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MYCOTAXON

Vol. XV, pp. 95-102

July-September 1982

NEW TREMELLALES FROM WEST BRAZILIAN AMAZON

B. Lowy

Botany Department, Louisiana State University
Baton Rouge, LA 70803

ABSTRACT

Two new species, Tremella riobrancensis and Ductifera elastica are described from Acre, Brazil, and 10 species previously unreported from this region are also listed.

The tremellaceous fungi of the Brazilian Amazon river basin which encompasses an area of some two million square miles in a varied and complex aqueous and terrestrial habitat are virtually unknown. This paper describes two new species, and others more pedestrian, recently collected in a small part of this region mostly confined to the floodplain sector (varzea) in the territory of Acre bordering on Peru and Bolivia at approximately lat. 10° S, long. 68° W. It is urgent that floristic and other biological studies be vigorously pursued in this area now, since extensive forests are presently undergoing devastating man-made ecological changes that are likely to be irreversible, and which are resulting in the destruction and even extinction not only of a unique flora and fauna, but of indigenous human populations as well.

Tremella riobrancensis Lowy, sp. nov.

FIGS. 1-2.

Fructificatio in humido duro-gelatinosa, effusa ± 650 µm crassa, fuscobrunnea, parasitica; in sicco cornea, ferrugineo-brunnea; hymenio ± 75 µm lata; probasidia subglobosa, 14-18 (-20) µm diam; metabasidia cruciatim septata, subovoidea (20-) 23-28 (-32) X 15-18 (-20) µm diam; hyphae nodosae; sterigmata anguste-cylindraceae, basidiosporae subglobosa, 10.0-12.0 X 8.5-11.0 µm, apiculus pro-

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Tremella riobrancensis Lowy, sp. nov.

FIGS. 1-2.

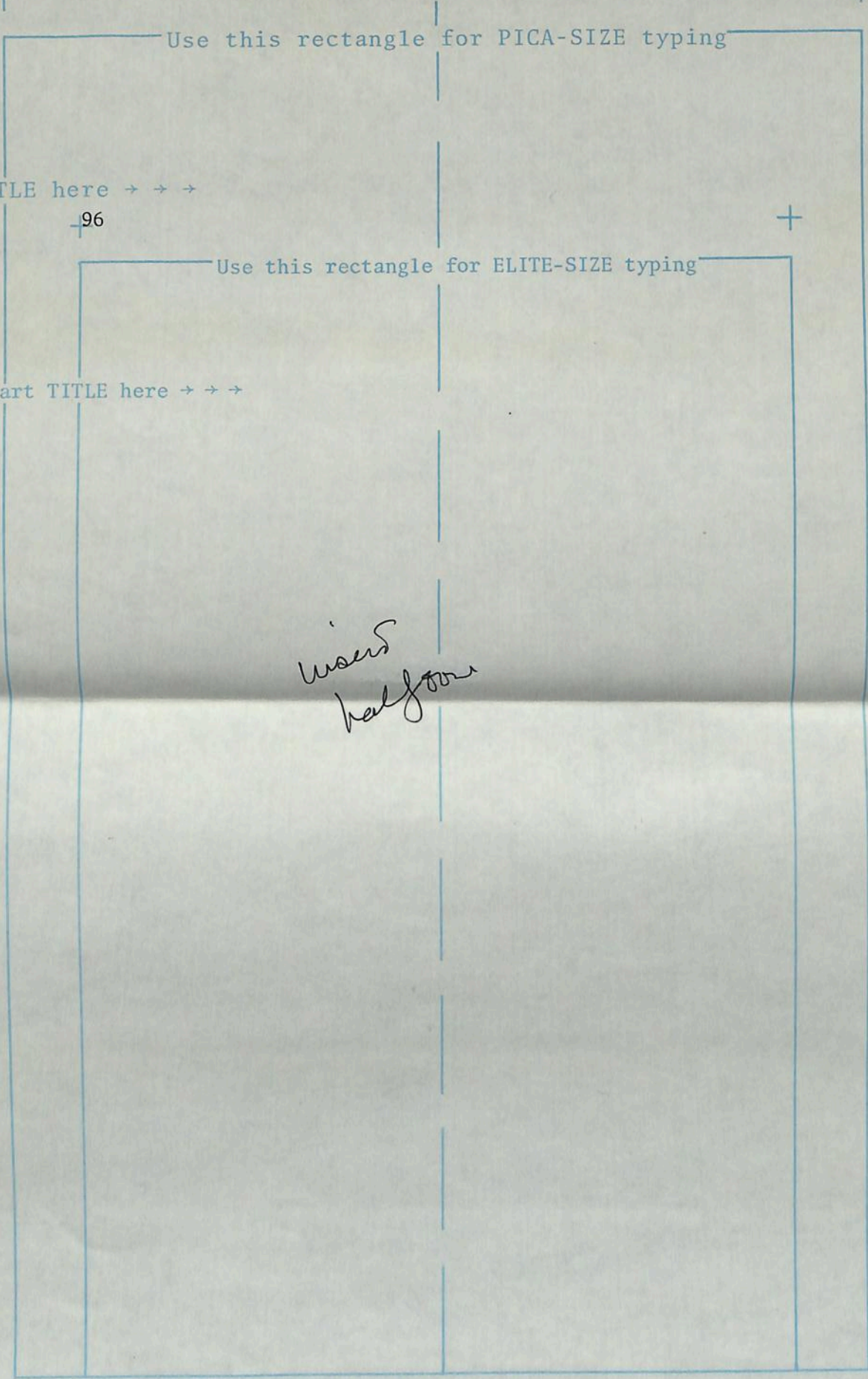
Fructificatio in humido duro-gelatinosa, effusa ± 650 µm crassa, fuscobrunnea, parasitica; in sicco cornea, ferrugineo-brunnea; hymenio ± 75 µm lata; probasidia subglobosa, 14-18 (-20) µm diam; metabasidia cruciatim septata, subovoidea (20-) 23-28 (-32) X 15-18 (-20) µm diam; hyphae nodosae; sterigmata anguste-cylindratae, basidiosporae subglobosa, 10.0-12.0 X 8.5-11.0 µm, apiculus pro-

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minens, per repetitionem germinantes.

Fructification tough gelatinous when fresh, effused, ± 650 µm thick, dark brown, parasitizing perithecia of a pyrenomycete; drying to a rusty brown crust; hymenium ± 75 µm wide with basidia arising from clamped hyphae; probasidia subglobose 14-18 (-20) µm diam; metabasidia cruciate septate, subovoid, (20-) 23-28 (-32) X 15-18 (-20) µm diam; sterigmata narrow-cylindrical; basidiospores subglobose 10.0-12.0 X 8.5-11.0 µm with prominent apiculus, germinating by repetition.

HOLOTYPE: Brazil. Km 18 SE of Rio Branco on road to Porto Velho, Acre. On decorticated wood, 6-X-1980. Lowy BR 485 (Holotype LSUM).

Of neotropical species of Tremella that I have examined (Lowy, 1971), only T. tubercularia Berk. has been reported as parasitizing a pyrenomycete, and this is known from a single collection in Colombia. T. tubercularia and the new species differ in their major macroscopic and microscopic characteristics. T. tubercularia is hyaline to grayish when soaked, with metabasidia measuring 14-18.5 X 11.0-14.5 µm and basidiospores 8.0-9.5 X 7.0-8.5 µm.

Ductifera elastica Lowy, sp. nov.

FIG. 3.

Fructificatio in humido effusa, ± 200 µm crassa, elastico-gelatinosa, fusco-brunnea; in sicco tenue-membranosa; hyphae enodosae; gloeocystidia numerosa, serpentina, in hymenio et subhymenio spissa, (60-) 110-125 (-150) X 5.0-7 (-8.5) µm, cum granulae brunneolae et crassae; probasidia subglobosa 9.5-11.5 X 10.5-12.0 µm; metabasidia cruciatim

FIGS. 1-2. Tremella riobrancensis. 1. Transverse free hand section through basidiocarp showing aggregation of basidia in hymenium. X 100. 2. Crush mount of hymenium. A-C. Unicellular probasidia. D-E. Septate metabasidia. F. Three mature basidiospores, and a smaller secondary spore. X 1000. B. Lowy BR 485 (Holotype LSUM).

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FIG. 3. Ductifera elastica. A. Gloeocystidium. B. Three basidiospores, one germinating by repetition. C. Cruciate septate basidium. D. Two maturing metabasidia with sterigmata. B. Lowy BR 646 (Holotype LSUM).

septata, 13.0-15.0 X 8.5-11.0 μm ; basidiosporae ovoidae (7.5-) 8.5-9.5 X 5.0-6.0 μm , per repetitionem germinantes.

Fructification effused, \pm 200 μm thick when fresh, extremely tough rubbery gelatinous, dark brownish, drying to a concolorous film; hyphae obscure, no clamp connections observed; gloeocystidia (beta type) numerous, serpentine, crowded in hymenium and subhymenium, (60-) 110-125 (-150) X 5.0-7 (-8.5) μm , with coarse, brownish granules; probasidia subglobose, 9.5-11.5 X 10.5-12.0 μm ; metabasidia cruciate septate, 13.0-15.0 X 8.5-11.0 μm ; basidiospores ovoid (7.5) 8.5-9.5 X 5.0-6.0 μm ; germinating by repetition.

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HOLOTYPE: Brazil. Km 20 AC-010 N of Rio Branco on road to Porto Acre, Acre. On rotten wood, 11-X-1980. B. Lowy, et al., Lowy BR 646 (Holotype LSUM).

Start TITLE here of the six species of Ductifera reported from the neotropics only D. argentinensis, Lowy (1962), has ovoid basidiospores 10.0-13.2 X 6.5-7.3 μ m, but its thick, gelatinous basidiocarp (up to 4 mm) and conspicuous carotinoid pigmentation easily separates it from the new species.

The collections cited below extend the range in which the species noted have been found.

Auriculariaceae

Auricularia delicata (Fr.) Henn.

Reserva Florestal Ducke, km 26 N Manaus, Amazonas. Lowy, B., et al.* BR 156, 13 Sept. 1980; km 500 S of Manaus on Porto Velho road, Amazonas. Lowy, B., et al. BR 220, 17 Sept. 1980; km 25 from Rio Branco to Porto Acre, Acre. Lowy, B., et al. BR 269, 27 Sept. 1980; km 18 S of Rio Branco along highway AC-040, Acre. Lowy, B., et al. BR 359, 28 Sept. 1980; km 33 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 367, 29 Sept. 1980; km 46 highway AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 397, 1 Oct. 1980; between km 44, km 52, BR 317 SW of Rio Branco on road to Xapuri, Acre. Lowy, B., et al. BR 451, 2 Oct. 1980; forest on terra firme near Sena Madureira, Acre, Brasil. Nelson, B. BN 533, 554, 574, 579, 2-5 Oct. 1980; km 18 SE of Rio Branco on road to Porto Velho, Acre. Lowy, B., et al. BR 502, 6 Oct. 1980; between km 40 and km 46 AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 542, 8 Oct. 1980; km 49 SE of Rio Branco on road to Porto Velho, Acre. Lowy, B., et al. BR 575, 9 Oct. 1980; km 20 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 620, 11 Oct. 1980; km 33 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 652, 12 Oct. 1980;

* To conserve space, "et al." refers to one or more of the following, who at various times accompanied the author in the field: S.R. Lowrie, B. Nelson, C.A. Cid Ferreira, M. Morreira, V.M. de Souza and A. Rosas, Jr.

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km 39 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 705, 13 Oct. 1980; km 35 AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 748, 17 Oct. 1980; km 16 AC-040 SW between Rio Branco and Xapuri, Acre. Lowy, B., et al. BR 786, 20 Oct. 1980; km 11 AC-040 SW between Rio Branco and Quinari, Acre. Lowy, B., et al. BR 894, 24 Oct. 1980; km 8 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1039, 1 Nov. 1980; km 13 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1063, 2 Nov. 1980; km 16 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1089, 3 Nov. 1980; km 22 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1112, 4 Nov. 1980.

Auricularia fuscosuccinea (Mont.) Farl.

Parque zoobotanico, Universidad Nacional de Acre, Rio Branco, Acre. Lowy, B., et al. BR 238, 24 Sept. 1980; km 33 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 367a, 29 Sept. 1980; km 46 highway AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 396, 1 Oct. 1980; between km 45 and km 65 BR 317 SW of Rio Branco on road to Xapuri, Acre. Lowy, B., et al. BR 589, 10 Oct. 1980; km 33 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 653, 12 Oct. 1980; km 39 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 704, 13 Oct. 1980; km 35 AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 747, 17 Oct. 1980; km 23 between Rio Branco and Quixada, Acre. Lowy, B., et al. BR 772a, 19 Oct. 1980; km 5 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 835, 21 Oct. 1980; km 29 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 875, 23 Oct. 1980; km 42 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 892, 23 Oct. 1980; km 29 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 902, 24 Oct. 1980; km 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1068, 2 Nov. 1980.

Auricularia mesenterica Pers.

Km 46 highway AC-040 SE of Rio Branco on road to

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Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 384, 1 Oct. 1980; km 39 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 710, 13 Oct. 1980.

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Tremellaceae

Ductifera pululahuana (Pat.) Donk

Km 175 S of Manaus on Porto Velho Road, Amazonas. Lowy, B., et al. BR 180, 16 Sept. 1980.

Exidia nucleata (Schw.) Burt

KM 25 from Rio Branco to Porto Acre, Acre. Lowy, B., BR 280, 27 Sept. 1980; km 18 S of Rio Branco along highway AC-040, Acre. Lowy, B., et al. BR 356, 28 Sept. 1980.

Stypella minor Möller

KM 25 on road from Rio Branco to Porto Acre, Acre. Lowy, B., et al. BR 281, 27 Sept. 1980.

Tremella fuciformis Berk.

KM 16 AC-040 SW between Rio Branco and Xapuri, Acre. Lowy, B., et al. BR 783a, 20 Oct. 1980; km 22 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1115, 4 Nov. 1980.

Dacrymycetaceae

Calocera cornea (Batsch ex Fr.) Fr.

KM 25 from Rio Branco to Porto Acre, Acre. Lowy, B., et al. BR 275, 27 Sept. 1980; km 16 AC-040 SW between Rio Branco and Xapuri, Acre. Lowy, B., et al. BR 827, 20 Oct. 1980; km 8 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1041, 1 Nov. 1980; km 22 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1100, 4 Nov. 1980.

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Dacryopinax elegans (Berk. & Curt.) Martin

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Dacryopinax spathularia (Schw.) Martin

Km 42 BR 317 SW of Rio Branco on road to Xapuri, Acre. Lowy, B., et al. BR 473, 4 Oct. 1980; km 20 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 610, 11 Oct. 1980; km 35 AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 741, 17 Oct. 1980; km 29 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 912, 24 Oct. 1980.

ACKNOWLEDGMENTS

I wish to thank The New York Botanical Garden, The National Science Foundation, the Instituto Nacional de Pesquisas da Amazonia in Manaus, Amazonas, Brasil, and Louisiana State University, Baton Rouge, LA, under whose joint sponsorship the field work was undertaken as part of the Projecto Flora Amazonica.

LITERATURE CITED

- Lowy, B. 1962. Contribución al estudio de los Tremellales de La Argentina. *Lilloa* 31: 213-228.
Lowy, B. 1971. Tremellales. *Flora Neotropica* 6: 1-153. Hafner Publ. Co., Inc., New York.

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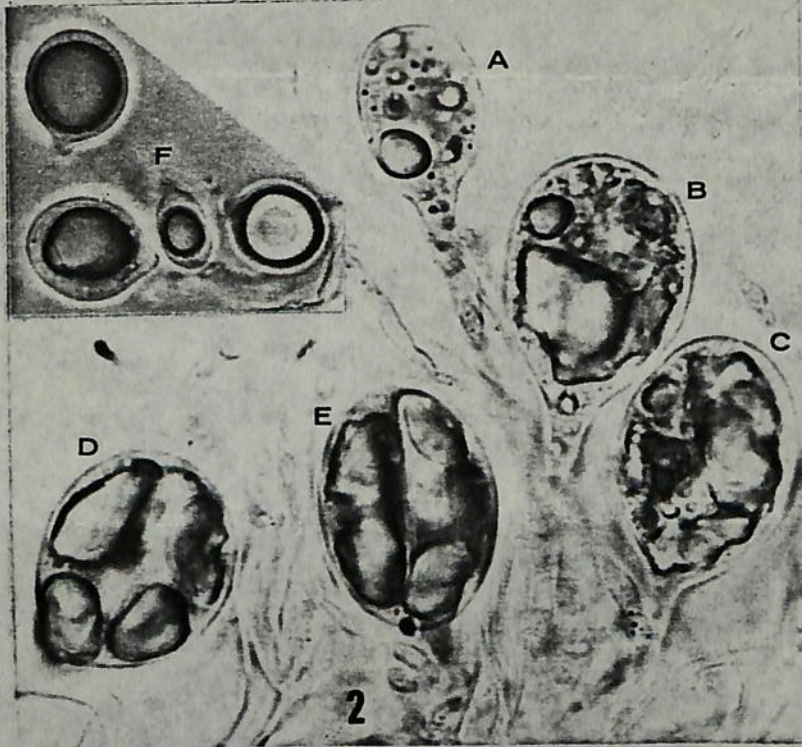
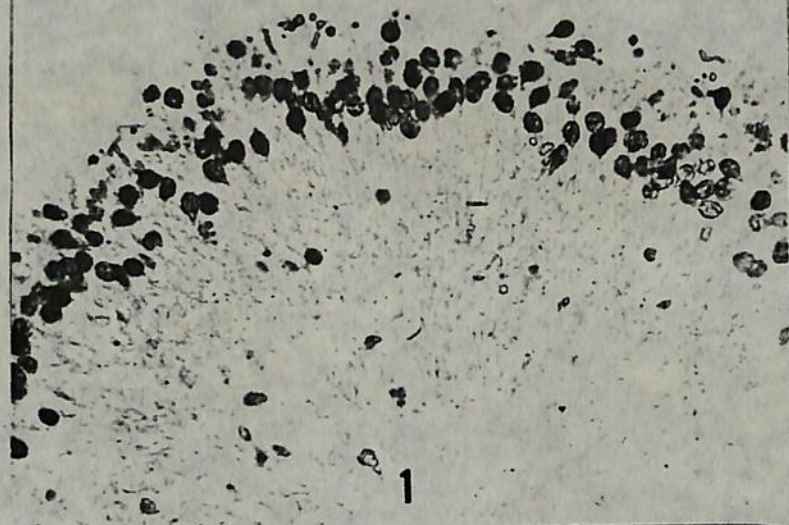
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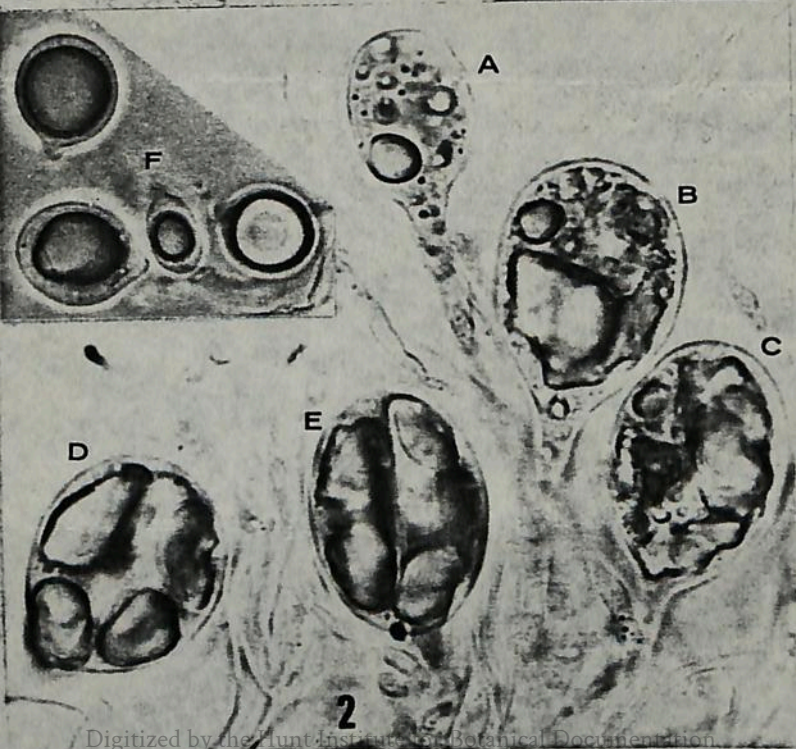
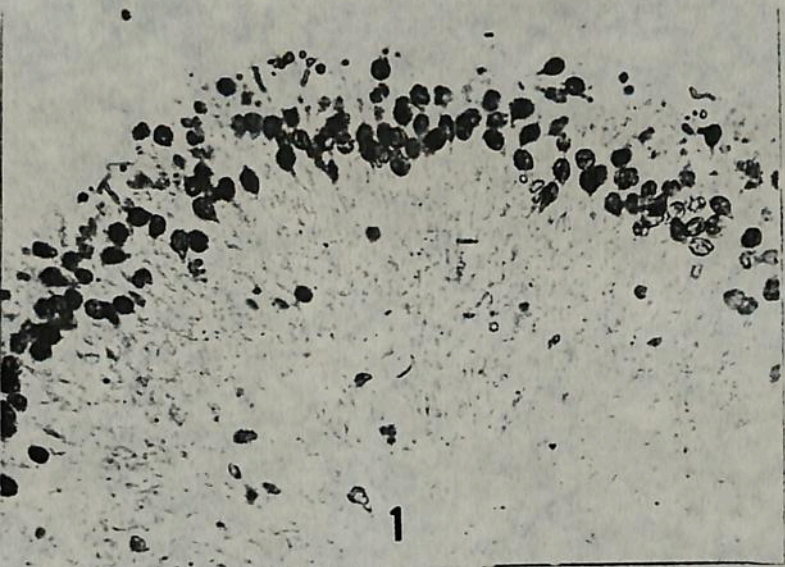
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NEW TREMELLALES FROM WEST BRAZILIAN AMAZON

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ABSTRACT

Two new species, Tremella riobrancensis and Ductifera elastica are described from Acre, Brazil, and 10 species previously unreported from this region are also listed.

The tremellaceous fungi of the Brazilian Amazon river basin which encompasses an area of some two million square miles in a varied and complex aqueous and terrestrial habitat are virtually unknown. This paper describes two new species, and others more pedestrian, recently collected in a small part of this region mostly confined to the floodplain sector (varzea) in the territory of Acre bordering on Peru and Bolivia at approximately lat. 10° S, long. 68° W. It is urgent that floristic and other biological studies be vigorously pursued in this area now, since extensive forests are presently undergoing devastating man-made ecological changes that are likely to be irreversible, and which are resulting in the destruction and even extinction not only of a unique flora and fauna, but of indigenous human populations as well.

Tremella riobrancensis Lowy, sp. nov.

FIGS. 1-2.

Fructificatio in humido duro-gelatinosa, effusa ± 650 µm crassa, fuscobrunnea, parasitica; in sicco cornea, ferrugineo-brunnea; hymenio ± 75 µm lata; probasidia subglobosa, 14-18 (-20) µm diam; metabasidia cruciatim septata, subovoidea (20-) 23-28 (-32) X 15-18 (-20) µm diam; hyphae nodosae; sterigmata anguste-cylindraceae, basidiosporae subglobosa, 10.0-12.0 X 8.5-11.0 µm, apiculus pro-

Figs. 1-2

minens, per repetitionem germinantes.

Fructification tough gelatinous when fresh, effused, \pm 650 μm thick, dark brown, parasitizing perithecia of a pyrenomycete; drying to a rusty brown crust; hymenium \pm 75 μm wide with basidia arising from clamped hyphae; probasidia subglobose 14-18 (-20) μm diam; metabasidia cruciate septate, subovoid, (20-) 23-28 (-32) X 15-18 (-20) μm diam; sterigmata narrow-cylindrical; basidiospores subglobose 10.0-12.0 X 8.5-11.0 μm with prominent apiculus, germinating by repetition.

HOLOTYPE: Brazil. Km 18 SE of Rio Branco on road to Porto Velho, Acre. On decorticated wood, 6-X-1980. Lowy BR 485 (Holotype LSUM).

Of neotropical species of Tremella that I have examined (Lowy, 1971), only T. tubercularia Berk. has been reported as parasitizing a pyrenomycete, and this is known from a single collection in Colombia. T. tubercularia and the new species differ in their major macroscopic and microscopic characteristics. T. tubercularia is hyaline to grayish when soaked, with metabasidia measuring 14-18.5 X 11.0-14.5 μm and basidiospores 8.0-9.5 X 7.0-8.5 μm .

Ductifera elastica Lowy, sp. nov.

FIG. 3.

Fructificatio in humido effusa, \pm 200 μm crassa, elastico-gelatinosa, fusco-brunnea; in sicco tenue-membranosa; hyphae enodosae; gloeocystidia numerosa, serpentina, in hymenio et subhymenio spissa, (60-) 110-125 (-150) X 5.0-7 (-8.5) μm , cum granulae brunneolae et crassae; probasidia subglobosa 9.5-11.5 X 10.5-12.0 μm ; metabasidia cruciatim

FIGS. 1-2. Tremella riobrancensis. 1. Transverse free hand section through basidiocarp showing aggregation of basidia in hymenium. X 100. 2. Crush mount of hymenium. A-C. Unicellular probasidia. D-E. Septate metabasidia. F. Three mature basidiospores, and a smaller secondary spore. X 1000. B. Lowy BR 485 (Holotype LSUM).

FIG. 3. Ductifera elastica. A. Gloeocystidium. B. Three basidiospores, one germinating by repetition. C. Cruciate septate basidium. D. Two maturing metabasidia with sterigmata. B. Lowy BR 646 (Holotype LSUM).

septata, 13.0-15.0 X 8.5-11.0 μm ; basidiosporae ovoidae (7.5-) 8.5-9.5 X 5.0-6.0 μm , per repetitionem germinantes.

Fructification effused, \pm 200 μm thick when fresh, extremely tough rubbery gelatinous, dark brownish, drying to a concolorous film; hyphae obscure, no clamp connections observed; gloeocystidia (beta type) numerous, serpentine, crowded in hymenium and subhymenium, (60-) 110-125 (-150) X 5.0-7 (-8.5) μm , with coarse, brownish granules; probasidia subglobose, 9.5-11.5 X 10.5-12.0 μm ; metabasidia cruciate septate, 13.0-15.0 X 8.5-11.0 μm ; basidiospores ovoid (7.5) 8.5-9.5 X 5.0-6.0 μm ; germinating by repetition.

HOLOTYPE: Brazil. Km 20 AC-010 N of Rio Branco on road to Porto Acre, Acre. On rotten wood, 11-X-1980. B. Lowy, et al., Lowy BR 646 (Holotype LSUM).

Of the six species of Ductifera reported from the neotropics only D. argentinensis, Lowy (1962), has ovoid basidiospores 10.0-13.2 X 6.5-7.3 μ m, but its thick, gelatinous basidiocarp (up to 4 mm) and conspicuous carotinoid pigmentation easily separates it from the new species.

The collections cited below extend the range in which the species noted have been found.

Auriculariaceae

Auricularia delicata (Fr.) Henn.

Reserva Florestal Ducke, km 26 N Manaus, Amazonas. Lowy, B., et al.* BR 156, 13 Sept. 1980; km 500 S of Manaus on Porto Velho road, Amazonas. Lowy, B., et al. BR 220, 17 Sept. 1980; km 25 from Rio Branco to Porto Acre, Acre. Lowy, B., et al. BR 269, 27 Sept. 1980; km 18 S of Rio Branco along highway AC-040, Acre. Lowy, B., et al. BR 359, 28 Sept. 1980; km 33 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 367, 29 Sept. 1980; km 46 highway AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 397, 1 Oct. 1980; between km 44, km 52, BR 317 SW of Rio Branco on road to Xapuri, Acre. Lowy, B., et al. BR 451, 2 Oct. 1980; forest on terra firme near Sena Madureira, Acre, Brasil. Nelson, B. BN 533, 554, 574, 579, 2-5 Oct. 1980; km 18 SE of Rio Branco on road to Porto Velho, Acre. Lowy, B., et al. BR 502, 6 Oct. 1980; between km 40 and km 46 AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 542, 8 Oct. 1980; km 49 SE of Rio Branco on road to Porto Velho, Acre. Lowy, B., et al. BR 575, 9 Oct. 1980; km 20 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 620, 11 Oct. 1980; km 33 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 652, 12 Oct. 1980;

* To conserve space, "et al." refers to one or more of the following, who at various times accompanied the author in the field: S.R. Lowrie, B. Nelson, C.A. Cid Ferreira, M. Morreira, V.M. de Souza and A. Rosas, Jr.

km 39 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 705, 13 Oct. 1980; km 35 AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 748, 17 Oct. 1980; km 16 AC-040 SW between Rio Branco and Xapuri, Acre. Lowy, B., et al. BR 786, 20 Oct. 1980; km 11 AC-040 SW between Rio Branco and Quinari, Acre. Lowy, B., et al. BR 894, 24 Oct. 1980; km 8 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1039, 1 Nov. 1980; km 13 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1063, 2 Nov. 1980; km 16 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1089, 3 Nov. 1980; km 22 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1112, 4 Nov. 1980.

Auricularia fuscosuccinea (Mont.) Farl.

Parque zoobotanico, Universidad Nacional de Acre, Rio Branco, Acre. Lowy, B., et al. BR 238, 24 Sept. 1980; km 33 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 367a, 29 Sept. 1980; km 46 highway AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 396, 1 Oct. 1980; between km 45 and km 65 BR 317 SW of Rio Branco on road to Xapuri, Acre. Lowy, B., et al. BR 589, 10 Oct. 1980; km 33 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 653, 12 Oct. 1980; km 39 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 704, 13 Oct. 1980; km 35 AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 747, 17 Oct. 1980; km 23 between Rio Branco and Quixada, Acre. Lowy, B., et al. BR 772a, 19 Oct. 1980; km 5 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 835, 21 Oct. 1980; km 29 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 875, 23 Oct. 1980; km 42 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 892, 23 Oct. 1980; km 29 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 902, 24 Oct. 1980; km 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1068, 2 Nov. 1980.

Auricularia mesenterica Pers.

Km 46 highway AC-040 SE of Rio Branco on road to

Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 384, 1 Oct. 1980; km 39 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 710, 13 Oct. 1980.

Tremellaceae

Ductifera pululahuana (Pat.) Donk

Km 175 S of Manaus on Porto Velho Road, Amazonas. Lowy, B., et al. BR 180, 16 Sept. 1980.

Exidia nucleata (Schw.) Burt

KM 25 from Rio Branco to Porto Acre, Acre. Lowy, B., BR 280, 27 Sept. 1980; km 18 S of Rio Branco along highway AC-040, Acre. Lowy, B., et al. BR 356, 28 Sept. 1980.

Stypella minor Möller

KM 25 on road from Rio Branco to Porto Acre, Acre. Lowy, B., et al. BR 281, 27 Sept. 1980.

Tremella fuciformis Berk.

KM 16 AC-040 SW between Rio Branco and Xapuri, Acre. Lowy, B., et al. BR 783a, 20 Oct. 1980; km 22 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1115, 4 Nov. 1980.

Dacrymycetaceae

Calocera cornea (Batsch ex Fr.) Fr.

KM 25 from Rio Branco to Porto Acre, Acre. Lowy, B., et al. BR 275, 27 Sept. 1980; km 16 AC-040 SW between Rio Branco and Xapuri, Acre. Lowy, B., et al. BR 827, 20 Oct. 1980; km 8 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1041, 1 Nov. 1980; km 22 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1100, 4 Nov. 1980.

Dacryopinax elegans (Berk. & Curt.) Martin

Km 25 from Rio Branco to Porto Acre, Acre. Lowy, B., et al. BR 293, 27 Sept. 1980; km 42 BR 317 SW of Rio Branco on road to Xapuri, Acre. Lowy, B., et al. BR 477, 4 Oct. 1980; km 39 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 679, 13 Oct. 1980; km 16 AC-040 SW between Rio Branco and Xapuri, Acre. Lowy, B., et al. BR 826, 20 Oct. 1980; km 29 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 880, 23 Oct. 1980; km 12 BR 364 on road to Porto Velho, Acre. Lowy, B., et al. BR 967, 25 Oct. 1980; km 13 BR 317 on road between Brasileia and Assis Brasil, Acre. Lowy, B., et al. BR 1045, 2 Nov. 1980.

Dacryopinax spathularia (Schw.) Martin

Km 42 BR 317 SW of Rio Branco on road to Xapuri, Acre. Lowy, B., et al. BR 473, 4 Oct. 1980; km 20 AC-010 N of Rio Branco on road to Porto Acre, Acre. Lowy, B., et al. BR 610, 11 Oct. 1980; km 35 AC-040 SE of Rio Branco on road to Placido de Castro (near Bolivian border, Acre). Lowy, B., et al. BR 741, 17 Oct. 1980; km 29 BR 364 NW of Rio Branco on road to Sena Madureira, Acre. Lowy, B., et al. BR 912, 24 Oct. 1980.

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LITERATURE CITED

- Lowy, B. 1962. Contribución al estudio de los Tremellales de La Argentina. *Lilloa* 31: 213-228.
Lowy, B. 1971. Tremellales. *Flora Neotropica* 6: 1-153. Hafner Publ. Co., Inc., New York.