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**Catalogue of the  
Hepaticae and Anthocerotae  
of Colombia**

by

JAIME URIBE M. & S. ROBERT GRADSTEIN

with 1 map and 3 tables

*Author's addresses:*

Jaime Uribe M.  
Instituto de Ciencias Naturales  
Universidad Nacional de Colombia  
Apartado Aereo 7495  
Santafé de Bogotá  
Colombia  
Email: [juribem@ciencias.ciencias.unal.edu.co](mailto:juribem@ciencias.ciencias.unal.edu.co)

S. Robbert Gradstein  
Albrecht von Haller Institute of Plant Sciences  
University of Göttingen  
Untere Karspüle 2  
D-37073 Göttingen  
Germany  
Email: [sgradst@gwdg.de](mailto:sgradst@gwdg.de)

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## Abstract

Since the appearance of the "Catalogue of the Hepaticae of Colombia" (Gradstein & Hekking, 1979), 164 species were newly reported for Colombia and about two hundred species were reduced to synonymy, excluded or renamed. This new catalogue accepts 840 species (in 36 families and 136 genera): 832 species of Hepaticae and 8 species of Anthocerotae. The following new synonyms are proposed: *Crossotolejeunea angulata* S. Winkler = *Cheilolejeunea* (subgen. *Strepsilejeunea*) spec., *Metzgeria bialata* S. Winkler = *Riccardia andina* (Spruce) Herz., *Plagiochila guilleminiana* Mont. = *P. raddiana* Lindenb. The Colombian hepatic flora is a very rich one. About 60% of all the species of tropical America and one sixth of the world's hepatics occur in Colombia. The country has more species than the whole of Africa south of the Sahara and almost twice as many as Europe. Highest diversity is at elevations between 2000-3000 m, lowest above 4000 m. The largest number of species has been recorded from the Andean region (especially Depts. Cundinamarca, Risaralda, Magdalena), the lowest from the Llanos orientales and the Caribbean coastal region which are the poorest regions of Colombia for hepatics. The lowland rain forests of the Pacific coastal region and Amazonia are also poorly known, in spite of the rather high number of hepatic species reported from these lowlands. With large tracts of lowland rain forest remaining in Colombia, exploration of these forests should be a priority for future research.

## Resumen

Desde la aparición del „Catalogue of the Hepaticae of Colombia“ (Gradstein & Hekking, 1979), se han reportado 161 especies nuevas para Colombia y unos 200 han sido reducidas a la sinonimia, excluidas o han recibido un nuevo nombre. Este nuevo catálogo acepta 840 especies (en 36 familias y 136 géneros): 832 especies de Hepaticae y 8 de Anthocerotae. Se proponen los siguientes sinónimos: *Crossotolejeunea angulata* S. Winkler = *Cheilolejeunea* (subgén. *Strepsilejeunea*) spec., *Metzgeria bialata* S. Winkler = *Riccardia andina* (Spruce) Herz.; y *Plagiochila guilleminiana* Mont. = *P. raddiana* Lindenb. La flora de hepáticas de Colombia es muy rica. Cerca del 60% de las especies de América tropical y una sexta parte de las hepáticas del mundo están presentes en Colombia. El país tiene más especies que toda el Africa al sur del Sahara y casi dos veces más que Europa. La más alta diversidad se encuentra a altitudes entre 2000-3000 m, la más baja por arriba de los 4000 m. El número más alto de especies se ha registrado en la región Andina (especialmente en los departamentos de Cundinamarca y Risaralda), él más bajo en los llanos orientales y la región costera del Caribe, las cuales son las regiones más pobres de Colombia en hepáticas. Los bosques pluviales tropicales de tierras bajas en la región costera del Pacífico y la Amazonia son pobremente conocidos, a pesar del alto número de especies de hepáticas registrado. Como aún se encuentran grandes áreas de bosque tropical de zonas bajas en Colombia, la exploración de estos bosques debe ser una prioridad para las futuras investigaciones.

Fig. 1. Departments of Colombia; Andean region shaded  
(from *The Bryologist* with permission).

## Introduction

Colombia is located in the northwestern corner of South America, with coasts on the Caribbean Sea and along the Pacific Ocean. The country occupies a landsurface of over 1 million square kilometers or about the size of France, Spain and Portugal. Its landscape and climate are enormously diverse. The principal physiographic feature of Colombia are the three cordilleras of the Andes (western, central and eastern cordillera), which vary in elevation from 3200 to over 5700 m and are separated by the deep Cauca and Magdalena river valleys. The highest elevation in Colombia is not reached in the cordilleras, however, but along the Caribbean coast in the isolated Sierra Nevada de Santa Marta (5800 m), the highest coastal mountain massiv worldwide.

Colombia is politically divided into 31 Departments (Fig. 1), which may be arranged in five different physiographic regions as follows (Rangel, 1995):

**I. Caribbean coastal region** (*Région Costa Caribe*): in the north, from sea level to 500 m, excluding the Sierra Nevada de Santa Marta. Relatively dry region, mostly covered by deciduous woodland, scrub, or semi-desert vegetation. Departments: Atlántico, Antioquia, Bolívar, Cesar, Córdoba, La Guajira, Magdalena, Sucre.

**II. Pacific coastal region** (*Région Costa Pacífica*): in the west, relatively narrow strip of land up to 100 km wide between the Andes and the Pacific ocean, from sea level to 500 m. One of the wettest regions of the world with up to 11.000 mm rainfall per year in the Chocó, covered by lush, species-rich evergreen rain forest. Departments: Cauca, Chocó, Nariño, Valle.

**III. Amazonia** (*Région Amazonica*): in the southeast, drainage area of the Amazon river, mostly below 500 m, to 2800 m in the Sierra de la Macarena. Moist tropical lowlands largely covered by evergreen rain forest, savannas in the dryer, northern part of the region towards the llanos (Guainia, Vaupes). Departments: Amazonas, Caqueta, Guainia, Guaviare, Putumayo, Vaupes. Furthermore part of Meta (Sierra de la Macarena).

**IV. Llanos Orientales** (*Région Orinoquia*): in the east, drainage area of the Orinoco river, below 500 m. Relatively dry area with a prolonged dry season of ca. 6-month, largely covered by savannas. Departments: Arauca, Casanare, Meta, Vichada.

**V. Andes** (*Région Andina*): including the three cordilleras, the Cauca and Magdalena valleys and the Sierra Nevada de Santa Marta, 500-5800 m. The most densely populated and heavily deforested region of Colombia, mostly humid, innerandean valleys dry, remnants of species-rich evergreen forests on the slopes of the mountains. Above timberline (3200-3800 m) *páramo* vegetation, rich in endemic species. Departments: Antioquia, Boyacá, Caldas, Cauca, Cundinamarca, Huila, Nariño, Norte de Santander, Quindío, Risaralda, Santander, Tolima, Valle. Furthermore parts of Cesar, La Guajira, and Magdalena (Sierra Nevada de Santa Marta).

Because of the enormous variation in physiography and climate, Colombia has a highly diverse flora and vegetation. The flora is considered one of the richest in the world with about 35000 species of flowering plants (Forero, 1988). About 1740 species of bryophytes - ca. 900 mosses, 840 hepatics - have been recorded from Colombia, totalling almost 45% of the whole bryophyte flora of tropical America (Churchill, 1989, 1991; this publication).

The present publication is the updated version of the "Catalogue of the Hepaticae of Colombia" (Gradstein & Hekking, 1979). The number of floristic novelties and taxonomic changes since 1979 are so large that preparation of a new catalogue became necessary. Many new records were published in the series "Studies on Colombian Cryptogams" (Gradstein, 1982, 1983, 1990). Important hepatic collecting after 1979 was done by G. B. A. van Reenen, J. Aguirre and others in the framework of the Dutch-Colombian ECOANDES-Project (e.g., van Reenen et al., 1984), by J. Aguirre and associates of the National Herbarium of Colombia (e.g., Uribe & Aguirre, 1995), by S. R. Gradstein and associates (e.g., Gradstein, 1994, 1995; van Zanten & Gradstein, 1988), by J. Meenks (Meenks, 1987, *Riccardia*), by J. Wolf in Risaralda (Wolf, 1993), and by R. M. Schuster (Schuster, 1992)<sup>1</sup>. Many hepatic collections were also made by S. P. Churchill and his associates in the framework of the "Flora of Colombia" project (Churchill & Linares, 1995); these collections still remain unpublished, however.

All published records as well as some unpublished ones are included in this catalogue. Unpublished records include gatherings of S. R. Gradstein from Risaralda (surroundings of Mistrato) and the Chocó made together with J. Aguirre and J.-P. Frahm in the summer of 1992 (Frahm, 1994), and specimens collected by A. M. Cleef in the eastern cordillera during 1971-73 (Cleef, 1981).

The format of the present catalogue is essentially similar to that of the previous one (Gradstein & Hekking, 1979), except for invalid and dubious names which are excluded from the alphabetical species list and are placed in a separate section. Previously unpublished records are cited by collector and number (in italics) and by the herbarium where the material is kept. When herbarium citation is lacking the material is in GOET. All identifications are by the second author unless otherwise indicated.

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<sup>1</sup> This publication, dealing with the oil bodies of the Lejeuneaceae, is unfortunately marred by defective species names, including 41 from Colombia that are invalidly published.



## State of knowledge of the hepatic flora of Colombia

This new catalogue accepts 840 hepatic species (in 36 families and 136 genera) in Colombia: 832 species of Hepaticae (in 34 families and 132 genera) and 8 species of Anthocerotae (in 2 families and 4 genera). The Colombian hepatic flora is a very rich one (Table 1). About 60% of all the species of tropical America and almost one sixth of the world's hepatics occur in Colombia. The country has more species than the whole of Africa south of the Sahara and almost twice as many as Europe.

Table 1. Number of species of Hepaticae and Anthocerotae reported from Colombia and elsewhere.

Area	Species	Reference
Colombia	840	This publication
Tropical America	1350	Gradstein et al, in press
Sub-Saharan Africa	713	Wigginton & Grolle, 1996
Europe	451	Grolle, 1983
World	ca. 5000	Gradstein et al., in press

Since 1979, 16 genera and 164 species of hepatics were newly discovered in Colombia. Genera new to Colombia include *Andrewsianthus*, *Austrofossombronia*, *Campanocolea*, *Cephaloziopsis*, *Cylindrocolea*, *Diplophyllum*, *Gymnocoleopsis*, *Kymatocalyx*, *Lunularia*, *Luteolejeunea*, *Mytilopsis*, *Pallavicinia*, *Ruizanthus*, *Temnoma*, *Thysananthus*, and *Trachylejeunea*. Groups with large numbers of new species are *Riccardia* (Meenks 1987), *Symphogyna* (Uribe & Aguirre, 1995), *Metzgeria* (Kuwahara, 1982, 1986; Pinheiro da Costa, in prep.), *Plagiochila* (Wolf, 1993), and the family Lejeuneaceae (Gradstein, 1994; Schuster, 1992).

The total number of hepatic species known from Colombia has increased with 8% in the last twenty years. This increase might seem rather low, the reason for this being mainly the large number of new synonyms. The names of more than one hundred species had been reduced to synonymy since 1979 and another 80 or so were excluded or renamed following taxonomic revision. Thus, the total amount of name changes since 1979 is much larger than the net increase in species, totalling over 40% of the number of species recorded in 1979! The number of species will undoubtedly undergo further changes in the future due to new discoveries (these may be getting less, however) and by new synonymy resulting from taxonomic work. Especially in the genus *Plagiochila*, the largest hepatic genus of Colombia with about 150 species recorded, one may expect many name changes when the taxonomy of this poorly known genus has been revised (Heinrichs et al., 1998).

The elevational records of the species show that highest diversity in terms of number of species is between 2000-3000 m, in the upper montane belt (Table 2). This confirms previous observations based on a much more limited dataset (Gradstein, 1995).

Table 2. Altitudinal distribution of Colombian hepatics up to the snowline (4700 m) based on the elevational records of about 750 species.

Altitudinal belt	Number of species
0-1000 m	225 (180 below 500 m)
1000-2000 m	275
2000-3000 m	375
3000-4000 m	270
4000-4700 m	65

Of particular interest is the relatively large number of species recorded from below 500 m (180 species). Usually, the equatorial lowlands are considered poor in bryophytes as compared with the montane belts. Recent studies, however, have shown that hepatic diversity of humid, evergreen lowland rain forests may not be much lower than that of montane forests, with exception of the very rich upper montane ones (Gradstein 1992a, 1995). Species of Lejeuneaceae are particularly numerous in the lowlands, totalling about 70% of hepatic diversity in these areas. Most of the lowland hepatics occur in Colombia in the moist, species-rich rain forests of Amazonia and the Pacific coastal region. The Pacific coastal forests are of particular interest because of many "montane" elements growing there at sea level, due to the exceptionally wet climate in this region (Gradstein, 1995).

Not unexpectedly, high diversity is also seen between 3000 and 4000 m, in the upper montane, subalpine and lower páramo belt. Above 4000 m in the superpáramos, the hepatic diversity is relatively low, yet is of interest due to the presence of a considerable number of rare or endemic taxa at these high elevations, e.g., *Anastrophyllum austroamericanum*, *A. pearcei*, *Drepanolejeunea andina*, *Gymnocoleopsis multiflora*, *Gymnomitrium andinum*, *G. atrofilum*, *G. setaceum*, *G. truncato-apiculatum*, *Herbertus oblongifolius*, *Jamesoniella undata*, *Jensenia florschuetzii*, *Leptoscyphus cleefii*, *Marsupella andina*, *M. involuta*, *M. trollii*, *Metzgeria metaensis*, *Plagiochila cleefii*, *P. revolvens*, *Riccardia parasitans*, *R. wallisii*, *Riccia lamellosa*, *Scapania cuspiduligera* (see also Gradstein, 1998a).

The number of Departmental species records from Colombia has increased to almost 2500; of these 860 or more than one third are new records since 1979 (Table 3). The greatest numbers of new records are from Risaralda (279 new spp., leg. J. Wolf and various other collectors), followed by the Chocó (79 new spp., mostly leg. S. R. Gradstein), Cundinamarca (70 new spp., various collectors), Magdalena (64 new spp., mostly leg. G. B. A. van Reenen), Meta (64 new spp., mostly leg. A. M. Cleef, leg. S. R. Gradstein) and Boyacá (49 new spp., mostly leg. A. M. Cleef). The number of Departmental records may further increase when the large holdings of unidentified hepatics in the National Herbarium of Colombia (COL) and elsewhere (e.g., collections S. P. Churchill) have been worked up.

In spite of the large amount of new data, our knowledge of hepatic distribution in the various regions and departments of Colombia is still meagre. Poorest known are the Llanos orientales and the Caribbean coastal region, which have less than ten records on average

Table 3. Number of hepatic species recorded from the Departments of Colombia as of 1979 and 1999 (number of new records in brackets).

Department	1979	1999
Amazonas	23	28 (5)
Antioquia	67	77 (10)
Arauca	16	33 (17)
Atlántico	0	0
Bolívar	0	0
Boyacá	90	139 (49)
Caldas	28	47 (19)
Caquetá	14	15 (1)
Casanare	0	25 (25)
Cauca	109	150 (41)
Cesar	62	62
Chocó	65	144 (79)
Córdoba	0	0
Cundinamarca	315	385 (70)
Guainía	1	1
Guajira	10	10
Huila	34	67 (33)
Magdalena	213	277 (64)
Meta	55	119 (64)
Nariño	2	8 (6)
Norte de Santander	34	40 (6)
Putumayo	33	33
Quindío	15	18 (3)
Risaralda	12	291 (279)
San Andrés y Providencia	0	1 (1)
Santander	46	83 (37)
Sucre	0	0
Tolima	64	99 (35)
Valle	120	122 (2)
Vaupés	32	34 (2)
Vichada	0	0

per Department, five of them (Atlántico, Bolívar, Córdoba, Sucre, Vichada) without a single record. The lack of records may be due, in part, to the poorness of the hepatic flora in these dry lowland areas. We would expect, however, that an intensive fieldsearch in these areas during the rainy season may yield species of *Fossombronia*, *Notothylas*, *Riccia*, *Cylindricolea* and other drought-tolerant hepatics.

The lowland rain forests of the Pacific coastal region and Amazonia are also poorly known, in spite of the high number of species reported. Departmental records from these regions are still relatively few and almost nothing is known about the frequency of the species in these areas. With large tracts of lowland rain forest remaining in Colombia, exploration of the hepatic flora of these forests should be a priority for future research.

The Andean region, not unexpectedly, has the largest number of species. Covering ca. 20-25% of the Colombian land surface, this region contains 93% of total species diversity for mosses (Churchill, 1991). For hepatics, the figure is about the same (ca. 90%). Even though, the number of records from the Andean region is still relatively low, varying from 10 to 150 species per Department, with exception of Cundinamarca (385 species), Magdalena (277 species) and Risaralda (291 species), which may be considered the better known Departments of Colombia for hepatics. The figures for Magdalena and Risaralda are somewhat misleading, however, because almost all the records from Risaralda are from only two localities, Santa Rosa de Cabal (1500-4000 m) and Mistrato (1200-1800 m), and those from Magdalena are all from the Sierra Nevada de Santa Marta. This shows that total number of species recorded per Department is an inadequate figure to evaluate the state of exploration of the area. In addition, information on the number of localities inventoried is required as well.

The available data clearly indicate that our knowledge of Colombian hepatics is still very incomplete in spite of the progress reported here. Much remains to be done to improve our understanding of the rich diversity of the Hepaticae and Anthocerotae of Colombia.

Synopsis of the genera and families<sup>2</sup>

## HEPATICAЕ

*Lophocolea* (Dum.) Dum.

## JUNGERMANNIALES

**Acrobolbaceae**

*Lethocolea* Mitt.  
*Tylimanthus* Mitt.

**Adelanthaceae**

*Adelanthus* Mitt.

**Arnelliaceae**

*Gongylanthus* Nees

**Balantiopsaceae**

*Isotachis* Mitt.  
*Neesioscyphus* Grolle  
*Ruizanthus* Schust.

**Calypogeiaceae**

*Calypogeia* Raddi

**Cephaloziaceae**

*Albiellopsis* Schust.  
*Anomoclada* Spruce  
*Cephalozia* (Dum.) Dum.  
*Nowellia* Mitt.  
*Odontoschisma* (Dum.) Dum.

**Cephaloziellaceae**

*Cephaloziella* (Spruce) Schiffn.  
*Cephaloziopsis* (Spruce) Schiffn.  
*Cylindrocolea* Schust.  
*Kymatocalyx* Herzog

**Geocalycaceae**

*Campanocolea* Schust.  
*Clasmatocolea* Spruce  
*Heteroscyphus* Schiffn.  
  
*Leptoscyphus* Mitt.

**Gymnomitriaceae**

*Gymnomitrium* Corda  
*Marsupella* Dum.  
*Stephaniella* Jack  
*Stephaniellidium* S. Winkler ex Grolle

**HERBERTACEAE**

*Herbertus* S. Gray  
*Triandrophyllum* Fulf. & Hatch.

**Jubulaceae**

*Frullania* Raddi  
*Jubula* Dum.

**Jungermanniaceae**

*Anastrophyllum* (Spruce) Steph.  
*Andrewsianthus* Schust.  
*Cryptochila* Schust.  
*Gymnocoleopsis* (Schust.) Schust.  
*Jamesoniella* (Spruce) Lees  
*Jungermannia* L.  
*Lophozia* (Dum.) Dum.  
*Nardia* S. Gray  
*Syzygiella* Spruce

**Lejeuneaceae**

*Acanthocoleus* Schust.  
*Acrolejeunea* (Spruce) Schiffn.  
*Amphilejeunea* Schust.  
*Anoplolejeunea* (Spruce) Schiffn.  
*Aphanolejeunea* Evans  
*Archilejeunea* (Spruce) Schiffn.  
*Aureolejeunea* Schust.  
*Blepharolejeunea* S. Arnell  
*Brachiolejeunea* (Spruce) Schiffn.  
*Bryopteris* (Nees) Lindenb.  
*Caudalejeunea* (Steph.) Schiffn.  
*Ceratolejeunea* (Spruce) Schiffn.

<sup>2</sup> This arrangement follows Yano & Gradstein (1997).

*Cheilolejeunea* (Spruce) Schiffn.  
*Cololejeunea* (Spruce) Schiffn.  
*Colura* (Dum.) Dum.  
*Crossotolejeunea* (Spruce) Schiffn.  
*Cyclolejeunea* Evans  
*Cyrtolejeunea* Evans  
*Cystolejeunea* Evans  
*Dicranolejeunea* (Spruce) Schiffn.  
*Diplasiolejeunea* (Spruce) Schiffn.  
*Drepanolejeunea* (Spruce) Schiffn.  
*Echinocolea* Schust.  
*Frullanoides* Raddi  
*Fulfordianthus* Gradst.  
*Harpalejeunea* (Spruce) Schiffn.  
*Lejeunea* Lib.  
*Lepidolejeunea* Schust.  
*Leptolejeunea* (Spruce) Schiffn.  
*Leucolejeunea* Evans  
*Lindigianthus* Kruijt & Gradst.  
*Lopholejeunea* (Spruce) Schiffn.  
*Luteolejeunea* Piippo  
*Macrolejeunea* (Spruce) Schiffn.  
*Marchesinia* S. Gray  
*Mastigolejeunea* (Spruce) Schiffn.  
*Microlejeunea* Steph.  
*Neurolejeunea* (Spruce) Schiffn.  
*Odontolejeunea* (Spruce) Schiffn.  
*Omphalanthus* Lindenb. & Nees  
*Pictolejeunea* Grolle  
*Prionocolea* Schust.  
*Prionolejeunea* (Spruce) Schiffn.  
*Rectolejeunea* Evans  
*Schiffneriolejeunea* Verdoorn  
*Sphaerolejeunea* Herzog  
*Stictolejeunea* (Spruce) Schiffn.  
*Symbiezidium* Trevis.  
*Taxilejeunea* (Spruce) Schiffn.  
*Thysananthus* Lindenb.  
*Trachylejeunea* (Spruce) Schiffn.

#### **Lepicoleaceae**

*Lepicolea* Dum.

#### **Lepidoziaceae**

*Arachniopsis* Spruce  
*Bazzania* S. Gray  
*Kurzia* G. Martens

*Lepidozia* (Dum.) Dum.  
*Micropterygium* Lindenb. et al.  
*Mytilopsis* Spruce  
*Paracromastigum* Fulf. & J. Taylor  
*Pseudocephaloza* Schust.  
*Telaranea* Spruce ex Schiffn.  
*Zoopsidella* Schust.

#### **Plagiochilaceae**

*Plagiochila* (Dum.) Dum.  
*Plagiochilion* Hatt.  
*Szweykowskia* Gradst. & Reiner

#### **Pleuroziaceae**

*Pleurozia* Dum.

#### **Porellaceae**

*Porella* L.

#### **Pseudolepicoleaceae**

*Blepharostoma* (Dum.) Dum.  
*Chaetocolea* Spruce  
*Temnoma* Mitt.

#### **Radulaceae**

*Radula* Dum.

#### **Scapaniaceae**

*Diplophyllum* (Dum.) Dum.  
*Scapania* (Dum.) Dum.

#### **Trichocoleaceae**

*Trichocolea* Dum.

#### **METZGERIALES**

#### **Aneuraceae**

*Aneura* Dum.  
*Riccardia* S. Gray

#### **Fossombroniaceae**

*Austrofossombronia* Schust.  
*Fossombronia* Raddi

#### **Metzgeriaceae**

*Metzgeria* Raddi

**Pallaviciniaceae***Jensenia* Lindb.*Pallavicinia* S. Gray*Symphyogyna* Nees & Mont.**Pelliaceae***Noteroclada* Tayl. ex Hook. & Tayl.

## MONOCLEALES

**Monocleaceae***Monoclea* Hook.

## MARCHANTIALES

**Aytoniaceae***Asterella* P. Beauv.*Plagiochasma* Lehm. & Lindenb.**Corsiniaceae***Cronisia* Berk.**Lunulariaceae***Lunularia* Adans.**Marchantiaceae***Dumortiera* Nees*Marchantia* L.**Ricciaceae***Riccia* L.**Targioniaceae***Cyathodium* Kunze*Targionia* L.**ANTHOCEROTAE**

## ANTHOCEROTALES

**Anthocerotaceae***Anthoceros* L.*Phaeoceros* Prosk.**Dendrocerotaceae***Dendroceros* Nees*Megaceros* Campb.





### Alphabetical list of species<sup>3</sup>

#### *Acanthocoleus* Schust. (Lejeuneaceae)

*Acanthocoleus aberrans* (Lindenb. & Gott.) var. *laevis* Gradst. - BOYACA, CUNDINAMARCA, TOLIMA: Gradstein (1994) 193, Fig. 51 - MAGDALENA: Winkler (1976) 810 as *Dicranolejeunea loxensis* (Gott.) Steph. - META: Gradstein & Hekking (1979) 110 det. as *D. loxensis* - RISARALDA: Wolf (1993) 941 - Alt.: 1700-2600 m.

#### *Acrolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

*Acrolejeunea emergens* (Mitt.) Steph. - NORTE DE SANTANDER: Gradstein & Hekking (1979) 104 - Alt.: 150 m.

\**Acrolejeunea torulosa* (Lehm. & Lindenb.) Schiffn. - AMAZONAS, CUNDINAMARCA, META, NARIÑO, RISARALDA, VAUPES: Gradstein (1994) 127, Fig. 33 - Alt: 0-1000 m.

#### *Adelanthus* Mitt. (Adelanthaceae)

\**Adelanthus aeromarginatus* Schust. - CUNDINAMARCA: *Schuster 88-967a* (det. R. M. Schuster) - Alt.: 3500 m.

*Adelanthus carabayensis* (Mont.) Grolle - S.L. ("Nova Granada"): Stephani (1905-09) 383 as *A. decurvus* Mitt.

*Adelanthus crossii* Spruce - BOYACA: *Cleef & Florschütz 5861* - CAUCA: Stephani (1906-09) 381; Grolle (1972a) 354, Fig. 9a-c - CUNDINAMARCA: van Zanten & Gradstein (1988) 47 - RISARALDA: Wolf (1993) 941 - Alt.: 2750-4000 m.

\**Adelanthus decipiens* (Hook.) Mitt. - CUNDINAMARCA: Gradstein et al. (1981) 235 - RISARALDA: Wolf (1993) 941; *Gradstein 8362, 8526* - Alt.: 1500-3370 m.

*Adelanthus lindenbergianus* (Lehm.) Mitt. - ARAUCA: Grolle (1972a) 342, Fig. 5, 9d-p - CUNDINAMARCA: Gottsche (1864) 116 as *Plagiochila magellanica* Lindenb.; Gradstein et al. (1977) 385 - MAGDALENA: van Reenen et al. (1984) 178 - META, SANTANDER, TOLIMA: Gradstein & Hekking (1979) 104 - RISARALDA: Wolf (1993) 941 - Alt.: 1800-4155 m.

*Adelanthus pittieri* (Steph.) Grolle - CAUCA: *Bischler 899, 1063* - CUNDINAMARCA, HUILA, NORTE DE SANTANDER: Grolle (1972a) 337, Fig. 3 - MAGDALENA: Winkler (1976) 805, Fig. 4 as *A. corticolus* sp. nov.; van Reenen et al. (1984) 178 - RISARALDA: Wolf (1993) 942 - Alt.: 2500-3700 m.

#### *Alobiellopsis* Schust. (Cephaloziaceae)

<sup>3</sup> Names marked with an asterisk are new to the Colombian flora (not listed in Gradstein & Hekking 1979).

*Albiellopsis dominicensis* (Spruce) Fulf. - RISARALDA: *Gradstein & Aguirre 8541* - VALLE: *Gradstein & Hekking (1979) 104* - Alt.: 250-1200 m.

*Amphilejeunea* Schust. (Lejeuneaceae)

*Amphilejeunea reflexistipula* (Lehm. & Lindenb.) Gradst. - CAUCA: Herzog (1955) 192 as *Hygrolejeunea reflexistipula* (Lehm. & Lindenb.) Steph. - RISARALDA: Wolf (1993) 944 as *Lejeunea reflexistipula* (Lehm. & Lindenb.) Steph. - Alt.: 1400-3000 m.

*Amphilejeunea patellifera* (Spruce) Schust. - CESAR, MAGDALENA: Winkler (1976) 813 as *Hygrolejeunea patellifera* (Spruce) Steph. - SANTANDER: Schuster (1992) 289 - Alt.: 2900 m.

\**Amphilejeunea viridissima* Schust. - RISARALDA: Wolf (1993) 942; Gradstein (1995) 324 - Alt.: 2100-3200 m.

*Anastrophyllum* (Spruce) Steph. (Jungermanniaceae)

*Anastrophyllum auritum* (Lehm.) Steph. - ARAUCA, BOYACA, META: *Gradstein & Hekking (1979) 104* as *A. leucostomum* (Tayl.) Steph. - CALDAS: Robinson (1967a) 45 as *A. leucostomum* - CUNDINAMARCA, RISARALDA: van Zanten & Gradstein (1988) 49 - MAGDALENA: Winkler (1976) 807 as *A. leucostomum* - PUTUMAYO: Robinson (1967a) 45 as *A. leucostomum* - Alt.: 2000-4500 m.

*Anastrophyllum austroamericanum* Vána - BOYACA: Vána (1980) 225, Fig. 1, 2.; *Gradstein & Hekking (1979) 121* as *Marsupella austro-americana* Vána, nom. inval. - Alt.: 3750-4300 m.

*Anastrophyllum crebrifolium* (Hook. f. & Tayl.) Steph. - ARAUCA, BOYACA, CAUCA, CUNDINAMARCA, META: *Gradstein & Hekking (1979) 104* as *A. leucocephalum* (Tayl.) Spruce - RISARALDA: Wolf (1993) 942 as *A. leucocephalum* - Alt.: 2300-4250 m.

*Anastrophyllum leptodictyon* Herz. - CUNDINAMARCA: Herzog (1934) 86, Fig. 4 - Alt.: 2200-2400 m.

*Anastrophyllum minutirete* Herz. - CUNDINAMARCA: Herzog (1934) 85, Fig. 2c-f - MAGDALENA: Winkler (1976) 807 - Alt.: 2000-3200 m.

*Anastrophyllum minutum* (Schreb.) Schust. - MAGDALENA: Winkler (1976) 805, Fig. 4a-h. as *A. gemmiferum* S. Winkler - Alt.: 4500 m.

*Anastrophyllum nigrescens* (Mitt.) Steph. - ANTIOQUIA: Robinson (1967a) 45 - BOYACA: *Aguirre & Gradstein 2903* - CUNDINAMARCA: Gradstein et al. (1977) 287 - MAGDALENA: Winkler (1976) 807 - META: *Gradstein & Hekking (1979) 104* - RISARALDA: Gradstein (1995) 324 - Alt.: 2000-4300 m.

\**Anastrophyllum pearcei* (Steph.) Schust. - BOYACA: *Cleef 5677, 9779* (det. J. Vána) - Cundinamarca: *Cleef 282a, 3745, 6372a* (det. J. Vána) - S.L.: Vána (1984) 103 - Alt.: 3500-4500 m.

*Anastrophyllum stellatum* Schust. - BOYACA: *Aguirre, Gradstein & Santana 2910* - CUNDINAMARCA: *Gradstein & Hekking (1979) 104* as *A. gradsteinii* Vána, nom.

inval. - META: *Cleef 8204* (det. J. Vána) - RISARALDA: Gradstein (1995) 324 - TOLIMA: *Aguirre & Gradstein 1038* (det. J. Vána) - Alt.: 3450-4000 m.

*Anastrophyllum tubulosum* (Nees) Grolle - CALDAS, META: Gradstein & Hekking (1979) 105 as *A. pusillum* Steph. - CUNDINAMARCA: Gottsche (1864) 117 as *Jungermannia adulterina* Gott. - MAGDALENA: Winkler (1976) 807 as *A. conforme* (Lindenb. & Gott.) Steph., also as *A. glaziovii* Steph. - RISARALDA: Wolf (1993) 942 - Alt.: 2000-4300 m.

*Andrewsianthus* Schust. (Jungermanniaceae)

\**Andrewsianthus jamesoni* (Mont.) Vána - BOYACA, META: Gradstein et al. (1983) 147 - CALDAS: *Linares et al. 1441* (det. J. Vána) - CUNDINAMARCA, MAGDALENA, TOLIMA: Vána (1980) 228 as *A. kilimanjaricus* (S. Arnell) Grolle & Vána - RISARALDA: van Zanten & Gradstein (1988) 50 - Alt.: 2300-4550 m.

*Aneura* Dum. (Aneuraceae)

*Aneura pinguis* (L.) Dum. - CESAR: Winkler (1976) 823 as *Riccardia pinguis* (L.) S. Gray - PUTUMAYO: Robinson (1967a) 56 - RISARALDA: *Gradstein 8674* - Alt.: 300-1900 m.

*Anomoclada* Spruce (Cephaloziaceae)

*Anomoclada portoricensis* (Hampe & Gott.) Vána - VAUPES: Fulford (1968) 346, Pl. 90, Fig. 1 as *A. mucosa* Spruce - Alt.: 250 m.

*Anoplolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

*Anoplolejeunea conferta* (Meissn.) Evans - BOYACA, CAUCA, TOLIMA: Gradstein & Hekking (1979) 105 - CHOCO: Winkler (1970) 951; *Gradstein 8867 p.p.*, *8882 p.p.* - CUNDINAMARCA: Gottsche (1864) 152 as *Lejeunea conferta* (Meissn.) Gott. et al.; Gradstein et al. (1977) 388 - MAGDALENA: Winkler (1976) 807 - RISARALDA: Wolf (1993) 942; Gradstein (1995) 324 - VALLE: Herzog (1955) 172 - Alt.: 30-3700 m.

*Anthoceros* L. (Anthocerotaceae)

*Anthoceros granulatus* Gott. - CUNDINAMARCA: Gottsche (1864) 188 - Alt.: 2600 m.  
*Anthoceros punctatus* L. - CUNDINAMARCA: Robinson (1967a) 57 - Alt.: 2500-2700 m.

*Aphanolejeunea* Evans (Lejeuneaceae)

*Aphanolejeunea ensifolia* (Spruce) Herz. - CHOCO: Winkler (1970) 951 - MAGDALENA: Winkler (1976) 808 - Alt.: 50 m.

*Aphanolejeunea exigua* Evans - MAGDALENA: Winkler (1976) 807 - Alt.: 2200 m.

\**Aphanolejeunea heterophylla* Schust. - CHOCO: *Gradstein 8940a* (det. A. Bernecker) - RISARALDA: *Gradstein 8935* (det. A. Bernecker) - Alt.: 400-1500 m.

- Aphanolejeunea gracilis* Jov.-Ast - CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.  
*Aphanolejeunea kunertiana* Steph. - CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.  
 \**Aphanolejeunea minuta* Schust. - RISARALDA: *Gradstein 8935p.p.* (det. A. Bernecker)  
 - Alt.: 1500 m.  
*Aphanolejeunea sicaefolia* (Gott.) Evans - VALLE: Herzog (1955) 195 - Alt.: 200-500  
 m.  
*Aphanolejeunea verrucosa* Jov.-Ast - CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.

*Arachniopsis* Spruce (Lepidoziaceae)

- Arachniopsis diacantha* (Mont.) Howe - AMAZONAS, VAUPES: Fulford (1968) 362, Pl.  
 96, Fig. 2 as *A. coactilis* Spruce - MAGDALENA: van Reenen et al. (1984) 178 as *A.*  
*coactilis* - CHOCO: *Gradstein 8774* - RISARALDA: *Gradstein 8473 p.p., 8509 p.p.,*  
*8511* - Alt.: 100-1900 m.  
 \**Arachniopsis monodactylus* (Spruce) Schust. - CHOCO: *Gradstein 8780a, 8863* - Alt.:  
 30-100 m.

*Archilejeunea* (Spruce) Schiffn. (Lejeuneaceae)

- \**Archilejeunea bischleriana* Gradst. - CHOCO: Gradstein (1994) 58, sp. nov. - Alt.: 50-  
 100 m.  
 \**Archilejeunea crispistipula* (Spruce) Steph. - AMAZONAS: Gradstein (1994) 54 - Alt.:  
 150 m.  
*Archilejeunea fuscescens* (Hampe ex Lehm.) Fulf. - AMAZONAS/CAQUETA: Nees (1833)  
 351 as *Jungermannia filiformis* Nees; Gradstein (1975) 126 as *A. juliformis* (Nees)  
 Gradst. - CASANARE, MAGDALENA: Winkler (1976) 822 det. as *Ptychocoleus juliformis*  
 (Nees) Trevis.; Winkler (1976) 816 det. as *Marchesinia extensa* (Steph.) Steph. -  
 META: Gradstein (1994) 57, Fig. 14 - Alt.: 150 m.  
 \**Archilejeunea ludoviciana* (De Not. ex Lehm.) Geissler & Gradst. subsp. *ludoviciana*  
 - CHOCO: Gradstein (1994) 59 as *A. porelloides* subsp. *chocoensis* Gradst. - META:  
 Gradstein (l. c.) - Alt.: 30-500 m.  
 - subsp. \**porelloides* (Spruce) Gradst. - AMAZONAS: Gradstein (1994) 58 as *A.*  
*porelloides* subsp. *porelloides* - Alt.: 500 m.  
*Archilejeunea parviflora* (Nees) Schiffn. - CAUCA (I. Gorgona), META, NORTE DE  
 SANTANDER, RISARALDA: Gradstein (1994) 65, Fig. 16 - CHOCO: Winkler (1970) 95  
 as *A. leprieurii* (Mont.) Schiffn. - Alt.: 0-1500 m.

*Asterella* P. Beauv. (Aytoniaceae)

- Asterella lateralis* Howe - CAUCA: Robinson (1967a) 57 - Alt.: 1800 m.  
*Asterella macropoda* (Spruce) Evans - CUNDINAMARCA: Gottsche (1864) 187 as  
*Fimbriaria lindenbergiana* Corda; Gradstein & Hekking (1979) 105 as *A.*  
*lindenbergiana* (Corda) Lindenb. - SANTANDER: Herzog (1955) 158 - Alt.: 2300-  
 3700 m.  
*Asterella pringlei* Underw. - MAGDALENA: Stephani (1917) 11 as *Fimbriaria bakeri*  
 Steph.

*Aureolejeunea* Schust. (Lejeuneaceae)

- \**Aureolejeunea aurifera* Schust. - CUNDINAMARCA: *Cleef 1700* - Alt.: 3800 m.  
 \**Aureolejeunea fulva* Schust. - RISARALDA: Wolf (1993) 942 - Alt. 2450-3200 m.  
*Aureolejeunea paramicola* (Herz.) Schust. - CUNDINAMARCA: Schuster (1992) 236; Herzog (1934) 95, Fig. 8 as *Brachiolejeunea paramicola* Herz. - RISARALDA: Wolf (1993) 942 - Alt.: 3000-3700 m.  
 \**Aureolejeunea quinquecarinata* Schust. - CASANARE: *Aguirre et al. 3248* - CUNDINAMARCA: *Cleef 1697b* - META: *Cleef 8145a* - RISARALDA: Gradstein (1995) 324 - Alt.: 3000-4100 m.

*Austrofossombronia* Schust. (Fossombroniaceae)

- \**Austrofossombronia peruviana* (Gott.) Schust. - BOYACA: *Cleef 9506* - CAUCA: *Cleef & Fernandez 622* - CUNDINAMARCA: *Cleef 5362* - Alt.: 3300-3800 m.

*Bazzania* S. Gray (Lepidoziaceae)

- Bazzania acanthostipa* Spruce - AMAZONAS/CAQUETA/VAUPES (Rio Apaporis): Fulford (1963) 166, Fig. 48 - MAGDALENA: van Reenen et al. (1984) 178 - Alt.: 100-1900 m.  
*Bazzania affinis* (Lindenb. & Gott.) Trevis. - CUNDINAMARCA, META: Fulford (1963) 120, Fig. 7 - MAGDALENA: van Reenen et al. (1984) 178 - Alt.: 2300 m.  
*Bazzania angustifolia* Herz. - VALLE: Herzog (1955) 166, Fig. 6 - Alt.: 1700-2000 m.  
*Bazzania arcuata* (Lindenb. & Gott.) Trevis. - AMAZONAS/CAQUETA/VAUPES (Rio Apaporis): Fulford (1963) 146, Fig. 31 - CAUCA, HUILA: Bischler (1962a) 37 - MAGDALENA: Winkler (1976) 807 - Alt.: ± 200-3600 m.  
*Bazzania aurescens* Spruce - AMAZONAS/CAQUETA/VAUPES (Rio Apaporis): Fulford (1963) 129, Fig. 15 - Alt.: ±100-500m.  
*Bazzania bidens* (Nees) Trevis. - VAUPES: Fulford (1963) 113, Fig. 1 - Alt.: ± 200 m.  
*Bazzania boliviana* (Steph.) Fulf. - ANTIOQUIA, VALLE: Bischler (1962b) 38 - CUNDINAMARCA, SANTANDER: Fulford (1963) 162, Fig. 45 - Alt.: 100-2800 m.  
*Bazzania breuteliana* (Lindenb. & Gott.) Trevis. - ANTIOQUIA, META, VALLE: Fulford (1963) 131, Fig. 17 - BOYACA, CAUCA: Bischler (1962b) 37 - CUNDINAMARCA: Gottsche (1864) 141 as *Mastigobryum cuervi* Gott.; Bischler (l. c.); Fulford (l. c.) - NORTE DE SANTANDER: Herzog (1955) 168; Fulford (l. c.) - RISARALDA: Wolf (1993) 942 - SANTANDER: Herzog (l. c.) - VAUPES: Fulford (l. c.); Robinson (1967a) 44 - Alt.: 10-3500 m.  
*Bazzania canelensis* (Steph.) Fulf. - CAUCA, HUILA: Bischler (1962b) 38 - Alt.: 3500-3750 m.  
*Bazzania chilensis* (Steph.) Fulf. - CAUCA, HUILA: Bischler (1962b) 37 - CUNDINAMARCA: Stephani (1906-1909) 520 as *Mastigobryum bogotense* Steph.; Fulford (1963) 125, Fig. 11 - RISARALDA: Wolf (1993) 942 - Alt.: 2500-3650 m.  
*Bazzania chimborazensis* Spruce - CHOCO: Bischler (1962b) 37 - VALLE: Bischler (l.c.); Fulford (1963) 131, Fig. 18 - Alt.: 70-300 m.

- Bazzania crassidentata*** Fulf. - CAUCA, HUILA: Bischler (1962b) 37 - VALLE: Fulford (1963) 143, Fig. 28 - Alt.: 3500-3650 m.
- Bazzania cuneistipula*** (Gott. & Lindenb.) Trevis. - CUNDINAMARCA: Bischler (1962b) 36 - QUINDIO/RISARALDA/TOLIMA: Gottsche (1864) 141 as *Mastigobryum brevifolium* Gott.; Fulford (1963) 116, Fig. 4 - Alt.: 2000-2500 m.
- \****Bazzania denticulifera*** Mägdefrau - CHOCO: Mägdefrau (1983) 16, Fig. 2a-d - Alt.: 75 m.
- Bazzania diversicuspis*** Spruce - CAUCA: Bischler (1962b) 37 - Alt.: 3200-3500 m.
- \****Bazzania eggersiana*** (Steph.) Pagán - MAGDALENA: van Reenen et al. (1984) 178 - Alt.: 2500 m.
- Bazzania elongata*** Fulf. - HUILA: Bischler (1962b) 37 - Alt.: 2400 m.
- Bazzania falcata*** (Lindenb.) Trevis. - CAUCA, CUNDINAMARCA, NORTE DE SANTANDER: Bischler (1962b) 38 - MAGDALENA: Winkler (1976) 807 - VALLE: Fulford (1963) 158, Fig. 42 - Alt.: 1000-3600 m.
- Bazzania glaziovii*** (Gott.) Fulf. - CHOCO, NORTE DE SANTANDER, VALLE: Bischler (1962b) 37 - VAUPES: Fulford (1963) 131, Fig. 6 - Alt.: 70-900 m.
- Bazzania gracilis*** (Hampe & Gott.) Steph. - AMAZONAS, META, VAUPES: Fulford (1963) 118, Fig. 6 - MAGDALENA: van Reenen et al. (1984) 178 - VALLE: Herzog (1955) 168 - Alt.: 100-2300 m.
- Bazzania hookeri*** (Lindenb.) Trevis. - AMAZONAS/CAQUETA/VAUPES (Rio Apaporis): Fulford (1963) 160, Fig. 44 as *B. robusta* Spruce - BOYACA: Bischler (1962b) 39 - CAUCA: Bischler (l.c.) as *B. robusta*; Gradstein et al. (1977) 388, Fig. 4 - CUNDINAMARCA: Herzog (1955) 168; Bischler (l. c.) as *B. robusta* - GUAJIRA, VAUPES: Fulford (1963) 159, Fig. 43 - HUILA: Bischler (l. c.) as *B. robusta*; Robinson (1967a) 44 as *B. robusta* - MAGDALENA: van Reenen et al. (1984) 178 - META: Gradstein & Hekking (1979) as *B. robusta* - NORTE DE SANTANDER: Bischler (l. c.); Fulford (l.c.) - RISARALDA: Wolf (1993) 942. - Alt.: 100-3700 m.
- Bazzania jamaicensis*** (Lehm. & Lindenb.) Trevis. - BOYACA, CAUCA: Bischler (1962b) 38 - MAGDALENA: Winkler (1976) 807 - Alt.: 2500-3500 m.
- Bazzania latidens*** (Gott.) Fulf. - VALLE: Robinson (1967a) 44 - Alt.: 3750 m.
- \****Bazzania liebmanniana*** (Lindenb. & Gott.) Trevis. - MAGDALENA: van Reenen et al. (1984) 178 - Alt.: 2100-2300 m.
- Bazzania longistipula*** (Lindenb.) Trevis. - ANTIOQUIA: Irmscher (1914) 995 as *Mastigobryum columbicum* Steph. - CAUCA: Bischler (1962b) 38 - CUNDINAMARCA: Irmscher (l. c.); Gradstein et al. (1977) 388, Fig. 5 - GUAJIRA: Fulford (1946) 86 - MAGDALENA: van Reenen et al. (1984) 178 - META: Fulford (1963) 136 as *B. tricuspidata* (Steph.) Fulf. - NORTE DE SANTANDER: Fulford (l. c.) Fig. 22 - SANTANDER, VALLE: Herzog (1955) 169 - RISARALDA: Wolf (1993) 942 - Alt.: 750-3500 m.
- Bazzania pallidevirens*** (Steph.) Fulf. - AMAZONAS/CAQUETA/VAUPES (Rio Apaporis), VALLE: Fulford (1963) 121, Fig. 8 - BOYACA: Bischler (1962b) 38 - Alt.: ± 100-2800 m.
- Bazzania phyllobola*** Spruce - AMAZONAS/CAQUETA/VAUPES (Rio Apaporis), VALLE: Fulford (1963) 113, Fig. 2 - CESAR, MAGDALENA: Winkler (1976) 807 - CUNDINAMARCA: Bischler (1962b) 36 - NORTE DE SANTANDER, SANTANDER: Herzog (1955) 169 - Alt.: ± 100 - 2900 m.

- Bazzania placophylla* (Tayl.) Grolle - CAUCA, HUILA: Bischler (1962b) 39 - RISARALDA: Gradstein (1995) 325 - Alt.: 3500-3750 m.
- Bazzania quadricrenata* (Gott.) Trevis. - AMAZONAS/CAQUETA/VAUPES (Rio Apaporis): Fulford (1963) 128, Fig. 14 - NORTE DE SANTANDER: Bischler (1962b) 38 - Alt.: ± 200-1600 m.
- Bazzania roraimensis* (Steph.) Fulf. - CAUCA, HUILA: Bischler (1962b) 36 - NORTE DE SANTANDER: Fulford (1963) 117, Fig. 5 - Alt.: 2900-3650 m.
- Bazzania schlimiana* (Gott.) Fulf. - CAUCA, CUNDINAMARCA: Bischler (1962b) 39 - CESAR: Winkler (1976) 807 - GUAJIRA (Sierra Nevada de Santa Marta): Gottsche (1864) 140 as *Mastigobryum schlimianum* Gott.; Fulford (1963) 156, Fig. 41 - MAGDALENA: Winkler (l.c.) - NORTE DE SANTANDER: Fulford (l.c.) - PUTUMAYO: Robinson (1967a) 44 - VALLE: Bischler (l.c.); Fulford (l.c.) - Alt.: 650-3300 m.
- Bazzania serrata* Fulf. - NORTE DE SANTANDER: Fulford (1963) 125., Fig. 10 - Alt.: 2150-2250 m.
- Bazzania stolonifera* (Sw.) Trevis. - BOYACA: Bischler (1962b) 38 - MAGDALENA: van Reenen et al. (1984) 178 - Alt.: 1700-3000 m.
- Bazzania taleana* (Gott.) Fulf. - CUNDINAMARCA: Bischler (1962b) 38 - Alt.: 2000-2500 m.
- Bazzania tayloriana* (Mitt.) Kuntze - CUNDINAMARCA: Bischler (1962b) 39; Fulford (1963) 169, Fig. 53 - VALLE: Bischler (l.c.) - Alt.: 100-1300 m.
- Bazzania teretiuscula* (Lindenb. & Gott.) Trevis. - CUNDINAMARCA: Stephani (1906-09) 520, sub *Mastigobryum humifusum* Spruce; Fulford (1946) 150 - MAGDALENA: Winkler (1976) 807; van Reenen et al. (1984) 178 - META: Fulford (1963) 163, Fig. 47 - Alt.: 1700-3100 m.

*Blepharolejeunea* S. Arnell (Lejeuneaceae)

- Blepharolejeunea incongrua* (Lindenb. & Gott.) van Slag. & Kruijt - ANTIOQUIA, ARAUCA, BOYACA, CASANARE, META, TOLIMA: Gradstein (1994) 182 - CUNDINAMARCA: Gottsche (1864) 145 as *Phragmicoma nitidiuscula* Gott.; Herzog (1934) 95, Fig. 8; as *B. nitidiuscula* (Gott) Schiffn.; Herzog (1934) 96 as *Dicranolejeunea incongrua* (Lindenb. & Gott.) Steph.; Gradstein et al. (1977) 390, Fig. 7 as *B. nitidiuscula* - RISARALDA: Wolf (1993) 942 - Alt.: 2000-4100 m.
- \**Blepharolejeunea saccata* (Steph.) van Slag. & Kruijt - ANTIOQUIA: Gradstein (1994) 179 - Alt.: 1200-1850 m.
- \**Blepharolejeunea securifolia* (Spruce) Schust. - BOYACA, CASANARE, MAGDALENA, META: Gradstein (1994) 183, Fig. 47 - CUNDINAMARCA: van Zanten & Gradstein (1988) 52 - RISARALDA: Wolf (1993) 942 - Alt.: 2450-4100 m.

*Blepharostoma* (Dum.) Dum. (Pseudolepicoleaceae)

- Blepharostoma trichophyllum* (L.) Dum. - CUNDINAMARCA, META: Gradstein & Hekking (1979) 107 - TOLIMA: Gradstein et al. (1977) 389 - RISARALDA: Wolf (1993) 942 - Alt.: 3100-3750 m.

*Brachiolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

*Brachiolejeunea laxifolia* (Tayl.) Schiffn. - ANTIOQUIA, CASANARE, MAGDALENA, META, NORTE DE SANTANDER: Gradstein (1994) 172, Fig. 45 - BOYACA, CAUCA, TOLIMA: Gradstein & Hekking (1979) 107 - CUNDINAMARCA: Robinson (1967a) 51; Gradstein et al. (1977) 389, Fig. 6; Schuster (1992) 204 - NORTE DE SANTANDER, SANTANDER: Herzog (1955) 176 - RISARALDA: Wolf (1993) 942 - Alt.: 1500-3800 m.

*Brachiolejeunea leiboldiana* (Lindenb. & Gott.) Schiffn. - CALDAS, CASANARE: Gradstein (1994) 174 - RISARALDA: Wolf (1993) 942 - Alt.: 1700 m.

*Brachiolejeunea phyllorhiza* (Nees) Kruijt & Gradst. - CUNDINAMARCA, TOLIMA: Gradstein (1994) 177 - RISARALDA: Wolf (1993) 942 - SANTANDER: Gottsche (1864) 150 as *Lejeunea phyllorhiza* (Nees) Nees; Gradstein & Hekking (1979) 110 as *Dicranolejeunea phyllorhiza* (Nees) Schiffn. - Alt.: 300-2500 m.

#### *Bryopteris* (Nees) Lindenb. (Lejeuneaceae)

*Bryopteris diffusa* (Sw.) Nees - S.L.: Stotler & Crandall-Stotler (1974) 71, Fig. 100-123 - RISARALDA: Wolf (1993) 942 - Alt. 1000-1250 m.

*Bryopteris filicina* (Sw.) Nees - CASANARE, CAUCA: Gradstein (1994) 98, Fig. 27. - CESAR: Winkler (1976) 808 as *B. fruticulosa* Tayl. - CUNDINAMARCA, MAGDALENA, META, SANTANDER, VALLE, VAUPES: Stotler & Crandall-Stotler (1974), div. Figs. as *B. fruticulosa* or as *B. trinitensis* (Lehm. & Lindenb.) Lehm. & Lindenb.; Gradstein (l. c.) - PUTUMAYO: Robinson (1967a) 51 - RISARALDA: Wolf (1993) 942 - Alt: 300-3000 m.

#### *Calypogeia* Raddi (Calypogeiaceae)

*Calypogeia andicola* Bischler - BOYACA: Gradstein & Hekking (1979) 108 - CAUCA, TOLIMA: Fulford (1968) 298, Pl. 72, Fig. 17 - CUNDINAMARCA: Fulford (l. c.); Gradstein et al. (1977) 390 - Alt.: 800-4100 m.

*Calypogeia caespitosa* (Spruce) Steph. - CAUCA, META, NORTE DE SANTANDER: Fulford (1968) 285, Pl. 67, Fig. 5 - CESAR: Winkler (1976) 808 - CHOCO: Gradstein 8913, 8965 - MAGDALENA: van Reenen et al. (1984) 178 - RISARALDA: Gradstein 8371, 8458, 8587 - Alt.: 400-2100 m.

*Calypogeia crenulata* Bischl. - CUNDINAMARCA: Fulford (1968) 286, Pl. 67, Fig. 6 - MAGDALENA: van Reenen et al. (1984) 179 - Alt.: 1900 m.

*Calypogeia cyclostipa* (Spruce) Steph. - CAUCA, CUNDINAMARCA: Gradstein et al. (1977) 391, Fig. 8 - RISARALDA: Wolf (1993) 942 - TOLIMA: Gradstein & Hekking (1979) 108 - Alt.: 1700-3600 m.

*Calypogeia densifolia* (Steph.) Steph. - AMAZONAS: Fulford (1968) 301, Pl. 73, Fig. 22 - Alt.: 200-250 m.

*Calypogeia laxa* Gott. & Lindenb. - ANTIOQUIA, CUNDINAMARCA: Fulford (1968) 305, Pl. 74, Fig. 25 - MAGDALENA: van Reenen et al. (1984) 179 - Alt.: 2300-3200 m.

*Calypogeia lechleri* (Steph.) Steph. - AMAZONAS: Fulford (1968) 303, Pl. 74, Fig. 23 - CHOCO: Gradstein 8917, 8976 - MAGDALENA: van Reenen et al. (1984) 179 -



- NORTE DE SANTANDER: Bischler (1962e) 98, Fig. 31 - RISARALDA: *Gradstein 8515* - Alt.: 400-2100 m.
- Calypogeia miquelii* Mont. - AMAZONAS, VAUPES: Fulford (1968) 307, Pl. 75, Fig. 26 as *C. amazonica* (Spruce) Steph. - ANTIOQUIA, NORTE DE SANTANDER, VALLE: Bischler (1962e) 107, Fig. 35 as *C. amazonica* - CHOCO: *Gradstein 8752* - MAGDALENA: van Reenen et al. (1984) 178 as *C. amazonica* - Alt.: 200-2300 m.
- \**Calypogeia nephrostipa* (Spruce) Steph. - CHOCO: *Gradstein 8716, 8813* - Alt.: 30-200 m.
- Calypogeia parallelogramma* (Spruce) Steph. - META: Fulford (1968) 287, Pl. 68, Fig. 8 - Alt.: 1700 m.
- Calypogeia peruviana* Nees & Mont. - BOYACA: Bischler (1962d) 63, Fig. 17 - CAUCA, META, PUTUMAYO: Fulford (1968) 292, Pl. 70, Fig. 13 - CUNDINAMARCA: Gottsche (1864) 139 det. as *C. trichomanis* Corda; Stephani (1906-09) 403 as *C. biapiculata* (Spruce) Steph.; Bischler (l. c.); Fulford (l. c.); Gradstein et al. (1977) 391, Fig. 9 - HUILA, NORTE DE SANTANDER: Bischler (l. c.); Bischler (1962d) 65, Fig. 18 as *C. heterophylla* (Steph.) Steph. - MAGDALENA: Winkler (1976) 808 as *C. heterophylla* (Steph.) Steph. - RISARALDA: Wolf (1993) 942 - Alt.: 250-3800 m.
- Calypogeia rhombifolia* (Spruce) Steph. var. *rhombifolia* - ANTIOQUIA, CHOCO, META: Bischler (1962e) 102, Fig. 33; Fulford (1968) 299, Pl. 73, Fig. 20 - Alt.: 350-1700 m.
- var. *colombiana* Bischler - VALLE: Bischler (1962e) 104, Fig. 34; Fulford (1968) 301, Pl. 73, Fig. 21 as var. "*colombica*" - Alt.: 500-600 m.
- Calypogeia tenax* (Spruce) Steph. - AMAZONAS, VAUPES: Fulford (1968) 299, Pl. 72, Fig. 19 - Alt.: 250 m.

***Campanocolea* Schust. (Geocalycaceae)**

- \**Campanocolea fragmentissima* (Schust.) Schust. - BOYACA: *Aguirre et al. 2877* - CUNDINAMARCA: *van der Hammen & Jaramillo 4339ab* - RISARALDA: *Aguirre & Gradstein 1366* - TOLIMA: *Aguirre & Gradstein 1609* - Alt.: 3250-3700 m.

***Caudalejeunea* (Steph.) Schiffn. (Lejeuneaceae)**

- Caudalejeunea lehmanniana* (Gott.) Evans - BOYACA: Gradstein & Hekking (1979) 108 - CHOCO: Winkler (1970) 951 - Alt.: 100 m.

***Cephalozia* (Dum.) Dum. (Cephaloziaceae)**

- Cephalozia bicuspidata* (L.) Dum. - BOYACA: Fulford (1968) 317, Pl. 78, Fig. 5 - Alt.: 3800 m.
- Cephalozia crassifolia* (Lindenb. & Gott.) Fulf. - BOYACA: Gradstein & Hekking (1979) 108 - CUNDINAMARCA, META: Fulford (1968) 312, Pl. 77, Fig. 1 - MAGDALENA: van Reenen et al. (1984) 179 - NORTE DE SANTANDER: Gradstein & Hekking (l. c.) as *C. caribbeana* Fulf. - RISARALDA: Wolf (1993) 942 - Alt.: 1000-3370 m.
- Cephalozia crossii* Spruce - BOYACA, CUNDINAMARCA: Gradstein & Hekking (1979) 108 as *C. dussii* Fulf. - CAUCA: Stephani (1906-09) 309; Fulford (1968) 322, Pl. 80,

Fig. 9 as *C. bischlerae* Fulf. - MAGDALENA: van Reenen et al. (1984) 179 as *C. dussii* - META: Fulford (l. c.) as *C. bischlerae*; Gradstein & Hekking (l. c.) as *C. dussii* Fulf. - RISARALDA: Wolf (1993) 942 as *C. bischlerae*; Gradstein (1995) 324 - TOLIMA: Robinson (1967a) 50; Gradstein & Hekking (l. c.) as *C. dussii* - Alt.: 2400-4100 m.

\**Cephalozia infusata* Schust. - CHOCO: Gradstein 8710, 8927, 8956, (det. J. Vána) - VALLE: Fulford (1980) 355, Pl. 93 as *Fuscocephaloziosis biloba* (Herz.) Fulf. - Alt.: 80-700 m.

\**Cephalozia pleniceps* (Aust.) Lindb. - BOYACA, CUNDINAMARCA, TOLIMA: Gradstein & Vána (1987) 405, Fig. 10 - Alt.: 3500-3700 m.

#### *Cephaloziella* (Spruce) Schiffn. (Cephaloziellaceae)

*Cephaloziella divaricata* (Sm.) Schiffn. - CUNDINAMARCA: Herzog (1934) 92, Fig. 6; Fulford (1976) 413, Pl. 114, Fig. 10 - Alt.: 3400 m.

*Cephaloziella fragillima* (Spruce) Fulf. - CAUCA: Fulford (1976) 409, Pl. 112, Fig. 5. - CUNDINAMARCA: Cleef 6226a (det. J. Vána) - Alt.: 3000-3660 m.

*Cephaloziella granatensis* (Jack) Fulf. - BOYACA: Cleef 4561 - CALDAS, TOLIMA: Stephani (1906-09) 300 as *Cephalozia granatensis*; Fulford (1976) 411, Pl. 113, Fig. 9 - CAUCA: Fulford (l. c.) - CASANARE: Aguirre & Gradstein 3039 (det. J. Vána) - CESAR: Winkler (1976) 808 - SANTANDER: Gradstein 7012 (det. J. Vána) - Alt.: 1300-4000 m.

#### *Cephaloziosis* (Spruce) Schiffn.

\**Cephaloziosis intertexta* (Gott.) Schust. - MAGDALENA: Aguirre 657 (det. R. Grolle) - Alt.: 2100 m.

#### *Ceratolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

*Ceratolejeunea cornuta* (Lindenb.) Schiffn. - CHOCO: Gradstein 8755 - S.L.: Fulford (1945) 388, Fig. 74-81 - Alt.: 200 m.

*Ceratolejeunea cubensis* (Mont.) Schiffn. - CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.

\**Ceratolejeunea fastigiata* (Spruce) Steph. - RISARALDA: Gradstein 8436 (cf.), 8514, 8520 - Alt.: 1500-1600 m.

*Ceratolejeunea globulifera* Herz. - CAUCA: Herzog (1942a) 23; Herzog (1955) 188 - Alt.: 1400-1500 m.

*Ceratolejeunea grandiloba* Jack & Steph. - ANTIOQUIA: Bonner (1953c) 197, Fig. 39-40 - RISARALDA: Wolf (1993) 942 - Alt.: 2100-3000 m.

*Ceratolejeunea guianensis* (Nees & Mont.) Steph. - CHOCO: Winkler (1970) 951 - Alt.: 30-100 m.

*Ceratolejeunea maritima* (Spruce) Steph. - CHOCO: Winkler (1970) 951 - MAGDALENA: Winkler (1976) 808 - PUTUMAYO: Robinson (1967a) 52 - RISARALDA: Wolf (1993) 942 - VALLE: Fulford (1945) 385; Herzog (1955) 188 as *C. litoralis* Herz.; Robinson (l.c.) - Alt.: 0-2550 m.

- \**Ceratolejeunea megalophysa* (Spruce) Steph. - CHOCO: *Gradstein* 8613, 8906 - Alt.: 400-800 m.
- Ceratolejeunea patentissima* (Hampe & Gott.) Evans - RISARALDA: Wolf (1993) 942 - S.L.: Fulford (1945) 282, Fig. 38- 44 - Alt. 2750 m.
- Ceratolejeunea platyceras* Steph. - VALLE: Herzog (1955) 188 - Alt.: 200-300 m.
- Ceratolejeunea plumula* (Spruce) Steph. - CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.
- \**Ceratolejeunea rubiginosa* (Gott.) Steph. - CHOCO: *Gradstein* 8750 - Alt.: 200 m.
- Ceratolejeunea sacculosa* Herz. - CAUCA: Herzog (1942a) 20; Bonner (1953c) 235; Herzog (1955) 188 - VALLE: Herzog (1955) 188 - Alt.: 1400-2400 m.
- Ceratolejeunea spinosa* (Gott.) Steph. - CHOCO: Winkler (1970) 951; *Gradstein* 8724, 8822, 8943 - RISARALDA: *Gradstein* 8447, 8459 - S.L.: Fulford (1945) 373, Fig. 9-15 - Alt.: 30-1600 m.

***Chaetocolea* Spruce (Pseudolepicoleaceae)**

- Chaetocolea palmata* Spruce - TOLIMA: *Gradstein* et al. (1977) 392 - Alt.: 2500-3100 m.

***Cheilolejeunea* (Spruce) Schiffn. (Lejeuneaceae)**

- \**Cheilolejeunea acutangula* (Nees) Grolle - MAGDALENA: Winkler (1976) 823 as *Strepsilejeunea acutangula* (Nees) Schiffn. - RISARALDA: van Zanten & *Gradstein* (1988) 54 - Alt.: 1250-?3000 m.
- \**Cheilolejeunea adnata* (Kunze ex Lehm.) Grolle - CHOCO: *Gradstein* 8741, 8776a, 8867 - Alt.: 30-200 m.
- \**Cheilolejeunea asperrima* (Steph.) Grolle - MAGDALENA: Grolle (1985) 197 - Alt.: 2700 m.
- Cheilolejeunea choachina* (Gott.) *Gradst.* - CUNDINAMARCA: Gottsche (1864) 156 as *Lejeunea choachina* Gott.; *Gradstein* & Hekking (1979) 131 as *Strepsilejeunea choachina* (Gott.) Steph. - RISARALDA: Wolf (1993) 943 - Alt.: 3000-3600 m.
- Cheilolejeunea curvatiloba* (Herz.) Grolle - VALLE: Herzog (1955) 184, Fig. 18i-l, 23a-c as *Harpalejeunea curvatiloba* Herz. sp. nov. - Alt.: ± 10 m.
- Cheilolejeunea decurviloba* (Steph.) X.-L. He - CHOCO: He (1996) 51, Fig. 1, 2; *Gradstein* 8818, 8924, 8950a as *Pycnolejeunea decurviloba* Steph. - VALLE: Herzog (1955) 193 as *P. decurviloba* - Alt.: 0-700 m.
- \**Cheilolejeunea discoidea* (Lehm. & Lindenb.) Schust. & Kachroo - CHOCO: *Gradstein* 8729a - Alt.: 200 m.
- Cheilolejeunea fragrantissima* (Spruce) Schust. - SANTANDER: Herzog (1955) 193. as *Euosmolejeunea fragrantissima* (Spruce) Steph., also as *E. fragrantissima* var. *columbica* Herz. - Alt.: 1500-2500 m.
- Cheilolejeunea inflexa* (Hampe ex Lehm.) Grolle - MAGDALENA: Winkler (1976) 825 as *Trachylejeunea inflexa* (Hampe ex Lehm.) Steph. - RISARALDA: *Gradstein* 8420 p.p. - Alt.: 1500-2150 m.
- Cheilolejeunea laevicalyx* (Jack & Steph.) Grolle - ANTIOQUIA: Jack & Stephani (1892) 19 as *Strepsilejeunea laevicalyx* Jack & Steph., sp. nov.; Grolle (1988) 410 - CUNDINAMARCA: Grolle (1988) 403 - Alt.: 3300 m.

- \**Cheilolejeunea oncophylla* (Aongstr.) Grolle & Reiner - ANTIOQUIA, RISARALDA: Grolle & Reiner-Drehwald (1997) 781, Fig. 1, 2 - Alt: 2400-3000 m.
- Cheilolejeunea revoluta* (Herz.) Gradst. & Grolle - SANTANDER: Herzog (1934) as *Pycnolejeunea revoluta* Herz., sp. nov.; Gradstein et al. (1993) 60, Fig. 1-2 - Alt: 2000-2600 m.
- Cheilolejeunea rigidula* (Nees & Mont.) Schust. - CESAR, MAGDALENA: Winkler (1976) 810 as *Euosmolejeunea neglecta* Gott. ex Steph. - CHOCO: Gradstein 8864 - MAGDALENA: Winkler (l. c.) as *E. duriuscula* (Nees) Evans - RISARALDA: Wolf (1993) 943 - Alt.: 30-2800 m.
- \**Cheilolejeunea trifaria* (Reinw. et al.) Mizut. - RISARALDA: Wolf (1993) 943 - S.L.: Schuster (1992) 241 - Alt.: 1000-2000 m.

*Clasmatocolea* Spruce (Geocalyceae)

- Clasmatocolea vermicularis* (Lehm.) Grolle - BOYACA, CALDAS: Gradstein & Hekking (1979) 109 - CAUCA: Gradstein et al. (1977) 392 - CUNDINAMARCA: van Zanten & Gradstein (1988) 54 - SANTANDER: Herzog (1955) 164, Fig. 2e as *Lophocolea elata* Gott. fo. *aquatica* Herz.; Grolle (1960) 78, Fig. 1-2 - Alt.: 2000-4500 m.

*Cololejeunea* (Spruce) Schiffn. (Lejeuneaceae)

- \**Cololejeunea bischleriana* Tixier - CUNDINAMARCA: Tixier (1980) 36, Fig. 1 - Alt.: 2500 m.
- Cololejeunea conchifolia* (Gott.) Gradst. "*conchaefolia*" - CUNDINAMARCA: Gottsche (1864) 163; Stephani (1916) 876 - Alt.: 2600 m.
- Cololejeunea obliqua* (Nees & Mont.) Schiffn. - CHOCO: Winkler (1970) 951 as *Leptocolea scabrifolia* (Gott. ex Steph.) Evans; Gradstein & Hekking (1979) 109 as *C. scabrifolia* Gott. ex Steph. - Alt.: ± 100 m.
- Cololejeunea planifolia* (Evans) Schust. - CHOCO: Winkler (1970) 951 as *Leptocolea planifolia* Evans - Alt.: ± 100 m.

*Colura* (Dum.) Dum. (Lejeuneaceae)

- \**Colura clavigera* Gott ex Jov.-Ast - RISARALDA: Gradstein 8432, 8499 - Alt.: 1500-1600 m.
- \**Colura cylindrica* Herz. - CHOCO: Gradstein 8772a - Alt.: 100 m.
- Colura greig-smithii* Jov.-Ast - CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.
- Colura naumanni* Steph. - BOYACA: Jovet-Ast (1976) 913, Pl. 3; Gradstein et al. (1977) 394, Fig. 12 as *C. patagonica* Jov.-Ast. - RISARALDA: Wolf (1993) 943 - Alt.: 2550-3750 m.
- \**Colura ornithocephala* Herz. - CUNDINAMARCA: Aguirre et al. s.n. - RISARALDA: Gradstein (1995) 325 - Alt.: 3200-3800 m.
- Colura tenuicornis* (Evans) Steph. - CUNDINAMARCA: Jovet-Ast (1953) 248, Fig. 30 - RISARALDA: Wolf (1993) 943 - Alt.: 1900-3700 m.
- Colura tortifolia* (Nees & Mont.) Trevis. - CHOCO: Winkler (1970) 951; Gradstein 8888 - Alt.: 30 m.

*Colura ulei* Jov.-Ast - CHOCO: *Gradstein* 8772 - VALLE: Herzog (1955) 195 - Alt.: 100 m.

***Cronisia* Berk. (Corsiaceae)**

*Cronisia paradoxa* (Wils. & Hook.) Berk. - META: Jovet-Ast (1963) 197, Fig. 3-5 as *Funicularia bischleriana* Jov.-Ast; Vital (1974) 276 - Alt.: 350 m.

***Crossotolejeunea* (Spruce) Schiffn. (Lejeuneaceae)**

*Crossotolejeunea bogotensis* Steph. - CUNDINAMARCA: Stephani (1912-17) 236 "Peruvia" (!); Bonner (1963b) 898.

*Crossotolejeunea inflexiloba* Jack & Steph. nom. inval. - ANTIOQUIA: Jack & Stephani (1892) 16; Bonner (1963b) 900, 898 (as *C. cavifolia* Steph.) - Alt.: 3000 m.

*Crossotolejeunea intricata* Jack & Steph. nom. inval. - ANTIOQUIA: Jack & Stephani (1892) 17; Bonner (1963b) 900 - Alt.: ± 3000 m.

*Crossotolejeunea pustulosa-alata* Herz. - VALLE: Herzog (1955) 181, Fig. 17 l-o - Alt.: 2100-2400 m.

***Cryptochila* Schust. (Jungermanniaceae)**

*Cryptochila grandiflora* (Lindenberg & Gottsche) Grolle - BOYACA: *Gradstein s. n.* - CASANARE: *Aguirre et al.* 3208 - CESAR: Winkler (1976) 813 as *Jamesoniella grandiflora* (Lindenb. & Gott.) Spruce - CUNDINAMARCA: Herzog (1934) 84 as *J. allionii* Steph. fo. *gracillima* Herz. fo. nov.; Robinson (1967a) 45 as *J. grandiflora*; Grolle (1971) 19, Fig. 14 - RISARALDA: van Zanten & Gradstein (1988) 54; Gradstein (1995) 324 - VALLE: Gradstein & Hekking (1979) - Alt.: 2000-3500 m.

***Cyathodium* Kunze (Targioniaceae)**

*Cyathodium cavernarum* Kunze ex Lehm. - MAGDALENA: Winkler (1976) 898 - Alt.: 750 m.

***Cyclolejeunea* Evans (Lejeuneaceae)**

*Cyclolejeunea accedens* (Gott.) Evans - RISARALDA: Wolf (1993) 943 - VALLE: Robinson (1967a) 52 - Alt.: 10-3000 m.

*Cyclolejeunea convexistipa* (Lehm. & Lindenb.) Evans - CAUCA: Grolle (1984) 760 - CHOCO: Winkler (1970) 951 - VALLE: Herzog (1955) 176 - Alt.: 100-1800 m.

\**Cyclolejeunea chitonina* (Tayl.) Evans - S.L.: Schuster (1992) 313.

*Cyclolejeunea foliorum* (Nees) Grolle - CHOCO: Winkler (1970) 951 as *C. angulata* Herz. - Alt.: ± 100 m.

*Cyclolejeunea luteola* (Spruce) Grolle - MAGDALENA: Winkler (1976) 825 det. as *Trachylejeunea didrichsenii* Gott. ex Steph.; Grolle (1984a) 762.

*Cyclolejeunea peruviana* (Lehm. & Lindenb.) Evans - CAUCA: Herzog (1955) 176 - CHOCO: Winkler (1970) 951 - VALLE: Herzog (l. c.); Robinson (1967a) 52 - Alt.: 80-1800 m.

*Cylindrocolea* Schust. (Cephaloziellaceae)

\**Cylindrocolea rhizantha* (Mont.) Schust. - CASANARE: Aguirre et al. 3039 (COL) - Alt.: ± 1200 m.

*Cyrtolejeunea* Evans (Lejeuneaceae)

*Cyrtolejeunea holostipa* (Spruce) Evans - CAUCA: Schuster (1992) 248 - CHOCO: Gradstein 8867a CUNDINAMARCA: Gradstein & Hekking (1979) 110 - MAGDALENA: Winkler (1976) 808 - VALLE: Herzog (1955) 172, 185 - RISARALDA: Wolf (1993) 943 - Alt.: 100-3100 m.

*Cystolejeunea* Evans (Lejeuneaceae)

*Cystolejeunea lineata* (Lehm. & Lindenb.) Evans - CHOCO: Gradstein 8853 - VALLE: Herzog (1955) 194 - Alt.: 30-300 m.

*Dicranolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

*Dicranolejeunea axillaris* (Nees & Mont.) Schiffn. - ANTIOQUIA, CALDAS: Gradstein (1994) 188, Fig. 48, 49 - BOYACA, HUILA: Gradstein & Hekking (1979) 110 - CUNDINAMARCA: Gottsche (1864) 151 as *Lejeunea axillaris* Nees & Mont.; Herzog (1934) 96; Robinson (1967a) 51 - MAGDALENA: Winkler (1976) 810; Winkler (l. c.) as *D. tridentata* S. Winkler - RISARALDA: Wolf (1993) 943 - SANTANDER: Herzog (1955) 176 - TOLIMA: Robinson (l. c.) - Alt.: 500-3200 m.

*Dendroceros* Nees (Dendrocerotaceae)

*Dendroceros crispus* (Sw.) Nees - MAGDALENA: Winkler (1976) 810 as *D. spec.* - HUILA: van Zanten & Gradstein 747 - Alt.: 750-2500 m.

*Diplasiolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

\**Diplasiolejeunea brachyclada* Evans - CHOCO: Gradstein 8772b - Alt.: 100 m.

*Diplasiolejeunea brunnea* Steph. - SANTANDER: Reyes (1982) 160 as *D. galloana* Jov.-Ast - Alt.: 2300-2500 m.

\**Diplasiolejeunea columbica* Tixier - CUNDINAMARCA: Tixier (1983) 235, Fig. 2 - Alt.: 2500 m.

\**Diplasiolejeunea papillionacea* Schust. - RISARALDA: Gradstein (1995) 325 - Alt.: 3500 m.

*Diplasiolejeunea pauckertii* (Nees) Steph. - CUNDINAMARCA: Gradstein & Hekking (1979) 110; Tixier (1983) 233, Fig. 1 - HUILA, CAUCA: Tixier (l. c.) - RISARALDA: Wolf (1993) 943 - Alt.: 2000-4150 m.

*Diplasiolejeunea pellucida* (Meissn.) Schiffn. - CAUCA, SANTANDER: Herzog (1955) 195 - CHOCO: Winkler (1970) 951 - VALLE: Herzog (l. c.); Robinson (1967a) 55 - Alt.: 0-2500 m.

- var. *malleiformis* Evans - CHOCO: Winkler (1970) 951.

*Diplasiolejeunea reflexiloba* (Gott.) Steph. - CUNDINAMARCA: Gottsche (1864) 164 as *Lejeunea reflexiloba* Gott.; Stephani (1912-17) 925.

*Diplasiolejeunea rudolphiana* Steph. - CHOCO: Winkler (1970) 951 - PUTUMAYO: Robinson (1967a) 55 - Alt.: ± 100-300 m.

*Diplasiolejeunea unidentata* (Lehm. & Lindenb.) Schiffn. - MAGDALENA: Winkler (1976) 810 - Alt.: 2550 m.

#### *Diplophyllum* (Dum.) Dum. (Scapaniaceae)

\**Diplophyllum obtusatum* (Schust.) Schust. - CASANARE, CUNDINAMARCA: Gradstein & Vána (1987) 409, Fig. 11 - Alt.: 2650-3400 m.

#### *Drepanolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

\**Drepanolejeunea andina* Herz. - RISARALDA: Wolf (1993) 943; Gradstein (1995) 325 - Alt.: 3350-4150 m.

*Drepanolejeunea araucariae* Steph. var. *araucariae* - CUNDINAMARCA, NORTE DE SANTANDER: Bischler (1964) 128, Fig. 25 - Alt.: 1300-1600 m.

*Drepanolejeunea aurita* Bischler - CAUCA, HUILA: Bischler (1964) 146, Fig. 30 - Alt.: 3350-3450 m.

*Drepanolejeunea bidens* Steph. - CHOCO: Winkler (1970) 951 - CUNDINAMARCA, NORTE DE SANTANDER: Bischler (1964) 107, Fig. 20 - Alt.: ± 100-1600 m.

*Drepanolejeunea biocellata* Evans - CHOCO: Winkler (1970) 951 - CUNDINAMARCA, HUILA, NORTE DE SANTANDER: Bischler (1964) 57, Fig. 7 - RISARALDA: *Gradstein* 8543 - Alt.: 100-2100 m.

*Drepanolejeunea campanulata* (Spruce) Steph. - S.L.: Bischler (1964) 80, Fig. 13 - MAGDALENA: van Reenen et al. (1984) 179 - RISARALDA: *Gradstein* 8363, 8543 (det. H. Bischler) - Alt.: 1200-1700 m.

*Drepanolejeunea crucianella* (Tayl.) Evans - CAUCA: Herzog (1955) 187 - CHOCO: Winkler (1970) 951 - NORTE DE SANTANDER, VALLE: Bischler (1964) 88, Fig. 15 - RISARALDA: *Gradstein* 8502 *p.p.*, 9739 *p.p.* - Alt.: 80-1600 m.

*Drepanolejeunea granatensis* (Jack & Steph.) Bischler - ANTIOQUIA: Jack & Stephani (1892) 17 as *Harpalejeunea granatensis* Jack & Steph.; Bischler (1964) 150, Fig. 31 - Alt.: ± 3000 m.

*Drepanolejeunea inchoata* (Meissn.) Steph. - ANTIOQUIA, CAUCA: Bischler (1964) 39, Fig. 3 - CHOCO: Winkler (1970) 951 - MAGDALENA: Winkler (1976) 1810 - RISARALDA: Wolf (1993) 943 - VALLE: Herzog (1955) 185; Bischler (l. c.) - Alt.: 80-3000 m.

- var. *roraimae* (Steph. ex Zwickel) Bischler - VALLE: Herzog (1955) 185 as *D. roraimae* Zwickel; Bischler (1964) 48, Fig. 4 - Alt.: 1700-2200 m.
- Drepanolejeunea lancifolia* (Gott.) Steph. - CUNDINAMARCA: Gottsche (1864) 155 as *Lejeunea lancifolia* Gott.; Bischler (1964) 161 - Alt.: 2200 m.
- Drepanolejeunea lichenicola* (Spruce) Steph. - ANTIOQUIA, BOYACA, CAUCA, VALLE: Bischler (1964) 83, Fig. 4 - CHOCO: *Gradstein 8776a* - MAGDALENA: Winkler (1976) 810 - RISARALDA: van Zanten & Gradstein (1988) 55 - Alt.: 900-3000 m.
- Drepanolejeunea mosenii* (Steph.) Bischler - CUNDINAMARCA, NORTE DE SANTANDER: Bischler (1967) 118, Fig. 8 - Alt.: 1300-2000 m.
- Drepanolejeunea navicularis* Steph. - ANTIOQUIA, BOYACA, HUILA: Bischler (1964) 155, Fig. 33 - CAUCA: Gradstein et al. (1977) 395, Fig. 13 - Alt.: 3000-3500 m.
- Drepanolejeunea orthophylla* (Nees & Mont.) Bischler - BOYACA: Bischler (1964) 102, Fig. 4 - CAUCA: Herzog (1955) 187, Fig. 20 as *D. hamulata* Steph. var. *espinulosa* Herz. - Alt.: 1400-2700 m.
- Drepanolejeunea pterocalyx* (Herz.) Bischler - VALLE: Herzog (1955) 187, Fig. 20 as *Leptolejeunea pterocalix* Herz.; Bischler (1967) 114, Fig. 7 - Alt.: 1600-1800 m.
- Drepanolejeunea pungens* Bischler - CUNDINAMARCA: Bischler (1964) 104, Fig. 19.
- Drepanolejeunea spinosa* Herz. - CAUCA, VALLE: Herzog (1955) 185, Fig. 19; Bischler (1964) 53, Fig. 6 - Alt.: 1400-2400 m.
- Drepanolejeunea subdissitifolia* Herz. - MAGDALENA: Winkler (1976) 810 - Alt.: 2200 m.

#### *Dumortiera* Nees (Marchantiaceae)

- Dumortiera hirsuta* (Sw.) Nees - CALDAS, META: van Zanten & Gradstein (1988) 56 - CUNDINAMARCA: Gottsche (1864) 186; Evans (1919) 178 as *D. nepalensis* (Tayl.) Nees; Herzog (1934) 80 - RISARALDA: Gradstein (1995) 326 - SANTANDER, VALLE: Gradstein & Hekking (1979) 111 - TOLIMA: Robinson (1967a) 57 - Alt.: 1500-3300 m.

#### *Echinocolea* Schust. (Lejeuneaceae)

- Echinocolea prionocalyx* (Gott.) Schust. - MAGDALENA: Winkler (1967) 808 as *Crossotolejeunea prionocalyx* Gott. ex Steph. - Alt.: 60 m.
- Echinocolea subspathulata* (Spruce) Grolle - VALLE: Herzog (1955) 183 as *Harpalejeunea subspathulata* (Spruce) Steph. fo. *turgidula* - Alt.: 2000-3000 m.

#### *Fossombronia* Raddi (Fossombroniaceae)

- Fossombronia brasiliensis* Steph. - CESAR, MAGDALENA: Winkler (1976) 811 - Alt.: 1800-4200 m.
- Fossombronia lamellata* Steph. - MAGDALENA: Winkler (1976) 811 - Alt.: 750 m.
- Fossombronia paranapanemae* Schiffn. - CESAR: Winkler (1976) 811 - Alt.: 3000-4250 m.
- Fossombronia porphyrorhiza* (Nees) Prosk. - CUNDINAMARCA: Gottsche (1864) 176 as *Androcryphia porphyrorhiza* Nees - Alt.: 2800 m.



***Frullania* Raddi (Frullaniaceae)**

- Frullania albertii*** Steph. - BOYACA: Yuzawa (1991) 207, Fig. 13 - S.L.: Bonner (1965) 237 as *F. arnellii* Steph. - Alt.: 3550-3950 m.
- \****Frullania apiculata*** (Reinw. et al.) Nees - RISARALDA: Wolf (1993) 943 - Alt.: 2000-3200 m.
- Frullania apollinariii*** Steph. - CUNDINAMARCA: Bonner (1965) 235 - Alt.: 2700 m.
- Frullania arecae*** (Spreng.) Gott.
- var. ***arecae*** - CAUCA: Yuzawa (1991) 266, Fig. 42-44 - CESAR, MAGDALENA: Winkler (1976) 811 - CUNDINAMARCA: Gottsche (1864) 166 as *F. hians* Lehm. & Lindenb.; Robinson (1967a) 51 - RISARALDA: Wolf (1993) 943 - SANTANDER: Herzog (1955) 171; Haarbrink (1981) 54, Fig. 5-6 - S.L.: Stephani (1909-12) 332 as *F. campanensis* Spruce - Alt.: 650-3150 m.
  - var. \****spiniloba*** (Steph.) Yuzawa - CUNDINAMARCA: Yuzawa (1991) 271, Fig. 45 - Alt.: 2500 m.
- \****Frullania arsenii*** Steph. - CUNDINAMARCA ("Andes Bogotensis"): Yuzawa (1991) 206.
- Frullania atrata*** (Sw.) Nees - CAUCA: Kunth (1822) 43 as *Jungermannia atrata* Sw. - MAGDALENA: Winkler (1976) 811 - Alt.: 2150 m.
- var. ***flaccida*** (Web.) Nees - CUNDINAMARCA: Gottsche (1864) 175 - Alt.: 2500 m.
- Frullania atosanguinea*** Tayl. - CALDAS: Herzog (1955) 171 as fo. *rotundifolia* - CUNDINAMARCA, TOLIMA: Robinson (1967a) 51 - Alt.: 3000-3500 m.
- Frullania beyrichiana*** (Lehm. & Lindenb.) Lehm. & Lindenb. - ANTIOQUIA: Imscher (1914) 996 as *F. coalita* Steph. - CUNDINAMARCA: Gottsche (1864) 174 as var. *granatensis* Gott.; Imscher (1914) 996 as *F. coalita* Steph. - Alt.: 1800-2100 m.
- Frullania bicornistipula*** Spruce - S.L. ("Nova Granada"): Stephani (1909-12) 510 - RISARALDA: Gradstein 8399, 8691 - Alt.: 1500-1800 m.
- var. ***mucroloba*** (Clark & Svihla) Clark & Svihla - NORTE DE SANTANDER: Clark & Svihla (1949) 134 as *F. mucroloba*; Clark & Svihla (1951) 124 - Alt.: 2000-2500 m.
- Frullania bogotensis*** Steph. - CUNDINAMARCA: Stephani (1909-12) 327; Yuzawa (1991) 246, Fig. 34 - SANTANDER: Herzog (1955) 171 - Alt.: 1500 m.
- Frullania brasiliensis*** Raddi - ANTIOQUIA: Stotler (1969) 438, Fig. 4a, 9-10 etc. - BOYACA: Gottsche 171 as *F. cylindrica* Lehm. var. *lindigii* Gott. fo. *laevior* Gott. fo. nov. - CALDAS, TOLIMA: Robinson (1967a) 51 - CESAR, MAGDALENA: Winkler (1976) 811 as *F. brasiliensis* & *F. spruceana* Steph. - CUNDINAMARCA: Gottsche (l.c.) as *F. cylindrica* var. *lindigii* fo. *lindigii*, fo. *brevicalicina* Gott. & fo. *laevior* Gott. fo. nov.; Clark (1953) 140 as *F. spruceana* - RISARALDA: Wolf (1993) 943 - VALLE: Herzog (1955) 71 - Alt.: 1250-3300 m.
- Frullania breuteliana*** Gott. - CUNDINAMARCA, VALLE: Stotler (1969) 453, Fig. 160-167.
- Frullania caulisequa*** (Nees) Nees - CESAR, MAGDALENA: Winkler (1976) 811 as *F. gymnotis* Nees & Mont. - RISARALDA: Wolf (1993) 943 - Alt.: 1250-3200 m.
- Frullania clandestina*** (Nees & Mont.) Nees - CAUCA: Stotler (1969) 448, Fig. 118-125.
- Frullania convoluta*** Lindenb. & Hampe - BOYACA: Cleef 1998b - CUNDINAMARCA: van Zanten & Gradstein (1988) 56 - META: Cleef 1222 - PUTUMAYO: Robinson (1967a) 51

- RISARALDA: Wolf (1993) 943 - SANTANDER: *van der Hammen & Jaramillo* 2429 - Alt.: 2100-3900 m.
- Frullania crenulifolia*** Jack & Steph. - ANTIOQUIA: Jack & Stephani (1892) 14; Bonner (1965) 277 - Alt.: ± 3000 m.
- Frullania crinoidea*** Spruce - CESAR, MAGDALENA: Winkler (1976) 811 - Alt.: 2900 m.
- Frullania cuencensis*** Tayl. - CUNDINAMARCA: Stephani (1909-12) 340 as *F. pehlkeana* Steph. - SANTANDER: Herzog (1955) 171; Yuzawa (1991) 209, Fig. 15 - Alt.: 2900-3300 m.
- Frullania decidua*** Spruce - BOYACA: Yuzawa (1991) 211, Fig. 16 - S.L.: Bonner (1965) 284 - Alt.: 3800 m.
- Frullania dusenii*** Steph. - CESAR: Winkler (1976) 812 as *F. transfalculica* Clark & Svihla - CUNDINAMARCA ("Andes Bogotensis"): Yuzawa (1991) 216, Fig. 18 - Alt.: 2400-3000 m.
- Frullania ecklonii*** (Spreng.) Gott. et al. - BOYACA: Yuzawa (1991) 260, Fig. 40 - CUNDINAMARCA: Gottsche (1864) 166; Yuzawa (l. c.) - TOLIMA: Gottsche (l. c.) - Alt.: 3355-3800 m.
- Frullania ecuadoriensis*** Steph. - RISARALDA: Wolf (1993) 943 - VALLE: Stotler (1969) 471, Fig. 297-303 - Alt.: 1250 m.
- Frullania ericoides*** (Nees) Mont. - CUNDINAMARCA, SANTANDER: Gottsche (1864) 166 as *F. squarrosa* Nees - RISARALDA: Wolf (1993) 943; *Gradstein* 8617 - Alt.: 800-2200 m.
- Frullania flexicaulis*** Spruce - CAUCA: Stotler (1969) 463, Fig. 235-243.
- Frullania gibbosa*** Nees - ANTIOQUIA: Irmischer (1914) 996 - CESAR, MAGDALENA: Winkler (1976) 811 - CUNDINAMARCA: Gottsche (1864) 165; Yuzawa (1991) 218, Fig. 19 - SANTANDER: Gottsche (1864) 165 - TOLIMA: Bonner (1965) 452 as *F. tolimana* Steph. - Alt.: 750-2200 m.
- Frullania granatensis*** Gott. - CUNDINAMARCA: Gottsche (1864) 173 - Alt.: 2100 m.
- \****Frullania guadalupensis*** Gott. ex Steph. - MAGDALENA: van Reenen et al. (1984) 179 - Alt.: 3100 m.
- Frullania harpantha*** Herz. - CUNDINAMARCA: Herzog (1942) 571; Bonner (1965) 322 - Alt.: 2200-2400 m.
- Frullania intumescens*** (Lehm. & Lindenb.) Lehm. & Lindenb. - ANTIOQUIA, TOLIMA: Irmischer (1914) 997 as *F. longicollis* Lindenb. & Gott. - CESAR: Winkler (1976) 811 as *F. closterantha* Spruce - CUNDINAMARCA: Clark & Svihla (1952) 188; Bonner (1965) 390 as *F. pachoensis* Steph.; Stotler (1969) 444, Fig. 16-17, 21-23, etc. - MAGDALENA: Winkler (l. c.) - Alt.: 1900-2500 m.
- \****Frullania jelskii*** Loitlesb. - CUNDINAMARCA: Yuzawa (1991) 220, Fig. 20.
- \****Frullania laxiflora*** Spruce - S.L.: Yuzawa (1991) 135, Fig. 28 - Alt.: 1500 m.  
- var. ***crossii*** Spruce - CAUCA: Spruce (1884) 27; Bonner (1965) 349.
- Frullania lechleri*** Steph. - ANTIOQUIA: Irmischer (1914) 997 - Alt.: ± 2500 m.
- Frullania lobato-hastata*** Steph. - CUNDINAMARCA: Gradstein et al. (1977) 395 - SANTANDER: Stotler (1969) 468, Fig. 274-282 - Alt.: 1800-3400 m.
- Frullania longipinna*** Steph. - NORTE DE SANTANDER: Stephani (1909-12) 534; Bonner (1965) 355.
- Frullania macrocephala*** (Lehm. & Lindenb.) Lehm. & Lindenb. - CUNDINAMARCA, VALLE: Stotler (1969) 439, Fig. 68-75.

- Frullania mathanii* Steph. - ANTIOQUIA, CUNDINAMARCA: Irmischer (1914) 997 - Alt.: 2300-3300 m.
- Frullania meridana* Steph. - CAUCA: Stotler (1969) 470, Fig. 283, 289.
- Frullania mirabilis* Jack & Steph. - VALLE: Herzog (1955) 171, Fig. 8; Stotler (1969) 473, Fig. 311-317 as *F. pendulostyla* Steph. - S.L.: Jack & Stephani (1892) 15; Clark & Svihla (1948a) 189, Fig. 1-14 - Alt.: 2100-2400 m.
- \**Frullania montagnei* Gott. - MAGDALENA: van Reenen et al. (1984) 179 - Alt.: 2100 m.
- \**Frullania moritziana* Lindenb & Gott. - RISARALDA: Wolf (1993) 943 (as cf.) - Alt.: 3000 m.
- Frullania mucronata* (Lehm. & Lindenb.) Lehm. & Lindenb. - RISARALDA: Gradstein 8378 - S.L.: Bonner (1965) 395 as *F. patens* Lindenb. - Alt.: 1500 m.
- Frullania nodulosa* (Reinw. et al.) Nees - AMAZONAS/CAQUETA: Nees (1833) 369 as *Jungermannia replicata* Nees.
- Frullania occanniencis* Steph. - ANTIOQUIA: Irmischer (1914) 996; Stephani (1917-24) 542 - Alt.: 1900 m.
- Frullania paradoxa* Lehm. & Lindenb. - BOYACA, CAUCA, CUNDINAMARCA, VALLE: Stotler (1969) 455, Fig. 168-174 - QUINDIO/RISARALDA/TOLIMA (Mt. Quindio): Gottsche (1864) 175 - RISARALDA: Wolf (1993) 943 - Alt.: 3000-3700 m.
- Frullania peruviana* Gott. - CUNDINAMARCA: Gottsche (1864) 175 (as "var.  $\alpha$ " and "var.  $\beta$ "). - MAGDALENA: van Reenen et al. (1984) 179 - RISARALDA: Wolf (1993) 943 - Alt.: 2300-3700 m.
- \**Frullania pittieri* Steph. - RISARALDA: Wolf (1993) 943 - Alt.: 1500-2450 m.
- Frullania pluricarinata* Gott. - CUNDINAMARCA: Gottsche (1864) 168; Clark & Svihla (1950) 121, Fig. 1-4; Yuzawa (1991) 243, Fig. 32 - MAGDALENA: Winkler (1976) 811 - Alt.: 2700-3300 m.
- Frullania repanda* Gott. - CUNDINAMARCA: Gottsche (1864) 175 - Alt.:  $\pm$  2500 m.
- Frullania ringens* Spruce - S.L.: Yuzawa (1991) 263, Fig. 41; Bonner (1965) 415 - Alt.: 1200 m.
- Frullania riojaneirensis* (Raddi) Aongstr. - ANTIOQUIA: Irmischer (1914) 997 - CAUCA: Kunth (1822) 43 as *Jungermannia obscura* Sw.; Gradstein & Hekking (1979) as *F. obscura* (Sw.) Dum.; Haarbrink (1981) 56 - CESAR, MAGDALENA: Winkler (1976) 811 - CUNDINAMARCA: Robinson (1967a) 51 ; Gradstein et al. (1977) 396; Haarbrink (l. c.) - HUILA Haarbrink (l. c.) - RISARALDA: Wolf (1993) 943 - SANTANDER: Herzog (1955) 171 as *F. arietina* Tayl. - Alt.: 640-3800 m.
- Frullania sabanetica* Gott. - CUNDINAMARCA: Gottsche (1864) 170.
- Frullania sphaerocephala* Spruce - CUNDINAMARCA: Haarbrink (1981) 52, Fig. 7-13; van Zanten & Gradstein (1988) 58; Yuzawa (1991) 276, Fig. 79 - META: Haarbrink (l. c.) - RISARALDA: Wolf (1993) 943 - S.L.: Bonner (1965) 350 as *F. lehmanniana* Gott. ex Steph. - Alt.: 3000-3900 m.
- \**Frullania standaertii* Steph. - CUNDINAMARCA: Yuzawa (1991) 223, Fig. 22 - RISARALDA: Wolf (1993) 943 - Alt.: 1700-3200 m.
- Frullania tetraptera* Nees & Mont. - CUNDINAMARCA: Robinson (1967a) 51; Yuzawa (1991) 228, Fig. 24; Gottsche (1864) 169, t. 20, Fig. 51 as *F. semiconnata* var. *coronata* and var. *granatensis* - META: Haarbrink (1981) 50, Fig. 28-34; Yuzawa (l. c.) - RISARALDA: Wolf (1993) 943 - Alt.: 3000-4150 m.

*Frullania trianae* Gott. - S.L.: Gottsche (1864) 173.

*Frullania trollii* Herz. - CUNDINAMARCA: Herzog (1942) 575; Bonner (1965) 455 - Alt.: 3000-3200 m.

\**Frullania tunguraguana* Clark & Frye - S.L.: Yuzawa (1991) 278, Fig. 50.

\**Frullania winteri* Steph. - RISARALDA: Wolf (1993) 943 - Alt.: 1700-2000 m.

- var. *vanderhammenii* (Haarbrink) Yuzawa - BOYACA: Yuzawa (1991) 233, Fig. 27; Haarbrink (1981) 56, Fig. 14-20 as *F. vanderhammenii* Haarbrink - Alt.: 2550 m.

#### *Frullanoides* Raddi (Lejeuneaceae)

\**Frullanoides corticalis* (Lehm. & Lindenb.) van Slag. - CHOCO, NARIÑO, SAN ANDRÉS Y PROVIDENCIA: van Slageren (1985) 84, Pl. XVII, Fig. 1a-9, Pl. XVIII, Fig. 1-3 - Alt.: 0-200 m.

*Frullanoides densifolia* Raddi. subsp. *densifolia* - ANTIOQUIA, BOYACA, CASANARE, TOLIMA: Gradstein (1994) 136, Fig. 35 - CUNDINAMARCA: Gottsche (1864) 145 as *Phragmicoma bicolor* and as *P. rupestris*; Gradstein & Hekking (1979) 107 as *Brachiolejeunea densifolia* (Raddi) Evans and as *B. rupestris*; Gradstein (l. c.) - HUILA: van Zanten & Gradstein (1988) 58 - MAGDALENA: Winkler (1976) 807 as *B. densifolia* - RISARALDA: Wolf (1993) 943 - SANTANDER: Herzog (1955) 176 as *B. succisa* Steph.; Gradstein (l. c.) - S.L.: Bonner (1963a) 448. as *B. columbica* Steph. - Alt.: 500-3500 m.

*Frullanoides liebmanniana* (Lindenb. & Gott.) van Slag. - CUNDINAMARCA, SANTANDER, TOLIMA: Gradstein (1994) 139 - RISARALDA: Wolf (1993) 944 - S.L.: Stephani (1909-12) 125; Bonner (1963a) 454 as *Brachiolejeunea liebmanniana* (Lindenb. & Gott.) Schiffn. - S.L. Stephani (1912-17) 160 as *Dicranolejeunea gigantea* Steph. - Alt.: 1000-1250 m.

*Frullanoides tristis* (Steph.) van Slag. - CASANARE, CUNDINAMARCA, RISARALDA: Gradstein (1994) 142 - MAGDALENA: Winkler (1976) 807 as *Brachiolejeunea wrightii* Steph. - Alt.: 750-2000 m.

#### *Fulfordianthus* Gradst. (Lejeuneaceae)

*Fulfordianthus pterobryoides* (Spruce) Schiffn. - CAUCA: Gradstein (1994) 89, Fig. 25; Schuster (1992) 220 as *Thysanopsis pterobryoides* (Spruce) Schust. nom. inval. - CHOCO: Gradstein (l. c.) - PUTUMAYO: Robinson (1967a) 51 det. as *Thysananthus evansii* Fulf.; Gradstein (l. c.) - VALLE: Fulford (1941) 35, Fig. 13-27 as *Thysananthus pterobryoides* Fulf.; Gradstein (l. c.) - Alt.: 0-1500 m.

#### *Gongylanthus* Nees (Arnellaceae)

*Gongylanthus granatensis* (Gott.) Steph. - BOYACA, CAUCA, HUILA: Gradstein & Hekking (1979) 114 CALDAS: van Zanten & Gradstein (1988) 58 - CUNDINAMARCA: Gottsche (1864) 138, t. 20, Fig. 50 as *Lindigina granatensis* Gott.; Herzog (1934) 82 as *Haplozia carnosa* Herz.; Vána (1974) 197 - RISARALDA: Gradstein (1995) 324 - TOLIMA: Gradstein et al. (1977) 396, Fig. 14 - Alt.: 2900-3750 m.

***Gongylanthus liebmannianus*** (Lindenb. & Gott.) Steph. - ARAUCA, BOYACA: Gradstein & Hekking (1979) 114 - CUNDINAMARCA: Herzog (1934) 82, Fig. 3 as *Haplozia cucculata* Herz.; Gradstein et al. (1977) 396, Fig. 15 - MAGDALENA: van Reenen et al. (1984) 179 - RISARALDA: *van Reenen et al. 3420* (det. van Reenen) - Alt.: 3200-4300 m.

***Gongylanthus limbatus*** (Herz.) Grolle & Vána - BOYACA, CUNDINAMARCA, META: Gradstein & Hekking (1979) 114 as *G. innovans* S. Winkler - CESAR, MAGDALENA: Winkler (1969) 63, Fig. 2 as *G. innovans*; van Reenen et al. (1984) 179 - Alt.: 3100-4300 m.

***Gymnocoleopsis*** (Schust.) Schust. (Jungermanniaceae)

\****Gymnocoleopsis multiflora*** (Steph.) Schust. - BOYACA, RISARALDA: Gradstein et al. (1983) 148 - CUNDINAMARCA: van Zanten & Gradstein (1988) 58 - Alt.: 3500-4400 m.

***Gymnomitrium*** Corda (Gymnomitriaceae)

***Gymnomitrium andinum*** (Herz.) Herz. - BOYACA: Gradstein & Hekking (1979) 114 - CESAR: Winkler (1976) 812 - META: *Cleef 841* (det. J. Vána) - Alt.: 3400-4200 m.

***Gymnomitrium atrofium*** Vána - META: Vána (1976) 411, Fig. 1a-e, - Alt.: 4015 m.

***Gymnomitrium setaceum*** Grolle & Vána - BOYACA, CUNDINAMARCA, MAGDALENA, META: Vána (1976) 411, Fig. 1m-q, 2 - Alt.: 3200-4300 m.

***Gymnomitrium truncato-apiculatum*** Herz. - BOYACA, META: Gradstein & Hekking (1979) 114 - CUNDINAMARCA: Herzog (1934) 81, Fig. 2 - MAGDALENA: Winkler (1976) 812 - Alt.: 3500-4300 m.

***Harpalejeunea*** (Spruce) Schiffn. (Lejeuneaceae)

***Harpalejeunea acuta*** S. Winkler - MAGDALENA: Winkler (1976) 812, Fig. 5g-i - Alt.: 2550 m.

***Harpalejeunea ancistrodes*** (Spruce) Schiffn. - BOYACA: Gradstein & Hekking (1979) 114 - CUNDINAMARCA: Gradstein et al. (1977) 397, Fig. 16 - RISARALDA: Wolf (1993) 944 - Alt.: 2450-3000 m.

***Harpalejeunea buenaventurae*** Herz. - VALLE: Herzog (1955) 183, Fig. 17a-d - Alt.: ± 10 m.

***Harpalejeunea cinchonae*** (Nees) Schiffn. - ANTIOQUIA: Jack & Stephani (1892) 18, t. 3, Fig. 17-19, as *H. tuberculata* Jack & Steph. sp. nov. - S.L. ("Nova Granada"): Stephani (1912-17) 248 - Alt. ± 3000 m.

***Harpalejeunea grandis*** Grolle & Reiner - BOYACA, CUNDINAMARCA, RISARALDA: Grolle & Reiner-Drehwald (in press) - Alt.: 3300-3800 m.

\****Harpalejeunea oxyphylla*** (Nees & Mont.) Steph. - RISARALDA: Wolf (1993) 944 (as cf.) - Alt.: 2550 m.

***Harpalejeunea tridens*** (Besch. & Spruce) Steph. - VALLE: Herzog (1955) 183 - Alt.: 2100-2400 m.

***Harpalejeunea uncinata*** Steph. var. ***setulosa*** Herz. - CAUCA, VALLE: Herzog (1955) 183, Fig. 17e-k - Alt.: 1400-1500 m.

***Herbertus*** S. Gray (Herbertaceae)

***Herbertus acanthelius*** Spruce - ANTIOQUIA: Stephani (1909-12) 14 as *Schisma granatensis* Steph.; Stephani (1909-12) 18 as *S. wallisianum* Steph.; Fulford (1963) 99, Fig. 5 - ARAUCA, BOYACA, META, TOLIMA: van Reenen (1982) 114 - CAUCA: Herzog (1955) 169.; van Reenen (l. c.); Fulford (1963) 100, Fig. 7 as *H. limbatus* (Steph.) Herz.; Gradstein et al. (1977) 397, Fig. 17 as *H. limbatus* - CUNDINAMARCA: Herzog (1934) 94 as *Herberta granatensis* (Steph.) Herz.; Fulford (l. c.); van Reenen (l. c.); Fulford (l. c.); Gradstein et al. (l. c.) - MAGDALENA: van Reenen et al. (1984) 179 - RISARALDA: Wolf (1993) 944 - VALLE: Robinson (1967a) 43 - Alt.: 2400-4100 m.

\****Herbertus colombianus*** van Reenen - ARAUCA: van Reenen (1982) 117 - RISARALDA: Wolf (1993) 944 - Alt.: 3250-3750 m.

***Herbertus divergens*** (Steph.) Herz. - CESAR, MAGDALENA: Winkler (1976) 812 - CHOCO: Gradstein 8800, 8841 - RISARALDA: Gradstein 8380 - Alt.: 30-2900 m.

***Herbertus grossispinus*** (Steph.) Fulf. - HUILA: van Reenen (1982) 120 - MAGDALENA: Winkler (1976) 812 - TOLIMA: van Reenen (l. c.) - VALLE: Fulford (1963) 98, Fig. 4 - Alt.: 2150-2750 m.

***Herbertus juniperoideus*** (Sw.) Grolle - ARAUCA, BOYACA, CAUCA: van Reenen (1982) 119 - CUNDINAMARCA: Gottsche (1864) 142 as *Sendtnera juniperina* (Sw.) Nees.; van Reenen (l. c.) - MAGDALENA: van Reenen et al. (1984) 179 - RISARALDA: Wolf (1993) 944 - VALLE: Robinson (1967a) 43 - Alt.: 2200-3600 m.

***Herbertus oblongifolius*** (Steph.) Gradst. & Cleef - ARAUCA: Gradstein et al. (1977) 398, Fig. 31; van Reenen (1982) 117 - Alt.: 4065 m.

***Herbertus pensilis*** (Tayl.) Spruce - BOYACA, CUNDINAMARCA, HUILA: van Reenen (1982) 120 - MAGDALENA: van Reenen et al. (1984) 179 - RISARALDA: Wolf (1993) 944 - VALLE: Herzog (1955) 169 - S.L.: Fulford (1963) 94, Fig. 2 - Alt.: 1600-3700 m.

***Herbertus subdentatus*** (Steph.) Fulf. - ANTIOQUIA: Fulford (1963) 104, Fig. 10 - ARAUCA, BOYACA, CAUCA, CUNDINAMARCA, META, TOLIMA: van Reenen (1982) 116 - MAGDALENA: Winkler (1976) 812 as *H. subnivalis* S. Winkler; van Reenen et al. (1984) 179 - RISARALDA: Wolf (1993) 944 - Alt.: 3100-4100 m.

***Heteroscyphus*** Schiffn. (Geocalyceae)

***Heteroscyphus marginatus*** (Steph.) Fulf. - CAUCA, META: Fulford (1976) 491, Pl. 143, Fig. 4. Alt.: 1000-?3300 m.

***Heteroscyphus polyblepharis*** (Spruce) Schiffn. - CAUCA: Fulford (1976) 494, Pl. 145, Fig. 7. CUNDINAMARCA: van Zanten & Gradstein (1988) 59 - RISARALDA: Wolf (1993) 944 - Alt.: 2450-3700 m.

\****Heteroscyphus thraustus*** (Spruce) Fulf. - RISARALDA: Gradstein 8686 - Alt.: 1800 m.

***Isotachis*** Mitt. (Balantiopsaceae)

- Isotachis lacustris* Herz. - BOYACA: Gradstein & Hekking (1979) 115 - MAGDALENA: Winkler (1976) 825 as *Triandrophyllum maegdefraui* S. Winkler - Alt.: 3500 - 4325 m.
- \**Isotachis lopezii* (Schust.) Gradst. - BOYACA: Cleef 1882, 9537, 9776 - CUNDINAMARCA, TOLIMA: Gradstein et al. (1977) 409, Fig. 26 as *Neesioscyphus* sp. - RISARALDA: Aguirre & Gradstein 4877 - Alt.: 3500-3900 m.
- Isotachis lindigiana* Gott. - CAUCA: Gradstein et al. (1977) 399, Fig.18 - CUNDINAMARCA: Gottsche (1864) 123; Herzog (1934) 94 as fo. *minor* Herz.; Fulford (1963) 73, Fig. 8a-e; Robinson (1967a) 44 - Alt.: 2900-3500 m.
- Isotachis multiceps* (Lindenb. & Gott.) Gott. - BOYACA: Gradstein et al. (1977) 399 - CAUCA: Fulford (1963) 66, Fig. 2 - CUNDINAMARCA: Fulford (l. c.); Robinson (1967a) 44; Gradstein et al. (l. c.) - MAGDALENA: Winkler (1976) 813 - META: Gradstein & Hekking (1979) 116 - RISARALDA: Gradstein (1995) 324 - Alt.: 1250-4100 m.
- var. *fendleri* Gott. - CUNDINAMARCA: Gottsche (1864) 125 - Alt.: 2900 m.
- Isotachis serrulata* (Sw.) Gott. - ANTIOQUIA: Fulford (1963) 68, Fig. 4a-e as *I. madida* (Hook. & Tayl.) Mitt. - BOYACA, PUTUMAYO, TOLIMA: Robinson (1967a) 44 - CAUCA, CAQUETA, HUILA: Fulford (1963) 70, Fig. 5a; Fulford (1963) 71, Fig. 6a-d as *I. haematodes* (Lehm. & Lindenb.) Gott.) - CUNDINAMARCA: Fulford (l. c.), Robinson (l. c.) as *I. madida*; Gradstein et al. (1977) 399 - MAGDALENA: Winkler (1976) 813 - RISARALDA: Gradstein 8411, 8480 - Alt.: 1800-4450 m.
- Isotachis tenax* Steph. - MAGDALENA: Winkler (1976) 813 - Alt.: 1500-2200 m.

***Jamesoniella*** (Spruce) Nees (Jungermanniaceae)

- \**Jamesoniella autumnalis* (DC) Steph. - BOYACA, HUILA: Gradstein & Vána (1987) 410, Fig. 17.
- Jamesoniella rubricaulis* (Nees) Grolle - ARAUCA, BOYACA, TOLIMA: Grolle (1971) 78, Fig. 21; Gradstein & Hekking (1979) 116 - CAUCA: Robinson (1967a) 45 as *J. colorata* (Lehm.) Spruce - CESAR, MAGDALENA: Winkler (1976) 813 as *J. colorata* - CUNDINAMARCA: Herzog (1934) 84 as *J. colorata*; Gradstein et al. (1977) 400 - RISARALDA: Wolf (1993) 944 - SANTANDER: Herzog (1955) as *J. colorata* - Alt.: 2550-4500 m.
- Jamesoniella undata* (Mont.) Steph. - ARAUCA: Cleef 9094 - BOYACA: Cleef 3840 - CALDAS: Barclay 6298 (det. R. Grolle) - CUNDINAMARCA: Herzog (1934) 85 as *J. paramicola* Herz. sp. nov.; Robinson (1967a) 45; Grolle (1971) 74, Fig. 20 - Alt.: 3400-4300 m.

***Jensenia*** Lindb. (Pallaviciniaceae)

- Jensenia erythropus* (Gott.) Grolle var. *erythropus* - ANTIOQUIA: Jack & Stephani (1892) 23 as *Pallavicinia wallisii* Jack & Steph.; Hässel de Menéndez (1961) 276 as *Pallavicinia erythropus* (Gott.) Steph.; van der Grolle (1980) 277, Fig. 1, H-L - CAUCA: van der Grolle (1980) 277 - MAGDALENA: Winkler (1976) 818 as *J. wallisii* - RISARALDA: Gradstein (1995) 326 - Alt.: 2600-3950 m.

- \**Jensenia erythropus* (Gott.) Grolle var. *nobandae* van der Gronde - BOYACA, CAUCA, SANTANDER: van der Gronde (1980) 277, Fig. 1, M-O - CUNDINAMARCA: Gottsche (1864) 178 as *Mittenia erythropus* Gott.; Herzog (1934) 80 as *Pallavicinia erythropus* (Gott.) Steph.; Hässel de Menéndez (1961) 276, Fig. 7 as *P. erythropus*; van der Gronde (l. c.) - MAGDALENA: Winkler (1976) 818 as *P. erythropus* - Alt.: 2250-4100 m.
- \**Jensenia difformis* (Nees) Grolle - RISARALDA: *Gradstein 8496* (det. R. Grolle) - Alt.: 1600 m.
- \**Jensenia florschuetzii* van der Gronde - META: van der Gronde (1980) 273, Fig. 1, A-G - Alt.: 4015 m.

***Jubula* Dum. (Jubulaceae)**

- Jubula bogotensis* Steph. - CUNDINAMARCA: Gottsche (1864) 167 as *Frullania hutchinsiae* Nees var. *bogotensis* Gott.; Verdoorn (1928) 215 as *J. hutchinsiae* subsp. *bogotensis* (Gott.) Verdoorn; Guercke (1978) 83, Fig. 47-56 as *J. pennsylvanica* (Steph.) Evans subsp. *bogotensis* (Steph.) Guercke - MAGDALENA: van Reenen et al. (1984) 179 - Alt.: 2100-2700 m.

***Jungermannia* L. (Jungermanniaceae)**

- Jungermannia amoena* Lindenb. & Gott. - QUINDIO, RISARALDA, VALLE: Vána (1974) 188, Fig. 3 - Alt.: 1500 m.
- Jungermannia callithrix* Lindenb. & Gott. - BOYACA, CALDAS, QUINDIO, RISARALDA, TOLIMA, VALLE: Vána (1974) 185, Fig. 4-5 - CUNDINAMARCA: Herzog (1934) 82 as *Alicularia callithrix* (Lindenb. & Gott.) Herz. - Alt.: 1200-2500 m.
- Jungermannia decolor* Schiffn. - CAUCA, CUNDINAMARCA, PUTUMAYO, TOLIMA: Vána (1974) 184, Fig. 1-2 (Robinson 1967a det. as *J. hyalina*) - Alt.: 475-3000 m.
- Jungermannia hyalina* Lyell ex Hook. - CUNDINAMARCA: Gottsche (1864) 119; van Zanten & Gradstein (1988) 61 - MAGDALENA: Winkler (1976) 821 as *Plectocolea hyalina* (Lyell ex Hook.) Mitt. - Alt.: 1800-3400 m.
- Jungermannia linguifolia* Gott. - CALDAS, CAUCA: Vána (1974) 193, Fig. 6(1-4) - CESAR, MAGDALENA: Winkler (1976) 814 - CUNDINAMARCA: Herzog (1934) 82 det. as *Alicularia callithrix* (Lindenb. & Gott.) Herz.; Vána (l. c.) - Alt.: 1900-3300 m.
- Jungermannia ovato-trigona* (Steph.) Grolle - CUNDINAMARCA: Herzog (1934) 84 as *Haplozia rorida* Herz.; Grolle (1971) 90; Vána (1973) 279, Fig. 9 - RISARALDA: van Zanten & Gradstein (1988) 61 - Alt.: 2800-3750 m.
- Jungermannia sphaerocarpa* Hook. - ANTIOQUIA, CAUCA, RISARALDA, TOLIMA: Gradstein & Vána (1987) 412, Fig. 27 - BOYACA, CALDAS: Vána (1974) 196 - CUNDINAMARCA: Gottsche (1864) 19 as fo. *minor* Gott. nom. nud.; Robinson (1967a) 44; Vána (1974) 196; Vána (1974a) 408; Gradstein et al. (1977) 400, Fig. 19 - MAGDALENA: Winkler (1976) 823 as *Solenostoma sphaerocarpa* (Hook.) Steph. - Alt.: 2050-4100 m.

***Kurzia* G. Martens (Lepidoziaceae)**



- Kurzia capillaris*** (Sw.) Grolle - BOYACA, SANTANDER: Gradstein & Hekking (1979) 117 - CAUCA: Fulford (1966) 225, Pl. 49, Fig. 1 as *Microlepidozia capillaris* (Sw.) Fulf. - CUNDINAMARCA: Fulford (1966) 228, Pl. 49, Fig. 2 as *M. verrucosa* (Steph.) Fulf.; Gradstein et al. (1977) 401; Gradstein & Hekking (l. c.) as *K. verrucosa* (Steph.) Grolle) - RISARALDA: Gradstein (1995) 325 - Alt.: 1500-3750 m.
- Kurzia flagellifera*** (Steph.) Grolle - CUNDINAMARCA: Gradstein & Hekking (1979) 117 - MAGDALENA: Winkler (1976) 817 as *Microlepidozia flagellifera* (Steph.) Fulf. - RISARALDA: Wolf (1993) 944; *Gradstein 8473* - Alt.: 1600-3750 m.

***Kymatocalyx*** Herz. (Cephaloziellaceae)

- \****Kymatocalyx dominicensis*** (Spruce) Vána - RISARALDA: *Gradstein 8675, 8708* (verif. J. Vána) - Alt.: 1800 m.

***Lejeunea*** Lib. (Lejeuneaceae)

- \****Lejeunea ambigua*** Lindenb. & Gott. - RISARALDA: Wolf (1993) 944 (as aff.) - Alt.: 3000 m.
- Lejeunea biformis*** Gott. - TOLIMA: Gottsche (1864) 162; Stephani (1912-17) 724 - Alt.: 300 m.
- Lejeunea carolensis*** Spruce - MAGDALENA: Winkler (1976) 814 - Alt.: 700 m.
- Lejeunea cauapunensis*** Spruce - MAGDALENA: Winkler (1976) 814 - Alt.: 2100-2800 m.
- Lejeunea cyathophora*** Mitt. - CHOCO: Winkler (1970) 951 - MAGDALENA: Winkler (1976) 814 - Alt.: ± 100-1800 m.
- Lejeunea drymophila*** Spruce - CHOCO: Winkler (1970) 951 - MAGDALENA: Winkler (1976) 814 - Alt.: ± 100-1600 m.
- Lejeunea flava*** (Sw.) Nees - CAUCA: Herzog (1955) 194 - CHOCO: Winkler (1970) 951; *Gradstein 8891 p.p.* - CUNDINAMARCA: Gradstein & Hekking (1979) 117 - MAGDALENA: Winkler (1976) 814 - PUTUMAYO: Robinson (1967a) 55 - RISARALDA: Wolf (1993) 944 - SANTANDER: Gradstein et al. (1977) 402 - Alt.: 30-3000 m.
- var. ***robustior*** Gott. - CUNDINAMARCA: Gottsche (1864) 162 - Alt.: 2600 m.
- Lejeunea fusagasugana*** Gott. - CUNDINAMARCA: Gottsche (1864) 158 - Alt.: 2200 m.
- Lejeunea geophila*** Spruce - MAGDALENA: Winkler (1976) 814 det. as *L. filipes* Spruce (M. E. Reiner-Drehwald, pers. com.) - Alt.: 750 m.
- Lejeunea granatensis*** Steph. 1915 nom. illeg., non Jack & Steph. 1892 - S.L. ("Nova Granada"): Steph. (1912-17) 738; Bonner (1978) 564.
- Lejeunea hyalina*** (Steph.) Steph. - CUNDINAMARCA ("Bogota"): Stephani (1912-17) 614; Bonner (1978) 577; Gradstein & Hekking (1979) 129 as *Pycnolejeunea hyalina* Steph.
- Lejeunea laetevirens*** Nees & Mont. - CESAR, MAGDALENA: Winkler (1976) 814 as *L. lucens* Tayl. and *L. glaucophylla* Gott. - CUNDINAMARCA: *Gradstein s.n.* - RISARALDA: Wolf (1993) 944 - S.L.: Bonner (1978) 709 as *L. subhyalina* Lindenb. & Gott. - Alt.: 1000-2500 m.
- Lejeunea leptalea*** Spruce - CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.

- \**Lejeunea megalantha* Spruce - RISARALDA: Wolf (1993) 944 - Alt.: 2100-2750 m.  
*Lejeunea montana* Gott. - SANTANDER: Gottsche (1864) 160 - Alt.: 1200 m.  
*Lejeunea nemoralis* Gott. - CUNDINAMARCA: Gottsche (1864) 159 - Alt.: 2500 m.  
*Lejeunea phyllobola* Nees & Mont. - PUTUMAYO, VALLE: Robinson (1967a) 55 as  
*Rectolejeunea phyllobola* (Nees & Mont.) Evans.  
*Lejeunea radicans* Lindenb. & Gott. - CUNDINAMARCA: Gottsche (1864) 162.  
*Lejeunea remotifolia* Hampe ex Steph. - CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.  
*Lejeunea sabanetica* Gott. - CUNDINAMARCA: Gottsche (1864) 161 - Alt.: 2200 m.  
*Lejeunea semiscabrida* Gott. - GUAJIRA (Sierra Nevada de Santa Marta): Gottsche  
(1864) 154; Stephani (1912-17) 824 as *Microlejeunea semiscabrida* (Gott.) Steph.  
*Lejeunea silvatica* Gott. - BOYACA, CUNDINAMARCA: Gottsche (1864) 159 - Alt.: 2000-  
2800 m.  
*Lejeunea subsessilis* Spruce - MAGDALENA: Winkler (1976) 814 - Alt.: 700-1600 m.  
*Lejeunea tarapotensis* Spruce - VAUPES: Stephani (1917-1924) 765.

***Lepicolea* Dum. (Lepicoleaceae)**

- Lepicolea pruinosa* (Tayl.) Spruce - ANTIOQUIA, CAUCA, VALLE: Fulford (1963) 37, Fig. 6  
- ARAUCA, META: Gradstein & Hekking (1979) 118 - CASANARE: Aguirre & Gradstein  
3246 - CHOCO: van Reenen & Aguirre 5299 (det. Van Reenen) - CUNDINAMARCA:  
Robinson (1967a) 44 - RISARALDA: van Zanten & Gradstein (1988) 62; Wolf (1993)  
944 - TOLIMA: Aguirre & Gradstein 1003 - Alt.: 2550-3800 m.

***Lepidolejeunea* Schust. (Lejeuneaceae)**

- Lepidolejeunea grossepapulosa* (Steph.) Piippo - CHOCO: Piippo (1986) 51, Fig. 16a-j;  
Gradstein 8778, 8822 *p.p.*, 8968 - RISARALDA: Gradstein 8428, 8532 - VALLE:  
Grolle (251-260); Herzog (1955) 191, Fig. 22a-f as *Hygrolejeunea obtusiserrulata*  
Herz.; Piippo (l. c.) - S.L.: Schuster (1992) 317 - Alt.: 30-1500 m.  
*Lepidolejeunea eluta* (Nees) Schust. - CHOCO: Winkler (1970) 951 as *Hygrolejeunea*  
*devoluta* (Spruce) Steph. - S.L. ("Nova Granada"): Stephani (1912-17) 610 as  
*Pycnolejeunea granatensis* Steph.; Robinson (1967a) 55 as *Perilejeunea*  
*granatensis* (Steph.) Robinson - Alt.: 130-1800 m.  
*Lepidolejeunea involuta* (Gott.) Grolle - CHOCO: Winkler (1970) 951 as *Hygrolejeunea*  
*punctata* Herz.; Gradstein 8770, 8808 - HUILA: Piippo (1986) 45, Fig. 2d, 12a-n,  
13a-g - RISARALDA: Wolf (1993) 944; Gradstein 8601, 8626 - Alt.: 100-3000 m.  
*Lepidolejeunea ornata* (Robins.) Schust. - CHOCO: Gradstein 6734, 8989 - PUTUMAYO:  
Robinson (1967a) 53, as *Kingiolejeunea ornata* Robinson; Piippo (1986) 45, Fig.  
2e, 14 - RISARALDA: Gradstein 8579, 8645 - Alt.: 50-1600 m.  
\**Lepidolejeunea spongia* (Spruce) Thiers - CAUCA, CUNDINAMARCA: Piippo (1986) 53,  
Fig. 17a-k - RISARALDA: Wolf (1993) 944 - Alt.: 2450-3500 m.

***Lepidozia* (Dum.) Dum. (Lepidoziaceae)**

- Lepidozia alstoni* Fulf. - CUNDINAMARCA: Fulford (1966) 211, Pl. 45, Fig. 30; van  
Zanten & Gradstein (1988) 62 - Alt.: 3400 m.

- Lepidozia andicola* Beauv. - CAUCA, VALLE: Fulford (1966) 204, Pl. 43, Fig. 23 - Alt.: 3200-3600 m.
- \**Lepidozia armata* Steph. - MAGDALENA: van Reenen et al. (1984) 179 - Alt.: 1700 m.
- \**Lepidozia auriculata* Mitt. ex Steph. - CAUCA: *Cleef 2642* (det. T. Pócs) - CUNDINAMARCA: *Cleef 286* (det. T. Pócs) - META: *Cleef 1146* (det. T. Pócs) - Alt.: 3300-4050 m.
- Lepidozia brasiliensis* Steph. - CESAR, MAGDALENA: Winkler (1976) 814 - SANTANDER: Herzog (1955) 169 as *L. moritziana* Steph. - Alt.: 1500-2900 m.
- Lepidozia caespitosa* Spruce - CAUCA: Fulford (1966) 191, Pl. 41, Fig. 8; Gradstein et al. (1977) 402, Fig. 20 - HUILA, META, NORTE DE SANTANDER: Fulford (l. c.) - CESAR, MAGDALENA: Winkler (1976) 814 - Alt.: 1500-3500 m.
- Lepidozia cupressina* (Sw.) Lindenb. - CUNDINAMARCA: Gottsche (1864) 139 - Alt.: 2500 m.
- Lepidozia dendritica* Spruce - CUNDINAMARCA: Fulford (1966) 202, Pl. 43, Fig. 21a-c.
- Lepidozia incurvata* Lindenb. - ARAUCA: *Cleef 10160* (det. T. Pócs) - CAUCA, HUILA, NORTE DE SANTANDER: Fulford (1966) 186, Pl. 40, Fig. 3 - CUNDINAMARCA: *Aguirre & Gradstein s.n.* - QUINDIO/RISARALDA/TOLIMA (Mt. Quindio): Gottsche (1864) 139; Fulford (l. c.) - Alt.: 2150-3200 m.
- Lepidozia lindigiana* Steph. - CUNDINAMARCA: Herzog (1934) 93; Fulford (1966) 192, Pl. 41, Fig. 9 - MAGDALENA: Winkler (1976) 814 - Alt.: 2150-3200 m.
- Lepidozia macrocolea* Spruce - CAUCA, HUILA, SANTANDER, VAUPES: Fulford (1966) 200, Pl. 42, Fig. 18 - CUNDINAMARCA: Fulford (l. c.); Gradstein et al. (1947) 402, Fig. 21 - MAGDALENA: Winkler (1976) 814 - META: Gradstein & Hekking (1979) 118 - RISARALDA: van Zanten & Gradstein (1988) 63 - Alt.: 1500-4000 m.
- \**Lepidozia muenchiana* Steph. - ARAUCA: *Cleef 9180* (det. T. Pócs) - BOYACA: *Cleef 7142* (det. T. Pócs) - CUNDINAMARCA: *Cleef 8343* (det. T. Pócs) - META: *Cleef 813* (det. T. Pócs) - Alt. 3450-3850 m.
- Lepidozia patens* Lindenb. - CHOCO: *Gradstein 8983* - MAGDALENA: van Reenen (1984) 179 - NORTE DE SANTANDER: Fulford (1966) 183, Pl. 40, Fig. 1 - RISARALDA: *Gradstein 8361, 8468, 8588* - Alt.: 700-3100 m.
- Lepidozia peruviensis* Steph. - BOYACA, CUNDINAMARCA: Gradstein & Hekking (1979) 118 - CAUCA, HUILA: Fulford (1966) 201, Pl. 43, Fig. 20 - MAGDALENA: van Reenen et al. (1984) 179 - Alt.: 2500-3650 m.
- Lepidozia pinnaticurris* Spruce ex Steph. - CHOCO: *Gradstein 8992* - RISARALDA: *Gradstein 8382, 8523* - VALLE: Fulford (1966) 205, Pl. 43, Fig. 24 - Alt.: 80-2400 m.
- Lepidozia reptans* (L.) Dum. - CUNDINAMARCA: Fulford (1966) 188, Pl. 40, Fig. 5 - Alt.: 2600-2750 m.
- Lepidozia squarrosa* Steph. - MAGDALENA: Winkler (1976) 814; van Reenen et al. (1984) 179 - META: *Cleef 1010* - Alt.: 2500-3600 m.
- Lepidozia tunguraguae* Steph. - S.L.: Stephani (1917 24) 345; Fulford (1966) 213.
- Lepidozia wallisiana* Steph. - ANTIOQUIA, CUNDINAMARCA: Fulford (1966) 198, Pl. 42, Fig. 16 - CESAR: Winkler (1976) 185 - MAGDALENA: Winkler (1976) 185; van Reenen et al. (1984) 179 - SANTANDER: Gradstein & Hekking (1979) 118 - Alt.: 1500-3450 m.

***Leptolejeunea* (Spruce) Schiffn. (Lejeuneaceae)**

- Leptolejeunea elliptica*** (Lehm. & Lindenb.) Steph. - CAQUETA, CUNDINAMARCA, NORTE DE SANTANDER: Bischler (1969) 289, Fig. 3-4 - CHOCO: Bischler (1969) 289, Fig. 3-4; Winkler (1970) 951 - RISARALDA: Wolf (1993) 944 - Alt.: 30-2750 m.  
***Leptolejeunea radicata*** (Nees & Mont.) Grolle - ANTIOQUIA: Bischler (1969) 319, Fig. 11 as *L. obovata* Bischler - Alt.: 800 m.  
***Leptolejeunea tridentata*** Bischler - CHOCO: Bischler (1969) 335, Fig. 16 - Alt.: 80 m.

***Leptoscyphus* Mitt. (Geocalyceaceae)**

- Leptoscyphus amphibolius*** (Nees) Grolle - BOYACA, META, SANTANDER: Fulford (1976) 513, Pl. 152, Fig. 6 - CESAR, MAGDALENA: Winkler (1976) 815 - CUNDINAMARCA: Gottsche (1864) 130 as *Leioscyphus galipanus* Gott.; Grolle (1962) 55, t. 12, 20, 21; Fulford (l. c.) - HUILA: van Zanten & Gradstein (1988) 63 - RISARALDA: Wolf (1993) 944 - Alt.: 800-3000 m.  
***Leptoscyphus cleefii*** Fulf. - ARAUCA, BOYACA: Gradstein & Hekking (1979) 118 - CAUCA, CUNDINAMARCA, META: Fulford (1976) 534, Pl. 159, Fig. 19; Gradstein et al. (1977) 403, Fig. 22 - Alt.: 3220-4100 m.  
***Leptoscyphus cuneifolius*** (Hook.) Mitt. - ANTIOQUIA: Jack & Stephani (1892) 20, t. 1, Fig. 1-6 as *Leioscyphus fragilis* Jack & Steph.; Grolle (1962) 28, t. 4-5 as *L. cuneifolius* subsp. *fragilis* (Jack & Steph.) Grolle; Fulford (1976) 494, Pl. 150, Fig. 1 as *L. cuneifolius* subsp. *fragilis* - CALDAS: Cleef & 't Hart 2474c - CAUCA: Cleef & Fernandez 487 - CUNDINAMARCA: Gradstein & Hekking (1979) - RISARALDA: Wolf (1993) 944 - Alt.: 2550-4400 m.  
 \****Leptoscyphus gibbosus*** (Tayl.) Mitt. - CHOCO: Gradstein 8994 - RISARALDA: Gradstein 8418, 8512 - Alt.: 700-1600 m.  
***Leptoscyphus jackii*** Steph. - ANTIOQUIA: Grolle (1962) 48; Fulford (1976) 519, Pl. 153, Fig. 9 - RISARALDA: Wolf (1993) 944 - Alt.: 2750-3700 m.  
***Leptoscyphus obcordatus*** (Spruce) Grolle - CAUCA: Gradstein & Hekking (1979) 118 - S.L.: Grolle (1962) 33, Fig. 7; Fulford (1976) 510, Pl. 150, Fig. 3 - Alt.: 3300-3450 m.  
***Leptoscyphus physocalyx*** (Hampe & Gott.) Gott. - ANTIOQUIA: Grolle (1962) 50, t. 17-18; Fulford (1976) 516, Pl. 152, Fig. 7 - CUNDINAMARCA: Gradstein & Hekking (1979) 119 - RISARALDA: van Zanten & Gradstein (1988) 63 - Wolf (1993) 944 - Alt.: 3000-3750 m.  
***Leptoscyphus porphyrius*** (Nees) Grolle - ANTIOQUIA, META: Fulford (1976) 510, Pl. 151, Fig. 4 - ARAUCA, BOYACA, SANTANDER: Gradstein & Hekking (1979) 119 - CALDAS: Robinson (1967a) 45 as *L. liebmanianus* (Lindenb. & Gott.) Mitt.; Fulford (l. c.) - CAUCA: Herzog (1955) 163, Fig. 4h-i as *Mylia minuta* Herz.; Grolle (1962) 35, t. 8-9 as *L. liebmanianus*; Fulford (1976) (l. c.) - CUNDINAMARCA: Gottsche (1864) 131 as *L. liebmanianus*; Grolle (l. c.) as *L. liebmanianus*; Fulford (l. c.) - MAGDALENA: Winkler (1976) 815 as *L. liebmanianus* - RISARALDA: Wolf (1993) 944 - TOLIMA: Gradstein et al. (1977) 403 - Alt.: 1700-4300 m.

\**Leptoscyphus quadridentatus* (Spruce) Grolle - RISARALDA: Wolf (1993) 945 as *Lophocolea quadridentata* Spruce; Gradstein (1995) 324 as *L. quadridentata* Spruce - Alt.: 2750-3700 m.

*Lethocolea* Mitt. (Acrobolbaceae)

*Lethocolea glossophylla* (Spruce) Grolle - CALDAS: Robinson (1967a) 44, det. as *Jungermannia linguifolia* Gott. (fide Grolle in Vána (1974) 195) - CUNDINAMARCA: Gradstein et al. (1977) 405, Fig. 23 - MAGDALENA: Winkler (1969) 69, Fig. 4 as *Neoprasanthus granatensis* S. Winkler; Winkler (1976) 813 as *Jamesoniella boliviana* Steph.; Winkler (1976) 817 as *Neoprasanthus granatensis* - RISARALDA: van Zanten & Gradstein (1988) 64; Gradstein (1995) 324 - Alt.: 2700-3750 m.

*Lethocolea repens* S. Winkler - MAGDALENA: Winkler (1969) 67, Fig. 3; Winkler (1976) 815 - Alt.: 3300 m.

*Leucolejeunea* Evans (Lejeuneaceae)

*Leucolejeunea uncioba* (Lindenb.) Evans - CESAR, MAGDALENA: Winkler (1976) 815 - CUNDINAMARCA: van Zanten & Gradstein (1988) 64 - Alt.: 2750-3100 m.

*Leucolejeunea xanthocarpa* (Lehm. & Lindenb.) Evans - CUNDINAMARCA: van Zanten & Gradstein (1988) 64 - MAGDALENA: Winkler (1976) 815 - SANTANDER: Schuster (1992) 246 - Alt.: 1600-3400 m.

*Lindigianthus* Kruijt & Gradst. (Lejeuneaceae)

*Lindigianthus cipaconeus* (Gott.) Kruijt & Gradst. - ANTIOQUIA, HUILA, TOLIMA: Kruijt & Gradstein (1985); Gradstein (1994) 167, Fig. 43, 44 - CUNDINAMARCA: Gottsche (1864) 150 as *Lejeunea cipaconea* Gott.; Gradstein & Hekking (1979) 110 as *Dicranolejeunea cipaconea* (Gott.) Steph. - RISARALDA: Wolf (1993) 944 - Alt.: 2000-3500 m.

*Lophocolea* (Dum.) Dum. (Geocalycaceae)

*Lophocolea aberrans* Lindenb. & Gott. - CUNDINAMARCA: Robinson (1967a) 50 - MAGDALENA: Winkler (1976) 815 - Alt.: 750-2700 m.

*Lophocolea bidentata* (L.) Dum. - CAUCA, HUILA, SANTANDER: Fulford (1976) 449, Pl. 126, Fig. 19 as *L. coadunata* (Sw.) Nees; Gradstein et al. (1977) 407, Fig. 24 as *L. coadunata* - CESAR, MAGDALENA: Winkler (1976) 815 as *L. coadunata* - CUNDINAMARCA: Gottsche (1864) 127-129 as *L. longiflora* Hampe var. *longiflora*, var. *integra* Gott. and var. *minor* Gott., and as *L. mascula* Gott. var. *acroandra* Gott. and var. *minor* Gott.; Herzog (1934) 91 as *L. subtrilobata* Herz.; Robinson (1967a) 50 as *L. coadunata*; Fulford (l. c.) as *L. coadunata* - MAGDALENA: Winkler (1976) 815 as *L. coadunata* (Sw.) Nees - META, TOLIMA: Gradstein & Hekking (1979) 119 as *L. coadunata* - RISARALDA: Wolf (1993) 945 as *L. coadunata* - Alt.: 700-4100 m.

*Lophocolea connata* (Sw.) Nees - HUILA: van Zanten & Gradstein (1988) 64 - MAGDALENA: van Reenen et al. (1984) 179 - META: Fulford (1976) 446, Pl. 125,

- Fig. 17 - RISARALDA: Wolf (1993) 945 (as aff.); *Gradstein* 8404, 8550, 8609, 8703 - Alt. 800-3350 m.
- Lophocolea granatensis*** Gott. - CESAR/GUAJIRA/MAGDALENA: Fulford (1976) 455, Pl. 128, Fig. 22 - CUNDINAMARCA: Gottsche (1864) 126; Fulford (l. c.) - MAGDALENA: Fulford (l. c.); Winkler (1976) 815 as *L. exigua* Steph. - Alt.: 2500-3700 m.
- Lophocolea guadeloupensis*** Steph. - BOYACA, CUNDINAMARCA, HUILA: Fulford (1976) 448, Pl.125, Fig. 18.
- Lophocolea leptantha*** (Hook. f. & Tayl.) Tayl. - MAGDALENA: Winkler (1976) 815 as *L. brasiliensis* Schiffn. - Alt.: 1800 m.
- Lophocolea liebmanniana*** Gott. - CUNDINAMARCA: Gottsche (1864) 129 - MAGDALENA: Winkler (1976) 815 - PUTUMAYO: Robinson (1967a) 50 - RISARALDA: *Gradstein* 8663, 8690 - Alt.: 1800-3000 m.
- Lophocolea lindmannii*** Steph. - MAGDALENA: Winkler (1976) 815 - Alt.: 750 m.
- Lophocolea martiana*** Nees - CHOCO: *Gradstein* 8908 - CUNDINAMARCA: Fulford (1976) 441, Pl. 123, Fig. 13; van Zanten & Gradstein (1988) 65 - HUILA: van Zanten & Gradstein (l. c.) - MAGDALENA: Fulford (l. c.); Winkler (1976) 815 as *L. pertusa* Tayl.; van Reenen et al. (1984) 179 - Alt.: 400-3000 m.
- Lophocolea muricata*** (Lehm.) Nees - CAUCA, HUILA: Fulford (1976) 425, Pl. 117, Fig. 1 - CHOCO: *Gradstein* 8908 - CUNDINAMARCA: Gottsche (1864) 130; Fulford (l. c.); van Zanten & Gradstein (1988) 65 - MAGDALENA: Winkler (1976) 815 as *L. hirta* Steph. - RISARALDA: Wolf (1993) 945 - Alt.: 1500-3400 m.
- Lophocolea perissodonta*** (Spruce) Steph. - AMAZONAS/CAQUETA/VAUPES (Rio Apaporis): Fulford (1976) 445, Pl. 124, Fig. 16 - CUNDINAMARCA, META: Fulford (l. c.) - Alt.: 100-1700 m.
- Lophocolea proteus*** Herz. - MAGDALENA: Winkler (1976) 815 - SANTANDER: Fulford (1976) 443, Pl. 133, Fig. 14 - Alt.: 2000 m.
- Lophocolea trapezoidea*** Mont. - ANTIOQUIA, CAUCA, HUILA, SANTANDER: Fulford (1976) 435, Pl. 121-122, Fig. 10 - BOYACA: Fulford (l. c.); Gradstein et al. (1977) 407 - CALDAS: Robinson (1967a) 50 as *L. colombica* Gott. - CHOCO: *Gradstein* 8770, 8959 - CUNDINAMARCA: Gottsche (1864) 125 as *L. lindigiana* Gott. sp. nov.; Fulford (l. c.) - MAGDALENA: van Reenen et al (1984) 179 - RISARALDA: Wolf (1993) 945; Gradstein (1995) 324 - TOLIMA: Gradstein et al. (l. c.) - Alt.: 1800-3800 m.

***Lopholejeunea*** (Spruce) Schiffn. (Lejeuneaceae)

- \****Lopholejeunea eulopha*** (Tayl.) Schiffn. - S.L. ("Andes Bogotensis"): Gradstein (1994) 111 - CHOCO: *Gradstein* 8791 - Alt.: 100 m.
- Lopholejeunea nigricans*** (Lindenb.) Schiffn. - CASANARE, META, SANTANDER: Gradstein (1994) 112, Fig. 30 - CHOCO: *Gradstein* 8960 - MAGDALENA: Winkler (1976) 815 as *L. muelleriana* (Gott.) Schiffn. - RISARALDA: Gradstein (1994) 112, Fig. 30; *Gradstein* 8624, 8712 - Alt. 200-2500 m.
- \****Lopholejeunea subfusca*** (Nees) Schiffn. - CASANARE, VALLE: Gradstein (1994) 118 - CHOCO: Gradstein (1994) 118; *Gradstein* 8868 - RISARALDA: Wolf (1993) 945 - Alt.: 30-1500 m.

**Lophozia** (Dum.) Dum. (Jungermanniaceae)

**Lophozia debilis** Jack & Steph. - S.L.: Stephani (1917-24) 112.

**Lophozia incisa** (Schrad.) Dum. - ARAUCA, BOYACA, META: Gradstein & Hekking (1979) 120 - CALDAS: Robinson (1967a) 45 - CUNDINAMARCA: Gradstein et al. (1977) 408 - RISARALDA: Gradstein & Vána (1987) 414; Gradstein (1995) 324 - TOLIMA: Gradstein & Vána (l. c.) - Alt.: 2500-4500 m.

\***Lophozia laxifolia** (Mont.) Grolle - CALDAS: *Aguirre & Gradstein 4867* (det. J. Vána) - CAUCA: *Cleef & Fernandez 625* (det. J. Vána) - CUNDINAMARCA: *Gradstein & Aguirre 3666* - MAGDALENA: van Reenen et al. (1984) 179 as *L. subinflata* Steph. - META: *Cleef 7948a* (det. J. Vána) - RISARALDA: Gradstein (1995) 324 - TOLIMA: *van der Hammen & Jaramillo 3234* (det. J. Vána) - Alt.: 3000-4100 m.

**Lophozia** cf. **patagonica** Herz. & Grolle - CUNDINAMARCA: Gradstein & Hekking (1979) 120.

**Lunularia** Adans. (Lunulariaceae)

\***Lunularia cruciata** (L.) Dum. - CUNDINAMARCA: *Schultes 11323* - Alt.: 2650 m.

**Luteolejeunea** Piippo (Lejeuneaceae)

\***Luteolejeunea herzogii** (Buchloh) Piippo - CHOCO: Piippo (1986) 60, Fig. 19a-l; *Gradstein 8771, 8816, 8910* - VALLE: Piippo (1986) 60, Fig. 19a-l - S.L.: Schuster (1992) 321 - Alt.: 30-400 m.

**Macrolejeunea** (Spruce) Schiffn. (Lejeuneaceae)

**Macrolejeunea cerina** (Lehm. & Lindenb.) Gradst. - CHOCO: *Gradstein 8802* - CUNDINAMARCA: Herzog (1934) 97 as *Lejeunea cerina* (Lehm. & Lindenb.) Gott. et al.; Robinson (1967a) 53 as *Hygrolejeunea cerina* (Lehm. & Lindenb.) Steph. - MAGDALENA: Winkler (1976) 813 as *H. cerina*; Winkler (1976) 816 as *M. subsimplex* (Mont & Nees) Schiffn. - RISARALDA: *Gradstein 8552, 8660 p.p.* - TOLIMA: Robinson (1967a) 52 as *M. subsimplex* - Alt.: 30-2700 m.

\***Macrolejeunea lancifolia** (Steph.) Herz. - RISARALDA: Wolf (1993) 947 as *Taxilejeunea lancifolia* Steph.; *Gradstein 8660* - Alt.: 1800-2550 m.

**Macrolejeunea pallescens** (Mitt.) Schiffn. - BOYACA: Gottsche (1864) 148 as *Omphalanthus leioscyphus* Gott.; Schiffner (1897) 580 as *O. leioscyphus* - CUNDINAMARCA: Gottsche (l. c.); van Zanten & Gradstein (1988) 66; Schuster (1992) 287 - MAGDALENA: Winkler (1976) 816 - RISARALDA: Wolf (1993) 947 as *Taxilejeunea pallescens* (Mitt.) Steph. - SANTANDER: Herzog (1955) 188 as *T. pallescens* - Alt.: 2000-3800 m.

**Marchantia** L. (Marchantiaceae)

**Marchantia berteriana** Lehm. & Lindenb. - ANTIOQUIA: Imscher (1914) 994 as *M. discoidea* Steph. ex Bonner; Bischler (1984) 110, Fig. 12-15 - BOYACA, META:

- Bischler (l. c.) - CAUCA: Gradstein & Hekking (1979) 120 - CUNDINAMARCA: Herzog (1934) 79 as *M. berteroaana* var. *polylepida* Herz.; Gradstein & Hekking (l. c.) - SANTANDER: Herzog (1955) 158 - Alt.: 1800-4200 m.
- Marchantia breviloba*** Evans - BOYACA, CUNDINAMARCA: Bischler (1984) 112, Fig. 26-30 - NORTE DE SANTANDER, SANTANDER: Herzog (1955) 158 - Alt.: 3400-3900 m.
- Marchantia chenopoda*** L. - ANTIOQUIA: Irmischer (1914) 995 as *M. columbica* Steph. ex Bonner - BOYACA: Gottsche (1864) 186; Evans (1917) 290, Fig. 15-20 - CALDAS, CHOCO, META, NARIÑO, NORTE DE SANTANDER, PUTUMAYO, TOLIMA, QUINDIO: Bischler (1984) 114, Fig. 31-36 - CAUCA, SANTANDER: Herzog (1955) 158 - CUNDINAMARCA: Gottsche (l. c.); Evans (l. c.); Robinson (1967a) 57 - HUILA, RISARALDA: van Zanten & Gradstein (1988) 66 - MAGDALENA: Winkler (1976) 816 - Alt.: 150-3000 m.
- \****Marchantia inflexa*** Nees & Mont. - SANTANDER: Bischler (1984) 86, Fig. 37-41 - Alt.: 1600-2300 m.
- Marchantia paleacea*** Bert. - CUNDINAMARCA: Bischler (1984) 110, Fig. 16-20 - SANTANDER: Herzog (1955) 158 as *M. domingensis* Lehm. & Lindenb. - Alt.: 2300 m.
- Marchantia plicata*** Nees & Mont. - BOYACA, CAQUETA, CAUCA, CUNDINAMARCA, CHOCO, TOLIMA: Bischler (1984) 107, Fig. 6-10 - CALDAS: Robinson (1967a) 57 - CESAR, MAGDALENA: Winkler (1976) 816 - CUNDINAMARCA: Evans (1917) 241, Fig. 3; Robinson (l. c.) - META: Paris (1906) 105 as *M. lamellosa* Gott.; Bischler (l. c.) - SANTANDER: Herzog (1955) 158 - Alt.: 2200-4150 m.
- Marchantia polymorpha*** L. - BOYACA, CAUCA, NORTE DE SANTANDER, SANTANDER: Herzog (1955) 158; Bischler (1984) 106, Fig. 1-5 - CUNDINAMARCA: Gottsche (1864) 186, inclus. fo. *denticulata* Gott. & fo. *nuda* Gott.; Evans (1917) 232, Fig. 1-2 - MAGDALENA: Winkler (1976) 816 - NARIÑO, TOLIMA: Bischler (l. c.) - Alt.: 1700-4700 m.

#### ***Marchesinia*** S. Gray (Lejeuneaceae)

- Marchesinia brachiata*** (Sw.) Schiffn. - BOYACA, CUNDINAMARCA: Gradstein & Hekking (1979) 120 - CASANARE, HUILA, META, RISARALDA, SANTANDER, TOLIMA: Gradstein (1994) 104, Fig. 29 - MAGDALENA: Winkler (1976) 816 as *Lopholejeunea saxatilis* (Gott. ex Aongstr.) Steph. - NORTE DE SANTANDER: Herzog (1955) 174, Fig. 11 as *M. aquatica* Herz.; Gradstein (l. c.) - VALLE: Robinson (1967a) 51 as *M. longirostris* Herz.; Gradstein (l. c.) - Alt.: 100-3300 m.
- Marchesinia robusta*** (Mitt.) Schiffn. - CASANARE, HUILA: Gradstein (1994) 108 - SANTANDER: Herzog (1955) 172, Fig. 10; Gradstein (l. c.) - RISARALDA: Wolf (1993) 945 - Alt.: 650-2500 m.

#### ***Marsupella*** Dum. (Gymnomitriaceae)

- Marsupella andina*** Jack & Steph. - ANTIOQUIA: Stephani (1901-1905) 19 - CESAR: Winkler (1976) 816 - Alt.: 3000-4200 m.
- \****Marsupella emarginata*** (Ehrh.) Dum. - ANTIOQUIA, CUNDINAMARCA: Gradstein & Vána (1987) 415, Fig. 28 - Alt.: 3150-3200 m.



*Marsupella involuta* Vána - ARAUCA, BOYACA, META: Vána(1976) 414, Fig. 3 - CUNDINAMARCA: *Gradstein & Santana 4260* (det. J. Vána) - Alt.: 3600-4300 m.

*Marsupella trollii* Herz. - ARAUCA (Sierra Nevada de Cocuy): *Gradstein & Hekking* (1979) 121 - CALDAS: *Linares et al. 1433, 1434* (det. J. Vána) - CUNDINAMARCA: *Gradstein & Santana 4239, 4258* (det. J. Vána) MAGDALENA: *Winkler* (1976) 816; *van Reenen et al.* (1984) 179 - Alt.: 3400-4400 m.

*Mastigolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

*Mastigolejeunea auriculata* (Wils.) Schiffn. - PUTUMAYO: *Robinson* (1967a) 51 as *M. pittieri* Steph. - RISARALDA: *Wolf* (1993) 945; *Gradstein 8664* - TOLIMA: *Gradstein* (1994) 80, Fig. 21, 22 - Alt.: 800-3300 m.

*Mastigolejeunea plicatiflora* (Spruce) Steph. - CESAR, GUAJIRA (Sierra Nevada de Santa Marta): *Stephani* (1909-1912) 765 - MAGDALENA: *Gradstein* (1994) 82 - Alt.: 0-700 m.

*Megaceros* Campb. (Dendrocerotaceae)

*Megaceros columbianus* Steph. - PUTUMAYO: *Robinson* (1967a) 57 - S.L.: *Stephani* (1912-1917) 950 - Alt.: 2100 m.

*Megaceros vincentianus* (Lehm. & Lindenb.) Campb. - CUNDINAMARCA, TOLIMA: *Gottsche* (1864)189 as *Anthoceros vincentianus* Lehm. & Lindenb. - Alt.: 2500-3000 m.

*Metzgeria* Raddi (Metzgeriaceae)

\**Metzgeria agnewii* Kuwah. - BOYACA: *Cleef 1826, 2507* (det. D. Pinheiro da Costa) - CALDAS: *Cleef & 't Hart 3825* (det. D. Pinheiro da Costa) - CUNDINAMARCA: *Cleef 3750c* (det. D. Pinheiro da Costa) - Alt.: 3500-3900 m.

\**Metzgeria albinea* Spruce - CHOCO: *Gradstein 8830, 8937* - CUNDINAMARCA: *Kuwahara* (1982) 373 - Alt.: 50-3700 m.

*Metzgeria atramentaria* Kuwah. - BOYACA: *Kuwahara* (1976) 260, Fig. 1, 2 - META: *Kuwahara* (1982) 363 - Alt.: 3450-3550 m.

\**Metzgeria attenuata* Steph. - ARAUCA, CUNDINAMARCA: *Kuwahara* (1982) 365; *van Zanten & Gradstein* (1988) 67 - Alt.: 3350-3700 m.

\**Metzgeria australis* Steph. - CUNDINAMARCA, NORTE DE SANTANDER: *Kuwahara* (1976) 287, Fig. 15 as *M. thomeensis*; *Kuwahara* (1986) 152 Fig. 65, 66 - Alt.: 700-3000 m.

*Metzgeria bischlerae* Kuwah. - CAUCA, HUILA: *Kuwahara* (1976), 264, Fig. 3, 4 - Alt.: 3500-3650 m.

*Metzgeria bracteata* Spruce - S.L. ("Nova Granada"): *Stephani* (1898-1900) 302. - var. *robusta* Herz. - CUNDINAMARCA: *Herzog* (1934) 80, Fig. 1 - Alt.: 3200-3400 m.

\**Metzgeria cleefii* Kuwah. - CAUCA: *Kuwahara* (1982) 362 - Alt.: 3300 m.

*Metzgeria chilensis* Steph. - CAUCA: *Kuwahara* (1976) 267 - CUNDINAMARCA: *van Zanten & Gradstein* (1988) 67 - MAGDALENA: *Winkler* (1976) 817 - META: *Kuwahara* (1982) 374 - Alt.: 3200-3725 m.

- Metzgeria conjugata* Lindenb. - CUNDINAMARCA: Kuwahara (1976) 267, Fig. 5 - Alt.: 2500 m.
- \**Metzgeria consanguinea* Schiffn. - ARAUCA, META: Kuwahara (1982) 365 - CUNDINAMARCA: Kuwahara (1986) 46, Fig. 15a-c, 16 - Alt.: 3350-3500 m.
- \**Metzgeria crassipilis* (Lindb.) Evans - CUNDINAMARCA: Kuwahara (1986) 70, Fig. 27 - Alt.: 2000 m.
- Metzgeria crenata* Steph. - CESAR/MAGDALENA (Sierra Nevada de Santa Marta): Winkler (1976) 817 - Alt.: 2900 m.
- Metzgeria decipiens* (Massal.) Schiffn. - BOYACA: Kuwahara (1976) 268 - CUNDINAMARCA: Kuwahara (1986) 163, Fig. 68e-f, 70 - MAGDALENA: van Reenen et al. (1984) 179 - META: Kuwahara (1982) 374 - RISARALDA: Wolf (1993) 945; Gradstein (1995) 326 - Alt.: 500-4150 m.
- Metzgeria dorsipara* (Herz.) Kuwah. - BOYACA: Kuwahara (1976) 269, Fig. 6 - CUNDINAMARCA: Robinson (1967a) 56 as *M. violacea* var. *dorsipara* Herz.; Kuwahara (1982) 368 - META: Kuwahara (1982) 368 - Alt.: 3350-3900 m.
- Metzgeria filicina* Mitt. - BOYACA: Cleef 4539 (det. D. Pinheiro da Costa) - CUNDINAMARCA: Stephani (1898-1900) 283 - TOLIMA: Robinson (1967a) 56; Kuwahara (1976) 271, Fig. 7-8 - Alt.: 300-3300 m.
- \* *Metzgeria fruticola* Spruce - CALDAS, VALLE: Kuwahara (1982) 371 - RISARALDA: Wolf (1993) 945 - Alt.: 1970-3300 m.
- Metzgeria gigantea* Steph. - BOYACA, CALDAS, QUINDIO, RISARALDA: Kuwahara (1976) 274 - META: Kuwahara (1982) 371 - Alt.: 1500-4200 m.
- Metzgeria inflata* Steph. - CESAR, MAGDALENA: Winkler (1976) 817 - Alt.: 2850 m.
- \**Metzgeria lechleri* Steph. - BOYACA: Kuwahara (1986) 58, Fig. 20a-c, 21 - Alt.: 3800 m.
- Metzgeria leptoneura* Spruce - BOYACA, CAUCA, META, TOLIMA: Kuwahara (1976) 275 as *M. hamata* Lindb.; Kuwahara (1982) 375, 379 - CESAR, MAGDALENA: Winkler (1976) 817; Kuwahara (l. c.); Mägdefrau (1983) 14 as *M. hamata* - CHOCO: Kuwahara (276) 281 as *M. papulosa* Steph.; Gradstein 8810, 8970, 8999 - CUNDINAMARCA: Gottsche (1864) as *M. furcata* Nees var. *extensa* Nees; Robinson (1967a) 56 - HUILA/CAUCA: Kuwahara (1986) 141, Fig. 57 - RISARALDA: Wolf (1993) 945 - VALLE: Robinson (l. c.) - Alt.: 50-4200 m.
- Metzgeria liebmanniana* Lindenb. & Gott. - BOYACA, CAUCA, HUILA, CUNDINAMARCA: Kuwahara (1976) 275, Fig. 9-11 - META: Kuwahara (1982) 367 - Alt.: 800-3950 m.
- Metzgeria maegdefraui* Kuwah. - MAGDALENA: Kuwahara (1986) 115, Fig. 47-48 - Alt.: 2100 m.
- \**Metzgeria metaensis* Kuwah. - META: Kuwahara (1982) 377 - RISARALDA: Wolf (1993) 945 - Alt.: 4050-4150 m.
- Metzgeria mexicana* Steph. - CUNDINAMARCA: Kuwahara (1976) 280, Fig. 12 - Alt.: 3000 m.
- \**Metzgeria minor* (Schiffn.) Kuwah. var. *cyanogutta* Kuwah. - CUNDINAMARCA: Kuwahara (1986) 128, Fig. 52, 56a - Alt.: 2300 m.
- Metzgeria myriopoda* Lindb. - META: Kuwahara (1976) 280 - Alt.: 500 m.
- \**Metzgeria neotropica* Kuwah. - CUNDINAMARCA: Kuwahara (1982) 366 - Alt. 3500-3600 m.

- \**Metzgeria papulosa* Steph. - BOYACA: *Cleef* 4497 (det. D. Pinheiro da Costa) - CUNDINAMARCA: *Cleef & Uribe* 6707 (det. D. Pinheiro da Costa) - META: *Cleef* 1145, 8218 (det. D. Pinheiro da Costa) - Alt.: 3600-4050 m.
- Metzgeria polytricha* Spruce - BOYACA: Kuwahara (1976) 282, Fig. 13 - META: Kuwahara (1982) 379 - RISARALDA: *Gradstein* 8671, 8700 - Alt.: 1800-4040 m.
- Metzgeria procera* Mitt. - CAUCA, HUILA, VALLE: Kuwahara (1976) 284 - PUTUMAYO: Robinson (1967a) 56 - VALLE: Herzog (1955) 158 as *M. procera* var *columbica* Herz. - Alt.: 200-3560 m.
- Metzgeria rufula* Spruce - ANTIOQUIA: Kuwahara (1976) 285, Fig. 4 - CUNDINAMARCA: Herzog (1934) 80 - MAGDALENA: van Reenen et al. (1984) 180 - Alt.: 2800-3200 m.
- Metzgeria sandei* Schiffn. - BOYACA: Kuwahara (1982) 372 - CHOCO: Kuwahara (1976) 286 - RISARALDA: *Gradstein* 8670 - Alt.: 750-3950 m.
- Metzgeria scyphigera* Evans - CUNDINAMARCA: Kuwahara (1976) 286 - Alt.: 2650 m.
- Metzgeria tonsa* Herz. - ANTIOQUIA: Herzog (1955) 159; Kuwahara (1986) 172, Fig. 73d-h, 74c - Alt.: 2000 m.
- Metzgeria wallisiana* Steph. - ANTIOQUIA: Stephani (1898-1900) 299; Kuwahara (1986) 125, Fig. 50a-b. - Alt.:  $\pm$  3000 m.

#### *Microlejeunea* Steph. (Lejeuneaceae)

- Microlejeunea acutifolia* Steph. - CHOCO: *Gradstein* 8814 - VALLE: Herzog (1955) 194, Fig. 24; Bischler et al. (1963) 364, Pl. 59 - S.L.: Bonner (1978) 727 as *Lejeunea triangulata* (Herz.) Schust. - Alt.: 10-200 m.
- Microlejeunea bullata* (Tayl.) Steph. - CHOCO: Winkler (1970) 951; *Gradstein* 8875 - CUNDINAMARCA, NORTE DE SANTANDER: Bischler et al. (1963) 369, Pl. 61 - RISARALDA: *Gradstein* 8390 - Alt.: 30-2800 m.
- Microlejeunea capillaris* (Gott.) Steph. - CUNDINAMARCA: Gottsche (1864) 163 as *Lejeunea capillaris* Gott. - MAGDALENA: Winkler (1976) 817 - Alt.: 700-2500 m.
- Microlejeunea columbiana* Bischler - CUNDINAMARCA: Bischler et al. (1963) 273, Pl. 62; *Gradstein* et al. (1977) 408, Fig. 25 - MAGDALENA: Winkler (1976) 817 - Alt.: 1800-3200 m.
- Microlejeunea epiphylla* Bischler - CHOCO: Winkler (1970) 951 - Alt.:  $\pm$  100 m.
- Microlejeunea grandistipula* Steph. - MAGDALENA: Winkler (1976) 817 - Alt.: 2160 m.
- Microlejeunea perpusilla* (Spruce) Steph. - CHOCO: Winkler (1970) 951 - Alt.:  $\pm$  10 m.
- Microlejeunea stricta* (Gott. et al.) Steph. - MAGDALENA: Winkler (1976) 817 - Alt.: 700-2200 m.

#### *Micropterygium* Lindenb. et al. (Lepidoziaceae)

- Micropterygium carinatum* (Grev.) Reim. - CHOCO: Winkler (1970) 951 - RISARALDA: *Gradstein* 8456, 8509 - Alt.:  $\pm$  100-1600 m.
- Micropterygium lechleri* Reim. - CAQUETA: Reimers (1933) 184, Fig. 14; Fulford (1966) 261, Pl. 59, Fig. 10 - META: Fulford (l. c.) - Alt.: 1700 m.
- Micropterygium leiophyllum* Spruce - AMAZONAS, VAUPES: Fulford (1966) 258, Pl. 58, Fig. 8 - Alt.: 200-450 m.

*Micropterygium parvistipulum* Spruce - VAUPES: Fulford (1966) 268, Pl. 62, Fig. 14 - Alt.: 250 m.

*Micropterygium pterygophyllum* (Nees) Trevis. - AMAZONAS, VAUPES: Reimers (1933) 174, Fig. 12, as var. *gracile* Reim.; Fulford (1966) 261, Pl. 59, Fig. 9 - CHOCO: Gradstein 8774, 8821, 8915, 8948 - Alt.: 30-700 m.

*Micropterygium trachyphyllum* Reim. - AMAZONAS, VAUPES: Fulford (1966) 265, Pl. 61, Fig. 13.

*Monoclea* Hook. (Monocleaceae)

*Monoclea gottschei* Lindenb. subsp. *elongata* Gradst. & Mues - CASANARE: Gradstein et al. (1992) 118 - CHOCO: Gradstein et al. (1992) 118 - CUNDINAMARCA: Gottsche (1864) 185; Robinson (1967a) 56; Gradstein et al. (1992) 118 - HUILA: van Zanten & Gradstein (1988) 67 as *M. forsteri* Hook.; Gradstein et al. (1992) 118 - MAGDALENA: Winkler (1976) 817; van Reenen et al. (1984) 180 - META: van Reenen 2809 - PUTUMAYO: Robinson (l. c.) - RISARALDA: Wolf (1993) 945; Gradstein et al. (1992) 118; Gradstein 8376, 8394 - SANTANDER: Herzog (1955) 158; Gradstein et al. (1992) 118 - TOLIMA: Gradstein & Hekking (1979) 122 as *M. forsteri* - Alt.: 1100-3500 m.

*Mytilopsis* Spruce (Lepidoziaceae)

\**Mytilopsis albifrons* Spruce - RISARALDA: Gradstein 8434, 8570 - Alt.: 1200-1500 m.

*Nardia* S. Gray (Jungermanniaceae)

*Nardia succulenta* (Rich. ex Lehm.) Spruce - BOYACA, CALDAS, SANTANDER: Vána (1976) 406, Fig. 11, 12; Engel (1988) 217, Fig. 1-4 - CAUCA: Gradstein & Hekking (1979) 122; Engel (l. c.) - CUNDINAMARCA: Spruce (1885) 520; Vána (l. c.); Engel (l. c.) - Alt.: 1500-3460 m.

*Neesioscyphus* Grolle (Balantiopsaceae)

\**Neesioscyphus allionii* (Steph.) Grolle - RISARALDA: Gradstein 8391 - Alt.: 1500 m.

*Neesioscyphus argillaceus* (Nees) Grolle - MAGDALENA: Winkler (1976) 817 - Alt.: 700 m.

*Neurolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

*Neurolejeunea breutelii* (Gott.) Evans - CASANARE, CHOCO: Gradstein (1994) 156, Fig. 39 - CAUCA (I. Gorgona): Schuster (1992) 218 - SANTANDER: Herzog (1955) 171 - Alt.: 0-3000 m.

\**Neurolejeunea sastreana* Gradst. - RISARALDA: Gradstein 8415 - Alt.: 1500 m.

*Noteroclada* Tayl. ex Hook. & Wils. (Pelliaceae)

*Noteroclada confluens* Tayl. ex Hook. & Wils. - BOYACA: *Gradstein 3812* (det. R. Grolle) - CAUCA: *Cleef 599* (det. R. Grolle) - CUNDINAMARCA: Robinson (1967a) 55 - META: *Cleef 856a, 7568* (det. R. Grolle) - RISARALDA: van Zanten & Gradstein (1988) 68; *Gradstein (1995) 326* - Tolima: *Aguirre & Gradstein 1621* (det. R. Grolle) - Alt.: 2350-3800 m.

*Nowellia* Mitt. (Cephaloziaceae)

*Nowellia curvifolia* (Dicks.) Mitt. - MAGDALENA: Winkler (1976) 817 - Alt.: 2160 m.  
\**Nowellia evansii* Grolle - MAGDALENA: van Reenen et al. (1984) 180 - SANTANDER: *Gradstein 7042* - Alt.: 2200-2700 m.

*Odontolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

*Odontolejeunea decemdentata* (Spruce) Steph. - CAUCA: Herzog (1955) 176 - CUNDINAMARCA, VALLE: Teeuwen (1989), Fig. 1; *Gradstein (1994) 200* - CHOCO: Winkler (1970) 951; as *O. longispica* Evans - Alt.: 30-1800 m.

*Odontolejeunea lunulata* (Web.) Schiffn. - CALDAS, CUNDINAMARCA, HUILA: Teeuwen (1989), Fig. 2; *Gradstein (1994) 201, Fig. 54* - CHOCO: Winkler (1970) 951 as *O. calcarata* (Spruce) Steph., *O. grossiloba* Steph. and *O. sieberiana* (Gott.) Schiffn. - MAGDALENA: Winkler (1976) 817 as *O. chaerophylla* (Spruce) Schiffn. and *O. sieberiana* - PUTUMAYO, SANTANDER, VALLE: Herzog (1955) 176 as *O. calcarata* and *O. chaerophylla* - RISARALDA: Wolf (1993) 945 - Alt.: 30-3000 m.

*Odontolejeunea rhomalea* (Spruce) Steph. - CHOCO: Winkler (1970) 951 as *O. obversiloba* Herz. - SANTANDER, VALLE: Teeuwen (1989), Fig. 3; *Gradstein (1994) 204* - Alt.: 30-3200 m.

*Odontoschisma* (Dum.) Dum. (Cephaloziaceae)

*Odontoschisma atropurpureum* Steph. - ARAUCA: *Cleef 9138* (det. J. Vána) - BOYACA: *Cleef 9489* (det. J. Vána) - CASANARE: *Aguirre & Gradstein 3129* (det. J. Vána) - CAUCA, HUILA, VALLE, VAUPES: Fulford (1968) 345, Pl. 89, Fig. 10 - CHOCO: *Silversone-Sopkin et al. 1830* (det. J. Vána) - CUNDINAMARCA: *Cleef 1637a* (det. J. Vána) - Alt.: 250-4000 m.

- var. *andinum* (Spruce) Herz. - CUNDINAMARCA: Herzog (1934) 93 as fo. *laevis* Herz. - Alt.: 3400 m.

\**Odontoschisma denudatum* (Nees) Dum. - S.L.: *Gradstein & Vána (1987) 416* - Alt.: 3500 m.

*Odontoschisma falcifolium* Steph. - AMAZONAS, VAUPES: Fulford (1968) 343, Pl. 89, Fig. 9 - CUNDINAMARCA, SANTANDER: *Gradstein et al. (1977) 409* - CHOCO: *Gradstein 8848* - RISARALDA: *Gradstein 8509 p.p., 8535* - Alt.: 30-3600 m.

*Odontoschisma longiflorum* (Tayl.) Steph. - CUNDINAMARCA: *Gradstein et al. (1977) 409, Fig. 27* - META: Fulford (1968) 335, Pl. 86, Fig. 1 - Alt.: 1700-3200 m.

*Odontoschisma soratamum* Fulf. - AMAZONAS, VAUPES: Fulford (1968) 338, Pl. 87, Fig. 4 - Alt.: 250 m.

***Omphalanthus* Lindenb. & Nees (Lejeuneaceae)**

- Omphalanthus filiformis*** (Sw.) Nees - ANTIOQUIA, META: Herzog (1955) 171 as *O. grandistipulus* Steph. - ARAUCA, BOYACA: Gradstein & Hekking (1979) 123 - CHOCO: Gradstein 8953 - CUNDINAMARCA: Gottsche (1864) 147; Herzog (1934) 95 - MAGDALENA: Winkler (1976) 817, and as *O. grandistipulus* - PUTUMAYO: Robinson (1967a) 51 - RISARALDA: Wolf (1993) 945 as *O. filiformis/O. platycoleus* - SANTANDER: Gradstein et al. (1977) 410, Fig. 28; Schuster (1992) 233 - Alt.: 700-3900 m.
- Omphalanthus ovalis*** (Lindenb. & Gott.) Gradst. - MAGDALENA: Mägdefrau (1983) 23 - RISARALDA: Wolf (1993) 945; Gradstein 8661 - VALLE: Robinson (1967a) 51 as *Peltolejeunea ovalis* (Lindenb. & Gott.) Schiffn.; Gradstein et al. (1977) 411 - Alt.: 1800-3000 m.
- Omphalanthus platycoleus*** Herz. - S.L.: Herzog (1955) 171, Fig. 9 - RISARALDA: Wolf (1993) 945 as *O. filiformis/platycoleus* - Alt.: 1700-3750 m.
- Omphalanthus wallisii*** (Jack & Steph.) Gradst. - ANTIOQUIA: Jack & Stephani (1892) 19 as *Peltolejeunea wallisii*.

***Pallavicinia* S. Gray (Pallaviciniaceae)**

- \****Pallavicinia lyellii*** (Hook.) Carruth. - CHOCO: Gradstein 8884, 8920 - RISARALDA: Gradstein 8527a - Alt.: 30-1200 m.

***Paracromastigum* Fulf. & J. Taylor (Lepidoziaceae)**

- Paracromastigum bifidum*** (Steph.) Schust. - CUNDINAMARCA: Gradstein et al. (1977) 405 as *Leucosarmentum portoricense* Fulf.; Gradstein & Hekking (1979) 107 as *Bonneria bifida* (Steph.) Schust. - RISARALDA: Gradstein 8531 - Alt.: 1200-3300 m.
- Paracromastigum granatense*** (Gott.) Schust. - CUNDINAMARCA: Gottsche (1864) 139 as *Lepidozia granatensis* Gott.; Herzog (1934) 94 as *L. granatensis* Gott.; Fulford (1966) 178, Pl. 39, Fig. 1; Gradstein & Hekking (1979) 107 as *Bonneria granatensis* (Gott.) Fulf. & J. Tayl. - Alt.: 2900-3300 m.

***Phaeoceros* Prosk. (Anthocerotaceae)**

- Phaeoceros fimbriatus*** (Gott.) Gradst. - CUNDINAMARCA, TOLIMA: Gottsche (1864) 188 as *Anthoceros fimbriatus* Gott. - MAGDALENA: Gottsche (l. c.) as *A. fimbriatus* Gott. var. *schlimianus* Gott.; Bonner (1962a) 92 as *Aspiromitus schlimianus* (Gott.) Steph.; Winkler (1976) 807 as *A. fimbriatus* - Alt.: 650-2800 m.
- Phaeoceros gualaquizanus*** (Steph.) Gradst. - MAGDALENA: Winkler (1976) 807 as *Anthoceros gualaquizana* - Alt.: 1800 m.
- Phaeoceros laevis*** (L.) Prosk. - CALDAS, CUNDINAMARCA: Robinson (1967a) 57 as *Anthoceros laevis* L. - TOLIMA: Gottsche (1864) 187 as *A. laevis* - Alt.: 1800-3390 m.

***Pictolejeunea* Grolle (Lejeuneaceae)**

*Pictolejeunea picta* (Gott. ex Steph.) Grolle - VALLE: Robinson (1967a) 55, Fig. 63-66 as *Prionolejeunea cuatrecasii*; Grolle (1977) 255, Fig. 2 - Alt.: 10-100 m.

***Plagiochasma* Lehm. & Lindenb. (Aytoniaceae)**

*Plagiochasma rupestre* (Forst.) Steph. - CUNDINAMARCA, TOLIMA: Bischler (1979) 321, Fig. 20-24 - MAGDALENA: Winkler (1976) 818 as *P. subplanum* (Spruce) Steph. - SANTANDER: Herzog (1955) 158 as *P. cf. lanigerum*; Bischler (l. c.) - Alt.: 2150-3200 m.

***Plagiochila* (Dum.) Dum. (Plagiochilaceae)**

*Plagiochila abscedens* Gott. - CUNDINAMARCA: Gottsche (1864) 104, t. 18, Fig. 16-19, sp.nov.; Dugas (1929) 61, Fig. 29a; Carl (1931) 83 - Alt.: 2500 m.

*Plagiochila adiantoides* (Sw.) Lindenb. - CAUCA: Kunth (1822) 40 as *Jungermannia adiantoides* Sw. - RISARALDA: Wolf (1993) 945, also as *P. densispina* Steph., 946 as *P. esmeraldana* Steph. - SANTANDER: Herzog (1955) 163 as *P. procera* Lindenb. - S.L.: Stephani (1901-05) 532 as *P. procera*; Dugas (1929) 177, Fig. 171a as *P. procera* - Alt.: 2100-3200 m.

*Plagiochila aerea* Tayl. - CAUCA: Carl (1931) 48 as *Plagiochila loriloba* Herz. nom. nud; Gradstein & Hekking (1979) 125 as *P. cuneata* Lindenb. & Gott. var. *loriloba* Herz. - MAGDALENA: Winkler (1976) 818, 820 as *P. bursata* (Desv.) Lindenb.; van Reenen et al. (1984) 180 as *P. bursata* - RISARALDA: Wolf (1993) 945 as *P. alpina* Gott. and as *P. bursata* - VALLE: Robinson (1967a) 45; Carl (1931) 80 as *Plagiochila linearis* Herz. nom. nud; Herzog (1955) 160 - S.L.: Dugas (1929) 60 as *P. alpina* "var. *alpina*", "var. *major*"; Carl (1931) 68 as *P. alpina*; Herzog (1934) 87 as *P. alpina* fo. *latifolia* - Alt.: 400-3300 m.

*Plagiochila alternans* Lindenb. & Gott. - CALDAS: Robinson (1967a) 48 as *Plagiochila grandifolia* Steph. - MAGDALENA: Winkler (1976) 818 - S.L.: Carl (1931) 75; Herzog (1955a) - Alt.: 2150-2700 m.

*Plagiochila amicta* Steph. - ANTIOQUIA: Bonner (1962a) 13 - Alt.: ± 2500 m.

*Plagiochila apicidens* Steph. - CUNDINAMARCA: Gradstein & Hekking (1979) 124 - Alt.: 3100 m.

*Plagiochila arcta* S. Winkler - MAGDALENA: Winkler (1976) 818, Fig. 6g-i - Alt.: 1800-2200 m.

*Plagiochila aspleniformis* Schust. - PUTUMAYO: Robinson (1967a) 45 - Alt.: 300 m.

*Plagiochila axillaris* Jack & Steph. - S.L.: Jack & Stephani (1892) 24; Stephani (1901-05) 581; Carl (1931) 62.

\**Plagiochila bancroftii* Steph. - RISARALDA: Wolf (1993) 945 - Alt.: 1000-2450 m.

\**Plagiochila beskeana* Steph. - RISARALDA: Wolf (1993) 945 - Alt.: 1000-1700 m.

*Plagiochila bidens* Gott. - MAGDALENA: Winkler (1976) 820 - RISARALDA: Wolf (1993) 945 - Alt.: 1600-3500 m.

*Plagiochila bifaria* (Sw.) Lindenb. - CESAR, MAGDALENA: Winkler (1976) 820, 821 as *P. increscentifolia* Spruce - CUNDINAMARCA: Gottsche (1864) 115, t. 19, Fig. 29-32 as *P. arrectae* Gott. - Alt.: 2500-2900 m.

- Plagiochila binominis* Gott. - CUNDINAMARCA: Gottsche (1864) 103, t. 18, Fig. 13-15; Carl (1931) 81 - Alt.: 2200-2600 m.
- Plagiochila blepharobasis* Herz. - SANTANDER: Herzog (1932) 216, Fig. 9; Herzog (1955) 160 - Alt.: 500 m.
- Plagiochila bogotensis* Gott. - CUNDINAMARCA: Gottsche (1864) 98, t. 17, Fig. 4-6; Dugas (1929) 173, Fig. 166a; Carl (1931) 81 - MAGDALENA: Winkler (1976) 820 - RISARALDA: Wolf (1993) 945 - Alt.: 1250-2750 m.
- Plagiochila breuteliana* Lindenb. - S.L.: Carl (1931) 52.  
- var. *acutifolia* Herz. - VALLE: Herzog (1955) 160, Fig. 1 (including fo. *depauperata*) - Alt.: 1700-2200 m.  
- var. *novo-granatensis* Gott. - GUAJIRA: Gottsche (1864) 110; Stephani (1901-05) 517.
- Plagiochila calomelanos* Spruce - S.L.: Stephani (1901-05) 587.
- Plagiochila centrifuga* Tayl. - S.L.: Stephani (1901-05) 590.
- Plagiochila chinantlana* Gott. - CUNDINAMARCA: Gradstein & Hekking (1979) 124 - HUILA: van Zanten & Gradstein (1988) 68 - RISARALDA: van Zanten & Gradstein (1988) 68 - VALLE: Robinson (1967a) 46 - Alt.: 1600-3100 m.
- Plagiochila choachina* Gott. - CUNDINAMARCA: Gottsche (1864) 95 as var. *choachina*; Dugas (1929) 65, Fig. 34a-b - MAGDALENA: Winkler (1976) 820 - RISARALDA: Wolf (1993) 945 - S.L.: Carl (1931) 82 - Alt.: 1600-3000 m.  
- var. *phyllobola* Gott. - CUNDINAMARCA: Gottsche (1864) 95 - Alt.: 2900 m.
- Plagiochila cleefii* Inoue - META: Inoue (1987) 95, Fig. 1 - Alt.: 4050 m.
- Plagiochila cobana* Steph. - VALLE: Gradstein & Hekking (1979) 125.  
According to Grolle & Heinrichs (in press), *P.cobana* Steph. is not a synonym of *P.bursata* (Desv.) Lindenb. (= *P. area!*) as proposed by Inoue (1980).
- Plagiochila columbica* Gott. - S.L.: Bonner (1962a) 63.  
- var. *convexa* Gott. - S.L.: Bonner (1962a) 63.
- Plagiochila confundens* Lindenb. & Gott. - MAGDALENA: Winkler (1976) 820 - Alt.: 1500 m.
- Plagiochila connivens* Gott. - CUNDINAMARCA: Gottsche (1864) 114, t. 20, Fig. 37-40 - Alt.: 2200 m.
- Plagiochila conspicua* Tayl. - S.L. ("Nova. Granada"): Stephani (1901-05) 527.
- Plagiochila contigua* Gott. - VALLE: Herzog (1955) 160 - Alt.: 1550-1700 m.
- Plagiochila contingens* Gott. - CUNDINAMARCA: Gottsche (1864) 111; Dugas (1929) 159, Fig. 149c; Carl (1931) 62 - MAGDALENA: Winkler (1976) 820 (cf.) - Alt.: ± 2500 m.
- Plagiochila cordilliera* Steph. - S.L.: Stephani (1917-24) 142; Bonner (1962a) 70.
- Plagiochila crispabilis* Lindenb. - MAGDALENA: Winkler (1976) 820 - VALLE: Herzog (1955) 160 - Alt.: 1700-2500 m.
- Plagiochila crispatodecurrens* Herz. - MAGDALENA: Winkler (1976) 820 - Alt.: 1600 m.
- Plagiochila cristata* (Sw.) Lindenb. - MAGDALENA: van Reenen et al. (1984) 180 - SANTANDER: Herzog (1955) 160 - VALLE: Robinson (1967a) 46 - Alt.: 1500-2160 m.  
- var. *minor* Herz. - VALLE: Herzog (1955) 160.



- Plagiochila cuatrecasii* Robins. - BOYACA: Robinson (1967a) 47, Fig. 48-51 - RISARALDA: van Zanten & Gradstein (1988) 69; Gradstein (1995) 326 - Alt.: 3750-4000 m.
- Plagiochila cuervina* Gott. - CUNDINAMARCA: Gottsche (1864) 96.
- Plagiochila decuduifolia* Steph. - CAUCA: Herzog (1955) 160 - MAGDALENA: Winkler (1976) 820 - S.L.: Carl (1931) 82 - Alt.: 2150-3300 m.
- Plagiochila dependula* Tayl. - CAUCA, HUILA: Grolle (1971) 85, Fig. 23 as *Jamesoniella dependula* (Tayl.) Steph. - META: Gradstein & Hekking (1979) 125 - Alt.: 3500-4200 m.
- Plagiochila dilatata* Steph. - RISARALDA: Gradstein (1995) 326 - SANTANDER: Herzog (1955) 161 - Alt.: 300 m.
- P. disticha* (Lehm. & Lindenb.) Mont. - PUTUMAYO, VALLE: Robinson (1967a) 48 - RISARALDA: Wolf (1993) 945 - Alt.: 500-2100 m.
- \**Plagiochila divaricata* Lindenb. - RISARALDA: Wolf (1993) 945 - Alt.: 2550-3200 m.
- \**Plagiochila diversifolia* Lindenb. & Gott. - MAGDALENA: Winkler (1976) 821 as *P. glaucescens* Steph. - RISARALDA: Wolf (1993) 945 - S.L. ("Nova Granada"): Stephani (1901-05) 254 as *P. glaucescens*; Dugas (1929) 163, Fig. 153d - Alt.: 1500-2100 m.
- var. *hians* Gott. nom. illeg. - CUNDINAMARCA, GUAJIRA: Gottsche (1864) 109 - Alt.: 2400-2500 m.
- \**Plagiochila diversispina* Steph. - MAGDALENA: Mägdefrau (1983) 20, as *P. variifolia* Steph. - RISARALDA: Wolf (1993) 945 - Alt.: 2100-3200 m.
- \**Plagiochila domincensis* Tayl. - CHOCO: Mägdefrau (1983) 19 - RISARALDA: Wolf (1993) 946 - Alt.: 75-2550 m.
- Plagiochila douini* Steph. - MAGDALENA: Winkler (1976) 820 - Alt.: 2000-2160 m.
- Plagiochila echinella* Gott. - CUNDINAMARCA: van Zanten & Gradstein (1988) 69 - HUILA: van Zanten & Gradstein (l. c.) - RISARALDA: Wolf (1993) 946 - VALLE: Robinson (1967a) 47 - Alt.: 1950-3750 m.
- Plagiochila elegantula* Herz. - CAUCA: Herzog (1955) 161, Fig. 3 - Alt.: 1400-1500 m.
- Plagiochila ensiformis* Tayl. - CUNDINAMARCA: Herzog (1955) 162 - S.L.: Gottsche et al. (1844-47) 743; Stephani (1901-05) 581.
- Plagiochila exesa* Lindenb. & Gott. - VALLE: Carl (1931) 83; Herzog (1955) 162 - Alt.: 80-100 m.
- Plagiochila exigua* (Tayl.) Tayl. - CUNDINAMARCA: Herzog (1934) 87 as *P. cuneata* Lindenb. & Gott. var. *bicuspidata* (Gott.) Herz.; Inoue (1980) 115, Fig. 1-2 as *P. corniculata* Dum. - RISARALDA: Wolf (1993) 945 as *P. corniculata* - TOLIMA: Inoue (l. c.) as *P. corniculata* - Alt.: 2000-3500 m.
- Plagiochila falcatoserrata* Carl - CAQUETA: Carl (1931) 58; Herzog (1932) 217, Fig. 10 - SANTANDER: Herzog (1955) 162 - Alt.: 1500 m.
- Plagiochila fallax* Lindenb. & Hampe - VALLE: Herzog (1955) 162 - Alt.: 1700-2200 m.
- Plagiochila filicina* Herz. - MAGDALENA: Winkler (1976) 820 - Alt.: 1600 m.
- Plagiochila fragilis* Tayl. - MAGDALENA: Winkler (1976) 820 - NORTE DE SANTANDER, SANTANDER: Carl (1931) 54; Herzog (1955) 162 - RISARALDA: Wolf (1993) 946 - Alt.: 1700-3000 m.

- Plagiochila frontinensis* Steph. - ANTIOQUIA: Stephani (1901-05) 532; Carl (1931) 61 - Alt.: ± 2500 m.
- Plagiochila funckiana* Steph. - CUNDINAMARCA: Herzog (1934) 89 - MAGDALENA: Winkler (1976) 820 - S.L.: Stephani (1917-24) 171 as *Plagiochila irmscheri* Steph.; Dugas (1929) 177, Fig. 172a; Carl (1931) 70 - Alt.: 1800-3200 m.
- Plagiochila fuscolutea* Tayl. - BOYACA: Robinson (1967a) 248 - CUNDINAMARCA: Carl (1931) 46, Fig. 7a; Herzog (1934) 37; Herzog (1955) 163 as fo. *purpurascens*; Robinson (1967a) 48; van Zanten & Gradstein (1988) 69. as *P. jelskii* Loitl. - RISARALDA: van Zanten & Gradstein (l. c.) as *P. jelskii*; Wolf (1993) 946 - Alt.: 3000-3750 m.
- Plagiochila glomerulifera* Herz. - NORTE DE SANTANDER: Herzog (1932) 202, Fig. 1e-g - Alt.: 2800-3000 m.
- Plagiochila granatensis* Gott. - CUNDINAMARCA: Gottsche (1864) 111, t. 19, Fig. 26-28.
- Plagiochila grandicrista* Steph. - CUNDINAMARCA: Stephani (1901-05) 581; Herzog (1934) 89 - Alt.: 2200-2400 m.
- \**Plagiochila grandifolia* Steph. - CUNDINAMARCA: Mägdefrau (1983) 19 - Alt.: 2800 m.
- Plagiochila guevarii* Robins. - CUNDINAMARCA: Gradstein & Hekking (1979) 126 - TOLIMA: Robinson (1967a) 48, Fig. 52-55 - Alt.: 3300-3550 m.
- Plagiochila gymnostoma* Jack & Steph. - S.L.: Jack & Stephani (1892) 25.
- Plagiochila hansmeyerii* Steph. - ANTIOQUIA: Irmischer (1914) 995. - RISARALDA: Wolf (1993) 946 - Alt.: 1700-3700 m.
- Plagiochila heteromalla* (Lehm. & Lindenb.) Lehm. & Lindenb. - S.L.: Stephani (1901-05) 477.
- \**Plagiochila hondurensis* Herz. - MAGDALENA: van Reenen et al. (1984) 180.  
According to Heinrichs & Gradstein (in press), *P. hondurensis* Steph. is not a synonym of *P. laetevirens* Lindenb. as proposed by Gradstein & Hekking (1989).
- Plagiochila horrida* Gott. - CUNDINAMARCA: Gradstein & Hekking (1979) 126 - MAGDALENA: Winkler (1976) 821 - Alt.: 2000-3100 m.  
- var. *granatensis* Gott. - CUNDINAMARCA: Gottsche (1864) 117 - Alt.: 2200 m.
- Plagiochila hylacoetis* Spruce - S.L.: Carl (1931) 51 "*hylacoetis*."
- Plagiochila jamesonii* Tayl. - PUTUMAYO, VALLE: Robinson (1967a) 48 - RISARALDA: Wolf (1993) 946 - SANTANDER: Carl (1931) 63; Herzog (1955) 163 - Alt.: 1250-3600 m.
- Plagiochila jaramillii* Robins. - CUNDINAMARCA: Robinson (1967a) 48, Fig. 56-62 - Alt.: 3520 m.
- \**Plagiochila jovoensis* Steph. - MAGDALENA: Mägdefrau (1983) 14 - Alt.: 2200 m.
- Plagiochila juruensis* Steph. - S.L.: Carl (1931) 58.
- Plagiochila keckiana* Steph. - S.L.: Dugas (1929) 133, Fig. 110a.
- Plagiochila kegeliana* Steph. - VALLE: Herzog (1955) 163 - S.L.: Carl (1931) 76 - Alt.: 1700-2200 m.
- Plagiochila laetevirens* Lindenb. - CUNDINAMARCA: Gottsche (1864) 106, t. 20, Fig. 45-49 as *P. tocarema*; Stephani (1901-05) 544 as *P. pachoenis* Steph., 574 as *P. tocarema* - RISARALDA: Wolf (1993) 946 - S.L.: Gottsche et al. (1844-47) 38; Stephani (1901-05) 542 - Alt.: 500-3000 m.  
- var. *peruviana* Spruce - VALLE: Herzog (1955) 163.

- Plagiochila leptodictyon* Herz. - MAGDALENA: Winkler (1976) 821 - Alt.: 2160 m.
- Plagiochila leptophylla* Spruce - S.L.: Stephani (1901-05) 586.
- Plagiochila lindigiana* Gott. - CUNDINAMARCA: Gottsche (1864) 105; Stephani (1901-05) 218 - Alt.: 2500 m.
- Plagiochila longaeva* Herz. - CESAR, MAGDALENA: Winkler (1976) 821 - Alt.: 1900-2600 m.
- Plagiochila longispina* Lindenb. & Gott. - CALDAS; VALLE: Robinson (1967a) 50 - CUNDINAMARCA: Gradstein & Hekking (1979) 126 - Alt.: 2800-3500 m.
- \**Plagiochila macrifolia* Tayl. - RISARALDA: Wolf (1993) 946 - Alt.: 2100-2750 m.
- Plagiochila macrotricha* Spruce - CESAR, MAGDALENA: Winkler (1976) 821 - VALLE: Herzog (1955) 163 - Alt.: 200-2200 m.
- Plagiochila macvicarii* Steph. - VALLE: Herzog (1955) 163 - S.L.: Stephani (1901-05) 229 - Alt.: 1700-2200 m.
- Plagiochila magellanica* Lindenb. - CUNDINAMARCA: Gottsche (1864) 116.
- Plagiochila micropteryx* Gott. - CUNDINAMARCA: Gottsche (1864) 107, t. 19, Fig. 23-25; Bonner (1962a) 193 "*micropterys*"; Stephani (1901-05) 570 as.; Stephani (1901-05) 575 as *P. relictata* Steph. - RISARALDA: Wolf (1993) 946 - S.L.: Dugas (1929) 179, Fig. 176a as *P. cipaconensis* Steph. - Alt.: 2200 m.
- Plagiochila miqueliana* Lehm. & Lindenb. - CUNDINAMARCA: Robinson (1967a) 50 - Alt.: 2500-2700 m.
- Plagiochila montagnei* Nees - MAGDALENA: Winkler (1976) 821 - Alt.: 100 m.
- Plagiochila oblongo-trigona* Steph. - CUNDINAMARCA: Imscher (1914) 995 - Alt.: 3300 m.
- Plagiochila oblita* Steph. - ANTIOQUIA: Stephani (1901-05) 221 - BOYACA: Robinson (1967a) 50 - S.L.: Carl (1931) 76 - Alt. 3500-3750 m
- Plagiochila oresitropha* Spruce - CALDAS: Herzog (1955) 163 as fo. *minor* - MAGDALENA: Winkler (1976) 821 - VAUPES: Bonner (1962a) 215 - S.L.: Carl (1931) 74 - Alt.: 1200-3300 m.
- Plagiochila ovata* Lindenb. & Gott. - MAGDALENA: van Reenen et al. (1984) 180 - S.L.: Stephani (1901-05) 578 - Alt.: 3150-3400 m.
- Plagiochila ovato-obconica* Steph. - ANTIOQUIA: Imscher (1914) 995 - S.L.: Stephani (1917-24) 191 - Alt.: 2100 m.
- Plagiochila ovifolia* Steph. - ANTIOQUIA: Imscher (1914) 995 - S.L.: Stephani (1917-24) 191 Alt.: 1700 m.
- Plagiochila oxyphylla* Spruce - S.L.: Stephani (1901-05) 551.
- Plagiochila pachyloma* Tayl. - MAGDALENA: van Reenen et al. (1984) 180 - RISARALDA: Gradstein (1995) 326 - SANTANDER: Carl (1931) 74; Herzog (1955) 163 - TOLIMA: Robinson (1967a) 50 - Alt.: 2900-4100 m.
- \**Plagiochila paludosa* Steph. - RISARALDA: Wolf (1993) 946 - Alt.: 2550-2750 m.
- Plagiochila paraphyllina* Herz. - CUNDINAMARCA: Herzog (1934) 89 - MAGDALENA: van Reenen et al. (1984) 180 - Alt.: 2300-3300 m.
- Plagiochila paucispinula* Herz. - NORTE DE SANTANDER: Carl (1931) 64; Herzog (1955) 163 - Alt.: 2800-3000 m.
- Plagiochila permista* Spruce - S.L.: Stephani (1901-05) 579.
- Plagiochila perrottetiana* Mont. & Gott. - CUNDINAMARCA: Gottsche (1864) 101. - var. *minor* Mont. & Gott. - CUNDINAMARCA: Gottsche (1864) 101.

- Plagiochila pichinchensis* Tayl. - MAGDALENA: van Reenen et al. (1984) 180 - PUTUMAYO: Robinson (1967a) 50 - Alt.: 2100-2500 m.
- \**Plagiochila pinnatidens* Steph. - MAGDALENA: van Reenen et al. (1984) 180 - Alt.: 3300 m.
- Plagiochila polopolensis* Herz. - MAGDALENA: Winkler (1976) 821 - Alt.: 2050 m.
- Plagiochila raddiana* Lindenb. - CESAR: Winkler (1976) 821 as *P. guilleminiana* Mont.; CUNDINAMARCA: Gottsche (1864) 97, t. 17, Fig. 1-3 as *P. interjecta* Gott.; Gottsche (1864) 99, t. 17, Fig. 7-9 as *P. discreta* Gott.; Stephani (1901-05) 255 as *P. longitexta* Steph.; Robinson (1967a) 48 as *P. guilleminiana* - MAGDALENA: Mägdefrau (1983) 19 as *P. guilleminiana* - NARIÑO, PUTUMAYO: Robinson (l. c.) as *P. guilleminiana* - RISARALDA: Wolf (1993) 946 as *P. falcata* Steph. and *P. guilleminiana* - Alt.: 150-3300 m.
- Plagiochila rara* Gott. - CUNDINAMARCA: Gottsche (1864) 100, t. 17, Fig. 10-12 - Alt.: 2600 m.
- Plagiochila regeliana* Steph. - S.L.: Stephani (1901-05) 212.
- \**Plagiochila revolvens* Mitt. - META: Cleef 8082 - Alt.: 4200 m.
- \**Plagiochila rudischusteri* Robins. - RISARALDA: Gradstein 8398 (male), 8522 (male, female) - Alt.: 1500-1600 m.
- Plagiochila rufoviridis* Spruce - S.L.: Dugas (1929) 169, Fig. 160.
- Plagiochila rutilans* Lindenb. - CAUCA: Herzog (1955) as fo. *foliicola* - CESAR: Winkler (1976) 821 - CUNDINAMARCA: Herzog (1934) 90 - PUTUMAYO: Robinson (1967a) 50 - RISARALDA: Wolf (1993) 946 - Alt.: 300-3200 m.
- Plagiochila saltuensis* Spruce - S.L.: Stephani (1901-05) 577.
- var. *spinossissima* Herz. - VALLE: Herzog (1955) 163, Fig. 1 - Alt.: 2100-2400 m.
- Plagiochila schlimiana* Gott. - S.L. ("Nova Granada"): Bonner (1962a) 269.
- \**Plagiochila semidentata* Steph. - MAGDALENA: van Reenen et al. (1984) 180 - Alt.: 2300 m.
- Plagiochila serrata* (Roth) Lindenb. - S.L.: Carl (1931) 58.
- Plagiochila silvatica* Gott. - CUNDINAMARCA: Gottsche (1864) 108, t. 20, Fig. 41-44; Stephani (1901-05) 554 "*sylvatica*"; Dugas (1929) 134, Fig. 113a; Herzog (1934) 90 - Alt.: 2200-2500 m.
- Plagiochila sparsifolia* Steph. - MAGDALENA: Winkler (1976) 821 - Alt.: 1800 m.
- Plagiochila stolonifera* Lindenb. & Gott. - MAGDALENA: van Reenen et al. (1984) 180 - META: Gradstein & Hekking (1979) 127 - TOLIMA: Robinson (1967a) 50 - Alt.: 1900-4150 m.
- Plagiochila stricta* Lindenb. - CUNDINAMARCA: Herzog (1934) 90 - Alt.: 2200-2400 m.
- Plagiochila subaequalis* Steph. - CUNDINAMARCA: Gradstein & Hekking (1979) 127 - Alt.: 3100 m.
- Plagiochila subdeflexiramea* Herz. - CESAR: Winkler (1976) 821 - Alt.: 1900 m.
- Plagiochila subdentata* Steph. - VALLE: Herzog (1955) 163 "*subdentata*" - Alt.: 200-300 m.
- Plagiochila subplana* Lindenb. - GUAINIA: Bonner (1962a) 11 as *P. amazonica* Spruce var. *parvifolia* Spruce - MAGDALENA: van Reenen et al. (1984) 180 - RISARALDA: Wolf (1993) 946 - S.L.: Carl (1931) 76 - Alt.: 500-2450 m.
- Plagiochila subrara* Herz. - CUNDINAMARCA: Herzog (1934) 87, Fig. 5a - Alt.: 3200 m.

- \**Plagiochila superba* Lindenb. - RISARALDA: Wolf (1993) 946 - Alt.: 2550-3000 m.  
 \**Plagiochila sylvicultrix* Spruce - RISARALDA: Wolf (1993) 946 - Alt.: 2550-2750 m.  
 \**Plagiochila tabinensis* Steph. - MAGDALENA: van Reenen et al. (1984) 180 - Alt.: 2100-2900 m.  
*Plagiochila tovarina* Gott. var.  *trianae* Gott. - S.L.: Gottsche (1864) 102; Stephani (1901-05) 206.  
*Plagiochila trianae* Gott. - CUNDINAMARCA: Gottsche (1864) 114, t. 19, Fig. 33-36; Stephani (1901-05) 515 - Alt.: 2600 m.  
*Plagiochila triangulifolia* Steph. - META: Gradstein & Hekking (1979) 127 - Alt.: 4050 m.  
*Plagiochila trichostoma* Gott. - CUNDINAMARCA: Gottsche (1864) 113; Stephani (1901-05) 579; Dugas (1929) 170, Fig. 162 - Alt.: 2500 m.  
*Plagiochila trollii* Herz. - CUNDINAMARCA: Herzog (1934) 90, Fig. 5b-d - Alt.: 2200-2400 m.  
*Plagiochila turgida* Herz. - MAGDALENA: Winkler (1976) 821 - Alt.: 2000 m.  
 \**Plagiochila umbrosa* Steph. - CUNDINAMARCA, RISARALDA: van Zanten & Gradstein (1988) 69; Gradstein (1995) 326 - Alt.: 3200-3750 m.  
*Plagiochila undulifolia* Herz. - MAGDALENA: Winkler (1976) 821 - Alt.: 700 m.  
*Plagiochila verruculosa* Schust. - CAUCA: Schuster (1959) 295; Inoue (1975) 342 - CUNDINAMARCA: Robinson (1967a) 50; Inoue (1980) 119, Fig. 3 - Alt.: 2300-3600 m.  
*Plagiochila vincentina* Lindenb. - BOYACA: Gottsche (1864) 110; Dugas (1929) 145, Fig. 128b - Alt.: 2100 m.  
*Plagiochila wallisiana* Steph. - NORTE DE SANTANDER: Stephani (1901-05) 586.  
 \**Plagiochila wolfii* Inoue - AMAZONAS: Inoue (1989) 46, Fig. 4, 5 - Alt.: ca. 300 m.

*Plagiochilion* Hatt. (Plagiochilaceae)

- Plagiochilion bryhnii* (Steph.) Inoue - SANTANDER: Herzog (1932) 240, Fig. 22 as *Plagiochila reclinata* Herz.; Herzog (1955) 163; Schuster (1960) 127 as *Plagiochilion reclinata* (Herz.) Schust.; Inoue (1964) 61, Fig. 1, 6 - VALLE: Robinson (1967a) 45 - Alt.: 1950-2600 m.

*Pleurozia* Dum. (Pleuroziaceae)

- Pleurozia paradoxa* Jack - HUILA/CAUCA: Thiers (1993) 525, Fig. 95-100 - NARIÑO: Jack (1886) 85, t. 10; Gradstein & Hekking (1979) 111 as *Eopleurozia paradoxa* (Jack) Schust. - Alt.: 3000 m.

*Porella* L. (Porellaceae)

- Porella brachiata* (Tayl.) Spruce - SANTANDER: Herzog (1955) 169, Fig. 7 as *Madotheca splendida* Herz.; Swails (1970) 225, Fig. 8a-j - Alt.: 2200-3200 m.  
*Porella brasiliensis* (Raddi) Schiffn. - RISARALDA: Wolf (1993) 946 - S.L.: Swails (1970) 213, Fig. 2a-k - Alt.: 1000-1500 m.

- Porella crispata* (Hook.) Trevis. - BOYACA: Gradstein & Hekking (1979) 128 - CUNDINAMARCA: Swails (1970) 211, Fig. 1a-s - QUINDIO, RISARALDA, TOLIMA: Hooker (1819-20) 24, t. 153, Fig. 1-3 as *Jungermannia crispata* Hook.; Gottsche (1864) 114 as *Madotheca crispata* (Hook.) Nees; Spruce (1885) 328; Swails (l. c.) - RISARALDA: Wolf (1993) 946 - Alt.: 1250-2100 m.
- Porella expansa* (Lindenb. & Gott.) Clark & Frye - MAGDALENA: Winkler (1976) 822 - Alt.: 1250 m.
- Porella leiboldi* (Lehm.) Trevis. - CAUCA: Swails (1970) 220, Fig. 5a-m.
- \**Porella splendida* Herz. - BOYACA: Mägdefrau (1983) 21 - Alt.: 3000 m.
- Porella squamulifera* (Tayl.) Trevis. - CUNDINAMARCA: Swails (1970) 226, Fig. 9a- k; Gradstein et al. (1977) 412 - SANTANDER: Herzog (1955) 169 as *Madotheca columbica* Tayl. - Alt.: 1200-3700 m.
- \**Porella swartziana* (Web.) Trevis. - RISARALDA: Wolf (1993) 946; Gradstein 8386 - Alt.: 800-1250 m.

***Prionocolea* Schust. (Lejeuneaceae)**

- \**Prionocolea viridissima* Schust. - CAUCA (I. Gorgona): Schuster (1994).

***Prionolejeunea* (Spruce) Schiffn. (Lejeuneaceae)**

- Prionolejeunea aemula* (Gott.) Evans - CAUCA: Herzog (1955) 176 - RISARALDA: Wolf (1993) 946 (as cf.) - Alt.: 1400-3200 m.
- Prionolejeunea ampliretis* Herz. - VALLE: Herzog (1955) 178, Fig. 13 - Alt.: 200-300 m.
- Prionolejeunea arguta* (Nees) Steph. - VALLE: Herzog (1955) 176 - Alt.: 200-300 m.
- Prionolejeunea circinulata* Herz. - VALLE: Herzog (1955) 179, Fig. 14 - Alt.: 200-300 m.
- Prionolejeunea denticulata* (Web.) Schiffn. - BOYACA: Gottsche (1864) 153 as *Lejeunea denticulata* (Web.) Nees fo. *muzoana* Gott. - CAUCA: Herzog (1955) 176 as *C. angulistipa* (Steph.) Evans - CHOCO: Winkler (1970) 951 as *C. angulistipa* - Alt.: 100-1900 m.
- Prionolejeunea fabroniaefolia* (Spruce) Schiffn. - VALLE: Robinson (1967a) 52 - Alt.: 1250-1400 m.
- Prionolejeunea gemmata* (Gott.) Steph. - CUNDINAMARCA: Gottsche (1864) 153 as *Lejeunea gemmata* Gott.
- Prionolejeunea helleri* Evans- CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.
- Prionolejeunea maculata* Herz. - VALLE: Herzog (1955) 180, Fig. 16 - Alt.: 150-300 m.
- Prionolejeunea magnistipula* Herz. - RISARALDA: Gradstein 8383, 8569 - VALLE: Herzog (1955) 176, Fig. 1-2 - Alt.: 200-1500 m.
- Prionolejeunea microdonta* (Gott.) Steph. - BOYACA: Gottsche (1864) 153 as *Lejeunea microdonta* Gott. - Alt.: 1900 m.
- Prionolejeunea mucronata* (Sande-Lac.) Steph. - VALLE: Herzog (1955) 176 - Alt.: 1700-2200 m.

*Prionolejeunea schlimiana* (Gott.) Steph. - GUAJIRA: Gottsche (1864) 154 as *Lejeunea schlimiana* Gott. - MAGDALENA: Winkler (1976) 822 - S.L.: Stephani (1912-17) 214 - Alt.: 1500-3000 m.

*Pseudocephalozia* Schust. (Lepidoziaceae)

*Pseudocephalozia quadriloba* (Steph.) Schust. - BOYACA, CAUCA: Gradstein & Hekking (1979) 128 - CUNDINAMARCA: Schuster & Engel (1974) 685, Fig. 10-14; Gradstein et al. (1977) 412, Fig. 29 - Alt.: 3200-4100 m.

*Radula* Dum. (Radulaceae)

\**Radula aguirrei* Schust. - CAUCA (I. Gorgona): Schuster (1991) 56, Fig. 1 - Alt.: 250 m.

*Radula angulata* Steph. - CUNDINAMARCA, PUTUMAYO: Robinson (1967a) 51 - MAGDALENA: Winkler (1976) 822 - Alt.: 300-2300 m.

*Radula bogotensis* Steph. - CUNDINAMARCA: Gottsche (1864) 143 as *R. pallens* Nees var. *brasiliensis* Nees; Stephani (1884) 115; Castle (1966) 40, Fig. 16 - Alt.: 2500 m.

*Radula episcia* Spruce - ANTIOQUIA: Castle (1959) 24, Fig. 11 as *R. cornucopiae* Spruce - CUNDINAMARCA: Jans (1979) 430, Fig. 1, g-h; van Zanten & Gradstein (1988) 70 - MAGDALENA: van Reenen et al. (1984) 180 - RISARALDA: *Gradstein 8384, 8607* (det. K. Yamada) - Alt.: 500-3400 m.

*Radula fendleri* Gott. - CESAR: Winkler (1976) 822 - CHOCO: Winkler (1970) 951 as *R. saccatiloba* Steph. - Alt.: 100-1900 m.

*Radula flaccida* Lindenb. & Gott. - VALLE: Robinson (1967a) 51 - Alt.: 5-80 m.

\**Radula frondescens* Steph. - CUNDINAMARCA: Jans (1979) 431, Fig. 1, k-l; Yamada (1982a) 453, Fig. 25 - Alt.: 3800 m.

*Radula gottscheana* Tayl. - CUNDINAMARCA: Castle (1936) 20, Fig. 1 det. as *R. boryana* (Web.) Nees. - MAGDALENA: *Griffin 50049* (det. K. Yamada) - Alt.: 1500-2000 m.

*Radula gracilis* Mitt. ex Steph. - CUNDINAMARCA: Castle (1967) 19, Fig. 7.

\**Radula involvens* Spruce - HUILA/CAUCA (Páramo de Las Papas): *Bischler 839* (det. K. Yamada) - RISARALDA: *Gradstein 8358* (det. K. Yamada) - Alt.: 1500 m.

*Radula jamesoni* Tayl. - CALDAS, TOLIMA: Irmischer (1914) 996 as *R. sprucei* Steph. - CUNDINAMARCA: Castle (1966) 29, Fig. 10 - S.L.: Yamada (1982a) 455, Fig. 26 - Alt.: 3700 m.

*Radula kegelii* Gott. - MAGDALENA: Winkler (1976) 822 - Alt.: 1500 m.

\**Radula lewisii* Yamada - RISARALDA: *Gradstein 8544* (det. K. Yamada) - Alt.: 1200 m.

*Radula lindigii* Castle - MAGDALENA: van Reenen et al. (1984) 180 - CUNDINAMARCA: Gottsche (1864) 143 as *R. pallens* Nees "var.  $\alpha$ "; Castle (1959) 29, Fig. 13 - Alt.: 500-2500 m.

*Radula macrostachya* Lindenb. & Gott. - CUNDINAMARCA: *Linares & Gradstein 3522* - MAGDALENA: Winkler (1976) 822 as *R. surinamensis* Steph. - META: *Bischler 1092, 1637* (det. K. Yamada) - RISARALDA: Wolf (1993) 946 as *R. caldana* Aongstr.;

- Gradstein 8636* (det. K. Yamada) - SANTANDER: *Bischler 1996* (det. K. Yamada) - VAUPES: Castle (1966) 22, Fig. 8 as *R. amazonica* Spruce; Gradstein & Hekking (1979) 129 as *R. surinamensis* Steph. - Alt.: 350-2250 m.
- Radula mammosa* Spruce - S.L.: Castle (1939) 24, Fig. 2.
- Radula mexicana* Lindenb. & Gott. ex Gott. - S.L.: Castle (1964) 192, Fig. 3.
- \**Radula nudicaulis* Steph. - ARAUCA, CALDAS, CUNDINAMARCA: Jans (1979) 426, Fig. 1, i-j - RISARALDA: Wolf (1993) 946 - Alt.: 3200 m.
- \**Radula opaciuscula* (Spruce) Castle - RISARALDA: *Gradstein 8662, 8694* (det. K. Yamada) - Alt.: 1800 m.
- \**Radula plumosa* Mitt. ex Steph. - RISARALDA: Wolf (1993) 946 - Alt.: 2100-2550 m.
- \**Radula pusilla* Spruce - RISARALDA: *Gradstein 8452a* (det. K. Yamada) - Alt.: 1500 m.
- Radula quadrata* Gott. - CESAR, MAGDALENA: Winkler (1976) 822 - CUNDINAMARCA: Gottsche (1864) 143 as *R. quadrata* var. *manzonensis* Gott.; Castle (1965) 334, Fig. 2 as *R. mollis* Lindenb. & Gott.; Yamada (1982) 121 as *R. mollis* - RISARALDA: Wolf (1993) 946 as *R. mollis* - Alt.: 1250-3100 m.
- \**Radula schaefer-verwimpii* Yamada - CHOCO: *Gradstein 8955* (det. K. Yamada) - RISARALDA: *Gradstein 8672* (det. K. Yamada) - Alt.: 700-1800 m.
- Radula sinuata* Gott. - CESAR, MAGDALENA: Winkler (1976) 822. - RISARALDA: Wolf (1993) 946 - Alt.: 1500-2000 m.
- Radula sonsonensis* Steph. - ANTIOQUIA: Castle (1963) 7, Fig. 2; Jans (1979) 423, Fig. 1, c-d - BOYACA, CAUCA, META, TOLIMA: Jans (l. c.) - RISARALDA: Wolf (1993) 947 - Alt.: 2550-3200 m.
- Radula stenocalyx* Mont. - CHOCO: Winkler (1970) 951 - Alt.: ± 100 m.
- \**Radula subinflata* Lindenb. & Gott. - CHOCO: *Gradstein 8738* (det. K. Yamada) - Alt.: 200 m.
- \**Radula tectiloba* Steph. - RISARALDA: Wolf (1993) 947 - Alt.: 1000 m.
- \**Radula tenera* Mitt. ex Steph. - RISARALDA: Wolf (1993) 947 - Alt.: 3000-3500 m.
- Radula voluta* Tayl. - BOYACA, CALDAS, CAUCA: Jans (1979) 428, Fig. 2 as *R. ramulina* Tayl. - CESAR: Winkler (1976) 822 as *R. ramulina* - CUNDINAMARCA: Jans (l. c.) as *R. ramulina* var. *microphylla* Jans; Yamada (1982) 123; van Zanten & Gradstein (1988) 70 - TOLIMA: Robinson (1967a) 51 as *R. ramulina* - Alt.: 1500-3600 m.
- Radula xalapensis* Mont. - CUNDINAMARCA: Gottsche (1864) 143 - Alt.: 2000-2700 m.

#### *Rectolejeunea* Evans (Lejeuneaceae)

- \**Rectolejeunea berteriana* (Gott. ex Steph.) Evans - CHOCO: *Gradstein 8803* - RISARALDA: *Gradstein 8628, 8591* - Alt.: 30-1200 m.
- Rectolejeunea emarginuliflora* (Gott. ex Schiffn.) Evans - VALLE: Herzog (1955) 194 - Alt.: 80-100 m.
- Rectolejeunea lindigiana* Steph. - S.L. ("Nova Granada"): Stephani (1912-17) 690.
- Rectolejeunea longiloba* Steph. - CUNDINAMARCA, VALLE: Robinson (1967a) 55 - Alt.: 2600-3250 m.
- Rectolejeunea mandiocana* Steph. - MAGDALENA: Winkler (1976) 823 - Alt.: 2160 m.



***Riccardia* S. Gray (Aneuraceae)**

- Riccardia aberrans*** (Steph.) Gradst. - ANTIOQUIA: Stephani (1898-1900) 210 as *Aneura aberrans* - CUNDINAMARCA: Meenks (1987) 168 - RISARALDA: Wolf (1993) 947 - Alt.: 3000-3700 m.
- Riccardia algooides*** (Tayl.) Meenks - ANTIOQUIA: Stephani (1898-1900) 222 as *Aneura squarrosa*; Gradstein & Hekking (1979) 130 as *R. squarrosa* (Steph.) Gradst. - CAUCA, CHOCO: Meenks (1987) 168 - Alt.: 3000-3860 m.
- Riccardia amazonica*** (Spruce) Schiffn. ex Gradst. - CHOCO: Meenks (1987) 168; Gradstein 8783, 8876 - CUNDINAMARCA, HUILA, RISARALDA, VAUPES: Meenks (1987) 168 - MAGDALENA: Winkler (1976) 823; van Reenen et al. (1984) 180 - RISARALDA: Gradstein 8469, 8563, 8677 - Alt.: 30-2900 m.
- Riccardia andina*** (Spruce) Herz. - BOYACA, CHOCO, HUILA, META, RISARALDA: Meenks (1987) 169 - MAGDALENA: Meenks (l. c.); Winkler (1976) 816, Fig. 5n-p as *Metzgeria bialata* S. Winkler - Alt.: 2450-3400 m.
- Riccardia bogotensis*** (Gott.) Pagán - CESAR: Winkler (1976) 823 - CUNDINAMARCA: Gottsche (1864) 184 as *Pseudoneura bogotensis*, sp. nov.; Stephani (1889-1900) 213 as *Aneura bogotensis* (Gott.) Steph. - TOLIMA: Meenks (1987) 170 - Alt.: 1900 m.
- \****Riccardia capillacea*** (Steph.) Meenks & De Jong var. *capillacea* - CUNDINAMARCA, MAGDALENA, META, RISARALDA: Meenks (1987) 170 - Alt.: 3000-3700 m.  
- var. \**dentata* Meenks - RISARALDA: Meenks (1987) 170 - Alt.: 3500 m.
- Riccardia cervicornis*** (Spruce) Herz. ex Gradst. & Hekking - VALLE: Herzog (1955) 158 - Alt.: 80-100 m.
- Riccardia ciliolata*** (Spruce) Gradst. - ANTIOQUIA: Stephani (1898-1900) 239 as *Aneura ciliolata* Spruce - ARAUCA, BOYACA, CAUCA, CUNDINAMARCA, CHOCO, META, RISARALDA: Meenks (1987) 171 - Alt.: 3000-3700 m.
- Riccardia columbica*** (Steph.) Hässel ex Gradst. & Hekking - BOYACA, CUNDINAMARCA: Meenks (1987) 172 - S.L.: Stephani (1917) 22 as *Aneura columbica* Steph. - Alt.: 1860- 3700 m.
- \****Riccardia crassicaulis*** (Steph.) Meenks & De Jong - CUNDINAMARCA, META, RISARALDA: Meenks (1987) 172 - Alt.: 2500-3600 m.
- Riccardia fucoidea*** (Sw.) Schiffn. - BOYACA, TOLIMA: Gradstein & Hekking (1979) 130 - CAUCA, HUILA, META, RISARALDA: Meenks (1987) 173 - PUTUMAYO: Robinson (1967a) 56 - Alt.: 1500-2500(-3500) m.
- \****Riccardia hansmeyerii*** (Steph.) Meenks & De Jong var. *hansmeyerii* - BOYACA, CUNDINAMARCA, HUILA, META: Meenks (1987) 173 - Alt.: 3200-3600 m.  
- var. \**dentata* Meenks - CAUCA: Meenks (1987) 173 - Alt.: 3300 m.
- \****Riccardia herzogiana*** (Steph.) Meenks & De Jong - ARAUCA, BOYACA, CUNDINAMARCA, CHOCO, MAGDALENA, RISARALDA: Meenks (1987) 174 - Alt.: 1500-4000 m.
- \****Riccardia hymenophytoides*** (Spruce) Meenks - CHOCO, RISARALDA: Meenks (1987) 174 - Alt.: 1500-2500 m.
- \****Riccardia judithae*** Meenks & De Jong - CUNDINAMARCA: Meenks (1987) 174 - Alt.: 3300 m.

- Riccardia lepidomitra* (Spruce) Gradst. - ANTIOQUIA: Stephani (1898-1900) 235 as *Aneura lepidomitra* Spruce - CHOCO: Meenks (1987) 174 - Alt.: 2800-3000 m.
- \**Riccardia leptophylla* (Spruce) Herz. - CUNDINAMARCA, CHOCO, HUILA, SANTANDER: Meenks (1987) 175 - Alt.: 2500-3350 m.
- Riccardia metzgeriaeformis* (Steph.) Hell - CUNDINAMARCA: Meenks (1987) 175 - MAGDALENA: Winkler (1976) 823; van Reenen et al. (1984) 180 - Alt.: 700-1900 m.
- \**Riccardia pallida* (Spruce) Meenks & De Jong - BOYACA, CAUCA, CUNDINAMARCA, META, RISARALDA, TOLIMA: Meenks (1987) 175-176 - Alt.: 2200-4100 m.
- Riccardia papillata* (Gott.) Hässel ex Gradst. & Hekking - CUNDINAMARCA: Gottsche (1864) 184; Stephani (1898-1900) 222 - MAGDALENA: Winkler (1976) 823 as *R. insignis* Schiffn.; Meenks (1987) 176 - Alt.: 1950-3450 m
- \**Riccardia paramorum* Meenks - CUNDINAMARCA: Meenks (1987) 176 - Alt.: 3400-3800 m.
- \**Riccardia parasitans* (Steph.) Meenks & De Jong - ARAUCA, BOYACA, CUNDINAMARCA, CHOCO, META: Meenks (1987) 177 - Alt.: 3050-4500 m.
- \**Riccardia plumaeformis* (Spruce) Meenks - CHOCO: Meenks (1987) 177 - MAGDALENA: van Reenen et al. (1984) 180 - RISARALDA: Meenks (l. c.); *Gradstein* 8414, 8471, 8566, 8674 p.p. - Alt.: 1500-3700 m.
- \**Riccardia poeppigiana* (Lehm. & Lindenb.) Hässel ex Meenks & De Jong - BOYACA, CUNDINAMARCA, META, RISARALDA, TOLIMA: Meenks (1987) 178 - MAGDALENA: van Reenen et al. (1984) 180 - Alt.: 2900-4170 m.
- \**Riccardia smaragdina* Meenks & De Jong - CUNDINAMARCA, CHOCO, META, RISARALDA: Meenks (1987) 178 - Alt.: 3000-3600 m.
- \**Riccardia sprucei* (Stephani) Meenks & De Jong - CHOCO, MAGDALENA, RISARALDA, SANTANDER: Meenks (1987) 179 - Alt.: 1500-3000 m.
- \**Riccardia trichomanoides* (Spruce) Meenks - META, RISARALDA: Meenks (1987) 179 - Alt.: 2900-3900 m.
- Riccardia wallisii* (Steph.) Gradst. - ANTIOQUIA: Stephani (1898-1900) 236 as *Aneura wallisii* - META: Meenks (1987) 179 - Alt.: 4000 m.

*Riccia* L. (Ricciaceae)

- Riccia lamellosa* Raddi - CESAR (Sierra Nevada de Santa Marta): Winkler (1976) 823 as *R. indusiata* S. Winkler; Gradstein (1998) - Alt.: 4200 m.
- Riccia weinionis* Steph. - MAGDALENA: Winkler (1976) 823; Jovet-Ast (1991) 248, Pl. 30, 31, 68, carte 12 as *R. wainionis* (corr. H. Bischler, pers. com.) - Alt.: 50 m.

*Ruizanthus* Schust. (Balantiopsaceae)

- \**Ruizanthus venezuelanus* Schust. - MAGDALENA: van Reenen et al. (1984) 180 - Alt.: 3500 m.

*Scapania* (Dum.) Dum. (Scapaniaceae)

\**Scapania cuspiduligera* (Nees) K. Müll. - META (Sumapaz): Gradstein & Vána (1987) 417, Fig. 23 - Alt.: 4300 m.

*Scapania portoricensis* Hampe & Gott. - ANTIOQUIA: Herzog (1928) 109 as fo. *integrifolia* Herz. - BOYACA, CUNDINAMARCA, META: Gradstein & Hekking (1979) 130 - MAGDALENA: van Reenen et al. (1984) 180 - RISARALDA: Wolf (1993) 947; Gradstein (1995) 326 - TOLIMA: Gradstein et al. (1977) 413 - VALLE: Herzog (1928) 109, Fig. 10; Herzog (1955) 169 as *S. portoricensis* var. *roraimensis* Steph. ex Herz. - Alt.: 1600-3700 m.

*Schiffneriolejeunea* Verdoorn (Lejeuneaceae)

*Schiffneriolejeunea polycarpa* (Nees) Gradst. - CASANARE, META: Gradstein (1994) 74, Fig. 19 - CHOCO: Winkler (1970) 951 as *Ptychocoleus polycarpus* (Nees) Trevis. (identification doubtful, to be checked) - RISARALDA: Wolf (1993) 947 - Alt.: 100-1600 m.

*Sphaerolejeunea* Herz. (Lejeuneaceae)

*Sphaerolejeunea umbilicata* Herz. - CAUCA: Herzog (1938) 88, Fig. 1; Herzog (1955) 195 - Alt.: 1400-1500 m.

*Stephaniella* Jack (Gymnomitriaceae)

*Stephaniella paraphyllina* Jack - ARAUCA: Gradstein & Hekking (1979) 130 - BOYACA, CESAR, MAGDALENA: Schmitt & Winkler (1968) 127, Fig. 1-3 - CUNDINAMARCA: Herzog (1934) 84; Schmitt & Winkler (l. c.) - Alt.: 2700-4500 m.

*Stephaniella rostrata* Schmitt - BOYACA: Schmitt & Winkler (1968) 124, Fig. 3 - MAGDALENA: van Reenen et al. (1984) 180 - Alt.: 3250-4300 m.

*Stephaniella uncifolia* S. Winkler - BOYACA: Schmitt & Winkler (1968) 127, Fig. 2 - Alt.: 3250 m.

*Stephaniellidium* S. Winkler ex Grolle (Gymnomitriaceae)

*Stephaniellidium sleumeri* (K. Müll.) S. Winkler - CESAR, MAGDALENA: Winkler (1969) 60, Fig. 1; Winkler (1976) 823 - Alt.: 3100 m.

*Stictolejeunea* (Spruce) Schiffn. (Lejeuneaceae)

\**Stictolejeunea balfourii* (Mitt.) E. W. Jones var. *balfourii* - CAUCA, CHOCO: Gradstein (1994) 148, Fig. 38 - META: van Zanten & Gradstein (1988) 71 - Alt.: 0-800 m.

*Stictolejeunea squamata* (Willd. ex Web.) Schiffn. - CHOCO: Winkler (1970) 951, also as *S. kunzeana* (Gott.) Schiffn. - MAGDALENA: Gradstein (1994) 147, Fig. 37 - NARIÑO: Gottsche (1864) 151 as *Lejeunea squamata* (Willd. ex Web.) Nees & Mont. - RISARALDA: Gradstein 8354, 8545, 8681, 8712 - VALLE: Herzog (1955) 171 as *S. kunzeana*; Gradstein & Hekking (1979) 131 - Alt.: 0-2400 m.

***Symbiezidium* Trevis. (Lejeuneaceae)**

- Symbiezidium barbiflorum*** (Lindenb. & Gott.) Evans - CAUCA, HUILA, MAGDALENA: Gradstein (1994) 161, Fig. 41 - CHOCO: *Gradstein 8888 p.p.* - RISARALDA: Wolf (1993) 947 - S.L.: Fulford (1942) 297 - Alt.: 0-2800 m.
- Symbiezidium dentatum*** Herz. - CAUCA, CHOCO: Gradstein (1994) 162; *Gradstein 8719, 8807* - MAGDALENA: Winkler (1976) 823 - VALLE: Herzog (1955) 175, Fig. 10 f-l ; Gradstein & van Beek (1985) as *S. transversale* subsp. *dentatum* - Alt.: 30-2160 m.
- Symbiezidium transversale*** (Sw.) Trevis. - CHOCO: Winkler (1970) 951 as *S. hobsonianum* (Lindenb.) Trevis. and as *S. subrotundum* (Kunth) Trevis. - CUNDINAMARCA: Fulford (1942) 298 as *S. subrotundum* - MAGDALENA: Winkler (1976) 824 as *S. subrotundum* - NARIÑO: Gottsche (1864) 150 as *Lejeunea transversalis* (Sw.) Nees; Robinson (1967a) 51 - PUTUMAYO: Robinson (l. c.) - QUINDIO, RISARALDA, TOLIMA: Kunth (1822) 41 as *Jungermannia subrotunda* Kunth; Gottsche (1864) 150 as *Lejeunea subrotunda* (Kunth) Hook. ex Gott. et al.; Fulford (1942) 298 as *S. subrotundum* - VALLE: Herzog (1955) 175 as *S. granulatum* (Nees) Steph. - Alt.: 0-2600 m.

***Symphyogyna* Nees & Mont. (Pallaviciniaceae)**

- \****Symphyogyna apiculispina*** Steph. - BOYACA, CUNDINAMARCA, META, QUINDIO: Uribe & Aguirre (1995) 434, Fig. 1 - Alt.: 500-3350 m.
- Symphyogyna aspera*** Steph. - CASANARE, CHOCO, META, RISARALDA, SANTANDER, TOLIMA, VALLE: Uribe & Aguirre (1995) 437, Fig.2 - CUNDINAMARCA: Uribe & Aguirre (l. c.); Gottsche (1864) 183, det. as *S. hochstetteri* Nees & Mont.; Evans (1925) 42, Fig. 11-13 - MAGDALENA: van Reenen et al. (1984) 181 - TOLIMA: Robinson (1967a) 56 - Alt.: 600-3700 m.
- Symphyogyna bogotensis*** (Gott.) Steph. - BOYACA, CALDAS, CAUCA, MAGDALENA, META, TOLIMA, RISARALDA, SANTANDER: Uribe & Aguirre (1995) 440, Fig. 3 - CUNDINAMARCA: Uribe & Aguirre (l. c.); Gottsche (1864) 181 as *S. hymenophyllum* (Hook.) Mont. & Nees; Stephani (1898-1900) 346; Herzog (1934) 81 - Alt.: 2200-3850 m.
- Symphyogyna brasiliensis*** Nees - ANTIOQUIA, BOYACA, CASANARE, CAUCA, CHOCO, HUILA, META, QUINDIO, RISARALDA, TOLIMA, VALLE: Uribe & Aguirre (1995) 443-444., Fig. 4 - CALDAS: Robinson (1967a) 56; Uribe & Aguirre (l. c.) - CUNDINAMARCA: Evans (1927) 307, Fig. 1.; Robinson (l. c.); Uribe & Aguirre (l. c.) - MAGDALENA: Uribe & Aguirre (l. c.); Winkler (1976) 824 - SANTANDER: Uribe & Aguirre (l. c.); Herzog (1955) 159 - Alt.: 50-4300 m.
- Symphyogyna brogniartii*** Mont. - ANTIOQUIA, CALDAS, CAUCA, HUILA, META, QUINDIO, RISARALDA, TOLIMA, VALLE: Uribe & Aguirre (1995) 447-448, Fig. 5 - CUNDINAMARCA: Gottsche (1864) 181, det. as *S. sinuata* Mont. & Nees; Evans (1925) 25, Fig. 5-7; Robinson (1967a) 56; Uribe & Aguirre (l. c.) - MAGDALENA: Winkler (1976) 824; van Reenen et al. (1984) 181, det. as *S. sinuata* Mont. & Nees; Uribe & Aguirre (l. c.) - SANTANDER: Herzog (1955) 159; Uribe & Aguirre (l. c.) - Alt.: 200-3700 m.

- \**Symphyogyna circinata* Mont. - CUNDINAMARCA, CHOCO: Uribe & Aguirre (1995) 450, Fig. 6 - MAGDALENA: van Reenen et al. (1984) 181 - Alt.: 350-3100 m.
- Symphyogyna leptothelia* Tayl. - CAUCA: Gradstein & Hekking (1979) 131 - RISARALDA: Uribe & Aguirre (1995) 451, Fig. 7 - Alt.: 3450-3750 m.
- \**Symphyogyna marginata* Steph. - CAUCA, CUNDINAMARCA, CHOCO, HUILA, QUINDIO, TOLIMA: Uribe & Aguirre (1995) 452-453, Fig. 8 - RISARALDA: Uribe & Aguirre (l. c.); *Gradstein 8504* - Alt.: 1600-3700 m.
- Symphyogyna rubescens* Steph. - CUNDINAMARCA: Uribe & Aguirre (1995) 453, Fig. 9 - Alt.: 3600 m.
- \**Symphyogyna trivitatta* Spruce - ANTIOQUIA, CUNDINAMARCA, RISARALDA: Uribe & Aguirre (1995) 454, Fig. 10 - Alt.: 600-3200 m.

#### *Syzygiella* Spruce (Jungermanniaceae)

- Syzygiella anomala* (Lindenb. & Gott.) Steph. - CALDAS, TOLIMA: Gradstein & Hekking (1979) 131 - CUNDINAMARCA: Herzog (1934) 87; Inoue (1966) 188, Fig. 8a-i - MAGDALENA: van Reenen et al. (1984) 181 - Alt.: 2700-3600 m.
- \**Syzygiella campanulata* Herz. - MAGDALENA (Sierra Nevada de Santa Marta): *van Reenen & Rangel 391* - RISARALDA: *Aguirre & Gradstein 1328* - TOLIMA: *Aguirre & Gradstein 1604* - Alt.: 2700-3700 m.
- Syzygiella colombiana* Robins. - RISARALDA: *Gradstein 8377, 8497* - VALLE: Robinson (1967b) 322, Fig. 25-31 - Alt.: 1500-2000 m.
- Syzygiella contigua* Steph. - CUNDINAMARCA: Gottsche (1864) 118 as *Jungermannia contigua* Gott., nom. illeg.; Herzog (1934) 86 - SANTANDER: Herzog (1955) 159 - Alt.: 3300-3600 m.
- Syzygiella grollei* Inoue - CUNDINAMARCA: Inoue (1974) 303, Fig. 2 - Alt.: 2000 m.
- Syzygiella integerrima* Steph. - CUNDINAMARCA: van Zanten & Gradstein (1988) 72 - RISARALDA: Wolf (1993) 947 - TOLIMA: Gradstein et al. (1977) 414 - Alt.: 2920-3550 m.
- Syzygiella liberata* Inoue - BOYACA, META: Gradstein & Hekking (1979) 132 - CUNDINAMARCA: Inoue (1974) 301, Fig. 1 - Alt.: 3150-3900 m.
- Syzygiella manca* (Mont.) Steph. - S.L.: Inoue (1966) 184, Fig. 6f-k.
- Syzygiella perfoliata* (Sw.) Spruce - CUNDINAMARCA: Stephani (1901-05) 186 as *S. jelskii* (Loitl.) Steph. - MAGDALENA: Winkler (1976) 824 as *S. linguifolia* Schiffn. - RISARALDA: Wolf (1993) 947 - Alt.: 2500-2750 m.
- Syzygiella setulosa* Steph. - CESAR, MAGDALENA: Winkler (1976) 814 as *Jamesoniella rotundifolia* Steph. - Alt.: 1600-2800 m.

#### *Szweykowskia* Gradst. & Reiner (Plagiochilaceae)

- Szweykowskia cucullifolia* (Jack & Steph.) Gradst. & Reiner - ANTIOQUIA: Jack & Stephani (1892) 24, as *Plagiochila cucullifolia*, sp. nov.; Gradstein & Reiner-Drehwald (1995) 36, Fig. 1 - CHOCO/RISARALDA, HUILA: Gradstein & Reiner-Drehwald (l. c.) - Alt.: 2200-2600 m.

#### *Targionia* L. (Targioniaceae)

*Targionia hypophylla* L. - MAGDALENA: Winkler (1976) 824 - Alt.: 630-1600 m.

*Taxilejeunea* (Spruce) Schiffn. (Lejeuneaceae)

*Taxilejeunea apiculata* (Gott.) Steph. - CUNDINAMARCA: Gottsche (1864) 149 as *Omphalanthus apiculatus* Gott. - S.L.: Stephani (1912-17) 459; Bonner (1978) 471 as *Lejeunea apiculata* (Gott.) Steph. - Alt.: 2800 m.

*Taxilejeunea auriculata* Steph. - ANTIOQUIA: Irmischer (1914) 996 - Alt.: 1900 m.

*Taxilejeunea caracensis* (Lindenb.) Schiffn. 1897 - CESAR, MAGDALENA: Winkler (1976) 824 "caracasensis" - Alt.: 1900-2150 m.

*Taxilejeunea caripensis* (Lindenb. & Gott.) Schiffn. - MAGDALENA: Winkler (1976) 824 - Alt.: 2160 m.

*Taxilejeunea cuervi* (Gott.) Steph. - CUNDINAMARCA: Gottsche (1864) 147 as *Omphalanthus cuervi* Gott.; Stephani (1912-17) 486.

*Taxilejeunea debilis* (Lehm. & Lindenb.) Steph. - CUNDINAMARCA: Gradstein et al. (1977) 415 - RISARALDA: van Zanten & Gradstein (1988) 72 - Alt.: 2000-3050 m.

*Taxilejeunea densiflora* Evans - MAGDALENA, NORTE DE SANTANDER: Evans (1921) 121, Fig. 12-16 - S.L.: Schuster (1992) 282.

*Taxilejeunea dissitifolia* Steph. - CESAR, MAGDALENA: Winkler (1976) 824 - Alt.: 1600-2200 m.

*Taxilejeunea flaccida* (Lindenb. & Gott.) Steph. - MAGDALENA: Winkler (1976) 824 - Alt.: 50 m.

*Taxilejeunea herzogiana* Steph. - MAGDALENA: Winkler (1976) 824 - Alt.: 1250-2100 m.

*Taxilejeunea hygrophila* (Gott.) Steph. - CUNDINAMARCA: Gottsche (1864) 157 as *Lejeunea hygrophila* Gott.; Stephani (1912-17) 468 - Alt.: 2800 m.

*Taxilejeunea killipii* Herz. - VALLE: Herzog (1955) 190, Fig. 18a-h - Alt.: 300-500 m.

*Taxilejeunea laevis* (Gott.) Steph. - BOYACA: Gottsche (1864) 148 as *Omphalanthus laevis* Gott. - Alt.: 2700 m.

*Taxilejeunea lindbergiana* Gott. ex Steph. - MAGDALENA: Winkler (1976) 824 - Alt.: 50-2100 m.

*Taxilejeunea longiloba* Steph. - VALLE: Robinson (1967a) 52 - Alt.: 1250-1400 m.

*Taxilejeunea lusoria* (Lindenb. & Gott.) Schiffn. - CAUCA: Herzog (1955) 188 - CHOCO: Winkler (1970) 951 - MAGDALENA: Winkler (1976) 824 - SANTANDER: Gradstein & Hekking (1979) 132 - TOLIMA: Robinson (1967a) 52 - S.L.: Gottsche et al. (1844-47) 306, 747 as *Omphalanthus lusorius* Lindenb. & Gott. - Alt.: 100-3300 m.

*Taxilejeunea macrorhyncha* (Spruce) Steph. - VALLE: Herzog (1955) 188.

*Taxilejeunea obtusangula* (Spruce) Evans - MAGDALENA: Winkler (1976) 824 - Alt.: 700 m.

*Taxilejeunea papulifera* Steph. - CESAR/GUAJIRA/MAGDALENA (Sierra Nevada de Santa Marta): Stephani (1912-17) 494.

*Taxilejeunea peruviana* Steph. - S.L.: Stephani (1912-17) 475.

*Taxilejeunea prominula* (Gott.) Steph. - CUNDINAMARCA: Gottsche (1864) 157 as *Lejeunea prominula* Gott. - S.L.: Stephani (1912-17) 476 - Alt.: 2200 m.

*Taxilejeunea pterigonia* (Lehm. & Lindenb.) Schiffn. - BOYACA: Gradstein & Hekking (1979) 133 - CALDAS, TOLIMA, VALLE: Robinson (1967a) 52 - CUNDINAMARCA: Gottsche (1864) 147 as *Omphalanthus pterogonius* (Lehm. & Lindenb.) Lehm. & Lindenb.; Evans (1921) 108, Pl. 2 - HUILA: van Zanten & Gradstein (1988) 72 - MAGDALENA: Winkler (1976) 824 - RISARALDA: Wolf (1993) 947 - SANTANDER: Herzog (1955) 188 - Alt.: 300-3400 m.

*Taxilejeunea speciosa* Herz. - VALLE: Herzog (1955) 188, Fig. 21 - Alt.: 80-100 m.

\**Taxilejeunea steyermarkii* Robins. - RISARALDA: *Gradstein 8448* - Alt.: 700 m.

*Taxilejeunea sulphurea* (Lehm. & Lindenb.) Schiffn. - BOYACA, SANTANDER: Gradstein & Hekking (1979) 133; Herzog (1955) 188 - CHOCO: *Gradstein 8945, 8960* - RISARALDA: van Zanten & Gradstein (1988) 72; Wolf (1993) 947 - Alt.: 700-3200 m.

#### *Telaranea* Spruce ex Schiffn. (Lepidoziaceae)

*Telaranea nematodes* (Gott. ex Aust.) Howe - AMAZONAS, META, VAUPES: Fulford (1966) 235, Pl. 52, Fig. 1 as *T. sejuncta* (Aongstr.) S. Arnell - BOYACA, HUILA, META: Gradstein & Hekking (1979) 133 - CUNDINAMARCA: Fulford (l. c.); Gradstein et al. (1977) 416 - CHOCO: *Gradstein 8823, 8916, 9001* - MAGDALENA: Winkler (1976) 825 - PUTUMAYO: Robinson (1967a) 44 - RISARALDA: Wolf (1993) 947; *Gradstein 8558* - Alt.: 200-4250 m.

#### *Temnoma* Mitt. (Pseudolepicoleaceae)

\**Temnoma chaetophylla* Schust. - CASANARE: *Aguirre et al. 3321* - Alt.: 3000 m.

#### *Thysananthus* Lindenb. (Lejeuneaceae)

\**Thysananthus amazonicus* (Spruce) Schiffn. - AMAZONAS: Gradstein (1994) 84, Fig. 23 - Alt.: 100 m.

#### *Trachylejeunea* (Spruce) Schiffn. (Lejeuneaceae)

\**Trachylejeunea domincensis* Steph. - RISARALDA: Wolf (1993) 947 - Alt.: 3000-3700 m.

#### *Triandrophyllum* Fulf. & Hatch. (Herbertaceae)

*Triandrophyllum subtrifidum* (Hook. f. & Tayl.) Fulf. & Hatch. - AMAZONAS, CAQUETA: Solari (1973) 198 - BOYACA, CALDAS, META: Gradstein & Hekking (1979) 133 - CAUCA, HUILA: Fulford (1963) 86, Fig. 1; Solari (l. c.) - CESAR, MAGDALENA: Winkler (1976) 825 - RISARALDA: van Zanten & Gradstein (1988) 73; Gradstein (1995) 324 - Alt.: 2900-4500 m.

- var. *trifidum* (Gott.) Solari - CALDAS: Gradstein & Hekking (1979) 133 - CUNDINAMARCA: Gottsche (1864) 142 as *Sendtnera trifida* Gott.; Stephani (1905-

09) 607 as *Isotachis trifida* (Gott.) Spruce: Fulford (1963) 87, Fig. 2 as *T. trifidum* (Gott.) Fulf. & Hatch.; Solari (1973) 201 - Alt.: 1800-4000 m.

***Trichocolea* Dum. (Trichocoleaceae)**

- Trichocolea argentea*** Herz. - CESAR: Winkler (1976) 825 - Alt.: 1900 m.  
***Trichocolea elegans*** Lehm. - MAGDALENA: Winkler (1976) 825 - Alt.: 2160 m.  
***Trichocolea elliotii*** Steph. - BOYACA, CAUCA, CUNDINAMARCA: Bischler (1962a) 34 - Alt.: 1700-3650 m.  
***Trichocolea filicaulis*** Steph. - CAUCA, CUNDINAMARCA: Bischler (1962a) 34 - MAGDALENA: Winkler (1976) 825 - Alt.: 2160-3500 m.  
***Trichocolea flaccida*** (Spruce) Jack & Steph. - BOYACA: Gradstein & Hekking (1979) 133 - CAUCA, HUILA: Bischler (1962a) 34; Fulford (1963) 49, Fig. 8 - CUNDINAMARCA: Fulford (l. c.) - MAGDALENA: Winkler (1976) 825 - QUINDIO, RISARALDA, TOLIMA: Bischler (1962a) 34 - Alt.: 1500-3150 m.  
 \****Trichocolea floccosa*** Herz. & Hatch. - MAGDALENA: van Reenen et al. (1984) 181 - Alt.: 1700 m.  
***Trichocolea paraphyllina*** (Spruce) Steph. - ANTIOQUIA, CAUCA: Fulford (1963) 46, Fig. 5. Alt.: ± 3000 m.  
***Trichocolea robusta*** Steph. - ANTIOQUIA: Bischler (1962a) 35; Fulford (1963) 46, Fig. 4 - BOYACA, CUNDINAMARCA: Bischler (l. c.) - Alt.: 2800-3600 m.  
***Trichocolea sprucei*** Steph. - CAUCA: Bischler (1962a) 35 - Alt.: 3500-3650 m.  
***Trichocolea tomentosa*** (Sw.) Gott. - BOYACA: Gradstein & Hekking (1979) 133 - CAUCA: Bischler (1962a) 35; Fulford (1963) 42, Fig. 1 - CHOCO: Bischler (l. c.); Gradstein 8760, 8972 - CUNDINAMARCA: Gottsche (1864) 133; Fulford (l. c.); Robinson (1967a) 44 - MAGDALENA: Winkler (1976) 825 - PUTUMAYO: Robinson (l. c.) - RISARALDA: Wolf (1993) 947; Gradstein (1995) 326 - TOLIMA: Gradstein & Hekking (1979) 133 - Alt.: 100-3700 m.  
 - var. ***minor*** Gott. - CUNDINAMARCA: Gottsche (1864) 133 - Alt.: 2900 m.  
***Trichocolea uleana*** Steph. - MAGDALENA: Winkler (1976) 826 - Alt.: 2160 m.

***Tylimanthus* Mitt. (Acrobolbaceae)**

- Tylimanthus bispinosus*** Jack & Steph. - NORTE DE SANTANDER: Jack & Stephani (1892) 26, t. 3, Fig. 12-13; Stephani (1901-05) 178 as *Acrobolbus bispinosus* (Jack & Steph.) Steph.  
***Tylimanthus herzogii*** Steph. - CUNDINAMARCA: Gottsche (1864) 137 as *Gymnanthe anisodonta* (Hook. f. & Tayl.) Gott. - Alt.: 2400-2500 m.  
***Tylimanthus setaceo-ciliatus*** Steph. - BOYACA, CUNDINAMARCA, META: Gradstein & Hekking (1979) 133 - RISARALDA: Gradstein (1995) 324 - TOLIMA: Gradstein et al. (1977) 417 - Alt.: 3000-4000 m.  
***Tylimanthus setaceus*** Steph. - ANTIOQUIA: Stephani (1905-09) 13.

***Zoopsidella* Schust. (Lepidoziaceae)**



- Zoopsidella integrifolia*** (Spruce) Schust. - CHOCO: *Gradstein* 8780, 8873 - RISARALDA:  
*Gradstein* 8498, 8557 - VAUPES: Fulford (1968) 369, Pl. 99, Fig. 1 - Alt.: 30-1600  
m.
- \****Zoopsidella dichotoma*** Schust. - CAUCA: Schuster (1993) 51, Fig. 1-3 - HUILA:  
Schuster (l. c.).

### Excluded and doubtful names<sup>4</sup>

*Aneura spectabilis* St., orth. error? - CUNDINAMARCA: Paris (1906) 105

*Bryolejeunea bogotensis* Héríb., nom. nud. - CUNDINAMARCA: Bonner (1963) 464.

*Bryolejeunea* (Spruce) Lacout. is a synonym of *Bryopteris* (Nees) Lindenb.

*Calypogeia biapiculata* Spruce, orth. error? - S.L.: Paris (1906) 105.

*C. grandistipula* (Steph.) Steph. - MAGDALENA: Winkler (1976) 808 as *C. puiggarii* Steph.

*C. grandistipula* (= *C. puiggarii*) is endemic to southeastern Brazil (Fulford, 1968: 297). The identification of this collections needs to be verified.

*Cephalozia connivens* (Dicks.) Lindenb. - QUINDIO, RISARALDA, TOLIMA: Kunth (1822) 41 as *Jungermannia connivens* Dicks.

The record of this strictly northern temperate species must be erroneous.

*C. evansioides* Douin (not in Vána, 1988).

*Ceratolejeunea "colombiana Phenotype"* - S.L.: Schuster (1992) 227.

*Cheilolejeunea paramicola* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 239.

*C. (Euosmolejeunea) anomala* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 241.

*C. (Euosmolejeunea) dichotoma* Schust., nom. inval. (without latin descr.) - S.L. (Cordillera Central): Schuster (1992) 243.

*C. (Pseudopycnolejeunea) splendida* Schust., nom. inval. (without latin descr.) - SANTANDER: Schuster (1992) 244.

*C. (Saccophoropsis) rhynchophora* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 244.

*C. (Strepsilejeunea) "grossepapulosa Phenotype"* - S.L.: Schuster (1992) 239.

*C. (Strepsilejeunea) "tablazoensis Phenotype"* - CUNDINAMARCA: Schuster (1992) 239.

*Cololejeunea (Protolejeunea) caespitosa* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 354.

*Colura colombiana* Schust., nom. inval. (without latin descr.) - CAUCA (I. Gorgona): Schuster (1992) 345.

*Cyclolejeunea convexistipa* Evans subsp. *angustipicata* Schust., nom. inval. (without latin descr.) - CAUCA (I. Gorgona): Schuster (1992) 311.

*C. ocellata* S. Winkler - CHOCO: Winkler (1970) 951.

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<sup>4</sup> This list contains doubtful records, misapplied, invalid or illegitimate names, and some unrevised names in genera that are nowadays treated as synonyms.

*Dicranolejeunea laevecalix* Paris, orth. error? - CUNDINAMARCA: Paris (1906) 105.

*Diplasiolejeunea (Austrolejeuneopsis) "minima Phenotype"* - S.L.: Schuster (1992) 346.

*D. "alpha Phenotype"* - S.L.: Schuster (1992) 349.

*D. "beta Phenotype"* - S.L.: Schuster (1992) 349.

*D. "bispinosa Phenotype"* - S.L.: Schuster (1992) 350.

*D. "paucisticta Phenotype"* - S.L.: Schuster (1992) 350.

*Drepanolejeunea "acanthocolea Phenotype"* - S.L.: Schuster (1992) 335.

*D. hamatifolia* (Hook.) Steph. - CUNDINAMARCA: Gottsche (1864) 155 as *Lejeunea hamatifolia* Dum.

The Colombian record of this European species must be erroneous.

*Euosmolejeunea beyrichii* (Lindenb.) Steph. - MAGDALENA: Winkler (1976) 810.

*Euosmolejeunea* is a synonym of *Cheilolejeunea*. The identity of this name and the following one is unclear and needs verification.

*E. condensata* Spruce ex Steph. - S.L.: Stephani (1912-17) 585; Bonner (1965) 150. See above.

*Frullania armata* "Herz. et. Cl." - CESAR, MAGDALENA: Winkler (1976) 811.

*F. atropurpurea* St., orth. error? - CUNDINAMARCA: Paris (1906) 105.

*F. confertiloba* Steph. - SANTANDER: Bonner (1965) 270.

Doubtful, based on a gathering of Micholitz who collected in Indomalesia, not in Colombia.

*F. cylindrica* Lehm. var. *granatensis* Gott. - CUNDINAMARCA: Gottsche (1864) 171.

*Frullania cylindrica* is a synonym of *F. brasiliensis* Raddi. The variety has not yet been revised.

*F. longicollis* G., orth. error? - CUNDINAMARCA: Paris (1906) 105.

*F. sebastianopolitana* Lindenb. var.  $\delta$  Gott. - CUNDINAMARCA, SANTANDER: Gottsche (1864) 166.

*Frullania sebastianopolitana* Lindenb. is a synonym of *F. brasiliensis* Raddi. The variety has not yet been revised.

*F. spruceana* St., orth. error? - CUNDINAMARCA: Paris (1906) 105.

*F. tamarisci* (L.) Dum.- S.L.: Kunth (1822) 43 as *Jungermannia tamarisci*.

The record of this northern temperate species must be erroneous.

*Gymnomitrion andinum* Schust. 1966 nom. illeg., non Herzog 1934 - CUNDINAMARCA:

Stephani (1901-05) 165 as *Sphenolobus laceratus* Steph.; Schuster (1966) 278, sub *S. laceratus*; see also Schuster (1996) 100, 101.

*Hygrolejeunea elongella* (Gott.) Steph. - CUNDINAMARCA: Gottsche (1864) 161 as *Lejeunea elongella* Gott.; Herzog (1934) 97.

*Hygrolejeunea* (Spruce) Schiffn. is a synonym of *Lejeunea*. The identity of this and the following names in *Hygrolejeunea* remain unclear.

*H. flavicans* (Gott.) Steph. - CESAR: Winkler (1976) 813.

- H. grossereticulata* (Gott.) Steph. - MAGDALENA: Winkler (1976) 813.  
*H. pallida* (Lindenb. & Gott.) Steph. - MAGDALENA: Winkler (1976) 813.  
*H. paramicola* Herz. - SANTANDER: Herzog (1955) 191, Fig. 22g-l.  
*H. planiloba* Steph. - TOLIMA: Bonner (1966) 661.

Doubtful, based on a gathering of Micholitz who collected in Indomalesia, not in Colombia.

- H. sullivanii* (Gott.) Steph. - Nova Granada : Stephani (1912-17) 531; Bonner (1966) 666. Possibly also belonging here: *Lejeunea sullivanii* Gott. var. *latior* Gott. - CUNDINAMARCA: Gottsche (1864) 152.

*Harpalejeunea "dichotoma Phenotype"* - SANTANDER: Schuster (1992) 327.

*H. "undulata Phenotype"* - SANTANDER: Schuster (1992) 327.

*Herpetium scutigerum* Nees & Mont. - Colombia: Bonner (1966) 605.

*Herpetium* is a synonym of *Bazzania*. The species definitely belongs to *Bazzania* (H. Bischler, pers. com.) but the type has not yet been revised.

*Hymenophyton flabellatum* (Labill.) Dum. - CUNDINAMARCA: Evans (1925b: 504.

The Colombian record of this australantarctic genus is probably erroneous (Gradstein et al., in press).

*Isotachis mascula* Gott. - CUNDINAMARCA: Stephani (1906-09) 666; Herzog (1934) 94.

- var. *tenerior* Gott. - CUNDINAMARCA: Gottsche (1864) 124, var. nov.

The identity of *Isotachis mascula* and its variety are unclear (not studied by Fulford, 1963).

*Jungermannia adulterina* Gott. var. *minuta* Gott. and var. *subserrulata* Gott. - CUNDINAMARCA, QUINDIO, RISARALDA, TOLIMA: Gottsche (1864) 118.

*Jungermannia adulterina* is a synonym of *Anastrophyllum tubulosum* (Nees) Grolle.

The identity of the two varieties described by Gottsche remains unclear.

*J. obovata* Nees var. *bogotensis* Gott. - CUNDINAMARCA: Gottsche (1864) 119; Vána (1975) 81.

The identity of this variety is unclear (J. Vána, pers. com.)

*J. sphaerocarpa* fo. *minor* Gott., nom. nud. - CUNDINAMARCA: Gottsche (1864) 119.

The identity of this form is unclear (Vána 1974a: 408).

*Lejeunea atrata* Jack, nom. nud. - ANTIOQUIA: Bonner (1978) 476 - Alt.: ± 3000 m.

*L. axillaris* Nees & Mont. var. *lindigiana* Gott. - CUNDINAMARCA: Gottsche (1864) 151.

*Lejeunea axillaris* is a synonym of *Dicranolejeunea axillaris* (Nees & Mont.) Schiffn. The identity of the variety remains unclear (not studied by Kruijt, 1987).

*L. "colombiana Phenotype"* - S.L.: Schuster (1992) 257.

*L. tortifolia* Nees & Mont. var. *granatensis* Gott. - CUNDINAMARCA: Gottsche (1864) 165.

*Lejeunea tortifolia* is a synonym of *Colura tortifolia* (Nees & Mont.) Schiffn. The identity of the variety remains unclear (not studied by Jovet-Ast, 1953).

- L. (Crossotolejeunea) crenuliloba* Schust., nom. inval. (without latin descr.) - CUNDINAMARCA: Schuster (1992) 273.
- L. (Crossotolejeunea) leptantha* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 274.
- L. (Hygrolejeunea) "brachyandroecia Phenotype"* - S.L.: Schuster (1992) 277.
- L. (Inflatolejeunea) pluridichotoma* Schust., nom. inval. (without latin descr.) - SANTANDER: Schuster (1992) 271.
- L. (Microlejeunea) subulistipa* subsp. *andina* Schust., nom. inval. (without latin descr.) - S.L. (Cordillera Central): Schuster (1992) 270.
- L. (Nanolejeunea) fragmentissima* Schust., nom. inval. (without latin descr.) - SANTANDER: Schuster (1992) 265.
- L. (Nanolejeunea) subaspera* Schust., nom. inval. (without latin descr.) - S.L. (Cordillera Central): Schuster (1992) 265.

*Lophocolea elata* Gott. (not in Grolle, 1960; not in Fulford, 1976) = ? *Clasmatocolea vermicularis* - CALDAS, CUNDINAMARCA: Robinson (1967a) 50.

*L. widgrenii* Steph. (not in Fulford, 1976) - MAGDALENA: Winkler (1976) 815.

*Madotheca commutata* Gott. var. *lindigiana* Gott. - CUNDINAMARCA: Gottsche (1864) 144.

*Madotheca commutata* is a synonym of *Porella crispata* (Hook.) Trevis.  
The identity of the variety remains unclear (not studied by Swails, 1970).

*Marchantia lamellosa* G., orth. error? - META: Paris (1906) 105.

*Mastigobryum stoloniferum* Lindenb. var. *granatensis* Gott - CUNDINAMARCA: Gottsche (1864) 140.

*Mastigobryum stoloniferum* is a synonym of *Bazzania stolonifera*. The identity of the variety remains unclear (not studied by Fulford, 1963).

*Metzgeria fruticulosa* (Dicks.) Evans - CUNDINAMARCA: Gottsche (1864) 185 as *M. furcata* Nees var. "*pallescens* aut *aeruginosa*" Nees.

The Colombian record of this northern temperate species must be erroneous.

*Notothylas orbicularis* (Schwein.) Sull. - "Columbia:" Müller 1951-58 (also in Schuster, 1992a, p. 849 as "Colombia"). This record probably refers to British Columbia (Canada), not Colombia.

*Odontolejeunea chaeropterix* (Spr.) St., orth. error? - CUNDINAMARCA: Paris (1906) 105.

*Oryzolejeunea* sp. [aff. *O. venezuelana*] - S.L.: Schuster (1992) 249 (Aguirre 7328).

*Otigoniolejeunea reducta* S. Winkler = *Lejeunea tarapotensis* Spruce ? - MAGDALENA: Winkler (1976) 818, Fig. 6a-d.

"The type (slide in hb.Ulm) contains long male spikes (not described by Winkler!) in addition to a few gynoecia. The slide is in too poor condition to make a more positive identification. The papillose perianth keels and vegetative characters illustrated by Winkler suggest *Lejeunea tarapotensis* Spruce" (M. E. Reiner-Drehwald, pers. com.).

*O. schizotis* (Spruce) Schiffn. - MAGDALENA: Winkler (1976) 818.

This identification needs verification. *Otigoniolejeunea* is a synonym of *Lejeunea*.

*Plagiochila amazonica* Spruce var. *parvifolia* Spruce - GUAINIA: Bonner (1962a) 11.

*Plagiochila amazonica* is a synonym of *P. subplana* Lindenb. (Herzog, 1952).

The identity of the variety *parvifolia* remains unclear.

*Plectocolea subamoena* S. Winkler - MAGDALENA: Winkler (1976) 821, Fig. 6e-f.

*Plectocolea* is a synonym of *Jungermannia*. The identity of this species needs verification.

*Porella rugulosa* (Aongstr.) S. Arnell (not in Swails, 1970) - CESAR, MAGDALENA: Winkler (1976) 822.

*Prionolejeunea convoluta* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 305.

*P. dimorphophylla* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 307.

*P. elobulata* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 308.

*P. granulata* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 307.

*P. hispidula* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 306.

*P. lacerifolia* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 308.

*P. obscura* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 308.

*P. pseudocellata* Schust., nom. inval. (without latin descr.) - S.L.: Schuster (1992) 307.

*Pycnolejeunea "serrulata Phenotype"* - CAUCA (I. Gorgona): Schuster (1992) 257.

*Rectolejeunea (Heterolejeunea) colombiana* Schust., nom. inval. (without latin descr.) - S.L. (Cordillera Central): Schuster (1992) 291.

*R. (Invasiolejeunea) intermedia* Schust., nom. inval. (without latin descr.) - CAUCA (I. Gorgona): Schuster (1992) 293.

*R. flagelliformes* subsp. *hamata* Schust., nom. inval. (without latin descr.) - CAUCA (I. Gorgona): Schuster (1992) 292.

*Strepsilejeunea pectiniformis* (Gott.) Steph. - SANTANDER: Gottsche (1864) 156 as *Lejeunea pectiniformis* Gott.

*Strepsilejeunea* is a synonym of *Cheilolejeunea*. This species needs verification.

*Taxilejeunea (Microantholejeunea) glaucophylla* Schust., nom. inval. (without latin descr.) - S.L. (Cordillera Central): Schuster (1992) 285.

*T. "plurigyna Phenotype"* - S.L.: Schuster (1992) 282.

*T. (Xenantholejeunea) "cordata Phenotype"* - S.L. (Cordillera Central): Schuster (1992) 283.

## Synonyms<sup>5</sup>

*Adelanthus decurvus* Mitt. = *A. carabayensis* (Mont.) Grolle (Grolle, 1972)

*A. corticolus* S. Winkler = *A. pittieri* Steph. (Grolle, 1989)

*Anastrophyllum adulterinum* (Gott.) Steph. = *A. tubulosum* (Nees) Grolle (Vána, 1984)

*A. conforme* (Lindenb. & Gott.) Steph. = *A. tubulosum* (Nees) Grolle (Vána, 1984)

*A. gemmiferum* S. Winkler = *A. minutum* (Schreb.) Schust. (Gradstein, 1998)

*A. glaziovii* Steph. = *A. tubulosum* (Nees) Grolle (Vána, pers. com.)

*A. gradsteinii* Vána = *A. stellatum* Schust. (Vána, 1984)

*A. leucocephalum* (Tayl.) Steph. = *A. crebrifolium* (Hook. f. & Tayl.) Steph. (Engel, 1978)

*A. leucostomum* (Tayl.) Steph. = *A. auritum* (Lehm.) Steph. (Vána, 1984)

*A. pusillum* (Gott.) Steph. = *A. tubulosum* (Nees) Grolle (Vána, 1984)

*Andrewsianthus kilimanjaricus* (S. Arnell) Grolle & Vána = *A. jamesonii* (Mont.) Vána (Gradstein et al., 1983)

*Anomoclada mucosa* Spruce = *A. portoricensis* (Hampe & Gott.) Vána (Vána, in Gradstein, 1989)

*Arachniopsis coactilis* Spruce = *A. diacantha* (Mont.) Howe (Pócs, 1984)

*Archilejeunea juliformis* (Nees) Gradst. = *A. fuscescens* (Hampe & Lehm.) Fulf. (Gradstein, 1994)

*A. leprieurii* (Mont.) Schiffn. = *A. parviflora* (Nees) Schiffn. (Gradstein, 1994)

*A. porelloides* (Spruce) Steph. subsp. *chocoensis* Gradst. = *A. ludoviciana* (De Not. & Lehm.) Geissler & Gradst. subsp. *ludoviciana* (Gradstein, 1994)

*A. porelloides* (Spruce) Steph. subsp. *porelloides* = *A. ludoviciana* (De Not. & Lehm.) Geissler & Gradst. subsp. *porelloides* (Spruce) Gradst. (Gradstein, 1994)

*A. viridissima* (Lindenb.) Evans = *A. parviflora* (Nees) Schiffn. (Gradstein, 1994)

*Aspiromitus schlimmianus* Steph. = *Phaeoceros fimbriatus* (Gott.) Gradst. (Hässel, 1989)

*Aureolejeunea paramoensis* Schust. = *A. paramicola* (Herz.) Schust. (Schuster, 1987)

*Bazzania robusta* Spruce = *B. hookeri* Lindenb. (Gradstein & Salazar Allen, 1992)

*B. tricuspidata* (Steph.) Fulf. = *B. longistipula* (Lindenb.) Trevis. (Gradstein & Hekking, 1989)

*Bonneria bifida* (Steph.) Schust. = *Paracromastigum bifidum* (Steph.) Schust.

*B. granatensis* (Gott.) Fulf. & J. Tayl. = *Paracromastigum granatense* (Gott.) Schust.

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<sup>5</sup> Synonyms listed in Gradstein & Hekking (1979) are not included.



- Brachiolejeunea chinantlana* (Gott.) Schiffn. = *Frullanoides tristis* (Steph.) van Slag. (van Slageren, 1985)
- B. columbica* Steph. = *Frullanoides densifolia* Raddi subsp. *densifolia* (van Slageren, 1985)
- B. densifolia* (Raddi) Evans = *Frullanoides densifolia* Raddi
- B. liebmanniana* (Lindenb. & Gott.) Schiffn. = *Frullanoides liebmanniana* (Lindenb. & Gott.) van Slag.
- B. nitidiuscula* (Gott) Schiffn. = *Blepharolejeunea incongrua* (Lindenb. & Gott.) van Slag. & Kruijt (van Slageren & Kruijt, 1985)
- B. paramicola* Herz. = *Aureolejeunea paramicola* (Herz.) Schust. (Schuster 1987)
- B. rupestris* (Gott.) Steph. = *Frullanoides densifolia* Raddi subsp. *densifolia* (van Slageren, 1985)
- B. succisa* Steph. = *Frullanoides densifolia* Raddi subsp. *densifolia* (van Slageren, 1985)
- B. wrightii* Steph. = *Frullanoides tristis* (Steph.) van Slag. (van Slageren, 1985)
- Bryopteris fruticulosa* Tayl. = *B. filicina* (Sw.) Nees (Gradstein, 1994)
- B. fruticulosa* Tayl. var *monoica* Stotler = *B. filicina* (Sw.) Nees (Gradstein, 1994)
- B. trinitensis* (Lehm. & Lindenb.) Lehm. & Lindenb. = *B. filicina* (Sw.) Nees (Gradstein, 1994)
- Calypogeia amazonica* (Spruce) Steph. = *C. miquelii* Mont. (Gradstein & Hekking, 1989)
- Cephalozia bischlerae* Fulf. = *C. crossii* Spruce (Vána, 1988)
- C. caribbeania* Fulf. = *C. crassifolia* (Lindenb. & Gott) Fulf. (Vána, 1988)
- C. dussii* Fulf. = *C. crossii* Spruce (Vána, 1988)
- Cephaloziella andina* Herz. = *C. divaricata* (Sm.) Schiffn. (Fulford, 1976)
- Cololejeunea ensifolia* (Spruce) Steph. = *Aphanolejeunea ensifolia* (Spruce) Herz. (Tixier, 1985)
- C. scabrifolia* (Gott.) Schiffn. = *C. obliqua* (Nees & Mont.) Schiffn. (Tixier, 1985)
- Crossotolejeunea angulata* S. Winkler = *Cheilolejeunea* (subgen. *Strepsilejeunea*) sp., **syn. nov.** (Type (very poor slide): Sierra Nevada de Santa Marta, Winkler C123, ULM).
- C. cavifolia* Steph. = *C. inflexiloba* Jack & Steph. (M. E. Reiner-Drehwald, pers. com.)
- C. prionocalyx* Gott. ex Steph. = *Echinocolea prionocalyx* (Gott.) Schust.
- Cyclolejeunea angulata* Herz. = *C. foliorum* (Nees) Grolle (Grolle, 1984a)
- C. angulistipa* (Steph.) Evans = *Prionolejeunea denticulata* (Web.) Schiffn. (Grolle, 1984a)
- Dicranolejeunea cipaconeae* (Gott.) Steph. = *Lindigianthus cipaconeus* (Gott.) Kruijt & Gradst.
- D. gigantea* Steph. = *Frullanoides liebmanniana* (Lindenb. & Gott.) Schiffn. (Kruijt, 1987)
- D. grossiloba* Steph. = *Odontolejeunea lunulata* (Web.) Schiffn. (Kruijt, 1987)

- D. loxensis* (Gott.) Steph. = *Acanthocoleus aberrans* (Lindenb. & Gott.) Kruijt var. *laevis* Gradst. (Kruijt, 1987; Gradstein, 1994)
- D. tridentata* S. Winkler = *D. axillaris* (Nees & Mont.) Schiffn. (Kruijt, 1987)
- Euosmolejeunea fragrantissima* (Spruce) Steph. = *Cheilolejeunea fragrantissima* (Spruce) Schust.
- E. neglecta* Gott. ex Steph. = *Cheilolejeunea rigidula* (Nees & Mont.) Schust. (Gradstein & Hekking, 1989)
- Fossombronia ptychophylla* Spruce = *Austrofossombronia peruviana* (Gott. & Hampe) Schust. (Gradstein et al, in press)
- Frullania arnelli* Steph. = *F. albertii* Steph. (Yuzawa, 1991)
- F. campanensis* Spruce = *F. arecae* (Spreng.) Gott. var. *arecae* (Yuzawa, 1991)
- F. gymnotis* Nees & Mont. = *F. caulisequa* (Nees) Nees (Gradstein & Hekking, 1989)
- F. lehmanniana* Spruce = *F. sphaerocephala* Spruce (Yuzawa, 1991)
- F. obcordata* Lehm. & Lindenb. = *F. caulisequa* (Nees) Nees (Yuzawa 1989)
- F. obscura* (Sw.) Dum. = *F. riojaneirensis* (Raddi) Aongstr. (Yuzawa, 1991)
- F. pachoensis* Steph. = *F. intumescens* (Lehm. & Lindenb.) Lehm. & Lindenb. (Yuzawa, 1989)
- F. pohlkeana* Steph. = *F. cuencensis* Tayl. (Yuzawa, 1991)
- F. pendulostyla* Steph. = *F. mirabilis* Jack & Steph. (Yuzawa, 1991)
- F. semiconnata* Lindenb. & Gott. var. *coronata* Gott. = *F. tetraptera* Nees & Mont. (Yuzawa, 1991)
- var. *granatensis* Gott. = *F. tetraptera* Nees & Mont. (Yuzawa, 1991)
- F. tolimana* Steph. = *F. gibbosa* Nees (Yuzawa, 1991)
- F. transfalculata* Clark & Svihla = *F. dusenii* Steph. (Yuzawa, 1991)
- F. vanderhammenii* Haarbrink = *F. winteri* var. *vanderhammenii* (Haarbrink) Yuzawa
- Fuscocephaloziopsis biloba* (Herz.) Fulf. = *Cephalozia infuscata* Schust. (Schuster, 1974)
- Gongylanthus innovans* S. Winkler = *G. limbatus* (Herz.) Grolle & Vána
- Harpalejeunea curvatiloba* Herz. = *Cheilolejeunea curvatiloba* (Herz.) Grolle (Grolle & Reiner-Drehwald, in press)
- H. heterodonta* Evans = *H. tridens* (Besch. & Spruce) Steph. (Grolle & Reiner-Drehwald, in press)
- H. subspathulata* (Spruce) Steph. fo. *turgidula* Herz. = ? *Echinocolea subspathulata* (Spruce) Grolle (Grolle & Reiner-Drehwald, in press)
- H. tuberculata* Jack & Steph. = *H. cinchonae* (Nees) Schiffn. (Grolle & Reiner-Drehwald, in press)
- Herbertus limbatus* Steph. = *H. acanthelius* Spruce (Van Reenen, 1982)
- H. subnivalis* S. Winkler = *H. subdentatus* Steph. (Van Reenen, 1982)

- Hygrolejeunea cerina* (Lehm. & Lindenb.) Steph. = *Macrolejeunea cerina* (Lehm. & Lindenb.) Gott.
- H. devoluta* (Spruce) Steph. = *Lepidolejeunea eluta* (Nees) Schust. (Piippo, 1986)
- H. obtusiserrulata* Herz. = *Lepidolejeunea grossepapulosa* (Steph.) Piippo (Grolle, 1984)
- H. patellifera* (Spruce) Steph. = *Amphilejeunea patellifera* (Spruce) Schust.
- H. punctata* Herz. = *Lepidolejeunea involuta* (Gott.) Grolle (Grolle, 1984)
- H. reflexistipula* (Lehm. & Lindenb.) Steph. = *Amphilejeunea reflexistipula* (Lehm. & Lindenb.) Gradst. (Gradstein et al., in press)
- Isotachis haematodes* (Lindenb. & Gott.) Gott. = *I. serrulata* (Sw.) Gott. (Gradstein et al., 1977)
- I. madida* (Hook. & Tayl.) Mitt. = *I. serrulata* (Sw.) Gott. (Gradstein et al., 1977)
- Jamesoniella dependula* (Tayl.) Steph. = *Plagiochila dependula* Tayl.
- Kingiolejeunea ornata* Robins. = *Lepidolejeunea ornata* (Robins.) Schust.
- Kurzia verrucosa* Steph. = *K. capillaris* (Sw.) Grolle (Pócs, 1984)
- Lejeunea cerina* (Lehm. & Lindenb.) Gott. et al. = *Macrolejeunea cerina* (Lehm. & Lindenb.) Gradst.
- L. glaucophylla* Gott. = *L. laetevirens* Nees & Mont. (Schuster, 1980a)
- L. reflexistipula* (Lehm. & Lindenb.) Steph. = *Amphilejeunea reflexistipula* (Lehm. & Lindenb.) Gradst. (Gradstein et al., in press)
- Leptolejeunea obovata* Bischler = *L. radicata* (Nees & Mont.) Grolle (Grolle, 1979)
- Lopholejeunea muelleriana* (Gott.) Schiffn. = *L. nigricans* (Lindenb.) Schiffn. (Gradstein, 1994)
- L. saxatilis* (Gott. ex Aongstr.) Steph. = *Marchesinia brachiata* (Sw.) Schiffn. (Gradstein, 1994)
- Lophocolea coadunata* (Sw.) Nees = *L. bidentata* L. (Gradstein & Vána, 1987)
- Lophozia subinflata* (Spruce) Schiffn. = *L. laxifolia* (Mont.) Grolle (fide R. Grolle)
- Macrolejeunea subsimplex* (Mont & Nees) Schiffn. = *M. cerina* (Lehm. & Lindenb.) Gradst. (Gradstein, 1989)
- Marchesinia aquatica* Herz. = *M. brachiata* (Sw.) Schiffn. (Gradstein, 1994)
- M. extensa* (Stephani) Steph. = *Archilejeunea fuscescens* (Hampe ex Lehm.) Fulf. (Gradstein, 1994)
- M. longirostris* Herz. = *M. brachiata* (Sw.) Schiffn. (Gradstein, 1994)
- Marsupella austro-americana* Vána, nom. inval. = *Anastrophyllum austro-americanum* Vána

- Mastigolejeunea pittieri* Steph. = *M. auriculata* (Wils.) Schiffn. (Gradstein, 1991)  
*Metzgeria bialata* S. Winkler, **syn. nov.** (Type: Santa Marta, Winkler C95, hb Ulm) =  
*Riccardia andina* (Spruce) Herz.  
*M. papulosa* Steph. = *M. leptoneura* Spruce (Piippo, 1991)  
*M. procera* Mitt. var. *columbica* Herz. = *M. procera* Mitt. (Kuwahara, 1986)  
*M. thomeensis* Steph. = *M. australis* Steph. (Kuwahara, 1986)
- Odontolejeunea calcarata* (Spruce) Steph. = *O. lunulata* (Web.) Schiffn. (Teeuwen, 1989)  
*O. longispica* Evans = *O. decemdentata* (Spruce) Steph. (Teeuwen, 1989)  
*O. obversiloba* Herz. = *O. rhomalea* (Spruce) Steph. (Teeuwen, 1989)  
*O. sieberiana* (Gott.) Schiffn. = *O. lunulata* (Web.) Schiffn. (Teeuwen, 1989)
- Omphalanthus grandistipulus* Steph. = *O. filiformis* (Sw.) Nees (Gradstein, 1991)  
*O. paramicola* (Herz.) Gradst. = *Aureolejeunea paramicola* (Herz.) Schust. (Schuster, 1987)
- Plagiochila alpina* Gott. = *P. aerea* Tayl. (Grolle & Heinrichs, in press)  
- var. *grandis* Gott. = *P. aerea* Tayl. (Grolle & Heinrichs, in press)  
- var. *lindigiana* Gott. = *P. aerea* Tayl. (Grolle & Heinrichs, in press)  
*P. amazonica* Spruce = *P. subplana* Lindenb. (Herzog, 1952)  
*P. arrecta* Gott. = *P. bifaria* (Sw.) Lindenb. (Heinrichs et al., in press)  
*P. asperifolia* Steph. var. *columbica* Herz. = *P. stricta* Lindenb. (Heinrichs et al., 1998)  
*P. bursata* (Desv.) Lindenb. = *P. aerea* Tayl. (Grolle & Heinrichs, in press)  
*P. corniculata* Dum. = *P. exigua* (Tayl.) Tayl. (Grolle, 1983)  
*P. cucullifolia* Jack & Steph. = *Szweykowskia cucullifolia* (Jack & Steph.) Gradst. &  
Reiner (Gradstein & Reiner-Drehwald, 1995)  
*P. cuneata* Lindenb. & Gott. var. *bicuspidata* (Gott.) Herz. = *P. exigua* (Tayl.) Tayl. (Inoue, 1980)  
*P. cuneata* Lindenb. & Gott. var. *loriloba* Herz. = *P. bursata* (Desv.) Lindenb. (Inoue, 1980)  
*P. densispina* Steph. = *P. adiantoides* (Sw.) Lindenb. (Heinrichs et al., 1998)  
*P. discreta* Gott. = *P. raddiana* sensu Inoue, non Lindenb. (Inoue, 1989).  
The true *P. raddiana* Lindenb. is identical to *P. guilleminiana* Mont. (see there)  
*P. esmeraldana* Steph. = *P. adiantoides* (Sw.) Lindenb. (Heinrichs et al., 1998)  
*P. falcata* Steph. = *P. raddiana* sensu Inoue, non Lindenb. (Inoue, 1989).  
The true *P. raddiana* Lindenb. is identical to *P. guilleminiana* Mont. (see there)  
*P. glaucescens* Steph. = *P. diversifolia* Lindenb. & Gott. (Herzog, 1952)  
*P. guilleminiana* Mont. = *P. raddiana* Lindenb., **syn. nov.** (fide types in PC-Mont. and W)  
*P. increscentifolia* Spruce = *P. bifaria* (Sw.) Lindenb. (Heinrichs et al., 1998)  
*P. interjecta* Gott. = *P. raddiana* sensu Inoue, non Lindenb. (Inoue, 1989).  
The true *P. raddiana* Lindenb. is identical to *P. guilleminiana* Mont. (see there)  
*P. jelskii* Loitles. = *P. fuscolutea* Tayl. (Inoue, 1989)  
*P. longitexta* Steph. = *P. raddiana* sensu Inoue, non Lindenb. (Inoue, 1989).  
The true *P. raddiana* Lindenb. is identical to *P. guilleminiana* Mont. (see there)

- P. loriloba* Herz. = *P. bursata* (Desv.) Lindenb. (Inoue, 1989)  
*P. pachoensis* Steph. = *P. laetevirens* Lindenb. (Heinrichs & Gradstein, in press)  
*P. procera* Lindenb. = *P. adiantoides* (Sw.) Lindenb. (Heinrichs et al., 1998)  
*P. tocarema* Gott. = *P. laetevirens* Lindenb. (Heinrichs & Gradstein, in press)  
*P. variifolia* Steph. = *P. diversispina* Tayl. (Inoue, 1989)
- Pycnolejeunea decurviloba* Steph. = *Cheilolejeunea decurviloba* (Steph.) X.-L. He  
*P. granatensis* Steph. = *Lepidolejeunea eluta* (Nees) Grolle (Gradstein, 1991)  
*P. hyalina* Steph. = *Lejeunea hyalina* (Steph.) Steph. (X.-L. He, pers. com.)  
*P. revoluta* Herz. = *Cheilolejeunea revoluta* (Herz.) Gradst. & Grolle
- Radula amazonica* Spruce = *R. macrostachya* Lindenb. & Gott. (Yamada, 1989, 1991)  
*R. caldana* Aongstr. = *R. macrostachya* Lindenb. & Gott. (Reiner-Drehwald, 1994)  
*R. cornucopiae* Spruce = *R. episcia* Spruce (Yamada & Gradstein, 1991)  
*R. mollis* Lindenb. & Gott. = *R. quadrata* Gott. (Yamada & Gradstein, 1991)  
*R. ramulina* Tayl. = *R. voluta* Tayl. (Yamada & Gradstein, 1991)  
*R. ramulina* var. *microphylla* Jans = *R. voluta* Tayl. (Yamada & Gradstein, 1991)  
*R. saccatiloba* Steph. = *R. fendleri* Gott. (Gradstein & Hekking, 1989)  
*R. surinamensis* Steph. = *R. macrostachya* Lindenb. & Gott. (Yamada, 1989)
- Rectolejeunea phyllobola* (Nees & Mont.) Evans = *Lejeunea phyllobola* Nees & Mont.  
 (Grolle, 1995)
- Riccardia insignis* Schiffn. = *R. papillata* (Gott.) Hässel ex Gradst. (Meenks, 1987)  
*R. squarrosa* (Steph.) Gradst. = *R. algooides* (Tayl.) Meenks (Meenks, 1987)
- Riccia indusiata* S. Winkler = *R. lamellosa* Raddi (Gradstein, 1998)
- Sphaerosporoceros granulatus* (Gott.) Hässel = *Anthoceros granulatus* Gott.
- Stictolejeunea kunzeana* (Gott.) Schiffn. = *S. squamata* (Will. ex Web.) Schiffn. (Gradstein, 1985)
- Strepsilejeunea acutangula* (Nees) Schiffn. = *Cheilolejeunea acutangula* (Nees) Grolle  
*S. choachina* (Gott.) Steph. = *Cheilolejeunea choachina* (Gott.) Gradst. (Gradstein, 1998)  
*S. laevicalyx* Jack & Steph. = *Cheilolejeunea laevicalyx* (Jack & Steph.) Grolle
- Symbiezidium granulatum* (Nees) Steph. = *S. transversale* (Sw.) Trevis. (Gradstein & van Beek, 1985)  
*S. subrotundum* (Kunth) Trevis. = *S. transversale* (Sw.) Trevis. (Gradstein & van Beek, 1985)  
*S. transversale* (Sw.) Trevis. subsp. *dentatum* (Herz.) Gradst. & van Beek = *S. dentatum* Herz. (Gradstein, 1994)
- Taxilejeunea lancifolia* Steph. = *Macrolejeunea lancifolia* (Steph.) Herz.  
*T. pallescens* (Mitt.) Steph. = *Macrolejeunea pallescens* (Mitt.) Schiffn.

*Thysananthus pterobryoides* (Spruce) Schiffn. = *Fulfordianthus pterobryoides* (Spruce) Gradst.

*Trachylejeunea didrichsenii* Gott. ex Steph. = *Cyclolejeunea luteola* (Spruce) Grolle (Grolle, 1984)

*T. inflexa* (Hampe ex Lehm.) Steph. = *Cheilolejeunea inflexa* (Hampe ex Lehm.) Grolle

*Triandrophyllum maegdefraui* S. Winkler = *Isotachis lacustris* Herz. (Gradstein, 1998)

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