

## New bryophyte taxon records for tropical countries IV

Jens Eggers

Blockhorner Weiden 3, D-22869 Schenefeld, Germany, email: [Jens.D.Eggers@t-online.de](mailto:Jens.D.Eggers@t-online.de)

C. Robin Stevenson

The College of West Anglia, Tennyson Avenue, King's Lynn, Norfolk PE30 2QW, UK

R.D. Porley

English Nature, Foxhold House, Crookham Common, Thatcham, Berks., RG19 8EL, UK

Michael Stech

Institut für Biologie - Systematische Botanik und Pflanzengeographie - Freie Universität Berlin, Altensteinstr. 6, D 14195 Berlin

HEPATICAE

### **Democratic Republic of the Congo (formerly Zaire)**

*Lejeunea acuta* Mitt.

Nord Kivu: c. 6 km north of Lubero, on sandy soil of tree-shaded road cutting, c. 1800m, 0° 8' S, 29° 14' E, 11 Aug 1988. *C.R. Stevenson Z 78f*, det. E.W. Jones (BM, & herb. C.R. Stevenson). Growing mixed with *Frullania serrata*, *Pilotrichella*, *Trachypodopsis*, etc. Distrib.: Annobon, Bioko, Burundi, Cameroun, Kenya, Rwanda, Sao Tome, Tanzania.

*Anastrophyllum minutum* (Schreb. ex Cranz) R.M.Schust.

Nord Kivu: Ruwenzori mountains, on peaty soil at base of ericaceous tree species, just below Mahungu Hut, c. 3200 m, 0° 21' 25" N, 29° 50'

3" E, 7 Aug 1988. *C.R. Stevenson Z 44a*, det. E.W. Jones (BM, & herb. C.R. Stevenson). Growing mixed with *Breutelia stuhlmannii*, *Sphagnum*, etc. Distrib.: Cameroun, Kenya, South Africa, Tanzania, Uganda.

*Plagiochila exigua* (Taylor) Taylor

Nord Kivu: Ruwenzori mountains, on soil under ericaceous tree circa 750 m south west, and downslope of, the Mahangu Hut, c. 2895 m, 0° 20' 52" N, 29° 50' 3" E, 7 Aug 1988. *C.R. Stevenson Z 69d*, det. E.W. Jones (BM, & herb. C.R. Stevenson). Growing mixed with *Plagiochila barteri*, *P. lastii*, and *Lophocolea bidentata*. Also recorded as an epiphyte, from both the Ruwenzori and Nyiragongo volcano. Recorded by Pócs (1993) from the Kahuzi-Biega National Park (Sud-Kivu). Distrib.: Ethiopia, Kenya, South Africa, Tanzania.

**Belize**

*Cololejeunea guadelupensis* Tix.

St Ann Creek Distr., Cocks Combe Reserv., epiphyllous in lowland rain forest beside rivulet, with *Radula flaccida*, *Lejeunea laetevirens*, *Diplasiolejeunea brunnea*. Leg. 17.3.1996 J.Eggers BEZ 5/24. Distribution: Guadeloupe.

**Costa Rica**

*Aphanolejeunea pustulosa* (Jov.-Ast) Bernecker & Pócs

Prov. Puntarenas, Cordillera de Tilaran, Refugio Monteverde, epiphyllous in cloud forest (ca.1600m), c.per., leg. 6.2.1985 J.Eggers CR 5/299, conf. T.Pócs. Distribution: Southern Mexico.

*Cololejeunea appressa* (Evans) Bened.

Prov. Cartago, Tuis Valley near Turrialba, Rancho Naturalista, mountain rain forest, 900m alt., Creeping on saxicolous *Homalia glabella*, with *Diplasiolejeunea pellucida* and *Aphanolejeunea* ssp. Leg. 30.3.2001 J.Eggers CR 17/5. Distribution: E and W Africa, SE Asia to New Caledonia, Tropical America from Mexico and Jamaica to Peru.

*Cololejeunea fejeana* Tix.

Prov. Heredia, Cordillera Central, between Montaña and the Volcan Barva, (2000m alt.), epiphyllous in montane rainforest near small river, c.per., with *Aphanolejeunea angustissima* and *A.camilli*. Leg. J.Eggers 1.2.1985 CR 1/208, det. T.Pócs. Distribution: Guadeloupe (but perhaps identical with *C.cremersii* from the Guayanas).

*Cololejeunea guadelupensis* Tix.

Prov. Heredia, Caribbean Slope, 5 km above San Miguel de Saraquipi (850m alt.), epiphyllous in small ravine, c.per.+andr.+gemma., together with *Aphanolejeunea ephemeroides*, *Cololejeunea linopteroides*, *C.standleyi*, *Diplasiolejeunea cavifolia*, *D.pellucida*. Leg. J.Eggers 30.1.1985 CR 2/70, det. T.Pócs. Distribution: Guadeloupe.

Further records: Prov. Limon, Jalapa, southern border of the Tortuguero NP, epiphyllous at river bank (2m alt.), with *Cololejeunea cardiocarpa*,

*Diplasiolejeunea brunnea*, *Leptolejeunea elliptica*, *Radula flaccida*, leg. 19.2.85 J.Eggers CR 12/7; Tortuga Lodge near Tortuguero, epiphyllous in swampy rain forest along river (2m alt.), with *Cyclolejeunea peruviana*, *Colura tortifolia*, *Colura verdoornii*, *Ceratolejeunea* cf. *maritima*, leg. 21.2.1985 J.Eggers CR 12/82; Prov. Guanacaste, Caribbean Slope N of Tenorio (500m alt.), epiphyllous in wet rain forest, c.gemm., with *Aphanolejeunea longifolia*, *Diplasiolejeunea pellucida*, *Leptolejeunea elliptica*, *Odontolejeunea lunulata*, *Crossidium* spec. Leg. 3.2.1985 J.Eggers CR 3/49; Prov. Cartago, Tuis Valley near Turrialba, Rancho Naturalista (ca.900m alt.), mountain rain forest, epiphyllous on fern leaf, c.per.+andr.+gemma., with *Aphanolejeunea angustissima*, *A.longifolia*, *Diplasiolejeunea pellucida*, *Leptolejeunea obovata*, *Rectolejeunea berteriana*. Leg. 30.3.2001 J.Eggers CR 17/28.

*Cololejeunea setiloba* Evans.

Prov. Heredia, Puerto Viejo (Caribbean lowlands, ca.100m alt.), bank of the river Saraquipi, epiphyllous on occasionally flooded shrubs, c.per.+andr., leg. 30.1.1985 J.Eggers CR 2/47, conf. T.Pócs. Distribution: Hitherto only known from USA (Florida).

*Diplasiolejeunea grolleana* Reyes

Prov. San José, Cordillera de Talamanca, Quizarra east of San Isidro El General, ca. 700m alt., epiphyllous in small rest of rainforest, c. andr., with *Cololejeunea cardiocarpa*, *Diplasiolejeunea cavifolia*, *Harpalejeunea uncinata*, *Aphanolejeunea costaricensis*, *A. ephemeroides*; leg. J.Eggers 12.2.1985 CR 7/12, conf. T.Pócs. Distribution: Cuba.

**Guatemala**

*Cololejeunea manaoensis* (Herz.) Herz.

Prov. Petén, Tikal, near the Maya ruins in lowland forest (150m alt.), epiphyllous, c.gyn.+andr., leg. J.Eggers 4.3.1996 GUA 2/15, det. T.Pócs. Further record: Same place, leg. 29.4.1992 M.Lenz, det. J.Eggers, Herbar J.Eggers GUA 2/2. Distribution: Amazonian Brazil, Venezuela and Mexico.

**Venezuela**

*Harpalejeunea tridens* (Besch. & Spruce) Steph. (syn. *H. heterodonta* Evans)  
Edo. Bolivar, Escalera (850m alt.), on wet rocks, creeping over mosses. Leg. 20.2.1994 J.Eggers VEN 7/13. - Distribution: Cuba, Puerto Rico, Martinique, Dominica, Guadeloupe, Suriname, Guyana, Brazil, Colombia.

**MUSCI****Peru**

*Pilopogon longirostratus* Mitt.  
Dept. Ancash, Prov. San Luis, Road from San Luis to Huari before Laguna Huachococha 4000 - 4500 m. coll. M. Weigend et al. 13.3.2001 det. Stech. Dupl. in BONN. Previously known from seven records in Colombia and Ecuador .

**Uganda**

*Splachnum adolphi-friederici* Broth.  
KISORO. Mgahinga NP, summit area of Sabinio, 1° 23' S, 29° 35' E. On decaying log beside trail to summit, 3416m, 10 February 1997, *Porley 684a*. This would appear to be the first record for Uganda, the only other report for Africa being from Rwenzori, Zaire (Mildbraed, 1914). In addition, there are two Rwenzori collections in BM: 1. 'Ridge between Butawa and Kamusoso rivers, July 1932, alt. 12,500 ft. Leg. G. N. Humphries 1203. Covers rocks where ground is very wet. Det. H. N. Dixon'. From the details given it is not certain whether the provenance is Zaire or Uganda as the border goes through this area. 2. 'Mot. Rwenzori, 10,000 ft., August 1938, leg. J. W. Purseglove P249'. An annotation by 'C.V.B.M., 4.i.1939' suggests that this specimen may be a variety of *Splachnum ampullaceum* Hedw., which he (?) regards as a widespread, extremely variable species; he had not examined the Brotherus type specimen. The locality details are insufficient to allocate this record to either Uganda or Zaire.

Although not noted in the field, it is possible that the present record of *Splachnum adolphi-friederici* was actually growing on animal dung, rather than directly on the decaying log.

**Acknowledgements**

Jens Eggers wishes to thank T.Pócs (Eger) for determination or confirmation of specimens.

**References**

- Dauphin, G., Gradstein, S.R., Bernecker-Lücking, A. & Morales, M.I. 1998.** Additions to the hepatic flora of Costa Rica II. *Lindbergia* 23: 74-80.
- Eggers, J., Frahm, J.-P. & Pursell, R.A. 1998.** New bryophyte taxon records for tropical countries II. *Tropical Bryol.* 14: 81-84.
- Equihua, C. & Pócs, T. 2000.** Epiphyllous bryophytes from the Lacandon Forest, Chiapas, Mexico. *Bryologist* 102 (4): 747-752, „1999“.
- Gradstein, S.R., Lücking, A., Morales Z., M.I. & Dauphin, G. 1994.** Additions to the hepatic flora of Costa Rica. *Lindbergia* 19: 73-86.
- Grolle, R. & Reiner-Drehwald, M.E. 1999.** Review of the genus *Harpalejeunea* ... - *J.Bryol.* 21: 31-46.
- Lücking, A. 1995.** Diversität und Mikrohabitatpräferenzen epiphyller Moose in einem tropischen Regenwald in Costa Rica. Diss. Ulm.
- Mildbraed J. 1914.** *Wissenschaftliche Ergebnisse der Deutschen Zentral-Afrika Expedition 1907-1908*. Band II. Botanik. Leipzig: Klinkhardt & Biermann.
- Morales Z., M.I. 1991.** Las Hepaticas comunicadas para Costa Rica. *Tropical Bryol.* 4: 25-57.
- Pócs, T. 1993.** Taxonomic results of the BRYOTROP expedition to Zaire and Rwanda. 12. Metzgeriaceae, Plagiochilaceae, Lejeuneaceae (the non-epiphyllous collections). *Tropical Bryology* 8: 105-125.
- Reyes, D.M. 1982.** El género *Diplasiolejeunea* en Cuba. *Acta Botanica Academiae Scientiarum Hungaricae* 28 (1-29): 145-180.
- Schuster, R.M. 1980.** The Hepaticae and Anthocerotae of North America. Vol. IV: 1257. New York.

- Tixier, P. 1991.** Bryophyta exotica 9. Quelques Lejeuneaceae (Hépatiques) nouvelles pour l'Amérique du Sud. *Candollea* 46: 267-302.
- Vital, D.M. & Visnadi, S.R. 2000.** New records and notes on Brazilian bryophytes. *J. Hattori Bot. Lab.* 88: 191-198.
- Whittemore, A.T. & Allen, B. 1996.** The liverworts and hornworts of Belize. *Bryologist* 99 (1): 64-67.