosellinia desmazieresii* var. *acutispora* Theiss., *Ann. Mycol.* 6:350. 1908.

1. Host not given. BRAZIL. São Leopoldo, 1906. Leg. Theissen (PACA, 18992!). Lectotype LP. On label: 1907.

2. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo, 1907. Leg. Rick (PACA, 18987!).

3. In ligno frondoso. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. Rick (PACA, 19045!).

4. Herb Theissen, sub *Rosellinia desmazieresii* var. *acutispora* (FH!).

The specimen PACA 18992 was chosen as lectotype because the package contained a handwritten label "*Rosellinia desmazierii*, Sao Leopoldo 1906 Theissen". The specimen deposited in FH has no indications. Careful comparison with specimens of *R. arcuata* is needed to evaluate conspecificity with this species.

Rosellinia desmazieresii

1. On Caju roots. BRAZIL. Para, 27.11.1923. Leg. J. R. Weir (BPI, 66635!).

2. On charred log. HONDURAS. 14.08.1940. Leg. T. J. Grant #2076 (BPI!).

These specimens belong to the species group of *R. arcuata* and *R. botryna*.

Rosellinia desmazieresii

1. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo, 1929. Leg. Rick (PACA, 19057!).

2. In ligno frondoso. BRAZIL. Rio Grande do Sul, São Leopoldo, 1920. Leg. Rick (PACA, 19028!).

3. In ligno frondoso. BRAZIL. Rio Grande do Sul, São Leopoldo, 1929. Leg. Rick (PACA, 19021!).

4. In ligno frondoso. BRAZIL. Rio Grande do Sul, São Leopoldo, 1929. Leg. Rick (PACA, 19041!).

All packages have a handwritten label inside. These specimens are conspecific. They lack synnemata, have a persistent dark brown subiculum and ascospores 19–25 x 6.5–8 µm, without cellular appendages at maturity. Stromata are roughly 1 mm in diam. and 1 mm high.

Rosellinia dimidiata Starb., *Bih. K. Svensk. Vet.–Akad. Handl.* 25, Afd 3 no 1. p. 49. 1899.

1. Ad smilacem. BRAZIL. Rio Grande do Sul, Cascata de Hermenegilda prope Pelotas, 11.12.1892. Leg. Gust. A. N. Malme, Exped. I. Regnellian Fungi no. 105, type (S!, Ex Herb Brasil Regnell. Musei bot. Stockholm, #81).

Close to *R. smilacina*, but ascospores are larger.

Rosellinia emergens (Berk. & Br.) Sacc., var. *bambusae* Rick

1. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo, 1907. Leg. J. Rick (FH!).

A handwritten label is in the package. This is a *Rosellinia* lacking synnemata, with a persistent subiculum and light brown ascospores approx. 65 x 16 µm. Their shape, however is different from that of ascospores of *R. emergens s.str.* The correct identification is impossible because the material is scant, in poor conditions and only 2 ascospores were seen.

Rosellinia emergens (Berk. & Br.) Sacc., var. *bambusicola* Theiss., *Ann. Mycol.* 6: 351. 1908.

1. Bambusa. Herb Theissen (FH!).

Collection data are given in the protologue: Ad culmos subputridos*, Guadua*, Sao Leopoldo, Brasilia. Three handwritten label are in the package. The first indicates the name and the spore size as 55–80 x 18–20 µm. The second gives a description and states that ascospores can be up to 90 x 28 µm and the species is different

from *R. decipiens* Penz. & Sacc. The third one is a transcription in ink of the second label. No ascospores were seen, however, the stromata are similar to those of *R. emergens* var. *bambusae* Rick.

Rosellinia euterpes Rehm, *Hedwigia*. 44: 3. 1905.

1. On *Euterpe*. BRAZIL. Santa Catharina, Blumenau, May 1888 Leg. E. Ule, type (HBG!, Fungi Rehm #839).

2. On *Euterpe*. BRAZIL. Estado de Sta Catharina, Blumenau, June 1888. Leg. E. Ule, type (S!, E. Ule Herbarium brasiliense #839).

Although the specimens were collected in different months, the herbarium number is the same. The specimen deposited in HBG has ascospores, whereas the one in S is immature.

Rosellinia gigantea Ell. & Ev., *Bull. Univ. Jowa* 2: 401. 1893.

1. Host not given. NICARAGUA. Castillo, Winter 1893. Leg. C. L. Smith, no 34 and 34a, holotype (NY!, 2 packages).

2. On bark. NICARAGUA. Castillo Viejo, Feb-March 1893. Leg. G. L. Smith. Central American Fungi, no 10, isotype (NY!, 2 packages).

3. On dead wood. FRENCH GUIANA. Saul, route de Belizon, elev. 100-200 m, 53o12'W. 3o37' N, 31.10.1986. Leg. A. Rossman, C. Feuillet, L. Skog (ZT!, ex BPI AR 2925).

4. On roots of large trees. TRINIDAD. Port of Spain, St. Ann's Brook, Feb 1912. Leg. R. Thaxter, no. 5279 (CWU!, ex LE 128119, ex Farlow Herb. of Harward Univ. #935). This specimen has no ascospores left.

Rosellinia gigaspora Ell. & Ev., *Bull. Univ. Jowa* 2: 401. 1893.

1. On bamboo cane. NICARAGUA. Castillo Viejo, Febr-March 1893. Leg. C. L. Smith, isotype (NY!).

Ascospores are fusiform with broadly rounded ends, dark brown with a spiral germ slit making almost 3 turns, measuring 73–87 x 12-15.5 µm.

Rosellinia griseo-cincta Starb., *Bih. K. Svensk. Vet.–Akad. Handl.* 25, Afd 3 no 1. p. 49. t. 2. f. 81. 1899.

1. Host not given. BRAZIL. Rio Grande do Sul, Santo Angelo pr. Cachoeira, 16.01.1893. Leg. Gust. A. N. Malme, Exped. I Regnellian Fungi no 128, type or isotype (S!, Herb. Brasil. Regnell. Musei bot. Stockholm).

2. In lignis putridis. BRAZIL. Rio Grande do Sul, São Leopoldo, Oct 1903. Leg. Rick (HBG!, Rick, Fungi Austro-Americani no 11, ex Herb Magnus). Same exsiccatum in PC(!). Not clear whether or not these exsiccata are conspecific with the type of *R. griseo-cincta*.

Rosellinia hyalospora Theiss., *Ann. Mycol.* 6: 351. 1908. Figure 1 e-f.

1. In ligno frondoso. BRAZIL. Rio Grande do Sul, São Leopoldo, 1907. Leg. Rick, isotype (PACA, 19012!). Probably type (FH, 12, Herb Theissen).

2. Host not given. Brazil: Bahia, El Salvador, 24.09.1943. Leg. Rick (PACA, 20416!), sub *R. tricolor*.

The specimen in FH has narrower ascospores than those kept in PACA.

Rosellinia longispora Rick, *Brotéria* 1: 189. 1932 (Petrini, 2003).

1. In ligno frondoso, cf. *Acer biella*. BRAZIL. Rio Grande do Sul, São Leopoldo, 1929. Leg. Rick (PACA, 19025!). Handwritten description inside, with the remark "*R. longispora* n. sp. in ramos". This is probably the type and the FH specimens are very likely exsiccata.

2. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. Rick, Braun (PACA, 19004!). Date handwritten on the sheet: 1929, Braun.

3. Host not given. BRAZIL. São Leopoldo, 1929. Leg. Braun (PACA, 19058!). Probably identical with PACA 19004, same type of host.

4. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo, 1929. Leg. Rick (FH!, 2 specimens).

5. Host not given. ECUADOR. Manglares Chumté, 1996. Leg. T. Laessøe #12346 (!).

Rosellinia paraguayensis Starb.

1. Host not given. BRAZIL. Paraguari Sass Thomaso, 13.08.1893. Leg. Gust. A. N. Malme Regnellian Fungi #429, type (S!).

Rosellinia perusensis P. Henn., *Hedwigia* 48: 10. 1909.

1. Ad lignum. BRAZIL. São Paolo, Perús, Sept. 1905. Leg. Puttemans, type (S, 1392!).

Rosellinia pepo Pat., *Bull. Soc. Myc. Fr.* 24: 9. 1908 (Petrini, 2003).

1. Ecorce d'*Hymenaea courbarol* (bark of *Hymenaea courbarol*). GUADELOUPE. Les Hares, 14.04.1903. Leg. Duss no 778, type (FH!). Perhaps synonym of *R. gigantea*.

Rosellinia puiggarii Pat., *Journ. Bot.* 2: 217. 1888.

1. Host not given. BRAZIL Apiahy, Jan 1883 Leg. E. Fischer, type (FH!).

Rosellinia rickii Bres., *Ann. Myc.* 4: 310. 1906.

1. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. Rick (HBG!, Herb Rick 53). Handwritten label.

2. In arbore frondosa. BRAZIL. Rio Grande do Sul, São Leopoldo, 1905. Leg. Rick. (HBG!, Rick, fungi austro-americani 53). Printed label.

3. In arbore frondosa. BRAZIL. Rio Grande do Sul, São Leopoldo, 1905. Leg. Rick (HBG, Rick, fungi austro-americani 53). Printed label, immature specimen with no ascospores.

4. In arbore frondosa. BRAZIL. Rio Grande do Sul, São Leopoldo, 1905. Leg. Rick (S!, Rick, fungi austro-americani 53).

The same exsiccatum no. 53 in also located in PC. This is a species close to *R. picta* (Berk.) Cooke.

Rosellinia smilacina Speg.

1. On *Smilax campestris*. ARGENTINA. Tucuman, parque Rocca, 15.04.1906. Leg. C. Spegazzini (LPS!, 6569).

Two packages in the same envelope. The second package is dated 14.04.1906, the latter in good conditions.

Rosellinia sp.

Valid name: *Rosellinia arcuata* Petch.

1. On Manguiers. GUADELOUPE. St. Claude, Jardinde, Jan 1997. Leg. J. Vivant (ZT!).

Rosellinia sp.

Valid name: *Rosellinia asperata* Massee, *Bull. Misc. Inf. Kew*, p. 209. 1918.

1. Host not given. COSTA RICA. Guapiles, near Finca los Diamantes, elev. 1200 ft., 18.09.1964. Leg. G. C. Carroll (Herb. G. C. Carroll, 702!).

Rosellinia sp.

Valid name: *Rosellinia bunodes* (Berk. & Br.) Sacc.

1. On base of dead palm? GUYANA. Mt Wokomung, at base of exposed rock wall of main peak 05o05'N, 59o50'W, elev. 1540-1570 m., July 1989. Leg. G. J. Samuels, B. M. Boom, G. Bacchus (NY, 6585!).

Rosellinia spp.

1. On a corticated branch. FRENCH WEST INDIES. Aug-Sept 2004. Leg. Christian Lechat (Herb. Fournier, CL2234!).

2. On rotten decorticated wood. VENEZUELA. Territorio Federal Amazonas, Cerro de la Neblina, 5.1 km NE Pico Phelps (Neblina) alt 1730-1850 m., 03.02.1985. Leg. A. Rossman (BPI, AR 1940!).

3. On dead branch. VENEZUELA. Territorio Federal Amazonas, Cerro de la Neblina, 5.1 km NE Pico Phelps (Neblina), alt. 1730-1850 m.a.s., 03.02.1985. Leg. A. Rossman (BPI, AR 2045!).

4. On dead wood. VENEZUELA. Territorio Federal Amazonas, Cerro de la Neblina, 5.1 km NE Pico Phelps (Neblina), alt. 1730-1850 m.a.s., 11.02.1985. Leg. A. Rossman (BPI, AR 2017!).

5. On arbre mort (dead tree), on stroma of *Biscogniauxia*. NOUVELLE CALÉDONIE. La Crowen, 02.06.1963. Leg. J. Mouchacca (PC, NC 63093!).

6. On *Phenakospermum guinense*. VENEZUELA. Amazonas, Dpto. Río Negro, along Río Mawarinuma, outside Cañon Grande, vicinity of Neblina base camp, Apr-May 1984. Leg. G. J. Samuels (NY, 1471!).

7. On *Phenakospermum guianense*. VENEZUELA. Amazonas, Dpto. Río Negro, Cerro de la Neblina, Along Mawarinuma, Puerto Chimo, moist to dry upland forest, 24-25.09.1984. Leg. G. J. Samuels (NY!).

8. On dead culm of bamboo. GUYANA. Mt. Wokomung, at base of exposed rockwall of main peak, 05o05'N, 59o50'W, elev. 1540-1570 m.a.s.l., July 1989. Leg. G. J. Samuels, B. M. Boom, G. Bacchus (NY!, Cryptogams of Guyana, #6556).

9. On very rotten wood. FRENCH GUIANA. Upper Marouini River, 2 kn North of Ouman fou-Langa Soula, 150 m.a.s.l., 23-24.08.1987. Leg. G. J. Samuels, J. J. de Granville, L. Allorge, W. Hahn, M. Hoff, A. Weitzman, (NY! #5986).

Rosellinia stenasca Rick, *Brotéria* 1: 190. 1932 (Petrini, 2003).

1. Host not given. BRAZIL. Sao Leopoldo, Rio grande do Sul, 1907. Rick expeditions in Brazil, authentic (FH!).

2. In ligno frondoso. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. Rick (PACA, 19036!).

Rosellinia subiculata (Schw. : Fr.) Sacc., *Syll. F.* 1: 255. 1882.

1. Host not given. PANAMA. Canal Zone, Barro Colorado Island, 18.07.1945. Leg. G. W. Martin no 6091 (BPI!, Fungi of Panama).

This material resembles *R. subiculata*, but has a cream to light brown subiculum instead of sulphur yellow.

Rosellinia subiculata Schw.

1. On much rotten decorticated wood. FRENCH WEST INDIES. Aug-Sept. 2004. Leg. C. Lechat (LIP!, 2236).

This is either *R. eucalypticola* P. Henn. & E. Nym. or *R. perusensis*.

Rosellinia sublimbata

Valid name: *Rosellinia smilacina*.

1. On Bambus. BRAZIL. São Paolo, Oriente, 06.05.1947. Leg. H. Zogg, #864 (ZT!).

2. On Bambus. BRAZIL. São Paolo, Oriente, 29.04.1947. Leg. H. Zogg, #663 (ZT!).

3. On Bambus. BRAZIL. São Paolo, Oriente, 06.05.1947. Leg. H. Zogg, #865 (ZT!).

Rosellinia subverruculosa Rehm, *Ann. Mycol.* 5:526. 1907. Ascomycetes novi 5: 516-546. 1907.

1. In Arundinaria. BRAZIL. Rio Grande do Sul, São Leopoldo, 1905. Leg. Rick (PACA,

18998!). On handwritten label in addition to collecting data: 18997, cf. *Clypeosphaeria dilegnosperma*.

2. In culmis Arundinariae. BRAZIL. Rio Grande do Sul, São Leopoldo, 1929. Leg. Rick (PACA!).

Probably *R. smilacina*.

(b) Specimens not belonging to Rosellinia

Rosellinia baccharidis Starb., *Bih. K. Svensk. Vet.–Akad. Handl.* 25, Afd 3 no 1. p. 51. t. 2 f. 77–79. 1899

1. Ad corticem Baccharidis draculifolios. BRAZIL. Rio Grande do Sul, Santo Angelo pr. Cachoeira, Serro Pellados. Exped. I. Regnellian. Fungi no. 117, 13.01.1893. Leg. Gust. A. N. Malme, Herb. Brasil Regnell. Musei bot. Stockholm, type or isotype (S!).

According to stromatal characters, this is no *Rosellinia.*

Rosellinia bakeri Ellis., *Torreya* 5: 87. 1905.

1. On *Urera*. NICARAGUA. Chinandega, Dec 1903. Leg. C. F. Baker, #3990 (NY!). Stromata superficial, but all squashed or cut.

The species was renamed as *Hypoxylon investiens* f. *bakeri* (Ellis) J.H. Miller ex Dennis (Dennis, 1960). Ju & Rogers (1996) [Ju, 1996 #3352] commented that this is either a *Rosellinia* or a uniperitheciate member of *Nemania*.

Rosellinia biguttulata Starb., *Arkiv för Botan.* 2: 14. 1904.

1. Host not given. BRAZIL. Rio Grande do Sul, Ijuhy, 29.09.1893. Leg. Gust. A. N. Malme (S!).

No specimen number given; handwritten label with comments, spore drawings on metric paper. This is very likely the original specimen. In the literature (Starbäck, 1904) the specimen number (307) and the date (29.03.1893) are mentioned. Probably *Annulohypoxylon*, close to *Annulohypoxylon bovei* var. *microspora*.

Rosellinia bresadolae var. *minor* Theissen, *Ann. Mycol.* 6: 351. 1908.

Valid name: *Stilbohypoxylon theissenii* L. E. Petrini, *Sydowia* 56: 68. 2004.

1. In ligno frondoso. BRAZIL. São Leopoldo, 1907. Leg. Theissen (PACA, 19060!). Selected as lectotype, because in better conditions than other collections (Petrini, 2004).

2. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. Rick (PACA, 19007!).

3. In ligno frondoso. BRAZIL. São Leopoldo, 1907. Leg. Theissen (PACA, 19009!).

(FH 4!, herb. Theissen).

Rosellinia bresadolae Theissen, *Ann. Mycol.* 6: 351. 1908.

Valid name: *Stilbohypoxylon immundum* (Berk. & Cooke) L. E. Petrini, *Sydowia* 56: 61. 2004.

1. (FH 3!), as *R. bresadolae*, authentic. This specimen is *St. immundum* (Petrini, 2004).

2. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo, 1939. Leg. Rick (PACA, 19013!). This specimen is *Stilbohypoxylon quisquiliarum* (Mont.) J. D. Rogers & Y.-M. Ju (Petrini, 2004).

Rosellinia cinereo-violascens Starb., *Arkiv för Bot.* 5: 17. 1905.

1. On unbarked wood. Leg. Rob. E. Fries, Exped. Suec in reg. Chaco-Andinis Fungi #327, type (S!, Herb. Brasil Regnell. Musei bot. Stockholm).

Probably a syntype, because 2 specimens (nos. 323, 327) are mentioned in the protologue. Stromata characters and ascospore dimensions resemble those of *Hypoxylon lenormandii*.

Rosellinia coffeicola Pat., *Bull. Soc. Myc. France* 18: 179. 1902.

Valid name: *Stilbohypoxylon coffeicola* (Pat.) L. E. Petrini, *Sydowia* 56: 53. 2004 (Petrini, 2004).

1. On *Coffea arabica*. GUADALOUPE. Cam-Jacob. Leg. Duss, type (FH, 503!).

Rosellinia cuprica Rick., *Brotéria* 5: 46. 1906.

Valid name: *Hypoxylon lenormandii* Berk. & M. A. Curtis, *J. Linn. Soc., Bot.* 10 (no. 46): 385 (1868) [1869].

1. In Ingà. BRAZIL. Rio Grande do Sul, São Leopoldo, 1905. Leg. Rick, type (PACA, 19010!).

The material is in poor conditions. The only 2 stromata left are reminiscent of *Hypoxylon lenormandii*.

Rosellinia desmazieresii

Valid name: *Hypoxylon lenormandii* Berk. & M. A. Curtis.

1. Host not given. BRAZIL Rio Grande do Sul, São Leopoldo, 1929. Leg. Rick (PACA, 19726!).

Rosellinia extremorum Starb., *Bih. K. Svensk. Vet.–Akad. Handl.* 25, Afd 3 no 1. p. 50. t. 2. f. 80. 1899.

1. Serro pellado in cortice crasso. BRAZIL. Rio Grande do Sul, Santo Angelo pr. Cachoeira, 18.01.1893. Leg. Gust. A. N. Malme, Exped. I. Regnellian. Fungi no. 145, isotype (S!, Herb. Brasil Regnell. Musei bot. Stockholm).

This is an *Annulohypoxylon*.

Rosellinia hypoxyloides (Henn.) Sacc., *Syll. F.* 17: 599. 1905.

1. In ligno frondoso. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. Braun (PACA, 19034!).

The taxonomic position of this fungus is not clear – it is close to *R. picta*, but the ascospores are smaller.

Rosellinia immunda (Berk. & Cooke) Sacc., *Syll. F.* 1: 256. 1882.

Valid name: *Stilbohypoxylon immundum* (Berk. & Cooke) L. E. Petrini, *Sydowia* 56: 61. 2004 (Petrini, 2004).

1. Host not given. CUBA. Leg. C. Wright,type (K, #538!).

2. C. Wright (PC Fungi cubenses Wrightiani #846!).

Rosellinia madeirensis P. Henn., *Hedwigia* 34: 242. 1904.

Valid name: *Astrocystis madeirenesis* (P. Henn.) Læssøe & Spooner, *Kew Bulletin* 49: 20. 1994.

1. Auf Zweigrinde (on the bark of a branch, probably bamboo). BRAZIL. Estado de Amazonas, Cachoeiras des Marmellos, March 1902. isotype (HBG!, Ex herb Ule. Fungi E. Ule Herbarium Brasiliense #2868). Material in good conditions.

2. Auf der Rinde eines Zweiges (probably bamboo). BRAZIL. Estado de Amazonas, Cachoeiras des Marmellos, March 1902. isotype (K!, Ex herb Ule. Fungi E. Ule Herbarium Brasiliense #868).

Rosellinia marcescens (Berk. & Curtis) Sacc. *Syll. F.* 1: 264. 1882.

1. On rotten wood. Leg. Wright #339, holotype (K!).

According to John Krug's annotation (1975), this is an *Amphisphaerella*. Specimen without ascospores.

Rosellinia melioloides (Berk. & Curtis) Sacc. *Syll. F.*: 1: 276. 1882.

1. On leaves. CUBA. Leg. C. Wright, #849, type (K!). No spores, material in poor conditions and no identification possible.

Not a *Rosellinia* according to stromatal characters, no ascospores left.

Rosellinia moelleriana P. Henn., *Hedwigia* 41: 13. 1902.

Valid name: *Hypoxylon lenormandii* Berk. & Curt.

1. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo Leg. S. J. Theissen (W!, HBG!, Rehm: Ascomycetes #1885).

2. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. S. J. Theissen (PACA, 21089!, 22022!, Rehm Ascomycetes #1885).

3. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo, 1910. Leg. Rick (HBG!, Theissen, Decades fungorum brasiliensium, #127.).

Rosellinia moelleriana P. Henn., *Hedwigia* 41: 13. 1902.

Valid name: *Annulohypoxylon bovei* Speg. var. *microspora* (J. H. Miller) Y.M. Ju, J.D. Rogers & H.M. Hsieh.

1. In ligno. BRAZIL. Rio Grande do Sul, São Leopoldo, 1908. Leg. F. Theissen (HBG!, Theissen, Decades fungorum brasiliensium, #211).

2. In ligno frondoso. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. Rick (PACA, 19039!). Similar specimen in S.

3. Host not given. BRAZIL. S. Catharina, Blumenau, 06.04.1892. Leg. A. Möller, type (S!).

Rosellinia rehmiana P. Henn., *Hedwigia* 36: 229. 1897.

1. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo, 1905. Leg. Theissen (PACA, 19005!). Handwritten label: "*Rosellinia rehmiana* Henn. Sao Leopoldo 1905 Theissen. ostiolo rostrato".

2. In ligno frondoso. BRAZIL. Rio Grande do Sul, São Leopoldo, 1905. Leg. Theissen (PACA, 19023!). Handwritten label: "*Rosellinia rehmiana* Henn. In ligno frondoso, Sao Leopoldo 1905 Theissen. ostiolo longo rostrato".

No ascospores are left. PACA 19023 belongs probably to a species in the Subgenus *Corrugata*. The material does not match the description in the literature and on the label. The type (St. Cathar., pr. Blumenau, Brasilia, Moeller #628) was not located.

Rosellinia sepulta (Berk. & Curtis) Sacc., *Syll. F.* 1: 256. 1882.

Valid name: *Lasiosphaeria sepulta* (Berk. & Curtis) Speg.

1. On palm. CUBA. Leg. C. Wright, no. 845 (K!, PC!). According to the annotation by S. Huhndorf on the K specimen this is not a *Lasiosphaeria*. We have observed a black hyphal tomentum but no ascospores.

Rosellinia sp.

Valid name: *Astrocystis mirabilis* Berk. & Br., *J. Linn. Soc.* 14: 123. 1873 .

1. On Bambusa. GUADELOUPE. Les Saintes, Oct.1993. Leg. J. Vivant (FC!, ZT!, GUAD 06).

2. Host not given. GUADELOUPE. Basse Terre, Bains Jaunes, 03.11.1993. Leg. J. Vivant (FC!, ZT!, GUAD 656).

Rosellinia sp.

Valid name: *Stilbohypoxylon quisquiliarum* (Mont.) J. D. Rogers & Y.-M. Ju (Petrini, 2004).

1. Host not given. COSTA RICA. San Pedro, University of Costa Rica Campus. Leg. G. C. Carroll ≠ 697 (Herb. G. C. Carroll!).

Rosellinia subaenea (Berk. & Curtis) Sacc., *Syll. F.* 1: 256. 1882.

Valid name: *Hypoxylon lenormandii* Berk. &. Curt.

Synonym: *Rosellinia bakeriana* Sacc.

1. On bark. CUBA. Leg. C. Wright, no 485 (K!, 79242). Identification annotated by Yu-Min Ju.

Rosellinia tricolor Theissen, *Ann. Mycol.* 6: 351. 1908.

1. Host not given. BRAZIL. Rio Grande do Sul, São Leopoldo, 1907, Rick expeditions in Brazil, isotype (FH!).

2. Isotype (FH!, herb Theissen).

Both packages contain a handwritten label (*Rosellinia tricolor* Theiss. Sao Leop. 1907). Spores 30–40 x 12–15 µm. The material is identical in both packages. Spores measure 30–35 x 11–14 µm with 10 µm long germ slits. Stromata are uni-to pluriperitheciate and have a disk-like top. This reminds of an *Annulohypoxylon*.

Rosellinia variospora Starb., *Arkiv för Bot.* 5: 18. 1905. f. 12.

1. In trunco sicco Salicis humboldtianae. BOLIVIA. Chaco, Fouin, Crevaux ad Rio Pilcomayo, 19.04.1902. Leg. Rob. E. Fries, Exped. Suec in reg. Chaco-Andinis Fungi no. 435 (S!, Herb. Brasil Regnell. Musei bot. Stockholm).

The only residual stroma is emergent and measures less than 250 µm in diam. As no ascospores are left, its taxonomic position cannot be determined.

Rosellinia variospora var. *foliicola* Theiss., *Beih. Bot. Centralbl.* 27, Abt. 2: 394. 1910.

1. In foliis Myrtaceae. BRAZIL. Rio Grande do Sul, São Leopoldo. Leg. Theissen (PACA, 21875!). Handwritten on envelope "703 (*Rosellinia* (*Amphisphaerella*) *variospora* Starb. [var. *foliicola* Theissen]. Asci 65-75 x 7 µm J+, perid. firmo 30-55 µm, sporidia continua, brunnea, elliptica, unilateraliter vel irregulariter, gibbosa v. globosa-elliptica, 10-11x6.5 µm vel 8-9 µm diam. São Leopoldo leg. Theissen.

This seems to be the type material of the var. *foliicola*. The stroma is reduced to a clypeus and the lower part of the perithecia is embedded in the host.

Stilbohypoxylon moelleri P. Henn., *Hedwigia* 41: 16. 1902.

Valid name: *Stilbohypoxylon elaeicola* (P. Henn.) L. E. Petrini, *Sydowia* 56: 55. 2004. (Petrini, 2004).

1. On *Euterpe* sp. BRITISH WEST INDIES. Grenada, Grand Etang, 1913. Leg. R. Thaxter (W!, 633 Rel. Farl.). 2 specimens: 1. printed label as reliquiae Farlowianae 2. F. Petrak Herbar, with inside handwritten label.

2. On *Prestoea*. PUERTO RICO. Mt. Britten, El Yunque peak, 980 m. a. s. l., 18.06.1998. Leg. W. Gams (ZT!).

3. On *Prestoea*. PUERTO RICO. Caribbean National Forest, Calmitillo, Big tree Trail & Palo Colorado Trail, 550 m. a. s. l., 18.06.1998. Leg. W. Gams (ZT!).

Stilbohypoxylon samuelsii J. D. Rogers & Y.-M. Ju

Valid name: *Stilbohypoxylon immundum* (Berk. & Cke.) Sacc. (Petrini, 2004).

1. On Wood. FRENCH GUIANA. Upper Marouini River, ca. 3 hr. walk W of river toward Roche Koutou, 1 km E of Roche Koutou, elev. 150-350 m., 15–18.08.1987. Leg. G. J. Samuels & al., #5797, isotype (WSP!, 69724).

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