

Bryophyte flora of São Tomé e Príncipe Archipelago (West Africa): annotated catalogue

Cecília SÉRGIO & César GARCIA*

*Universidade de Lisboa. MNHN. Jardim Botânico/CBA.
Rua da Escola Politécnica. 1269-170 Lisboa, Portugal*

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Abstract – An updated catalogue of the bryophytes of São Tomé e Príncipe Archipelago is presented. Occurrence data on both islands for each species are reported, based on a critical assessment of the literature since the first botanical expeditions in the 19th century up to June 2010. The references are chronologically listed for each species, and all old herbarium specimens revised or identified are also indicated. In addition, two lists (mosses and liverworts-hornworts) of known synonyms are provided.

Two hundred twenty bryophyte taxa are listed (91 mosses and 129 liverworts-hornworts), while twenty taxa are excluded or their occurrence considered very improbable.

The species diversity and endemics are also analysed for each island.

Tropical bryophytes / bibliographic list / herbarium types / São Tomé e Príncipe Archipelago / Africa

INTRODUCTION

The study of Tropical bryophytes has become extremely complex due to the lack of taxonomic bibliography or the difficulty in obtaining old records (O'Shea, 1997). However, two recent floras, one for Kenya (Chuah-Petiot, 2003) and another one for Central Africa (Wigginton, 2004a), are expected to be an excellent support to the study of African bryophyte diversity. The works pointed out by Pócs & O'Shea (1991) will help to facilitate new taxonomic studies, even though it is a general review of African bryoflora research. The current knowledge of São Tomé e Príncipe bryoflora continues incomplete, as in the majority of African countries (Richards, 1984; Frahm, 2003). Considering that the development of new studies in Africa is pressing, and that the few existing floras are insufficient (Hallinbäck & Hodgetts, 2000), the proposed study intends to contribute to bryological studies in Africa/West Africa.

The international program for the implementation of a *Guide to Bryophytes of sub-Saharan Africa* (GBA <http://www.gbaonline.org.uk/>), which aims to produce African versions of moss and liverwort checklists, and is managed on the Tropical Bryology Research site (<http://www.tropicalbryologyresearch.co.uk/>), has represented an important basis for this study.

* Correspondence and reprints: csergio@fc.ul.pt

Finally, this work intends to provide information on bibliography and herbarium specimens for further bryological research in the African tropics and also to support new fieldwork in São Tomé e Príncipe Islands.

THE STUDY AREA

The islands of the archipelago of São Tomé e Príncipe (Fig. 1) are of volcanic origin as are all others in the Gulf of Guinea (Cameroon Line Islands). The Islands of Annobón, Bioko (Fernando Pó), together with the Cameroon mountains are also part of this line of islands on both the geological and biological points of view.

The islands of São Tomé e Príncipe were uninhabited until their discovery by the Portuguese navigators in 1471. Human occupation was not immediate; the first colonization took place in 1493, and was dedicated to the cultivation of sugar cane imported from Madeira Island. In the 19th century, cultivation of coffee and cacao began, leading to the creation of great plantations, especially in areas situated below 800 m of altitude (Henriques, 1917; Exell, 1944).

Originally the two islands had rainforest, differentiated by the effect of climate, topography and soil. However, the continuous action of man led to changes in this vegetation; currently six types of formations are recognised on São Tomé island, the most important ones being: Mountain Rainforest “Obo”, Secondary Forest “Capoeira” and Wooded Savannah (Diniz & Matos, 2002).

The botanic interest of the São Tomé archipelago was remarked by Henriques (1917) and, since then, these islands have proved to be of high importance for plant conservation (Figueiredo, 1994; Figueiredo & Gascoigne, 2001). Also the bryoflora of these islands is highly distinctive: *ca* 17 endemic species have been reported from São Tomé e Príncipe (O’Shea, 2003; 2006; Wigginton, 2009).

Due to the narrow historical, cultural and scientific relationships of Portugal with Portuguese-speaking African countries and the possibility of widening the knowledge of the flora of these countries, a bryological research program was established in the Museu Nacional de História Natural of Lisbon. Its priority aim was the study of São Tomé e Príncipe islands involving new field studies, and, in a wider perspective, the cooperation and promotion of biodiversity conservation involving an active and regular dialogue among the authorities of both countries.

BOTANICAL EXPLORATIONS AND HERBARIUM COLLECTIONS

The first botanical explorations in the Islands of São Tomé e Príncipe were undertaken by George Don in 1822, under the auspices of the Royal Horticultural Society of London (Exell, 1944). However, no existing bryophyte collection is referenced.

The earliest data on collected bryophytes corresponded to the expedition of Friedrich Welwitsch, who made two visits to this archipelago in 1853 and 1860

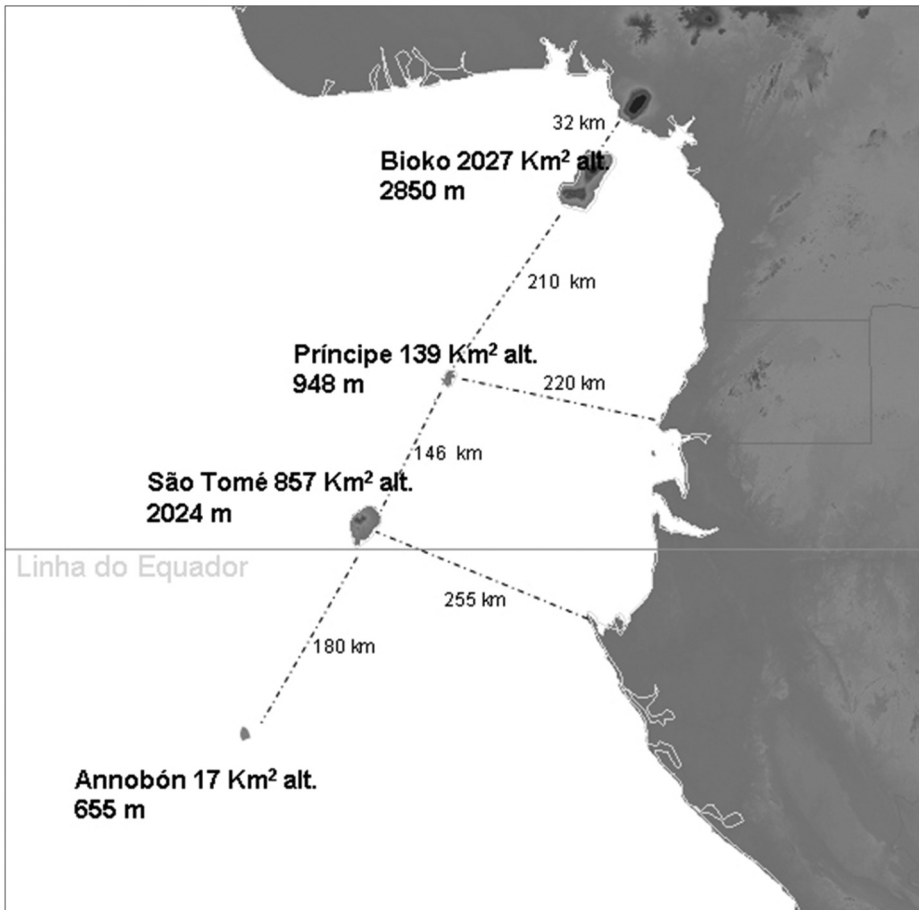


Fig. 1. Map of Guinea Gulf Islands. Location, area, maximum altitude and the distance to African mainland. Linha do Equador (Equator line).

(Dolezal, 1974) when going to and returning from Angola. Although Welwitsch visited São Tomé e Príncipe before Barter and Mann, his bryophyte material was only published in 1901 (Gepp, 1901; Stephani, 1901).

Between the two short expeditions of Welwitsch, Charles Barter made bryophyte collections during the Kew Garden mission (Niger Expedition, 1857). This bryophyte material was studied by William Mitten (1863), who recognized 5 new species and was the first to describe and publish bryophyte species from São Tomé. Also in the same year of 1858 he visited the Island of Príncipe, where he made an important collection of botanical specimens that are currently stored mainly in NY and BM herbaria. The historical circumstances of Welwitsch collections make typification difficult (Albuquerque *et al.*, 2009). However, from the examen of both, we have deduced that, for bryophytes, the best collections actually are kept at BM.

This expedition promoted by the Kew Gardens was continued by Gustav Mann, who also developed studies on floras in the mountains of Cameroon and Bioko. It was, according to Exell, the first expedition to collect plants from Pico in São Tomé. This expedition to the highest zone of São Tomé was undertaken in August 1861 and to the Island of Príncipe in September of the same year. This material also served as the basis for Mitten's publication (1863) where several new species were described. Most of the material gathered by Barter and Mann stored in BM or in PC herbaria was examined during the present study. Some have been digitalized and can be accessed in the database ALUKA (<http://www.aluka.org/>). However, the original material studied by Mitten, and some holotype specimens are kept in his bryophyte collections in NY.

Subsequent to these expeditions, other important scientific explorations were undertaken towards the end of 19th century by Adolpho Moller in 1885, Francis Newton in 1887 and 1888, and Francisco Quintas in 1888 to 1889 (Henriques, 1917; Exell, 1944). At this time these were the main and most important field studies that incorporated bryophytes. They were developed in a program carried out by the Botanical Garden of Coimbra under Professor Julio Henriques's supervision. These two naturalists, Moller and Quintas, in almost consecutive years, explored great part of the islands of São Tomé e Príncipe and made one of the most important bryophyte collections in western tropical Africa in the 19th century.

These collections, at this moment stored in the herbarium of Coimbra (COI), were also sent to diverse specialists to be identified (Sérgio *et al.*, 2011). The hepatics were sent to Franz Stephani in Geneva, in consecutive orders between 1886 and 1913, and the mosses were initially sent to Carl Müller in Halle, from 1885 up to 1887 and later, perhaps since 1889, to Helsinki to Victor Ferdinand Brotherus (up to 1904). All this material, remarkably prepared, is one of the best bryophyte collections for the study of tropical African flora as it includes a great number of new species, some corresponding to the types or the basionyms of many African taxa. We can confirm the existence of a large number of specimens from Moller and Quintas in Bescherelle's collection, the majority in PC, some in Dixon's and Nicholson's collections in BM, also in the Cardot's, Renauld's and Potier de la Varde's collections, the majority in PC, as well as some types from Müller's collection also in PC.

Julio Henriques, some years before the complete publication of "A Ilha de São Tomé sob o ponto de vista Histórico-Natural e Agrícola" (1917), made a visit to this island to list its entire flora. He made some collections in São Tomé in 1903, including a few bryophytes.

After Henriques, August Chevallier spent 6 weeks in São Tomé in 1905, collecting some material, particularly vascular plants. Exell (1944) indicates that Chevallier's gathering came mainly from the area between Monte Café and Pico, and from the region of Porto Alegre. However, only one bryophyte attributed to Chevallier's collection was reported from São Tomé Island: *Colura digitalis* (Mitt.) Steph. (Jovet-Ast, 1957).

Only some years later in October 1932, Arthur Exell landed on São Tomé Island to initiate a botanical expedition of the islands of the Gulf of Guinea. He visited the four islands (São Tomé, Príncipe, Bioko and Annobón) where he carried out numerous collections (Figueiredo, 1999). The results of this expedition were published in 1944, in the Catalogue of the Vascular Plants of São Tomé, which includes all known species and new reports of some taxa for these islands (Figueiredo, 2005) including diverse bryophytes. He was based in Vanhulst (Macambará), in the dependence of Roça Zampalma and collected the majority

of the bryophyte material in this region. His bryophyte collection was the basis for two publications, in which about 40 species of hepatics and mosses are listed (Nicholson, 1944; Sherrin, 1944). The majority of Exell's specimens are stored in BM, except some specimens kept at COI herbarium.

Subsequently to Exell, other collections were carried out by Théodore Monod and C. A. Therold in São Tomé e Príncipe Islands, mainly in Pico do Príncipe, on the occasion of the "6^e Conférence Internationale des Africanistes de l'Ouest" in 1956 (Monod, 1960). The majority of this material was the basis of the publication of Potier de la Varde (1959).

METHODOLOGY

The here presented bryophyte list of the São Tomé e Príncipe Islands is based on all known published literature, as well as on some unpublished data. The list includes some new records, and the respective reference made concerning these new studies is mainly based on observations of herbarium material associated to old collections. New information concerning new gatherings or records with references to localities will also be published in different papers.

The list is presented in alphabetical order of all the accepted *taxon* names, and all the literature on bryophytes of São Tomé e Príncipe Islands was surveyed, first for mosses, and then for liverworts and hornworts, both with a synonym list.

Incorrect or dubious species to São Tomé e Príncipe are also listed, printed in plain instead of bold format. The endemic *taxa* are indicated with the symbol • and *taxa* or synonymies (homotypic and heterotypic synonyms) whose type locality corresponds to São Tomé e Príncipe are designated.

The nomenclature, the delimitation of families and genera for mosses follows O'Shea (2006). For the allocation of genera of liverworts and hornworts we have used the last version of the Checklist of sub-Saharan Africa (Wigginton, 2009). Some additions result from more recent works such as the ones by Allen & Magill (2007) for the genus *Orthostichella* (Neckeraceae).

All the relevant synonyms were considered, particularly those used by different authors in São Tomé references or reports. Some general taxonomic criteria not considered in O'Shea (2006) are according to the Index Muscorum (Wijk *et al.*, 1959-1969). We have also used the W3MOST online database of the Missouri Botanical Garden (<http://mobot.mobot.org/W3T/Search/most.html>). This catalogue contains all specific and infra specific names attributed to São Tomé e Príncipe bryophytes. All effectively published epithets are included (whether valid or not), as well as herbarium names. Authors' names are abbreviated according to Brummitt and Powell (1992). The most accurate information about the original description cited in different volumes of Index Hepaticarum (e.g., Bischler, 1977; Bonner, 1962-3, 1963, 1964, 1976, 1978; Geissler & Bischler, 1985, 1989, 1990) is used but not in the presented annotations.

Consulted references are cited with the name of the author who indicated the location of the taxon. However, many records correspond to the same locality, revised and published by different authors in successive dates so they frequently do not correspond to the number of localities or areas, and do not reflect the species occurrence.

Additional criteria for the information presented in this catalogue are as follows:

- We have made no judgement on the quality of the records. All records have been accepted as a rule, excluding the ones indicated in the notes. In these notes we included all revised herbarium material. More than 750 specimens from different herbaria have been examined.
- The majority of type specimens have been checked and digitalized or photographed and each one is indicated in the studied material. We have studied also digital objects supported by ALUKA database (<http://www.aluka.org/>). The A.W. Mellon Foundation (African Plants Initiative) sponsored different herbaria to database the African types and the images and associated specimen label data are available through the ALUKA website. The majority of type material from the Stephani herbarium (in G) and Brotherus collections (in BM or in PC) were eventually made available electronically through the web site. In this catalogue we have indicated with a symbol when we have confirmed that the specimen is currently accessible at ALUKA website.
- The historical position and the status of the herbarium collections make typification difficult. So, for the majority of the typified specimens the different categories of types were not considered nor used.
- Data from existing African check-lists, as in the case of liverworts or hornworts (Wigginton & Grolle, 1996; Wigginton, 2004b; Wigginton, 2009) and mosses (Schultze-Motel, 1975; O'Shea, 2006), as well as the reports in the latest African floras were the basis for this catalogue. Some general text books and floras (such as Brotherus, 1924; 1925; Arnell, 1963; Magill, 1981; Chauh-Petiot, 2003) were not included.
- Synonyms are listed in alphabetical sequence and the valid *taxa* to which they apply are also indicated in two annexed lists.
- The present version includes only records published until June 2010.

Also the material available on the Web such as the bryophyte herbarium of the Swedish Museum of Natural History (Krypto-S – <http://andor.nrm.se/fmi/xsl/kbo/>), were not studied as all specimens are duplicates of others kept in visited herbaria.

Abbreviations and symbols used

- SAO São Tomé (Fig. 1)
 PRI Príncipe (Fig. 1)
 ≡ Homotypic synonymy based on São Tomé and Príncipe plants
 = Nomenclatural synonymy
 ▲ Observed digital objects support by ALUKA database (<http://www.aluka.org/>).
 Δ Not available in ALUKA database
 • Endemic *taxon*
 * New to São Tomé or Príncipe based on revised material
 ** Not recorded in São Tomé e Príncipe according to O'Shea (2006) and Wigginton (2009) lists (Some new *taxa* to the archipelago are based on new herbarium revisions)

- [] Critical *taxon* or data to be excluded
 Synonyms are indicated in italic

Herbarium list with acronyms (Vitt *et al.*, 1985)

- BM** Natural History Museum, London;
COI Herbário do Instituto Botânico de Coimbra;
G Conservatoire et Jardin botaniques de la Ville de Genève;
E Herbarium of the Royal Botanic Garden, Edinburgh;
H Finnish Museum of Natural History University of Helsinki; Brotherus Herbarium (H-BR);
LISU National Museum of Natural History, University of Lisbon;
NY New York Botanical Garden;
PC Muséum National d'Histoire Naturelle, Herbar de Cryptogamie, Paris;
PO Herbário do Instituto Botânico da Universidade do Porto;
S Naturhistoriska Riksmuseet (Swedish Museum of Natural History)

BRYOPHYTE DIVERSITY

The studied bibliography contains approximately 180 entries that support the acceptance of the species listed in this catalogue. The resulting list contains 220 taxa based on *ca* 1500 records.

Until the expeditions of Moller and Quintas (1885-1889) the total number of bryophytes reported from São Tomé e Príncipe was *ca* 32 species.

Afterwards, based on Quintas's expedition, Henriques (1917) reported 57 mosses and 74 liverworts (131 bryophytes), although until 1900, 71 mosses and 87 liverworts and hornworts (158 bryophytes) were known. The *ca* 160 Moller's and 120 Quintas's bryophyte specimens today remaining in COI correspond to 120 taxa (about 55 % of all know *taxa* for the Archipelago).

The updated data in O'Shea's (2006) reported 86 mosses from the two islands, and Wigginton (2009) listed 95 liverwort and hornwort species, which sums up to a total of 181 bryophytes.

The total number of taxa recorded (mosses and liverworts-hornworts) in the different islands can be summarized: São Tomé, 78 mosses and 104 liverworts-hornworts; Príncipe, 23 mosses and 48 liverworts-hornworts. The greatest diversity of taxa is achieved in São Tomé Island, where most surveys and researches have been undertaken. The two islands exhibit higher percentages of liverworts-hornworts than mosses

As for the taxonomic composition (Figs 2 and 3), the largest families are, among liverworts *Lejeuneaceae* (41 *taxa*), and among mosses *Hypnaceae* (10), *Calymperaceae* (9) and *Pilotrichaceae* (9). Eighteen families are represented by a single species.

São Tomé is the only island that bears endemic mosses: 11 species. For liverworts, São Tomé has two endemics and Príncipe only one.

This study yields a list of 220 bryophytes (91 mosses and 129 liverworts/hornworts) in the two islands, but 20 of them are not confirmed or very doubtful.

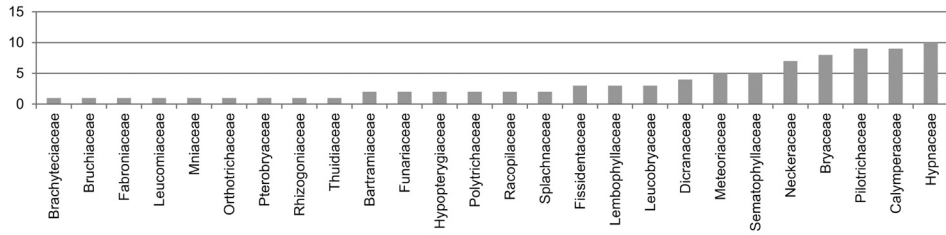


Fig. 2. Mosses. Species number recorded in São Tomé archipelago with family affiliation.

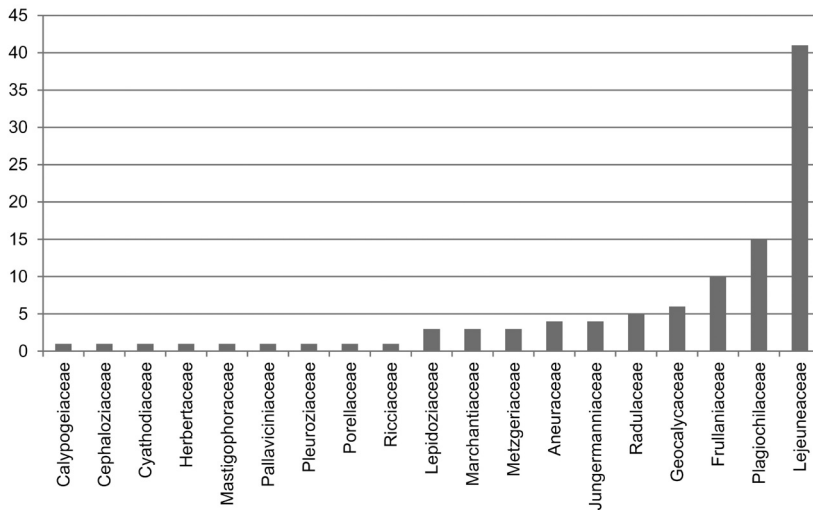


Fig. 3. Liverworts-hornworts. Species number recorded in São Tomé archipelago with family affiliation.

Finally, 18 are reported as new or not previously recorded based on O'Shea (2006) and Wigginton (2009) lists.

A remarkable fact is the rather low number of localities for many of the listed taxa: in fact, 50% of mosses and 25% of liverworts are reported from only one locality. As for endemic species, 10 were only found in the type locality. This reinforces the importance of our efforts to develop new field work, which took place within expeditions carried out by the second author during 2008 and 2009.

ANNOTATED CATALOGUE

Mosses

***Brachymenium leptophyllum* (Bruch et Schimp. ex Müll.Hal.) Bruch et Schimp. ex A.Jaeger**

SAO - Ochi, 1972; Ochi, 1973; Kürschner, 2004; O'Shea, 2006.

Note: The only known record of *B. leptophyllum* from São Tomé corresponds to the gathering of Thorold in Mushongero Kigeri, 1956.

***Brachymenium nepalense* Hook. in Schwägr.**

SAO - Ochi, 1972; O'Shea, 2006.

Note: The only known record of this species from São Tomé corresponds to Henriques' gathering (1903). Ochi studied the material housed in H-BR.

***Brachymenium subuliferum* (Mitt.) A.Jaeger**

=*Bryum subuliferum* Mitt. 1863

=*Bryum molleri* Müll.Hal. 1886

SAO - Mitten, 1863; Müller, 1886a; Müller, 1886b; Henriques, 1917; Ochi, 1972; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 1861, *Mann* (NY919836, NY919837, NY919838, **holotype** of *Bryum subuliferum*); 1861, *Mann* (BM000870696 **isotype** of *B. subuliferum* ▲); Encostas do Pico de São Tomé, 1600-2100 m, 1885, *Moller* (COI, **type** of *B. molleri*); Pico de São Tomé, 1600-2000 m, *Moller* (BM, Herb. C. Müller, **type** of *B. molleri* ▲).

***Brachymitrium moritzianum* (Müll.Hal.) A.K.Kop.**

=*Orthodon thomeanus* Broth. 1890

=*Tayloria thomeana* (Broth.) Broth. 1903

SAO - Brotherus, 1890; Henriques, 1917; Koponen & Weber, 1972; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 1888, *Quintas* (BM000711497, BM000711498, **isotypes** of *Orthodon thomeanus*, Brotherus label); Santa Maria, 1888, *Quintas* (H-BR *s.n.*, **holotype** of *O. thomeanus*); Santa Maria, 1300 m, 1888, *Quintas* (COI, **isotype** of *O. thomeanus*); 1889, *Quintas* (COI, sub *O. thomeanus*); Roça Trás-os-Montes, 1000 m, 1889, *Quintas 1433* (COI, sub *O. thomeanus*).

***Bryum apiculatum* Schwägr.**

=*Bryum areoblastum* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Potier de la Varde, 1933-1936; Ochi, 1972; Schultze-Motel, 1975; Bizot & Tixier, 1987; O'Shea, 2006.

Specimens: SAO - São Nicolau, 900 m, and Nova Moka, 800 m, 1885, *Moller* (COI, **isotype** of *Bryum areoblastum*); 900 m, *Moller* (COI, **isotype** of *B. areoblastum*, Müll.Hal label); São Nicolau, 900 m, *Moller* (BM000870921a, **isotype** *B. areoblastum*, rev. Ochi 1970); *Moller* (PC BESB5346, **isotype** of *B. areoblastum* ▲).

***Bryum argenteum* var. *argenteum* Hedw.**

=*Bryum squarripilum* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Müller, 1890; Henriques, 1917; Ochi, 1972; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Zona baixa, *Moller* (COI, **type** of *Bryum squarripilum*, selected here); Regione inferiore, 1885, *Moller* (PC, **type** of *B. squarripilum*, rev. Ochi); *Moller* (PC BESB5262, **type** of *B. squarripilum*); 1885, *Moller* (BM000878286, **type** of *B. squarripilum* ▲).

***Bryum coronatum* Schwägr.**

=*Bryum erythrostepum* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Gepp, 1901; Henriques, 1917; Ochi, 1972; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Bom Sucesso, 1150 m, 1885, *Moller* (COI, **type** of *Bryum erythrostegeum*); Bom Sucesso, 1150 m, *Moller* (BM000870835a, **type** of *B. erythrostegeum*, C. Müller label. ▲); (PC BESB5314 Herb. Müller, **type** of *B. erythrostegeum*); Monte Café; about 2500 ft., 1860 *Welwitsch 126* (BM, sub *Bryum coronatum* Schwägr., with original ichonography); Monte Café; about 2500 ft., 1860, *Welwitsch 126* (LISU, sub *B. coronatum*, without ichonography).

***Bryum huillense* Welw. et Duby**

=*Bryum quintasi* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Ochi, 1972; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - *Quintas* (H-BR3657-007, **holotype** of *Bryum quintasi*); *Quintas* (COI, **isotype** of *B. quintasi*).

•***Bryum thomeanum* P.de la Varde**

≡*Bryum thomeanum* P.de la Varde 1959

SAO - Potier de La Varde, 1959; Monod, 1960; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Praia Melão, 1956, *Monod* (PC0093082, **holotype** of *Bryum thomeanum* Δ).
Note: The Potier de la Varde's report is the only known locality, based on Monod's gathering of this endemic species. We think that it will be a taxon quite related to *B. cyclophyllum* (Hedw.) Schimp. In the original notes P.de la Varde indicated as the first name for this plant, *B. afro-cyclophyllum* nom. herb. Ochi (1973) included this taxon in the list of "not yet studied for the present revision".

***Callicostella brevipes* (Broth.) Broth.**

SAO - Demaret & Potier de la Varde, 1952; Schultze-Motel, 1975; Bizot & Tixier, 1987; O'Shea, 2006.

Note: All these reports correspond to only one locality of this taxon in São Tomé. The specimen studied from H and collected by Quintas was considered by Ochyra & Pócs (1982) to belong to *Schizomitrium* Schimp., *S. brevipes* (Broth.) Ochyra.

•***Callicostella chionophylla* (Müll.Hal.) Broth.**

≡*Hookeria chionophylla* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Demaret & Potier de la Varde, 1952; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 1885, *Moller* (H-BR0756-354, **holotype** of *Hookeria chionophylla*); Bom Sucesso, 1100 m, 1885, *Moller* (COI, **isotype** of *H. chionophylla*); Bom Sucesso, 1100 m, *Moller* (BM000871380, **type** of *Callicostella chionophylla*, Müller label ▲); *Moller* (PC BESB7173, **type** of *H. chionophylla*); *Moller* (PC0092358 Herb. C. Müller - Herb. F. Renauld **type** of *H. chionophylla*); *Moller* (PC0092400 Herb. Potier de la Varde, **type** of *C. chionophylla*); Cordilheira do Pico 1600-1700 m, *Quintas* (COI, sub *H. chionophylla*); Cordilheira do Pico 1600-1700 m, *Quintas* "Pintas" (H-BR0756-354, sub *H. chionophylla*).

Note: Ochyra & Pócs (1982) consider it another genus, *Schizomitrium* Schimp., *S. chionophyllum* (Müll.Hal.) Ochyra.

***Callicostella fissidentella* (Besch.) Kindb.**

=*Hookeria thomeana* Broth. 1890

PRI - Brotherus, 1890; Henriques, 1917; Potier de La Varde, 1959; Schultze-Motel, 1975; O'Shea, 2006.

SAO - Brotherus, 1890; Henriques, 1917; Demaret & Potier de la Varde, 1952; Potier de La Varde, 1959; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 1200 m, 1888, *Quintas* "Fr. Pintas" (H-BR1101-033); 1000 m, *Quintas* (H-BR0756-352, **holotype** of *Hookeria thomeana*); Roça Trás-os-Montes, 1000 m, 1889, *Quintas* 1440 (COI, *Moller* collection, **isotype** of *H. thomeana*); *Quintas* (PC0092393 Herb. Brotherus, **isotype** of *C. thomeana*); *Quintas* (PC0092388 -Herb. J. Cardot sub *C. thomeana*); 1000 m, *Quintas* (BM000711496, **isotype** of *H. thomeana*); *Quintas* 21 (PC BESB7177, **isotype** of *H. thomeana* Δ). - PRI - Flanc W du Pico, 1956, *Th. Monod 12160* (PC0092383, Herb. Potier de la Varde).

Note: Another recent name for *Hookeria fissidentella* Besch. is *Schizomitrium fissidentellum* (Besch.) Ochyra (Ochyra & Pócs, 1982).

***Callicostella perpapillata* Broth. et P.de la Varde**

PRI - Sherrin, 1944; Schultze-Motel, 1975; O'Shea, 2006.

Note: This is the only report, from the Exell gathering, of this species on Príncipe Island. It is considered to be another genus: *Schizomitrium* Schimp., *S. perpapillatum* (Broth. & P. de la Varde) Ochyra.

***Callicostella salaziae* (Besch.) Broth.**

=*Hookeria quintasi* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Demaret & Potier de la Varde, 1952; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO- 1400 m, *Quintas* (H-BR0756-351, **holotype** of *Hookeria quintasi*); Mata da Lagoa Amélia, 1400 m, 1889, *Quintas* (COI, **isotype** of *H. Quintasi*, not original label); *Quintas* (PC0092203 Herb. Potier de la Varde, **isotype** of *Callicostella quintasi* Δ).

Note: A new name is *Schizomitrium salaziae* (Besch.) Ochyra (Ochyra & Pócs, 1982).

***Calymperes afzelii* Sw.**

=*Calymperes quintasi* Broth. 1890

[PRI - Mitten, 1863; Schultze-Motel, 1975 (to be exclud, see *C. palisotii*)]

SAO - Brotherus, 1890; Potier de la Varde, 1933-1936; Schultze-Motel, 1975; Edwards, 1980; Reese, 1987; O'Shea, 2006.

Specimens: SAO - *Quintas* (H-BR07581-036, **holotype** of *Calymperes quintasi*); *Quintas* (COI, **isotype** of *C. quintasi*); *Quintas* "Pintas?" (BM000556246 associated to the holotype? of *Calymperes perrotetii* Besch. *Legit.*? 1824 ▲); *Quintas* (PC Herb. Bizot, isotype of *C. quintasi*).

*****Calymperes lonchophyllum* subsp. *microblastum* (Müll.Hal. ex Besch.)**

S.R.Edwards

=*Calymperes thomeanum* Müll.Hal. 1886 *new syn.*

PRI - Pico Papagaio, circa 2000 ft, 1932, *Exell 688* (COI, sub *Calymperes saxatile* Müll.Hal.).

SAO - Müller, 1886a; Müller, 1886b; Bescherelle, 1895; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Roça Trás-os-Montes, 1000 m, *Quintas 1426* (COI, **neotype?** sub *Calymperes thomeanum* Müll.Hal. not the type as the original is from Moller); *Quintas* (PC0094089, sub *C. thomeanum*, not the type); (PC0110459 BESB4440, Herb. Müller); São Tomé, Afrique occidentale PC0110615 BESB4595, Herb. Brotherus/Herb. Müller); "Pintas" *Quintas* (PC0110459 BESB4440, Herb. Müller Δ).

Note: According to O'Shea (2006), *Calymperes thomeanum* Müll.Hal. is to be excluded "there is doubt about the identity of this taxon recorded from São Tomé".

It is different from *C. thomeanum* Broth., but this specimen is not in H-BR herbarium. In a letter expeded by Brotherus to Henriques (01.08.1889, <http://bibdigital.bot.uc.pt/>) he informed him that *C. thomeanum* C. Müller existed but *C. thomeanum* Broth. needed to be considered as *C. pintasi* Broth. In the same way, Bescherelle (1895) considered *C. thomeanum* Müll.Hal. an independent species and different from *C. thomeanum* Broth. Currently, the Müll. Hal. species corresponds to *C. lonchophyllum* subsp. *microblastum*.

[*Calymperes lonchophyllum* subsp. *saxatile* (Müll.Hal.) S.R.Edwards]

PRI - Sherrin, 1944; Schultze-Motel, 1975.

Note: The specimen collected by Exell and reported as *C. saxatile* was included in the previous taxa in the course of this study.

*****Calymperes palisotii* Schwägr**

=*Calymperes occidentale* Besch.

PRI - Reese, 1987.

Specimen: PRI - *Mann* (PC0110418 BESB4399, from Herb. Kew sub *Calymperes occidentale* Besch.).

Note: According to Reese (1987) the collection of *C. afzelii* “Île du Prince, *Mann*, Hb. Kew (S)” corresponds to *C. occidentale* Besch.

[*Calymperes pintasii* Müll.Hal. ex Besch.]

≡ *Calymperes pintasii* Müll.Hal. ex Besch. 1896

= *Calymperes thomeanum* Broth. *nom. herb.*?

SAO - Bescherelle, 1895; Schultze-Motel, 1975; O’Shea, 2006.

Specimens: SAO - *Quintas* “*Pintas*” (PC0110459 BESB4440, Herb. Müller/Herb. Bescherelle); *Quintas* (PC0110443 BESB4424, Herb. Brotherus/Herb. Bescherelle Δ).

Note: According to O’Shea (2006) “There is doubt about the identity of this taxon, recorded from Guinea and São Tomé”. In H-BR herbarium we have not found this specimen.

*****Calymperes tenerum* Müll.Hal.**

= *Calymperes principis* Broth. 1890

PRI - Brotherus, 1890; Potier de La Varde, 1959; Reese, 1987.

SAO - Potier de La Varde, 1959; Monod, 1960; Schultze-Motel, 1975.

Specimens: PRI - “ad arbres”, *Quintas 6* (H-BR07781037, **isotype** of *Calymperes principis*); *Quintas* (PC0094091, Herb. Potier de la Varde); PC0094092, **types** of *C. principis*, PC0110416 BESB4397, Herb. Brotherus); *Quintas* (PC0093069 *type* of *C. principis* Brotherus label); *Quintas* (BM000575138, **isotype** of *C. principis*, Brotherus label, ▲). - SAO - Praia Melão, 1956, *Monod 12284* (PC0094094, sub *C. principis*).

Campylopus flexuosus* (Hedw.) Brid. var. *flexuosus

= *Campylopus quintasii* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Sherrin, 1944; Schultze-Motel, 1975; De Sloover & Szmajda, 1981; Frahm, 1985; Müller, 1996; O’Shea, 2006.

Specimens: SAO - 1200 m, 1888, *Quintas* (H-BR0886-007, H-BR0886-008, **holotype** and **isotype** of *Campylopus quintasii*); 1888, *Quintas* (COI, **isotype** of *C. quintasii*, Brotherus label, *rev.* Frahm); 1200 m, 1888, *Quintas* (PC0073406 and PC0073407 Herb. Renaud, *rev.* Frahm, **isotypes** of *C. quintasii* ▲).

***Campylopus savannarum* (Müll.Hal.) Mitt.**

= *Dicranum divaricatum* Mitt. 1863

= *Campylopus erythrocaulon* Broth. 1890

PRI - Mitten, 1863, Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; O’Shea, 2006.

SAO - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; Frahm, 1985; O’Shea, 2006.

Specimens: PRI - Princep’s Island, 1858, *Barter 1923* (BM000870130, **isotype** of *Dicranum divaricatum*, *rev.* A. Slavich 1984 ▲). - SAO - *Quintas* (COI, **isotype** of *Campylopus erythrocaulon*); *Quintas* (PC0106947 and PC0106948, Herb. Renaud, **isotype** of *C. erythrocaulon*); *Quintas* (PC0106949, Herb. Thériot, **isotype** of *C. erythrocaulon* ▲).

***Cyclodictyon filicuspis* P.de la Varde**

PRI - Sherrin, 1944; Schultze-Motel, 1975; Müller, 1996; O’Shea, 2006.

Note: This report (from the Exell’s gathering) is the only known locality of this species on Príncipe Island.

***Cyclodictyon laetevirens* (Hook. et Taylor) Mitt.**

SAO - Sherrin, 1944; Schultze-Motel, 1975; O’Shea, 2006.

Note: This report (based on the Exell’s gathering) is the only known locality, of this species on Príncipe Island. This specimen was not found in COI or BM collections.

***Dicranella falcularia* Müll.Hal. ex Dusén**

PRI - Sherrin, 1944; Schultze-Motel, 1975; O’Shea, 2006.

Note: This report is the only known locality of this species on Príncipe Island. This specimen was not found in COI or BM collections.

***Ectropothecium brevifalcatum* (Müll.Hal.) Kindb.**

≡*Hypnum brevifalcatum* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 1888, *Quintas* (H-BR1415-021 sub *Hypnum brevifalcatum*); Roça Trás-os-Montes, 700 m, *Quintas* (COI, sub *H. brevifalcatum*).

***Ectropothecium diffusum* (Mitt.) A.Jaeger**

≡*Stereodon diffusum* Mitt. 1863

PRI - Mitten, 1863; Schultze-Motel, 1975; O'Shea, 2006.

Note: This report, from the Barter's gathering (1858), corresponds to the original locality, of this species on Príncipe Island and Fernando Pó (Bioko). The specimen from Príncipe was not found in BM or H collections. It is an endemic taxon from São Tomé and Bioko. The paratype of *Stereodon diffusum* Mitt. (BM) is incorrectly labelled as it indicates Prince's Island in Bioko [Fernando Pó] ▲.

•*Ectropothecium drepanophyllum* Broth.

≡*Ectropothecium drepanophyllum* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - "ad ligna putrida", 900 m, *Quintas 23* (H-BR1415-022, **holotype** of *Ectropothecium drepanophyllum*); Roça Trás-os-Montes, 900 m, 1899, *Quintas 23* "1443" (COI, **isotype** of *E. drepanophyllum*); 1000 m, *Quintas 24* (H-BR1415023 Δ).

Note: These specimens from Quintas collections correspond to the only known locality of this endemic species.

***Fissidens ellipticus* Besch.**

=*Fissidens leucocaulis* Müll.Hal. 1890 *nom. nud.*

=*Fissidens leucocaulis* Müll. Hal. ex Bizot

SAO - Potier de la Varde & Richards, 1956; Bizot, 1968; Schultze-Motel, 1975; Bruggeman-Nannenga (1997); O'Shea, 2006.

Specimens: SAO - Roça Trás-os-Montes, 1000 m, 1888, *Quintas* (COI, **holotype** of *Fissidens leucocaulis* Müll.Hal. *nom. nud.*); 1888, *Quintas* (PC Herb. Bizot, **isotype?** of *F. leucocaulis* Δ).

Note: It is an epiphytic species named by Müller as *Fissidens leucocaulis* without a latin diagnose. Bizot (1968) named it *F. leucocaulis* C. Müll. *in litt.* We have revised this material (in COI) and it actually corresponds to *F. ellipticus* according to Bruggeman-Nannenga's work (1997).

***Fissidens glaucissimus* Welw. et Duby**

=*Fissidens subglaucissimus* Broth. 1890

PRI - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; Bizot & Tixier, 1987; O'Shea, 2006.

SAO - Brotherus, 1890; Henriques, 1917; Potier de la Varde, 1933-1936; Potier de la Varde & Richards, 1956; Schultze-Motel, 1975; Bizot & Tixier, 1987; Bruggeman-Nannenga, 2006; O'Shea, 2006.

Specimen: PRI - Prince's Island, *Quintas* (PC0106769, **isotype** of *Fissidens subglaucissimus* ▲).

***Fissidens sciophyllum* Mitt.**

=*Fissidens purpureocaulis* Müll.Hal. 1900

SAO - Müller, 1900; Dixon, 1933; Schultze-Motel, 1975; Bruggeman-Nannenga, 1997; Bruggeman-Nannenga, 2006; O'Shea, 2006.

Specimens: SAO - Maçambrara, 1250 m, *Quintas* (COI, **isolectotype** of *Fissidens purpureocaulis*).

Note: The lectotype of *F. purpureocaulis* in H-BR was designated by Bruggeman-Nannenga (1997) based on Quintas collection.

*****Floribundaria floribunda* (Dozy et Molk.) M.Fleisch.**

Specimen: SAO - Nova Moka, 850 m, *Moller* (PC0093086, sub *Papillaria patentissima* Müll.Hal. *statu juvenili*, Herb. C. Müller).

Note: The material at PC, actually corresponds to *F. floribunda*.

***Floribundaria vaginans* (Welw. et Duby) Broth.**

=*Papillaria patentissima* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Potier de la Varde, 1933-1936; Sherrin, 1944; Potier de La Varde, 1959; Monod, 1960; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - *Moller* 20 (H-BR1709-001, **holotype** of *Floribundaria patentissima*); Monte Café, 660 m, *Moller* (PC0093088, **isotype** of *P. patentissima*, rev. Argent); *Moller* (PC BESB6581, sub *Meteorium patentissimum* Δ); Monte Café, 660 m, 1885, *Moller* 20 (COI, **isotype** of *P. patentissima*); Encosta da Vinhas, 900 m, 1888, *Quintas* (COI, sub *P. patentissima*); Pentes NW de Pico, entre cascade et Vilela, 700-1000 m, 1956, *Monod* 12201 (PC0093087, sub *F. patentissima* Fleisch. Δ).

•*Funaria acicularis* Müll.Hal.

=*Funaria acicularis* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Macambrara, 1000 m, *Moller* (BM000780668, **type** of *Funaria acicularis*, label of Müller, ▲); Macambrava, in terra, 1000 m, *Moller* (COI, **type** of *F. acicularis*); Macambrara, 1000 m, 1885, *Moller* (PC, **type** of *F. acicularis*); (PC0108583 BESB2490, Herb. Müller/Herb. Bescherelle, **isolectotype** of *F. acicularis*); 1885, *Moller* 2 and 11 (H-BR1769-006 and 1769-007, **type** of *F. acicularis*).

***Funaria hygrometrica* Hedw.**

SAO - Gepp, 1901; Schultze-Motel, 1975; O'Shea, 2006.

Specimen: SAO - On Monte Café, about "2500 ft", *Welwitsch* 127 (BM and LISU).

***Hypopterygium tamarisci* (Sw.) Brid. ex Müll.Hal.**

=*Hypopterygium falcatum* Müll.Hal. 1886

=*Hypopterygium brevifolium* Broth. 1890

PRI - Kruijjer, 1997.

SAO - Mitten, 1863; Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; Kruijjer, 1997; Kruijjer, 2002; O'Shea, 2006.

Specimens: PRI - Saudade, 1887, *Newton* (COI, sub *Hypopterygium falcatum*).

SAO - 1000 m, *Quintas* 25 (H-BR2192-022, **type?** of *H. brevifolium*); Roça Trás-os-Montes, 1000 m, 1889, *Quintas* 1448 (COI, **type** of *H. brevifolium*).

•*Isopterygium nanoglobum* (Müll.Hal.) Paris

=*Hypnum nanoglobeum* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Bom Sucesso, 1150 m, *Moller* (COI, **isotype** of *Hypnum nanoglobeum*); 1885, *Moller* 23 (H-BR2217-049 **isotype** of *H. nanoglobeum*).

Note: This report (from the Moller's gathering) is the only known locality of this endemic species.

***Lepidopilum lastii* Mitt.**

SAO - Sherrin, 1944; Schultze-Motel, 1975; Bizot & Tixier, 1987; O'Shea, 2006.

Note: This report base on the Exell's gathering, is the only known locality of this species.

***Lepidopilum niveum* (Müll.Hal.) Kindb.**

=*Hookeria niveum* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Potier de la Varde, 1933-1936; Demaret, 1955; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 1800 m, 1885, *Moller* (BM000871444, Müller. label, **type** of *Lepidopilum niveum* ▲); Encostas do Pico de São Tomé, 1800 m, 1885, *Moller 16* (COI, **type** of *Hookeria niveum*); *Moller* (PC BESB7054, **type** of *L. niveum*); Encostas do Pico de São Tomé, 1800 m, 1885, *Quintas?* (COI); 1885, *Quintas 16* (H-BR2275-018, **type** of *H. niveum*).

Leucobryum fouta-djalloni Paris et Cardot

SAO - Potier de La Varde, 1959; Monod, 1960; Schultze-Motel, 1975; O'Shea, 2006.

Specimen: SAO - Pentes nord-ouest du Pico, 1350-1600 m, 1956, *Monod 12224* (PC).

Note: This report corresponding to the Monod's gathering, is the only known locality from São Tomé.

● ***Leucobryum homalophyllum Broth.***

≡ *Leucobryum homalophyllum* Broth. 1890

= *Leucobryum secundifolium* Broth. n. sp. *nom. herb.*

SAO - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - *Quintas* (BM000870301, **isotype** of *Leucobryum homalophyllum* ▲); *Quintas* (PC0073966 BESB1532, Herb. Brotherus, **isotype** of *L. homalophyllum*); *Moller* (COI, sub *L. secundifolium* n. sp. *nom. herb.*).

Note: These reports correspond to the only known localities of this endemic species. The holotype in H-BR herbarium was not found. See *Leucobryum secundifolium* Broth.

● ***Leucobryum leucophanoides Müll.Hal.***

≡ *Leucobryum leucophanoides* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Sherrin, 1944; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Bom Sucesso, 1200 m; encostas do Pico de São Tomé, 1500-210 m, *Moller 10* (COI, **type** of *Leucobryum leucophanoides*); 1885, *Moller 10* (H-BR2352-102 and 2352-103, **type** of *L. leucophanoides*); *Moller* (PC0073955 BESB1521, Herb. Müller, **type** of *L. leucophanoides* Δ).

Note: These reports give the only known locality of this endemic species.

[***Leucobryum secundifolium Broth.***]

Specimen: SAO - *Moller* (COI, **holotype?** of *Leucobryum secundifolium* n. sp. *nom. herb.*)

Note: In a letter expedited by Brotherus to Henriques (01.08.1889, <http://bibdigital.bot.uc.pt/>) he informed him that the initial name of *L. secundifolium* Broth. would be considered to be *L. homalophyllum* Broth., since the first name corresponded to a species from Hawaii.

Leucoloma gracilescens Broth.

≡ *Leucoloma gracilescens* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; Müller, 1996; La Farge, 2002; O'Shea, 2006.

Specimens: SAO - *Quintas* (COI, **isotype** of *Leucoloma gracilescens*); *Quintas* (PC0075771 and PC0075772, Herb. Renault – Herb. Thériot, **isotypes** of *L. gracilescens* ▲).

Note: The probable holotype in H-BR was not found.

Leucoloma secundifolium Mitt.

≡ *Leucoloma secundifolium* Mitt. 1863

SAO - Mitten, 1863; Müller, 1886a; Müller, 1886b; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 1861, *Mann* (BM000870094, **isotypes** of *Leucoloma secundifolium*, rev. C. La Farge 1994 and BM000870093 ▲); *Mann* (PC0075976, Herb. Mitten/Herb. Thériot/Herb. Général; Lagoa Amélia, 1400 m, Bom Sucesso, 1500 m, and Encostas do Pico de São Tomé, 1500-2100 m, 1885, *Moller 9* (COI sub *Dicranum secundifolium* Mitt.); PC0075974, Herb. Cardot/Herb. Général, PC0073748 BESB886 Herb. Brotherus/Herb. Bescherelle); 1150 m, *Moller* (BM, Müller label); *Quintas* (BM, Brotherus label); Cordilheira do Pico, 1400-1600 m, 1888, *Quintas* (COI); Mata da Lagoa Amélia, 1400 m, 1889, *Quintas 1431* (COI).

***Leucomium strumosum* (Hornsch.) Mitt.**

SAO - Sherrin, 1944; Schultze-Motel, 1975; O'Shea, 2006.

Note: This report is the only known locality based on the Exell's gathering of this species in São Tomé.

***Leucophanes molleri* Müll.Hal.**

≡*Leucophanes molleri* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Schultze-Motel, 1975; Salazar Allen, 1993a; Salazar Allen, 1993b; Salazar Allen, 1993c; Müller, 1996; O'Shea, 2006.

Specimens: SAO - Moller (COI, **isotype** of *Leucophanes molleri*, Brotherus label); 1885, Moller (H-BR2466-012, **holotype** of *L. molleri*); 1885, Moller (PC0106651, Herb. Potier de la Varde, PC0106650, Herb. Cardot/Herb. Général, **isotype** of *L. molleri* ▲).

***Leucophanes unguiculatum* Mitt.**

≡*Leucophanes unguiculatum* Mitt. 1863

PRI - Mitten, 1863; Gepp, 1901; Salazar Allen, 1993a; O'Shea, 1997; Heras Pérez & Infante Sánchez, 1999; O'Shea, 2006.

Specimens: PRI - "Prince Island "Bark of oil palms, 1858, *Barter 1922* (BM000726257, BM000726258, **isotypes** of *Leucophanes unguiculatum* ▲); base of palm-trunks, *Welwitsch 200* (BM000726260); base of palm-trunks, *Welwitsch 200* (LISU).

***Lopidium struthiopteris* (Brid.) M.Fleisch.**

=*Hypopterygium subtrichocladum* Broth. 1890

PRI - Kruijjer, 1997.

SAO - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; Kruijjer, 1997; O'Shea, 2006.

Specimens: SAO - *Quintas* (COI, **type** of *Hypopterygium subtrichocladum*).

***Macromitrium sulcatum* var. *sulcatum* (Hook.) Brid.**

=*Macromitrium levatum* Mitt. 1863

=*Macromitrium undatifolium* Müll.Hal. 1886

=*Macromitrium mannii* A.Jaeger?

PRI - Henriques, 1917; Potier de La Varde, 1959; O'Shea, 2006.

SAO - Mitten, 1863; Müller, 1886a; Müller, 1886b; Henriques, 1917; Dixon, 1937; Sherrin, 1944; Potier de La Varde, 1959; Monod, 1960; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: PRI - Face ouest du Pico, 500-600 m, 1956, *Monod 12117* (PC009368) - SAO - *Mann* (PC0093080, sub *Macromitrium mannii* A.Jaeger); São Pedro, montis Café, 1100 m, Bom Sucesso, 1050-1250 m, Pico de São Tomé, 1500-2100 m, *Moller* (COI, **type** of *M. undatifolium*); Bom Sucesso, 1250 m, 1885, *Moller* (BM0000869401, **type** of *M. undatifolium* ▲); Nova Moka, 800 m, *Moller* (COI, **type** of *M. undatifolium*); Cordilheira do Pico, 1600-1700 m, *Quintas* (COI); Trás-os-Montes, 900 m, 1888, *Quintas* (COI, sub *M. undatifolium*); *Quintas* (PC0107975 Herb. Müller/Herb. Bescherelle BESB1928, sub *M. undatifolium*).

*****Mesonodon flavescens* (Hook.) W.R. Buck**

=*Campylodontium africanum* Müll.Hal. *nom. herb.*

Specimens: PRI - Saudade, sobre um cafezeiro, 750 m, 1887, *Newton* (COI, sub *Campylodontium africanum* n. sp. *nom. herb.*).

•*Mittenothamnium leptoreptans* (Broth.) Cardot

=*Microthamnium longisetum* Broth. *nom. herb.*

≡*Microthamnium leptoreptans* Broth. 1890

≡*Mittenothamnium leptoreptans* (Broth.) Card. 1913

SAO - Brotherus, 1890; Cardot, 1913; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimen: SAO - São Tomé: Roça Saudade, 750 m, 1888, *Quintas 1422* (COI, **isotype** of *Microthamnium longisetum* Broth. *nom. herb.*, rev. Buck).

Note: These reports give the only known locality from the Quintas's gathering of this endemic species. Material in H-BR, PC or BM collections was not observed.

***Neckeropsis disticha* (Hedw.) Kindb.**

PRI - Enroth, 1993; O'Shea, 2006.

SAO - Enroth, 1993.

Specimen: PRI- 1881, *Pogge* (H-BR2906-024 sub *Neckera truncata*)

Note: This report corresponds to the recent Enroth's publication based on H-BR collection.

***Octoblepharum albidum* Hedw.**

PRI - Sherrin, 1944; Schultze-Motel, 1975; O'Shea, 2006.

SAO - Potier de La Varde, 1959; Monod, 1960; Schultze-Motel, 1975.

Specimens: PRI - Esperança, c. 350 ft, 1932, *Exell 675* (COI). - SAO - 1888, *Quintas* (COI).

***Orthostichella rigida* (Müll.Hal.) B.H.Allen et Magill**

=*Pilotrichella leptoclada* Müll.Hal. 1886

=*Pilotrichella calomicra* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006; Allen & Magill, 2007.

Specimens: SAO - Encostas do Pico de São Tomé, 1500-2100 m, *Moller* (COI, **islectotype** of *P. leptoclada*); Encostas do Pico de São Tomé, 1500 m, *Moller* (BM000845719, **islectotype** of *P. leptoclada* ▲); *Moller* (PC BESB6460, **islectotype** of *P. leptoclada*). *Quintas* (COI, **isotype** of *Pilotrichella calomicra*); *Quintas* (PC0054560, **isotype** of *P. calomicra*, Brotherus manuscript label Δ).

***Orthostichella versicolor* (Müll.Hall.) B.H.Allen et W.R.Buck**

=*Pilotrichella inflatifolia* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Sherrin, 1944; Potier de La Varde, 1959; Monod, 1960; Schultze-Motel, 1975; Tixier, 1983; O'Shea, 2006; Allen & Magill, 2007.

Specimens: SAO - *Moller* (COI, **type** of *Pilotrichella inflatifolia*); *Moller* (PC BESB6459, **type** of *P. inflatifolia* Δ).

Note: Some references correspond to *Pilotrichella communis* Müll.Hal. ex Dusén that now is a synonym of *O. versicolor*.

[*Orthostichidium involutifolium* subsp. *involutifolium* (Mitt.) Broth.]

SAO - Potier de la Varde, 1959; Monod, 1960; Schultze-Motel, 1975; Ochyra & Pócs, 1986; O'Shea, 2006.

Note: This specimen reported by Potier de La Varde (as *Orthostichidium involutifolium*) based on Monod's collection corresponds to the next taxon.

***Orthostichidium involutifolium* (Mitt.) Broth. subsp. *thomeanum* (Broth.)**

Argent

≡*Hildebrandtiella thomeana* Broth. 1890

≡*Orthostichidium thomeanum* (Broth.) Broth. 1906

PRI - Brotherus, 1890; Henriques, 1917; Sherrin, 1944; Schultze-Motel, 1975; Müller, 1996; O'Shea, 2006.

SAO - Brotherus, 1890; Henriques, 1917; Argent, 1973; Schultze-Motel, 1975; Müller, 1996; O'Shea, 2006.

Specimens: PRI - Esperança, plantation, 1932, *Exell 693* (COI sub *Orthostichidium thomeanum* Broth.). - SAO - 1888, *Quintas* (H-BR2908-010, **holotype** of *Hildebrandtiella thomeana*); *Quintas* (COI, **isotype** of *H. thomeana*); *Quintas* (BM000711499, BM000711500, **isotype** of *H. thomeana* Δ); 1888, *Quintas* (PC Herb. Bizot, as *Orthostichidium thomeana*); (PC BESB6251 Herb. Brotherus/Herb. Bescherelle, **isotype** of *H. thomeana*); Casa del Pico, 1930 m, *Monod 11952* (PC, sub *O. perpinnatum* (Broth.) Dusén).

***Philonotis nanothecia* (Müll.Hal.) Kindb.**

=*Bartramia nanothecia* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 1885, *Moller 3* (H-BR3087-058, **holotype** of *Bartramia nanothecia*); Manuel Jorge circa São Nicolau, 800 m, 1885, *Moller 3* (COI, **isotype** of *B. nanothecia*).

•*Philonotis trichodonta* (Müll.Hal.) Kindb.

=*Bartramia trichodonta* Müll.Hal.1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Sherrin, 1944; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 1885, *Moller 2* (H-BR3084-013, **holotype** of *Bartramia trichodonta*); São Nicolau, 880 m, 1885, *Moller 2* (COI, **isotype** of *B. trichodonta*); São Nicolau, 880 m, *Moller* (BM000870974, **isotype** of *B. trichodonta* ▲); (PC0108858 BESB2764, Herb. Müller/Herb. Bescherelle, **isotype** of *B. trichodonta*).

***Pinnatella minuta* (Mitt.) Broth.**

=*Hypnum africanum* Welw. & Duby

=*Thamnum africanum* (Welw. & Duby) Kindberg

PRI - Henriques, 1917; Enroth, 1994; Müller, 1996; O'Shea, 2006.

SAO - Duby, 1872; Gepp, 1901; Kindberg, 1902; Henriques, 1917; Schultze-Motel, 1975; Enroth, 1994; Müller, 1996; O'Shea, 2006.

Specimens: SAO - Monte Café at an elevation of about 2500 ft., 1860, *Welwitsch 124* (BM000878521, BM000878522, **isosyntypes** of *Hypnum africanum* Welw. & Duby, in a erroneous label as Angola ▲); Monte Café at an elevation of about 2500 ft., 1860, *Welwitsch 124* (LISU, **isosyntype**).

Note: The type designated as lectotype of *Hypnum africanum* Welw. & Duby corresponds to a specimen from Angola (*Musci Angolensis 168*) according to Enroth (1994). However this material (*Welwitsch 168*) is from São Tomé “Montis Caffé”, and certainly corresponds to the type of *H. africanum* ▲.

***Plagiomnium rhynchophorum* var. *rhynchophorum* (Hook.) T.J.Kop.**

SAO - Sherrin, 1944; Schultze-Motel, 1975; O'Shea, 2006.

Note: This report (from the Exell's gathering), is the only known locality on Rio Manuel Jorge. This specimen was not found in COI or BM collections.

***Pogonatum gracilifolium* Besch.**

=*Polytrichum molleri* Müll.Hal. 1886

=*Polytrichum rubenti-viridis* Müll.Hal. 1886

PRI - Sherrin, 1944; Schultze-Motel, 1975.

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Potier de La Varde, 1959; Monod, 1960; Schultze-Motel, 1975; De Sloover, 1986; Ochyra & Sharp, 1988; Hyvönen, 1989; O'Shea, 2006.

Specimens: SAO - Lagoa Amélia, 1400 m, 1885, *Moller* (BM000871099, Müll.Hal. label, part of **holotype** of *Polytrichum rubenti-viride* ▲); Encostas do Pico de São Tomé, 1500-2100 m et prope Lagoa Amélia, 1400 m, 1885, *Moller* (**isotype** of *P. rubenti-viride*); Roça São Nicolau, 820 m, 1885, *Moller* (BM000871100, **isotype** of *P. molleri* ▲); 1300 m, 1909 (BM, sub *Pogonatum gracilifolium* Besch., rev. Sloover 1983); Caminho do Rio Contador, 1450 m, 1888, *Quintas* (COI, sub *P. rubenti-viride*); prop. Cachoeira do rio Manuel Jorge, 850 m, Nova Moka, 800 m, 1885, *Moller* (COI, **isotype** of *P. molleri*); Encostas do Pico de São Tomé, *Moller* (PC0093083, Herb. Renauld); São Tomé (Herb.Müller/Herb. Bescherelle BESB5697, **isotype** of *P. molleri*); São Tomé, *Moller* (PC BESB5700, Herb. Müller/Herb. Bescherelle); between Santa Maria and Jamar, 1932, *Exell 264* (COI, sub *P. rubenti-viride* (Müll.Hal.) Paris); Environs de Casa do Pico, 1930 m, 1956, *Monod 12244 bis* (PC0093084, sub *P. gracilifolium* Besch.).

***Pogonatum usambaricum* (Broth.) Paris**

SAO - Hyvönen, 1989; Müller, 2006; O'Shea, 2006.

***Porothamnium stipitatum* (Mitt.) Touw ex De Sloover**

SAO - De Sloover, 1982; O'Shea, 2006.

Specimen: SAO - Lagoa Amélia, 1400 m, 1975, A. Sérgio 78 (LISU).***Porotrichum elongatum* (Welw. et Duby) A.Gepp**= *Hypnum molleri* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Sherrin, 1944; Schultze-Motel, 1975; De Sloover, 1982; O'Shea, 2006.

Specimens: SAO - Encostas do Pico de São Tomé, 1900 m, *Moller* (COI, of **isotype** *Hypnum molleri*); Encostas do Pico de São Tomé, 1900 m, *Moller* (BM000871277, **holotype** of *H. molleri* ▲); *Moller* (PC BESB6916); Novo Destino, 2500 ft., 1860, *Welwitsch 124* (LISU, sub *Porotrichum quintasii* Broth.).***Porotrichum quintasii* Broth.**= *Porotrichum quintasii* Broth. 1890

SAO - Brotherus, 1890; Gepp, 1901; Kindberg, 1902; Henriques, 1917; Schultze-Motel, 1975; De Sloover, 1982; O'Shea, 2006.

Specimens: SAO - *Quintas* (H-BR3076-019, **holotype** of *Porotrichum quintasii*); Roça Trás-os-Montes, 1700 m, *Quintas* (COI, **isotype** of *P. quintasii*); *Quintas* (PC, **isotype** of *P. quintasii* Δ).**Note:** The sample in LISU from *Welwitsch 124* collection (Gepp, 1901) corresponds to *Porotrichum elongatum*.***Porotrichum substriatum* (Hampe) Mitt.**= *Porotrichum caudatum* Broth. 1890

SAO - Brotherus, 1890; Kindberg, 1902; Henriques, 1917; Schultze-Motel, 1975; De Sloover, 1982; Tixier, 1983; Bizot & Tixier, 1987; O'Shea, 2006.

Specimens: SAO - *Quintas* (H-BR3376-020, **holotype** of *Porotrichum caudatum*); *Quintas* (COI, **isotype** of *P. caudatum*, Brotherus label, rev. De Sloover, 1982); *Quintas* (PC, **isotype** of *P. caudatum* Δ).**Note:** *Porotrichum caudatum* Broth was considered by Buck (1998) to be a synonym of *Porotrichum substriatum* (Hampe) Mitt., a species from Central and South America.***Pyrrhobryum spiniforme* (Hedw.) Mitt.**

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Sherrin, 1944; Potier de La Varde, 1959; Monod, 1960; Schultze-Motel, 1975; Müller, 1996; O'Shea, 2006.

Specimens: SAO - Encostas do Pico de São Tomé, 1500-2100 m, *Moller* (COI, sub *Rhizogonium spiniforme* (L.) Bruch.); Roça Trás-os-Montes, 1200 m, *Quintas* (COI, sub *R. spiniforme*); 1885, *Moller* (H-BR3645-010); 1400 m, *Quintas 18* (H-BR3645-004); 1200 m, *Quintas* (H-BR3645-008).***Racopilum orthocarpioides* Broth.**= *Racopilum orthocarpioides* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Potier de la Varde, 1933-1936; Schultze-Motel, 1975; Tixier, 1983; Bizot & Tixier, 1987; O'Shea, 2006.

Specimens: SAO - *Quintas* (COI, **isotype** of *Racopilum orthocarpioides*); *Quintas* (PC, **isotype** of *R. orthocarpioides* Δ).***Racopilum thomeanum* Broth.**= *Racopilum thomeanum* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; O'Shea, 2006.

Specimen: SAO - Roça Trás-os-Montes, 1200 m, *Quintas* (COI, **isotype?** of *Racopilum thomeanum*).**Note:** This report is the only known locality.***Radulina borbonica* (Bél.) W.R.Buck**= *Trichosteleum subpyncocylindricum* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Cordilheira do Pico, 1700 m, 1888, *Quintas 9* (H-BR4280-006 and 4280-010, **holotype?** of *Trichosteleum subpyncocylindricum*); Roça Trás-os-Montes, 1000 m, *Quintas 1428 (9)* (COI); Cordilheira do Pico, 1888, *Quintas* (COI, **isotype** of *T. subpyncocylindricum*, first as *T. albescens* Broth. n. sp. *nom nud.*); 1888, *Quintas* (PC0098675, **type** of *T. subpyncocylindricum* ▲).

***Rhacopilopsis trinitensis* (Müll.Hal.) E.Britton ex Dixon**

=*Microthamnium subelegantulum* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Roça Trás-os-Montes, 1100 m, *Quintas 1432* (COI, **type** of *Microthamnium subelegantulum*)

***Rhizofabronia persoonii* (Schwägr.) M.Fleisch.**

=*Fabronia persoonii* Schwägr. 1816

SAO - Mitten, 1863; Schultze-Motel, 1975; O'Shea, 2006.

Note: No sample of this taxon from São Tomé was examined in the Mann's collection at BM.

•*Rhynchostegium hopfferi* (Welw. et Duby) A.Gepp

=*Hypnum hopfferi* Welw. & Duby 1872

SAO - Duby, 1872; Gepp, 1901; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Novo Destino, 2500 ft, *Welwitsch 125* (BM0007211503, **isotype** of *Hypnum hopfferi* Welw. et Duby Δ); Novo Destino, 2500 ft, *Welwitsch 125* (LISU **holotype** of *H. hopfferi*).

Note: The Welwitsch's gathering is the only known report of this endemic species.

•*Sematophyllum amblystegiocarpum* (Müll.Hal.) Broth.

=*Hypnum amblystegiocarpum* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Monte Café, 600 m, Nova Moka, 850 m, Bom Sucesso, 1150 m, *Moller* (COI, **type** of *Hypnum amblystegiocarpum*); Nova Moka, 850 m, Bom Sucesso, 1150 m, 1885, *Moller* (BM000871586, **type** of *H. amblystegiocarpum* ▲); *Moller* (PC BESB8509, Herb. Müller/Herb. Bescherelle).

***Sematophyllum* sp.**

Specimen: PRI - Príncipe: O' que Cruz, 1887, *Newton* (COI, sub *Hypnum pallido-virens* Mitt. n. sp. *nom. herb.*).

Note: The original material in COI of *Hypnum pallido-virens* corresponds to *Sematophyllum subpinnatum* group (communicated by Buck).

***Syrhropodon gardneri* (Hook.) Schwägr.**

=*Syrhropodon quintasi* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Potier de la Varde, 1933-1936; Reese, 1974; Schultze-Motel, 1975; Reese, 1974; Reese, 1980; Orbán, 1981; O'Shea, 2006.

Specimens: SAO - "ad corticen arborium", *Quintas* (H-BR3956-006, **holotype** of *Syrhropodon quintasi*); *Quintas* (COI, **isotype** of *S. quintasi*).

***Syrhropodon lamprocarpus* Mitt.**

SAO - Müller, 1886a; Bescherelle, 1891; Müller, 1886b; Henriques, 1917; Potier de la Varde, 1933-1936; Schultze-Motel, 1975; Orbán, 1981; Müller, 1996; O'Shea, 2006.

Specimens: SAO - próximo da Lagoa Amélia, 1350 m, *Moller* (COI); Mata da Lagoa Amélia, 1400 m, 1889, *Quintas 1438* (COI); próximo da Lagoa Amélia, *Moller* (PC0094086, Herb. Müll.Hal.; PC0110214 BESB4195); "*Pintas*" *Quintas* (PC0094085, Herb. Renault and PC0094090, Herb. Cardot).

***Tayloria solitaria* (Hedw.) T.J.Kop et W.Weber**

SAO - Koponen & Weber, 1972; Müller, 1996; O'Shea, 2006.

***Thamnobryum corticola* (Kindb.) De Sloover**

≡*Thamniium corticola* (Broth.) Kindb. 1902

SAO - Kindberg, 1902; Henriques, 1917; De Sloover, 1982; O'Shea, 2006.

Specimen: SAO - Moller (COI, rev. De Sloover 1982, **isolectotype** of *Thamniium corticola*).

Note: This taxon was only reported from São Tomé and Bioko.

***Thuidium involvens* (Hedw.) Mitt. subsp. *thomeanum* (Broth.) Touw**

≡*Thuidium thomeanum* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Potier de la Varde, 1933-1936; Demaret & Leroy, 1949; Schultze-Motel, 1975; Tixier, 1983; Touw, 1976; O'Shea, 2006.

Specimen: SAO - Roça Queluz, 270 m, 1888, *Quintas* (COI, **isotype** of *Thuidium thomeanum*).

Note: *Thuidium involvens* subsp. *thomeanum* was not considered by Touw (2001) to be present in São Tomé.

***Trachypodopsis serrulata* var. *serrulata* (P.Beauv.) M.Fleisch.**

=*Trachypodopsis quintasiana* Broth. in Paris *nom. nud.*

SAO - Henriques, 1917; Brotherus, 1925; Potier de La Varde, 1959; Van Zanten, 1959; Monod, 1960; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - *Quintas 1332* (H-BR4233-027, sub *Trachypodopsis quintasiana* Broth.); Roça Trás-os-Montes, 900 m, 1888, *Quintas 1332* (COI as *Trachypus serrulatus* (Brid.) Besch., *det.* Brotherus manuscript).

Note: *Papillaria pintasiana* Müll.Hal. *nom. nud.* corresponds to a specimen from Cameroon Exs. Musci Afri. i Cam., a P. Dusen [= *Trachypus quintasianus* Müll.Hal. *nom. nud.*]. However, *Trachypodopsis quintasiana* was identified by Brotherus in H-BR. It is interesting to note that, in a letter from Brotherus to Henriques (19.08.1889), he commented "Obs. Selon M. Ch. Müller l'espèce que j'ai nommé *Trachypus serrulatus* (Brid.) Besch. n'est pas cette espèce, mais une espèce nouvelle: *Trachypus quintasi* C. Müll.". However, this species has never been described under this name.

***Trachypus bicolor* Reinw. et Hornsch. var. *viridulus* (Mitt.) Zanten**

=*Papillaria molleri* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Van Zanten, 1959; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Encostas do Pico de São Tomé, 1500 m, *Moller* (BM000871303, **holotype** of *Papillaria molleri*); Encostas do Pico de São Tomé, 1500 m, 1885, *Moller* (COI, **isotype** of *P. molleri*); Encostas do Pico de São Tomé, 1500 m, 1885, *Moller* (PC- BESB6369, **isotype** of *P. molleri* Δ).

[*Trematodon divaricatus* Bruch]

SAO - Schultze-Motel, 1975; O'Shea, 2006.

Note: See note under the next taxon.

*****Trematodon longicollis* Michx.**

=*Trematodon flexifolius* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Sherrin, 1944; Schultze-Motel, 1975; Magill, 1981; O'Shea, 2006.

Specimens: SAO - *Moller* (H-BR4264-012, **holotype** of *Trematodon flexifolius*); Cachoeira do rio Manuel Jorge circa São Nicolau, 850-880 m, *Moller* (BM000870256, **isotype** of *T. flexifolius* ▲); São Tomé, *Moller* (PC0075494, PC0029192 BESB509); Cachoeira do rio Manuel Jorge circa São Nicolau, 850-880 m, 1885, *Moller* (COI, **isotype** of *T. flexifolius*). Also Vanhulst (Macambarará), 4000 ft, 1932, *Exell 411* (BM).

Note: After the study of the material of *Trematodon flexifolius* in COI, we agree with Magill's criteria. This specimen corresponds to *T. longicollis* and not to *T. divaricatus* Bruch.

***Trichosteleum dicranelloides* Broth.**

≡*Trichosteleum dicranelloides* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - 900 m, *Quintas 22* (H-BR4287-011, **holotype** of *Trichosteleum dicranelloides*); Roça Trás-os-Montes, 900 m, 1889, *Quintas 1442* (COI, **isotype** of *T. dicranelloides*, label manuscripted by Brotherus); *Quintas* (PC0098675 ▲).

***Vesicularia glaucula* (Broth.) Broth.**

≡ *Ectropothecium glauculum* Broth. 1890

SAO - Brotherus, 1890; Henriques, 1917; Potier de la Varde, 1933-1936; Schultze-Motel, 1975; Bizot & Tixier, 1987; O'Shea, 2006.

Specimens: SAO - 1400 m, *Quintas 15* (H-BR4342-023, **holotype** of *Ectropothecium glauculum*); Mata da Lagoa Amélia, 1400 m, 1889, *Quintas 1434* (COI, **isotype** of *E. glauculum*); 1400 m, *Quintas 15* (BM000711502, **isotype** of *E. glauculum* Δ); *Quintas* (BESB8984, **isotype** of *E. glauculum*); 900 m, *Quintas* (H-BR4342 036 rev. by Brotherus as *E. glauculum* Broth.)

***Vesicularia scaturigina* (Brid.) Broth.**

PRI - Mitten, 1863; Schultze-Motel, 1975; O'Shea, 2006.

Note: This report based on the Barter's gathering (1858), is the only locality of this species in São Tomé.

*****Vesicularia strephomischos* (Welw. et Duby) Broth.**

≡ *Hypnum strephomischos* Welw. et Duby 1872

≡ *Ectropothecium strephomischos* (Welw. et Duby) A. Gepp

SAO - Gepp, 1901.

Specimens: SAO - Novo Destino at an elevation of 2500 ft., 1860, *Welwitsch 123* (LISU sub *Hypnum subsimplex* nom. herb.).

Note: The type specimen in BM (!) was collected in Angola (*Hypnum strephomischos* Welw. et Duby, Quibanga, 1856, *Welwitsch 179* ▲). Not listed in O'Shea (2006) for São Tomé or Príncipe, but the indication on the label in LISU (*Welwitsch 123*), corresponds to São Tomé and to Gepp's reference.

***Wijkia monodii* (P.de la Varde) H.Akiyama**

≡ *Gollania monodii* P.de la Varde 1959

SAO - Potier de La Varde, 1959; Monod, 1960; Ando, 1973; Akiyama, 2006; O'Shea, 2006.

Specimens: SAO - 1550 m, 1956, *Monod 11845* (PC0106721, **holotype** of *Gollania monodii* P.de la Varde ▲). **Note:** The Monod gathering is the only known locality (Potier de La Varde, 1959) of this species in São Tomé. Akiyama (2006) studied the holotype specimen in PC collection but erroneously included it in Angola "Type: Angola, Sao Tomi, 1550 m". Therefore it is only known from São Tomé and Cameroon.

***Wijkia trichocoleoides* (Müll.Hal.) H.A.Crum**

≡ *Hypnum trichocoleoides* Müll.Hal. 1886

SAO - Müller, 1886a; Müller, 1886b; Henriques, 1917; Schultze-Motel, 1975; O'Shea, 2006.

Specimens: SAO - Encostas do Pico de São Tomé, 1500-2100 m, 1885, *Moller* (BM000871541, **type** of *Hypnum trichocoleoides*, Müll. Hal. label ▲); Encostas do Pico de São Tomé, 1500-2100 m, 1885, *Moller* (COI, **type** of *H. trichocoleoides*); *Quintas* (BM, sub *H. trichocoleoides*, Brotherus label); *Quintas* (COI, sub *H. trichocoleoides*); Cordilheira do Pico, 1400-1600 m, 1888; *Quintas* (COI, sub *H. Trichocoleoides*, det. Brotherus); Mata da Lagoa Amélia, 1400 m, 1889, *Quintas 1439* (COI, sub *H. trichocoleoides*); São Tomé (PC BESB8342).

Hepatics and Hornworts

[*Aneura pinguis* (L.) Dumort. sens. lat.]

PRI - Stephani, 1888; Jones, 1956; Wigginton & Grolle, 1996; Wigginton, 2009.

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1901; Henriques, 1917; Jones, 1956; Meenks & Pócs, 1985; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Note: See note under the next taxon.

*****Aneura pseudopinguis* (Herzog) Pócs**

Specimens: PRI - O'que Cruz, 1887, *Newton* (COI sub *Aneura latissima* Spruce). - SAO - Novo Destino, about 2500 ft, 1860, *Welwitsch 267* (BM, sub *A. latissima* Spruce); Novo Destino, about 2500 ft, *Welwitsch 267* (LISU, sub *A. pinguis*); Nova Moka, 900 m, 1885, *Moller 57a and 57b* (COI, sub *A. pinguis*); *Quintas* (BM); 1888, *Quintas* (COI, sub *A. latissima* Spruce).

Note: All *Aneura* recorded in São Tomé correspond to this taxon. The plants identified by Stephani as *A. latissima* Spruce actually are also *A. pseudopinguis*, as was suggested by Wigginton, 2004a.

***Anthoceros pinnatus* Steph.**

≡ *Anthoceros pinnatus* Steph. 1886

≡ *Aspiromitus pinnatus* (Steph.) Steph. 1916

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1891; Stephani, 1895; Stephani, 1912-1917; Henriques, 1917; Nicholson, 1944; Wigginton & Grolle; Sérgio, 1987; Hasegawa, 1995; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - São Nicolau, 820 m, *Moller 55* (G00128029 and G00128030, **types** of *Anthoceros pinnatus* ▲); Cachoeira do Rio Manuel Jorge, 800 m, 1885, *Moller 33, 55a, 55b* (COI, **isotypes** of *A. pinnatus*); 1888, *Quintas* (COI and G).

Note: The type material, *Moller 55*, in BM (BM000890131) is impossible to confirm if it corresponds to this species. However, the type material in COI and G corresponds to this species. It is a very interesting and rare *Anthoceros* related to *A. caucasicus* Steph. (Sérgio, 1987).

***Archilejeunea africana* Steph.**

PRI - Müller *et al.*, 2000; Wigginton, 2004a; Wigginton, 2004b; Wigginton, 2009.

Note: At this moment the only known locality was reported by Jones based on the Therold's collection made in "Pico do Príncipe" (Müller *et al.*, 2000).

****Bazzania decrescens* subsp. *molleri* (Steph.) E.W.Jones**

≡ *Mastigobryum molleri* Steph. 1886

≡ *Bazzania molleri* (Steph.) Steph. 1891

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1891; Stephani, 1905-1909; Henriques, 1917; Nicholson, 1944; Vanden-Berghen, 1972; Vanden-Berghen, 1973; Jones, 1975; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: PRI - *Quintas* (BM). - SAO - São Tomé, 1885, *Moller* (G00069212, **type** of *Mastigobryum molleri* ▲); encostas do Pico de São Tomé, 1500 m, 1885, *Moller 8 and 9* (COI, **types** of *B. molleri*); 1888, *Quintas* (COI); Mata da Lagoa Amélia, 1400 m, 1889, *Quintas 1431 and 1435* (COI); encostas do Pico de São Tomé, 1500 m, *Moller* (BM, **isotype** of *B. molleri*); *Quintas* (BM, 3 specimens).

***Brachiolejeunea laxifolia* (Taylor) Schiffn.**

≡ *Brachiolejeunea thomeensis* Steph. 1912

SAO - Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, 1951; Slageren, 1985; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - 1885, *Moller* (G00045078, **type** of *Brachiolejeunea thomeensis* ▲).

Note: Slageren (1985) made *Brachiolejeunea thomeensis* Steph. a synonym of *B. laxifolia* (Taylor) Schiffn, however, it is a *taxon* restricted to the Neotropics and South America (Gradstein, 1994). Wigginton (2009) mentioned it as a dubious *taxon*. However, the type specimen of *B. thomeensis* Steph in G. was revised by Slageren (1985) as *B. laxifolia*. It is a much reduced specimen and very difficult to confirm the identification, so it will be necessary to see new collections.

***Calypogeia afrocaerulea* E.W.Jones**

SAO - Jones, 1976; Váña *et al.*, 1979; Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimen: SAO - *Quintas* (BM, sub *Calypogeia bidentula* Nees).

[*Calypogeia fissa* (L.) Raddi]

SAO - Bischler, 1970; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Note: The *Quintas* collection is the only known material and Jones (1976) noted "... an inadequate specimen, but probably *C. afrocerulea*". See previous *taxon*.

***Caudalejeunea africana* (Steph.) Steph.**

Specimen: SAO - *Quintas* (BM, sub *Caudalejeunea africana*).

Note: The *Quintas*'s material stored in BM is the only record in this Island.

***Caudalejeunea hanningtonii* (Mitt.) Schiffn.**

PRI - Müller *et al.*, 2000; Wigginton, 2009.

SAO - Müller *et al.*, 2000; Wigginton, 2009.

Note: The only two known localities were observed recently from the Therold's collection made in Príncipe and in São Tomé (Müller *et al.*, 2000).

***Cephalozia connivens* subsp. *fissa* (Steph.) Váña**

PRI - Váña, 1988; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

SAO - Váña, 1988; Wigginton, 2009.

***Ceratolejeunea calabariensis* Steph.**

PRI - Vanden-Berghen, "1959" 1960; Wigginton & Grolle, 1996; Wigginton, 2009.

SAO - Wigginton, 2004a.

Specimen: SAO - *Quintas* (BM, sub *Ceratolejeunea jungneri* Steph.).

*****Ceratolejeunea fallax* (Lehm. et Lindenb.) Bonner**

SAO - Bonner, 1953.

•*Ceratolejeunea floribunda* Steph.

≡*Ceratolejeunea floribunda* Steph. 1913

SAO - Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, 1951; Bonner, 1953; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimen: SAO - 1888, *Quintas* (G00045191, **type** of *Ceratolejeunea floribunda* ▲).

[*Ceratolejeunea umbonata* Steph.]

SAO - Wigginton, 2004a.

Note: According to Wigginton, 2004a, the presence in São Tomé needs to be confirmed.

[*Cheilolejeunea intertexta* (Lindenb.) Steph.]

SAO - Wigginton, 2004a.

Note: The presence of this *taxon* was reported by Wigginton (2004a) from São Tomé. However, it was not listed for São Tomé in the last Checklist (Wigginton, 2009)

[*Cheilolejeunea longiflora* (Taylor) R.M.Schust.]

SAO - Stephani, 1912-1917; Wigginton & Grolle, 1996; Wigginton, 2004b.

Note: Although it was reported from São Tomé Island by the above cited authors, its presence on this Island is doubtful (Wigginton & Grolle, 1996, Wigginton, 2009).

***Cheilolejeunea montagnei* (Gottsche) R.M.Schust.**

≡*Euosmolejeunea thomeensis* Steph. 1914

SAO - Mitten, 1863; Stephani, 1912-1917; Jones, 1954a; Pócs, 1993; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - Pico de São Tomé *Moller* (G00069336, G00069339, G00069340, **types** of *Lejeunea thomeensis*, Herb. Stephani ▲); 1888, *Quintas* 275 (G00069337 and G00069338 **types** of *L. thomeensis* ▲); encostas do Pico de São Tomé, 1600- 2120 m, 1885, *Moller* 12 (COI, sub *L. grandistipula* Steph.); *Quintas*, 1888 (COI, sub *L. trifaria*).

***Cheilolejeunea newtonii* Steph. ex Schiffn.**

≡*Lejeunea newtonii* Steph. *nom. herb.*

≡*Cheilolejeunea newtonii* Steph. 1888

PRI - Stephani, 1888; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

SAO - Stephani, 1912-1917; Wigginton, 2004a.

Specimens: PRI - 1887, *Newton* (G00112878, G00112879, **types** of *Lejeunea newtonii* ▲); O'que Cruz, 1887, *Newton* (COI, **isotype** of *L. newtonii*).

***Cheilolejeunea serpentina* (Mitt.) Mizut.**

=*Cheilolejeunea principensis* Steph. ex Paris 1888, *nom. inval.*

PRI - Stephani, 1888; Jones, 1954b; Grolle, 1979; Wigginton & Grolle, 1996; Wigginton, 2009.

SAO - Stephani, 1912-1917.

Specimens: PRI - Sundy, 1887, *Newton 2* (COI, **isotype** of *Cheilolejeunea principensis*); *Newton* (G00060668, **isotype** of *C. principensis* ▲); 1887, *Newton 1* (G00060667, **holotype** of *C. principensis* ▲).

***Cheilolejeunea trifaria* (Reinw. et al.) Mizut.**

=*Lejeunea grandistipula* Steph. 1886

=*Euosmolejeunea grandistipula* (Steph.) Steph. 1914

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1912-1917; Henriques, 1917; Jones, 1954a; Heras & Infante, 1996; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - 1885, 800 m, *Moller 25* (G00069264, **type** of *Lejeunea grandistipula* ▲); Nova Moka, 800 m, 1885, *Moller 25* (COI, **type** of *L. grandistipula*); Pico, 1885, 1120 m, *Moller 12* (G00069332, **type** of *L. grandistipula* ▲).

Note: Some material reported as *Lejeunea grandistipula*, such as *Moller 12* stored in COI, corresponds to *Cheilolejeunea montagnei* but can be different from G material, which needs to be revised.

***Chiloscyphus coadunatus* (Sw.) J.J.Engel et R.M.Schust.**

PRI - Mitten, 1863; Stephani, 1888; Stephani, 1891

Note: The only report corresponds to the *Mann* collection but the gathering was not found in BM or NY herbaria. The nomenclature seems uncertain and *C. latifolius* (Nees) J.J.Engel et R.M.Schust. might be the correct name for this taxon in Africa according to Wigginton (2009).

***Chiloscyphus difformis* (Nees) J.J.Engel et R.M.Schust.**

=*Lophocolea difformis* Nees 1845

=*Lophocolea molleri* Steph. 1886

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1905-1909; Henriques, 1917; Jones, 1953b; Vanden-Berghen, "1959" 1960; Vanden-Berghen, 1972; Fischer, 1993; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - Nova Moka, 950 m, 1885, *Moller 14* (G00045368 **type** of *Lophocolea molleri* ▲); Nova Moka, 950 m, 1885, *Moller 14* (COI, **isotype** of *L. molleri*).

***Chiloscyphus martianus* (Nees) J.J.Engel et R.M.Schust.**

=*Lophocolea martiana* Nees 1845

=*Lophocolea newtonii* Steph. 1907

PRI - Stephani, 1905-1909; Jones, 1953b; Vanden-Berghen, 1972; Fischer, 1993; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: PRI - *Newton 11* (G00045369, **type** *Lophocolea newtonii* ▲); O'que S. João, 1887, *Newton 11* (COI, sub *Lophocolea connata* (Sw.) Nees). - SAO - Mata da Lagoa Amélia, 1889, *Quintas 1427* (COI, sub *Lophocolea dusenii* Steph.).

Note: The type of *Lophocolea newtonii* from Príncipe in G was confirmed. However the first name to COI material of the *Newton 11* is *L. connata*, a species considered "excludenda" from Africa (Grolle 1995), as it is a species from Tropical America (Gradstein & Costa, 2003).

***Cololejeunea africana* (Steph.) R.M.Schust.**= *Physocolea africana* Steph. 1916

SAO - Stephani, 1912-1917; Jones, 1953a; Jones & Harrington, 1983; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimen: SAO - 1889, Moller (G00066860, **type** of *Physocolea africana* ▲).*****Cololejeunea marginata* (Lehm. & Lindenb.) Schiffn.**

SAO - Jones & Harrington, 1983.

Note: Not reported by Wigginton (2004b; 2009) for São Tomé.***Cololejeunea leloutrei* (E.W.Jones) R.M.Schust.**

SAO - Vanden-Berghen, "1959" 1960; Arnell, 1962; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Note: No material of this taxon from São Tomé was examined. However it was gathered by Monod in three localities (Vanden-Berghen, "1959" 1960).***Cololejeunea obliqua* (Nees et Mont.) Schiffn.**= *Cololejeunea crenatiflora* Steph. 1891= *Leptocolea crenatiflora* Steph. 1915

SAO - Stephani, 1891; Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, "1959" 1960; Vanden-Berghen, 1972; Tixier, 1995; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - *Quintas* (G00045208, **type** of *Cololejeunea crenatiflora* ▲); *Quintas* (BM000890144, with *Iconogr.* Stephani, BM000890145, Herb. Stephani, **type** of *C. crenatiflora*); Angolares, *Newton*, 1888 (COI, Stephani label).**Note:** *Cololejeunea crenatiflora* is an uncertain synonym. According to Jones the two taxa are strongly related but probably not conspecific. Grolle (1995) accepted the synonymy with doubt.***Cololejeunea zenkeri* (Steph.) E.W.Jones**PRI - Müller *et al.*, 2000.**Note:** The only known locality, from Therold's collection was reported recently.***Colura digitalis* (Mitt.) Steph.**

PRI - Jovet-Ast, 1957; Vanden-Berghen, "1959" 1960; Wigginton & Grolle, 1996; Wigginton, 2004a.

SAO - Jovet-Ast, 1957; Jovet-Ast, 1957; Monod, 1960; Vanden-Berghen, 1972; Wigginton & Grolle, 1996; Wigginton, 2009.

Note: No material of this taxon from São Tomé e Príncipe was found in PC.***Colura tenuicornis* (A. Evans) Steph.**

SAO - Jovet-Ast, 1957; Monod, 1960; Arnell, 1965; Wigginton & Grolle, 1996; Wigginton, 2009.

***Conoscyphus trapezioides* (Sande Lac.) Schiffn.**= *Lophocolea devexa* Mitt. 1863

SAO - Mitten, 1863; Stephani, 1905-1909; Henriques, 1917; Jones & Harrington, 1983; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - *Mann* (NY00713634, **holotype** of *Lophocolea devexa*); 1861, *Mann* (BM, **type** of *L. devexa*).***Cyathodium cavernarum* Kunze**= *Cyathodium africanum* Mitt.

SAO - Jones, 1952; Vanden-Berghen, 1972; Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2009.

***Dendroceros crispatus* Nees**

SAO - Mitten, 1863; Wigginton, 2009.

Note: We could not find any material from Mann's collection in NY, nor in BM. It has been reported from only one locality, and this material needs to be revised.

***Diplasiolejeunea cavifolia* Steph.**

=*Lejeunea cavifolia* Steph. 1886, *hom. illeg.* [non (Ehrh.) Lindb.]

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, 1960; Vanden-Berghen, 1960; Arnell, 1965; Tixier, 1995; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimen: SAO - Monte Café, 700 m, 1885, *Moller 7a* (G00069081, type of *Diplasiolejeunea cavifolia* ▲).

***Drepanolejeunea cultrella* (Mitt.) Steph.**

=*Drepanolejeunea mollerii* Steph. 1913

SAO - Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, "1959" 1960; Vanden-Berghen, 1972; Tixier, 1995; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - *Moller* (G00045229, **type** of *Drepanolejeunea mollerii* ▲); Pentes NW du Pico, 1956, *Monod 12223* (PC0093077).

***Drepanolejeunea physaefolia* (Gottsche) Steph.**

=*Prionolejeunea fissistipula* Steph. 1913

=*Drepanolejeunea "claviformis" clavicormis* Steph. 1913

PRI - Vanden-Berghen, "1959" 1960; Pócs, 1993; Wigginton & Grolle, 1996; Buchbender & Fischer, 2004; Wigginton, 2004a.

SAO - Stephani, 1896; Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, "1959" 1960; Pócs, 1993; Wigginton & Grolle, 1996; Buchbender & Fischer, 2004; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - *Moller 346* (G00045632, **type** of *Drepanolejeunea clavicormis* ▲); *Quintas* (G00112088, **holotype** of *Prionolejeunea fissistipula* ▲).

***Dumortiera hirsuta* (Sw.) Nees**

PRI - Vanden-Berghen, "1959" 1960.

SAO - Stephani, 1886a; Stephani, 1898-1900; Henriques, 1917; Nicholson, 1944; Vanden-Berghen, "1959" 1960; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - Encostas do Pico de São Tomé, 1500-2100 m, 1885, *Moller 31* (COI); *Moller 31* (BM); Vanhulst (Macambarará), 1932, *Exell 105* (BM); Vanhulst (Macambarará), *Exell 443* (COI); vers 1400 m, 1956, *Monod 11849* (PC0093076); prés dune Cascade, 1956, *Monod 12042bis* (PC0093075).

*****Folioceros incurvus* (Steph.) D.C.Bharadwaj**

=*Anthoceros incurvus* Steph. 1893

Specimens: PRI - 1888, *Quintas* (BM000890130 and COI sub *A. pinnatus* Steph.). - SAO - Colina do Rio Abade, 1889, *Quintas 1450* (COI, sub *A. tenuissimus* Steph.); *Newton* (BM000890132, sub *A. pinnatus* Steph.); *Quintas* (BM000890135, BM000890133 p.p, sub *A. pinnatus* Steph.); Vanhulst, 1200 m, 1932, *Exell 406* (BM, sub *A. pinnatus* Steph.).

Note: The majority of São Tomé specimens in BM and COI were first identified as *Anthoceros pinnatus* Steph., or *A. tenuissimus* Steph.

***Frullania angulata* Mitt.**

=*Frullania subatrata* Steph. 1911

=*Frullania cordifolia* Steph. 1911

SAO - Mitten, 1863; Stephani, 1909-1912; Henriques, 1917; Vanden-Berghen, 1976; Tixier, 1995; Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - Pico 1950 m, 1885, *Moller* (COI, sub *F. atrata* Nees not *Frullania atrata* Dumort.); Pr. Lagoa Amélia, 1400 m, 1885, *Moller 44*, (COI, sub *F. atrata* Nees); *Moller 44* (G00069008, **type** of *F. subatrata* ▲); 1885, *Moller 24* (G00069006, **type** of *F. subatrata* ▲); Monte Café, 1885, *Moller 24* (COI, sub *F. atrata* Nees); Roça Bom Sucesso, 1885, *Moller 48* (G00069002, **type** of *F. subatrata* ▲); Roça Bom Sucesso, 1200 m, 1885, *Moller 48* (COI, sub *F. atrata* Nees); 1888, *Quintas* (COI, sub *F. atrata* Nees); *Quintas* (G00067924, G00045247 **types** of *F. cordifolia* ▲).

Note: In COI collections the type specimen of *Frullania cordifolia* Steph. does not exist. On the other hand the material in COI corresponds to the first identification of these plants labelled as *F. atrata* Nees, and, afterwards, Stephani (1911) described it as a new species (*Frullania subatrata* Steph.).

***Frullania apicalis* Mitt.**

=*Frullania laceriloba* Steph. 1911

SAO - Stephani, 1909-1912; Henriques, 1917; Vanden-Berghen, 1976; Fischer, 1993; Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimen:

SAO - (G00045284, **type** of *F. lacericola* ▲).

***Frullania arecae* (Spreng.) Gottsche**

=*Frullania thomeensis* Steph. 1910

SAO - Stephani, 1909-1912; Henriques, 1917; Vanden-Berghen, 1976; Fischer, 1993; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - *Quintas* (G0045310, **type** of *F. thomeensis*); Nova Moka, 900 m, 1885, *Moller 34* (COI, sub *F. ecklonii* Spreng.); Bom Sucesso, 1100 m, 1885, *Moller 26* (COI, sub *F. ecklonii* Spreng.); *Quintas* (COI, sub *F. hians*).

Note: Quintas's collection of *F. thomeensis* Steph. (G00045310) is revised as *Frullania arecae*.

***Frullania caffraria* Steph.**

=*Frullania molleri* Steph. 1894 (Probably synonym)

SAO - Stephani, 1894; Stephani, 1909-1912; Henriques, 1917; Vanden-Berghen, 1976; Wigginton & Grolle, 1996; Wigginton, 2004a.

Specimens: SAO - *Moller inter 45* (G00045290, **type** of *F. molleri* ▲); 1888, *Quintas* (COI, sub *M. capensis*).

Note: The revised type material of *Frullania molleri* Steph. in G is a very reduced specimen, and is almost certainly *F. caffraria*.

***Frullania diptera* (Lehm.) Drège**

SAO - Stephani, 1886a; Stephani, 1886b; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimen: SAO - Cachão Grande, 1885, *Moller 18* (COI).

Note: The two specimens of Monte Café, *Moller 64* (COI) identified as *Frullania diptera*, correspond to *Frullania spongiosa* Steph., a species considered to have a critical occurrence in São Tomé (see note under this species). However the specimen from Cachão Grande is *F. diptera*.

[*Frullania ecklonii* (Spreng.) Gottsche et al.]

SAO - Stephani, 1886a; Stephani, 1886b; Wigginton & Grolle, 1996; Wigginton, 2009.

Note: The majority of the material in COI identified by Stephani as *Frullania ecklonii* corresponds to *F. arecae* (Spreng.) Gottsche, while the remaining one corresponds to *F. riojaneirensis* (see specimen lists under these species). The presence of *F. ecklonii* in São Tomé needs to be confirmed.

***Frullania ericoides* (Nees) Mont.**

PRI - Mitten, 1863; Stephani, 1888; Wigginton & Grolle, 1996; Wigginton, 2009.

SAO - Stephani, 1886a; Stephani, 1886b.

Specimens: PRI - Sundy, 1887, *Newton* (COI, sub *Frullania squarrosa* Nees). - SAO - Bate-pá, 550 m, 1885, *Moller 42* (COI, sub *F. squarrosa*).

***Frullania obscurifolia* Mitt.**

SAO - Eggers et al., 2004; Wigginton, 2009.

***Frullania purpurea* Steph.**

SAO - Vanden-Berghen, 1976; Jones & Harrington, 1983; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimen: SAO - Nova Moka, 900 m, 1885, *Moller 20* (COI sub *Frullania serrata* Gottsche); *Moller 20* (G16772).

***Frullania riojaneirensis* (Raddi) Ångstr.**

=*Frullania africana* Steph. 1891

PRI - Vanden-Berghen, 1976; Tixier, 1983; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

SAO - Stephani, 1891; Stephani, 1909-1912; Henriques, 1917; Vanden-Berghen, 1976; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - São Nicolau, 950 m, 1885, *Moller 11* (COI, **type** of *F. africana*); 1885, *Moller 38* (G00045270, **type** of *F. africana* ▲); *Moller* (BM000890139, **type** of *F. africana* with *Iconogr.* Stephani BM000890143); *Quintas* (BM000890138, BM000890137, sub *F. africana*; Rodia?, 1885, *Moller 38* (COI, sub *F. ecklonii* Spreng.); Monte Café, 700 m, 1885, *Moller 6* (COI, sub *F. ecklonii*).

***Frullania serrata* Gottsche**

SAO - Stephani, 1886a; Stephani, 1886b; Henriques, 1917; Vanden-Berghen, "1959" 1960; Vanden-Berghen, 1976; Fischer, 1993; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - Nova Moka, 850 m, 1885, *Moller 19* (COI); Saudade 750 m, 1885, *Moller 21a* (COI); Bom Sucesso, 1250 m, 1885, *Moller 43* (COI); Bom Sucesso, 1100 m, 1885, *Moller 62* (COI); *Quintas* (COI, Stephani label).

*****Frullania spongiosa* Steph.**

Specimen: SAO - Monte Café, 600-500 m, 1885, *Moller 64* (COI, sub *Frullania diptera*).

Note: See note under *Frullania diptera*.

[*Herbertus juniperoideus* (Sw.) Grolle]

SAO - Mitten, 1863.

Note: The only known report corresponds to a Barter's gathering, but the specimen was not found in BM. On the other hand Grolle (1995) listed it as an "excludendum" taxon.

****Herbertus dicranus* (Taylor ex Gottsche, Lindenb. et Nees) Trevis.**

=*Sendtnera mollis* Steph. 1886

=*Herbertus mollis* (Steph.) Dusén

SAO - Stephani, 1886a; Stephani, 1886b; Henriques, 1917; Arnell, 1965; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2004b; Wigginton, 2009; Hodgetts, 2008.

Specimens: PRI - Príncipe, *Quintas* (BM).

SAO - Pico São Tomé, 1500-2100 m, *Moller 23* (G00045602, **type** of *Sendtnera mollis* ▲); Encostas do Pico de São Tomé, 1885, *Moller 23* (COI, **type** of *S. mollis*); Pico, 2100 m, *Moller 23* (BM000745048, **isotype** of sub *H. mollis*); Newton (BM, sub *Sendtnera mollis* Steph. forma *major*).

****Heteroscyphus dubius* (Gottsche) Schiffn.**

PRI - Stephani, 1888; Stephani, 1905-1909; Jones, 1953b; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: PRI - O'que Cruz, 1887, *Newton* (COI). - SAO - Roça Trás-os-Montes, 1889, *Quintas 1429* (COI).

Note: First locality in São Tomé Island, as up to now it only had been reported from Príncipe.

***Heteroscyphus spectabilis* (Steph.) Schiffn.**

=*Isotachis perfoliata* Steph. 1886

=*Chiloscyphus thomeensis* Steph. 1893 *nom. nud.*?

SAO - 1886a; Stephani, 1886b; Stephani, 1893; Stephani, 1905-1909; Henriques, 1917; Váña, 1982; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - Bom Sucesso, 1150 m, 1885, *Moller 15b* (G00045207, **type** of *I. perfoliatus* ▲); Bom Sucesso, 1885, *Moller* (COI, **isotype** of *I. perfoliatus*); *Moller* (BM, **isotype** of *Chiloscyphus thomeensis*).

***Jungermannia dusenii* (Steph.) Steph.**

SAO - Váña, 1974; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2004b; Müller, 2006; Wigginton, 2009.

Note: The only known collection was observed by Váña from the Moller's gathering, however without indication of locality (communicated by Váña). This species has been only reported from São Tomé, Cameroon and recently from Bioko (Müller, 2006).

***Lejeunea caespitosa* Lindenb.**

PRI - Jones, 1972; Wigginton & Grolle, 1996; Wigginton, 2004a.
SAO - Jones, 1972; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimen: PRI - 1200 ft, 1853, *Welwitsch 263* (LISU sub *Eulejeunea jungeri* Steph.)

[*Lejeunea eckloniana* Lindenb.]

SAO - Wigginton, 2004a.

Note: Reported from Gulf of Guinea Islands without indication of localities or island.

***Lejeunea flava* (Sw.) Nees**

PRI - Stephani, 1888.

SAO - Vanden-Berghen, "1959" 1960; Wigginton & Grolle, 1996.

Specimen: PRI - Sundy, 1887, *Newton* (COI, with *Lejeunea principensis*). - SAO - *Quintas* (COI); Lagoa Amélia, 1400 m, *Monod 11787* (PC0093074).

***Lejeunea grossecristata* (Steph.) E.W.Jones**

≡ *Hygrolejeunea grossecristata* Steph. 1896

≡ *Taxilejeunea longirostris* Steph. 1914

SAO - Stephani, 1896; Stephani, 1912-1917; Henriques, 1917; Jones, 1968; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimen: SAO - *Moller 45 pp.* (G0004532, **type** of *Hygrolejeunea grossecristata* ▲); Bom Sucesso, 1250 m, 1885, *Moller 52 and 36* (G00045612 and G10396, **types** of *Taxilejeunea longirostris* ▲).

***Lejeunea ramosissima* Steph.**

≡ *Lejeunea ramosissima* Steph. 1886

≡ *Taxilejeunea ramosissima* (Steph.) Steph. 1914

PRI - Wigginton & Grolle, 1996; Wigginton, 2004a.

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1912-1917; Henriques, 1917; Jones, 1967; Jones & Harrington, 1983; Pócs, 1993; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - Pico de São Tomé, 1885, *Moller 36* (G00067870, **type** of *L. ramosissima* ▲); Pico de São Tomé, 1850 m, 1885, *Moller 36* (COI, **type** of *L. ramosissima*); Monte Café, 750 m, 1885, *Moller 5* (COI, **type** *L. ramosissima*); Bom Sucesso, 1250 m, 1885, *Moller 52* (COI, **type** *L. ramosissima*).

***Lejeunea setacea* (Steph.) Steph.**

PRI - Jones, 1969; Vanden-Berghen, 1972; Wigginton & Grolle, 1996; Wigginton, 2004a.

SAO - Jones, 1969; Vanden-Berghen, 1972; Wigginton & Grolle, 1996; Wigginton, 2009.

Note: The only available data correspond to Therold's collections from Príncipe and São Tomé Islands (Jones, 1969).

***Lejeunea tabularis* (Spreng.) Gottsche et al.**

PRI - Jones, 1968; Vanden-Berghen, 1972; Wigginton & Grolle, 1996; Wigginton, 2009.

Note: The only known collection is in the Geneve herbarium (G 10772) and was observed by Jones from the Quintas's gathering.

***Lepidozia succida* Mitt.**

≡ *Sprucella succida* (Mitt.) Steph. 1891

SAO - Stephani, 1891; Stephani, 1905-1909; Henriques, 1917; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - Vale do Abade, 750 m, 1889, *Quintas 1437* (COI, sub *Sprucella succida*); *Quintas* (G, sub *S. succida*).

***Leptolejeunea epiphylla* (Mitt.) Steph.**

= *Lejeunea quintasii* Steph. 1891

SAO - Stephani, 1891; Henriques, 1917; Stephani, 1912-1917; Vanden-Berghen, 1953; Vanden-Berghen, "1962" 1963; Arnell, 1965; Tixier, 1995; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - 1888, *Quintas* (G00045354, **type** *Leptolejeunea quintasii* ▲); Angolares, 1888, *Newton* (COI, sub *L. quintasii* mixed with *L. crenatiflora* Steph.).

***Leptolejeunea maculata* (Mitt.) Schiffn.**

= *Lejeunea thomeensis* Steph. 1886

= *Leptolejeunea thomeensis* (Steph.) Steph. 1913

= *Drepanolejeunea gomphiae* Steph. 1913

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, "1959" 1960; Vanden-Berghen, "1962" 1963; Vanden-Berghen, 1972; Grolle, 1976; Tixier, 1995; Wigginton & Grolle, 1996; Wigginton, 2004b; Wigginton, 2009.

Specimens: SAO - *Moller* (G00069336 and G00069339 **types** of *Lejeunea thomeensis* ▲); *Moller* (G00069340, **type** of *L. thomeensis* ▲); Pico S. Tomé, 1888, *Quintas* (G00069337, G00069338, **type** of *L. thomeensis*); 1889, "Moller" *Quintas* (G00045225 **type** of *Drepanolejeunea gomphiae* ▲).

Note: The type in Geneve herbarium is reported in ALUKA data base, as the Moller's gathering was certainly made by Quintas because the date is 1888.

Marchantia pappeana* Lehm. subsp. *pappeana

= *Marchantia planiloba* Steph. 1886

SAO - Stephani, 1886a; Stephani, 1886b; Henriques, 1917; Nicholson, 1944; Vanden-Berghen, "1959" 1960; Vanden-Berghen, 1972; Jones & Harrington, 1983; Bischler-Causse, 1993; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - 1885, *Moller 56* (G00069322, G00069320 **types** of *M. planiloba* ▲); *Moller 56* (BM, **isotype** of *M. planiloba*, rev. Bischler, 1999); 1885, *Moller 56* (COI, **type**); Cachoeira do rio Manuel Jorge, *Moller 32* (G00069321, **type** sub *M. planiloba* ▲); Cachoeira do Rio Manuel Jorge, 800 m, 1885, *Moller 32* (COI, **types** of *M. planiloba*); *Quintas*, 1888 (Herb. Stephani, G00069323, not type ▲); Santa Maria, 1300 m, 1888, *Quintas* (COI sub *M. planiloba*); 1888, *Quintas* (BM, rev. Bischler 1999); 1903, *Henriques* (COI and BM, rev. Bischler, 1999); Vanhulst (Macambarará), 1200 m, 1932, *Exell 408* (BM, rev. Bischler, 1991); au dessus de Monte Café, 1010 m, 1956, *Monod* (PC0093073, rev. Bischler 1991); Monte Café, 690 m, 1956, *Monod* (PC, sub "*M. parviloba* Steph."); au dessus de Cascata, 1200 m, 1956, *Monod* (PC, sub "*M. parviloba* Steph."); NW du Pico, 1956, *Monod* (PC0093072).

*****Marchantia debilis* Goebel**

Specimens: SAO - S. Nicolau et Nova Moka, 850 m, 1885, *Moller* (COI sub *Marchantia pappeana*); 1903, *Henriques* (COI sub *M. planiloba* with *Dumortiera hirsuta*); between Santa Maria and Jamar, 4000 ft, 1932, *Exell 262* (COI, sub *M. planiloba*).

Note: This species was identified during the revision of the *Marchantia* material from São Tomé in COI. Some material comes from the same locality as *M. pappeana*, but it is a very distinct species.

****Marchesinia excavata* (Mitt.) Schiffn.**= *Homalolejeunea henriquesii* Steph. 1888≡ *Homalolejeunea excavata* (Mitt.) Steph. 1912

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1888; Stephani, 1891; Henriques, 1917; Stephani, 1912-1917; Vanden-Berghen, 1948, Vanden-Berghen, 1973; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: PRI - *Quintas* (BM, Stephani label, sub *Homalejeunea excavata*); O' que Nazareth, 1887, *Newton 14* (COI, sub *L. excavata*). - SAO - *Moller 60* (BM, Stephani label, sub *H. excavata*); *Quintas* (BM, Stephani label, sub *Lejeunea excavata*); Bom Sucesso, 1250 m; 1885, *Moller* (COI, sub *Phragmicoma excavata* Mitt.); Encostas do Pico São Tomé, 1950 m, 1885, *Moller 61* (COI, sub *P. Excavata*); Encostas do Pico São Tomé, 1700-2100 m, 1885, *Moller 10* (COI, sub *P. excavata*); Bom Sucesso, 1250 m, 1885, *Moller 51* (COI, sub *P. excavata*); Nova Moka, 900 m, 1885, *Moller 59* (COI, sub *P. excavata*); Santa Maria, 1885, *Moller 1330 pp.* (COI, sub *Marchesinia?*); 1888, *Quintas* (COI, Herb. Stephani, with *Mastigobryum molleri*); Roça Trás-os-Montes, 1889, *Quintas 1429c* (COI, sub *H. excavata*).

Note: The types of Moller (60, 61) as *Homalolejeunea henriquesii* Steph. are in G (G00069000, G00066628 and G00068999 ▲), although they are labelled as *P. excavata* Mitt.

****Mastigolejeunea auriculata* (Wilson) Schiffn.**

SAO - Stephani, 1909-1912; Henriques, 1917; Vanden-Berghen, 1949; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimen: PRI - O' que S. João, 1887, *Newton* (COI, sub *Marchesinia* sp.).

Note: It is the first report from Príncipe Island. No other specimen of this taxon in G or in COI was studied.

***Mastigolejeunea florea* (Mitt.) Paris**PRI - Müller *et al.*, 2000; Wigginton, 2004a; Wigginton, 2009.

Note: At this moment the only known locality was reported by Jones from the Therold's collection made in Pico do Príncipe (Müller *et al.*, 2000).

***Mastigolejeunea nigra* Steph.**≡ *Lejeunea nigra* Steph. 1891≡ *Brachiolejeunea nigra* Steph. 1912

SAO - Stephani, 1891; Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, 1951; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - *Quintas* (G00045073, **holotype** of *Brachiolejeunea nigra* ▲); Santa Maria, 1350 m, 1888, *Quintas* (COI, **isotype?** of *Lejeunea nigra*).

***Mastigolejeunea turgida* Steph.**

PRI - Jones & Harrington, 1983; Wigginton & Grolle, 1996; Wigginton, 2009.

SAO - Stephani, 1909-1912; Henriques, 1917; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

***Mastigophora diclados* (Brid. ex F.Weber) Nees**≡ *Sendtnera diclados* (Brid. ex F.Weber) Endl. ex Gottsche *et al.*

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1891; Nicholson, 1944; Vanden-Berghen, 1973; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - Encostas do Pico de São Tomé, 1950 m, 1885, *Moller 27* (BM, sub *M. diclados*); Encostas do Pico de São Tomé, 1500-2100 m, 1885, *Moller 27b* (COI, sub *Sendtnera diclados*); Bom Sucesso, 1100 m, 1885, *Moller 27a* (COI, sub *S. diclados*); Bom Sucesso, 1250 m, 1885, *Moller 49 and 50* (COI); Santa Maria, 4500, 1932, *Exell 388a* (BM and COI, sub *M. diclados*).

*****Metzgeria albinea* Spruce**

SAO - Costa, 2008.

Note: At this moment this is the only report from this island. No specimens were seen, although it was indicated as an Afro-American species by Costa (2008). Not reported by Wigginton (2009).

***Metzgeria furcata* (L.) Dumort.**= *Metzgeria thomeensis* Steph. 1891

PRI - So, 2004; Wigginton, 2004a.

SAO - Stephani, 1891; Stephani, 1898-1900; Henriques, 1917; Nicholson, 1944; Vanden-Berghen, 1948; Vanden-Berghen, "1959" 1960; Wigginton & Grolle, 1996; So, 2002; So, 2004; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - *Quintas* (G00067171, **holotype** of *Metzgeria thomeensis* ▲); 1888, *Quintas*, (G00045416, **isotype** sub *M. thomeensis* ▲; 1888, *Quintas* (COI, **isotype** of *M. thomeensis*, Stephani label); *Quintas* (BM, **isotype** of *M. thomeensis*); Vanhulst (Macambrará), 1050-1200 m, 1932, *Exell 108a* (BM, sub *M. thomeensis*).***Metzgeria leptoneura* Spruce**= *Metzgeria recurva* Steph. 1886

PRI - So, 2004; Wigginton, 2004a.

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1898-1900; Henriques, 1917; Vanden-Berghen, 1948; Vanden-Berghen, "1959" 1960; Wigginton & Grolle, 1996; So, 2004; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - Pico de São Tomé, 1500-2100 m, 1885, *Moller 29* (G00069331 **type** of *Metzgeria recurva* ▲); Pico de São Tomé, S. Nicolau, 1500-2100 m, 1885, *Moller 29* (COI, **type** of *M. recurva*; 1885, *Moller 29* (BM, **type** of *M. recurva*, rev. So); *Quintas* (G); S. Nicolau, 1885, *Moller* (COI); S. Nicolau, 950 m, 1885, *Moller 29a* (COI, sub *M. recurvata*); 1888, *Quintas* (COI, sub *M. recurva*).***Microlejeunea africana* Steph.**= *Microlejeunea africana* Steph. 1888PRI - Stephani 1888; Stephani, 1891; Jones, 1969; Vanden-Berghen, 1972; Tixier, 1995; Wigginton & Grolle, 1996; Wigginton, 2004a; Ah-Peng *et al.*, 2005.SAO - Stephani, 1891; Henriques, 1917; Jones, 1953a; Vanden-Berghen, 1965; Vanden-Berghen, 1972; Jones & Harrington, 1983; Wigginton & Grolle, 1996; Wigginton, 2004b; Ah-Peng *et al.*, 2005; Wigginton, 2009.**Specimen:** SAO - *Newton* (G00066791, **type** of *Microlejeunea africana* ▲).***Microlejeunea kamerunensis* Steph.**= *Microlejeunea cochlearifolia* Steph. 1888

PRI - Jones, 1990; Wigginton & Grolle, 1996; Wigginton, 2004a.

SAO - Stephani 1888; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimen: SAO - *Quintas* (G00045409, **isotype** of *Microlejeunea cochlearifolia* ▲).***Odontolejeunea lunulata* (F.Weber) Schiffn.**= *Odontolejeunea thomeensis* Steph.

PRI - Wigginton, 2004a.

SAO - Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, "1959" 1960; Vanden-Berghen, 1972; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - *Moller 7* (G00069003 **type** of *Odontolejeunea thomeensis* ▲); *Monod 11774* (PCPC0093071, sub *Odontolejeunea tortuosa* (Lehm. & Lindenb.) Steph.).***Pallavicinia lyellii* (Hook.) Carruth.**= *Pallavicinia pilifera* Steph. 1891

SAO - Stephani, 1891; Stephani, 1898-1900; Henriques, 1917; Vanden-Berghen 1965; Vanden-Berghen, 1972; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - *Quintas* (G00069342, G00069343 **types**, sub *Pallavicinia pillifera*, rev. Grolle 1984); 1888, *Quintas 88* (G00069341 sub *P. pilifera* ▲); 1888, *Quintas* (COI, **type** of *P. pilifera*); *Quintas* (BM, **isotype** of *P. pilifera*).

*****Phaeoceros carolinianus* (Michx.) Prosk.**

Specimens: SAO - *Quintas* (BM, sub *A. pinnatus* Steph.).

Note: We identified this species during the revision of São Tomé hornworts material in BM herbarium.

Plagiochila barteri* Mitt. var. *barteri

=*Plagiochila triangularis* Steph. 1886

=*Plagiochila quintasii* Steph. 1904

PRI - Jones, 1962; Vanden-Berghen, 1973; Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2004a. .

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1891; Stephani, 1901-1906; Henriques, 1917; Vanden-Berghen, "1959" 1960; Jones, 1962; Vanden-Berghen, 1973; Pócs, 1993; Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: PRI - *Newton* (BM, sub *Plagiochila quintasii*, Stephani label); - SAO - 1885, *Moller 60* (G00045535, **type** of *Plagiochila triangularis* ▲); Bom Sucesso, 1100 m, 1885, *Moller 60* (COI, **type** *P. triangularis*); 1888, *Quintas*, (G00113040, G00113041, G00113042, G00113051 and G00045507, **types** of *P. quintasii* ▲); Bom Sucesso, 1885, *Moller 13* (G00068966 **type** of *Plagiochila triangularis* ▲); Bom Sucesso, 1885, *Moller 13a and 13b* (COI, **type** of *P. triangularis* Steph., Stephani label); Bom Sucesso, *Moller* (BM, **type** of *P. triangularis*); *Quintas* (BM, **type** of *P. quintasii*); Encostas do Pico 1500-2100 m, 1885, *Moller 1* (COI, sub *Plagiochila thomeensis*); 1888, *Quintas* (COI, sub *P. calva* (Nees) Lindenb.).

Note: The specimen in COI identified by Stephani as *P. calva* (Nees) Lindenb. included by Wigginton (2009) as *Excludenda*, corresponds to *Plagiochila barteri*.

***Plagiochila barteri* var. *valida* (Steph.) Vanden-Berghen**

PRI - Vanden-Berghen, C. 1981; Wigginton, 2004a.

SAO - Vanden-Berghen, C. 1981; Wigginton, 2009.

Specimen: SAO - 1888, *Quintas* (COI, sub *Plagiochila mauritiana* (Nees) Lindenb.).

***Plagiochila brunneola* Steph.**

≡*Plagiochila brunneola* Steph. 1904

SAO - Stephani, 1901-1906; Henriques, 1917; Jones, 1962; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - 1888, *Quintas 435* (G00045449, **type** of *Plagiochila brunneola* ▲).

Note: The only known material corresponds to a Quintas's gathering (in G) but without mention of the locality. On the other hand, Jones (1962) included this taxon as "omitted species" and considered that it could belong to the *Cauliflorae* group.

[*Plagiochila divergens* Steph. var. *capensis* (Steph.) E.W.Jones]

SAO - Jones, 1962; Wigginton & Grolle, 1996.

Note: The only material that can be this taxon corresponds to Quintas 429 gathering (G1864). However Jones (1962) included it in another taxon that seems to be a member of the same complex "it resembles *P. fusifera* or a plant derivative of *Plagiochila divergens*". See note under *P. fusifera*.

****Plagiochila flabellata* Steph.**

≡*Plagiochila flabellata* Steph. 1886

=*Plagiochila molleri* Steph. 1886

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1901-1906; Henriques, 1917; Jones, 1962; Vanden-Berghen, C. 1981; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2004b; Wigginton, 2009; Müller, 2006.

Specimens: PRI - *Quintas* (BM, Stephani label, sub *Plagiochila molleri*).

SAO - 1885, *Moller 2* (G00069325, G00069324, G00069326 and G00069327 **types** ▲); 1888, *Quintas* (G003754, Herb. Stephani, sub *P. molleri*); 1885, *Moller 2b* (COI, **type** of *P. molleri*); Bom Sucesso, 1200 m, *Moller* (BM, Stephani label, **type** of *P. molleri*); *Moller* (BM, Stephani label, Herb. Besherele, **type** of *P. molleri*); Bom Sucesso, 1885, *Moller 3* (G00045473 and G00045474 **type**

of *P. flabellata* ▲); Bom Sucesso, 1885, *Moller 3* (COI, sub *P. flabellata*); 1888, *Quintas* (COI, Stephani label, sub *P. molleri*); Roça de Trás-os-Montes, 1889, *Quintas 1429d* (COI, sub *P. molleri*); Encostas do Pico São Tomé, 1885, *Moller 190* (G00069329 **type** of *P. molleri* ▲); Encostas do Pico São Tomé, 1100 m, 1500-2100 m, 1885, *Moller* (COI, sub *P. molleri*).

Note: *Plagiochila molleri* Steph. was considered by Jones (1962) probably a synonym of *Plagiochila flabellata* or a form of *P. praemorsa* Steph.

***Plagiochila fusifera* Taylor**

=*Plagiochila amplifolia* Steph. 1901

SAO - Stephani, 1901-1906; Henriques, 1917; Jones, 1962; Wigginton, 2004a.

Specimens: SAO - *Quintas 464* (G00069310, **type** of *Plagiochila amplifolia* ▲); *Quintas* (BM, Stephani label, **isotype** of *P. amplifolia*).

Note: After the examen of the material of *P. amplifolia* Steph. in BM collection, we agree with Jones (1962) who sinonymised *P. amplifolia* Steph. with *P. fusifera* Taylor.

•*Plagiochila gibbiflora* Steph.

≡*Plagiochila gibbiflora* Steph. 1904

SAO - Stephani, 1901-1906; Henriques, 1917; Jones, 1962; Wigginton & Grolle, 1996; Wigginton, 2009.

Note: The original report based on Quintas's gathering is the only known locality of this endemic species. The type specimen is located in G (G00045477 ▲). This specimen needs to be revised.

***Plagiochila integerrima* Steph.**

≡*Plagiochila integerrima* Steph. 1886

PRI - Stephani, 1901-1906.

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1901-1906; Henriques, 1917; Jones, 1962; Vanden-Berghen, 1972; Vanden-Berghen, C. 1981; Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: PRI - *Newton* (BM, sub *Plagiochila flagellaris* Steph.); Sundy, 1887, *Newton 12* (COI, sub *Plagiochila* sp.).

SAO - Nova Moka, 1885, *Moller 40* (G00045484, G00068954 and G00068953, **holotype** and **types** of *P. integerrima* ▲); Nova Moka, 900 m, 1885, *Moller 40* (COI, **isotype** of *P. integerrima*); *Moller 54* pp. (BM, sub *P. flagellaris*); Rodia, 570 m, 1885, *Moller 39* (COI, sub *P. sarmentosa* Lehm, Moller label); Novo Destino, 1860, *Welwitsch 266* (LISU sub *Jungermannia*).

****Plagiochila loloensis* Steph.**

=*Plagiochila rotundifolia* Steph. 1904 *hom. illeg.* [non Colenso 1888]

SAO - Stephani, 1901-1906; Henriques, 1917; Jones, 1962; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: PRI - *Newton 402* (G, sub *Plagiochila rotundifolia*). - SAO - 1888, *Quintas* (G00045516, **type** of *P. rotundifolia* ▲).

***Plagiochila moenkemeyeri* Steph.**

SAO - Jones, 1962; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Note: The single report of this *Plagiochila*, based on Roumeguère's 188 gathering, was given by Jones (1962) based on a specimen in Genève herbarium.

*****Plagiochila neckeroidea* Mitt.**

=*Plagiochila curvatifolia* Steph.

SAO - Stephani, 1901-1906; Henriques, 1917.

Specimen: PRI - O' que S. João, *Newton 9* (COI, sub *Plagiochila securifolia*).

Note: Not listed in Wigginton (2009) for São Tomé or Príncipe Islands. However, Stephani indicated this taxon for São Tomé under the name *Plagiochila curvatifolia* Steph. We have also seen it in a specimen from Príncipe in COI.

***Plagiochila pectinata* Willd. ex Lindenb.**

SAO - Vanden-Berghen, "1959" 1960; Jones, 1962; Pócs, 1993; Wigginton & Grolle, 1996; Wigginton, 2009.

Note: The only material that can correspond to this taxon (sub *P. comorensis* Steph.) is Monod's 11788 gathering (in BM) according to Jones (1962).

***Plagiochila praemorsa* Steph.**

=*Plagiochila cacuminis* Steph. 1918

PRI - Stephani, 1888.

SAO - Stephani, 1917-1925; Jones, 1962; Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - 1886, *Moller* (G00045453, **type** of *Plagiochila cacuminis* ▲); Cordilheira do Pico, 1700 m, 1888, *Quintas* (COI, sub *P. flabellata*).

***Plagiochila sarmentosa* (Lehm. et Lindenb.) Lindenb.]**

SAO - Stephani, 1886a; Stephani, 1886b.

Note: The only material identified as *P. sarmentosa* in studied collections (*Rodia*, *Moller* 39, COI) corresponds to *P. integerrima* Steph. Jones (1962) did not indicate *P. sarmentosa* for São Tomé.

***Plagiochila strictifolia* Steph.**

PRI - Jones, 1962; Vanden-Berghen, 1972; Wigginton & Grolle, 1996; Wigginton, 2004a.

SAO - Henriques, 1917; Jones, 1962; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: PRI - *Newton 10* (G, Stephani label); O' que Cruz, 1887, *Newton 10* (COI, sub *P. praemorsa* Steph.). - SAO - *Quintas* (BM, Stephani label).

****Plagiochila terebrans* Nees et Mont. ex Lindenb.**

=*Plagiochila thomeensis* Steph. 1886

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1901; Stephani, 1901-1906; Henriques, 1917; Nicholson, 1944; Jones, 1962; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: PRI - *Newton* (BM, sub *Plagiochila thomeensis*).

SAO - Bom Sucesso, 1885, *Moller 2 and 46* (G00068936, G00068939, G00068940, G00068945, **types** of *P. thomeensis*); Lagoa Amélia, 1885, *Moller 47* (G00068937, **type** *P. thomeensis* ▲); Lagoa Amélia, 1350 m, 1885, *Moller 47* (COI, **type** *P. thomeensis*); Encostas do Pico São Tomé, 1885, *Moller* (BM, **type** of *P. thomeensis*, rev. Jones); *Moller* (BM, herb. Bescherelle, sub *P. thomeensis*); Monte Café, 1885, *Moller* (COI sub *P. thomeensis*); Bom Sucesso, 1200 m, 1885, *Moller 40a and 46* (COI, sub *P. thomeensis*); Bom Sucesso, 1250 m, 1885, *Moller 48* (COI, sub *P. thomeensis*); Encostas do Pico São Tomé, 2000 m, 1885, *Moller 67* (COI, **type?** of *P. thomeensis*); 1888, *Quintas* (COI, det. Stephani, sub *P. thomeensis*); *Quintas* (BM, sub *P. thomeensis*); 1050-1200 m, 1932, *Exell 98, 157, 175* (BM, sub *P. thomeensis*); Vanhulst (Macambará), 3500-4000 ft, 1932; *Exell 175* (COI, sub *P. thomeensis*).

Note: The majority of the material identified as *Plagiochila thomeensis* by Stephani corresponds to *P. terebrans* Nees & Mont. However, *Moller 1*, in COI is *P. barteri* Mitt.

***Plagiochila tricuspis* Steph.**

=*Plagiochila tricuspis* Steph. 1921

SAO - Stephani, 1917-1925; Jones, 1962; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimen: SAO - *Moller 23* (G00045536, **type** of *Plagiochila tricuspis* ▲).

Note: The only known material corresponds to *Moller's 23* gathering but without mention of the locality. On the other hand, Jones (1962) included this taxon as "omited species". The holotype of *P. tricuspis* Steph. in G needs to be studied, but according to Jones it is a not well developed sample.

[*Plagiochila winteri* Steph.]≡*Plagiochila winteri* Steph. 1902

SAO - Henriques, 1917; Stephani, 1901-1906; Jones, 1962.

Note: It can correspond to *Plagiochila strictifolia* Steph. or *P. moenkemeyeri* Steph. (Jones, 1962). So the original material of Stephani herbarium in G (G00068962 ▲) needs to be revised.***Pleurozia gigantea* (F.Weber) Lindb.**SAO - Mitten, 1863; Stephani, 1909-1912; Henriques, 1917; Arnell, 1965; Váña *et al.*, 1979; Thiers 1993; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.***Plicanthus hirtellus* (F.Weber) R.M.Schust.**

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1905-1909; Henriques, 1917; Wigginton & Grolle, 1996; Váña & Watling, 2004; Wigginton, 2004b; Wigginton, 2009.

Specimens: SAO - Bom Sucesso, 1100 m, 1885, *Moller 32a* (COI, sub *Jungermannia hirtella* F.Weber.); *Moller 32a* (BM, sub *Chandonanthus hirtellus* Mitt.); *Quintas* (COI, sub *J. hirtella*).**[*Porella capensis* (Gottsche) Mitt.]**

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1895.

Note: All studied material in COI identified as *Porella capensis* corresponds to *Porella subdentata* (Mitt.) E.W.Jones var. *subdentata* or var. *camerunensis* E.W.Jones. See next taxon.***Porella subdentata* (Mitt.) E.W.Jones var. *subdentata***= *Madotheca thomeensis* Steph. 1910

PRI - Jones, 1963; Hodgetts, 1997; Wigginton & Grolle, 1996; Wigginton, 2004a. SAO - Stephani, 1909-1912; Henriques, 1917; Nicholson, 1944; Jones, 1963; Vanden-Berghen, 1972; Hodgetts, 1997; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: PRI - Newton (BM, sub *Madotheca subdentata* Mitt.) - SAO - 1861, Mann (BM, sub *M. subdentata*); *Moller 18* (G00045566, **holotype** of *M. thomeensis* ▲); 1889, *Quintas* (COI sub *M. subdentata*); Roça Trás-os-Montes, 1889; *Quintas 1444* (COI, sub *M. subdentata*); Vanhulst (Macambará), 1932, *Exell 104* (COI); *Quintas* (BM, sub *M. subdentata*); Bom Sucesso, 1885, *Moller 1b and 66* (COI, sub *Madotheca capensis* Gottsche); São Nicolau e Nova Moka, 950 m, 1885; *Moller 30* (COI, sub *M. capensis*); São Nicolau, 950 m, 1885, *Moller* (COI, sub *M. capensis*); *Moller 2c* (COI, sub *M. capensis*).*****Porella subdentata* var. *camerunensis* E.W.Jones****Specimens:** SAO - *Moller 58* (BM, sub *M. subdentata*); Nova Moka, 900 m, 1885, *Moller 58* (COI, sub *M. capensis*); Bom Sucesso, 1150 m, 1885, *Moller 15a and 15b* (COI, sub *M. capensis*).***Prionolejeunea grata* (Gottsche) Schiffn.**

PRI - Vanden-Berghen, "1959" 1960; Vanden-Berghen, 1973; Wigginton & Grolle, 1996; Wigginton, 2004a.

SAO - Vanden-Berghen, "1959" 1960; Vanden-Berghen, 1973; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Note: The species was collected by Monod in Príncipe and São Tomé Islands.**●*Prionolejeunea principensis* Vanden-Berghen**≡*Prionolejeunea principensis* Vanden-Berghen "1959" 1960

PRI - Vanden-Berghen, "1959" 1960; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2004b; Wigginton, 2009; Müller & Pócs, 2007.

Specimens: PRI - Face W du Pico, 1956, *Monod 12158* (PC0078896, **isotype** of *P. principensis*, rev. Borges 2003); Face W du Pico, 1956, *Monod 12158* (of **type** *P. principensis*, IFAN31829 ▲).

***Radula appressa* Mitt.**= *Radula angustata* Steph. 1886= *Radula molleri* Steph. 1910

PRI - Stephani, 1909-1912; Jones, 1977; Yamada, 1993; Wigginton, 2004a.

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1909-1912; Henriques, 1917; Castle, 1966; Castle, 1968; Jones, 1977; Yamada, 1993; Wigginton & Grolle, 1996; Wigginton, 2004; Wigginton, 2009.

Specimens: SAO - Monte Café, 750 m, 1885, *Moller 5a* (G00043615, **type** of *R. angustata* ▲); Monte Café, 750 m, 1885, *Moller 5a* (COI, **isotype** of *R. angustata*); *Moller 47 and 67* (G00066806, G00066805, **types** of *R. molleri* ▲); *Newton* (G00066804 sub *R. molleri* ▲).***Radula boryana* (F.Weber) Mont.**= *Radula tamariscina* Mitt. 1863= *Radula fusciorufa* Steph. 1924

PRI - Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2004a.

SAO - Mitten, 1863; Stephani, 1886a; Stephani, 1886b; Stephani, 1891; Stephani, 1909-1912; Henriques, 1917; Stephani, 1917-1925; Castle, 1966; Castle, 1968; Müller, 1996; Wigginton & Grolle, 1996; Grolle, 2001, Wigginton, 2004a; Wigginton, 2009.

Specimens: PRI - *Quintas* (BM, sub *Radula bipinnata* Mitt.). - SAO - *Mann* (NY737543, **holotype** of *R. tamariscina*, rev. Grolle 2002); encostas do Pico de São Tomé, 1885, *Moller 17* (COI, sub *R. bipinnata*); Lagoa Amélia, Bacia do Rio Contador, 1300 m, 1885, *Moller 65* (COI, sub *R. bipinnata*); *Moller* (BM, sub *R. bipinnata*).**Note:** We have studied the holotype of *R. tamariscina* in NY herbarium.***Radula flaccida* Lindenb. et Gottsche**

PRI - Castle, 1939; Castle, 1968; Vanden-Berghen, 1972; Wigginton, 2004a.

SAO - Castle, 1939; Vanden-Berghen, "1959" 1960; Castle, 1968; Vanden-Berghen, 1972; Wigginton & Grolle, 1996; Wigginton, 2004; Wigginton, 2009.

Specimens: PRI - *Quintas* (BM, sub *Radula epiphylla* Mitt.). - SAO - 1888, Angolares, *Newton* (COI, sub *R. epiphylla*); NW du Pico, 1350-1600 m, 1956, *Monod* (PC0093070); *Moller* (BM, sub *R. epiphylla*).***Radula fulvifolia* (Hook.f. et Taylor) Gottsche et al.**

PRI - Grolle, 2001; Wigginton, 2004a; Wigginton, 2009.

Note: Grolle (2001) observed the specimen collected by Newton (G27396) sub *Radula tamariscina*.***Radula stenocalyx* Mont.***Radula tubiflora* Steph. "tubaeflora" 1910

SAO - Stephani, 1909-1912; Henriques, 1917; Arnell, 1963; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Note: Specimen G (G00067875 ▲) is the type of *Radula tubiflora* from Cameroon. In the original description it is indicated "Hab. Insula San Thomé, Kamerun".***Riccardia amazonica* (Spruce) Schiffn. ex Gradst.**

SAO - Wigginton, 2004a.

Specimens: SAO - Roça Trás-os-Montes, 1000 m, 1889, 1445 (COI, sub *Aneura stephanii* Besch. ex Steph.).**Note:** It was reported to be present in São Tomé only in Jones's Flora of West Africa (Wigginton, 2004a).***Riccardia erosa* (Steph.) E.W.Jones**= *Aneura erosa* Steph. 1891

SAO - Stephani, 1891; Stephani, 1898-1900; Henriques, 1917; Jones, 1956; Meenks & Pócs, 1985; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - *Quintas* 7 (G00067552, **type** of *Aneura erosa* ▲); *Quintas* (BM, **type** of *A. erosa*); Roça Trás-os-Montes, 1000 m, *Quintas 1429* (COI, sub of *Aneura stephanii* Besch.).

***Riccardia limbata* (Steph.) E.W.Jones**

SAO - Stephani, 1898-1900; Henriques, 1917; Vanden-Berghen, “1959” 1960; Meenks & Pócs, 1985; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - Masambara, 1000 m, *Quintas* (COI, sub *Aneura reticulata* Steph.); Colina do Rio Abade, 1300 m, 1889, *Quintas 1436* (COI, sub *A. limbata*); Roça Trás-os-Montes, 1000 m, *Quintas 1446* (COI, sub *A. reticulata*).

[*Riccia fluitans* L.]

SAO - Stephani, 1886a; Stephani, 1886b; Henriques, 1917; Wigginton & Grolle, 1996; Wigginton, 2009.

Note: See note under the next taxon.

*****Riccia stricta* (Lindenb.) Perold**

Specimens: SAO - Nova Moka, 950 m, Bacia do Rio Contador, 1885, *Moller 28* and *53* (COI, sub *Riccia fluitans* L.); Nova Moka, 900 m, 1885, *Moller 54* (COI); São Nicolau, 950 m, 1885, *Moller* (COI); Mina do Rio Abade, 1888, *Quintas* (COI); 1889, *Quintas 1430* (COI, sub *R. fluitans* L.); *Moller* (BM, sub *R. fluitans* L.); *Quintas* (BM, sub *Ricciella fluitans* L., rev. Perold 1990).

Note: All material reported as *R. fluitans* are *R. stricta*. Some specimens are fertile and the spores correspond to *R. stricta* according to Perold criterio (1990).

***Schiffneriolejeunea occulta* (Steph.) Gradst.**

Specimen: SAO - *Moller* (G, sub *Acrolejeunea occulta* Steph.).

Note: Not reported in Wigginton (2009) from São Tomé. It was collected by Moller, since there is a specimen in G under this name but this specimen needs to be revised.

Schiffneriolejeunea pappeana* (Nees) Gradst. var. *pappeana

=*Ptychocoleus quintasii* Steph. 1912

SAO - Stephani, 1912-1917; Henriques, 1917; Jones, 1954c; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Note: Jones (1954c) observed in G the original material from Quintas's collection (G00069071, **holotype** of *Ptychocoleus quintasii* ▲).

***Schiffneriolejeunea polycarpa* (Nees) Gradst.**

=*Ptychanthus pauciplicatus* Steph. *nom. herb.*

=*Phragmicoma amplexens* Steph. 1886

=*Phragmicoma molleri* Steph. 1886

=*Lejeunea amplexens* (Steph.) Steph. 1890

=*Acrolejeunea molleri* (Steph.) Paris 1906

=*Ptychocoleus molleri* (Steph.) Steph. 1913

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1912-1917; Henriques, 1917; Vanden-Berghen, 1948; Arnell, 1962; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - Bom Sucesso, 1885, *Moller 22* (COI, **type** of *Phragmicoma amplexens*); *Moller 21b* (BM, sub *Lejeunea amplexens*, rev. Gradstein); Saudade, 1885, *Moller 21* (COI, **isotype** of *L. amplexens*); *Moller 41* (G00045435, **holotype** of *Acrolejeunea molleri* ▲); Bate-pá, *Moller 41* (BM, **isotype** *Phragmilejeunea molleri*, rev. Gradstein); Bate-pá, 550 m, *Moller 41* (COI, **isotype** sub *Ptychanthus pauciplicatus* Steph. *nom. herb.*).

***Solenostoma borgenii* (Gottsche ex Pearson) Steph.**

≡*Jungermannia borgenii* Gottsche ex Pearson 1893

SAO - Vânia, 1974; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Note: The only known collection was observed by Vânia from the Moller's gathering, however, without indication of locality (information confirmed by Vânia).

***Stenolejeunea acuta* (Mitt.) Tixier**= *Hygrolejeunea patellirostris* Steph. 1896= *Lejeunea pulcherrima* Steph. 1914

PRI - Vanden-Berghen, "1959" 1960; Wigginton, 2004a.

SAO - Stephani, 1886a; Stephani, 1886b; Stephani, 1891; Stephani, 1912-1917; Henriques, 1917; Nicholson, 1944; Vanden-Berghen, "1959" 1960; Vanden-Berghen, 1961; Vanden-Berghen, 1972; Tixier, 1995; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Specimens: SAO - *Moller 51* (G00045325, **type** of *H. patellirostris*); Bom Sucesso, 1885, *Moller 35* (G00045342, **syntype** of *L. pulcherrima* ▲); Bom Sucesso, 1885, *Moller 35* and *45* (COI, **isotypes** of *L. pulcherrima*); Lagoa Amélia, 1885, *Moller 63* (G00045343, **syntype** of *L. pulcherrima* ▲); 1885, *Moller 45* (G00045344, **syntype** of *L. pulcherrima* ▲); Lagoa Amélia, 1885, *Moller* (COI); Monte Café, 1885, *Moller 4* (G00045341, G00045340, **syntype** and **type** of *L. pulcherrima* ▲); Monte Café, 1885 *Moller 4* (COI); Monte Café & Bom Sucesso, *Moller 4* and *45* (BM, **isotypes** *L. pulcherrima*); *Quintas* (COI, sub *L. pulcherrima*); Santa Maria, 1932, *Exell 197* (BM).

***Symphogyna* sp.**

SAO - Nicholson, 1944.

Note: The only known record of *Symphogyna* in São Tomé corresponds to Exell's gathering (Vanhulst-Macambrará, 1050-1200 m, in virgin forest, 1932). This specimen was not found in BM nor in COI collections.

***Szygiella geminifolia* (Mitt.) Steph.**= *Jungermannia geminifolia* Mitt. 1863SAO - Mitten, 1863; Henriques, 1917; Arnell, 1965; Jones, 1976; Váňa *et al.*, 1979; Müller, 1996; Wigginton & Grolle, 1996; Wigginton, 2009.

Specimens: SAO - 1861, *Mann* (NY737502, **holotype** of *Jungermannia geminifolia*, *rev.* Grolle 1976); 1861, *Mann* (BM, **isotype** of *J. geminifolia*).

[*Szygiella securifolia* (Nees in Lindenb.) Inoue]

PRI - Stephani, 1888; Váňa & Piippo, 1989; Wigginton & Grolle, 1996; Wigginton, 2004a; Wigginton, 2009.

Note: According to Wigginton (2004a) *Szygiella securifolia* (Nees in Lindenb.) Inoue "is almost certainly erroneous". The material in COI (Príncipe Island, O' que S. João, 1887, *Newton 9*), under *Plagiochila securifolia* Nees is *P. neckeroidea* Mitt. See previous taxon.

[*Taxilejeunea conformis* (Mont. et Nees) Steph.]= *Eulejeunea jungneri* Steph.?

PRI - Stephani, 1901.

Specimen: PRI - In rather elevated parts of the island, about 1200 ft, 1853, *Welwitsch 263* (BM, sub *Eulejeunea jungneri* Steph.).

Note: This material in BM needs to be revised as in LISU the *Welwitsch 263* collection corresponds in great part to *Lejeunea caespitosa* Lindenb. See this latter species.

***Telaranea nematodes* (Gottsche ex Austin) M.Howe**= *Lepidozia quintasii* Steph. 1922

SAO - Stephani, 1917-1925; Wigginton & Grolle, 1996; Wigginton, 2004a; Engel & Smith Merrill, 2004; Wigginton, 2009.

Specimen: SAO - *Quintas* (G00115912, **holotype** of *Lepidozia quintasii* ▲).

Note: Engel & Merrill (2004) include some comments in the taxonomic treatment of *Arachniopsis coactilis* and the specimen of *Lepidozia quintasii* in G herbarium.

Synonymes**Mosses**

- Acanthocladium trichocoleoides* (Müll.Hal.) Broth. = *Wijkia trichocoleoides* (Müll.Hal.) H.A.Crum
- Bartramia nanothecia* Müll.Hal. = *Philonotis nanothecia* (Müll.Hal.) Kindb.
- Bartramia trichodonta* Müll.Hal. = *Philonotis trichodonta* (Müll.Hal.) Kindb.
- Brachymenium molleri* (Müll.Hal.) Kindb. = *Brachymenium subuliferum* (Mitt.) A.Jaeger
- Bryum areoblastum* Müll.Hal. = *Bryum apiculatum* Schwägr.
- Bryum erythrostegeum* Müll.Hal. = *Bryum coronatum* Schwägr.
- Bryum molleri* Müll.Hal. = *Brachymenium subuliferum* (Mitt.) A.Jaeger
- Bryum nitens* Hook. = *Bryum apiculatum* Schwägr.
- Bryum quintasi* Broth. = *Bryum huillense* Welw. et Duby
- Bryum squarripilum* Müll.Hal. = *Bryum argenteum* var. *argenteum* Hedw.
- Bryum subuliferum* Mitt. = *Brachymenium subuliferum* (Mitt.) A.Jaeger
- Callicostella pycnoptera* Müll.Hal. = *Callicostella perpapillata* Broth. et P.de la Varde
- Callicostella quintasii* Broth. = *Callicostella salaziae* (Besch.) Broth.
- Callicostella thomeana* Broth. = *Callicostella fissidentella* (Besch.) Kindb.
- Calymperes thomeanum* Müll.Hal. **new syn.** = *Calymperes lonchophyllum* subsp. *microblastum* (Müll.Hal. ex Besch.) S.R.Edwards
- Calymperes orthophyllaceum* Müll.Hal. = *Calymperes afzelii* Sw.
- Calymperes principis* Broth. = *Calymperes tenerum* Müll.Hal.
- Calymperes quintasii* Broth. = *Calymperes afzelii* Sw.
- Calymperes saxatile* Müll.Hal. ex Besch. = *Calymperes lonchophyllum* subsp. *saxatile* (Müll.Hal.) S.R.Edwards
- Campylopus divaricatus* (Mitt.) Jaeger = *Campylopus savannarum* (Müll.Hal.) Mitt.
- Campylopus erythrocaulon* Broth. = *Campylopus savannarum* (Müll.Hal.) Mitt.
- Campylopus quintasii* Broth. = *Campylopus flexuosus* (Hedw.) Brid. var. *flexuosus*
- Dicranum secundifolium* Mitt. = *Leucoloma secundifolium* Mitt.
- Dicranum divaricatum* Mitt. = *Campylopus savannarum* (Müll.Hal.) Mitt.
- Ectropothecium glauculum* Broth. = *Vesicularia glaucula* (Broth.) Broth.
- Ectropothecium strephomischos* (Welw. et Duby) A.Gepp = *Vesicularia strephomischos* (Welw. et Duby) Broth.
- Fabronia persoonii* Schwägr. = *Rhizofabronia persoonii* (Schwägr.) M.Fleisch.
- Fissidens subglaucissimus* Broth. = *Fissidens glaucissimus* Welw. et Duby
- Fissidens leucocaulis* Müll. Hal. ex Bizot = *Fissidens ellipticus* Besch.
- Fissidens purpleocaulis* Müll.Hal. = *Fissidens sciophyllus* Mitt.
- Fissidens subglaucissimus* Broth. = *Fissidens glaucissimus* Welw. et Duby
- Floribundaria molleri* (Müll.Hal.) Broth. = *Trachypus bicolor* var. *viridulus* (Mitt.) Zanten
- Floribundaria patentissima* (Müll.Hal.) Fleisch. = *Floribundaria vaginans* (Welw. et Duby) Broth.
- Gollania monodii* P.de la Varde = *Wijkia monodii* (P.de la Varde) H.Akiyama
- Hildebrandtiella thomeana* Broth. = *Orthostichidium involutifolium* subsp. *thomeanum* (Broth.) Argent
- Hookeria chionophylla* Müll.Hal. = *Callicostella chionophylla* (Müll.Hal.) Broth.
- Hookeria quintasi* Broth. = *Callicostella salaziae* (Besch.) Broth.
- Hookeria thomeana* Broth. = *Callicostella fissidentella* (Besch.) Kindb.
- Hookeria niveum* Müll.Hal. = *Lepidopilum niveum* (Müll.Hal.) Kindb.

- Hypnum amblystegiocarpum* Müll.Hal. = *Sematophyllum amblystegiocarpum* (Müll.Hal.) Broth.
- Hypnum brevifalcatum* Müll.Hal. = *Ectropothecium brevifalcatum* (Müll.Hal.) Kindb.
- Hypnum nanoglobeum* Müll.Hal. = *Isopterygium nanoglobum* (Müll.Hal.) Paris
- Hypnum molleri* Müll.Hal. = *Porotrichum elongatum* (Welw. et Duby) A.Gepp
- Hypnum trichocoleoides* Müll.Hal. = *Wijkia trichocoleoides* (Müll.Hal.) H.A.Crum
- Hypnum pallido-virens* Mitt. n. sp. nom. herb. = see *Sematophyllum* sp.
- Hypnum africanum* Welw. et Duby = *Pinnatella minuta* (Mitt.) Broth.
- Hypnum hopfferi* Welw. et Duby 1901 = *Rhynchostegium hopfferi* (Welw. et Duby) A.Gepp
- Hypopterygium brevifolium* Broth. = *Hypopterygium tamarisci* (Sw. ex Sw.) Brid. ex Müll.Hal.
- Hypopterygium subtrichocladum* Broth. = *Lopidium struthiopteris* (Brid.) M.Fleisch.
- Hypopterygium laricinum* Hook. = *Hypopterygium tamarisci* (Sw. ex Sw.) Brid. ex Müll.Hal.
- Lepidopilum dusenii* Müll.Hal. ex Broth. = *Lepidopilum lastii* Mitt.
- Leucomium golungense* Gepp in Hiern. = *Leucomium strumosum* (Hornsch.) Mitt.
- Leucophanes molleri* Müll.Hal. = *Leucophanes molleri* Müll.Hal.
- Lopidium subtrichocladon* (Broth.) Fleisch. = *Lopidium struthiopteris* (Brid.) M.Fleisch.
- Macromitrium levatum* Mitt. = *Macromitrium sulcatum* (Hook.) Brid.
- Macromitrium mannii* Jaeger = ? *Macromitrium sulcatum* var. *sulcatum* (Hook.) Brid.
- Macromitrium menziesii* Mitt. sp. nov. = *Macromitrium sulcatum* (Hook.) Brid.
- Macromitrium undatifolium* Müll.Hal. = *Macromitrium sulcatum* var. *sulcatum* (Hook.) Brid.
- Microthamnium subelegantulum* Broth. = *Rhacopilopsis trinitensis* (Müll.Hal.) E.Britton ex Dixon
- Mittenothamnium subelegantulum* (Broth.) Card. = *Rhacopilopsis trinitensis* (Müll.Hal.) E.Britton ex Dixon
- Microthamnium longisetum* Broth. nom. herb. = *Mittenothamnium leptoreptans* (Broth.) Card.
- Orthodon thomeanus* Broth. = *Brachymitrium moritzianum* (Müll.Hal.) A.K.Kop.
- Orthostichidium thomeanum* (Broth.) Broth. = *Orthostichidium involutifolium* subsp. *thomeanum* (Broth.) Argent
- Papillaria patentissima* Müll.Hal. = *Floribundaria vaginans* (Welw. et Duby) Broth.
- Papillaria molleri* Müll.Hal. = *Trachypus bicolor* var. *viridulus* (Mitt.) Zanten
- Papillaria pintasiana* Müll.Hal. nom. nud. = *Trachypodopsis serrulata* var. *serrulata* (P.Beauv.) M.Fleisch.
- Pilotrichella calomicra* Broth. = *Orthostichella rigida* B.H.Allen et Magill
- Pilotrichella communis* Müll.Hal. ex Dusén = *Orthostichella versicolor* (Müll.Hal.) B.H.Allen et W.R.Buck
- Pilotrichella inflatifolia* Müll.Hal. = *Orthostichella versicolor* (Müll.Hal.) B.H.Allen et W.R.Buck
- Pilotrichella leptoclada* Müll.Hal. = *Orthostichella rigida* B.H.Allen et Magill
- Pinnatella africana* (Welw. et Duby) Broth. = *Pinnatella minuta* (Mitt.) Broth.
- Pogonatum rubenti-viride* (Müll.Hal.) Paris = *Pogonatum gracilifolium* Besch.
- Polytrichum molleri* Müll.Hal. = *Pogonatum gracilifolium* Besch.
- Poroathamnium caudatum* Broth. = *Porotrichum substriatum* (Hampe) Mitt.
- Poroathamnium comorense* (Müll.Hal.) Sim = *Porotrichum elongatum* (Welw. et Duby) A.Gepp
- Porotrichum caudatum* Broth. = *Porotrichum substriatum* (Hampe) Mitt.
- Porotrichum corticola* Broth. = *Thamnobryum corticola* (Kindb.) De Sloover

- Porotrichum lopidioides* Müll.Hal. = *Pinnatella minuta* (Mitt.) Broth.
Rhaphidostegium amblystegiocarpum (Müll.Hal.) Paris = *Sematophyllum amblystegiocarpum* (Müll.Hal.) Broth.
Rhizogonium spiniforme (Hedw.) Bruch. = *Pyrrhobryum spiniforme* (Hedw.) Mitt.
Rhodobryum quintasii (Broth.) Paris = *Bryum huillense* Welw. et Duby
Schizomitrium brevipes (Broth.) Ochyra et Pócs = *Callicostella brevipes* (Broth.) Broth.
Schizomitrium chionophyllum (Müll.Hal.) Ochyra & Pócs = *Callicostella chionophylla* (Müll.Hal.) Broth.
Sematophyllum amblystegiocarpum (Müll.Hal.) Broth. = *Sematophyllum amblystegiocarpum* (Müll.Hal.) Broth.
Stereodon scaturigineus Brid. = *Vesicularia scaturigina* (Brid.) Broth.
Stereodon diffusus Mitt. = *Ectropothecium diffusum* (Mitt.) A.Jaeger
Syrhropodon quintasi Broth. = *Syrhropodon gardneri* (Hook.) Schwägr.
Tayloria thomeana (Broth.) Broth. = *Brachymitrium moritzianum* (Müll.Hal.) A.K.Kop.
Thamnum africanum (Welw. et Duby) Kindberg = *Pinnatella minuta* (Mitt.) Broth.
Thamnum caudatum (Broth.) Kindb. = *Porotrichum substriatum* (Hampe) Mitt.
Thamnum corticola (Broth.) Kindb. = *Thamnobryum corticola* (Kindb.) De Sloover
Thamnum molleri (Müll.Hal.) Paris = *Porotrichum elongatum* (Welw. et Duby) A.Gepp
Thamnum quintasii (Broth.) Kindb. = *Porotrichum quintasii* Broth.
Thuidium thomeanum Broth. = *Thuidium involvens* (Hedw.) Mitt. subsp. *thomeanum* (Broth.) Touw
Trachypodopsis quintasiana Broth. = *Trachypodopsis serrulata* var. *serrulata* (P.Beauv.) M.Fleisch.
Trachypus molleri (Müll.Hal.) Broth. = *Trachypus bicolor* var. *viridulus* (Mitt.) Zanten
Trematodon flexifolius Müll.Hal. = *Trematodon longicollis* Michx.
Trichosteleum subpyncocylindricum Broth. = *Radulina borbonica* (Bél.) W.R.Buck
Trismegistia monodii (P.de la Varde) Ando = *Wijkia monodii* (P.de la Varde) H.Akiyama

Hepatics and hornworts

- Acrolejeunea molleri* (Steph.) Paris = *Schiffneriolejeunea polycarpa* (Nees) Gradst.
Aneura erosa Steph. = *Riccardia erosa* (Steph.) E.W.Jones
Aneura reticulata Steph. = *Riccardia limbata* (Steph.) E.W.Jones
Anthoceros incurvus Steph. = *Foliosceros incurvus* (Steph.) D. C. Bharadwaj
Aspiromitus pinnatus Steph. = *Anthoceros pinnatus* Steph.
Bazzania molleri (Steph.) Steph. = *Bazzania decrescens* subsp. *molleri* (Steph.) E.W. Jones
Bellincina thomensis Steph. = *Porella subdentata* (Mitt.) E.W.Jones var. *subdentata*
Brachiolejeunea nigra Steph. = *Mastigolejeunea nigra* Steph.
Brachiolejeunea thomeensis Steph. = *Brachiolejeunea laxifolia* (Taylor) Schiffn.
Cephalozia fissa Steph. = *Cephalozia connivens* subsp. *fissa* (Steph.) Vána
Chandonanthus hirtellus (F.Weber) Mitt. = *Plicanthus hirtellus* (F.Weber) R.M.Schust.
Cheilolejeunea principensis Steph. ex Paris, nom. inval. = *Cheilolejeunea serpentina* (Mitt.) Mizut.
Chiloscyphus dubius Gottsche = *Heteroscyphus dubius* (Gottsche) Schiffn.
Chiloscyphus thomeensis Steph. = *Heteroscyphus spectabilis* (Steph.) Schiffn.
Cololejeunea crenatiflora Steph. = *Cololejeunea obliqua* (Nees et Mont.) Schiffn.
Cololejeunea hyalino-marginata (Nees ex Montagne) Grolle = *Cololejeunea marginata* (Lehm. et Lindenb.) Schiffn.
Conoscyphus inflexifolius Mitt. = *Conoscyphus trapezioides* (Sande Lac.) Schiffn.
Drepanolejeunea claviformis Steph. = *Drepanolejeunea physaefolia* (Gottsche) Steph.

- Drepanolejeunea gomphiae* Steph. = *Leptolejeunea maculata* (Mitt.) Schiffn.
Drepanolejeunea molleri Steph. = *Drepanolejeunea cultrella* (Mitt.) Steph.
Drepanolejeunea vesiculosa (Mitt.) Steph. = *Drepanolejeunea physaefolia* (Gottsche) Steph.
Eulejeunea flava Sw. ≡ *Lejeunea flava* (Sw.) Nees
Euosmolejeunea grandistipula (Steph.) Steph. = *Cheilolejeunea trifaria* (Reinw. et al.) Mizut.
Euosmolejeunea longiflora (Taylor) Steph. ≡ *Cheilolejeunea longiflora* (Taylor) R.M.Schust.
Euosmolejeunea montagnei (Gottsche) Steph. ≡ *Cheilolejeunea montagnei* (Gottsche) R.M.Schust.
Euosmolejeunea thomeensis Steph. = *Cheilolejeunea montagnei* (Gottsche) R.M.Schust.
Frullania africana Steph. = *Frullania riojaneirensis* (Raddi) Ångstr.
Frullania atrata Nees = *Frullania serrata* Gottsche var. *serrata*
Frullania cordata Mitt. = *Frullania serrata* Gottsche var. *serrata*
Frullania cordifolia Steph. = *Frullania angulata* Mitt.
Frullania laceriloba Steph. = *Frullania apicalis* Mitt.
Frullania molleri Steph. = *Frullania caffraria* Steph.
Frullania squarrosa Nees = *Frullania ericoides* (Nees) Mont.
Frullania stephanii Schiffn. = *Frullania caffraria* Steph.
Frullania subatrata Steph. = *Frullania angulata* Mitt.
Frullania thomeensis Steph. = *Frullania arecae* (Spreng.) Gottsche
Herberta mollis Steph. ≡ *Herbertus mollis* (Steph.) Dusén
Homalolejeunea henriquesii Steph. = *Marchesinia excavata* (Mitt.) Schiffn.
Homalolejeunea henriquesii Steph. = *Marchesinia excavata* (Mitt.) Schiffn.
Hygrolejeunea acuta (Mitt.) Vanden-Berghen ≡ *Stenolejeunea acuta* (Mitt.) Tixier
Hygrolejeunea grossecristata Steph. = *Lejeunea grossecristata* (Steph.) E.W.Jones
Hygrolejeunea patellirostris Steph. = *Lejeunea* sp.
Hygrolejeunea pulcherrima Steph. = *Lejeunea acuta* Mitt.
Isotachis perfoliata Steph. = *Heteroscyphus spectabilis* (Steph.) Schiffn.
Jungermannia atrata Nees = *Frullania serrata* Gottsche var. *serrata*
Jungermannia borgenii Gottsche ex Pearson = *Solenostoma borgenii* (Gottsche ex Pearson) Steph.
Jungermannia geminifolia Mitt. ≡ *Syzygiella geminifolia* (Mitt.) Steph.
Jungermannia hirtella Web. ≡ *Plicanthus hirtellus* (F.Weber) R.M.Schust.
Lejeunea acuta Mitt. = *Stenolejeunea acuta* (Mitt.) Tixier
Lejeunea amplexans (Steph.) Steph. = *Schiffneriolejeunea polycarpa* (Nees) Gradst.
Lejeunea cavifolia Steph. hom. illeg. [non (Ehrh.) Lindb.] ≡ *Diplasiolejeunea cavifolia* Steph.
Lejeunea flava subsp. *tabularis* S. Arnell = *Lejeunea tabularis* (Spreng.) Gottsche et al.
Lejeunea grandistipula Steph. = *Cheilolejeunea trifaria* (Reinw. et al.) Mizut.
Lejeunea nigra Steph. ≡ *Mastigolejeunea nigra* Steph.
Lejeunea pulcherrima Steph. = *Stenolejeunea acuta* (Mitt.) Tixier
Lejeunea quintasii Steph. = *Leptolejeunea epiphylla* (Mitt.) Steph.
Lejeunea thomeensis Steph. = *Leptolejeunea maculata* (Mitt.) Schiffn.
Lejeunea ulicina subsp. *ocellifera* (S.W.Arnell) R.M.Schust. = *Microlejeunea africana* Steph.
Lepidozia quintasii Steph. = *Telaranea nematodes* (Gottsche ex Austin) M.Howe
Leptocolea africana (Steph.) E. W. Jones ≡ *Cololejeunea africana* (Steph.) R.M.Schust.
Leptocolea crenatiflora (Steph.) Steph. = *Cololejeunea obliqua* (Nees et Mont.) Schiffn.
Leptocolea leloutrei E. W. Jones = *Cololejeunea leloutrei* (E.W. Jones) R.M.Schust.
Leptolejeunea quintasii (Steph.) Steph. = *Leptolejeunea epiphylla* (Mitt.) Steph.
Leptolejeunea thomeensis (Steph.) Steph. = *Leptolejeunea maculata* (Mitt.) Schiffn.

- Lophocolea coadunata* Sw. = *Chiloscyphus coadunatus* (Sw.) J.J.Engel et R.M.Schust.
Lophocolea congoana Steph. = *Chiloscyphus martianus* (Nees) J.J.Engel et R.M.Schust.
Lophocolea connata (Sw.) Steph. = *Chiloscyphus difformis* (Nees) J.J.Engel et R.M.Schust.
Lophocolea devexa Mitt. = *Conoscyphus trapezioides* (Sande Lac.) Schiffn.
Lophocolea difformis Nees = *Chiloscyphus difformis* (Nees) J.J.Engel et R.M.Schust.
Lophocolea martiana Nees = *Chiloscyphus martianus* (Nees) J.J.Engel et R.M.Schust.
Lophocolea molleri Steph. = *Chiloscyphus difformis* (Nees) J.J.Engel et R.M.Schust.
Lophocolea newtonii Steph. = *Chiloscyphus martianus* (Nees) J.J.Engel et R.M.Schust.
Madotheca capensis Gottsche = *Porella capensis* (Gottsche) Mitt.
Madotheca subdentata Mitt. = *Porella subdentata* (Mitt.) E.W.Jones var. *subdentata*
Madotheca thomeensis Steph. = *Porella subdentata* (Mitt.) E.W.Jones var. *subdentata*
Marchantia planiloba Steph. = *Marchantia pappeana* Lehm. subsp. *pappeana*
Mastigobryum molleri Steph. = *Bazzania decrescens* subsp. *molleri* (Steph.) E.W. Jones
Mastigolejeunea africana Steph. = *Mastigolejeunea florea* (Mitt.) Paris
Mastigolejeunea buettneri Steph. = *Mastigolejeunea auriculata* (Wilson) Schiffn.
Mastigolejeunea carinata (Mitt.) Steph. = *Mastigolejeunea auriculata* (Wilson) Schiffn.
Metzgeria australis Steph. = *Metzgeria furcata* (L.) Dumort.
Metzgeria hamata Lindb. = *Metzgeria leptoneura* Spruce
Metzgeria recurva Steph. = *Metzgeria leptoneura* Spruce
Metzgeria thomeensis Steph. = *Metzgeria furcata* (L.) Dumort.
Microlejeunea cochlearifolia Steph. = *Microlejeunea kamerunensis* Steph.
Odontolejeunea thomeensis Steph. = *Odontolejeunea lunulata* (F.Weber) Schiffn.
Odontolejeunea tortuosa (Lehm. et Lindenb.) Steph. = *Odontolejeunea lunulata* (F.Weber) Schiffn.
Pallavicinia pilifera Steph. = *Pallavicinia lyellii* (Hook.) Carruth.
Phragmicoma amplexans Steph. = *Schiffneriolejeunea polycarpa* (Nees) Gradst.
Phragmicoma excavata (Mitt.) Steph. = *Marchesinia excavata* (Mitt.) Schiffn.
Phragmicoma molleri Steph. = *Schiffneriolejeunea polycarpa* (Nees) Gradst.
Physotium sphagnoides Hook. = *Pleurozia gigantea* (F.Weber) Lindb.
Physocolea africana Steph. = *Cololejeunea africana* (Steph.) R.M.Schust.
Plagiochila amplifolia Steph. = *Plagiochila fusifera* Taylor
Plagiochila armata Steph. = *Plagiochila barteri* Mitt. var. *barteri*
Plagiochila cacuminis Steph. = *Plagiochila praemorsa* Steph.
Plagiochila clavaeflora Steph. f. *integerrima* = *Plagiochila integerrima* Steph.
Plagiochila comorensis Steph. = *Plagiochila pectinata* Willd. ex Lindenb.
Plagiochila curvatifolia Steph. = *Plagiochila neckeroidea* Mitt.
Plagiochila mauritiana Nees. var. *angustifolia* Steph. = *Plagiochila strictifolia* Steph.
Plagiochila molleri Steph. = *Plagiochila flabellata* Steph.
Plagiochila quintasii Steph. = *Plagiochila barteri* Mitt. var. *barteri*
Plagiochila rotundifolia Steph. hom. illeg. (non Colenso) = *Plagiochila loloensis* Steph.
Plagiochila securifolia Nees in Lindenb. = *Syzygiella securifolia* (Nees in Lindenb.) Inoue
Plagiochila thomeensis Steph. = *Plagiochila terebrans* Nees et Mont. ex Lindenb.
Plagiochila triangularis Steph. = *Plagiochila barteri* Mitt. var. *barteri*
Plagiochila tricuspis Steph. = *Plagiochila tricuspis* Steph.
Plagiochila winteri Steph. = *Plagiochila moenkemeyeri* Steph. or *Plagiochila strictifolia* Steph.
Priolejeunea kindbergii Steph. = *Prionolejeunea grata* (Gottsche) Schiffn.
Priolejeunea serrula (Mitt.) Steph. = *Prionolejeunea grata* (Gottsche) Schiffn.

Prionolejeunea fissistipula Steph. = *Drepanolejeunea physaefolia* (Gottsche) Steph.
Ptychanthus pauciplicatus Steph. nom. herb. = *Schiffneriolejeunea polycarpa* (Nees) Gradst.
Ptychocoleus quintasii Steph. ≡ *Schiffneriolejeunea pappeana* (Nees) Gradst. var. *pappeana*
Radula angustata Steph. = *Radula appressa* Mitt.
Radula bipinnata Mitt. = *Radula boryana* (F. Weber) Mont.
Radula fuscorufa Steph. = *Radula boryana* (F. Weber) Mont.
Radula molleri Steph. = *Radula appressa* Mitt.
Radula tamariscina Mitt. = *Radula boryana* (F. Weber) Mont.
Radula thomensis Steph. = *Radula boryana* (F. Weber) Mont.
Radula tubiflora Steph. “*tubaeiflora*” = *Radula stenocalyx* Mont.
Schisma molle Steph. ≡ *Herbertus mollis* (Steph.) Dusén
Sendtnera diclados (Brid. ex Web.) Gottsche et al. ≡ *Mastigophora diclados* (Brid. ex F. Weber) Nees
Sendtnera juniperina Sw. ≡ *Herbertus juniperoideus* (Sw.) Grolle
Sendtneria mollis Steph. ≡ *Herbertus mollis* (Steph.) Dusén
Sprucella succida (Mitt.) Steph. ≡ *Lepidozia succida* Mitt.
Syzygiella ruwenzorensis Steph. = *Syzygiella geminifolia* (Mitt.) Steph.
Taxilejeunea longirostris Steph. = *Lejeunea grossecristata* (Steph.) E.W. Jones
Taxilejeunea ramosissima (Steph.) Steph. = *Lejeunea ramosissima* Steph.

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