

## New bryophyte taxon records for tropical countries 1

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### Introduction

This is the first in a series of papers listing new records, which will be published whenever sufficient new records have been found. The taxa are arranged by countries for an easier evaluation, e.g. updates of checklists. The initials of the contributor for each record is shown in square brackets after the record, and these initials are interpreted at the end of the paper.

### Contributors

BJO = Brian J. O'Shea

JE = Jens Eggers

RAP = Ronald A. Pursell

PS = Philip Sollman

CRS = Stevenson

### MUSCI

The 47 new records from Africa (using O'Shea (1995) as the base-line) contributed by BJO where found by the contributor whilst working on BM collections. Locality details are as shown on the collection packet. The identifications of the records have not been checked.

### Angola

*Trichosteleum chrysophyllum* P. Varde. Portuguese Maiomhe; Chilungo. Coll.: J. Gissweiler 7064, 1919. Det.: H.N. Dixon. BM. [BJO]

*Rhacopilopsis guineensis* (Broth. & Par.) Buck Dondeiro, rio Duruma. Coll.: Mario de Castro, 2 Aug. 1923. Comm.: A. Machado. BM. [BJO]

**Bioko (Equatorial Guinea)**

*Trichosteleum subrhizophyllum* (C. Muell.) Jaeg. Coll.: E. Seimund, spring 1904. Com.: W.S. Sherrin. BM. (This record is new for Africa, the taxon having previously only been recorded for Oceania.) [BJO]

**Bolivia**

*Erythrophyllastrum andinum* (Sull.) Zand. Um die Saittulaguna, in der Grassteppe, 4300 m, Juni 1911, leg. Th. Herzog 2659A, det. Ph. Sollman, 1997; herb. L (separated from *Leptodontium acutifolium* Mitt.). This species is well described, discussed and illustrated in Zander (1993). [PS]

**Cameroon**

*Cyclodictyon aubertii* (P. Beauv.) O. Kuntze. On bark at edge of pool, Mannsqueller, Mt. Cameroon. 7800 ft. Coll.: Miss M. Steele, 2 Feb. 1932. Det.: F. Demaret. BM. [BJO]

*Trichosteleum leviusculum* Ren. & Card. Bipinde, Urwaldgebiet. Coll.: s.n. 2139, 1900; 2370, 1901; 3935, 1909. BM. (New to mainland Africa: previously only known from Madagascar.) [BJO]

*Trichosteleum usambaricum* Broth. Coll.: W.G. Travis, 1920. Det.: H.N. Dixon. BM. (Previously only recorded for Tanzania.) [BJO]

**Central African Republic**

*Taxithelium octodiceroides* (C. Muell.) Jaeg. Niamniam, Mbangé. Coll.: Schweinfurth. BM. (This species does not appear in Schultze-Motel (1975).) [BJO]

*Taxithelium schweinfurthii* (C. Muell.) Jaeg. Niamniam. Coll.: Schweinfurth. BM. (This species does not appear in Schultze-Motel (1975).) [BJO]

**Colombia**

*Bryoerythrophyllum ferruginascens* (Stirt.) Giac. Ibagué, Tolima, alt: 1268 m, sterile, with rhizoidal tubers, Jan. 1901, leg. W. Micholitz s.n., det. Ph. Sollman, 1997; herb. H-Broth. R/4879. [PS]

*Tortula polyseta* (C. Muell.) Warnst. Prov. Caldas, Cordillena Occidental, Parque National Nevado de Ruiz, zwischen El Refugio und Parkgate, nasse Felswand, alt. 4150m, c.fr., 23. July 1992, leg. J.-P. Frahm s.n., det. Ph. Sollman, 1997; herb. Frahm, Sollman. Zander (1993) treats this taxon as a *Henediella* species. [PS]

**Ecuador**

*Bryoerythrophyllum bolivianum* (C. Muell.) Zand. Prov. Cotopaxi, Parque National Cotopaxi, NW slope of volcano Cotopaxi, Laguna Limpia Pongo, dry paramo, on slope next to the lake, lat. 0° 38' S, 78° 32' W, 3900m, sterile, 25 Sept. 1988, leg. J.P. Frahm & S.R. Gradstein 28, det. Ph. Sollman, 1997; herb. Frahm, Sollman. Prov. Cotopaxi, NW slope of volcano Cotopaxi, Parque National Cotopaxi, road between park headquarters and Laguna Limpia Pongo, 2 km before the lake, shrubby paramo and *Pinus carribea* plantation, alt: 3800 m, sterile, 25 Sept. 1988, leg. J.P. Frahm & S.R. Gradstein 30, det. Ph. Sollman, 1997; herb. BUF, Frahm, Sollman. [PS]

*Erythrophyllastrum andinum* (Sull.) Zand. Prov. Cotopaxi, Parque National Cotopaxi, NW slope of volcano Cotopaxi, Laguna Limpia Pongo, dry paramo on slope next to the lake, lat. 0° 38' S, 78° 32' W, alt.: 3900 m, sterile, 25 Sept. 1988, Leg. J.-P. Frahm & S.R. Gradstein 28A, det. Ph. Sollman, 1997; herb. Frahm, Sollman. [PS]

*Sagenotortula quitoensis* (Tayl. in Hook.) Zand. Prov. Cotopaxi, NW slope of volcano Cotopaxi, Parque National Cotopaxi, on road 2 km before park headquarters, wet road bank with springs and Quebrada, sterile, with rhizoidal tubers, alt: 3550 m, 25 Sept. 1988, leg. J.P. Frahm & S.R. Gradstein 37, det. Ph. Sollman, 1993; herb. Frahm, Sollman. This species is well

described, discussed and illustrated in Zander (1993). [PS]

### Ghana

- Acroporium le-testui* P.Varde Tarkna, Prestea District. Coll.: H.H. Saxby, 1910-1911. Comm.: W.E. Nicholson. BM. (Previously known only from Gabon.) [BJO]
- Radulina borbonica* (Bel.) Buck Abboniakoon, Tarkna. Coll.: H.H. Saxby, 1910. Det.: H.N. Dixon. BM. [BJO]
- Trichosteleum chrysophyllum* P.Varde. Abboniakoon, Tarkna. Coll.: H.H. Saxby, 1910. Det.: H.N. Dixon. BM. [BJO]
- Trichosteleum staudtii* Broth. Tarkna, Prestea District. Coll.: H.H. Saxby, 1910-11. Det.: H.N. Dixon. Com.: W.E. Nicholson. BM. [BJO]
- Trichosteleum stictum* (Besch.) Kindb. Tarkna, Prestea District. Coll.: H.H. Saxby, 1910-11. Det.: H.N. Dixon. Com.: W.E. Nicholson. BM. (First record for mainland Africa: previously only known from Seychelles.) [BJO]

### Guyana

- Fissidens amazonicus* Pursell. Upper Mazaruni District. At confluence of Arobaru River and Kako River, 5°32'N, 60°40'W, alt. 500m, on emerged sandstone rocks at river bank, Gradstein 4968 (U). This species was previously known from Brazil (Amazonas, Roraima), and Colombia (Amazonas, Vaupés). [RAP]

### Madagascar

- Barbula eubryum* C. Müll. Isalo National Park, about 8 km SW of Ranohira (22°38'S, 45°51'E), Central Highlands, alt. 650m, on open sandy soil, overlying sandstone rock. Vegetation of scattered bunches of grasses and other herbs, leg. C.R. Stevenson, det. J.L. DeSloover (voucher in BM). O'Shea (1995) noted its occurrence in Angola, Burundi, Central African Republic, Kenya, Natal, Rwanda, Swaziland, Tanzania, Transvaal,

Uganda, Zaire, Zambia and Zimbabwe. Its appearance in Madagascar is therefore not unexpected. [CRS]

### Malawi

- Ectropothecium taxiforme* (Brid.) Broth. nr. Bandawe, Chinteché. Coll.: Adziel Lillie, 1935. BM. (First record for East Africa. Previously recorded only from Liberia, Annobon (Pagalu) and Cameroon.) [BJO]
- Heterophyllum albo-alare* (Broth.) Broth. Shire Highlands, Sochi. Coll.: G.F. Scott Elliott, Ruwenzori Expedition 1893-1894, Dec. 1894. BM. (This record of this taxon was reported in Kis (1985), but ignored by O'Shea (1993) on advice that the locality was in 'Rhodesia' (presumably Zambia), and subsequently overlooked by O'Shea (1995). From the slightly more detailed data on the BM specimen, it appears after all to be from Malawi. This is the only record apart from a subsequent gathering in Central African Republic (Potier de la Varde, 1939).
- Rhacopilopsis guineensis* (Broth. & Par.) Buck nr. Bandawe, Chinteché. Coll.: Adziel Lillie, 1935. BM. (The first East African record for this taxon, previously recorded from Guinea, Sierra Leone and Liberia in West Africa, and Gabon, Central African Republic and Zaire in central Africa.) [BJO]

### Mauritius

- Aerobryopsis wallichii* (Brid.) Fleisch. Coll.: Mme Lecoultré, 1871. BM. (Cryptogamie communiquées par la Ville de Genève. No. 2370. (*Meteorium longissime* var. *tenue*. Bryol. Javan.). This is the first use of this name for Africa, replacing *A. longissima* (Dozy & Molk.) Fleisch. (Noguchi, 1976). Previously known in Africa only from Seychelles.) [BJO]
- Taxithelium nossianum* Besch. Coll.: Balfour. Det. H.N. Dixon. BM. (From the New York Botanical Garden - Herbarium of William Mitten, presented December 1906. Previously only known from

Madagascar.) [BJO]

*Trichosteleum microdontum* (Besch.) Ren. Coll.: Balfour. Det.: H.N. Dixon. BM. (From the New York Botanical Garden - Herbarium of William Mitten, presented December 1906. Previously only known from Madagascar.) [BJO]

### Mozambique

*Aerobrydium subpiligerum* (Hampe) Card. Near Gogogo Peak, Gorongosa Mt., Manica & Sofalia. Occasional pendent epiphyte in forest. 1770 m. E. Schelpe 5556, 6 July 1955. BM. [BJO]

*Cyclodictyon laete-virens* (Hook. & Tayl.) Mitt. Namuli, Makua county. Coll.: J.T. Last, 1887. BM. [BJO]

### Niger

*Taxithelium ramivagum* (C. Muell.) Broth. Coll.: Vogel. Det.: H.N. Dixon. Com.: NYBG BM. (Ex herb. H.N. Dixon ref. 9.102, ex herb. Wm. Mitten, 1906.) [BJO]

### Panama

*Fissidens cylindraceus* Mitten. Darien, Summit of Piree Massif, 1200-1350m, on tree fern trunk, Allen 8865 (MO, PMA). The species was known before from Ecuador (the type) and Colombia (Magdalena). [RAP]

### Peru

*Erythrophyllastrum andinum* (Sull.) Zand. Dep. CUZCO, 1 km NW Pass zwischen Urcos und Juliaca an der Strasse Cuzco - Puno, Graspuna und Felswände, alt: 4400 m, sterile, 12 Aug. 19~Z, leg. J.P. Frahm 82.3999A, det. Ph. Sollman, 1997; herb. Frahm, Sollman. [PS]

*Fissidens andicola* (Herzog) Bruggemann-Nannenga. Cuzco, Cereado, Tampumachoy, 3600m, Vargas 14301 (NY) det. W.R. Buck ver. R.A. Pursell. The species was formerly known from only Bolivia (Cochabamba). [RAP]

*Tortula leiostoma* Herz. Dep. Cuzco, 1 km NW Pass zwischen Urcos und Juliaca an der Strasse Cuzco- Puno, Graspuna und Felswände, alt. 4400m, c.fr., 10. Aug. 1982, leg. J.P. Frahm 82.3999, det. W. Kramer, 1992; herb. Frahm, Kramer, Sollman. This species is well described, discussed and illustrated in Mishler (1994). Zander (1993) treats this taxon as a *Hennediella* species. [PS]

*Tortula polyseta* (C. Muell.) Warnst. Dep. Ayacucho, an der Strasse Huanta - San Francisco, Pass zwischen Tambo und Quinoa, alpines Grasland und Felswände, alt: 4100 m, c.fr., 3. Aug. 1982, leg. J.P. Frahm 82.4020A, det. W. Kramer 1992; herb. Frahm, Kramer, Sollman. [PS]

### Sierra Leone

*Hyophila involuta* (Hook.) Jaeg. Njala. Coll.: F.C. Deighton 3085, 27 Oct. 1935. Det.: H.N. Dixon. BM. (As *H. atrovirens* (C. Muell.) Broth.) [BJO]

*Taxithelium suboctodicerus* Broth. & Par. Kenema. Coll.: N.W. Thomas, 20 Jan. 1915. Det.: H.N. Dixon. BM. (Ex herb. H.N. Dixon ref. 7708A.) [BJO]

### South Africa/Cape

*Cyclodictyon laete-virens* (Hook. & Tayl.) Mitt. Moist stones in a rill running through the valley above 'Paradise', Table Mountain. Coll.: W.N. Harvey, Jan. 1836. BM. (Demaret & Potier de la Varde (1951) stated that this taxon occurs in South Africa, but gave no further details, and it was not listed by Perold & van Rooy (1993). It has an interesting distribution, being recorded for Europe (including Britain and Ireland), Madeira, Canaries and the Azores as well as Fernando Po (Bioko), Sao Tomé, Zaire, Zimbabwe, Mozambique (see above) and Madagascar.) [BJO]

### South Africa/Transvaal

*Callicostella salaziae* (Besch.) Kindb. Marikana.

Coll.: H.A. Wagner 1172, 1932. Det.: H.N. Dixon, 1952. BM. (As *C. tristis* (Hampe) Broth. This plant has an unusual distribution, having previously been recorded only from West Africa (Cameroon and Sao Tomé) and Réunion.) [BJO]

*Cyclodictyon aubertii* (P.Beauv.) O.Kuntze. Kappsche Hoop. Coll.: H.A. Wager, 1915. Det.: F. Demaret. BM. [BJO]

### Tanzania

*Cyclodictyon filicuspis* P.Varde. Mt. Meru, above Aruscha. 5-6000 ft. Coll.: Wm. Leighton, 1917. Det.: H.N. Dixon. BM. [BJO]

### Tristan d'Acunha

*Pyrrhobryum spiniforme* (Hedw.) Mitt. Coll.: Ware 517, 15 Oct. 1955. Det.: D.H. Dalby. BM. (Although this plant is frequent throughout the tropics, the only previous record from Tristan d'Acunha is of *Pyrrhobryum spiniforme* var. *acunhense* (Besch.) Manuel. I have not seen a specimen of this variety (I believe only the type exists (in PC)), but have already expressed doubt about its value as a taxon based on the original description and an appreciation of the high degree of variation present in the species (O'Shea, 1997). The variety appears to have been recorded for Mauritius rather than Tristan by mistake (Bescherelle, 1880), and this is perpetuated in the African checklist (O'Shea, 1995).) [BJO]

### Uganda

*Callicostella usambarica* (C.Muell.) Broth. Tree trunk, forest, Kipayo. 1220 m. Coll.: R. Dümmer 983a, Dec. 1914. Det.: H.N. Dixon. Comm.: Sim. BM. [BJO]

*Catagonium nitens* (Brid.) Card. - Forest Reserve between Kampala and Jinja, alt. ca. 1300m, epiphytic in rain forest, leg. 1993 J. Eggers UG 2/5 (herb. Eggers). Distrib.: Tanzania, South Africa, East African Islands. [JE]

*Cyclodictyon aubertii* (P.Beauv.) O.Kuntze.

Ruwenzori forest. 8000 ft. Coll.: G.F. Scott Elliot 174. Det.: Broth. BM. [BJO]

*Cyclodictyon vesiculosum* (Brid.) O.Kuntze Ruwenzori. 8000ft. Coll. G.F. Scott Elliot 227 pp. BM. (Known previously only from Mauritius, Réunion and Tanzania) [BJO]

*Dicranella nodicoma* C.Muell. Highest point, Katali-Mutitum(?) road, Kigezi. 2380m. Coll.: G.H.S. Wood 1082, 5 Sept. 1950. BM. [BJO]

*Ectropothecium anisophyllum* Broth. Forest at Kipayo. 1220 m. R. Dümmer 1402, Dec. 1914. BM. (First record for East Africa.) [BJO]

*Ectropothecium brachycladulum* C.Muell. Mpiigi, Mongo Dist. 1220 m. A.S. Thomas 3040a, 29 July 1939. BM. [BJO]

*Ectropothecium perrotii* Card. Buliganya. 1940 m. Miss Budd 41, 1928. BM. [BJO]

*Floribundaria patentissima* (C.Muell.) Fleisch. Malina forest, Mulange. 1220 m. Coll.: R.A. Dümmer 4448, Oct/Nov. 1920. BM. [BJO]

*Floribundaria vaginans* (Welw. & Duby) Broth. Mulange, forest. 1220 m. Coll.: R.A. Dümmer 4127, June 1919. BM. (Previously known only from Malawi and Angola.) [BJO]

*Hyophila involuta* (Hook.) Jaeg. Kokomongole, Karamoja, rocks by river. 1890m. Coll.: A.S. Thomas, 28 May 1939. Det.: H.N. Dixon. BM. (As *H. atrovirens* (C.Muell.) Broth.) [BJO]

*Leptodontium longicaule* var. *longicaule* Mitt. Mt. Mhaghinga, Kigezi, very common on ground in bamboo zone. 2650m. Coll.: A.S. Thomas 2423, 24 Aug. 1938. BM. [BJO]

*Leptodontium luteum* (Tayl.) Mitt. W slopes of Mt. Muhavuru, Kigezi Dist., on ground in *Senecio* forest with undergrowth of *Alchemilla geranioides*. 3750 m. Coll.: O. Hedberg 2123, 6 Oct. 1948. Det.: R. Potier de la Varde. BM. [BJO]

*Pyrrhobryum spiniforme* (Hedw.) Mitt. Towa forest, Sese Is. 1220m. Coll.: A.S. Thomas 1361, 30 June 1935. BM. [BJO]

*Sematophyllum perrevolutum* (Broth.) Broth.

Mulange. Epiphytic in forest. 1220 m. Coll.: R.A. Dümmer 4014, April 1919. BM. [BJO]

*Trachythecium le-testui* Thér. & P. Varde. Mulange. 1220 m. Coll.: R.A. Dümmer 4065, 4083, April 1919. BM. (First record for East Africa.) [BJO]

*Vesicularia ischyropteris* (Broth.) C. Muell. Kemp Lake, Kampala. 1160 m. Coll.: Chandler & Hancock 144a, Feb. 1936. BM. (First record for East Africa.) [BJO]

### Zaire

*Taxithelium pobeguini* Broth. & Par. Equateur distr.: KL (?). Coll.: Marcel Vermeulen, June 1922. (Hb. Naveau. Flora Congoana 410.) BM. [BJO]

### Zambia

*Cyclodicton vallis-gratiae* (C. Muell.) O. Kuntze Found in falls on tributary of Saisi, Saisi valley, Abercorn [=Mbala] district. 5400 feet. Coll.: A.H. Gamwell 181, Sept. 1933. Det.: W. Sherrin. BM. (An earlier specimen from the same collector is labelled 'Murambeshi, N. Rhodesia, 3000-3500 ft., April 1932', but I was unable to confirm the locality.) [BJO]

## HEPATICAEE

### Argentina

*Lejeunea trinitensis* Lindenb. in Gott. & al. (syn. *Rectolejeunea pililoba* [Spruce] Schust.) - Prov. Misiones, Iguazu, near the waterfalls, alt. ca. 200 m, epiphyllous in rain forest, leg. 1990 J. Eggers ARG 5/12 (herb. Eggers). Distrib.: Widespread in Tropical America, Comores. [JE]

### Australia

*Cololejeunea vidaliana* Tix. - Queensland, Palmerston NP W of Innisfail, alt. 150-350 m, epiphyllous in rain forest of a gorge,

leg. 1988 J. Eggers AUS 4/228 (herb. Eggers). Distrib.: pantropical. [JE]

*Drepanolejeunea intermedia* Zwickel - Queensland, Atherton Tableland, 10 km S of the Crater NP, alt. 900 m, epiphyllous in rain forest, leg. 1988 J. Eggers AUS 4/35 (herb. Eggers). Distrib.: Philippines, Borneo, Sumatra, Java, Moluccas, Solomon Isl., New Guinea, New Caledonia [JE]

### Belize

*Aphanolejeunea ephemeroide* Schust. - St Ann Creek Distr., Cockscombe Reserv., epiphyllous on tree fern in lowland rain forest, leg. 1996 J. Eggers BEZ 5/22 (herb. Eggers). Distrib.: Florida, Cuba, Costa Rica. [JE]

*Cololejeunea cardiocarpa* (Mont.) Steph. - Cayo Distr., Blue Hole Reserv., alt. 100-200 m, epiphyllous in rain forest, leg. 1996 J. Eggers BEZ 3/9; Orange Walk Distr., Rio Bravo Reserv., epiphyllous in lowland rain forest, leg. 1996 J. Eggers BEZ 4/9, St Ann Creek Distr., Cockscombe Reserv., epiphyllous in lowland rain forest, leg. 1996 J. Eggers BEZ 5/7 (herb. Eggers). Distrib.: pantropical. [JE]

*Cololejeunea obliqua* (Nees & Mont.) Schiffn. - Cayo Distr., Blue Hole Reserv., alt. 100-200 m, epiphyllous in rain forest, leg. 1996 J. Eggers BEZ 3/3; St Ann Creek Distr., Cockscombe Reserv., epiphyllous in lowland rain forest, leg. 1996 J. Eggers BEZ 5/6 (herb. Eggers). Distrib.: pantropical. [JE]

*Colura tortifolia* (Mont.) Steph. - Cayo Distr., Mountain Pine Ridge, Cave Rio Frio, alt. 600 m, epiphyllous in riverine forest, leg. 1996 J. Eggers BEZ 2/30, Blue Hole Reserv., alt. 100-200 m, epiphyllous in rain forest, leg. 1996 J. Eggers BEZ 3/5; St Ann Creek Distr. Cockscombe Reserv., epiphyllous in lowland rain forest, leg. 1996 J. Eggers BEZ 5/10 (herb. Eggers). [JE]

*Colura verdoornii* Herz. & Jov.-Ast - St Ann Creek Distr., Cockscombe Reserv., epiphyllous on tree fern in lowland rain

forest, leg.1996 J.Eggers BEZ 5/19 (herb.Eggers). Distrib.: Malaysia, Borneo, Sumatra, Sri Lanka, Costa Rica. The Belize specimens correspond well with the illustration in Lücking (1995) from Costa Rica, but the marginal crenulation is much stronger than in my plants from Sri Lanka, det.R.Grolle. [JE]

*Diplasiolejeunea brunnea* Steph. - Cayo Distr., Mountain Pine Ridge, Cave Rio Frio, alt.600m, epiphyllous in riverine forest, leg.1996 J.Eggers BEZ 2/33; Blue Hole Reserv., alt.100-200m, epiphyllous in rain forest, leg.1996 J.Eggers BEZ 3/6; Orange Walk Distr., Rio Bravo Reserv., epiphyllous in lowland forest, leg.1996 J.Eggers BEZ 4/11; St Ann Creek Distr., Cockscombe Reserv., epiphyllous in lowland rain forest, leg.1996 J.Eggers BEZ 5/8 (herb.Eggers). Distrib.: Widespread in the Neotropics. [JE]

*Drepanolejeunea mosenii* (Steph.) Bischl. - Cayo Distr., Mountain Pine Ridge, Cave Rio Frio, alt.600m, epiphyllous in riverine forest, leg.1996 J.Eggers BEZ 2/31 (herb.Eggers). Distrib.: widespread in Middle and northern South America. [JE]

*Leptolejeunea moniliata* Steph. - St Ann Creek Distr., Cockscombe Reserv., epiphyllous on tree fern in lowland rain forest, leg.1996 J.Eggers BEZ 5/21 (herb.Eggers). Distrib.: Middle America and northern South America. [JE]

*Leptolejeunea elliptica* (Lehm.& Lindenb.) Schiffn. - Cayo Distr., Mountain Pine Ridge, Cave Rio Frio, alt.600m, epiphyllous in riverine forest, leg.1996 J.Eggers BEZ 2/32; Blue Hole Reserv., alt.100m, epiphyllous in rain forest, leg.1996 J.Eggers BEZ 3/6; Orange Walk Distr., Rio Bravo Reserv., epiphyllous in lowland rain forest, leg.1996 J.Eggers BEZ 4/10; St Ann Creek Distr., Cockscombe Reserv., epiphyllous in lowland rain forest (herb.Eggers). Distrib.: Widespread in tropical America and scattered in tropical Asia. [JE]

*Leptolejeunea radicata* (Nees ex Mont.) Grolle (syn. *L.obovata* Bischl.) - St Ann Creek Distr., Cockscombe Reserv., epiphyllous

on tree fern in lowland rain forest, leg.1996 J.Eggers BEZ 5/20 (herb.Eggers). - Distrib.: Widespread in the Neotropics. [JE]

*Radula flaccida* Lindenb.& Gott. - St Ann Creek Distr., Cockscombe Reserv., epiphyllous in lowland rain forest, leg.1996 J.Eggers BEZ 5/3 (herb.Eggers). Distrib.: Widespread in the Neotropics and tropical Africa. [JE]

## China

*Calypogeia fissa* (L.) Raddi - Sichuan, above Wolong, near Wu Yi Ping, alt.2500-2600m, mixed forest, under roots, leg.1994 J.Eggers CHI 3/94 (herb.Eggers). Distrib.: holarctic. New for Sichuan (also genus). [JE]

*Radula acuminata* Steph. - Sichuan, Emei Shan near Checkpoint, alt.1350m, on a rock epibryous on *Plagiochila* sp., leg.1994 J.Eggers CHI 3/95 (herb.Eggers). Distrib.: Widespread in SE-Asia. New for Sichuan. [JE]

*Scapania ornithopodioides* (With.) Waddell - Sichuan, between Wolong and Beimuping, alt.ca.2800m, on a rock in shadow beneath torrent, c.per., leg.1994 J.Eggers CHI 3/86 (herb.Eggers). Distrib.: Great Britain, Ireland, Norway, Faeroes, Himalaya, W.China, Japan, Taiwan, Philippines, Hawaii. New for Sichuan. - According to Smith (1990) perianths are unknown in Europe. [JE]

## Dominica (Lesser Antilles)

*Diplasiolejeunea pocsii* Reyes - Morne Trois Pitons NP, Emerald Pool, alt.350-400m, epiphyllous in rain forest, c.per.+andr., leg.1987 J.Eggers DO 8/37 (herb.Eggers). Distrib.: Cuba. - The species is not known outside of Cuba nor with reproductive structures. [JE]

*Drepanolejeunea crucianella* (Tayl.) Evans - Morne Trois Pitons NP, Emerald Pool, alt.350-400m, epiphyllous on fern fronds in rain forest, leg.1987 J.Eggers DO 8/54

(herb.Eggers). Distrib.: Widespread in the Neotropics. [JE]

*Leptolejeunea radicata* (Nees ex Mont.) Grolle (syn. *Leptolejeunea obovata* Bischl.) - Morne Trois Pitons NP, Emerald Pool, alt.350-400m, epiphyllous on fern fronds in rain forest, leg.1987 J.Eggers DO 8/41 (herb.Eggers). Distrib.: Widespread in the Neotropics. [JE]

*Macrocolura lyrata* (Steph.) Schust. - Morne Diablotin, alt.1400m, epiphyllous and epibryous, leg.1987 J.Eggers DO 7/32, DO 7/38 (herb.Eggers). Distrib.: Guadeloupe, Guyana, Peru. [JE]

*Stictolejeunea balfourii* (Mitt.) Jones - Morne Trois Pitons NP, between Freshwater Lake and Grand Fond, alt.350m, on stone in creek above water, leg.1987 J.Eggers DO 2/41 (herb.Eggers). Distrib.: pantropical. [JE]

### Ecuador

*Colura naumannii* (Schiffn.) Steph. (syn. *C.patagonica* Jov.-Ast) - Prov. Zamora, Podocarpus NP, alt.2900m, paramo, on dead leaves under *Cycas* sp., leg.1994 J.Eggers ECU 7/17 (herb.Eggers). Distrib.: Argentina, Chile, Colombia, Ecuador. - The Southern Ecuador record, also paramo, is from different (micro-)habitat and situated much lower than the records reported by Gradstein & al. 1977 (altitude: 3350-3750m). [JE]

### Mexico

*Harpalejeunea oxyphylla* (Nees & Mont.) Steph. - Edo. Chiapas, Lagunas de Montebello NP, alt.1500m, epiphyllous in Liquidambar forest, leg.1979 J.Eggers & J.-P.Frahm MX 32/55 (herb.JE, herb.Eggers). Distrib.: Costa Rica, Guyana, Honduras, Peru, Surinam. [JE]

### Seychelles

*Radula stenocalyx* Mont. - Mahé, alt.400m, epiphyllous, leg.1977 J.Eggers SEY 1/48, det.R.Grolle (herb.JE, Eggers). Distrib.:

Comoren, Madagascar, Mauritius, Reunion, widespread in Continental Africa. [JE]

### Sulawesi (Indonesia)

*Schiffneria hyalina* Steph. - Central Prov., Lore Lindu NP, Mt. Rore Katimbu, alt.ca.1950m, on decaying wood near creek in forest, leg.1995 J.Eggers CEL 2/69 (herb.Eggers). Distrib.: Bhutan, Sikkim, China, Japan, Philippines, Borneo, Malaysia, Sumatra, Moluccas, New Guinea. [JE]

### Venezuela

*Leptolejeunea obfuscata* (Spruce) Steph. - Edo. Bolívar, Campamento Rio Grande E of El Palmar, at ca.250m, epiphyllous in riverine forest, leg.1994 J.Eggers VEN 7/24 (herb.Eggers). Distrib.: Brasilia, Guyana, Surinam. [JE]

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