

Hepatics and Anthocerotes of the Mediterranean, an annotated checklist

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In Memoriam to Creu Casas and Carmela Cortini Pedrotti

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Abstract – The names of all hepatics and anthocerototes published to the end of May 2007 in the Mediterranean countries and Bulgaria are compiled in an annotated checklist list. The list comprises accepted names and synonyms and provides explanatory annotations for ambiguous and disputed names. A total of 403 accepted species and 12 infraspecific taxa are reported from the area.

Liverworts / distribution / nomenclature / checklist / Mediterranean

INTRODUCTION

In the second half of the twentieth century, several authors published checklists summarizing the current state of knowledge of the distribution of bryophytes in Europe and Macaronesia (Podpěra, 1954; Corley *et al.*, 1981; Düll, 1983, 1984, 1985, 1992; Grolle, 1983; Corley & Crundwell, 1991; Grolle & Long, 2000; Dierßen, 2001; Söderström *et al.*, 2002; Hill *et al.*, 2006). Within the Mediterranean region many lists have been produced at national level (Casas, 1991, 1998; Herrnstadt *et al.*, 1991; Aleffi & Schumacker, 1995; Düll, 1995; El-Saadawi *et al.*, 1999; Sabovljević & Stevanović, 1999; Sabovljević, 2000, 2003; Cortini Pedrotti, 2001a; Ganeva & Natcheva, 2003; Sérgio & Carvalho, 2003; Kürschner & Erdağ, 2005; Natcheva & Ganeva, 2005; Aleffi, 2005; Cekova, 2005; Colacino & Sabovljević, 2006; Dragicević & Veljić, 2006; Sérgio *et al.*, 2007), and several new floras have been published or are currently in the process of publication (Casas *et al.*, 2001, 2004, 2006; Cortini Pedrotti, 2001b, 2006; Heyn & Herrnstadt, 2004; Guerra & Cros, 2006). There have also been lists covering different sectors of the Mediterranean region, as well some of the larger islands (Bischler & Jovet-Ast, 1973; Eggers, 1982; Dia *et al.*, 1987; Frey & Kürschner, 1991; Dirkse *et al.*, 1993; Düll *et al.*, 1999; Ros *et al.*, 1999; Losada-Lima *et al.*, 2001,

2004; Sabovljević & Natcheva, 2006; Sotiaux *et al.*, 2007). However no attempt has been made to produce taxonomically critical lists of bryophytes for the whole Mediterranean region. With respect to liverworts, only two works can be regarded as covering the whole area, and these are mainly focused on ecological and biogeographical aspects (Bischler-Causse, 1995; Bischler, 2004).

Because of the intensive research activity that is currently taking place in the Mediterranean area, and the need for updated red lists to inform conservation studies and policies, it is important that accurate and comprehensive lists of published bryophyte names should be available for the whole Mediterranean region. The OPTIMA Bryophyte Commission, during a meeting held at Palermo in September 2001, proposed that the gap should be filled by the publication of a checklist of Mediterranean bryophytes in two stages: initially for liverworts and subsequently for mosses. After an interval of several years the first stage has been completed and we present here a checklist of Mediterranean liverworts in the form of a catalogue of recognized names and synonyms. The catalogue includes all the names that have been published for any one or more of the countries on the periphery of the Mediterranean Sea.

The project

During the OPTIMA meeting in 2001, the Bryophyte Commission considered two important matters: 1) the definition of the area to be included, and 2) the authorship of the list and the system to be adopted in its preparation. The point at issue in the first question was whether the list should include the whole of each country bordering the Mediterranean littoral, or only the areas within these countries subject to a Mediterranean climate. It was clear that there would be serious difficulties in correlating the boundaries of study areas and their climatic regimes, and we concluded that the only practical option was to define the area using the national boundaries of the countries bordering the northern, eastern and southern shores of the Mediterranean. We included Bulgaria since part of that country is subject to a Mediterranean climate (see Fig. 1 for a map of the study area). We decided to treat the larger islands as distinct units because of their biogeographical interest. However the Azores archipelago was excluded because of its non-Mediterranean climate.

With regard to the second question, it was felt appropriate to designate authors to be responsible for each country and island group (Table 1). These authors would compile a list of accepted names and synonyms according to criteria proposed by the Commission and send them to the Secretary who, assisted by the remaining members of the Commission, would consolidate them into a single paper. From the time of these initial decisions, the project has proceeded through 5 stages: 1) the Commission prepared the criteria for the list of accepted names and synonyms and distributed them to the designated authors; 2) the authors compiled their lists and sent them to the Secretary of the Commission (R. M. Ros), who in collaboration with a second member of the commission (V. Mazimpaka), consolidated the country and islands lists into a master list of accepted names and a separate list of synonyms; 3) the resulting lists were sent back to the authors for data checking, correction and update; 4) having re-checked and re-integrated the author amendments and additions in the master list, the Commission edited the final version of the paper, which (5) was returned to the authors for text checking. This resulted in the version that was submitted for publication.

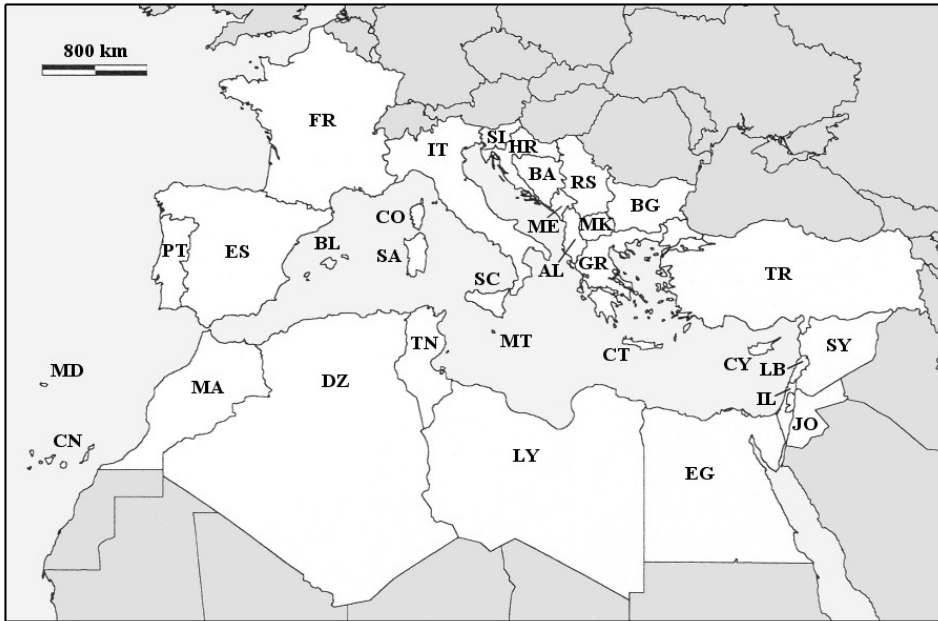


Fig. 1. Map of the study area indicating the abbreviation used the countries and islands for which a separate list is included in the checklist (cf. also Table 1).

The lengthy duration of the project is explained by its complexity and the fact that the members of the OPTIMA Bryophyte Commission had other concurrent activities and responsibilities. However the experience gained during the project will serve as a sound basis for the checklist of mosses still to be produced.

Taxonomy and Nomenclature

Criteria for the list of accepted names

The list includes published names and records to the end of May 2007. The checklist by Grolle & Long (2000) was the basic reference work for accepted names in Europe and Macaronesia. We have made some exceptions to this list in the light of more recently published taxonomic papers, and we have added the names of taxa from African and Asian countries that were outside the geographical scope of Grolle & Long's list. We have also included some names that are not cited in Grolle & Long's list in view of their frequent use in Mediterranean areas and the lack of consensus in recent literature on their taxonomic value. For example, Grolle & Long (2000) cited very few infra-specific names. We took the view that the varieties and subspecies of some polymorphic taxa that have been recognized in relatively recent studies merited inclusion (e.g., those of *Bazzania trilobata* (L.) Gray, *Blepharostoma trichophyllum* (L.) Dumort., *Jubula hutchinsiae* (Hook.) Dumort., *Marchantia polymorpha* L. and several species of *Riccia*). In cases where infraspecific taxa have not been distinguished in the literature for a

Table 1. Countries and island groups treated in the checklist, with the names of the responsible authors. Country abbreviations are based on the two-letters code defined by ISO 3166-1 for country names. For the islands that are not independent countries a two-letter code as used in Söderström *et al.* (2002) has been used except for Madeira for which MD has been used. For the purpose of the checklist, Andorra has not been considered. Sinai has been included in Egypt. Israel includes some adjacent areas (Gaza, the West Bank, the former Cis-Jordan, and parts of both the Golan Heights and Mt. Hermon). The list of Malta includes the Maltese islands: Malta, Gozo and Comino. The Spanish North-African territories have been included in Morocco; Kosovo in Serbia; Gibraltar in Spain. Turkey includes the European and Asian parts, although no segregation between them has been done.

<i>Countries and Islands</i>	<i>Abbreviations</i>	<i>Authors</i>
Albania	AL	M. Sabovljević
Algeria	DZ	R.M. Ros & M.J. Cano
Balears	BL	M. Brugués & R.M. Cros
Bosnia-Herzegovina	BA	M. Sabovljević
Bulgaria	BG	A. Ganeva
Canary Islands	CN	A. Losada-Lima, G.M. Dirkse, S. Rodríguez-Nuñez & J.M. González-Mancebo
Corsica	CO	L. Söderström
Crete	CT	T.L. Blockeel
Croatia	HR	M. Sabovljević
Cyprus	CY	T. L. Blockeel
Egypt	EG	W. El Saadawi, H. Shabbara, U. Abou-Salama & M.S. Refai
France	FR	L. Söderström
Greece	GR	T.L. Blockeel
Israel	IL	I. Herrnstadt
Italy	IT	M. Aleffi
Jordan	JO	H. Kürschner
Lebanon	LB	H. Kürschner & A. Erdağ
Libya	LY	R.M. Ros & M.J. Cano
Macedonia	MK	M. Sabovljević
Madeira	MD	M. Sim-Sim
Malta	MT	E. Lanfranco
Montenegro	ME	M. Sabovljević
Morocco	MA	R.M. Ros & M.J. Cano
Portugal	PT	C. Sérgio
Sardinia	SA	M. Aleffi
Serbia	RS	M. Sabovljević
Sicilia	SC	M.G. Dia
Slovenia	SI	M. Sabovljević
Spain	ES	M. Brugués & R.M. Cros
Syria	SY	W. El Saadawi, H. Shabbara, U. Abou-Salama, M.S. Refai & K. Khalil
Tunisia	TN	R.M. Ros & M.J. Cano
Turkey	TR	H. Kürschner & A. Erdağ

given territory, then the relevant occurrences have been indicated in the checklist at species level. For the most part, however, we have been restrictive in our inclusion of infraspecific taxa. Thus, if the majority of recent authors have not recognized a taxon, then we have also ignored it here. We have not recognized the category of “form”. We have compared the contents of our list as they relate to European territories with the data and subsequent amendments published by Söderström *et al.* (2002; 2007) (see <http://www.bio.ntnu.no/ECCB/> for a complete checklist). Taxa erroneously reported from the territories covered by Söderström *et al.* (2007) and noted as such by them are not repeated here. Taxa whose presence in a given area is doubtful have been excluded at the discretion of the author responsible for that area. We have ignored names previously rejected in published papers, but have included an explanatory annotation for those rejected here.

The names of the accepted taxa and their occurrence in individual territories are presented in tabular format. Taxa are arranged alphabetically within taxonomic unit, and territories are listed in alphabetic sequence of their respective abbreviations. The reported presence of a taxon in a territory is marked by one of the following symbols indicating the nature of the record. The absence of a symbol means that the taxon has not been reported in the territory or has been rejected in previous publications. Annotations concerning taxonomic criteria and floristic data are indicated by a number following the name of the taxon, or in the relevant cell of the grid.

- Report based on collections published before 1962.
- Report based on at least one collection published during or after 1962.
- (○) Doubtful report based on collections published before 1962.
- (●) Doubtful report based on at least one collection published during or after 1962.
- + Report without precise collection data or locality.

Criteria for the list of synonyms

Our objective was to compile all the names published for Mediterranean liverworts, and we have therefore included all available synonyms. The authors of the national and island lists were asked to include all the names published for their designated territories. All these names were checked using standard works on liverworts and other important recent publications, including general and regional floras (Müller, 1954-1957; Schuster, 1966, 1969, 1980, 1988, 1992a, 1992b; Paton, 1999; Schumacker & Vána, 2000, 2005; Damsholt, 2002), generic monographs (Grolle, 1972; Jovet-Ast, 1986; Bischler-Causse, 1993; Sim-Sim, 1999; Engel & Merrill, 2004; Long, 2006, etc.) and earlier lists (e.g., Grolle, 1983, Grolle & Long, 2000; Söderström *et al.*, 2002). Our intention was to include all the names used in the literature, even if they had been misapplied or had not been validly published. However it became clear that the authorities given for names cited in floristic publications were sometimes erroneous, and we have therefore ignored such errors.

The names and authorities of taxa were first checked against *Index Hepaticarum* (Bonner, 1962a, 1962b, 1963a, 1963b, 1965, 1966; Bischler, 1977; Geissler & Bischler, 1985, 1987, 1989, 1990) and *Index of Hepatics* (Crosby & Engel, 2006), and the nomenclature was then further verified using the publications cited above. Author abbreviations follow Brummitt & Powell (1992), and annotations are included for problematic names. Invalid combinations have been included, especially basionyms and their subsequent combinations, with the aim of facilitating their interpretation.

For ease of consultation, all the synonyms and disputed names used in the Mediterranean countries have been arranged alphabetically in a single consolidated list, with a cross-reference where appropriate to the annotation in which the taxonomic problem is discussed. This list also includes names rejected for the whole of our area.

Summarizing the results of three centuries work in a critical list is a complex and difficult task, especially considering that advances in taxonomy and nomenclature have run in parallel with floristic exploration. While we have attempted to check all names against the available literature, we do not assume that the result is perfect. We would welcome any further observations regarding omissions, errors and inconsistencies, since they will serve to improve future editions of the checklist.

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
<i>madeirensis</i> (Schiffn.) Grolle													
<i>microscopica</i> (Taylor) A. Evans					●						●	●	
<i>sintensis</i> Steph.					●								
<i>Apomarsupella</i> R. M. Schust.													
<i>revoluta</i> (Nees) R. M. Schust.												●	
<i>Apometzgeria</i> Kuwah.													
<i>pubescens</i> (Schrank) Kuwah.		●	●			●					●	●	
<i>Arnellia</i> Lindb.													
<i>fennica</i> (Gottsche) Lindb.												●	
<i>Asterella</i> P. Beauv. [8]													
<i>africana</i> (Mont.) A. Evans					●	●			○		●		
<i>gracilis</i> (F. Weber) Underw. [9]		●									●	●	
<i>lindenbergiana</i> (Corda ex Nees) Arnell		●	○									○	
<i>saccata</i> (Wahlenb.) A. Evans [10]												(○)	
<i>Athalamia</i> Falconer													
<i>hyalina</i> (Sommerf.) S. Hatt. [9]	●		●	●			●		●		●	●	●
<i>spathysii</i> (Lindenb.) S. Hatt.	●			●	●	●	○		○		●	(●)	●
<i>Barbilophozia</i> Loeske													
<i>atlantica</i> (Kaal.) Müll. Frib.											●	●	
<i>attenuata</i> (Mart.) Loeske		○	+								●	●	
<i>barbata</i> (Schmidel ex Schreb.) Loeske	●	●	●			●					●	●	●
<i>binsteadii</i> (Kaal.) Loeske											●		
<i>floerkei</i> (F. Weber & D. Mohr) Loeske			●								●	●	
<i>hatcheri</i> (A. Evans) Loeske		●	●			●					●	●	●
<i>kunzeana</i> (Huebener) Müll. Frib.			●								●	●	
<i>lycopodioides</i> (Wallr.) Loeske	●		●			●					●	●	●
<i>quadriloba</i> (Lindb.) Loeske												●	
<i>rubescens</i> (R. M. Schust. & Damsh.) Kartt. & L. Söderstr.													
<i>Bazzania</i> Gray													
<i>flaccida</i> (Dumort.) Grolle			●								●	●	
<i>tricrenata</i> (Wahlenb.) Lindb.	○	○	●								●	●	+
<i>trilobata</i> (L.) Gray													
var. <i>depauperata</i> (Müll. Frib.) Grolle											●	+	
var. <i>trilobata</i>	○	○	●								●	●	○
<i>Blasia</i> L.													
<i>pusilla</i> L.			●								●	●	●
<i>Blepharostoma</i> (Dumort.) Dumort.													
<i>trichophyllum</i> (L.) Dumort.													
subsp. <i>brevirete</i> (Bryhn & Kaal.) R. M. Schust.												+	
subsp. <i>trichophyllum</i>		●	●			●					●	●	●

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
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		○													○			
						○	●				●		○				●	
		●							○						●			●
		●						(○)							○			
		●							●									
○	(○)	●		[1]		●		○							○			●
	●	●	●	●	●	○	+				○			●			●	●
		●										○			○			○
○		●		[1]					○		●	●		●	○			●
		●						○	○		●	●		●	○			
●		●						●	○		●	●	●	●				●
		●																
○		●						○	○		●	●			○			
		●													○			
																		+
(●)		●		[1]											●			●
○		●							○			○			○			●
○		●					●		○		○	●		●	○			●
○		●					(○)	○	○		○	(●)		○	○			●
				[1]														
		●																
●		●						●				●			●			●

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
Chiloscyphus Corda													
<i>pallescens</i> (Ehrh. ex Hoffm.) Dumort.	[16]	○	●			●			○		●	●	●
<i>polyanthos</i> (L.) Corda	○	○	●			●			○		●	●	●
Cladopodiella H. Buch													
<i>fluitans</i> (Nees) H. Buch											●	●	
<i>francisci</i> (Hook.) Jörg.											●	●	
Cololejeunea (Spruce) Schiffn.													
<i>calcareo</i> (Lib.) Schiffn.	●	○	●	●							●	●	●
<i>minutissima</i> (Sm.) Schiffn.					●				○		●	●	●
<i>rossettiana</i> (C. Massal.) Schiffn.	●		●	●		●			○		●	●	●
<i>schaeferi</i> Grolle					●								
Colura (Dumort.) Dumort.													
<i>calyptrifolia</i> (Hook.) Dumort.					●							●	
Conocephalum Hill													
<i>conicum</i> (L.) Dumort.	●	●	●	●	●	●	●		○		●	●	●
<i>salebrosum</i> Szweyk., Buczkowska & Odrzykoski [17]		●										●	
Corsinia Raddi													
<i>coriandrina</i> (Spreng.) Lindb.	●		○	●	●	●	●	●	●		●	●	●
Cryptothallus Malmb.													
<i>mirabilis</i> Malmb.												●	
Cyathodium Kunze													
<i>foetidissimum</i> Schiffn.													
Diptlophyllum (Dumort.) Dumort.													
<i>albicans</i> (L.) Dumort.		○	●		●	●			[1]		●	●	○
<i>obtusatum</i> (R. M. Schust.) R. M. Schust.													
<i>obtusifolium</i> (Hook.) Dumort.		●	●								●	●	
<i>taxifolium</i> (Wahlenb.) Dumort.			●			●					●	●	
Douinia (C. E. O. Jensen) H. Buch													
<i>ovata</i> (Dicks.) H. Buch						●					●	●	
Drepanolejeunea (Spruce) Schiffn.													
<i>hamatifolia</i> (Hook.) Schiffn.					●						●	●	
Dumortiera Nees													
<i>hirsuta</i> (Sw.) Nees					●				[1]		●	●	(○)
Eremonotus Lindb. & Kaal. ex Pearson													
<i>myriocarpus</i> (Carrington) Pearson			●									●	
Exormotheca Mitt.													
<i>pustulosa</i> Mitt.					●						●	●	
<i>welwitschii</i> Steph.									○		●		

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
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○		●				○	●	○	○		●	●	●	●	○		●	●
		●				○									●			●
		○					●											
●		●						●				●	●		○			●
●		●		[1]			●	●			●	●		●			●	
●		●				○		●			●	●		●	●			+
							●											
							●											
●		●	●		(●)	●	●	●	●		●	●	●	●	●		●	●
●	●	●		○		●	●	●	○		●		●	●	○		●	●
											●							
		●																
○		●				○	●		○		●	●	●	●	○			●
		○																
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		●		○							●				○			○
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																		●
		○				○	●				●			●				
						○					●							

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
<i>Fossombronia</i> Raddi [18] [19]													
<i>angulosa</i> (Dicks.) Raddi	●		●	●	●	●	●		○		●	●	●
<i>caespitiiformis</i> De Not. ex Rabenh. [20] [21]													
subsp. <i>caespitiiformis</i>	●	○		●	●	●	●	●	●		●	●	●
subsp. <i>multispira</i> (Schiffn.) J. R. Bray & D. C. Cargill			●	●	●	●	●		○		●	●	●
<i>crispa</i> Nees [22]													
<i>echinata</i> Macvicar [20]				(●)	●	●	●	+	●		●	●	●
<i>foveolata</i> Lindb.						●						●	●
<i>incurva</i> Lindb.												●	
<i>leucoxantha</i> Lehm.													
<i>mittenii</i> Tind.									○		●	○	
<i>pusilla</i> (L.) Nees [21] [23]			●	●	●	●	●	●	○		●	●	●
<i>wondraczekii</i> (Corda) Lindb. [20] [23]			●	●		●	+	(●)	○		●	●	●
<i>Frullania</i> Raddi													
<i>azorica</i> Sim-Sim <i>et al.</i> [24]					●								
<i>dilatata</i> (L.) Dumort. [25]	●	●	●	●	●	●	●	●	○		●	●	●
<i>ericoides</i> (Nees) Mont.					●								
<i>fragilifolia</i> (Taylor) Gottsche <i>et al.</i>	●	○	●		●	●					●	●	○
<i>inflata</i> Gottsche	●												+
<i>jackii</i> Gottsche [26]			●									●	
<i>microphylla</i> (Gottsche) Pearson					●						●	●	
<i>oakesiana</i> Austin											●		
<i>parvistipula</i> Steph.													
<i>polysticta</i> Lindenb.					●								
<i>riparia</i> Hampe ex Lehm.			●	●	[24]						●	●	
<i>sergiae</i> Sim-Sim <i>et al.</i>													
<i>tamarisci</i> (L.) Dumort. [25]	●	●	●	●	●	●	●		○		●	●	●
<i>teneriffae</i> (F. Weber) Nees					●						●	●	
<i>Geocalyx</i> Nees													
<i>graveolens</i> (Schrad.) Nees											●	●	(○)
<i>Gongylanthus</i> Nees													
<i>ericetorum</i> (Raddi) Nees	●			●	●	●	●	●	●		●	●	●
<i>Gymnocolea</i> (Dumort.) Dumort.													
<i>inflata</i> (Huds.) Dumort.			+		●	●			○		●	●	(○)
<i>Gymnomitrium</i> Corda													
<i>apiculatum</i> (Schiffn.) Müll. Frib.			+										
<i>concinatum</i> (Lightf.) Corda			●								●	●	
<i>corallioides</i> Nees			●								●	●	
<i>crenulatum</i> Gottsche ex Carrington											●	●	
<i>obtusum</i> Lindb.											●	●	
<i>Haplomitrium</i> Nees													
<i>hookeri</i> (Sm.) Nees											●	●	
<i>Harpalejeunea</i> (Spruce) Schiffn.													
<i>molleri</i> (Steph.) Grolle					●	●					●	●	

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
○		●		[1]		●	●	●			●		●	●			●	●
○	●	●	●	●	●	●	●			●	●		●	●			●	●
○		●		[1]	○	○	●		○	○	●		●	●				●
●		●				○	●				(●)		●				●	
		○				○					●							+
											●							
											●			●				
○		●		○		○	●		○	●	●	●	●	●	○		●	●
●		●				○					●			●				
							●				○							
●	●	●		●		●	●	●	○		●	●	●	●	●		●	●
●		●					●				●	○	●	○	○			
		●													○			
		●									●				○			●
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●		●		●		●	●	○	○		●	●	●	●	●		●	●
						○	●				●							
		○					+											
●		●		○		●	●				●		●	●			●	●
		●					●		○		●				○		(○)	●
		●													○			
		●													○			●
		●													○			
											●							
											●							
		●																
(○)		●					●				●							

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
		●													○			
○		○						(○)							○			●
							●											
		○					●											
○		●						(○)				●			○			●
							● [27]											● [27]
●		●		●		○	●	●			●	●	●	●	●			○
		●					●											●
		●													○			
○		●		●			●	○	○		●		●	●	○		●	●
●		●		●		○	(●)				●	●	●	●	○		(○)	●
○		●		[1]			●	●	○			●			○			●
		●									●	○		●			●	○
○		●					●	○			●			○	●			●
		●						○	●		●	●	(○)	●	○			●
		●													●			
																		○
		●					●				●				○			
		●									(○)							
●		●					●	●	●			●			○			+
●		●						●	○			●	(●)	●	●			●
		●										●	●	●	●			●

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
<i>heterocolpos</i> (Thed. ex Hartm.) H. Buch			○		●						●	●	●
<i>turbinata</i> (Raddi) H. Buch	●	○		●	●	●	●	●	○		●	●	●
<i>Lejeunea</i> Lib.													
<i>canariensis</i> (Steph.) Steph.					●								
<i>cavifolia</i> (Ehrh.) Lindb. [33]	●	●	●	●		●	●		○		●	●	●
<i>eckloniana</i> Lindenb.					●						●	○	
<i>flava</i> (Sw.) Nees					●								
<i>hibernica</i> Bischl. <i>et al.</i> ex Grolle													
<i>lamacerina</i> (Steph.) Schiffn.					●	●					●	●	
<i>mandonii</i> (Steph.) Müll. Frib.					●						●		
<i>patens</i> Lindb. [33]				(●)							●	●	
<i>Lepidozia</i> (Dumort.) Dumort. [35]													
<i>cupressina</i> (Sw.) Lindenb.			○		●						●	●	
<i>reptans</i> (L.) Dumort.		○	●			●					●	●	●
<i>Leptoscyphus</i> Mitt.													
<i>cuneifolius</i> (Hook.) Mitt.													
<i>Lophocolea</i> (Dumort.) Dumort.													
<i>bidentata</i> (L.) Dumort.	○	○	●	●	●	●			○		●	●	●
<i>fragrans</i> (Moris & De Not.) Gottsche <i>et al.</i>					●	●					●	●	
<i>heterophylla</i> (Schrad.) Dumort.	●	○	●	●	●	●	●		[1]		●	●	●
<i>minor</i> Nees	●	●	●			●			[1]		●	●	●
<i>Lophozia</i> (Dumort.) Dumort. [36]													
<i>ascendens</i> (Warnst.) R. M. Schust.			●								●	●	
<i>bicrenata</i> (Schmidel ex Hoffm.) Dumort.					●	●			○		●	●	●
<i>capitata</i> (Hook.) Macoun											(○)	●	
<i>decolorans</i> (Limpr.) Steph.			○									●	
<i>elongata</i> Steph.													
<i>excisa</i> (Dicks.) Dumort.	○	○	+		●	●					●	●	●
<i>grandiretis</i> (Lindb. ex Kaal.) Schiffn.												(●)	
<i>incisa</i> (Schrad.) Dumort.	○	○	●								●	●	●
<i>laxa</i> (Lindb.) Grolle												●	
<i>longidens</i> (Lindb.) Macoun			○			●					●	●	
<i>longiflora</i> (Nees) Schiffn.		○	●			●					●	●	(○)
<i>obtusa</i> (Lindb.) A. Evans			●			●					●	●	●
<i>opacifolia</i> Culm. ex Meyl.											●	●	
<i>perssonii</i> H. Buch & S. W. Arnell												●	
<i>polaris</i> (R. M. Schust.) R. M. Schust. & Damsh.													
<i>silvicola</i> H. Buch [37]			+								●	●	
<i>sudetica</i> (Nees ex Huebener) Grolle			●			●					●	●	
<i>ventricosa</i> (Dicks.) Dumort. [38]	○	○	●			●					●	●	●
<i>wenzelii</i> (Nees) Steph.			●								●	●	
<i>Lunularia</i> Adans.													
<i>cruciata</i> (L.) Lindb.	●	○	●	●	●	●	●	●	●		●	●	●

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
		●					●	○				●			○			
●	●	●		●		○ [32]		○	○	●	●	●	●	●	○		●	●
							●											
●		●				●	●	●			●	●	●	●	○		●	●
							●				●							
							● [34]											
		●					●				●		●					●
							●				●							○
							●											
●		●					●	●	○		●	●			○			○
							●											
●		●		[1]		○	●	●			●	●	●	●	○		●	●
		●				○	●				●							
●		●		●		○	●	●			●	●	●	●	○		●	●
○		●				○	●		○		○	●		●	○			●
○		●										●						
○		●					●				●	●			○			●
		●																
○		●						○	○		●	●	(○)	●	○			●
		○																
○		●						○			●				○			●
		●										●						○
○		●						(○)			●	●			○			●
		●										●						
		●							○						○			
		●											+					
○		●					●	○			●	●			○			○
		●						○	○		●	●	(○)	●	○			●
		●									●							
●	●	●	●	●	●	●	●	●	○	●	●	○	●	●	○		●	●

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
<i>Mannia</i> Opiz									[39]				
<i>androgyna</i> (L.) A. Evans	●	○	●	●	●	●	●	●	○	●	●	●	●
<i>californica</i> (Gottsche ex Underw.) L. C. Wheeler												●	
<i>fragrans</i> (Balbis) Frye & L. Clark [10]		●	●								●	●	(○)
<i>pilosa</i> (Hornem.) Frye & L. Clark			●										
<i>triandra</i> (Scop.) Grolle	●	○	●								●	●	
<i>Marchantia</i> L.													
<i>debilis</i> Goegel										●			
<i>paleacea</i> Bertol.	●			●	●	●			●		●	○	●
<i>polymorpha</i> L.									○	○			
subsp. <i>montivagans</i> Bischl. & Boisselier			●		●						●	●	●
subsp. <i>polymorpha</i>			●		●	●			+		●	●	●
subsp. <i>ruderalis</i> Bischl. & Boisselier	●	○			●	●	●				●	●	●
<i>Marchesinia</i>													
<i>mackaii</i> (Hook.) Gray				●	●	●					●	●	
<i>Marsupella</i> Dumort.													
<i>adusta</i> (Nees emend. Limpr.) Spruce			●									●	
<i>alpina</i> (Gottsche ex Husn.) Bernet			●								●	●	
<i>boeckii</i> (Austin) Kaal.											●	●	
<i>brevisima</i> (Dumort.) Grolle			○								●	●	
<i>commutata</i> (Limpr.) Bernet												●	
<i>condensata</i> (Ångstr. ex C. Hartm.) Kaal.												●	
<i>emarginata</i> (Ehrh.) Dumort.		○	●		●	●	●		[1]		●	●	●
<i>funckii</i> (F. Weber & D. Mohr) Dumort.			●		●	●					●	●	●
<i>profunda</i> Lindb.					●								
<i>sparsifolia</i> (Lindb.) Dumort.			+								●	●	
<i>sphacelata</i> (Gieseke ex Lindenb.) Dumort.			●			●					●	●	○
<i>sprucei</i> (Limpr.) Bernet			●								●	●	
<i>Metzgeria</i> Raddi													
<i>conjugata</i> Lindb.		○	●		●						●	●	●
<i>furcata</i> (L.) Dumort.	●	●	●	●	●	●	●	●	○		●	●	●
<i>leptoneura</i> Spruce					●								
<i>simplex</i> Lorb. ex Müll. Frib.			●									●	
<i>temperata</i> Kuwah.											●	●	
<i>violacea</i> (Ach.) Dumort. [40]											●	●	
<i>Microlejeunea</i> Steph.													
<i>ulicina</i> (Taylor) A. Evans					●	●					●	●	
<i>Moerckia</i> Gottsche													
<i>blyttii</i> (Moerch ex Hornem.) Brockm.												●	
<i>hibernica</i> (Hook.) Gottsche									○			○	+

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
●	●	●	●	○		○	●	●			●		●	●			●	●
○		●					●		○			●		●	○			+
		●													○			
●		●							○			●			○			
●		●		+		●	●	●	○		(○)	○		●	○			●
	●			+		●				●							(●)	
○		●				+	+	○				●			●			●
●		●					●	●	●		●	●	●					●
○	●	●		●		+	+	●			●	●	●	●	●			●
●		●					●				●							
		○									●							
		○									(○)							
		○									(●)							
		●																
		●																
		●																
○		●					●		○		●		●	●	○		●	●
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							●				●							
		●									●							
		●					●				●				○			
○		●					●	●	○		●	●	●		○			●
●	●	●		●		●	●	●	●		●	●	●	●	●		●	●
		●					●								●			
●		●					●	(○)				(●)			○			
		●					●	●			●	●		●	●			●
		●																
		●				○									○			

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
<i>Mylia</i> Gray													
<i>anomala</i> (Hook.) Gray		○	●								●	●	
<i>taylorii</i> (Hook.) Gray												●	
<i>Nardia</i> Gray													
<i>breidleri</i> (Limpr.) Lindb.											●	●	
<i>compressa</i> (Hook.) Gray			●			●					●	●	(○)
<i>geoscyphus</i> (De Not.) Lindb. [41]			●	(○)	●	●					●	●	○
<i>insecta</i> Lindb. [41]												●	
<i>scalaris</i> Gray			●		●	●			○		●	●	○
<i>Nowellia</i> Mitt.													
<i>curvifolia</i> (Dicks.) Mitt.		○	●			●					●	●	●
<i>Odontoschisma</i> (Dumort.) Dumort. [12]													
<i>denudatum</i> (Mart.) Dumort.											●	●	
<i>elongatum</i> (Lindb.) A. Evans											●	●	
<i>macounii</i> (Austin) Underw.													
<i>prostratum</i> (Sw.) Trevis.													
<i>sphagni</i> (Dicks.) Dumort.			+			●					●	●	
<i>Oxymitra</i> Bisch. ex Lindenb.													
<i>incrassata</i> (Brot.) Sérgio & Sim-Sim	●		●	●	●	●	●	●	●		●	●	●
<i>Pallavicinia</i> Gray													
<i>lyellii</i> (Hook.) Carruth.											●	●	○
<i>Pedinophyllum</i> (Lindb.) Lindb.													
<i>interruptum</i> (Nees) Kaal.	○	○	●			●			●		●	●	●
<i>Pellia</i> Raddi													
<i>endiviifolia</i> (Dicks.) Dumort.	●	●	●	●		●	●	●	●[42]		●	●	●
<i>epiphylla</i> (L.) Corda [43]		●	●			●	(●)	●	○		●	●	●
<i>neesiana</i> (Gottsche) Limpr.			●								●	●	●
<i>Peltolepis</i> Lindb.													
<i>quadrata</i> (Saut.) Müll. Frib.		○										●	
<i>Petalophyllum</i> Nees & Gottsche ex Lehm.													
<i>ralfsii</i> (Wilson) Nees & Gottsche				●			●	●	●				●
<i>Plagiochasma</i> Lehm. & Lindenb.													
<i>appendiculatum</i> Lehm. & Lindenb.				●									
<i>microcephalum</i> (Steph.) Steph.													
var. <i>tunesicum</i> Bischl.													
<i>rupestre</i> (J. R. Forst. & G. Forst.) Steph.	●			●	●	●	●	+	●	●	●	●	●
<i>Plagiochila</i> (Dumort.) Dumort. [44]													
<i>asplenioides</i> (L. emend. Taylor) Dumort. [45]	●	(●)	●			●			(○)		●	●	●

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
		●													○			
○		●										●			○			●
		●																
		●		[1]			●				●	●						○
		●					●				●			○	○			
○		●					●				●	●		●	○			●
○		●					●	●				●			○			○
○		●					●								○			
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●	●	●			●	●	+	●		●	●		●	●			●	●
		●					●				●						●	
●		●						●	○			●	●	○	●			●
●	●	●		○	●	●	●	●	●	●	●	●	●	●	●		●	●
○		●		[1]			●	●	○		●	●	●	●	○		●	●
○		●						(○)	○		●	●			○			●
○		○													○			
		●								●	●		●	●			●	●
																		●
○	○	●	+		(○)	●	●	●	○		●		●	●			●	●
(●)		●						●	(●)		(●)	●	●	●	●			●

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
<i>bifaria</i> (Sw.) Lindenb.					●						●	●	
<i>britannica</i> Paton											●		
<i>exigua</i> (Taylor) Taylor					●						●	●	
<i>heterophylla</i> Lindenb. ex Lehm. [46]												+	
<i>maderensis</i> Gottsche ex Steph. [47]					●								
<i>porelloides</i> (Torrey ex Nees) Lindenb. [45]	○	○	●	●	●	+			○		●	●	●
<i>punctata</i> (Taylor) Taylor					●						●	●	
<i>retrorsa</i> Gottsche													
<i>spinulosa</i> (Dicks.) Dumort.					●						●	●	
<i>stricta</i> Lindenb.					●								
<i>virginica</i> A. Evans					●								
<i>Pleurocladula</i> Grolle													
<i>albescens</i> (Hook.) Grolle		●									●	●	
<i>Porella</i> L.													
<i>arboris-vitae</i> (With.) Grolle	●		●	●	(●) [48]	●			○		●	●	●
<i>xbaueri</i> (Schiffn.) C. E. O. Jensen	●		●								●	●	●
<i>canariensis</i> (F. Weber) Underw.					●						●		
<i>cordaeana</i> (Huebener) Moore	●	○	●			●	●	●	●		●	●	●
<i>inaequalis</i> (Gottsche ex Steph.) Perss.													
<i>obtusata</i> (Taylor) Trevis.	[16]		●	●	●	●		+	○		●	●	●
<i>pinnata</i> L.			●						○		●	●	
<i>platyphylla</i> (L.) Pfeiff.	●	●	●	●	● [48]	●	●	●	●		●	●	●
<i>Prasanthus</i> Lindb.													
<i>suecicus</i> (Gottsche) Lindb.												●	
<i>Preissia</i> Corda													
<i>quadrata</i> (Scop.) Nees [51]	○	●	●			●					●	●	●
<i>Ptilidium</i> Nees													
<i>ciliare</i> (L.) Hampe	○	○	●			●					●	●	○
<i>pulcherrimum</i> (Weber) Vain.		●	●								●	●	
<i>Radula</i> Dumort. [52]													
<i>aquilegia</i> (Hook. f. & Taylor) Gottsche <i>et al.</i>					●						●		
<i>carringtonii</i> J. B. Jack					●								
<i>complanata</i> (L.) Dumort.	●	●	●	●		●	●	+	○		●	●	●
<i>holtii</i> Spruce					●						●		
<i>jonesii</i> Bouman <i>et al.</i>					●								
<i>lindenberiana</i> Gottsche ex C. Hartm.	●	○	●	●	●	●	●		●		●	●	●
<i>nudicaulis</i> Steph.													
<i>visianica</i> C. Massal.													
<i>wichurae</i> Steph.					●								
<i>Reboulia</i> Raddi													
<i>hemisphaerica</i> (L.) Raddi [51]	●	○	●	●	●	●	●	●	●		●	●	●

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
		●					●				●							[1]
		●					●											
							●											
●		●		[1]		●	●	●	○		●	●	●	●	●			●
							●				●							
							●											
							●											
○		●																
●		●		[1]		○		●			○	●	●	●	○		●	●
●		(○)						●				●			●			●
						[49]	●				●							
●	●	●		○	[50]	●	●	●	○		●	●	●	●	○			●
							●											
●		●		●		○	●	●			●		●	●	○		●	●
						[50]					●							●
●		●		[1]		●		●	●		●	●	●	●	●		●	●
●		●		●		○		●	○		●	●		○	●			●
○		●						○				●			○			
○		●						●				●			○			
							●											
							●											
●		●		[1]		●	●	●	●		●	●	●	●	●		●	●
							●				●							
							●											
●		●				●	●	●			●		●	●	○		●	●
							●											
		○																
							●											
○	●	●	●	●	●	●	●	○	○		●	●	●	●	○	○	●	●

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
<i>Riccardia</i> Gray													
<i>chamedryfolia</i> (With.) Grolle		○	●		●	●	●		○		●	●	●
<i>incurvata</i> Lindb.			(○)								●	●	
<i>latifrons</i> (Lindb.) Lindb.		○	○			●			[1]		●	●	●
<i>multifida</i> (L.) Gray	●	○	○		●	●	●		○		●	●	●
<i>palmata</i> (Hedw.) Carruth.	○	○	●			●					●	●	
<i>Riccia</i> L. [53] [54] [55]													
<i>atlantica</i> Sérgio & Perold													
<i>atromarginata</i> Levier				●	●		○		●	○	●	●	●
<i>beyrichiana</i> Hampe ex Lehm.				●		●			○		●	●	●
<i>bicarinata</i> Lindb.	●	○		○	●	●	●	+	●		●	●	●
<i>bifurca</i> Hoffm. [56]	●			●	●		●		○		●	●	●
<i>breidleri</i> Jur. ex Steph.												●	
<i>canaliculata</i> Hoffm.						●	+		○		●	●	●
<i>cavernosa</i> Hoffm.				●	●					●	●	●	
<i>ciliata</i> Hoffm. [57]	●		●	●	●	●	●		○		●	●	●
<i>ciliifera</i> Link ex Lindenb.	●	○	●		●	●			●		●	●	●
<i>congoana</i> Steph.										●			
<i>crinita</i> Taylor [57]		○		●	●	●	●		○		●	●	●
<i>crozalsii</i> Levier	●	○		●	●	●	●	●	○		●	●	●
<i>crustata</i> Trab.			●	●				+	○	○	●	●	
<i>crystallina</i> L. emend. Raddi	●		●	●	●		●		●		●	●	●
<i>duplex</i> Lorb.											●		
<i>fluitans</i> L.		○	●	●		●			●		●	●	●
<i>frostii</i> Austin									●	●	●		
<i>glauca</i> L.		○											
var. <i>ciliaris</i> Warnst.						●			●		●	●	●
var. <i>glauca</i>	●		●	●	●	●	●		●		●	●	+
<i>gougetiana</i> Durieu & Mont.													
var. <i>armatissima</i> Levier ex Müll. Frib.					●				●		●	●	●
var. <i>gougetiana</i>		○	●	●	●	●	●		●		●	●	●
<i>huebeneriana</i> Lindenb.									(○)		●	●	
<i>lamellosa</i> Raddi	●			●	●	●	●	●	○	○	●	●	●
<i>ligula</i> Steph.					●				[1]		●	●	
<i>macrocarpa</i> Levier	●			●	●	●	●		●		●	●	●
<i>melitensis</i> C. Massal.													
<i>micheli</i> Raddi	●	○				●	●	+	●		●	●	●
<i>nigrella</i> DC.	●	○	●	●	●	●	●	+	●		●	●	●
<i>papillosa</i> Moris	●	○	●		●	●	●		○		●	●	●
<i>perennis</i> Steph.						●			○		●	●	●
<i>rhenana</i> Lorb. ex Müll. Frib.												●	
<i>sommieri</i> Levier							●		○		●		●
<i>sorocarpa</i> Bisch.													
var. <i>heegii</i> Schiffn.					●	●			+		●	●	
var. <i>sorocarpa</i>	●	○	●	●	●	●	●	●	●	○	●	●	●
<i>subbifurca</i> Warnst. ex Croz.	●				●	●	●		○		●	●	
<i>teneriffae</i> S. W. Arnell					○								
<i>trabutiana</i> Steph.	●			●	●		●	+	●		●	●	+
<i>warnstorffii</i> Limpr. ex Warnst.													
var. <i>subinermis</i> Warnst.													
var. <i>warnstorffii</i>						(○)			●		●	●	

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
○		●				○	●	(○)			●		●	●	○		(○)	●
○		●					●	●			●	○			○		●	●
●		●				○	●	●			●	(●)	●	●	○		●	●
○		●					●	●				○			○			●
							●											
	●	●	●		●	●	●				●		(○)	●		+	●	
○	●	○				●		●		●	●		●	●	○	+	●	●
○		●		[1]			●		○		●		●	●	○			●
		●																
	+	●				○					●		●				+	+
(○)		●			●	●	●				●			●			●	●
●	+				●	●	●	●	○				●	●	○		●	●
○		●		○		●	●	●	○		●		●	●		+	+	●
●		●		+	●	●		●			●	●					●	●
●	●	●		+		●	●	●		●	●		●	●		+	●	●
	●		●	+	●	●											●	
○	●	●		[1]	●	●	●			●	●	●	●	●			●	●
		●									●						●	
○	(○)	●				+		●	○		●	●			○			●
○	●	●				+						●				+	[58]	●
○	(●)			○						●		●			○			
						●							●					●
		●				○	(○)				●		●	●				●
				+					○									
		○				●					●		●				●	●
●	●	●		+		●	●				●		●	●			●	●
		●				[1]					●							
	●	●	●	+	●	●	●			●	●		●	●		+	●	●
	+	●					(○)						●					
○	●	●	●			●	●				●		●	●			●	●
										●								
●	●	●	●	[1]	●	○		●			●		●	●		+	●	●
●	●	●	●		●	●	●	●			●		●	●		+	●	●
●		●				○		●			●		○	●				+
		○				●					●		●				●	
		○				○					●		●					●
									○	●								
						○	+				●		●				●	
●	●	●	●	+	●	●	●	●			●	●	●	●	○	+	●	●
●	●	●					●	●			●					+		
	●		●		●	●	●				●			●			●	●
○								●									[1]	
○						○					●			○				
		●				○	●				●		(○)	●				

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
Ricciocharpos Corda													
<i>natans</i> (L.) Corda		○	●						○		●	●	○
Riella Mont.													
<i>affinis</i> M. Howe & Underw.					●						[59]		
<i>bialata</i> Trab.									○				
<i>cossoniana</i> Trab.					●				●		●		
<i>cyrenaica</i> Maire													
<i>helicophylla</i> (Bory & Mont.) Mont.				●					●	○	●	●	
<i>notarisii</i> (Mont.) Mont.				●	●		●		○		●	●	○
<i>numidica</i> Trab. [60]									○				
<i>parisii</i> Gottsche									○		(○)	●	
<i>sersuensis</i> Trab. [60]									○				
Saccogyna Dumort.													
<i>viticulosa</i> (L.) Dumort.					●	●					●	●	
Sauteria Nees													
<i>alpina</i> (Nees) Nees												●	
Scapania (Dumort.) Dumort.													
<i>aequiloba</i> (Schwägr.) Dumort.	●	○	●								●	●	●
<i>apiculata</i> Spruce			●									●	
<i>aspera</i> Bernet & M. Bernet	●	○	●	●		●					●	●	●
<i>brevicaulis</i> Taylor													
<i>calcicola</i> (Arnell & J. Pers.) Ingham	●	○	●	[62]							●	●	●
<i>carinthiaca</i> J. B. Jack ex Lindb.													
<i>compacta</i> (A. Roth) Dumort. [63]	●	●	●		●	●	●		○		●	●	●
<i>crassiretis</i> Bryhn		○											
<i>curta</i> (Mart.) Dumort.		○	○		●	●	●		○		●	●	●
<i>cuspiduligera</i> (Nees) Müll. Frib.											●	●	(○)
<i>gracilis</i> Lindb.					●	●			[1]		●	●	(○)
<i>gymnostomophila</i> Kaal.											●	●	
<i>helvetica</i> Gottsche			●								(●)	●	
<i>irrigua</i> (Nees) Nees		○	●			●			○		●	●	○
<i>lingulata</i> H. Buch												●	
<i>mucronata</i> H. Buch			●			●					●	●	
<i>nemorea</i> (L.) Grolle	●	●	●		●	●					●	●	●
<i>obscura</i> (Arnell & C. E. O. Jensen) Schiffn.													
<i>paludicola</i> Loeske & Müll. Frib.			●								●	●	
<i>paludosa</i> (Müll. Frib.) Müll. Frib.						●					●	●	(●)
<i>praetervisa</i> Meyl.											●	●	
<i>scandica</i> (Arnell & H. Buch) Macvicar			●								●	●	
<i>scapanioides</i> (C. Massal.) Grolle													
<i>subalpina</i> (Nees ex Lindenb.) Dumort.			●			●			○		(○)	●	○
<i>uliginosa</i> (Sw. ex Lindenb.) Dumort.											(●)	●	
<i>umbrosa</i> (Schräd.) Dumort.	●	○	●			●					●	●	
<i>undulata</i> (L.) Dumort.			●		●	●			●		●	●	●
<i>verrucosa</i> Heeg		○	●								●	●	

HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
	●	●				○		●	○			(●)					●	●
	●																	
	●		●			[1]											+	
	●		○		●	○				●	○		○	●			●	+
●						○					●						○	
						●											○	
						[1]												
		●					●				●		(○)					
	●							○								○		
○	●		[1]				●					●		●	●			○
○	○														●			
●	●		[1]				●				(○)	●	(○)	●	●			○
	+ [61]																	
○	●		●									●			○			
	●																	
●	●					○	●	○			●		●	●	○		●	●
	●														●			
○	●						●				●	●		○	○		(○)	○
	●														○			
	○					○	●				●						(○)	
	●																	
	●														○			
	●							●	○			●			○			●
	●											●						
○	●						+					●						
○	●						●		○		●	●		●	○			●
	●																	
	●											●						
	●										●	●						
	●										●	●		●	○			●
	●																	
○	●						●	●	○			●			○			○
○	●					○	●	●	○		●	●	●	●	○		●	●
○	●													○				●

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR	HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
<i>madeirensis</i> (Schiffn.) Grolle																					●											
<i>microscopica</i> (Taylor) A. Evans					●						●	●									●											
<i>sintenisii</i> Steph.					●																●											
<i>Apomarsupella</i> R. M. Schust.																																
<i>revoluta</i> (Nees) R. M. Schust.												●				●																
<i>Apometzgeria</i> Kuwah.																																
<i>pubescens</i> (Schrank) Kuwah.		●	●			●					●	●		●		●					●	○			○		●	○				○
<i>Arnellia</i> Lindb.																																
<i>fennica</i> (Gottsche) Lindb.												●				○																
<i>Asterella</i> P. Beauv. [8]																																
<i>africana</i> (Mont.) A. Evans					●	●			○		●									○	●			●		○				●		
<i>gracilis</i> (F. Weber) Underw. [9]		●									●	●				●						○						●			●	
<i>lindenbergiana</i> (Corda ex Nees) Arnell		●	○									○				●					(○)							○				
<i>saccata</i> (Wahlenb.) A. Evans [10]												(○)				●						●										
<i>Athalamia</i> Falconer																																
<i>hyalina</i> (Sommerf.) S. Hatt. [9]	●		●	●			●		●		●	●	●	○	(○)	●		[1]		●		○						○			●	
<i>spathysii</i> (Lindenb.) S. Hatt.	●		●	●	●	●	○		○		●	(●)	●		●	●	●	●	○	+				○			●			●	●	
<i>Barbilophozia</i> Loeske																																
<i>atlantica</i> (Kaal.) Müll. Frib.											●	●																				
<i>attenuata</i> (Mart.) Loeske			○	+							●	●				●										○		○				○
<i>barbata</i> (Schmidel ex Schreb.) Loeske	●	●	●			●					●	●	●	○		●		[1]				○		●	●		●	○			●	
<i>binsteadii</i> (Kaal.) Loeske											●																					
<i>floerkei</i> (F. Weber & D. Mohr) Loeske			●								●	●				●					○	○		●	●		●	○				
<i>hatcheri</i> (A. Evans) Loeske		●	●			●					●	●	●	●		●					●	○		●	●	●	●				●	
<i>kunzeana</i> (Huebener) Müll. Frib.			●								●	●				●																
<i>lycopodioides</i> (Wallr.) Loeske	●		●			●					●	●	●	○		●					○	○		●	●			○				
<i>quadriloba</i> (Lindb.) Loeske												●				●												○				
<i>rubescens</i> (R. M. Schust. & Damsh.) Kartt. & L. Söderstr.																																+
<i>Bazzania</i> Gray																																
<i>flaccida</i> (Dumort.) Grolle			●								●	●		(●)		●		[1]										●			●	
<i>tricrenata</i> (Wahlenb.) Lindb.	○	○	●								●	●	+	○		●						○				○		○			●	
<i>trilobata</i> (L.) Gray																																
var. <i>depauperata</i> (Müll. Frib.) Grolle											●	+																				
var. <i>trilobata</i>	○	○	●								●	●	○	○		●					●	○		○	●		●	○			●	
<i>Blasia</i> L.																																
<i>pusilla</i> L.			●								●	●	●	○		●					(○)	○	○		○	(●)	○	○			●	
<i>Blepharostoma</i> (Dumort.) Dumort.																																
<i>trichophyllum</i> (L.) Dumort.																																
subsp. <i>brevirete</i> (Bryhn & Kaal.) R. M. Schust.												+				●																
subsp. <i>trichophyllum</i>		●	●			●					●	●	●	●		●						●					●				●	

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR	HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
<i>heterocolpos</i> (Thed. ex Hartm.) H. Buch			○		●						●	●	●			●					○											
<i>turbinata</i> (Raddi) H. Buch	●	○		●	●	●	●	●	○		●	●	●	●	●					○ [32]		○	○	●	●	●	●	●	○		●	●
Lejeunea Lib.																																
<i>canariensis</i> (Steph.) Steph.					●																●											
<i>cavifolia</i> (Ehrh.) Lindb. [33]	●	●	●	●		●	●		○		●	●	●	●		●				●	●	●			●	●	●	○		●	●	
<i>eckloniana</i> Lindenb.					●						●	○									●											
<i>flava</i> (Sw.) Nees					●																● [34]											
<i>hibernica</i> Bischl. <i>et al.</i> ex Grolle																					●											
<i>lamacerina</i> (Steph.) Schiffn.					●	●					●	●									●				●							●
<i>mandonii</i> (Steph.) Müll. Frib.					●						●										●				●							
<i>patens</i> Lindb. [33]				●							●	●									●				●							○
Lepidozia (Dumort.) Dumort. [35]																																
<i>cupressina</i> (Sw.) Lindenb.			○		●						●	●									●											
<i>reptans</i> (L.) Dumort.		○	●			●					●	●	●	●							●	●	○		●	●			○			○
Leptoscyphus Mitt.																																
<i>cuneifolius</i> (Hook.) Mitt.																					●											
Lophocolea (Dumort.) Dumort.																																
<i>bidentata</i> (L.) Dumort.	○	○	●	●	●	●			○		●	●	●	●							○	●	●		●	●	●	○		●	●	
<i>fragrans</i> (Moris & De Not.) Gottsche <i>et al.</i>					●	●					●	●									○	●			●							
<i>heterophylla</i> (Schrad.) Dumort.	●	○	●	●	●	●	●		[1]		●	●	●	●							○	●	●		●	●	●	○		●	●	
<i>minor</i> Nees	●	●	●			●			[1]		●	●	●	○							○	●	○		○	●	●	○			●	
Lophozia (Dumort.) Dumort. [36]																																
<i>ascendens</i> (Warnst.) R. M. Schust.			●								●	●																				
<i>bicrenata</i> (Schmidel ex Hoffm.) Dumort.					●	●			○		●	●	●								●				●	●			○			●
<i>capitata</i> (Hook.) Macoun											(○)	●																				
<i>decolorans</i> (Limpr.) Steph.			○									●																				
<i>elongata</i> Steph.																																
<i>excisa</i> (Dicks.) Dumort.	○	○	+		●	●					●	●	●	○							○	○			●	●	(○)	●	○			●
<i>grandiretis</i> (Lindb. ex Kaal.) Schiffn.												(●)																				
<i>incisa</i> (Schrad.) Dumort.	○	○	●								●	●	●	○																		●
<i>laxa</i> (Lindb.) Grolle												●																				
<i>longidens</i> (Lindb.) Macoun			○			●					●	●																				○
<i>longiflora</i> (Nees) Schiffn.		○	●			●					●	●	(○)	○							(○)				●	●			○			●
<i>obtusata</i> (Lindb.) A. Evans			●			●					●	●	●													●						
<i>opacifolia</i> Culm. ex Meyl.											●	●																				
<i>perssonii</i> H. Buch & S. W. Arnell												●																				
<i>polaris</i> (R. M. Schust.) R. M. Schust. & Damsh.																						○								○		
<i>silvicola</i> H. Buch [37]			+								●	●																				
<i>sudetica</i> (Nees ex Huebener) Grolle			●			●					●	●									●	○			●	●			○			○
<i>ventricosa</i> (Dicks.) Dumort. [38]	○	○	●			●					●	●	●	○							○	○			●	●	(○)	●	○			●
<i>wenzelii</i> (Nees) Steph.			●								●	●													●							
Lunularia Adans.																																
<i>cruciata</i> (L.) Lindb.	●	○	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	○	●	●	○		●	●

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR	HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR	
Mannia Opiz									[39]																								
<i>androgyna</i> (L.) A. Evans	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<i>californica</i> (Gottsche ex Underw.) L. C. Wheeler												●																					
<i>fragrans</i> (Balbis) Frye & L. Clark [10]		●	●								●	●	(○)	○		●					●	○				●	○					+	
<i>pilosa</i> (Hornem.) Frye & L. Clark			●																														
<i>triandra</i> (Scop.) Grolle	●	○	●								●	●										○				●		○					
Marchantia L.																																	
<i>debilis</i> Goegel										●										●													
<i>paleacea</i> Bertol.	●			●	●	●			●	○	●	○	●	●	●	●	+	(●)	(●)	●	○	○	○	(○)	○	○	●	○					●
<i>polymorpha</i> L.									○	○				●			+			●			●							(●)			
subsp. <i>montivagans</i> Bischl. & Boisselier			●		●						●	●	●	○						+	+	○				●		●				●	
subsp. <i>polymorpha</i>			●		●	●			+		●	●	●	●							●	●	●			●	●	●				●	
subsp. <i>ruderalis</i> Bischl. & Boisselier	●	○			●	●	●				●	●	●	○				●		+	+	●			●	●	●	●	●			●	
Marchesinia																																	
<i>mackaii</i> (Hook.) Gray				●	●	●					●	●		●							●												
Marsupella Dumort.																																	
<i>adusta</i> (Nees emend. Limpr.) Spruce			●									●													●								
<i>alpina</i> (Gottsche ex Husn.) Bernet			●								●	●													(○)								
<i>boeckii</i> (Austin) Kaal.											●	●												(●)									
<i>brevissima</i> (Dumort.) Grolle			○								●	●																					
<i>commutata</i> (Limpr.) Bernet												●																					
<i>condensata</i> (Ångstr. ex C. Hartm.) Kaal.												●																					
<i>emarginata</i> (Ehrh.) Dumort.		○	●		●	●	●		[1]		●	●	●	○							●	○			●	●	●	○			●	●	
<i>funkii</i> (F. Weber & D. Mohr) Dumort.			●		●	●					●	●	●	○							●				●	●		○				○	
<i>profunda</i> Lindb.					●																●												
<i>sparsifolia</i> (Lindb.) Dumort.			+								●	●																					
<i>sphacelata</i> (Gieseke ex Lindenb.) Dumort.			●		●						●	●	○												●								
<i>sprucei</i> (Limpr.) Bernet			●								●	●									●							○					
Metzgeria Raddi																																	
<i>conjugata</i> Lindb.		○	●		●						●	●	●	○							●	●	○		●	●	●	○				●	
<i>furcata</i> (L.) Dumort.	●	●	●	●	●	●	●	●	○		●	●	●	○							●	●	●		●	●	●	●	●	●	●	●	●
<i>leptoneura</i> Spruce					●																●												
<i>simplex</i> Lorb. ex Müll. Frib.			●									●																					
<i>temperata</i> Kuwah.											●	●									●												
<i>violacea</i> (Ach.) Dumort. [40]											●	●		●							●	(○)						○					
Microlejeunea Steph.																																	
<i>ulicina</i> (Taylor) A. Evans					●	●					●	●									●	●			●	●	●	●				●	
Moerckia Gottsche																																	
<i>blytii</i> (Moerch ex Hornem.) Brockm.												●																					
<i>hibernica</i> (Hook.) Gottsche									○			○	+			●				○								○					

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR	HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR	
Mylia Gray																																	
<i>anomala</i> (Hook.) Gray		○	●								●	●				●													○				
<i>taylorii</i> (Hook.) Gray												●		○		●										●		○				●	
Nardia Gray																																	
<i>breidleri</i> (Limpr.) Lindb.											●	●				●																	
<i>compressa</i> (Hook.) Gray			●			●					●	●	(○)			●	[1]							●	●							○	
<i>geoscyphus</i> (De Not.) Lindb. [41]			●	(○)	●	●					●	●	○			●					●			●	●		○	○					
<i>insecta</i> Lindb. [41]												●																					
<i>scalaris</i> Gray			●		●	●			○		●	●	○	○		●					●			●	●		●	○				●	
Nowellia Mitt.																																	
<i>curvifolia</i> (Dicks.) Mitt.		○	●			●					●	●	●	○		●					●	●			●			○				○	
Odontoschisma (Dumort.) Dumort. [12]																																	
<i>denudatum</i> (Mart.) Dumort.											●	●		○		●													○				
<i>elongatum</i> (Lindb.) A. Evans											●	●				●																	
<i>macounii</i> (Austin) Underw.																																	
<i>prostratum</i> (Sw.) Trevis.																																	
<i>sphagni</i> (Dicks.) Dumort.			+			●					●	●				●													○				
Oxymitra Bisch. ex Lindenb.																																	
<i>incrassata</i> (Brot.) Sérgio & Sim-Sim	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		+	●		●		●	●	●	●	●	●			●	●	
Pallavicinia Gray																																	
<i>lyellii</i> (Hook.) Carruth.											●	●	○			●									●								
Pedinophyllum (Lindb.) Lindb.																																	
<i>interruptum</i> (Nees) Kaal.	○	○	●			●			●		●	●	●	●	●	●		○			●	○			●	●	○	●				●	
Pellia Raddi																																	
<i>endiviifolia</i> (Dicks.) Dumort.	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<i>epiphylla</i> (L.) Corda [43]		●	●			●	(●)	●	○		●	●	●	○		●	[1]			●	●	○		●	●	●	●	○		●	●	●	
<i>neesiana</i> (Gottsche) Limpr.			●								●	●	●	○		●					(○)	○		●	●			○				●	
Peltolepis Lindb.																																	
<i>quadrata</i> (Saut.) Müll. Frib.		○												○		○													○				
Petalophyllum Nees & Gottsche ex Lehm.																																	
<i>ralfsii</i> (Wilson) Nees & Gottsche				●			●	●	●				●			●							●	●		●	●				●	●	
Plagiochasma Lehm. & Lindenb.																																	
<i>appendiculatum</i> Lehm. & Lindenb.				●																													
<i>microcephalum</i> (Steph.) Steph.																																	
var. <i>tunesicum</i> Bischl.																																	
<i>rupestre</i> (J. R. Forst. & G. Forst.) Steph.	●			●	●	●	●	+	●	●	●	●	●	○	○	●	+		(○)	●	●	●	○		●		●	●			●	●	
Plagiochila (Dumort.) Dumort. [44]																																	
<i>asplenioides</i> (L. emend. Taylor) Dumort. [45]	●	(●)	●			●			(○)		●	●	●	(●)		●					●	(●)		(●)	●	●	●	●	●			●	

	AL	BA	BG	BL	CN	CO	CT	CY	DZ	EG	ES	FR	GR
Riccardia Gray													
<i>chamedryfolia</i> (With.) Grolle		○	●		●	●	●		○		●	●	●
<i>incurvata</i> Lindb.			(○)								●	●	
<i>latifrons</i> (Lindb.) Lindb.		○	○			●		[1]			●	●	●
<i>multifida</i> (L.) Gray	●	○	○		●	●	●		○		●	●	●
<i>palmata</i> (Hedw.) Carruth.	○	○	●			●					●	●	
Riccia L. [53] [54] [55]													
<i>atlantica</i> Sérgio & Perold													
<i>atromarginata</i> Levier				●	●		○		●	○	●	●	●
<i>beyrichiana</i> Hampe ex Lehm.				●		●			○		●	●	●
<i>bicarinata</i> Lindb.	●	○		○	●	●	●	+	●		●	●	●
<i>bifurca</i> Hoffm. [56]	●			●	●		●		○		●	●	●
<i>breidlerii</i> Jur. ex Steph.												●	
<i>canaliculata</i> Hoffm.						●	+		○		●	●	●
<i>cavernosa</i> Hoffm.				●	●					●	●	●	
<i>ciliata</i> Hoffm. [57]	●		●	●	●	●	●		○		●	●	●
<i>ciliifera</i> Link ex Lindenb.	●	○	●		●	●			●		●	●	●
<i>congoana</i> Steph.										●			
<i>crinita</i> Taylor [57]		○		●	●	●	●		○		●	●	●
<i>crozalsii</i> Levier	●	○		●	●	●	●	●	○		●	●	●
<i>crustata</i> Trab.			●	●				+	○	○	●	●	
<i>crystallina</i> L. emend. Raddi	●		●	●	●		●		●		●	●	●
<i>duplex</i> Lorb.												●	
<i>fluitans</i> L.		○	●	●		●			●		●	●	●
<i>frostii</i> Austin									●	●	●		
<i>glauca</i> L.		○											
var. <i>ciliaris</i> Warnst.						●			●		●	●	●
var. <i>glauca</i>	●		●	●	●	●	●		●		●	●	+
<i>gougetiana</i> Durieu & Mont.													
var. <i>armatissima</i> Levier ex Müll. Frib.					●				●		●	●	●
var. <i>gougetiana</i>		○	●	●	●	●	●		●		●	●	●
<i>huebeneriana</i> Lindenb.									(○)		●	●	
<i>lamellosa</i> Raddi	●			●	●	●	●		○	○	●	●	●
<i>ligula</i> Steph.				●					[1]		●	●	
<i>macrocarpa</i> Levier	●			●	●	●			●		●	●	●
<i>melitensis</i> C. Massal.													
<i>michelii</i> Raddi	●	○			●	●	+	●	●		●	●	●
<i>nigrella</i> DC.	●	○	●	●	●	●	●	+	●		●	●	●
<i>papillosa</i> Moris	●	○	●		●	●	●		○		●	●	●
<i>perennis</i> Steph.					●				○		●	●	●
<i>rhenana</i> Lorb. ex Müll. Frib.												●	
<i>sommieri</i> Levier							●		○		●		●
<i>sorocarpa</i> Bisch.													
var. <i>heegii</i> Schiffn.					●	●			+		●	●	
var. <i>sorocarpa</i>	●	○	●	●	●	●	●	●	●	○	●	●	●
<i>subbifurca</i> Warnst. ex Croz.	●				●	●	●		○		●	●	
<i>teneriffae</i> S. W. Arnell					○								
<i>trabutiana</i> Steph.	●			●	●		●	+	●		●	●	+
<i>warnstorffii</i> Limpr. ex Warnst.													
var. <i>subinermis</i> Warnst.													
var. <i>warnstorffii</i>						(○)			●		●	●	

	HR	IL	IT	JO	LB	LY	MA	MD	ME	MK	MT	PT	RS	SA	SC	SI	SY	TN	TR
	○		●				○	●	(○)			●		●	●	○		(○)	●
								●					●						
	○		●					●	●			●	○			○		●	●
	●		●				○	●				●	(●)	●	●	○		●	●
	○		●					●	●				○			○			●
								●											
	○		●	●		●	●	●				●		(○)	●			+	●
	●	●	○				●		●		●	●		●	●	○		+	●
	○		●		[1]			●		○		●		●	●	○			●
		+	●				○					●		●				+	+
	(○)		●			●	●	●				●		●					●
	○	+	●			●	●	●	○			●		●	●	○			●
	○		●		○		●	●	●	○		●		●	●			+	+
	●		●		+	●	●	●				●	●						●
	●	●	●		+	●	●	●			●	●		●	●			+	●
	○	●	●		[1]	●	●	●			●	●	●	●	●				●
	○	(○)	●				+	●	○			●	●						●
	○	●	●				+					●						+	[58]
	○	(●)			○							●		●					○
									●					●					●
			●				○	(○)				●		●	●				●
							+		○					●					●
	●	●	●		+	●	●					●		●	●				●
			●				[1]		●			●		●	●				●
	○	+	●					(○)				●		●	●				+
	○	●	●					●				●		●	●				●
	●	●	●		+	●	●	●				●	●	●	●				●
	●	●	●					●				●		●	●				+
	○																		[1]
	○												●		○				
													●		(○)	●			

List of synonyms and names used in the studied area

Symbols used in the list:

- ▶ Name used in the Mediterranean literature, but not found in reference works and there are uncertainties about the correct synonymy and authorship.
- ☞ The author/s of the name is/are doubtful.
- ? Name used in the Mediterranean literature, but not found in reference works and the authorship is therefore uncertain, although there is no doubt about the taxon referred (the name was probably created in a floristic publication).
- # Name used in the Mediterranean literature and found in independent reference works, but the synonymy could not be confirmed.
- \$ Synonym used in the Mediterranean literature, but not formally published (the name was undoubtedly created in a floristic publication) therefore no authors are indicated.

Anthocerotae

Anthoceros beltrani Casares-Gil [4]

Anthoceros bulbiculosus Brot. = ***Phymatoceros bulbiculosus*** (Brot.) Stotler, W. T. Doyle & Crand.-Stotl.

Anthoceros caespiticus De Not. = ***Anthoceros punctatus*** L.

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

Anthoceros constans Lindb. = ***Anthoceros punctatus*** L.

Anthoceros crispulus (Mont.) Douin = ***Anthoceros punctatus*** L.

Anthoceros crispulus auct. non (Mont.) Douin = ***Anthoceros agrestis*** Paton

Anthoceros dichotomus Raddi = ***Phymatoceros bulbiculosus*** (Brot.) Stotler, W. T. Doyle & Crand.-Stotl.

Anthoceros dichotomus f. *stricta* Casares-Gil = ***Phymatoceros bulbiculosus*** (Brot.) Stotler, W. T. Doyle & Crand.-Stotl.

Anthoceros dichotomus var. *gussonei* Zodda = ***Phaeoceros laevis*** (L.) Prosk. [5]

Anthoceros husnotii Steph. = ***Anthoceros punctatus*** L.

Anthoceros laevis L. = ***Phaeoceros laevis*** (L.) Prosk.

Anthoceros mandonii Steph. = ***Anthoceros caucasicus*** Steph.

Anthoceros multifidus L. = ***Anthoceros punctatus*** L. [2]

Anthoceros multifidus auct. = ***Anthoceros agrestis*** Paton [2]

Anthoceros multilobulus Lindb. = ***Anthoceros punctatus*** L.

Anthoceros polymorphus Raddi = ***Anthoceros punctatus*** L.

Anthoceros punctatus var. *cavernosus* auct. non (Nees) Gottsche *et al.* = ***Anthoceros agrestis*** Paton

Anthoceros punctatus var. *crispatus* Mont. = ***Anthoceros punctatus*** L.

Anthoceros punctatus var. *crispatus* auct. non Mont. = ***Anthoceros agrestis*** Paton

Anthoceros punctatus var. *crispulus* Mont. = ***Anthoceros punctatus*** L.

Anthoceros punctatus var. *crispulus* auct. non Mont. = ***Anthoceros agrestis*** Paton

Anthoceros punctatus var. *husnotii* (Steph.) Zodda = ***Anthoceros punctatus*** L.

Anthoceros punctatus f. *multifidus* (L.) Nees = ***Anthoceros punctatus*** L. [2]

Anthoceros punctatus f. *multifidus* auct. non (L.) Nees = ***Anthoceros agrestis*** Paton [2]

Anthoceros punctatus var. *multifidus* (L.) Schmidel *ex Swartz* = ***Anthoceros punctatus*** L. [2]

Anthoceros punctatus var. *multifidus* auct. non (L.) Schmidel *ex Swartz* = ***Anthoceros agrestis*** Paton [2]

Anthoceros validus Steph. = ***Phaeoceros carolinianus*** (Michx.) Prosk.

- # *Anthoceros torreyi* Austin = ***Anthoceros punctatus*** L.
Aspiromitus madeirensis Steph. = ***Anthoceros caucasicus*** Steph.
Carpobolus orbicularis (Schwein.) Schwein. = ***Notothylas orbicularis*** (Schwein.) A. Gray
Carpolipum fertile Lehm. = ***Notothylas orbicularis*** (Schwein.) A. Gray
Carpolipum valvatum (Sull.) Nees = ***Notothylas orbicularis*** (Schwein.) A. Gray
Chamaeceros fertilis (Lehm.) Milde = ***Notothylas orbicularis*** (Schwein.) A. Gray
Notothylas fertilis (Milde) Lehm. = ***Notothylas orbicularis*** (Schwein.) A. Gray
Notothylas valvata Sull. = ***Notothylas orbicularis*** (Schwein.) A. Gray
Phaeoceros bulbiculosus (Brot.) Prosk. = ***Phymatoceros bulbiculosus*** (Brot.) Stotler, W.T. Doyle & Crand.-Stotl.
Phaeoceros dichotomus (Raddi) Prosk. = ***Phymatoceros bulbiculosus*** (Brot.) Stotler, W.T. Doyle & Crand.-Stotl.
Phaeoceros laevis subsp. *carolinianus* (Michx.) Prosk. = ***Phaeoceros carolinianus*** (Michx.) Prosk.

Hepaticae

- Achiton quadratum* (Scop.) Corda = ***Preissia quadrata*** (Scop.) Müll. Frib. [51]
Acolea adusta (Nees emend. Limpr.) C. Massal. hom. illeg. non (Gray) Trevis. = ***Marsupella adusta*** (Nees emend. Limpr.) Spruce
Acolea alpina (Gottsche ex Husn.) C. Massal. = ***Marsupella alpina*** (Gottsche ex Husn.) Bernet
Acolea brevissima Dumort. = ***Marsupella brevissima*** (Dumort.) Grolle
Acolea concinnata (Lightf.) Dumort. = ***Gymnomitrium concinnatum*** (Lightf.) Corda
Acolea conferta (Limpr.) C. Massal. & Carestia = ***Marsupella brevissima*** (Dumort.) Grolle
Acolea corallioides (Nees) Dumort. = ***Gymnomitrium corallioides*** Nees
Acolea revoluta (Nees) Steph. = ***Apomarsupella revoluta*** (Nees) R. M. Schust.
Acolea varians (Lindb.) Steph. = ***Marsupella brevissima*** (Dumort.) Grolle
Aitonia italica (Sassi) Lindb. = ***Plagiochasma rupestre*** (J. R. Forst. & G. Forst.) Steph.
Alicularia breidlereri Limpr. = ***Nardia breidlereri*** (Limpr.) Lindb.
Alicularia compressa (Hook.) Nees = ***Nardia compressa*** (Hook.) Gray
Alicularia geoscypha De Not. = ***Nardia geoscyphus*** (De Not.) Lindb.
Alicularia geoscypha f. *insecta* (Lindb.) Müll. Frib. = ***Nardia insecta*** Lindb.
Alicularia minor (Nees) Limpr. = ***Nardia geoscyphus*** (De Not.) Lindb.
Alicularia pachyphylla De Not. = ***Nardia compressa*** (Hook.) Gray
Alicularia rotaeana De Not. = ***Nardia scalaris*** Gray
Alicularia scalaris (Gray) Corda = ***Nardia scalaris*** Gray
Alicularia scalaris var. *minor* (Nees) Nees = ***Nardia geoscyphus*** (De Not.) Lindb.
Anastrophyllum minutum var. *grande* (Gottsche ex Lindb.) R. M. Schust. = ***Anastrophyllum minutum*** (Schreb.) R. M. Schust.
Anastrophyllum minutum var. *weberi* (Mart.) Kartt. = ***Anastrophyllum minutum*** (Schreb.) R. M. Schust.
Anastrophyllum myriocarpum (Carrington) R. M. Schust. ex Váňa = ***Eremonotus myriocarpus*** (Carrington) Pearson
Anastrophyllum nardioides (Lindb.) Kaal. = ***Anastrophyllum assimile*** (Mitt.) Steph.
Anastrophyllum reichardtii (Gottsche in Jur.) Steph. = ***Anastrophyllum assimile*** (Mitt.) Steph.
Aneura incurvata (Lindb.) Steph. = ***Riccardia incurvata*** Lindb.
Aneura latifrons Lindb. = ***Riccardia latifrons*** (Lindb.) Lindb.
Aneura multifida (L.) Dumort. = ***Riccardia multifida*** (L.) Gray

- Aneura multifida* var. *major* (Dicks. ex Hook.) Nees = ***Riccardia chamedryfolia*** (With.) Grolle
- ☞ *Aneura multifida* var. *rivularis* Rabenh. = ***Riccardia chamedryfolia*** (With.) Grolle
- Aneura palmata* (Hedw.) Dumort. = ***Riccardia palmata*** (Hedw.) Carruth.
- Aneura pinguis* var. *angustior* (Hook.) Dumort. = ***Aneura pinguis*** (L.) Dumort.
- Aneura pinnatifida* (Sw.) Dumort. hom. illeg. = ***Riccardia chamedryfolia*** (With.) Grolle
- Aneura sinuata* (Dicks. ex Hook.) Dumort. = ***Riccardia chamedryfolia*** (With.) Grolle
- Anomomarsupella cephalozielloides* R. M. Schust. = ***Eremonotus myriocarpus*** (Carrington) Pearson
- Anthelia andina* Herzog = ***Anthelia juratzkana*** (Limpr.) Trevis.
- Anthelia julacea* subsp. *juratzkana* (Limpr.) Meyl. = ***Anthelia juratzkana*** (Limpr.) Trevis.
- Anthelia nivalis* (Sw. ex F. Weber & D. Mohr) Lindb. [7]
- Anthelia phyllacantha* C. Massal. & Carestia = ***Cephaloziella phyllacantha*** (C. Massal. & Carestia) Müll. Frib.
- Anthelia setiformis* (Ehrh.) Dumort. = ***Tetralophozia setiformis*** (Ehrh.) Schljakov
- Anthelia turneri* (Hook.) Dumort. = ***Cephaloziella turneri*** (Hook.) Müll. Frib.
- Antoioria vulgaris* Raddi nom. illeg. = ***Porella platyphylla*** (L.) Pfeiff.
- Antrocephalus italicus* Sassi = ***Plagiochasma rupestre*** (J. R. Forst. & G. Forst.) Steph.
- Aphanolejeunea teotonii* V. Allorge & Ast = ***Aphanolejeunea sintenisii*** Steph.
- Aplozia amplexicaulis* (Dumort.) Dumort. = ***Jungermannia sphaerocarpa*** Hook.
- Aplozia anomala* (Hook.) Warnst. = ***Mylia anomala*** (Hook.) Gray
- Aplozia atrovirens* (Dumort.) Dumort. = ***Jungermannia atrovirens*** Dumort.
- Aplozia autumnalis* (DC.) Heeg = ***Jamesoniella autumnalis*** (DC.) Steph.
- Aplozia confertissima* (Nees) Dumort. = ***Jungermannia confertissima*** Nees
- Aplozia cordifolia* Dumort. = ***Jungermannia exsertifolia*** subsp. *cordifolia* (Dumort.) Váňa
- Aplozia crenulata* (Mitt.) Lindb. = ***Jungermannia gracillima*** Sm.
- Aplozia crenulata* var. *inundata* (Schiffn.) Macvicar = ***Jungermannia gracillima*** Sm.
- Aplozia crenulata* var. *gracillima* (Sm.) Heeg = ***Jungermannia gracillima*** Sm.
- Aplozia gracillima* (Sm.) Dumort. = ***Jungermannia gracillima*** Sm.
- Aplozia hyalina* (Lyeell) Dumort. = ***Jungermannia hyalina*** Lyeell
- Aplozia lanceolata* (L.) Dumort. = ***Jungermannia atrovirens*** Dumort.
- Aplozia lanceolata* auct. non (L.) Dumort. = ***Jungermannia leiantha*** Grolle
- Aplozia lurida* (Dumort.) Dumort. = ***Jungermannia sphaerocarpa*** Hook.
- Aplozia lurida* sensu Breidl. = ***Jungermannia confertissima*** Nees
- Aplozia nana* (Nees) Breidl. = ***Jungermannia sphaerocarpa*** Hook.
- Aplozia oblongifolia* (Müll. Frib.) Jörg. = ***Jungermannia pumila*** With.
- Aplozia obovata* (Nees) Loeske = ***Jungermannia obovata*** Nees
- Aplozia polaris* (Lindb.) Bryhn & Kaal. = ***Jungermannia polaris*** Lindb.
- Aplozia pumila* (With.) Dumort. = ***Jungermannia pumila*** With.
- Aplozia riparia* (Taylor) Dumort. = ***Jungermannia atrovirens*** Dumort.
- Aplozia riparia* var. *potamophila* Müll. Arg. ex Bernet = ***Jungermannia atrovirens*** Dumort.
- Aplozia riparia* var. *rivularis* Bernet = ***Jungermannia atrovirens*** Dumort.
- Aplozia scalariformis* (Nees) Dumort. = ***Jungermannia confertissima*** Nees
- Aplozia schiffneri* Loitl. = ***Jungermannia polaris*** Lindb.
- Aplozia sphaerocarpa* (Hook.) Dumort. = ***Jungermannia sphaerocarpa*** Hook.
- Aplozia sphaerocarpa* var. *nana* (Nees) Macvicar = ***Jungermannia sphaerocarpa*** Hook.
- Aplozia sphaerocarpoidea* (De Not.) Dumort. = ***Jungermannia atrovirens*** Dumort.
- Aplozia tristis* (Nees) Dumort. = ***Jungermannia atrovirens*** Dumort.

- Asterella bonjeanii* (De Not.) Trevis. = *Asterella lindenbergiana* (Corda ex Nees) Arnell
Asterella elegans (Spreng.) Trevis. **REJECTED FROM THE AREA [8]**
Asterella fragrans (Schleich.) Trevis. = *Asterella saccata* (Wahlenb.) A. Evans [10]
Asterella hemisphaerica (L.) P. Beauv. = *Reboulia hemisphaerica* (L.) Raddi
Asterella ludwigii (Schwägr.) Underw. ex A. Evans nom. inval. = *Mannia triandra* (Scop.) Grolle
Asterella ludwigii auct. non (Schwägr.) Underw. ex A. Evans nom. inval. = *Asterella gracilis* (F. Weber) Underw.
Asterella nana (Lindenb.) C. Massal. = *Athalamia hyalina* (Sommerf.) S. Hatt. [9]
Asterella pilosa (Wahlenb.) Trevis. = *Asterella gracilis* (F. Weber) Underw.
Aytonia rupestris J. R. Forst. & G. Forst. = *Plagiochasma rupestre* (J. R. Forst. & G. Forst.) Steph.
Barbilophozia baueriana (Schiffn.) Loeske = *Barbilophozia hatcheri* (A. Evans) Loeske
Barbilophozia gracilis (Schleich. ex Steph.) Müll. Frib. = *Barbilophozia attenuata* (Mart.) Loeske
Barbilophozia hatcheri var. *grandiretis* H. Buch ex Lammes = *Barbilophozia rubescens* (R. M. Schust. & Damsh.) Kartt. & L. Söderstr.
Barbilophozia lycopodioides var. *hatcheri* (Evans) Schljakov = *Barbilophozia hatcheri* (A. Evans) Loeske
? *Barbilophozia lycopodioides* var. *parvifolia* Schiffn. = *Barbilophozia hatcheri* (A. Evans) Loeske
Barbilophozia obtusa (Lindb.) H. Buch = *Lophozia obtusa* (Lindb.) A. Evans
Bazzania deflexa (Mart.) Trevis. = *Bazzania tricrenata* (Wahlenb.) Lindb.
Bazzania denudata auct. non (Torrey ex Gottsche *et al.*) Trevis. = *Bazzania flaccida* (Dumort.) Grolle
Bazzania implexa (Nees) Müll. Frib. = *Bazzania flaccida* (Dumort.) Grolle
Bazzania triangularis (Schleich.) Lindb. nom. illeg. = *Bazzania tricrenata* (Wahlenb.) Lindb.
Bazzania triangularis var. *implexa* (Nees) Zahlbr. = *Bazzania flaccida* (Dumort.) Grolle
\$ *Bazzania tricrenata* var. *implexa* = *Bazzania flaccida* (Dumort.) Grolle
Bellincinia laevigata (Schrad.) Kuntze = *Porella arboris-vitae* (With.) Grolle
Bellincinia montana Raddi = *Porella arboris-vitae* (With.) Grolle
Bellincinia platyphylla (L.) Kuntze = *Porella platyphylla* (L.) Pfeiff.
Bellincinia porella (Dicks.) Kuntze = *Porella pinnata* L.
Bellincinia thuja (Hook.) Kuntze = *Porella arboris-vitae* (With.) Grolle
Blasia pusilla var. *gemmifera* Nees = *Blasia pusilla* L.
Blepharostoma arachnoideum var. *brevirete* (Bryhn & Kaal.) Frye & L. Clark = *Blepharostoma trichophyllum* subsp. *brevirete* (Bryhn & Kaal.) R. M. Schust.
Blepharostoma trichophyllum var. *brevirete* Bryhn & Kaal. = *Blepharostoma trichophyllum* subsp. *brevirete* (Bryhn & Kaal.) R. M. Schust.
Blepharozia ciliaris (L.) Dumort. = *Ptilidium ciliare* (L.) Hampe
? *Blepharozia ciliaris* var. *wallrothiana* Nees = *Ptilidium pulcherrimum* (Weber) Vain.
Blepharozia pulcherrima (Weber) Lindb. = *Ptilidium pulcherrimum* (Weber) Vain.
Blyttia lyellii (Hook.) Endl. ex Gottsche *et al.* = *Pallavicinia lyellii* (Hook.) Carruth.
Blyttia lyellii var. *hibernica* (Hook.) Nees = *Moerckia hibernica* (Hook.) Gottsche
Blyttia moerckii Nees = *Moerckia blyttii* (Moerch ex Hornem.) Brockm.
Brissocarpus riccioides Bisch. = *Corsinia coriandrina* (Spreng.) Lindb.
Calycularia blyttii (Moerch ex Hornem.) Steph. = *Moerckia blyttii* (Moerch ex Hornem.) Brockm.
Calycularia hibernica (Hook.) Steph. = *Moerckia hibernica* (Hook.) Gottsche

- Calypogeia adscendens* (Nees) Warnst. = *Calypogeia muelleriana* (Schiffn.) Müll. Frib.
Calypogeia ericetorum Raddi = *Gongylanthus ericetorum* (Raddi) Nees
Calypogeia flagellifera Raddi = *Gongylanthus ericetorum* (Raddi) Nees
Calypogeia meylanii H. Buch = *Calypogeia integristipula* Steph.
Calypogeia muelleriana f. *sphagnicola* (Arnell & J. Perss.) Schljakov = *Calypogeia sphagnicola* (Arnell & J. Perss.) Warnst. & Loeske
Calypogeia neesiana var. *laxa* Meyl. ex Müll. Frib. = *Calypogeia muelleriana* (Schiffn.) Müll. Frib.
Calypogeia neesiana var. *meylanii* (H. Buch) R. M. Schust. = *Calypogeia integristipula* Steph.
Calypogeia paludosa Warnst. = *Calypogeia sphagnicola* (Arnell & J. Perss.) Warnst. & Loeske
Calypogeia tenuis (Austin) A. Evans. = *Calypogeia sphagnicola* (Arnell & J. Perss.) Warnst. & Loeske
Calypogeia trichomanis (L.) Corda nom. rejic. = *Calypogeia fissa* (L.) Raddi
Calypogeia trichomanis auct. non (L.) Corda = *Calypogeia azurea* Stotler & Crotz [11]
Calypogeia trichomanis var. *communis* Nees = *Calypogeia fissa* (L.) Raddi
Calypogeia trichomanis var. *erecta* Müll. Frib. = *Calypogeia muelleriana* (Schiffn.) Müll. Frib.
Calypogeia trichomanis var. *fissa* (L.) De Not. = *Calypogeia fissa* (L.) Raddi
Calypogeia trichomanis f. *papillosa* Warnst. = *Calypogeia azurea* Stotler & Crotz
Calypogeia trichomanis var. *sphagnicola* (Arnell & J. Perss.) Meyl. = *Calypogeia sphagnicola* (Arnell & J. Perss.) Warnst. & Loeske
Calypogeia trichomanis var. *sprengelii* (Mart.) C. Massal. = *Calypogeia fissa* (L.) Raddi
Calypogeia trichomanis var. *suecica* (Arnell & J. Perss.) Casares-Gil = *Calypogeia suecica* (Arnell & J. Perss.) Müll. Frib.
Candollea carinata Raddi = *Scapania compacta* (A. Roth) Dumort.
Cephalozia albescens (Hook.) Dumort. = *Pleurocladula albescens* (Hook.) Grolle
Cephalozia asperifolia f. *belsensis* Douin = *Cephaloziella divaricata* (Sm.) Schiffn.
Cephalozia baueri (Mart.) C. Massal. = *Nowellia curvifolia* (Dicks.) Mitt.
Cephalozia bicuspidata subsp. *ambigua* (C. Massal.) R. M. Schust. = *Cephalozia ambigua* C. Massal.
Cephalozia bicuspidata subsp. *lammersiana* (Huebener) R. M. Schust. = *Cephalozia bicuspidata* (L.) Dumort.
Cephalozia bicuspidata var. *alpicola* (C. Massal.) C. Massal. & Carestia = *Cephalozia pleniceps* (Austin) Lindb.
Cephalozia bicuspidata var. *lammersiana* (Huebener) Breidl. = *Cephalozia bicuspidata* (L.) Dumort.
Cephalozia bicuspidata var. *setulosa* Spruce = *Cephalozia bicuspidata* (L.) Dumort.
Cephalozia bifida Lindb. = *Cephaloziella rubella* (Nees) Warnst.
Cephalozia borealis Lindb. = *Cladopodiella francisci* (Hook.) Jörg.
Cephalozia bryhnii Kaal. = *Cephaloziella rubella* (Nees) Warnst.
Cephalozia byssacea (A. Roth) Dumort. nom. rejic. = *Cephaloziella hampeana* (Nees) Schiffn.
Cephalozia byssacea auct. non (A. Roth) Dumort. = *Cephaloziella divaricata* (Sm.) Schiffn.
Cephalozia columbae Camus = *Cephaloziella massalongi* (Spruce) Müll. Frib.
Cephalozia compacta Warnst. = *Cephalozia connivens* (Dicks.) Lindb.
Cephalozia curvifolia (Dicks.) Dumort. = *Nowellia curvifolia* (Dicks.) Mitt.
Cephalozia dentata (Raddi) Lindb. = *Cephaloziella dentata* (Raddi) Steph.
Cephalozia divaricata (Sm.) Dumort. = *Cephaloziella divaricata* (Sm.) Schiffn.

- Cephalozia divaricata* Heeg nom. inval. non (Sm.) Dumort. = *Cephaloziella rubella* (Nees) Warnst.
- Cephalozia divaricata* var. *scabra* M. Howe = *Cephaloziella divaricata* (Sm.) Schiffn.
- Cephalozia divaricata* var. *stellulifera* Taylor ex Spruce = *Cephaloziella stellulifera* (Taylor ex Spruce) Schiffn.
- Cephalozia divaricata* var. *starkei* auct. non (Funck ex Nees) Spruce nom. illeg. = *Cephaloziella divaricata* (Sm.) Schiffn.
- Cephalozia elegans* Heeg = *Cephaloziella elegans* (Heeg) Schiffn.
- Cephalozia fluitans* (Nees) Spruce = *Cladopodiella fluitans* (Nees) H. Buch
- Cephalozia francisci* (Hook.) Dumort. = *Cladopodiella francisci* (Hook.) Jörg.
- Cephalozia granatensis* J.B. Jack ex Steph. = *Cephaloziella granatensis* (J.B. Jack ex Steph.) Fulford
- Cephalozia helleri* (Nees ex Lindenb.) Lindb. nom. illeg. = *Anastrophyllum hellerianum* (Nees ex Lindenb.) R. M. Schust.
- Cephalozia hibernica* Spruce ex Pearson = *Cephalozia crassifolia* (Lindenb. & Gottsche) Fulford
- Cephalozia hypogyna* Steph. = *Cephaloziella stellulifera* (Taylor ex Spruce) Schiffn.
- Cephalozia integerrima* Lindb. = *Cephaloziella integerrima* (Lindb.) Warnst.
- Cephalozia lammersiana* (Huebener) Carrington = *Cephalozia bicuspidata* (L.) Dumort.
- Cephalozia laxifolia* (Hook.) Lindb. = *Hygrobiiella laxifolia* (Hook.) Spruce
- ☞ *Cephalozia limprichtii* (Warnst.) Steph. = *Cephaloziella stellulifera* (Taylor ex Spruce) Schiffn.
- Cephalozia lucens* (A. Evans) Steph. = *Metahygrobiiella lucens* (A. Evans) H. A. Miller
- REJECTED FROM THE AREA**
- # *Cephalozia lunulaefolia* var. *gasilieni* Corb. = *Cephalozia affinis* Lindb. ex Steph.
- Cephalozia massalongi* Spruce = *Cephaloziella massalongi* (Spruce) Müll. Frib.
- Cephalozia media* Lindb. = *Cephalozia lunulifolia* (Dumort.) Dumort.
- # *Cephalozia media* var. *gasilieni* Corb. = *Cephalozia affinis* Lindb. ex Steph.
- Cephalozia multiflora* (Huds.) Lindb. = *Cephalozia connivens* (Dicks.) Lindb.
- Cephalozia multiflora* Spruce nom. illeg. = *Cephalozia lunulifolia* (Dumort.) Dumort.
- Cephalozia myriocarpa* (Carrington) Lindb. = *Eremonotus myriocarpus* (Carrington) Pearson
- Cephalozia nematodes* sensu auct. eur. non Gottsche ex Austin = *Teleranea europea* J.J. Engel & G.L.S. Merrill [66]
- Cephalozia notarisiana* C. Massal. = *Hygrobiiella laxifolia* (Hook.) Spruce
- ☞ *Cephalozia nudis* Lindb. = *Cephalozia lunulifolia* (Dumort.) Dumort.
- Cephalozia obtusiloba* Lindb. = *Cladopodiella fluitans* (Nees) H. Buch
- Cephalozia pallida* (Spruce) Pearson = *Cephalozia lunulifolia* (Dumort.) Dumort.
- Cephalozia papillosa* Douin = *Cephaloziella divaricata* (Sm.) Schiffn.
- Cephalozia patula* Steph. = *Cephaloziella stellulifera* (Taylor ex Spruce) Schiffn.
- Cephalozia phyllacantha* (C. Massal. & Carestia) C. Massal. & Carestia = *Cephaloziella phyllacantha* (C. Massal. & Carestia) Müll. Frib.
- Cephalozia pleniceps* var. *macrantha* (Kaal. & Nicholson) Müll. Frib. = *Cephalozia pleniceps* (Austin) Lindb.
- Cephalozia raddiana* (C. Massal.) C. Massal. = *Cephaloziella rubella* (Nees) Warnst.
- Cephalozia reclusa* (Taylor) Dumort. = *Cephalozia catenulata* (Huebener) Lindb.
- Cephalozia serriflora* Lindb. = *Cephalozia catenulata* (Huebener) Lindb.
- Cephalozia sphagni* (Dicks.) Spruce = *Odontoschisma sphagni* (Dicks.) Dumort.
- Cephalozia starkei* auct. non (Funck ex Nees) Dumort. ex Cogn. nom. illeg. = *Cephaloziella divaricata* (Sm.) Schiffn.

- Cephalozia symbolica* (Gottsche) Breidl. = ***Cephalozia lunulifolia*** (Dumort.) Dumort.
Cephalozia symbolica var. *sphagnorum* C. Massal. = ***Cephalozia pleniceps*** (Austin) Lindb.
Cephalozia turneri (Hook.) Lindb. = ***Cephaloziella turneri*** (Hook.) Müll. Frib.
Cephaloziella algeriensis (Douin) Trab. = ***Cephaloziella baumgartneri*** Schiffn.
Cephaloziella alpina Douin = ***Cephaloziella varians*** (Gottsche) Steph.
Cephaloziella arctica Bryhn & Douin = ***Cephaloziella varians*** (Gottsche) Steph.
Cephaloziella baumgartneri var. *algeriensis* Douin = ***Cephaloziella baumgartneri*** Schiffn.
Cephaloziella bifidoides Douin = ***Cephaloziella rubella*** (Nees) Warnst.
Cephaloziella byssacea (A. Roth) Warnst. nom. rejic. = ***Cephaloziella hampeana*** (Nees) Schiffn.
Cephaloziella byssacea auct. non (A. Roth) Warnst. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
☞ *Cephaloziella byssacea* var. *asperifolia* (Taylor) R. M. Schust. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
Cephaloziella carnutensis Douin = ***Cephaloziella divaricata*** (Sm.) Schiffn.
Cephaloziella columbae (Camus) Müll. Frib. = ***Cephaloziella massalongi*** (Spruce) Müll. Frib.
Cephaloziella compacta (Jörg.) Müll. Frib. = ***Cephaloziella massalongi*** (Spruce) Müll. Frib.
Cephaloziella curnowii Douin = ***Cephaloziella hampeana*** (Nees) Schiffn.
Cephaloziella divaricata var. *asperifolia* (Taylor) Damsh. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
Cephaloziella divaricata var. *polystratosa* (R. M. Schust. & Damsh.) Potemkin = ***Cephaloziella divaricata*** (Sm.) Schiffn.
Cephaloziella divaricata var. *rupestris* (C. E. O. Jensen) Damsh. nom. inval. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
Cephaloziella divaricata var. *scabra* (M. Howe) S.W. Arnell = ***Cephaloziella divaricata*** (Sm.) Schiffn.
Cephaloziella erosa Limpr. ex Warnst. = ***Cephaloziella hampeana*** (Nees) Schiffn.
? *Cephaloziella francisci* (Hook.) Dumort. = ***Cladopodiella francisci*** (Hook.) Jörg.
Cephaloziella gallica (Douin) Douin = ***Cephaloziella hampeana*** (Nees) Schiffn. [14]
Cephaloziella gracillima (Douin) Douin = ***Cephaloziella stellulifera*** (Taylor ex Spruce) Schiffn.
Cephaloziella hampeana var. *subtilis* (Velen.) Macvicar = ***Cephaloziella hampeana*** (Nees) Schiffn.
Cephaloziella latzeliana Schiffn. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
☞ *Cephaloziella limprichtii* Warnst. = ***Cephaloziella stellulifera*** (Taylor ex Spruce) Schiffn.
Cephaloziella limprichtii var. *stellulifera* (Taylor ex Carrington & Pearson) Müll. Frib. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
Cephaloziella massalongi var. *algarvica* Douin = ***Cephaloziella massalongi*** (Spruce) Müll. Frib.
Cephaloziella massalongi var. *compacta* (Jörg.) Müll. Frib. = ***Cephaloziella massalongi*** (Spruce) Müll. Frib.
Cephaloziella myriantha (Lindb.) Schiffn. = ***Cephaloziella rubella*** (Nees) Warnst. [15]
Cephaloziella nigrimonasteriensis Douin = ***Cephaloziella divaricata*** (Sm.) Schiffn.
Cephaloziella papillosa (Douin) Schiffn. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
Cephaloziella patula (Steph.) Schiffn. = ***Cephaloziella stellulifera*** (Taylor ex Spruce) Schiffn.
Cephaloziella piriflora Douin = ***Cephaloziella integerrima*** (Lindb.) Warnst.
Cephaloziella pulchella (C. E. O. Jensen) Douin = ***Cephaloziella rubella*** (Nees) Warnst.
Cephaloziella raddiana (C. Massal.) Schiffn. = ***Cephaloziella rubella*** (Nees) Warnst.

- Cephaloziella rubella* var. *elegans* (Heeg) R. M. Schust. nom. illeg. = ***Cephaloziella elegans*** (Heeg) Schiffn.
- Cephaloziella rubella* var. *pulchella* (C. E. O. Jensen) R. M. Schust. = ***Cephaloziella rubella*** (Nees) Warnst.
- Cephaloziella rubella* var. *sullivantii* (Austin) Müll. Frib. = ***Cephaloziella rubella*** (Nees) Warnst.
- Cephaloziella starkei* auct. non (Funck ex Nees) Schiffn. nom. illeg. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
- # *Cephaloziella starkei* var. *examphigastriata* Douin ex Müll. Frib. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
- ☞ *Cephaloziella starkei* var. *papillosa* (Douin) Casares-Gil = ***Cephaloziella divaricata*** (Sm.) Schiffn.
- Cephaloziella starkei* var. *scabra* (M. Howe) Frye & L. Clark = ***Cephaloziella divaricata*** (Sm.) Schiffn.
- # *Cephaloziella starkei* var. *serriflora* Douin = ***Cephaloziella divaricata*** (Sm.) Schiffn.
- ☞ *Cephaloziella stellulifera* var. *gracillima* Douin = ***Cephaloziella stellulifera*** (Taylor ex Spruce) Schiffn.
- # *Cephaloziella stellulifera* var. *hericensis* Douin = ***Cephaloziella stellulifera*** (Taylor ex Spruce) Schiffn.
- Cephaloziella stellulifera* var. *gracillima* Douin = ***Cephaloziella stellulifera*** (Taylor ex Spruce) Schiffn.
- Cephaloziella stellulifera* var. *limprichtii* (Warnst.) Macvicar = ***Cephaloziella stellulifera*** (Taylor ex Spruce) Schiffn.
- Cephaloziella striatula* (C. E. O. Jensen) Douin = ***Cephaloziella spinigera*** (Lindb.) Warnst.
- Cephaloziella subdentata* Warnst. = ***Cephaloziella spinigera*** (Lindb.) Warnst.
- Cephaloziella vaucherioides* Cout. = ***Cephaloziella baumgartneri*** Schiffn.
- Cephaloziella verrucosa* (C.E.O. Jensen) Bryhn & Kaal. hom. illeg. = ***Cephaloziella varians*** (Gottsche) Steph.
- Cesia adusta* (Nees emend. Limpr.) Lindb. = ***Marsupella adusta*** (Nees emend. Limpr.) Spruce
- Cesia concinnata* (Lightf.) Lindb. = ***Gymnomitrium concinnatum*** (Lightf.) Corda
- ▶ *Cesia conferta* (Limpr.) Pearson = ***Marsupella brevissima*** (Dumort.) Grolle
- Cesia corallioides* (Nees) Carruth. = ***Gymnomitrium corallioides*** Nees
- Cesia revoluta* (Nees) Lindb. = ***Apomarsupella revoluta*** (Nees) R. M. Schust.
- Cesia varians* (Lindb.) Lindb. = ***Marsupella brevissima*** (Dumort.) Grolle
- Cesius concinnatus* (Lightf.) Gray nom. rejic. = ***Gymnomitrium concinnatum*** (Lightf.) Corda
- Chaetopsis trichophylla* (L.) Mitt. = ***Blepharostoma trichophyllum*** (L.) Dumort.
- Chandonanthus setiformis* (Ehrh.) Lindb. = ***Tetralophozia setiformis*** (Ehrh.) Schljakov
- Cheilolejeunea boaventurae* Steph. = ***Lejeunea eckloniana*** Lindenb.
- Chiloscyphus canariensis* Bryhn = ***Lophocolea fragrans*** (Moris & De Not.) Gottsche *et al.*
- Chiloscyphus denticulatus* Mitt. = ***Heteroscyphus denticulatus*** (Mitt.) Schiffn.
- Chiloscyphus fragilis* (A. Roth) Schiffn. = ***Chiloscyphus pallescens*** (Ehrh. ex Hoffm.) Dumort.
- Chiloscyphus lophocoleoides* Nees = ***Chiloscyphus pallescens*** (Ehrh. ex Hoffm.) Dumort.
- Chiloscyphus minor* (Nees) J. J. Engel & R. M. Schust. = ***Lophocolea minor*** Nees
- Chiloscyphus pallescens* var. *fontana* Müll. Frib. = ***Chiloscyphus pallescens*** (Ehrh. ex Hoffm.) Dumort.
- Chiloscyphus pallescens* var. *fragilis* (A. Roth) Müll. Frib. = ***Chiloscyphus pallescens*** (Ehrh. ex Hoffm.) Dumort.

- Chiloscyphus polyanthos* var. *erectus* Boulay = *Chiloscyphus pallescens* (Ehrh. ex Hoffm.) Dumort.
- # *Chiloscyphus polyanthos* var. *gracilescens* Boulay = *Chiloscyphus polyanthos* (L.) Corda
- Chiloscyphus polyanthos* var. *pallescens* (Ehrh. ex Hoffm.) C. Hartm. = *Chiloscyphus pallescens* (Ehrh. ex Hoffm.) Dumort.
- Chiloscyphus polyanthos* var. *rivularis* (Schrad.) Nees = *Chiloscyphus polyanthos* (L.) Corda
- Chiloscyphus rivularis* (Schrad.) Hazsl. = *Chiloscyphus polyanthos* (L.) Corda
- Chomiocarpon commutatus* (Lindenb.) Lindb. = *Preissia quadrata* (Scop.) Müll. Frib.
- Chomiocarpon quadratus* (Scop.) Lindb. = *Preissia quadrata* (Scop.) Nees [51]
- Cincinnatiulus argutus* (Nees & Mont.) Dumort. = *Calypogeia arguta* Nees & Mont.
- Cincinnatiulus suecicus* (Arnell & J. Perss.) Müll. Frib. = *Calypogeia suecica* (Arnell & J. Perss.) Müll. Frib.
- Cincinnatiulus trichomanis* (L.) Dumort. = *Calypogeia fissa* (L.) Raddi
- Cincinnatiulus trichomanis* auct. non (L.) Dumort. = *Calypogeia azurea* Stotler & Crotz [11]
- Cincinnatiulus trichomanis* var. *fissus* (L.) Boulay = *Calypogeia fissa* (L.) Raddi
- Cladopus francisci* (Hook.) Meyl. = *Cladopodiella francisci* (Hook.) Jörg.
- Clevea crassa* Trab. nom. inval. = *Athalamia hyalina* (Sommerf.) S. Hatt.
- Clevea hyalina* (Sommerf.) Lindb. = *Athalamia hyalina* (Sommerf.) S. Hatt.
- Clevea rousselliana* (Mont.) Leitg. ex Steph. = *Athalamia spathysii* (Lindenb.) S. Hatt.
- Clevea spathysii* (Lindenb.) Müll. Frib. = *Athalamia spathysii* (Lindenb.) S. Hatt.
- Clevea suecica* (Lindb.) Lindb. = *Athalamia hyalina* (Sommerf.) S. Hatt.
- Clevea trabutiana* Steph. = *Athalamia hyalina* (Sommerf.) S. Hatt.
- Codonia pusilla* (L.) Dumort. nom. inval. = *Fossombronia pusilla* (L.) Nees
- Codonia ralfsii* (Wilson) Dumort. = *Petalophyllum ralfsii* (Wilson) Nees & Gottsche
- Codonia wondraczekii* (Corda) Dumort. = *Fossombronia wondraczekii* (Corda) Lindb.
- Coleochila anomala* (Hook.) Dumort. = *Mylia anomala* (Hook.) Gray
- Coleochila stillicidiorum* (Raddi) Dumort. = *Southbya tophacea* (Spruce) Spruce
- Cololejeunea azorica* V. Allorge & Ast = *Aphanolejeunea azorica* (V. Allorge & Ast) Bernecker & Pócs
- Cololejeunea inconspicua* (Raddi) Schiffn. = *Cololejeunea minutissima* (Sm.) Schiffn.
- Cololejeunea madeirensis* Schiffn. = *Aphanolejeunea madeirensis* (Schiffn.) Grolle
- Cololejeunea microscopica* (Taylor) Schiffn. = *Aphanolejeunea microscopica* (Taylor) A. Evans
- Cololejeunea teotonii* (V. Allorge & Ast) Grolle = *Aphanolejeunea sintenisii* Steph.
- ☞ *Conocephalum hemisphaericum* Dumort. = *Preissia quadrata* (Scop.) Nees
- Conocephalum trioicum* F. H. Wigg. nom. superfl. = *Conocephalum conicum* (L.) Dumort.
- Conocephalus officinalis* Trevis. = *Conocephalum conicum* (L.) Dumort.
- Conocephalus vulgaris* Bisch. = *Conocephalum conicum* (L.) Dumort.
- Corbierella algeriensis* Douin & Trab. = *Exormotheca welwitschii* Steph.
- ? *Corbierella welwitschii* (Steph.) Douin & Trab. ex Paris = *Exormotheca welwitschii* Steph.
- Cordaea blyttii* (Moerch ex Hornem.) Corda = *Moerckia blyttii* (Moerch ex Hornem.) Brockm.
- Cordaea flotoviana* Nees = *Moerckia hibernica* (Hook.) Gottsche
- Corsinia coriandrina* var. *latifrons* Trab. nom. inval. = *Corsinia coriandrina* (Spreng.) Lindb.
- Corsinia marchantioides* Raddi = *Corsinia coriandrina* (Spreng.) Lindb.
- Corsinia reticulata* (J.F. Gmel.) Dumort. nom. illeg. = *Corsinia coriandrina* (Spreng.) Lindb.

- Crossocalyx hellerianus* (Nees ex Lindenb.) Meyl. = *Anastrophyllum hellerianum* (Nees ex Lindenb.) R. M. Schust.
- Crossogyna autumnalis* (DC.) Schljakov = *Jamesoniella autumnalis* (DC.) Steph.
- Cyathophora commutata* (Lindenb.) Trevis. = *Preissia quadrata* (Scop.) Müll. Frib.
- ☞ *Dichiton calyculatum* (Durieu & Mont.) Trevis. = *Cephaloziella calyculata* (Durieu & Mont.) Müll. Frib.
- Dichiton gallicum* Douin = *Cephaloziella hampeana* (Nees) Schiffn. [14]
- Dichiton integerrimum* (Lindb.) H. Buch = *Cephaloziella integerrima* (Lindb.) Warnst.
- Dichiton perpusillum* Mont. nom. illeg. = *Cephaloziella calyculata* (Durieu & Mont.) Müll. Frib.
- Dichominum cruciatum* (L.) Trevis. = *Lunularia cruciata* (L.) Lindb.
- Dicranolejeunea johnsoniana* (Mitt.) Vanden Berghen ex S. W. Arnell = *Acanthocoleus aberrans* (Lindenb. & Gottsche) Kruijt
- Dilaena blyttii* (Moerch ex Hornem.) Dumort. = *Moerckia blyttii* (Moerch ex Hornem.) Brockm.
- Dilaena hibernica* (Hook.) Dumort. = *Moerckia hibernica* (Hook.) Gottsche
- Dilaena lyellii* (Hook.) Dumort. = *Pallavicinia lyellii* (Hook.) Carruth.
- Diplolaena blyttii* (Moerch ex Hornem.) Nees = *Moerckia blyttii* (Moerch ex Hornem.) Brockm.
- Diplolaena lyellii* (Hook.) Dumort. = *Pallavicinia lyellii* (Hook.) Carruth.
- Diplolaena lyellii* var. *hibernica* (Hook.) Nees = *Moerckia hibernica* (Hook.) Gottsche
- ☞ *Diplolaena lyellii* var. *lamellata* (Nees) Macvicar = *Petalophyllum ralfsii* (Wilson) Nees & Gottsche
- Diplolaena lyellii* f. *lamellata* Nees = *Petalophyllum ralfsii* (Wilson) Nees & Gottsche
- Diplomitrium blyttii* (Moerch ex Hornem.) Corda = *Moerckia blyttii* (Moerch ex Hornem.) Brockm.
- Diplomitrium hibernicum* (Hook.) Corda = *Moerckia hibernica* (Hook.) Gottsche
- Diplophylleia albicans* (L.) Trevis. = *Diplophyllum albicans* (L.) Dumort.
- Diplophylleia minuta* (Schreb.) Trevis. = *Anastrophyllum minutum* (Schreb.) R. M. Schust.
- Diplophylleia obtusifolia* (Hook.) Trevis. = *Diplophyllum obtusifolium* (Hook.) Dumort.
- Diplophylleia taxifolia* (Wahlenb.) Trevis. = *Diplophyllum taxifolium* (Wahlenb.) Dumort.
- Diplophyllum apiculatum* var. *obtusatum* R. M. Schust. = *Diplophyllum obtusatum* (R. M. Schust.) R. M. Schust.
- Diplophyllum dicksoni* (Hook.) Dumort. = *Douinia ovata* (Dicks.) H. Buch
- Diplophyllum gymnostomophilum* (Kaal.) Kaal. = *Scapania gymnostomophila* Kaal.
- Diplophyllum ovatum* (Dicks.) Lindb. ex Steph. = *Douinia ovata* (Dicks.) H. Buch
- Diplophyllum scapanioides* (C. Massal.) Steph. = *Scapania scapanioides* (C. Massal.) Grolle
- Dumortiera irrigua* (Wilson ex Hook.) Nees = *Dumortiera hirsuta* (Sw.) Nees
- Dumortiera spathysii* (Lindenb.) Nees = *Athalamia spathysii* (Lindenb.) S. Hatt.
- Duriaea helicophylla* Bory & Mont. = *Riella helicophylla* (Bory & Mont.) Mont.
- Duriaea notarisii* (Mont.) Bory & Mont. nom. illeg. = *Riella notarisii* (Mont.) Mont.
- Duvalia pilosa* (Hornem.) Lindb. = *Mannia pilosa* (Hornem.) Frye & L. Clark
- Duvalia rupestris* Nees = *Mannia triandra* (Scop.) Grolle
- Eucalyx crenulatus* (Mitt.) Loeske = *Jungermannia gracillima* Sm.
- Eucalyx gracillimus* (Sm.) Loeske = *Jungermannia gracillima* Sm.
- ☞ *Eucalyx hyalinus* (Lyell) Breidl. = *Jungermannia hyalina* Lyell
- Eucalyx muellerianus* (Schiffn.) Müll. Frib. = *Jungermannia hyalina* Lyell
- Eucalyx obovatus* (Nees) Breidl. = *Jungermannia obovata* Nees

- Eucalyx subellipticus* (Lindb. ex Kaal.) Breidl. = *Jungermannia subelliptica* (Lindb. ex Kaal.) Levier
- Eucephalozia bicuspidata* (L.) Schiffn. = *Cephalozia bicuspidata* (L.) Dumort.
- Eulejeunea canariensis* Steph. = *Lejeunea canariensis* (Steph.) Steph.
- Eulejeunea cavifolia* (Ehrh.) Lindb. = *Lejeunea cavifolia* (Ehrh.) Lindb.
- Eulejeunea flava* (Sw.) Steph. = *Lejeunea flava* (Sw.) Nees
- Eulejeunea lamacerina* Steph. = *Lejeunea lamacerina* (Steph.) Schiffn.
- Eulejeunea pitardii* Steph. = *Lejeunea eckloniana* Lindenb.
- Eulejeunea serpyllifolia* (Dicks.) Schiffn. nom. illeg. = *Lejeunea patens* Lindb. [33]
- ? *Eulejeunea serpyllifolia* var. *cavifolia* (Ehrh.) Lindb. = *Lejeunea cavifolia* (Ehrh.) Lindb.
- ? *Eulejeunea serpyllifolia* var. *patens* (Lindb.) A. L. M. Guim. = *Lejeunea patens* Lindb.
- Eulejeunea ulicina* (Taylor) Schiffn. = *Microlejeunea ulicina* (Taylor) A. Evans
- Evansia dentata* (Raddi) Douin = *Cephalozia dentata* (Raddi) Steph.
- Exormotheca africana* Steph. = *Exormotheca pustulosa* Mitt.
- Exormotheca bullosa* sensu Müll. Frib. = *Exormotheca welwitschii* Steph.
- Fegatella conica* (L.) Corda = *Conocephalum conicum* (L.) Dumort.
- Fegatella officinalis* Raddi nom. superfl. = *Conocephalum conicum* (L.) Dumort.
- Fimbriaria africana* Mont. = *Asterella africana* (Mont.) A. Evans
- Fimbriaria blumeana* Nees = *Asterella blumeana* (Nees) Kachroo **REJECTED FROM THE AREA**
- Fimbriaria bonjeanii* De Not. = *Asterella lindenbergiana* (Corda ex Nees) Arnell
- Fimbriaria elegans* auct. eur. non Spreng. = *Asterella africana* (Mont.) A. Evans
- Fimbriaria fragrans* (Balbis) Nees = *Mannia fragrans* (Balbis) Frye & L. Clark [10]
- Fimbriaria fragrans* auct. = *Asterella saccata* (Wahlenb.) A. Evans. [10]
- Fimbriaria lindenbergiana* Corda ex Nees = *Asterella lindenbergiana* (Corda ex Nees) Arnell
- Fimbriaria ludwigii* auct. non (Schwägr.) Limpr. = *Asterella gracilis* (F. Weber) Underw.
- Fimbriaria ludwigii* (Schwägr.) Limpr. ex Müll. Frib. nom. inval. = *Mannia triandra* (Scop.) Grolle
- Fimbriaria nana* Lindenb. = *Athalamia hyalina* (Sommerf.) S. Hatt. [9]
- Fimbriaria pilosa* (Wahlenb.) Nees = *Asterella gracilis* (F. Weber) Underw.
- Fimbriaria raddii* Corda ex Nees = *Asterella wallichiana* (Lehm. & Lindenb.) Pandé *et al.* **REJECTED FROM THE AREA**
- Fimbriaria saccata* (Wahlenb.) Nees = *Asterella saccata* (Wahlenb.) A. Evans
- Fimbriaria stahlII* Steph. = *Asterella pringlei* Underw. **REJECTED FROM THE AREA**
- Fimbriaria tenella* auct. non L. = *Asterella gracilis* (F. Weber) Underw.
- Fossombronina angulosa* var. *caespitiformis* Raddi = *Fossombronina caespitiformis* De Not. ex Rabenh.
- Fossombronina caespitiformis* var. *husnotii* (Corb.) Corb. = *Fossombronina caespitiformis* subsp. *multispira* (Schiffn.) J.R. Bray and D.C. Cargill in Stotler *et al.*
- Fossombronina caespitiformis* var. *intermedia* (Corb. ex Trab.) Trab. ex Bonner nom. inval. = *Fossombronina echinata* Macvicar [20]
- Fossombronina caespitiformis* var. *subcristata* Schiffn. = *Fossombronina caespitiformis* De Not. ex Rabenh. subsp. *caespitiformis*
- Fossombronina corbulaeformis* Trab. = *Petalophyllum ralfsii* (Wilson) Nees & Gottsche
- # *Fossombronina crispula* (Brot.) R. M. Schust. [21]
- Fossombronina cristata* Lindb. = *Fossombronina wondraczekii* (Corda) Lindb.
- Fossombronina cristata* var. *wondraczekii* (Corda) Lindb. = *Fossombronina wondraczekii* (Corda) Lindb.

- Fossombronia crozalsii* Corb. = ***Fossombronia mittenii*** Tind.
Fossombronia dumortieri Huebener & Genth ex Lindb. nom. inval. = ***Fossombronia foveolata*** Lindb.
Fossombronia husnotii Corb. = ***Fossombronia caespitiformis*** subsp. ***multispira*** (Schiffn.) J.R. Bray and D.C. Cargill in Stotler *et al.*
Fossombronia intermedia Corb. ex Trab. nom. inval. = ***Fossombronia echinata*** Macvicar [20]
Fossombronia intestinalis Taylor **REJECTED FROM THE AREA** [19]
Fossombronia loitlesbergeri Schiffn. = ***Fossombronia pusilla*** (L.) Nees [23]
Fossombronia mauritanica Trab. nom. inval. = ***Fossombronia caespitiformis*** subsp. ***multispira*** (Schiffn.) J. R. Bray and D. C. Cargill in Stotler *et al.*
Fossombronia maritima (Paton) Paton = ***Fossombronia pusilla*** (L.) Nees
Fossombronia pusilla var. *corsa* Lindb. ex Bonner nom. nud. = ***Fossombronia pusilla*** (L.) Nees
Fossombronia pusilla var. *decipiens* Corb. = ***Fossombronia pusilla*** (L.) Nees
Fossombronia pusilla var. *maritima* Paton = ***Fossombronia pusilla*** (L.) Nees
▶ *Fossombronia pusilla* var. *major* Jur. nom. nud. = ***Fossombronia pusilla*** (L.) Nees
Fossombronia verrucosa Lindb. = ***Fossombronia caespitiformis*** subsp. ***multispira*** (Schiffn.) J. R. Bray and D. C. Cargill in Stotler *et al.*
Frullania aeolotis Mont. & Nees = ***Frullania riparia*** Hampe ex Lehm.
Frullania bryhnii Müll. Frib. = ***Frullania polysticta*** Lindenb.
Frullania calcarifera Steph. = ***Frullania tamarisci*** (L.) Dumort.
Frullania caucasica Steph. = ***Frullania parvistipula*** Steph.
Frullania cesatiana De Not. = ***Frullania riparia*** Hampe ex Lehm.
Frullania cesatiana var. *musciicola* (Steph.) Bisang *et al.* nom. nud. **REJECTED FROM THE AREA** [24]
Frullania cesatiana var. *musciicola* auct. eur. non (Steph.) Bisang *et al.* nom. nud. = ***Frullania azorica*** Sim-Sim *et al.* [24]
Frullania cleistostoma Schiffn. & Wollny = ***Frullania inflata*** Gottsche
Frullania davurica auct. eur. non Hampe = ***Frullania jackii*** Gottsche [26]
Frullania davurica subsp. *jackii* (Gottsche) S. Hatt. = ***Frullania jackii*** Gottsche
Frullania dilatata var. *anomala* Corb. = ***Frullania dilatata*** (L.) Dumort.
Frullania dilatata var. *briziana* C. Massal. = ***Frullania dilatata*** (L.) Dumort.
Frullania dilatata var. *elongata* Losada Lima & Vanden Berghen [25]
Frullania dilatata var. *microphylla* (Wallroth) Nees = ***Frullania dilatata*** (L.) Dumort.
Frullania eboracensis subsp. *caucasica* (Steph.) R. M. Schust. = ***Frullania parvistipula*** Steph.
Frullania eboracensis subsp. *parvistipula* (Steph.) R. M. Schust. = ***Frullania parvistipula*** Steph.
Frullania fragilifolia var. *parvistipula* (Steph.) Schiffn. = ***Frullania parvistipula*** Steph.
Frullania funchalensis Gottsche nom. nud. = ***Frullania dilatata*** (L.) Dumort.
Frullania germana (Taylor) Taylor = ***Frullania teneriffae*** (F. Weber) Nees
Frullania hispanica Nees = ***Frullania tamarisci*** (L.) Dumort.
Frullania hispanica Hampe non Nees = ***Frullania polysticta*** Lindenb.
Frullania hutchinsiae (Hook.) Nees = ***Jubula hutchinsiae*** (Hook.) Dumort.
Frullania illyrica Grolle = ***Frullania inflata*** Gottsche
? *Frullania inflata* subsp. *illyrica* (Grolle) R. M. Schust. = ***Frullania inflata*** Gottsche
Frullania inflata var. *illyrica* (Grolle) R. M. Schust. = ***Frullania inflata*** Gottsche
Frullania major Raddi nom. superfl. = ***Frullania tamarisci*** (L.) Dumort.

- Frullania maritima* Steph. p. p. = ***Frullania tamarisci*** (L.) Dumort.
Frullania microphylla var. *deciduiifolia* Grolle = ***Frullania microphylla*** (Gottsche) Pearson
Frullania muscicola Steph. **REJECTED FROM THE AREA [24]**
Frullania muscicola sensu Sérgio non Steph. = ***Frullania azorica*** Sim-Sim *et al.* [24]
Frullania nervosa Mont. = ***Frullania tamarisci*** (L.) Dumort.
Frullania nervosa var. *microcellularis* Müll. Frib. nom. nud. = ***Frullania tamarisci*** (L.) Dumort.
Frullania nervosa var. *polysticta* Nees nom. herb. = ***Frullania polysticta*** Lindenb.
Frullania obscurifolia Mitt. **REJECTED FROM THE AREA**
Frullania saxicola Austin = ***Frullania inflata*** Gottsche
Frullania squarrosa Dumort. = ***Frullania ericoides*** (Nees) Mont.
Frullania tamarisci var. *atrovirens* Carrington = ***Frullania tamarisci*** (L.) Dumort.
Frullania tamarisci var. *calcarifera* Steph. = ***Frullania tamarisci*** (L.) Dumort.
Frullania tamarisci var. *hispanica* (Nees) Nees = ***Frullania tamarisci*** (L.) Dumort.
Frullania tamarisci var. *mediterranea* (De Not.) Nees = ***Frullania tamarisci*** (L.) Dumort.
Frullania tamarisci var. *mediterranea* f. *robustior* Schiffn. = ***Frullania tamarisci*** (L.) Dumort.
Frullania tamarisci var. *heterophylla* Corb. = ***Frullania tamarisci*** (L.) Dumort.
Frullania tamarisci var. *heterophylla* f. *brunnea* Schiffn. = ***Frullania tamarisci*** (L.) Dumort.
Frullania tamarisci var. *microphylla* Gottsche = ***Frullania microphylla*** (Gottsche) Pearson
Frullania tamarisci var. *robusta* Lindb. = ***Frullania tamarisci*** (L.) Dumort.
Frullania tamarisci var. *sardoa* (De Not.) De Not. = ***Frullania tamarisci*** (L.) Dumort.
Frullania tamarisci var. *schiffneri* Nicholl = ***Frullania tamarisci*** (L.) Dumort.
Frullania tenera Lindb. ex Steph. non Spruce = ***Frullania parvistipula*** Steph.
Frullania trabutiana Steph. = ***Frullania dilatata*** (L.) Dumort.
Frullania welwitschii Steph. = ***Frullania ericoides*** (Nees) Mont.
Frullania willkommii Steph. = ***Frullania tamarisci*** (L.) Dumort.
Gongylanthus flagelliferus (Raddi) Nees = ***Gongylanthus ericetorum*** (Raddi) Nees
Grimaldia androgyna (L.) Lindb. = ***Mannia androgyna*** (L.) A. Evans
Grimaldia angustifolia (Neck.) Lindb. ex Schiffn. = ***Mannia androgyna*** (L.) A. Evans
Grimaldia atlantica Trab. nom. inval. [39]
Grimaldia barbifrons Bisch. = ***Mannia fragrans*** (Balbis) Frye & L. Clark
Grimaldia carnica C. Massal. = ***Mannia pilosa*** (Hornem.) Frye & L. Clark
Grimaldia dichotoma Raddi nom. illeg. = ***Mannia androgyna*** (L.) A. Evans
Grimaldia fragrans (Balbis) Corda = ***Mannia fragrans*** (Balbis) Frye & L. Clark [10]
Grimaldia hemisphaerica (L.) Lindenb. = ***Reboulia hemisphaerica*** (L.) Raddi
Grimaldia pilosa (Hornem.) Lindb. = ***Mannia pilosa*** (Hornem.) Frye & L. Clark
Grimaldia punicea Wallr. = ***Athalamia hyalina*** (Sommerf.) S. Hatt.
Grimaldia rupestris (Nees) Lindenb. = ***Mannia triandra*** (Scop.) Grolle
Grimaldia triandra (Scop.) Lindb. = ***Mannia triandra*** (Scop.) Grolle
Grimaldia ventricosa Wallr. = ***Reboulia hemisphaerica*** (L.) Raddi
Guentheria graveolens Trevis. = ***Corsinia coriandrina*** (Spreng.) Lindb.
Gymnocolea acutiloba (Schiffn.) Müll. Frib. = ***Gymnocolea inflata*** (Huds.) Dumort.
Gymnocolea huebeneriana (Nees) Dumort. = ***Hygrobiella laxifolia*** (Hook.) Spruce
Gymnocolea inflata subsp. *acutiloba* (Schiffn.) R. M. Schust. & Damsh. ex L. Söderstr. & Váňa = ***Gymnocolea inflata*** (Huds.) Dumort.
Gymnocolea inflata var. *acutiloba* (Schiffn.) S. W. Arnell = ***Gymnocolea inflata*** (Huds.) Dumort.

- Gymnocolea inflata* var. *heterostipa* (Carrington & Spruce) Müll. Frib. = *Gymnocolea inflata* (Huds.) Dumort.
- Gymnocolea laxifolia* (Hook.) Dumort. = *Hygrobiella laxifolia* (Hook.) Spruce
- Gymnomitrium adustum* Nees emend. Limpr. = *Marsupella adusta* (Nees emend. Limpr.) Spruce
- Gymnomitrium alpinum* (Gottsche ex Husn.) Schiffn. = *Marsupella alpina* (Gottsche ex Husn.) Bernet
- Gymnomitrium cochleare* (Lindb.) Müll. Frib. = *Marsupella brevissima* (Dumort.) Grolle
- Gymnomitrium commutatum* (Limpr.) Schiffn. = *Marsupella commutata* (Limpr.) Bernet
- Gymnomitrium concinnatum* var. *intermedium* Limpr. = *Gymnomitrium concinnatum* (Lightf.) Corda
- Gymnomitrium condensatum* Ångstr. ex C. Hartm. = *Marsupella condensata* (Ångstr. ex C. Hartm.) Kaal.
- Gymnomitrium confertum* (Limpr.) Limpr. = *Marsupella brevissima* (Dumort.) Grolle
- Gymnomitrium crassifolium* Carrington = *Marsupella brevissima* (Dumort.) Grolle
- Gymnomitrium revolutum* (Nees) Philib. = *Apomarsupella revoluta* (Nees) R. M. Schust.
- Gymnomitrium varians* (Lindb.) Schiffn. = *Marsupella brevissima* (Dumort.) Grolle
- Haplozia amplexicaulis* (Dumort.) Warnst. = *Jungermannia sphaerocarpa* Hook.
- Haplozia atrovirens* (Dumort.) Müll. Frib. = *Jungermannia atrovirens* Dumort.
- Haplozia autumnalis* (DC.) Warnst. = *Jamesoniella autumnalis* (DC.) Steph.
- Haplozia breidleri* Müll. Frib. = *Jungermannia confertissima* Nees
- Haplozia cordifolia* (Dumort.) Müll. Frib. = *Jungermannia exsertifolia* subsp. *cordifolia* (Dumort.) Váňa
- Haplozia crenulata* (Mitt.) Müll. Frib. = *Jungermannia gracillima* Sm.
- Haplozia crenulata* var. *gracillima* (Sm.) C. E. O. Jensen = *Jungermannia gracillima* Sm.
- Haplozia crenulata* f. *gracillima* (Sm.) Müll. Frib. = *Jungermannia gracillima* Sm.
- Haplozia hyalina* (Lyell) Warnst. = *Jungermannia hyalina* Lyell
- Haplozia levieri* (Steph.) Müll. Frib. = *Jungermannia confertissima* Nees
- Haplozia lurida* (Dumort.) Müll. Frib. = *Jungermannia sphaerocarpa* Hook.
- Haplozia muelleriana* (Schiffn.) Casares-Gil = *Jungermannia hyalina* Lyell
- Haplozia nigrella* (De Not.) Dumort. = *Southbya nigrella* (De Not.) Henriq.
- Haplozia oblongifolia* Müll. Frib. = *Jungermannia pumila* With.
- Haplozia obovata* (Nees) Casares-Gil = *Jungermannia obovata* Nees
- Haplozia polaris* (Lindb.) Müll. Frib. = *Jungermannia polaris* Lindb.
- Haplozia pumila* (With.) Müll. Frib. = *Jungermannia pumila* With.
- Haplozia riparia* (Taylor) Müll. Frib. = *Jungermannia atrovirens* Dumort.
- Haplozia riparia* var. *rivularis* (Bernet) Müll. Frib. = *Jungermannia atrovirens* Dumort.
- Haplozia rivularis* (Schiffn.) Casares-Gil = *Jungermannia pumila* With.
- Haplozia schiffneri* (Loitl.) Müll. Frib. = *Jungermannia polaris* Lindb.
- Haplozia schraderi* (Mart.) Dumort. = *Jamesoniella autumnalis* (DC.) Steph.
- Haplozia sphaerocarpa* (Hook.) Müll. Frib. = *Jungermannia sphaerocarpa* Hook.
- Haplozia sphaerocarpa* var. *amplexicaulis* (Dumort.) Müll. Frib. = *Jungermannia sphaerocarpa* Hook.
- Haplozia sphaerocarpa* var. *nana* (Nees ex Flot.) Müll. Frib. = *Jungermannia sphaerocarpa* Hook.
- Haplozia subelliptica* (Lindb. ex Kaal.) Casares-Gil = *Jungermannia subelliptica* (Lindb. ex Kaal.) Levier
- Haplozia tristis* (Nees) Müll. Frib. = *Jungermannia atrovirens* Dumort.

- Harpalejeunea ovata* (Hook.) Schiffn. non (Dicks.) Schiffn. = *Harpalejeunea molleri* (Steph.) Grolle
- Hepatica conica* (L.) Lindb. = *Conocephalum conicum* (L.) Dumort.
- Herpetium deflexum* (Mart.) Nees = *Bazzania tricrenata* (Wahlenb.) Lindb.
- Herpetium reptans* (L.) Nees = *Lepidozia reptans* (L.) Dumort.
- Herpetium trilobatum* (L.) Nees = *Bazzania trilobata* (L.) Gray
- Homalolejeunea mackaii* (Hook.) Gray ex Casares-Gil = *Marchesinia mackaii* (Hook.) Gray
- Hygrobrella myriocarpa* (Carrington) Spruce = *Eremonotus myriocarpus* (Carrington) Pearson
- Hygrophila irrigua* (Wilson ex Hook.) Taylor nom. superfl. = *Dumortiera hirsuta* (Sw.) Nees
- Hypenantron africanum* (Mont.) Kuntze = *Asterella africana* (Mont.) A. Evans
- ? *Hypenantron lindenbergianum* (Corda ex Nees) Kuntze = *Asterella lindenbergiana* (Corda ex Nees) Arnell
- Hypnenatron nanum* (Lindenb.) Trevis. = *Athalamia hyalina* (Sommerf.) S. Hatt.
- Isopaches bicrenatus* (Schmidel ex Hoffm.) H. Buch = *Lophozia bicrenata* (Schmidel ex Hoffm.) Dumort.
- Isopaches decolorans* (Limpr.) H. Buch = *Lophozia decolorans* (Limpr.) Steph.
- Isopaches hellerianus* (Nees ex Lindenb.) H. Buch = *Anastrophyllum hellerianum* (Nees ex Lindenb.) R. M. Schust.
- Jamesoniella autumnalis* f. *subapicalis* (Nees) Müll. Frib. = *Jamesoniella autumnalis* (DC.) Steph.
- Jamesoniella subapicalis* (Nees) Schiffn. = *Jamesoniella autumnalis* (DC.) Steph.
- Jubula hutchinsiae* subsp. *hutchinsiae* var. *integrifolia* (Steph.) S. Hatt. [27]
- Jubula hutchinsiae* var. *sullivanti* Spruce [27]
- Jubula hutchinsiae* var. *warburgii* auct. eur. non Schiffn. = *Jubula hutchinsiae* (Hook.) Dumort. subsp. *hutchinsiae*
- Jubula javanica* Steph. = *Jubula hutchinsiae* subsp. *javanica* (Steph.) Verd.
- Jubula pennsylvanica* (Steph.) A. Evans [27]
- Jungermannia acuta* Lindenb. nom. illeg. = *Leiocolea collaris* (Nees) Schljakov
- Jungermannia acuta* var. *aeruginosa* Lindenb. = *Leiocolea turbinata* (Raddi) H. Buch
- Jungermannia acutiloba* Kaal. non Hook. f. & Taylor = *Gymnocolea inflata* (Huds.) Dumort.
- Jungermannia aequiloba* Schwägr. = *Scapania aequiloba* (Schwägr.) Dumort.
- Jungermannia affinis* Wilson ex Hook. nom. inval. = *Leiocolea turbinata* (Raddi) H. Buch
- Jungermannia albescens* Hook. = *Pleurocladula albescens* (Hook.) Grolle
- Jungermannia albicans* L. = *Diplophyllum albicans* (L.) Dumort.
- # *Jungermannia albicans* var. *rubescens* Grognot = *Diplophyllum albicans* (L.) Dumort.
- Jungermannia albicans* var. *taxifolia* (Wahlenb.) Wallr. = *Diplophyllum taxifolium* (Wahlenb.) Dumort.
- Jungermannia algeriensis* Gottsche & Rabenh. = *Leiocolea turbinata* (Raddi) H. Buch
- Jungermannia alicularia* De Not. = *Southbya tophacea* (Spruce) Spruce
- Jungermannia alpestris* Schleich. ex F. Weber = *Leiocolea collaris* (Nees) Schljakov
- Jungermannia alpestris* auct. non Schleich. ex F. Weber = *Lophozia sudetica* (Nees ex Huebener) Grolle
- Jungermannia amplexicaulis* Dumort. = *Jungermannia sphaerocarpa* Hook.
- Jungermannia angulosa* Dicks. = *Fossombronina angulosa* (Dicks.) Raddi
- Jungermannia anomala* Hook. = *Mylia anomala* (Hook.) Gray

- Jungermannia aquilegia* Hook. f. & Taylor = ***Radula aquilegia*** (Hook. f. & Taylor) Gottsche *et al.*
- Jungermannia arboris-vitae* With. = ***Porella arboris-vitae*** (With.) Grolle
- Jungermannia arenaria* Nees = ***Lophozia excisa*** (Dicks.) Dumort.
- Jungermannia asplenioides* L. *emend.* Taylor = ***Plagiochila asplenioides*** (L. *emend.* Taylor) Dumort.
- Jungermannia assimilis* Mitt. = ***Anastrophyllum assimile*** (Mitt.) Steph.
- Jungermannia attenuata* (Mart.) Lindenb. = ***Barbilophozia attenuata*** (Mart.) Loeske
- Jungermannia attenuata* var. *gracilis* Schleich. *ex* Lindenb. = ***Barbilophozia attenuata*** (Mart.) Loeske
- # *Jungermannia attenuata* var. *gradata* Desm. = ***Barbilophozia attenuata*** (Mart.) Loeske
- Jungermannia autumnalis* DC. = ***Jamesoniella autumnalis*** (DC.) Steph.
- Jungermannia badensis* Gottsche = ***Leiocolea badensis*** (Gottsche) Schiffn.
- Jungermannia bantriensis* Hook. = ***Leiocolea bantriensis*** (Hook.) Jörg.
- Jungermannia bantriensis* var. *acuta* Lindb. = ***Leiocolea collaris*** (Nees) Schljakov
- Jungermannia bantriensis* var. *muelleri* (Nees *ex* Lindenb.) Lindb. = ***Leiocolea collaris*** (Nees) Schljakov
- Jungermannia barbata* Schmidel *ex* Schreb. = ***Barbilophozia barbata*** (Schmidel *ex* Schreb.) Loeske
- Jungermannia barbata* var. *attenuata* (Mart.) Nees = ***Barbilophozia attenuata*** (Mart.) Loeske
- Jungermannia barbata* var. *floerkei* (F. Weber & D. Mohr) Dumort. = ***Barbilophozia floerkei*** (F. Weber & D. Mohr) Loeske
- Jungermannia barbata* var. *lycopodioides* (Wallr.) Nees = ***Barbilophozia lycopodioides*** (Wallr.) Loeske
- Jungermannia barbata* var. *quinquedentata* (Huds.) Nees = ***Tritomaria quinquedentata*** (Huds.) H. Buch
- Jungermannia barbata* var. *schreberi* Nees nom. illeg. = ***Barbilophozia barbata*** (Schmidel *ex* Schreb.) Loeske
- Jungermannia bartlingii* Hampe *ex* Nees = ***Scapania cuspiduligera*** (Nees) Müll. Frib.
- Jungermannia baueri* Mart. = ***Nowellia curvifolia*** (Dicks.) Mitt.
- Jungermannia baueriana* (Schiffn.) Arnell = ***Barbilophozia hatcheri*** (A. Evans) Loeske
- Jungermannia bicalyculata* Raddi = ***Cephalozia bicuspidata*** (L.) Dumort.
- Jungermannia bicornis* F. Weber & D. Mohr = ***Anastrophyllum minutum*** (Schreb.) R. M. Schust.
- Jungermannia bicrenata* Schmidel *ex* Hoffm. = ***Lophozia bicrenata*** (Schmidel *ex* Hoffm.) Dumort.
- Jungermannia bicuspidata* L. = ***Cephalozia bicuspidata*** (L.) Dumort.
- Jungermannia bidentata* L. = ***Lophocolea bidentata*** (L.) Dumort.
- Jungermannia bifaria* Sw. = ***Plagiochila bifaria*** (Sw.) Lindenb.
- Jungermannia blasia* DC. = ***Blasia pusilla*** L.
- Jungermannia blyttii* Moerch *ex* Hornem. = ***Moerckia blyttii*** (Moerch *ex* Hornem.) Brockm.
- Jungermannia breidleri* (Müll. Frib.) Gams = ***Jungermannia confertissima*** Nees
- Jungermannia byssacea* A. Roth nom. rejic. = ***Cephaloziella hampeana*** (Nees) Schiffn.
- Jungermannia byssacea* auct. non A. Roth = ***Cephaloziella divaricata*** (Sm.) Schiffn.
- Jungermannia calycina* Taylor = ***Pellia endiviifolia*** (Dicks.) Dumort.
- Jungermannia calyculata* Durieu & Mont. = ***Cephaloziella calyculata*** (Durieu & Mont.) Müll. Frib.
- Jungermannia calypogeia* Raddi nom. illeg. = ***Calypogeia fissa*** (L.) Raddi
- Jungermannia catenulata* Huebener = ***Cephalozia catenulata*** (Huebener) Lindb.

- Jungermannia cavifolia* Ehrh. = *Lejeunea cavifolia* (Ehrh.) Lindb.
Jungermannia chamedryfolia With. = *Riccardia chamedryfolia* (With.) Grolle
Jungermannia ciliaris L. = *Ptilidium ciliare* (L.) Hampe
Jungermannia collaris Nees = *Leiocolea collaris* (Nees) Schljakov
Jungermannia compacta A. Roth = *Scapania compacta* (A. Roth) Dumort.
Jungermannia compacta Mazziari nom. nud. non Roth [28]
Jungermannia commutata Huebener = *Lophozia bicrenata* (Schmidel ex Hoffm.) Dumort.
Jungermannia complanata L. = *Radula complanata* (L.) Dumort.
Jungermannia compressa Hook. = *Nardia compressa* (Hook.) Gray
Jungermannia concinnata Lightf. = *Gymnomitrium concinnatum* (Lightf.) Corda
Jungermannia confervoides Raddi = *Cephaloziella divaricata* (Sm.) Schiffn.
Jungermannia connivens Dicks. = *Cephalozia connivens* (Dicks.) Lindb.
Jungermannia corcyraea Nees = *Leiocolea turbinata* (Raddi) H. Buch
Jungermannia cordaeana Huebener = *Porella cordaeana* (Huebener) Moore
Jungermannia cordifolia Brot. non Hook. [63]
Jungermannia cordifolia Hook. non Brot. nec Ehrh. ex F. Weber nom. illeg. = *Jungermannia exsertifolia* subsp. *cordifolia* (Dumort.) Váňa
Jungermannia crassifolia Lindenb. & Gottsche = *Cephalozia crassifolia* (Lindenb. & Gottsche) Fulford
Jungermannia crenulata Sm. nom. illeg. non Schmidel = *Jungermannia gracillima* Sm.
Jungermannia crenulata var. *gracillima* (Sm.) Hook. = *Jungermannia gracillima* Sm.
Jungermannia crispula Brot. [21]
Jungermannia crocata De Not. = *Lophocolea minor* Nees
Jungermannia cuneifolia Hook. = *Leptoscyphus cuneifolius* (Hook.) Mitt.
Jungermannia cupressina Sw. = *Lepidozia cupressina* (Sw.) Lindenb.
Jungermannia curta Mart. = *Scapania curta* (Mart.) Dumort.
Jungermannia curvifolia Dicks. = *Nowellia curvifolia* (Dicks.) Mitt.
Jungermannia cuspiduligera Nees = *Scapania cuspiduligera* (Nees) Müll. Frib.
Jungermannia cylindracea Dumort. = *Lophozia excisa* (Dicks.) Dumort.
Jungermannia decipiens Hook. = *Adelanthus decipiens* (Hook.) Mitt.
Jungermannia decolorans Limpr. = *Lophozia decolorans* (Limpr.) Steph.
Jungermannia deflexa var. *flaccida* Schleich. ex Lindenb. nom. illeg. = *Bazzania flaccida* (Dumort.) Grolle
Jungermannia dentata Raddi = *Cephaloziella dentata* (Raddi) Steph.
Jungermannia denudata (Mart.) Nees = *Odontoschisma denudatum* (Mart.) Dumort.
Jungermannia dilatata L. = *Frullania dilatata* (L.) Dumort.
Jungermannia distans Schwein. = *Porella pinnata* L.
Jungermannia divaricata Sm. = *Cephaloziella divaricata* (Sm.) Schiffn.
Jungermannia emarginata Ehrh. = *Marsupella emarginata* (Ehrh.) Dumort.
Jungermannia endiviifolia Dicks. = *Pellia endiviifolia* (Dicks.) Dumort.
Jungermannia epiphylla L. = *Pellia epiphylla* (L.) Corda
Jungermannia epiphylla var. *furcigera* Hook. = *Pellia endiviifolia* (Dicks.) Dumort.
Jungermannia epiphylla var. *longifolia* Lam. & DC. = *Pellia endiviifolia* (Dicks.) Dumort.
Jungermannia ericoides Nees = *Frullania ericoides* (Nees) Mont.
Jungermannia excisa Dicks. = *Lophozia excisa* (Dicks.) Dumort.
Jungermannia exigua Taylor = *Plagiochila exigua* (Taylor) Taylor
Jungermannia exsecta Schmidel ex Schrad. = *Tritomaria exsecta* (Schmidel ex Schrad.) Loeske

- Jungermannia exsectiformis* Breidl. = *Tritomaria exsectiformis* (Breidl.) Loeske
Jungermannia falcata Raddi nom. illeg. = *Diplophyllum albicans* (L.) Dumort.
Jungermannia fennica Gottsche = *Arnellia fennica* (Gottsche) Lindb.
Jungermannia fissa (L.) Scop. = *Calypogeia fissa* (L.) Raddi
Jungermannia fissidentoidea Huebener = *Diplophyllum albicans* (L.) Dumort.
Jungermannia flaccida Huebener = *Jungermannia obovata* Nees
Jungermannia flava Sw. = *Lejeunea flava* (Sw.) Nees
Jungermannia floerkei F. Weber & D. Mohr = *Barbilophozia floerkei* (F. Weber & D. Mohr) Loeske
Jungermannia flotoviana Nees = *Harpanthus flotovianus* (Nees) Nees
Jungermannia fluitans Nees = *Cladopodiella fluitans* (Nees) H. Buch
Jungermannia foscardiana Mazziari nom. nud. [28]
Jungermannia fragilifolia Taylor = *Frullania fragilifolia* (Taylor) Gottsche *et al.*
Jungermannia fragilis A. Roth = *Chiloscyphus pallescens* (Ehrh. ex Hoffm.) Dumort.
Jungermannia fragrans Moris & De Not. = *Lophocolea fragrans* (Moris & De Not.) Gottsche *et al.*
Jungermannia francisci Hook. = *Cladopodiella francisci* (Hook.) Jörg.
Jungermannia fruticulosa auct. eur. non (O. F. Müll.) Sm. = *Metzgeria violacea* (Ach.) Dumort. [40]
Jungermannia fuciformis Bory [43]
Jungermannia funckii F. Weber & D. Mohr = *Marsupella funckii* (F. Weber & D. Mohr) Dumort.
Jungermannia furcata L. = *Metzgeria furcata* (L.) Dumort.
Jungermannia germana Taylor = *Frullania teneriffae* (F. Weber) Nees
Jungermannia gillmanii Austin = *Lophozia gillmanii* (Austin) R. M. Schust.
Jungermannia gracilis (Schleich. ex Lindenb.) Lindb. = *Barbilophozia attenuata* (Mart.) Loeske
Jungermannia grandiretis Lindb. ex Kaal. = *Lophozia grandiretis* (Lindb. ex Kaal.) Schiffn.
Jungermannia graveolens Schrad. = *Geocalyx graveolens* (Schrad.) Nees
Jungermannia grimsulana J. B. Jack ex Gottsche & Rabenh. = *Cephaloziella grimsulana* (J.B. Jack ex Gottsche & Rabenh.) Lacout.
Jungermannia guilfortiana Mazziari nom. nud. [28]
Jungermannia guttulata Lindb. & Arnell = *Lophozia longiflora* (Nees) Schiffn.
Jungermannia hamatifolia Hook. = *Drepanolejeunea hamatifolia* (Hook.) Schiffn.
Jungermannia hampeana Nees = *Cephaloziella hampeana* (Nees) Schiffn.
Jungermannia hatcheri A. Evans = *Barbilophozia hatcheri* (A. Evans) Loeske
Jungermannia helleriana Nees ex Lindenb. = *Anastrophyllum hellerianum* (Nees ex Lindenb.) R. M. Schust.
Jungermannia heterocolpos Thed. ex Hartm. = *Leiocolea heterocolpos* (Thed. ex Hartm.) H. Buch
Jungermannia heterophylla Schrad. = *Lophocolea heterophylla* (Schrad.) Dumort.
Jungermannia hibernica Hook. = *Moerckia hibernica* (Hook.) Gottsche
Jungermannia hoffmannii Wallr. = *Ptilidium ciliare* (L.) Hampe
Jungermannia hornschuchiana Nees = *Leiocolea bantriensis* (Hook.) Jörg.
Jungermannia hutchinsiae Hook. = *Jubula hutchinsiae* (Hook.) Dumort. subsp. *hutchinsiae*
Jungermannia incisa Schrad. = *Lophozia incisa* (Schrad.) Dumort.
Jungermannia inconspicua Raddi = *Cololejeunea minutissima* (Sm.) Schiffn.
Jungermannia inflata Huds. = *Gymnocolea inflata* (Huds.) Dumort.

- Jungermannia inflata* var. *fluitans* (Nees) Gottsche *et al.* = *Cladopodiella fluitans* (Nees) H. Buch
- Jungermannia integrifolia* Lehm. & Lindenb. = *Chiloscyphus integrifolius* (Lehm. & Lindenb.) Lehm. & Lindenb. **REJECTED FROM THE AREA**
- Jungermannia jenseniana* Grolle **REJECTED FROM THE AREA** [29]
- Jungermannia intermedia* Lindenb. nom. illeg. = *Lophozia excisa* (Dicks.) Dumort.
- Jungermannia interrupta* Nees = *Pedinophyllum interruptum* (Nees) Kaal.
- Jungermannia irrigua* Nees = *Scapania irrigua* (Nees) Nees
- Jungermannia julacea* L. = *Anthelia julacea* (L.) Dumort.
- Jungermannia julacea* var. *clavuligera* Nees = *Anthelia juratzkana* (Limpr.) Trevis.
- Jungermannia juratzkana* Limpr. = *Anthelia juratzkana* (Limpr.) Trevis.
- Jungermannia karl-muelleri* Grolle = *Jungermannia pumila* With.
- Jungermannia kaurinii* Limpr. = *Leiocolea gillmanii* (Austin) R. M. Schust.
- Jungermannia kunzeana* Huebener = *Barbilophozia kunzeana* (Huebener) Müll. Frib.
- Jungermannia lacera* Mazziari nom. nud. [28]
- Jungermannia laevigata* Schrad. = *Porella arboris-vitae* (With.) Grolle
- Jungermannia lammersiana* Huebener = *Cephalozia bicuspidata* (L.) Dumort.
- Jungermannia lanceolata* L. nom. rejic. = *Jungermannia atrovirens* Dumort.
- Jungermannia lanceolata* auct. non L. = *Jungermannia leiantha* Grolle
- Jungermannia laurentiana* De Not. = *Leiocolea collaris* (Nees) Schljakov
- Jungermannia laxifolia* Hook. = *Hygrobiiella laxifolia* (Hook.) Spruce
- Jungermannia leersii* A. Roth = *Ptilidium ciliare* (L.) Hampe
- Jungermannia laevigata* Schrad. = *Porella arboris-vitae* (With.) Grolle
- Jungermannia levieri* (Steph.) H. Buch, A. Evans & Verd. = *Jungermannia confertissima* Nees
- Jungermannia limosa* Mazziari nom. nud. [28]
- Jungermannia limprichtii* (Lindb. ex C. Massal. & Carestia) Warnst. = *Lophozia excisa* (Dicks.) Dumort.
- Jungermannia longidens* Lindb. = *Lophozia longidens* (Lindb.) Macoun
- Jungermannia longiflora* Nees = *Lophozia longiflora* (Nees) Schiffn.
- Jungermannia lunulifolia* Dumort. = *Cephalozia lunulifolia* (Dumort.) Dumort.
- Jungermannia lurida* Dumort. nom. illeg. = *Jungermannia sphaerocarpa* Hook.
- Jungermannia lycopodioides* Wallr. = *Barbilophozia lycopodioides* (Wallr.) Loeske
- Jungermannia lycopodioides* var. *floerkei* (F. Weber & D. Mohr) Lindb. = *Barbilophozia floerkei* (F. Weber & D. Mohr) Loeske
- Jungermannia lyellii* Hook. = *Pallavicinia lyellii* (Hook.) Carruth.
- Jungermannia lyonii* Taylor = *Tritomaria quinquentata* (Huds.) H. Buch
- Jungermannia mackaii* Hook. = *Marchesinia mackaii* (Hook.) Gray
- Jungermannia macounii* Austin = *Cephalozia macounii* (Austin) Austin
- Jungermannia menzelii* Corda = *Cephalozia bicuspidata* (L.) Dumort.
- Jungermannia michauxii* F. Weber = *Anastrophyllum michauxii* (F. Weber) H. Buch
- Jungermannia minuta* Schreb. = *Anastrophyllum minutum* (Schreb.) R. M. Schust.
- Jungermannia minuta* var. *procera* Nees = *Anastrophyllum michauxii* (F. Weber) H. Buch
- Jungermannia minuta* var. *robusta* C. Massal. & Carestia nom. inval. = *Anastrophyllum assimile* (Mitt.) Steph.
- Jungermannia minutissima* Sm. = *Cololejeunea minutissima* (Sm.) Schiffn.
- Jungermannia muelleri* Nees ex Lindenb. = *Leiocolea collaris* (Nees) Schljakov
- Jungermannia multifida* L. = *Riccardia multifida* (L.) Gray

- Jungermannia multifida* var. *sinuata* Dicks. ex Hook. = ***Riccardia chamedryfolia*** (With.) Grolle
- Jungermannia myriocarpa* Carrington = ***Eremonotus myriocarpus*** (Carrington) Pearson
- Jungermannia nana* Nees ex Flot. = ***Jungermannia sphaerocarpa*** Hook.
- Jungermannia nardioides* Lindb. = ***Anastrophyllum assimile*** (Mitt.) Steph.
- Jungermannia naumannii* Nees ex Mart. = ***Barbilophozia floerkei*** (F. Weber & D. Mohr) Loeske
- Jungermannia nemorea* L. = ***Scapania nemorea*** (L.) Grolle
- Jungermannia nemorosa* L. nom. illeg. = ***Scapania nemorea*** (L.) Grolle
- Jungermannia nemorosa* var. *recurvifolia* Hook. = ***Scapania gracilis*** Lindb.
- Jungermannia nevicensis* Carrington = ***Marsupella boeckii*** (Austin) Lindb.
- Jungermannia nigrella* De Not. = ***Southbya nigrella*** (De Not.) Henriq.
- Jungermannia nigricans* Lam. nom. illeg. = ***Frullania tamarisci*** (L.) Dumort.
- Jungermannia obtusa* Lindb. = ***Lophozia obtusa*** (Lindb.) A. Evans
- Jungermannia obtusifolia* Hook. = ***Diplophyllum obtusifolium*** (Hook.) Dumort.
- # *Jungermannia oppositifolia* Lacroix = ***Gongylanthus ericetorum*** (Raddi) Nees
- Jungermannia orcadensis* Hook. = ***Anastrepta orcadensis*** (Hook.) Schiffn.
- Jungermannia pallescens* Ehrh. ex Hoffm. = ***Chiloscyphus pallescens*** (Ehrh. ex Hoffm.) Dumort.
- Jungermannia pallescens* var. *rivularis* Schrad. = ***Chiloscyphus polyanthos*** (L.) Corda
- Jungermannia palmata* Hedw. = ***Riccardia palmata*** (Hedw.) Carruth.
- Jungermannia pauciflora* Dicks. = ***Kurzia pauciflora*** (Dicks.) Grolle
- Jungermannia pinguis* L. = ***Aneura pinguis*** (L.) Dumort.
- Jungermannia platyphylla* L. = ***Porella platyphylla*** (L.) Pfeiff.
- Jungermannia platyphylla* var. *thuja* Hook. = ***Porella arboris-vitae*** (With.) Grolle
- Jungermannia platyphylla* var. *canariensis* F. Weber = ***Porella canariensis*** (F. Weber) Underw.
- Jungermannia platyphylloidea* Schwein. = ***Porella platyphylla*** (L.) Pfeiff.
- Jungermannia pleniceps* Austin = ***Cephalozia pleniceps*** (Austin) Lindb.
- Jungermannia plicata* Hartm. = ***Barbilophozia kunzeana*** (Huebener) Müll. Frib.
- Jungermannia polita* Nees = ***Tritomaria polita*** (Nees) Schiffn.
- Jungermannia polyanthos* L. = ***Chiloscyphus polyanthos*** (L.) Corda
- Jungermannia porella* Dicks. nom. illeg. = ***Porella pinnata*** L.
- Jungermannia porelloides* Torrey ex Nees = ***Plagiochila porelloides*** (Torrey ex Nees) Lindenb.
- Jungermannia porphyroleuca* Nees. nom. illeg. = ***Lophozia longiflora*** (Nees) Schiffn.
- Jungermannia porphyroleuca* var. *guttulata* (Lindb. & Arnell) Warnst. = ***Lophozia longiflora*** (Nees) Schiffn.
- Jungermannia prostrata* Sw. = ***Odontoschisma prostratum*** (Sw.) Trevis.
- Jungermannia pubescens* Schrank = ***Apometzgeria pubescens*** (Schrank) Kuwah.
- Jungermannia pulcherrima* Weber = ***Ptilidium pulcherrimum*** (Weber) Vain.
- Jungermannia pulvinata* Raddi = ***Marsupella emarginata*** (Ehrh.) Dumort.
- Jungermannia pumila* subsp. *polaris* (Lindb.) R. M. Schust. = ***Jungermannia polaris*** Lindb.
- Jungermannia pumila* var. *rivularis* (Schiffn.) Frye & L. Clark = ***Jungermannia pumila*** With.
- Jungermannia punctata* Taylor = ***Plagiochila punctata*** (Taylor) Taylor
- Jungermannia pusilla* L. = ***Fossombronia pusilla*** (L.) Nees
- Jungermannia quinquedentata* Huds. = ***Tritomaria quinquedentata*** (Huds.) H. Buch

- Jungermannia quinquedentata* var. *attenuata* (Mart.) Steud. = ***Barbilophozia attenuata*** (Mart.) Loeske
- Jungermannia raddiana* C. Massal. = ***Cephaloziella rubella*** (Nees) Warnst.
- Jungermannia ralfsii* Wilson = ***Petalophyllum ralfsii*** (Wilson) Nees & Gottsche
- Jungermannia reclusa* Taylor = ***Cephalozia catenulata*** (Huebener) Lindb.
- Jungermannia reichardtii* Gottsche ex Jur. = ***Anastrophyllum assimile*** (Mitt.) Steph.
- Jungermannia reptans* L. = ***Lepidozia reptans*** (L.) Dumort.
- Jungermannia resupinata* Hook. nom. inval. = ***Scapania compacta*** (A. Roth) Dumort.
- Jungermannia resupinata* L. = ***Scapania undulata*** (L.) Dumort.
- Jungermannia rigida* Wallr. nom. illeg. = ***Aneura pinguis*** (L.) Dumort.
- Jungermannia rigidula* Huebener nom. illeg. = ***Cephalozia bicuspidata*** (L.) Dumort.
- Jungermannia riparia* Taylor = ***Jungermannia atrovirens*** Dumort.
- § *Jungermannia riparia* var. *rotundifolia* = ***Jungermannia atrovirens*** Dumort.
- Jungermannia rosacea* Corda = ***Scapania curta*** (Mart.) Dumort.
- Jungermannia rostellata* Huebener = ***Jungermannia pumila*** With.
- Jungermannia rubella* Nees = ***Cephaloziella rubella*** (Nees) Warnst.
- Jungermannia saxicola* Schrad. = ***Anastrophyllum saxicola*** (Schrad.) R. M. Schust.
- Jungermannia scalariformis* Nees = ***Jungermannia confertissima*** Nees
- Jungermannia scalaris* Schmidel ex Schreb. nom. dub. [12]
- Jungermannia scalaris* Hook. homon. illeg. = ***Nardia scalaris*** Gray
- Jungermannia scalaris* var. *denudata* Mart. = ***Odontoschisma denudatum*** (Mart.) Dumort.
- Jungermannia scalaris* var. *minor* Nees = ***Nardia geoscyphus*** (De Not.) Lindb.
- Jungermannia scapanioides* C. Massal. = ***Scapania scapanioides*** (C. Massal.) Grolle
- Jungermannia schiffneri* (Loitl.) A. Evans = ***Jungermannia polaris*** Lindb.
- Jungermannia schraderi* Mart. = ***Jamesoniella autumnalis*** (DC.) Steph.
- Jungermannia schraderi* auct. non Mart. = ***Jamesoniella undulifolia*** (Nees) Müll. Frib.
- Jungermannia schreberi* S. Hatt. nom. inval. = ***Barbilophozia barbata*** (Schmidel) Loeske
- Jungermannia scitula* Taylor = ***Tritomaria scitula*** (Taylor) Jörg.
- Jungermannia scutata* F. Weber & D. Mohr = ***Harpanthus scutatus*** (F. Weber & D. Mohr) Spruce
- Jungermannia serpyllifolia* var. *ovata* auct. non Hook. = ***Harpalejeunea molleri*** (Steph.) Grolle
- Jungermannia setiformis* Ehrh. = ***Tetralophozia setiformis*** (Ehrh.) Schljakov
- Jungermannia sinuata* Dicks. nom. illeg. = ***Riccardia chamedryfolia*** (With.) Grolle
- Jungermannia socia* Nees = ***Lophozia excisa*** (Dicks.) Dumort.
- Jungermannia sphacelata* Gieseke ex Lindenb. = ***Marsupella sphacelata*** (Gieseke ex Lindenb.) Dumort.
- Jungermannia sphaerocarpa* var. *amplexicaulis* (Dumort.) Frye & L. Clark = ***Jungermannia sphaerocarpa*** Hook.
- Jungermannia sphaerocarpoidea* De Not. = ***Jungermannia atrovirens*** Dumort.
- Jungermannia sphagni* Dicks. = ***Odontoschisma sphagni*** (Dicks.) Dumort.
- Jungermannia spinulosa* Dicks. = ***Plagiochila spinulosa*** (Dicks.) Dumort.
- Jungermannia sprengelii* Mart. = ***Calypogeia fissa*** (L.) Raddi
- Jungermannia starkei* auct. non Funk ex Nees nom. illeg. = ***Cephaloziella divaricata*** (Sm.) Schiffn.
- Jungermannia stellulifera* Taylor ex Carrington & Pearson = ***Cephaloziella divaricata*** (Sm.) Schiffn.
- Jungermannia stillicidiorum* (Raddi) De Not. = ***Southbya tophacea*** (Spruce) Spruce
- Jungermannia stipulacea* Hook. = ***Harpanthus scutatus*** (F. Weber & D. Mohr) Spruce

- Jungermannia subalpina* Nees ex Lindenb. = *Scapania subalpina* (Nees ex Lindenb.) Dumort
- Jungermannia subapicalis* Nees = *Jamesoniella autumnalis* (DC.) Steph.
- Jungermannia sudetica* Nees ex Huebener = *Lophozia sudetica* (Nees ex Huebener) Grolle
- Jungermannia sullivantii* Austin = *Cephaloziella rubella* (Nees) Warnst.
- Jungermannia tamarisci* L. = *Frullania tamarisci* (L.) Dumort.
- Jungermannia tamarisci* var. *mediterranea* De Not. = *Frullania tamarisci* (L.) Dumort.
- Jungermannia tamarisci* var. *sardoa* De Not. = *Frullania tamarisci* (L.) Dumort.
- Jungermannia tamariscifolia* L. nom. illeg. = *Frullania tamarisci* (L.) Dumort.
- Jungermannia taxifolia* Wahlenb. = *Diplophyllum taxifolium* (Wahlenb.) Dumort.
- Jungermannia taylorii* Hook. = *Mylia taylorii* (Hook.) Gray
- Jungermannia taylorii* var. *anomala* (Hook.) Nees = *Mylia anomala* (Hook.) Gray
- Jungermannia teneriffae* F. Weber = *Frullania teneriffae* (F. Weber) Nees
- Jungermannia tenerrima* Raddi nom. illeg. = *Jungermannia gracillima* Sm.
- Jungermannia tersa* Nees = *Jungermannia sphaerocarpa* Hook.
- Jungermannia thuja* Dicks. nom. illeg. = *Porella arboris-vitae* (With.) Grolle
- Jungermannia thuja* auct. non Dicks. nom. illeg. = *Porella obtusata* (Taylor) Trevis.
- Jungermannia tomentella* Ehrh. = *Trichocolea tomentella* (Ehrh.) Dumort.
- Jungermannia tophacea* Spruce = *Southbya tophacea* (Spruce) Spruce
- Jungermannia trichomanis* (L.) Scop. = *Calypogeia fissa* (L.) Raddi
- Jungermannia trichomanis* auct. non (L.) Scop. = *Calypogeia azurea* Stotler & Crotz [11]
- Jungermannia trichophylla* L. = *Blepharostoma trichophyllum* (L.) Dumort.
- Jungermannia tricrenata* Wahlenb. = *Bazzania tricrenata* (Wahlenb.) Lindb.
- Jungermannia trilobata* L. = *Bazzania trilobata* (L.) Gray
- Jungermannia tristis* Nees = *Jungermannia atrovirens* Dumort.
- Jungermannia turbinata* Raddi = *Leiocolea turbinata* (Raddi) H. Buch
- Jungermannia turneri* Hook. = *Cephaloziella turneri* (Hook.) Müll. Frib.
- Jungermannia ulicina* Taylor = *Microlejeunea ulicina* (Taylor) A. Evans
- Jungermannia uliginosa* Sw. ex Lindenb. = *Scapania uliginosa* (Sw. ex Lindenb.) Dumort.
- Jungermannia umbrosa* Schrad. = *Scapania umbrosa* (Schrad.) Dumort.
- Jungermannia undulata* L. = *Scapania undulata* (L.) Dumort.
- Jungermannia varians* Gottsche = *Cephaloziella varians* (Gottsche) Steph.
- Jungermannia ventricosa* Dicks. = *Lophozia ventricosa* (Dicks.) Dumort.
- Jungermannia ventricosa* var. *guttulata* (Lindb. & Arnell) C. Massal. = *Lophozia longiflora* (Nees) Schiffn.
- Jungermannia ventricosa* var. *longidens* (Lindb.) C. Massal. & Carestia = *Lophozia longidens* (Lindb.) Macoun
- Jungermannia ventricosa* var. *porphyroleuca* Hartm. = *Lophozia longiflora* (Nees) Schiffn.
- Jungermannia viticulosa* L. = *Saccogyna viticulosa* (L.) Dumort.
- Jungermannia wenzelii* Nees = *Lophozia wenzelii* (Nees) Steph.
- Jungermannia wilsonii* (Nees) Hook. f. & Taylor = *Acrobolbus wilsonii* Nees
- Jungermannia wilsoniana* Nees = *Leiocolea turbinata* (Raddi) H. Buch
- Jungermannia wondraczekii* Corda = *Fossombronia wondraczekii* (Corda) Lindb.
- Jungermannia zeyheri* Huebener = *Jungermannia pumila* With.
- Kantius(Kantia) argutus(arguta)* (Nees & Mont.) Lindb. = *Calypogeia arguta* Nees & Mont.
- Kantius(Kantia) calypogeus(calypogea)* (Raddi) Lindb. = *Calypogeia fissa* (L.) Raddi
- Kantius(Kantia) fissus(fissa)* (L.) Lindb. = *Calypogeia fissa* (L.) Raddi

- Kantius*(*Kantia*) *muellerianus*(*muelleriana*) Schiffn. = *Calypogeia muelleriana* (Schiffn.) Müll. Frib.
- Kantius*(*Kantia*) *neesianus* (*neesiana*) (C. Massal. & Carestia) Arnell & C. E. O. Jensen = ***Calypogeia neesiana*** (C. Massal. & Carestia) Müll. Frib.
- Kantius*(*Kantia*) *sphagnicolus*(*sphagnicola*) Arnell & J. Perss. = *Calypogeia sphagnicola* (Arnell & J. Perss.) Warnst. & Loeske
- Kantius*(*Kantia*) *sprengelii* (Mart.) Trevis. = ***Calypogeia fissa*** (L.) Raddi
- Kantius*(*Kantia*) *submersus*(*submersa*) Arnell = ***Calypogeia sphagnicola*** (Arnell & J. Perss.) Warnst. & Loeske
- Kantius*(*Kantia*) *suecicus*(*suecica*) Arnell & J. Perss. = ***Calypogeia suecica*** (Arnell. & J. Perss.) Müll. Frib.
- Kantius*(*Kantia*) *trichomanis* (L.) Gray = ***Calypogeia fissa*** (L.) Raddi
- Kantius*(*Kantia*) *trichomanis* auct. non (L.) Gray = ***Calypogeia azurea*** Stotler & Crotz [11]
- Kantius*(*Kantia*) *trichomanis* var. *fissus*(*fissa*) (L.) Lindb. = ***Calypogeia fissa*** (L.) Raddi
- Kantius*(*Kantia*) *trichomanis* var. *neesianus*(*neesiana*) C. Massal. & Carestia = ***Calypogeia neesiana*** (C. Massal. & Carestia) Müll. Frib.
- Leiocolea alpestris* (Schleich. ex F. Weber) Isov. = ***Leiocolea collaris*** (Nees) Schljakov
- Leiocolea kaurinii* (Limpr.) Jörg. = ***Leiocolea gillmanii*** (Austin) A. Evans
- Leiocolea muelleri* (Nees ex Lindenb.) Jörg. = ***Leiocolea collaris*** (Nees) Schljakov
- Leiocolea obtusa* (Lindb.) H. Buch = ***Lophozia obtusa*** (Lindb.) A. Evans
- Leiocolea turbinata* f. *aquatica* Jelenc nom. nud. [32]
- Leioscyphus anomalus* (Hook.) Steph. = ***Mylia anomala*** (Hook.) Gray
- Leioscyphus cuneifolius* (Hook.) Steph. = ***Leptoscyphus cuneifolius*** (Hook.) Mitt.
- Lejeunea aberrans* Lindenb. & Gottsche = ***Acanthocoleus aberrans*** (Lindenb. & Gottsche) Kruijt
- Lejeunea azorica* Steph. = ***Lejeunea lamacerina*** (Steph.) Schiffn.
- Lejeunea calcarea* Lib. = ***Cololejeunea calcarea*** (Lib.) Schiffn.
- Lejeunea calcarea* var. *rossettiana* (C. Massal.) Mansion & Clerbois = ***Cololejeunea rossettiana*** (C. Massal.) Schiffn.
- Lejeunea cavifolia* var. *loitlesbergeri* Schiffn. nom. inval. = ***Lejeunea cavifolia*** (Ehrh.) Lindb.
- Lejeunea diversiloba* Spruce = ***Lejeunea hibernica*** Bischl. *et al.* ex Grolle
- Lejeunea echinata* (Hook.) Taylor ex Gottsche *et al.* nom. inval. = ***Cololejeunea calcarea*** (Lib.) Schiffn.
- Lejeunea flava* subsp. *moorei* (Lindb.) R. M. Schust. [34]
- Lejeunea hamatifolia* (Hook.) Spreng. = ***Drepanolejeunea hamatifolia*** (Hook.) Schiffn.
- Lejeunea hamatifolia* Dumort. nom. inval. = ***Drepanolejeunea hamatifolia*** (Hook.) Schiffn.
- Lejeunea holtii* Spruce = ***Lejeunea eckloniana*** Lindenb.
- Lejeunea inconspicua* (Raddi) De Not. ex Rabenh. = ***Cololejeunea minutissima*** (Sm.) Schiffn.
- Lejeunea lamacerina* var. *azorica* (Steph.) Greig-Smith = ***Lejeunea lamacerina*** (Steph.) Schiffn.
- Lejeunea mackaii* (Hook.) Spreng. = ***Marchesinia mackaii*** (Hook.) Gray
- Lejeunea macvicarii* Pearson = ***Lejeunea mandonii*** (Steph.) Müll. Frib.
- Lejeunea microscopica* (Taylor) Gottsche *et al.* = ***Aphanolejeunea microscopica*** (Taylor) A. Evans
- Lejeunea minutissima* (Sm.) Spreng. = ***Cololejeunea minutissima*** (Sm.) Schiffn.
- Lejeunea molleri* Steph. = ***Harpalejeunea molleri*** (Steph.) Grolle
- Lejeunea moorei* Lindb. [34]
- Lejeunea ovata* (Dicks.) Taylor ex Gottsche = ***Douinia ovata*** (Dicks.) H. Buch

- Lejeunea planiuscula* (Lindb.) H. Buch = ***Lejeunea lamacerina*** (Steph.) Schiffn.
Lejeunea rossettiana C. Massal. = ***Cololejeunea rossettiana*** (C. Massal.) Schiffn.
Lejeunea serpyllifolia (Dicks.) Lib. nom. illeg. = ***Lejeunea patens*** Lindb. [33]
Lejeunea serpyllifolia Scop. = ***Lejeunea cavifolia*** (Ehrh.) Lindb. [33]
Lejeunea serpyllifolia var. *cavifolia* (Ehrh.) Lindb. nom. inval. = ***Lejeunea cavifolia*** (Ehrh.) Lindb.
☞ *Lejeunea serpyllifolia* var. *loitlesbergeri* Schiffn. = ***Lejeunea cavifolia*** (Ehrh.) Lindb.
Lejeunea serpyllifolia var. *planiuscula* C. Massal. nom. illeg. = ***Lejeunea lamacerina*** (Steph.) Schiffn.
Lejeunea serpyllifolia f. *planiuscula* Lindb. nom. illeg. = ***Lejeunea lamacerina*** (Steph.) Schiffn.
Lejeunea taylorii Spruce = ***Cololejeunea minutissima*** (Sm.) Schiffn.
Lejeunea ulicina (Taylor) Gottsche *et al.* = ***Microlejeunea ulicina*** (Taylor) Steph.
Lepidozia azorica H. Buch & Perss. = ***Telaranea azorica*** (H. Buch & Perss.) Pócs *ex* Schumacker & Váňa [65]
Lepidozia pearsonii Spruce **REJECTED FROM THE AREA [35]**
Lepidozia pinnata (Hook.) Dumort. = ***Lepidozia cupressina*** (Sw.) Lindenb.
Lepidozia reptans var. *tenera* (Huebener) Nees = ***Lepidozia reptans*** (L.) Dumort.
Lepidozia setacea (Weber) Mitt. = ***Kurzia pauciflora*** (Dicks.) Grolle
Lepidozia sylvatica A. Evans = ***Kurzia sylvatica*** (A. Evans) Grolle
Lepidozia trichoclados Müll. Frib. = ***Kurzia trichoclados*** (Müll. Frib.) Grolle
Leptoscyphus anomalus (Hook.) Lindb. = ***Mylia anomala*** (Hook.) Gray
Leptoscyphus interruptus (Nees) Lindb. = ***Pedinophyllum interruptum*** (Nees) Kaal.
Leptoscyphus taylorii (Hook.) Mitt. = ***Mylia taylorii*** (Hook.) Gray
Liochlaena lanceolata Nees = ***Jungermannia leiantha*** Grolle
Liochlaena subulata (A. Evans) Schljakov = ***Jungermannia subulata*** A. Evans
Lophocolea alata Mitt. *ex* Larter = ***Lophocolea bidentata*** (L.) Dumort.
☞ *Lophocolea bidentata* var. *alata* (Mitt. *ex* Larter) Nees = ***Lophocolea bidentata*** (L.) Dumort.
Lophocolea bidentata var. *cuspidata* (Nees) Nees = ***Lophocolea bidentata*** (L.) Dumort.
Lophocolea bidentata var. *fluitans* F. A. Camus *ex* Husn. = ***Lophocolea bidentata*** (L.) Dumort.
Lophocolea bidentata var. *latifolia* (Nees) Rabenh. nom. inval. = ***Lophocolea bidentata*** (L.) Dumort.
Lophocolea bidentata var. *rivularis* (Raddi) Warnst. = ***Lophocolea bidentata*** (L.) Dumort.
Lophocolea crocata (De Not.) Nees = ***Lophocolea minor*** Nees
Lophocolea cuspidata (Nees) Limpr. = ***Lophocolea bidentata*** (L.) Dumort.
▶ *Lophocolea heterophylla* f. *gemmifera* Andres = ***Lophocolea heterophylla*** (Schrad.) Dumort.
Lophocolea heterophylla var. *minor* (Nees) Douin = ***Lophocolea minor*** Nees
Lophocolea heterophylla f. *propagulifera* Feld nom. inval. = ***Lophocolea heterophylla*** (Schrad.) Dumort.
Lophocolea hirticalyx Corb. & Steph. = ***Lophocolea fragrans*** (Moris & De Not.) Gottsche *et al.*
Lophocolea hookeriana Nees = ***Lophocolea bidentata*** (L.) Dumort.
Lophocolea incisa Lindb. = ***Lophocolea heterophylla*** (Schrad.) Dumort.
Lophocolea lateralis Dumort. = ***Lophocolea bidentata*** (L.) Dumort.
Lophocolea latifolia Nees = ***Lophocolea bidentata*** (L.) Dumort.
Lophocolea preauxiana Mont. = ***Saccogyna viticulosa*** (L.) Dumort.

- ☞ *Lophocolea spicata* Gottsche *et al.* = ***Lophocolea fragrans*** (Moris & De Not.) Gottsche *et al.*
- Lophocolea vogesiaca* Huebener *ex* Nees = ***Harpanthus flotovianus*** (Nees) Nees
- Lophozia acutiloba* Schiffn. = ***Gymnocolea inflata*** (Huds.) Dumort.
- Lophozia alpestris* (Schleich. *ex* F. Weber) A. Evans = ***Leiocolea collaris*** (Nees) Schljakov
- Lophozia alpestris* auct. non (Schleich. *ex* F. Weber) A. Evans = ***Lophozia sudetica*** (Nees *ex* Huebener) Grolle
- Lophozia attenuata* (Mart.) Dumort. = ***Barbilophozia attenuata*** (Mart.) Loeske
- Lophozia atlantica* (Kaal.) Schiffn. = ***Barbilophozia atlantica*** (Kaal.) Müll. Frib.
- Lophozia badensis* (Gottsche) Schiffn. = ***Leiocolea badensis*** (Gottsche) Jörg.
- Lophozia bantriensis* (Hook.) Steph. = ***Leiocolea bantriensis*** (Hook.) Jörg.
- Lophozia barbata* (Schmidel *ex* Schreb.) Dumort. = ***Barbilophozia barbata*** (Schmidel *ex* Schreb.) Loeske
- Lophozia baueriana* (Schiffn.) Schiffn. = ***Barbilophozia hatcheri*** (A. Evans) Loeske
- Lophozia canariensis* Bryhn = ***Marsupella emarginata*** (Ehrh.) Dumort.
- Lophozia capitata* subsp. *laxa* (Lindb.) Bisang = ***Lophozia laxa*** (Lindb.) Grolle
- Lophozia collaris* (Nees) Dumort. = ***Leiocolea collaris*** (Nees) Schljakov
- Lophozia confertifolia* Schiffn. = ***Lophozia ventricosa*** (Dicks.) Dumort. [38]
- Lophozia ehrhartiana* (F. Weber) Inoue & Steere = ***Lophozia ventricosa*** (Dicks.) Dumort.
- Lophozia elongata* Steph. **REJECTED FROM THE AREA**
- Lophozia excisa* var. *cylindracea* (Dumort.) Müll. Frib. = ***Lophozia excisa*** (Dicks.) Dumort.
- Lophozia excisa* var. *jurensis* (Meyl. *ex* Müll. Frib.) Müll. Frib. = ***Lophozia excisa*** (Dicks.) Dumort.
- Lophozia exsecta* (Schmidel *ex* Schrad.) Dumort. = ***Tritomaria exsecta*** (Schmidel *ex* Schrad.) Loeske
- Lophozia exsectiformis* (Breidl.) Jaap = ***Tritomaria exsectiformis*** (Breidl.) Loeske
- Lophozia floerkei* (F. Weber & D. Mohr) Schiffn. = ***Barbilophozia floerkei*** (F. Weber & D. Mohr) Loeske
- Lophozia gillmanii* (Austin) R. M. Schust. = ***Leiocolea gillmanii*** (Austin) A. Evans
- Lophozia gracillima* H. Buch = ***Lophozia ascendens*** (Warnst.) R. M. Schust.
- Lophozia gracilis* Schleich. *ex* Steph. nom. illeg. = ***Barbilophozia attenuata*** (Mart.) Loeske
- Lophozia guttulata* (Lindb. & Arnell) A. Evans = ***Lophozia longiflora*** (Nees) Schiffn.
- Lophozia hatcheri* (A. Evans) Steph. = ***Barbilophozia hatcheri*** (A. Evans) Loeske
- Lophozia heterocolpos* (Thed. *ex* Hartm.) M. Howe = ***Leiocolea heterocolpos*** (Thed. *ex* Hartm.) H. Buch
- Lophozia hornschuchiana* (Nees) Macoun = ***Leiocolea bantriensis*** (Hook.) Jörg.
- Lophozia incisa* subsp. *opacifolia* (Culm. *ex* Meyl.) R. M. Schust. & Damsh. = ***Lophozia opacifolia*** Culm. *ex* Meyl.
- Lophozia inflata* (Huds.) M. Howe = ***Gymnocolea inflata*** (Huds.) Dumort.
- Lophozia jurensis* Meyl. *ex* Müll. Frib. = ***Lophozia excisa*** (Dicks.) Dumort.
- Lophozia kaurinii* (Limpr.) Steph. = ***Leiocolea gillmanii*** (Austin) A. Evans
- Lophozia kiaeri* Jörg. *p. p.* = ***Lophozia excisa*** (Dicks.) Dumort.
- Lophozia kunzeana* (Huebener) A. Evans = ***Barbilophozia kunzeana*** (Huebener) Müll. Frib.
- Lophozia longiflora* sensu auct. = ***Lophozia ventricosa*** (Dicks.) Dumort.
- Lophozia lycopodioides* (Wallr.) Cogn. = ***Barbilophozia lycopodioides*** (Wallr.) Loeske
- Lophozia lycopodioides* var. *parvifolia* Schiffn. = ***Barbilophozia hatcheri*** (A. Evans) Loeske
- Lophozia lyoni* (Taylor) Steph. = ***Tritomaria quinquentata*** (Huds.) H. Buch

- Lophozia minuta* (Schreb.) Schiffn. = **Anastrophyllum minutum** (Schreb.) R. M. Schust.
Lophozia muelleri (Nees ex Lindenb.) Dumort. = **Leiocolea collaris** (Nees) Schljakov
Lophozia porphyroleuca (Nees) Schiffn. nom. illeg. = **Lophozia longiflora** (Nees) Schiffn.
Lophozia quadriloba (Lindb.) A. Evans = **Barbilophozia quadriloba** (Lindb.) Loeske
Lophozia propagulifera (Gottsche) Steph. = **Lophozia latifolia** R. M. Schust. [36]
Lophozia quinquedentata (Huds.) Cogn. = **Tritomaria quinquedentata** (Huds.) H. Buch
Lophozia rufescens Schljakov = **Lophozia sudetica** (Nees ex Huebener) Grolle
Lophozia schreberi Boulay nom. illeg. = **Barbilophozia barbata** (Schmidel ex Schreb.) Loeske
Lophozia scutata (F. Weber & D. Mohr) Dumort. = **Harpanthus scutatus** (F. Weber & D. Mohr) Spruce
Lophozia turbinata (Raddi) Steph. = **Leiocolea turbinata** (Raddi) H. Buch
Lophozia turbinata var. *wilsoniana* (Nees) C. Massal. = **Leiocolea turbinata** (Raddi) H. Buch
Lophozia ventricosa var. *longiflora* (Nees) Macoun = **Lophozia longiflora** (Nees) Schiffn.
Lophozia ventricosa var. *longiflora* auct. non (Nees) Macoun = **Lophozia ventricosa** (Dicks.) Dumort.
Lophozia ventricosa var. *porphyroleuca* (Nees) Müll. Frib. = **Lophozia longiflora** (Nees) Schiffn.
Lophozia ventricosa var. *silvicola* (H. Buch) E. W. Jones ex R. M. Schust. = **Lophozia silvicola** H. Buch
Lophozia ventricosa var. *uliginosa* Breidl. ex Schiffn. = **Lophozia ventricosa** (Dicks.) Dumort.
Lunularia alpina Nees = **Sauteria alpina** (Nees) Nees
Lunularia dillenii Le Jol. = **Lunularia cruciata** (L.) Lindb.
Lunularia michelii Le Jol. = **Lunularia cruciata** (L.) Lindb.
Lunularia vulgaris Raddi nom. illeg. = **Lunularia cruciata** (L.) Lindb.
Madotheca baueri Schiffn. = **Porella xbaueri** (Schiffn.) C. E. O. Jensen
Madotheca canariensis (F. Weber) Nees = **Porella canariensis** (F. Weber) Underw.
Madotheca canariensis var. *subsquarrosa* Schiffn. = **Porella canariensis** (F. Weber) Underw.
Madotheca cordaeana (Huebener) Dumort. = **Porella cordaeana** (Huebener) Moore
Madotheca cordaeana var. *distans* (Müll. Frib.) Müll. Frib. = **Porella cordaeana** (Huebener) Moore
Madotheca dentata (Hartm.) C. Massal. = **Porella cordaeana** (Huebener) Moore
Madotheca inaequalis Gottsche ex Steph. = **Porella inaequalis** (Gottsche ex Steph.) Perss.
Madotheca jackii Schiffn. = **Porella platyphylla** (L.) Pfeiff.
Madotheca kabylica Trab. nom. inval. = **Porella cordaeana** (Huebener) Moore
Madotheca laevigata (Schrad.) Dumort. = **Porella arboris-vitae** (With.) Grolle
Madotheca laevigata var. *obscura* Nees = **Porella arboris-vitae** (With.) Grolle
Madotheca laevigata var. *killarniensis* (Pearson) Macvicar = **Porella arboris-vitae** (With.) Grolle
Madotheca laevigata var. *subintegra* (Kaal.) Schiffn. = **Porella arboris-vitae** (With.) Grolle
☞ *Madotheca laevigata* var. *thuja* (Nees) Gottsche et al. = **Porella arboris-vitae** (With.) Grolle
Madotheca levieri (J. B. Jack & Steph.) Copp. = **Porella cordaeana** (Huebener) Moore
Madotheca obscura (Nees) Boulay = **Porella arboris-vitae** (With.) Grolle
Madotheca obscura (Nees) Warnst. nom. inval. = **Porella arboris-vitae** (With.) Grolle
Madotheca obtusata Taylor = **Porella obtusata** (Taylor) Trevis.

- Madotheca platyphylla* (L.) Dumort. = ***Porella platyphylla*** (L.) Pfeiff.
Madotheca platyphylla var. *subsquarrosa* Schiffn. = ***Porella platyphylla*** (L.) Pfeiff.
Madotheca platyphylloidea (Schwein.) Nees = ***Porella platyphylla*** (L.) Pfeiff.
Madotheca porella Nees nom. illeg. = ***Porella pinnata*** L.
Madotheca porelloides De Not. ex Lindb. nom. inval. = ***Porella platyphylla*** (L.) Pfeiff.
Madotheca rivularis Nees = ***Porella cordaeana*** (Huebener) Moore
Madotheca simplicior J. E. Zetterst. = ***Porella cordaeana*** (Huebener) Moore
Madotheca thuja (Hook.) Dumort. nom. illeg. = ***Porella arboris-vitae*** (With.) Grolle
Madotheca thuja auct. non (Hook.) Dumort. = ***Porella obtusata*** (Taylor) Trevis.
Madotheca torva De Not. ex Bertol. nom. inval. = ***Porella obtusata*** (Taylor) Trevis.
Mannia atlantica Jelenc nom. inval. [39]
Mannia dichotoma Udar & V. Chandra nom. inval. = ***Mannia androgyna*** (L.) A. Evans
Mannia dichotoma S. W. Arnell = ***Mannia androgyna*** (L.) A. Evans
Mannia rupestris (Nees) Frye & L. Clark = ***Mannia triandra*** (Scop.) Grolle
Marchantia alpestris (Nees) Burgeff = ***Marchantia polymorpha*** subsp. *montivagans* Bischl. & Boisselier
Marchantia androgyna L. = ***Mannia androgyna*** (L.) A. Evans
Marchantia angustifolia Neck. nom. illeg. = ***Mannia androgyna*** (L.) A. Evans
Marchantia aquatica (Nees) Burgeff = ***Marchantia polymorpha*** L. subsp. ***polymorpha***
Marchantia circumscissa Biv. = ***Mannia androgyna*** (L.) A. Evans
Marchantia commutata Lindenb. = ***Preissia quadrata*** (Scop.) Müll. Frib.
Marchantia conica L. = ***Conocephalum conicum*** (L.) Dumort.
Marchantia cruciata L. = ***Lunularia cruciata*** (L.) Lindb.
Marchantia cruciata var. *hyalina* Sommerf. = ***Athalamia hyalina*** (Sommerf.) S. Hatt.
§ *Marchantia dillenii* = ***Lunularia cruciata*** (L.) Lindb.
Marchantia fragrans Balbis = ***Mannia fragrans*** (Balbis) Frye & L. Clark [10]
Marchantia glauca Biv. = ***Plagiochasma rupestre*** (J. R. Forst. & G. Forst.) Steph.
Marchantia gracilis F. Weber = ***Asterella gracilis*** (F. Weber) Underw.
Marchantia hemisphaerica L. = ***Reboulia hemisphaerica*** (L.) Raddi
Marchantia hirsuta Sw. = ***Dumortiera hirsuta*** (Sw.) Nees
Marchantia hyalina Sommerf. = ***Athalamia hyalina*** (Sommerf.) S. Hatt.
Marchantia irrigua Wilson ex Hook. = ***Dumortiera hirsuta*** (Sw.) Nees
Marchantia pilosa Hornem. = ***Mannia pilosa*** (Hornem.) Frye & L. Clark
Marchantia polycephala Schleich. nom. inval. = ***Asterella gracilis*** (F. Weber) Underw.
Marchantia polymorpha auct. = ***Marchantia polymorpha*** subsp. *ruderalis* Bischl. & Boisselier
Marchantia polymorpha var. *alpestris* (Nees) Nees = ***Marchantia polymorpha*** subsp. ***montivagans*** Bischl. & Boisselier
Marchantia polymorpha var. *aquatica* (Nees) Gottsche *et al.* = ***Marchantia polymorpha*** L. subsp. ***polymorpha***
Marchantia polymorpha f. *domestica* Nees nom. illeg. = ***Marchantia polymorpha*** subsp. ***ruderalis*** Bischl. & Boisselier
Marchantia polymorpha var. *mamillata* I. Hag. ex Schiffn. = ***Marchantia polymorpha*** subsp. ***montivagans*** Bischl. & Boisselier
Marchantia quadrata Scop. = ***Preissia quadrata*** (Scop.) Müll. Frib. [51]
Marchantia spathysii Lindenb. = ***Athalamia spathysii*** (Lindenb.) S. Hatt.
Marchantia stellata Scop. = ***Marchantia polymorpha*** subsp. ***ruderalis*** Bischl. & Boisselier
Marchantia triandra Scop. = ***Mannia triandra*** (Scop.) Grolle

- Marchantia umbellata* Scop. = ***Marchantia polymorpha*** subsp. *ruderalis* Bischl. & Boisselier
Marchantia vittata Raddi = ***Marchantia polymorpha*** L. subsp. *polymorpha*
Marchesinia johnsoniana (Mitt.) Herz. = ***Acanthocoleus aberrans*** (Lindenb. & Gottsche) Kruijt
☞ *Marsilia epiphylla* (L.) Lindb. nom. illeg. = ***Pellia epiphylla*** (L.) Corda
Marsupella aemula (Limpr.) Lindb. ex Kaal. = ***Marsupella condensata*** (Ångstr. ex C. Hartm.) Kaal.
Marsupella aquatica (Lindenb.) Schiffn. = ***Marsupella emarginata*** (Ehrh.) Dumort.
Marsupella badensis Schiffn. = ***Marsupella funckii*** (F. Weber & D. Mohr) Dumort.
Marsupella capillaris (Limpr.) H. Bern. = ***Marsupella boeckii*** (Austin) Lindb.
Marsupella conferta (Limpr.) Spruce = ***Marsupella brevissima*** (Dumort.) Grolle
Marsupella emarginata subsp. *aquatica* (Lindenb.) Meyl. = ***Marsupella emarginata*** (Ehrh.) Dumort.
Marsupella emarginata var. *aquatica* (Lindenb.) Dumort. = ***Marsupella emarginata*** (Ehrh.) Dumort.
Marsupella emarginata var. *minor* C. Massal. ex Schiffn. nom. illeg. = ***Marsupella emarginata*** (Ehrh.) Dumort.
Marsupella erythrorhiza Schiffn. = ***Marsupella sphaclata*** (Gieseke ex Lindenb.) Dumort.
☞ *Marsupella filiformis* (Lindb.) Lindb. ex Kaal. = ***Marsupella boeckii*** (Austin) Lindb.
Marsupella funckii var. *major* (Nees) Boulay = ***Marsupella funckii*** (F. Weber & D. Mohr) Dumort.
☞ *Marsupella gracilis* (C. Massal. & Cestria) Pearson = ***Marsupella sprucei*** (Limpr.) Bernet
Marsupella hungarica Boros & Vajda nom. inval. = ***Marsupella funckii*** (F. Weber & D. Mohr) Dumort.
Marsupella joergensenii Schiffn. = ***Marsupella sphaclata*** (Gieseke ex Lindenb.) Dumort.
Marsupella latifolia Lindb. nom. inval. = ***Marsupella boeckii*** (Austin) Lindb.
☞ *Marsupella neglecta* (Limpr.) Lindb. = ***Marsupella sprucei*** (Limpr.) Bernet
Marsupella nevicensis (Carrington) Pearson = ***Marsupella boeckii*** (Austin) Lindb.
Marsupella pearsonii Schiffn. ex Macvicar = ***Marsupella emarginata*** (Ehrh.) Dumort.
Marsupella pygmaea (Limpr.) Steph. = ***Marsupella funckii*** (F. Weber & D. Mohr) Dumort.
Marsupella revoluta (Nees) Dumort. = ***Apomarsupella revoluta*** (Nees) R. M. Schust.
Marsupella robusta (De Not.) A. Evans = ***Marsupella emarginata*** (Ehrh.) Dumort.
Marsupella styriaca (Limpr.) Kaal. = ***Marsupella sparsifolia*** (Lindb.) Dumort.
Marsupella sullivantii (De Not.) A. Evans = ***Marsupella sphaclata*** (Gieseke ex Lindenb.) Dumort.
Marsupella ustulata (Huebener) Spruce ex Pearson hom. illeg. = ***Marsupella emarginata*** (Ehrh.) Dumort.
Marsupella ustulata Spruce non (Huebener) Spruce ex Pearson hom. illeg. = ***Marsupella sprucei*** (Limpr.) Bernet
Marsupella ustulata var. *neglecta* (Limpr.) Müll. Frib. = ***Marsupella sprucei*** (Limpr.) Bernet
Marsupella varians (Lindb.) Müll. Frib. = ***Marsupella brevissima*** (Dumort.) Grolle
Martinellia aequiloba (Schwägr.) Lindb. nom. illeg. = ***Scapania aequiloba*** (Schwägr.) Dumort.
☞ *Martinellia apiculata* (Spruce) Trevis. = ***Scapania apiculata*** Spruce
☞ *Martinellia aspera* (Bernet & M. Bernet) Broth. = ***Scapania aspera*** Bernet & M. Bernet
Martinellia calcicola Arnell & J. Perss. = ***Scapania calcicola*** (Arnell & J. Perss.) Ingham
Martinellia convexa (Scop.) Lindb. = ***Scapania umbrosa*** (Schrad.) Dumort.
Martinellia crassiretis (Bryhn) Arnell = ***Scapania crassiretis*** Bryhn
Martinellia curta (Mart.) Lindb. = ***Scapania curta*** (Mart.) Dumort.

- Martinellia cuspiduligera* (Nees) Arnell = ***Scapania cuspiduligera*** (Nees) Müll. Frib.
Martinellia gracilis (Lindb.) Lindb. = ***Scapania gracilis*** Lindb.
☞ *Martinellia helvetica* (Gottsche) Trevis. = ***Scapania helvetica*** Gottsche
Martinellia mucronata (H. Buch) Arnell & C. E. O. Jensen = ***Scapania mucronata*** H. Buch
Martinellia nemorosa Lindb. nom. illeg. = ***Scapania nemorea*** (L.) Grolle
Martinellia obliqua Arnell = ***Scapania uliginosa*** (Sw. ex Lindenb.) Dumort.
Martinellia obscura Arnell & C. E. O. Jensen = ***Scapania obscura*** (Arnell & C. E. O. Jensen) Schiffn.
Martinellia paludicola (Loeske & Müll. Frib.) C. E. O. Jensen = ***Scapania paludicola*** Loeske & Müll. Frib.
☞ *Martinellia paludosa* (Müll. Frib.) Arnell & C. E. O. Jensen = ***Scapania paludosa*** (Müll. Frib.) Müll. Frib.
Martinellia resupinata (L.) Gray ex Lindb. = ***Scapania undulata*** (L.) Dumort.
☞ *Martinellia resupinata* (Hook.) Lindb. nom. inval. = ***Scapania compacta*** (A. Roth) Dumort.
Martinellia rosacea (Corda) Lindb. = ***Scapania curta*** (Mart.) Dumort.
Martinellia scandica Arnell & H. Buch = ***Scapania scandica*** (Arnell & H. Buch) Macvicar
☞ *Martinellia subalpina* (Nees ex Lindenb.) Trevis. = ***Scapania subalpina*** (Nees ex Lindenb.) Dumort.
☞ *Martinellia uliginosa* (Sw. ex Lindenb.) Trevis. = ***Scapania uliginosa*** (Sw. ex Lindenb.) Dumort.
☞ *Martinellia umbrosa* (Schrad.) Gray = ***Scapania umbrosa*** (Schrad.) Dumort.
Martinellia undulata (L.) Gray = ***Scapania undulata*** (L.) Dumort.
Massula capitata (Hook.) Schljakov = ***Lophozia capitata*** (Hook.) Macoun
Massula grandiretis (Lindb. ex Kaal.) Schljakov = ***Lophozia grandiretis*** (Lindb. ex Kaal.) Schiffn.
Massula incisa (Schrad.) Schljakov nom. illeg. = ***Lophozia incisa*** (Schrad.) Dumort.
Massula opacifolia (Culm. ex Meyl.) Schljakov nom. illeg. = ***Lophozia opacifolia*** Culm. ex Meyl.
Mastigobryum deflexum (Mart.) Nees = ***Bazzania tricrenata*** (Wahlenb.) Lindb.
Mastigobryum triangulare Schleich. ex Steph. nom. illeg. = ***Bazzania tricrenata*** (Wahlenb.) Lindb.
Mastigobryum trilobatum (L.) Nees = ***Bazzania trilobata*** (L.) Gray
Mesophylla crenulata (Mitt.) Corb. = ***Jungermannia gracillima*** Sm.
Mesophylla crenulata var. *gracillima* (Sm.) Boulay nom. illeg. = ***Jungermannia gracillima*** Sm.
Mesophylla hyalina (Lydell) Corb. = ***Jungermannia hyalina*** Lyell
Mesophylla hyalina var. *gracillima* (Schiffn.) Boulay = ***Jungermannia hyalina*** Lyell
Mesophylla nigrella (De Not.) Boulay = ***Southbya nigrella*** (De Not.) Henriq.
Mesophylla obovata (Nees) Corb. = ***Jungermannia obovata*** Nees
Mesophylla rotaeana (De Not) Dumort. = ***Nardia scalaris*** Gray
Mesophylla scalaris (Gray) Dumort. = ***Nardia scalaris*** Gray
Mesophylla stillicidiorum (Raddi) Boulay = ***Southbya tophacea*** (Spruce) Spruce
Metzgeria conjugata subsp. *simplex* (Lorb. ex Müll. Frib.) R. M. Schust. = ***Metzgeria simplex*** Lorb. ex Müll. Frib.
Metzgeria conjugata f. *subpinnata* Jörg. = ***Metzgeria conjugata*** Lindb.
Metzgeria densisetata Steph. = ***Metzgeria furcata*** (L.) Dumort.
Metzgeria fruticulosa auct. eur. non (O. F. Müll.) Evans = ***Metzgeria violacea*** (Ach.) Dumort. [40]

- Metzgeria furcata* var. *fruticulosa* auct. eur. non (O. F. Müll.) Lindb. = *Metzgeria violacea* (Ach.) Dumort. [40]
- ☞ *Metzgeria furcata* var. *ulvula* (Nees) Gottsche *et al.* = *Metzgeria furcata* (L.) Dumort.
- Metzgeria glabra* Raddi nom. illeg. = *Metzgeria furcata* (L.) Dumort.
- Metzgeria glabra* f. *ulvula* (Nees) Zodda = *Metzgeria furcata* (L.) Dumort.
- Metzgeria hamata* Lindb. nom. illeg. = *Metzgeria leptoneura* Spruce
- Metzgeria nitida* Mitt. = *Metzgeria leptoneura* Spruce
- Metzgeria pubescens* (Schrank) Raddi = *Apometzgeria pubescens* (Schrank) Kuwah.
- Microlejeunea diversiloba* auct. non (Spruce) Müll. Frib. = *Lejeunea hibernica* Bischl. *et al.* ex Grolle
- Microlejeunea mandonii* Steph. = *Lejeunea mandonii* (Steph.) Müll. Frib.
- Microlepidozia setacea* auct. non (G. Web.) Jørg. = *Kurzia pauciflora* (Dicks.) Grolle
- Microlepidozia sylvatica* (A. Evans) Jørg. = *Kurzia sylvatica* (A. Evans) Grolle
- Microlepidozia trichoclados* (Müll. Frib.) Jørg. = *Kurzia trichoclados* (Müll. Frib.) Grolle
- Mnium fissum* L. = *Calypogeia fissa* (L.) Raddi
- Mnium trichomanis* L. = *Calypogeia fissa* (L.) Raddi
- Mnium trichomanis* auct. non L. = *Calypogeia azurea* Stotler & Crotz [11]
- Moerckia flotoviana* (Nees) Schiffn. = *Moerckia hibernica* (Hook.) Gottsche
- Mylia cuneifolia* (Hook.) Gray = *Leptoscyphus cuneifolius* (Hook.) Mitt.
- Nardia alpina* (Gottsche ex Husn.) Trevis. nom. inval. = *Marsupella alpina* (Gottsche ex Husn.) Bernet
- Nardia boeckii* (Austin) Lindb. = *Marsupella boeckii* (Austin) Lindb.
- Nardia brevissima* (Dumort.) Lindb. = *Marsupella brevissima* (Dumort.) Grolle
- Nardia cochlearis* Lindb. = *Marsupella brevissima* (Dumort.) Grolle
- Nardia commutata* (Limpr.) C. Massal. & Carestia = *Marsupella commutata* (Limpr.) Bernet
- Nardia compressa* var. *rigida* Lindb. = *Nardia compressa* (Hook.) Gray
- Nardia crassula* Lorb. nom. inval. = *Nardia insecta* Lindb.
- Nardia crenulata* (Mitt.) Lindb. = *Jungermannia gracillima* Sm.
- Nardia crenulata* var. *crustulata* (Dumort.) Schiffn. = *Jungermannia gracillima* Sm.
- Nardia crenulata* var. *gracillima* (Sm.) Lindb. = *Jungermannia gracillima* Sm.
- Nardia crenulata* var. *inundata* Schiffn. = *Jungermannia gracillima* Sm.
- ☞ *Nardia densifolia* (Nees) Trevis. = *Marsupella emarginata* (Ehrh.) Dumort.
- Nardia emarginata* (Ehrh.) Gray = *Marsupella emarginata* (Ehrh.) Dumort.
- Nardia emarginata* var. *aquatica* (Lindenb.) Carrington = *Marsupella emarginata* (Ehrh.) Dumort.
- Nardia filiformis* Lindb. = *Marsupella boeckii* (Austin) Lindb.
- ☞ *Nardia funckii* (F. Weber & D. Mohr) Carrington ex Lindb. = *Marsupella funckii* (F. Weber & D. Mohr) Dumort.
- Nardia geoscyphus* var. *insecta* (Lindb.) Schiffn. = *Nardia insecta* Lindb.
- Nardia gracilis* C. Massal. & Carestia = *Marsupella sprucei* (Limpr.) Bernet
- Nardia gracillima* (Sm.) Lindb. = *Jungermannia gracillima* Sm.
- Nardia haematosticta* Nees ex Lindb. nom. inval. = *Nardia geoscyphus* (De Not.) Lindb.
- Nardia hyalina* (Lyell) Carrington = *Jungermannia hyalina* Lyell
- Nardia hyalina* var. *colorata* Samp. nom. inval. [30]
- Nardia latifolia* Lindb. nom. inval. = *Marsupella boeckii* (Austin) Lindb.
- Nardia levieri* Steph. = *Jungermannia confertissima* Nees
- Nardia lignicola* Schiffn. = *Jungermannia lignicola* (Schiffn.) Grolle

- Nardia muelleriana* Schiffn. = ***Jungermannia hyalina*** Lyell
Nardia obovata (Nees) Lindb. = ***Jungermannia obovata*** Nees
Nardia obovata var. *minor* Carrington = ***Jungermannia subelliptica*** (Lindb. ex Kaal.) Levier
Nardia pachyphylla (De Not.) Trevis. = ***Nardia compressa*** (Hook.) Gray
Nardia revoluta (Nees) Lindb. = ***Apomarsupella revoluta*** (Nees) R. M. Schust.
☞ *Nardia robusta* (De Not.) Lindb. ex Carrington = ***Marsupella emarginata*** (Ehrh.) Dumort.
☞ *Nardia silvrettae* (Gottsche ex Dumort.) Trevis. [41]
Nardia sparsifolia (Lindb.) Lindb. = ***Marsupella sparsifolia*** (Lindb.) Dumort.
Nardia sparsifolia var. *minor* (Schleich.) Lindb. nom. inval. = ***Marsupella brevissima*** (Dumort.) Grolle
Nardia sphacelata (Gieseke ex Lindenb.) Carrington = ***Marsupella sphacelata*** (Gieseke ex Lindenb.) Dumort.
Nardia sprucei (Limpr.) C. Massal. & Carestia = ***Marsupella sprucei*** (Limpr.) Bernet
Nardia subelliptica Lindb. ex Kaal. = ***Jungermannia subelliptica*** (Lindb. ex Kaal.) Levier
Nardia subtilissima Schiffn. = ***Jungermannia subtilissima*** (Schiffn.) Grolle
Nardia varians Lindb. = ***Marsupella brevissima*** (Dumort.) Grolle
Neesiella carnica (C. Massal.) Schiffn. = ***Mannia pilosa*** (Hornem.) Frye & L. Clark
Neesiella pilosa (Hornem.) Schiffn. = ***Mannia pilosa*** (Hornem.) Frye & L. Clark
Neesiella rupestris (Nees) Schiffn. = ***Mannia triandra*** (Scop.) Grolle
Obtusifolium obtusum (Lindb.) S. W. Arnell = ***Lophozia obtusa*** (Lindb.) A. Evans
Odontoschisma cavifolium Steph. = ***Odontoschisma denudatum*** (Mart.) Dumort.
Odontoschisma denudatum subsp. *elongatum* (Lindb.) Potemkin = ***Odontoschisma elongatum*** (Lindb.) A. Evans
Odontoschisma denudatum var. *elongatum* (Lindb.) Lindb. = ***Odontoschisma elongatum*** (Lindb.) A. Evans
Odontoschisma denudatum f. *elongatum* Lindb. = ***Odontoschisma elongatum*** (Lindb.) A. Evans
Odontoschisma remotifolium Warnst. = ***Odontoschisma sphagni*** (Dicks.) Dumort.
Odontoschisma sphagni var. *denudatum* (Mart.) C. Massal. & Carestia = ***Odontoschisma denudatum*** (Mart.) Dumort.
Odontoschisma sphagni var. *macrior* Bernet = ***Odontoschisma denudatum*** (Mart.) Dumort.
Odontoschisma tessellatum (Berggr.) C. E. O. Jensen = ***Odontoschisma macounii*** (Austin) Underw.
Orthocaulis atlanticus (Kaal.) H. Buch = ***Barbilophozia atlantica*** (Kaal.) Müll. Frib.
Orthocaulis attenuatus (Mart.) A. Evans = ***Barbilophozia attenuata*** (Mart.) Loeske
Orthocaulis floerkei (F. Weber & D. Mohr) H. Buch = ***Barbilophozia floerkei*** (F. Weber & D. Mohr) Loeske
Orthocaulis gracilis (Schleich. ex DC.) H. Buch = ***Barbilophozia attenuata*** (Mart.) Loeske
Orthocaulis kunzeanus (Huebener) H. Buch = ***Barbilophozia kunzeana*** (Huebener) Müll. Frib.
Otione crinita (Michx.) Corda = ***Reboulia hemisphaerica*** (L.) Raddi
Otione italica (Sassi) Dumort. = ***Plagiochasma rupestre*** (J. R. Forst. & G. Forst.) Steph.
Otione rupestris (J. R. Forst. & G. Forst.) Dumort. = ***Plagiochasma rupestre*** (J. R. Forst. & G. Forst.) Steph.
Oxymitra paleacea Bisch. ex Lindenb. = ***Oxymitra incrassata*** (Brot.) Sérgio & Sim-Sim
Oxymitra pyramidata (Raddi) Huebener non (Willd.) Huebener = ***Oxymitra incrassata*** (Brot.) Sérgio & Sim-Sim

- Oxymitra pyramidata* var. *linkii* (Lindenb.) Lindenb. = *Oxymitra incrassata* (Brot.) Sérgio & Sim-Sim
- Oxymitra pyramidata* var. *paleacea* (Bisch. ex Lindenb.) Gottsche *et al.* = *Oxymitra incrassata* (Brot.) Sérgio & Sim-Sim
- Pallavicinia blyttii* (Moerch ex Hornem.) Lindb. = *Moerckia blyttii* (Moerch ex Hornem.) Brockm.
- Pallavicinia flotoviana* (*flotowii error pro flotoviana*) (Nees) Lindb. = *Moerckia hibernica* (Hook.) Gottsche
- Pallavicinia flotoviana* var. *hibernica* (Hook.) Lindb. nom. illeg. = *Moerckia hibernica* (Hook.) Gottsche
- Pallavicinia hibernica* (Hook.) Gray = *Moerckia hibernica* (Hook.) Gottsche
- Pedinophyllum interruptum* var. *pyrenaicum* (Spruce) Kaal. = *Pedinophyllum interruptum* (Nees) Kaal.
- Pedinophyllum pyrenaicum* (Spruce) Lindb. = *Pedinophyllum interruptum* (Nees) Kaal.
- Pedinophyllum pyrenaicum* var. *interruptum* (Nees) Schiffn. nom. incorrect. = *Pedinophyllum interruptum* (Nees) Kaal.
- Pellia borealis* Lorb. = *Pellia epiphylla* (L.) Corda
- Pellia calycina* (Taylor) Nees = *Pellia endiviifolia* (Dicks.) Dumort.
- Pellia endiviifolia* f. *furcigera* (Hook.) Schiffn. = *Pellia endiviifolia* (Dicks.) Dumort.
- Pellia epiphylla* subsp. *borealis* (Lorb.) Messe = *Pellia epiphylla* (L.) Corda
- Pellia epiphylla* f. *neesiana* Gottsche = *Pellia neesiana* (Gottsche) Limpr.
- Pellia fabbrioniana* auct. non Raddi = *Pellia endiviifolia* (Dicks.) Dumort.
- § *Pellia fabbrioniana* var. *furcigera* = *Pellia endiviifolia* (Dicks.) Dumort.
- Pellia fabbrioniana* f. *furcigera* (Hook.) C. Massal. = *Pellia endiviifolia* (Dicks.) Dumort.
- Pellia fabbrioniana* f. *undulata* Jelenc nom. inval. [42]
- Pellia fuciformis* (Bory) Nees [43]
- Peltolepis grandis* (Lindb.) Lindb. = *Peltolepis quadrata* (Saut.) Müll. Frib.
- Peltolepis sibirica* Lindb. = *Peltolepis quadrata* (Saut.) Müll. Frib.
- Petalophyllum lamellatum* (Nees) Lindb. = *Petalophyllum ralfsii* (Wilson) Nees & Gottsche
- Phragmicoma mackaii* (Hook.) Dumort. = *Marchesinia mackaii* (Hook.) Gray
- Physocolea rossettiana* (C. Massal.) Steph. = *Cololejeunea rossettiana* (C. Massal.) Schiffn.
- Plagiochasma algericum* Steph. = *Plagiochasma rupestre* (J. R. Forst. & G. Forst.) Steph.
- Plagiochasma aitoniana* Lindenb. & Nees = *Plagiochasma rupestre* (J. R. Forst. & G. Forst.) Steph.
- Plagiochasma beccarianum* Steph. **REJECTED FROM THE AREA**
- Plagiochasma italicum* (Sassi) De Not. = *Plagiochasma rupestre* (J. R. Forst. & G. Forst.) Steph.
- Plagiochasma roussellianum* Mont. = *Athalamia spathysii* (Lindenb.) S. Hatt.
- Plagiochasma sauteria* Gottsche ex Jelenc nom. inval. = *Athalamia spathysii* (Lindenb.) S. Hatt.
- Plagiochila aequiloba* (Schwägr.) Mont. & Nees = *Scapania aequiloba* (Schwägr.) Dumort.
- Plagiochila africana* Steph. **REJECTED FROM THE AREA** [44]
- Plagiochila asplenioides* auct. = *Plagiochila porelloides* (Torrey ex Nees) Lindenb.
- Plagiochila asplenioides* var. *humilis* (Nees) Lindenb. = *Plagiochila porelloides* (Torrey ex Nees) Lindenb.
- Plagiochila asplenioides* var. *major* Nees = *Plagiochila asplenioides* (L. emend. Taylor) Dumort.
- Plagiochila asplenioides* var. *minor* Lindenb. = *Plagiochila porelloides* (Torrey ex Nees) Lindenb.

Plagiochila asplenioides subsp. *porelloides* (Torrey ex Nees) Kaal. = ***Plagiochila porelloides*** (Torrey ex Nees) Lindenb.

Plagiochila asplenioides var. *riparia* Breidl. = ***Plagiochila porelloides*** (Torrey ex Nees) Lindenb.

Plagiochila atlantica F. Rose = ***Plagiochila heterophylla*** Lindenb. ex Lehm. [46]

Plagiochila compacta (A. Roth) Mont. & Nees = ***Scapania compacta*** (A. Roth) Dumort.

Plagiochila corniculata auct. non (Dumort.) Dumort. = ***Plagiochila exigua*** (Taylor) Taylor

Plagiochila curta (Mart.) Mont. & Nees = ***Scapania curta*** (Mart.) Dumort.

Plagiochila diacantha Taylor ex Steph. = ***Plagiochila bifaria*** (Sw.) Lindenb.

Plagiochila dubia Lindenb. & Gottsche = *Plagiochila patula* (Sw.) Lindenb. **REJECTED FROM THE AREA**

Plagiochila interrupta (Nees) Mont. & Nees = ***Pedinophyllum interruptum*** (Nees) Kaal.

Plagiochila javanica (Sw.) Nees & Mont. **REJECTED FROM THE AREA**

Plagiochila killarniensis Pearson = ***Plagiochila bifaria*** (Sw.) Lindenb.

Plagiochila major (Nees) S. W. Arnell nom. illeg. = ***Plagiochila asplenioides*** (L. emend. Taylor) Dumort.

Plagiochila punctata var. *owenii* (Steph.) Macvicar = ***Plagiochila punctata*** (Taylor) Taylor

Plagiochila pyrenaica Spruce = ***Pedinophyllum interruptum*** (Nees) Kaal.

Plagiochila sharpii H. L. Blomq. = ***Plagiochila retrorsa*** Gottsche

Plagiochila spinulosa var. *inermis* Carrington = ***Plagiochila bifaria*** (Sw.) Lindenb.

Plagiochila spinulosa var. *killarniensis* (Pearson) Macvicar = ***Plagiochila bifaria*** (Sw.) Lindenb.

Plagiochila spinulosa var. *macaronesiana* Allorge & V. Allorge = ***Plagiochila bifaria*** (Sw.) Lindenb.

Plagiochila spinulosa var. *punctata* (Taylor) Carrington = ***Plagiochila punctata*** (Taylor) Taylor

Plagiochila spinulosa var. *tridenticulata* auct. non (Michx.) Husn. nom. illeg. = ***Plagiochila exigua*** (Taylor) Taylor

Plagiochila stableri Pearson = ***Plagiochila exigua*** (Taylor) Taylor

Plagiochila tridenticulata auct. non (Michx.) Dumort. = ***Plagiochila exigua*** (Taylor) Taylor

Plagiochila undulata (L.) Mont. & Nees = ***Scapania undulata*** (L.) Dumort.

Plectocolea crenulata (Mitt.) A. Evans = ***Jungermannia gracillima*** Sm.

Plectocolea crenulata var. *gracillima* (Sm.) Frye & L. Clark = ***Jungermannia gracillima*** Sm.

Plectocolea hyalina (Lyell) Mitt. = ***Jungermannia hyalina*** Lyell

Plectocolea obovata (Nees) Lindb. = ***Jungermannia obovata*** Nees

Plectocolea subelliptica (Lindb. ex Kaal.) A. Evans = ***Jungermannia subelliptica*** (Lindb. ex Kaal.) Levier

Pleuroclada albescens (Hook.) Spruce nom. illeg. = ***Pleurocladula albescens*** (Hook.) Grolle

Pleuroschisma flaccidum Dumort. = ***Bazzania flaccida*** (Dumort.) Grolle

Pleuroschisma implexum (Nees) Meyl. = ***Bazzania flaccida*** (Dumort.) Grolle

Pleuroschisma sphagni (Dicks.) Dumort. = ***Odontoschisma sphagni*** (Dicks.) Dumort.

§ *Pleuroschisma triangulare* var. *implexa* = ***Bazzania flaccida*** (Dumort.) Grolle

Pleuroschisma tricrenatum (Wahlenb.) Dumort. = ***Bazzania tricrenata*** (Wahlenb.) Lindb.

Pleuroschisma tricrenatum var. *implexum* (Nees) Müll. Frib. = ***Bazzania flaccida*** (Dumort.) Grolle

Pleuroschisma trilobatum (L.) Dumort. = ***Bazzania trilobata*** (L.) Gray

Porella arboris-vitae var. *killarniensis* (Pearson) M. F. V. Corley = ***Porella arboris-vitae*** (With.) Grolle

- Porella arboris-vitae* var. *obscura* (Nees) M.F.V. Corley = ***Porella arboris-vitae*** (With.) Grolle
- Porella cordaeana* var. *distans* (Müll. Frib.) Jelenc = ***Porella cordaeana*** (Huebener) Moore
- Porella cordaeana* var. *simplicior* (J.E. Zetterst.) Arnell = ***Porella cordaeana*** (Huebener) Moore
- Porella dentata* (Hartm.) Lindb. = ***Porella cordaeana*** (Huebener) Moore
- Porella kabylica* Jelenc nom. inval. = ***Porella cordaeana*** (Huebener) Moore
- Porella laevigata* (Schrad.) Pfeiff. = ***Porella arboris-vitae*** (With.) Grolle
- Porella laevigata* var. *obscura* (Nees) Arnell = ***Porella arboris-vitae*** (With.) Grolle
- ☞ *Porella laevigata* var. *thuja* (Nees) Arnell = ***Porella arboris-vitae*** (With.) Grolle
- Porella levieri* J. B. Jack & Steph. = ***Porella cordaeana*** (Huebener) Moore
- Porella notarisii* Trevis. nom. inval. = ***Porella platyphylla*** (L.) Pfeiff.
- Porella platyphylla* var. *subsquarrosula* (Schiffn.) Arnell = ***Porella platyphylla*** (L.) Pfeiff.
- Porella platyphylloidea* (Schwein.) Lindb. = ***Porella platyphylla*** (L.) Pfeiff.
- ? *Porella porelloides* De Not. = ***Porella platyphylla*** (L.) Pfeiff.
- Porella rivularis* (Nees) Pfeiff. = ***Porella cordaeana*** (Huebener) Moore
- Porella thuja* (Dicks.) Lindb. nom. illeg. = ***Porella arboris-vitae*** (With.) Grolle
- Porella thuja* auct. non (Dicks.) Lindb. = ***Porella obtusata*** (Taylor) Trevis.
- Preissia commutata* (Lindenb.) Nees = ***Preissia quadrata*** (Scop.) Müll. Frib.
- Preissia cucullata* Nees & Mont. = ***Lunularia cruciata*** (L.) Lindb.
- ☞ *Preissia hemisphaerica* Cogn. = ***Preissia quadrata*** (Scop.) Müll. Frib.
- Preissia italica* Corda = ***Preissia quadrata*** (Scop.) Müll. Frib.
- Prionolobus turneri* (Hook.) Schiffn. = ***Cephaloziella turneri*** (Hook.) Müll. Frib.
- ☞ *Ptilidium ciliare* var. *pulcherrimum* (Weber) Warnst. = ***Ptilidium pulcherrimum*** (Weber) Vain.
- Ptilidium trichophyllum* (L.) Mitt. = ***Blepharostoma trichophyllum*** (L.) Dumort.
- Radula bornmuelleri* Schiffn. = ***Radula lindenbergiana*** Gottsche ex C. Hartm.
- Radula commutata* Gottsche ex J. B. Jack = ***Radula lindenbergiana*** Gottsche ex C. Hartm.
- Radula complanata* subsp. *lindenbergiana* (Gottsche ex C. Hartm.) R. M. Schust. = ***Radula lindenbergiana*** Gottsche ex C. Hartm.
- Radula complanata* f. *propagulifera* Nees = ***Radula lindenbergiana*** Gottsche ex C. Hartm.
- Radula complanata* var. *propagulifera* (Nees) Gottsche et al. = ***Radula lindenbergiana*** Gottsche ex C. Hartm.
- Radula germana* J. B. Jack = ***Radula lindenbergiana*** Gottsche ex C. Hartm.
- Radula limbata* Schiffn. = ***Radula wichurae*** Steph.
- Radula lindenbergiana* Gottsche ex Jack nom. inval. = ***Radula lindenbergiana*** Gottsche ex C. Hartm.
- Radula lindenbergii* Gottsche ex Lindb. nom. inval. = ***Radula lindenbergiana*** Gottsche ex C. Hartm.
- Radula notarisii* Steph. = ***Radula complanata*** (L.) Dumort.
- Radula ovata* J. B. Jack ex Steph. = ***Radula lindenbergiana*** Gottsche ex C. Hartm.
- Radula physoloba* Mont. **REJECTED FROM THE AREA [52]**
- Reboulia charrieri* Douin & R.C.V. Douin = ***Reboulia hemisphaerica*** (L.) Raddi
- ☞ *Reboulia hemisphaerica* var. *macrocephala* C. Massal. = ***Reboulia hemisphaerica*** (L.) Raddi
- Reboulia hemisphaerica* var. *microspora* Schiffn. = ***Reboulia hemisphaerica*** (L.) Raddi
- Reboulia hemisphaerica* var. *pangiensis* (Kashyap) Kashyap = ***Reboulia hemisphaerica*** (L.) Raddi

- Reboulia hemisphaerica* subsp. *paradoxa* R. M. Schust. nom. inval. = ***Reboulia hemisphaerica*** (L.) Raddi
- Reboulia occidentalis* Douin & R. C. V. Douin = ***Reboulia hemisphaerica*** (L.) Raddi
- Reboulia quadrata* (Scop.) Bertol. = ***Preissia quadrata*** (Scop.) Nees [51]
- Rhakiocarpon conspersum* Corda = ***Reboulia hemisphaerica*** (L.) Raddi
- Riccardia latifrons* var. *sinuata* (Dicks. ex Hook.) Lindb. = ***Riccardia chamedryfolia*** (With.) Grolle
- Riccardia major* Lindb. = ***Riccardia chamedryfolia*** (With.) Grolle
- Riccardia pinguis* (L.) Gray = ***Aneura pinguis*** (L.) Dumort.
- Riccardia pinguis* f. *angustior* (Hook.) P. Allorge = ***Aneura pinguis*** (L.) Dumort.
- *Riccardia pinguis* f. *submersa* Loeske ex Jaap nom. inval. = ***Aneura pinguis*** (L.) Dumort.
- Riccardia sinuata* (Dicks. ex Hook.) Trevis. = ***Riccardia chamedryfolia*** (With.) Grolle
- Riccia aculeata* Trab. nom. nud. = ***Riccia crozalsii*** Levier [55]
- Riccia aegyptiaca* S. W. Arnell = ***Riccia congoana*** Steph.
- Riccia affinis* Milde = ***Riccia ciliata*** Hoffm.
- Riccia aggregata* Underw. = ***Riccia nigrella*** DC.
- Riccia americana* (M. Howe) M. Howe = ***Riccia lamellosa*** Raddi
- Riccia armatissima* (Levier ex Müll. Frib.) Trab. = ***Riccia gougetiana*** var. *armatissima* Levier ex Müll. Frib.
- Riccia arvensis* Austin = ***Riccia bifurca*** Hoffm.
- Riccia atromarginata* var. *glabra* Levier ex Müll. Frib. = ***Riccia trabutiana*** Steph.
- Riccia austinii* Steph. = ***Riccia lamellosa*** Raddi
- Riccia battandieri* Trab. nom. nud. [55]
- Riccia baumgartneri* Schiffn. = ***Riccia subbifurca*** Warnst. ex Croz.
- Riccia bavarica* Warnst. = ***Riccia warnstorffii*** Limpr. ex Warnst.
- Riccia beckeriana* Steph. = ***Riccia frostii*** Austin
- Riccia bifurca* f. *subinermis* (Heeg) Müll. Frib. = ***Riccia bifurca*** var. *subinermis* Heeg
- Riccia bischoffii* Huebener = ***Riccia ciliifera*** Link ex Lindenb.
- Riccia bischoffii* f. *armata* Trab. nom. nud. = ***Riccia gougetiana*** var. *armatissima* Levier ex Müll. Frib. [55]
- Riccia bischoffii* var. *ciliifera* (Link. ex Lindenb.) Müll. Frib. = ***Riccia ciliifera*** Link ex Lindenb.
- Riccia bischoffii* var. *fimbriata* Gottsche *et al.* = ***Riccia ciliifera*** Link ex Lindenb.
- Riccia bischoffii* f. *maxima* Levier = ***Riccia gougetiana*** Durieu & Mont.
- Riccia bischoffii* var. *subtumida* Milde = ***Riccia ciliata*** Hoffm.
- Riccia bullosa* Link ex Lindenb. **REJECTED FROM THE AREA**
- Riccia bullosa* sensu Müll. Frib. = ***Exormotheca welwitschii*** Steph.
- Riccia cana* Durieu ex Trab. nom. illeg. = ***Riccia crinita*** Taylor
- Riccia canescens* Steph. = ***Riccia crinita*** Taylor
- Riccia capensis* Steph. = ***Riccia limbata*** Bisch. ex Krauss **REJECTED FROM THE AREA**
- Riccia capillata* Schmidel nom. illeg. = ***Ricciocarpos natans*** (L.) Corda
- Riccia centrifuga* Arnell = ***Riccia fluitans*** L.
- Riccia chinensis* Herz. [54]
- Riccia chudoana* Steph. [54]
- Riccia ciliata* Raddi nom. illeg. = ***Riccia michelii*** Raddi
- Riccia ciliata* var. *intumescens* Bisch. = ***Riccia ciliata*** Hoffm. [57]
- Riccia ciliata* var. *epilosa* Warnst. = ***Riccia ciliata*** Hoffm.
- Riccia ciliifera* f. *pedemontana* (Steph.) Müll. Frib. = ***Riccia ciliifera*** Link ex Lindenb.

- Riccia ciliata* var. *violacea* Kny = ***Riccia ciliata*** Hoffm.
Riccia commutata J. B. Jack ex Levier = ***Riccia warnstorffii*** Limpr. ex Warnst.
Riccia commutata var. *acrotricha* Levier ex Sommier = ***Riccia warnstorffii*** var. *subinermis* Warnst.
Riccia concava Bisch. **REJECTED FROM THE AREA**
Riccia convexa Steph. [54]
Riccia coriandrina Spreng. = ***Corsinia coriandrina*** (Spreng.) Lindb.
▶ *Riccia crozalsii* f. *major* C. Massal. nom. nud. = ***Riccia crozalsii*** Levier
Riccia crystallina auct. = ***Riccia cavernosa*** Hoffm.
Riccia crystallina var. *angustior* Lindenb. ex Nees = ***Riccia cavernosa*** Hoffm.
Riccia crystallina subsp. *austriгена* Schiffn. = ***Riccia crystallina*** L. emend. Raddi
Riccia crystallina var. *major* Lindb. = ***Riccia crystallina*** L. emend. Raddi
Riccia crystallina var. *vulgaris* Lindenb. = ***Riccia crystallina*** L. emend. Raddi
Riccia dufourii Nees = ***Riccia lamellosa*** Raddi
Riccia echinulata Trab. nom. nud. = ***Riccia ciliifera*** Link ex Lindenb. [55]
Riccia epicarpa Wallr. ex Gottsche et al. = ***Riccia sorocarpa*** Bisch.
Riccia erinacea Schiffn. = ***Riccia gougetiana*** var. *armatissima* Levier ex Müll. Frib.
Riccia eudichotoma Bisch. nom. illeg. = ***Riccia canaliculata*** Hoffm.
Riccia eudichotoma var. *fluitans* (L.) Bisch. nom. incorrect. & nom. illeg. = ***Riccia fluitans*** L.
Riccia fluitans var. *canaliculata* (Hoffm.) A. Roth = ***Riccia canaliculata*** Hoffm.
Riccia fluitans var. *purpurascens* Klinggr. = ***Riccia huebeneriana*** Lindenb.
Riccia frostii var. *crystallinoides* Schiffn. [58]
Riccia fruticulosa auct. eur. non O. F. Müll. = ***Metzgeria violacea*** (Ach.) Dumort. [40]
Riccia glauca var. *subinermis* (Lindb.) Warnst. = ***Riccia glauca*** var. *ciliaris* Warnst.
Riccia glaucescens Carrington = ***Riccia beyrichiana*** Hampe ex Lehm.
Riccia gougetiana var. *erinacea* Schiffn. nom. inval. = ***Riccia gougetiana*** var. *armatissima* Levier ex Müll. Frib.
Riccia henriquesii Levier = ***Riccia bicarinata*** Lindb.
Riccia henriquesii var. *mediterranea* C. Massal. = ***Riccia bicarinata*** Lindb.
Riccia heyeri (Huebener ex Genth) Müll. Frib. = ***Riccia canaliculata*** Hoffm.
Riccia huebeneriana var. *cavernosa* (Hoffm.) Ast = ***Riccia cavernosa*** Hoffm.
Riccia huebeneriana var. *pseudo-frostii* Schiffn. = ***Riccia huebeneriana*** Lindenb.
Riccia hyi Levier ex Müll. Frib. nom. inval. = ***Riccia glauca*** var. *ciliaris* Warnst.
Riccia incrassata Brot. = ***Oxymitra incrassata*** (Brot.) Sérgio & Sim-Sim
Riccia insularis Levier ex Steph. = ***Riccia sorocarpa*** Bisch.
Riccia intumescens (Bisch.) Heeg = ***Riccia ciliata*** Hoffm. [57]
Riccia intumescens Underw. nom. inval. = ***Riccia crinita*** Taylor [57]
Riccia klinggraeffii Gottsche = ***Riccia huebeneriana*** Lindenb.
Riccia lamellosa var. *americana* M. Howe = ***Riccia lamellosa*** Raddi
Riccia latzelii Schiffn. = ***Riccia ciliifera*** Link ex Lindenb.
Riccia lescuriana Austin = ***Riccia beyrichiana*** Hampe ex Lehm.
Riccia lescuriana var. *glaucescens* (Carrington) Müll. Frib. nom. incorrect. = ***Riccia beyrichiana*** Hampe ex Lehm.
Riccia lesquerouxii Lindb. = ***Riccia beyrichiana*** Hampe ex Lehm.
Riccia levieri Schiffn. = ***Riccia beyrichiana*** Hampe ex Lehm.
Riccia levieri var. *algarvica* Schiffn. ex Nicholson = ***Riccia beyrichiana*** Hampe ex Lehm.
Riccia lindenberghiana Saut. = ***Riccia sorocarpa*** Bisch.
Riccia linkii Lindenb. = ***Oxymitra incrassata*** (Brot.) Sérgio & Sim-Sim

- Riccia lusitanica* Levier *ex* Steph. = ***Riccia bicarinata*** Lindb.
Riccia major A. Roth = ***Riccia glauca*** L.
Riccia mamillata Trab. *ex* Steph. [54]
Riccia michelii var. *ciliaris* Levier nom. illeg. = ***Riccia michelii*** Raddi
Riccia michelii var. *subinermis* Levier nom. illeg. = ***Riccia michelii*** Raddi
Riccia microspora Steph. = ***Riccia frostii*** Austin
Riccia minima L. *p. p.* = ***Riccia sorocarpa*** Bisch.
Riccia minima L. *p. p.* = ***Riccia nigrella*** DC.
Riccia minutissima Steph. = ***Riccia bifurca*** Hoffm. [56]
Riccia montagnei Steph. = ***Riccia cavernosa*** Hoffm.
Riccia munita Trab. nom. nud. = ***Riccia sorocarpa*** Bisch. [55]
Riccia natans L. = ***Ricciocarpos natans*** (L.) Corda
Riccia negrii Gola = ***Riccia crystallina*** L. emend. Raddi
Riccia palaestina S. W. Arnell = ***Riccia frostii*** Austin
Riccia palmata Lindenb. = ***Riccia michelii*** Raddi
Riccia palmata var. *minor* Lindenb. = ***Riccia michelii*** Raddi
Riccia panormitana Levier & Jack *ex* Lojacono-Pojero = ***Riccia sorocarpa*** Bisch.
Riccia paradoxa De Not. = ***Riccia michelii*** Raddi
Riccia pearsoni Steph. = ***Riccia nigrella*** DC.
Riccia pedemontana Steph. = ***Riccia ciliifera*** Link *ex* Lindenb.
Riccia plana Taylor = ***Riccia crystallina*** L. emend. Raddi
Riccia polycarpa (Trab.) Jelenc [54]
Riccia pseudo-frostii (Schiffn.) Müll. Frib. = ***Riccia huebeneriana*** Lindenb.
Riccia pseudopapillosa Levier *ex* Steph. = ***Riccia papillosa*** Moris
Riccia pusilla Warnst. = ***Riccia bifurca*** Hoffm.
Riccia pyramidata Raddi non Willd. = ***Oxymitra incrassata*** (Brot.) Sérgio & Sim-Sim
Riccia raddiana J. B. Jack & Levier *ex* Steph. = ***Riccia sorocarpa*** Bisch.
Riccia reticulata J. F. Gmel. nom. illeg. = ***Corsinia coriandrina*** (Spreng.) Lindb.
Riccia riatensis Trab. nom. nud. = ***Riccia lamellosa*** Raddi [55]
Riccia ruppiniensis Steph. = ***Riccia glauca*** L. var. ***glauca***
Riccia sanguinea Kashyap = ***Riccia frostii*** Austin
Riccia sorocarpa var. *raddiana* (J. B. Jack & Levier *ex* Steph.) Croz. *ex* Casares-Gil = ***Riccia sorocarpa*** Bisch.
Riccia sorocarpa f. *raddiana* (J. B. Jack & Levier *ex* Steph.) Chevassut & Quézel nom. inval. = ***Riccia sorocarpa*** Bisch.
Riccia spinosissima Steph. = ***Riccia ciliata*** Hoffm.
Riccia subciliata Trab. nom. inval. = ***Riccia glauca*** var. ***ciliaris*** Warnst.
Riccia subcrispula Warnst. = ***Riccia bifurca*** Hoffm.
Riccia subinermis Lindb. = ***Riccia glauca*** var. ***ciliaris*** Warnst.
Riccia subtumida Milde = ***Riccia ciliata*** Hoffm.
Riccia tellinii Gola = ***Riccia cavernosa*** Hoffm.
Riccia terracianoii Gola = ***Riccia cavernosa*** Hoffm.
Riccia trichocarpa M. Howe = ***Riccia crinita*** Taylor
Riccia trichophylla Gasp. *ex* Müll. Frib. nom. inval. = ***Riccia papillosa*** Moris
Riccia tumida Lindenb. = ***Riccia michelii*** Raddi
Riccia velutina Wilson *ex* Hook. = ***Ricciocarpos natans*** (L.) Corda
Riccia venosa A. Roth = ***Riccia glauca*** L. var. ***glauca***

- Riccia warnstorffii* f. *subinermis* (Warnst.) Warnst. ex Kavina = ***Riccia warnstorffii*** var. ***subinermis*** Warnst.
- Riccia watsonii* Austin = ***Riccia frostii*** Austin
- Riccia zachariae* Lorb. ex Müll. Frib. = ***Riccia gougetiana*** Durieu & Mont. var. ***gougetiana***
- Ricciella fluitans* (L.) A. Braun = ***Riccia fluitans*** L.
- Ricciella fluitans* var. *canaliculata* (Hoffm.) Hartm. = ***Riccia canaliculata*** Hoffm.
- Ricciella fluitans* f. *terrestris* Jaap nom. inval. = ***Riccia fluitans*** L.
- Ricciella heyeri* Huebener ex Genth = ***Riccia canaliculata*** Hoffm.
- Ricciella huebeneriana* (Lindenb.) Dumort. = ***Riccia huebeneriana*** Lindenb.
- Ricciella huebeneriana* var. *cavernosa* (Hoffm.) Casares-Gil = ***Riccia cavernosa*** Hoffm.
- Ricciella polycarpa* Trab. = ***Riccia polycarpa*** (Trab.) Jelenc
- Ricciella rautanenii* Steph. = ***Riccia cavernosa*** Hoffm.
- Ricciniella perennis* (Steph.) Trab. = ***Riccia perennis*** Steph.
- Ricciocarpos velutina* (Wilson ex Hook.) Steph. = ***Ricciocarpos natans*** (L.) Corda
- Riella battandieri* Trab. = ***Riella notarisii*** (Mont.) Mont.
- Riella clausonis* Letourn. = ***Riella parisii*** Gottsche
- Riella cossoniana* var. *echinata* Müll. Frib. nom. inval. = ***Riella helicophylla*** (Bory & Mont.) Mont.
- Riella gallica* Balansa = ***Riella notarisii*** (Mont.) Mont.
- Riella reuteri* Mont. = ***Riella notarisii*** (Mont.) Mont.
- Riella reuteri* f. *gallica* (Balansa) Trab. = ***Riella notarisii*** (Mont.) Mont.
- Roemeria multifida* (L.) Raddi nom. illeg. = ***Riccardia multifida*** (L.) Gray
- Roemeria palmata* (Hedw.) Raddi nom. illeg. = ***Riccardia palmata*** (Hedw.) Carruth.
- Ruppinia italica* (Sassi) Trevis. = ***Plagiochasma rupestre*** (J. R. Forst. & G. Forst.) Steph.
- Rupinia pyramidata* (Raddi) Corda non (Willd.) Corda = ***Oxymitra incrassata*** (Brot.) Sérgio & Sim-Sim
- Rupinia rupestris* (J. R. Forst. & G. Forst.) Sw. = ***Plagiochasma rupestre*** (J. R. Forst. & G. Forst.) Steph.
- Saccobasis polita* (Nees) H. Buch = ***Tritomaria polita*** (Nees) Jörg.
- Saccogyna graveolens* (Schrad.) Lindb. = ***Geocalyx graveolens*** (Schrad.) Nees
- Sarcocyphos aemulus* Limpr. = ***Marsupella condensata*** (Ångstr. ex C. Hartm.) Kaal.
- Sarcocyphos alpinus* Gottsche ex Husn. = ***Marsupella alpina*** (Gottsche ex Husn.) Bernet
- Sarcocyphos boeckii* Austin = ***Marsupella boeckii*** (Austin) Lindb.
- Sarcocyphos capillaris* Limpr. = ***Marsupella boeckii*** (Austin) Lindb.
- Sarcocyphos commutatus* Limpr. = ***Marsupella commutata*** (Limpr.) Bernet
- Sarcocyphos confertus* Limpr. = ***Marsupella brevissima*** (Dumort.) Grolle
- Sarcocyphos densifolius* Nees = ***Marsupella emarginata*** (Ehrh.) Dumort.
- ☞ *Sarcocyphos emarginatus* (Ehrh.) C. Hartm. = ***Marsupella emarginata*** (Ehrh.) Dumort.
- Sarcocyphos ehrhardtii* Corda nom. illeg. = ***Marsupella emarginata*** (Ehrh.) Dumort.
- Sarcocyphos ehrhardtii* var. *aquaticus* (Nees) Gottsche et al. = ***Marsupella emarginata*** (Ehrh.) Dumort.
- Sarcocyphos ehrhardtii* var. *robustus* De Not. = ***Marsupella emarginata*** (Ehrh.) Dumort.
- Sarcocyphos funckii* (F. Weber & D. Mohr) Nees = ***Marsupella funckii*** (F. Weber & D. Mohr) Dumort.
- Sarcocyphos muelleri* Nees = ***Marsupella funckii*** (F. Weber & D. Mohr) Dumort.
- Sarcocyphos neglectus* Limpr. = ***Marsupella sprucei*** (Limpr.) Bernet
- Sarcocyphos pygmaeus* Limpr. = ***Marsupella funckii*** (F. Weber & D. Mohr) Dumort.
- Sarcocyphos revolutus* Nees = ***Apomarsupella revoluta*** (Nees) R. M. Schust.

- Sarcocyphos sparsifolius* Lindb. = ***Marsupella sparsifolia*** (Lindb.) Dumort.
Sarcocyphos sphacelatus (Gieseke ex Lindenb.) Nees = ***Marsupella sphacelata*** (Gieseke ex Lindenb.) Dumort.
Sarcocyphos sprucei Limpr. = ***Marsupella sprucei*** (Limpr.) Bernet
Sarcocyphos styriacus Limpr. = ***Marsupella sparsifolia*** (Lindb.) Dumort.
Sarcocyphos sullivanii De Not. = ***Marsupella sphacelata*** (Gieseke ex Lindenb.) Dumort.
Sarcocyphos ustulatus auct. = ***Marsupella sprucei*** (Limpr.) Bernet
Sauteria grandis Lindb. = ***Peltolepis quadrata*** (Saut.) Müll. Frib.
Sauteria hyalina (Sommerf.) Lindb. = ***Athalamia hyalina*** (Sommerf.) S. Hatt.
Sauteria quadrata Saut. = ***Peltolepis quadrata*** (Saut.) Müll. Frib.
Sauteria seriata Lindb. nom. illeg. = ***Athalamia hyalina*** (Sommerf.) S. Hatt.
Scapania aconiensis De Not. = ***Scapania nemorea*** (L.) Grolle
Scapania bartlingii (Hampe ex Nees) Nees nom. illeg. = ***Scapania cuspiduligera*** (Nees) Müll. Frib.
Scapania biroliana C. Massal. & Carestia = ***Scapania compacta*** (A. Roth) Dumort.
Scapania buchii Müll. Frib. nom. illeg. = ***Scapania lingulata*** H. Buch
Scapania carestiae De Not. = ***Scapania cuspiduligera*** (Nees) Müll. Frib.
Scapania carinthiaca var. *massalongi* Müll. Frib. = ***Scapania carinthiaca*** J. B. Jack ex Lindb.
Scapania casaresana Steph. = ***Scapania gracilis*** Lindb.
Scapania compacta var. *biroliana* (C. Massal. & Carestia) C. Massal. = ***Scapania compacta*** (A. Roth) Dumort.
Scapania convexa (Scop.) Pearson = ***Scapania umbrosa*** (Schrad.) Dumort.
Scapania curta var. *geniculata* (C. Massal.) Müll. Frib. = ***Scapania helvetica*** Gottsche
☞ *Scapania curta* var. *spinulosa* (Nees) Gottsche *et al.* = ***Scapania carinthiaca*** J. B. Jack ex Lindb.
Scapania dentata (Dumort.) Dumort. = ***Scapania undulata*** (L.) Dumort.
Scapania franzoniana De Not. = ***Scapania subalpina*** (Nees ex Lindenb.) Dumort.
Scapania geniculata C. Massal. = ***Scapania helvetica*** Gottsche
☞ *Scapania gracilis* var. *laxifolia* (Dumort.) Dumort. = ***Scapania gracilis*** Lindb.
Scapania gracilis var. *minor* (Pearson) Macvicar = ***Scapania gracilis*** Lindb.
Scapania intermedia (Husn.) Pearson = ***Scapania undulata*** (L.) Dumort.
Scapania joergensenii Schiffn. ex Müll. Frib. = ***Scapania nemorea*** (L.) Grolle
Scapania massalongii (Müll. Frib.) Müll. Frib. = ***Scapania carinthiaca*** J. B. Jack ex Lindb.
Scapania microphylla Warnst. = ***Scapania lingulata*** H. Buch
Scapania microscopica Culm. = ***Diplophyllum obtusifolium*** (Hook.) Dumort.
Scapania mucronata var. *praetervisa* (Meyl.) H. Buch = ***Scapania praetervisa*** Meyl.
Scapania nemorea subsp. *crassiretis* (Bryhn) Potemkin = ***Scapania crassiretis*** Bryhn
Scapania nemorosa Dumort. nom. illeg. = ***Scapania nemorea*** (L.) Grolle
Scapania nemorosa var. *aconiensis* (De Not.) C. Massal. = ***Scapania nemorea*** (L.) Grolle
Scapania nemorosa var. *fallaciosa* Schiffn. = ***Scapania nemorea*** (L.) Grolle
Scapania oakesii Austin = ***Scapania undulata*** (L.) Dumort.
Scapania obliqua (Arnell) Schiffn. = ***Scapania uliginosa*** (Sw. ex Lindenb.) Dumort.
Scapania recurva Steph. ex Müll. Frib. = ***Scapania gracilis*** Lindb.
Scapania resupinata (L.) Dumort. = ***Scapania undulata*** (L.) Dumort.
Scapania resupinata sensu A. L. M. Guim. = ***Scapania gracilis*** Lindb.
Scapania rosacea (Corda) Nees nom. inval. = ***Scapania curta*** (Mart.) Dumort.
Scapania rotundata Warnst. = ***Scapania paludicola*** Loeske & Müll. Frib.

- Scapania subalpina* var. *undulifolia* (Nees) Gottsche *et al.* = *Scapania subalpina* (Nees ex Lindenb.) Dumort.
- Scapania tyrolensis* (Nees) Nees = *Scapania aequiloba* (Schwägr.) Dumort.
- Scapania undulata* var. *aequatiformis* (De Not.) C. Massal. & Carestia = *Scapania undulata* (L.) Dumort.
- Scapania undulata* var. *dentata* (Dumort.) Douin = *Scapania undulata* (L.) Dumort.
- Scapania undulata* var. *dentata* (Dumort.) McArdle. nom. inval. = *Scapania undulata* (L.) Dumort.
- Scapania undulata* var. *integrifolia* Lindb. = *Scapania undulata* (L.) Dumort.
- Scapania undulata* var. *paludosa* Müll. Frib. = *Scapania paludosa* (Müll. Frib.) Müll. Frib.
- Scapania undulata* var. *purpurascens* (Huebener) Cogn. = *Scapania undulata* (L.) Dumort.
- Scapania undulata* var. *purpurea* Nees nom. inval. = *Scapania undulata* (L.) Dumort.
- Scapania vexata* C. Massal. nom. illeg. = *Scapania scapanioides* (C. Massal.) Grolle
- Scapaniella carinthiaca* (J. B. Jack ex Lindb.) H. Buch = *Scapania carinthiaca* J. B. Jack ex Lindb.
- Scapaniella massalongi* (Müll. Frib.) H. Buch = *Scapania carinthiaca* J. B. Jack ex Lindb.
- Schistochilopsis grandiretis* (Lindb. ex Kaal.) Konstantinova = *Lophozia grandiretis* (Lindb. ex Kaal.) Schiffn.
- Schistochilopsis incisa* (Schrad.) Konstantinova = *Lophozia incisa* (Schrad.) Dumort.
- Schistochilopsis opacifolia* (Culm. ex Meyl.) Konstantinova = *Lophozia opacifolia* Culm. ex Meyl.
- Solenostoma amplexicaule* (Dumort.) Steph. = *Jungermannia sphaerocarpa* Hook.
- Solenostoma atrovirens* (Dumort.) Müll. Frib. nom. illeg. = *Jungermannia atrovirens* Dumort.
- Solenostoma caespitium* (Lindenb.) Steph. = *Jungermannia caespiticia* Lindenb.
- Solenostoma confertissimum* (Nees) Schljakov = *Jungermannia confertissima* Nees
- Solenostoma cordifolium* (Dumort.) Steph. = *Jungermannia exsertifolia* subsp. *cordifolia* (Dumort.) Váňa
- Solenostoma crenulatum* (Sm.) R. M. Schust. = *Jungermannia gracillima* Sm.
- Solenostoma crenulatum* (Sm.) Mitt. nom. illeg. = *Jungermannia gracillima* Sm.
- Solenostoma handelii* (Schiffn.) Müll. Frib. = *Jungermannia handelii* (Schiffn.) Amakawa
- Solenostoma hyalinum* (Lyell) Mitt. = *Jungermannia hyalina* Lyell
- Solenostoma lanceolatum* (L.) Steph. = *Jungermannia atrovirens* Dumort.
- Solenostoma lanceolatum* auct. non (L.) Steph. = *Jungermannia leiantha* Grolle
- Solenostoma levieri* (Steph.) Steph. = *Jungermannia confertissima* Nees
- Solenostoma oblongifolium* (Müll. Frib.) Müll. Frib. = *Jungermannia pumila* With.
- Solenostoma obovatum* (Nees) C. Massal. = *Jungermannia obovata* Nees
- Solenostoma ontariense* R. M. Schust. = *Jungermannia hyalina* Lyell
- Solenostoma polare* (Lindb.) R. M. Schust. = *Jungermannia polaris* Lindb.
- Solenostoma pumilum* (With.) Müll. Frib. = *Jungermannia pumila* With.
- Solenostoma pusillum* (C. E. O. Jensen) Steph. = *Jungermannia jenseniana* Grolle
- Solenostoma pusillum* var. *vinaceum* R. M. Schust. = *Jungermannia confertissima* Nees
- Solenostoma scalare* (Gray) Mitt. = *Nardia scalaris* Gray
- Solenostoma schiffneri* (Loitl.) Müll. Frib. = *Jungermannia polaris* Lindb.
- Solenostoma sphaerocarpoideum* (De Not.) Paton & E. F. Warb. = *Jungermannia atrovirens* Dumort.
- Solenostoma sphaerocarpum* (Hook.) Steph. = *Jungermannia sphaerocarpa* Hook.
- Solenostoma subellipticum* (Lindb. ex Kaal.) R.M. Schust. = *Jungermannia subelliptica* (Lindb. ex Kaal.) Levier

- Solenostoma triste* (Nees) Müll. Frib. = ***Jungermannia atrovirens*** Dumort.
Southbya alicularia C. Massal. = ***Southbya tophacea*** (Spruce) Spruce
Southbya crenulata (Mitt.) Bernet = ***Jungermannia gracillima*** Sm.
Southbya fennica (Gottsche) C. Hartm. = ***Arnellia fennica*** (Gottsche) Lindb.
Southbya hyalina (Lyell) Husn. = ***Jungermannia hyalina*** Lyell
Southbya obovata (Nees) Lindb. = ***Jungermannia obovata*** Nees
Southbya stillicidorum (Raddi) Lindb. = ***Southbya tophacea*** (Spruce) Spruce
Sphaerocarpos algeriensis Trab. nom. nud. = ***Sphaerocarpos texanus*** Austin [64]
Sphaerocarpos californicus Austin = ***Sphaerocarpos texanus*** Austin
Sphaerocarpos europaeus Lorb. = ***Sphaerocarpos texanus*** Austin
Sphaerocarpos notarisii Mont. = ***Riella notarisii*** (Mont.) Mont.
Sphaerocarpos sphaerocarpos (Dicks.) M. Howe nom. illeg. = ***Sphaerocarpos michelii***
 Bellardi
Sphaerocarpos terrestris Sm. nom. illeg. = ***Sphaerocarpos michelii*** Bellardi
Sphagnoecetis communis Nees nom. illeg. = ***Odontoschisma sphagni*** (Dicks.) Dumort.
Sphagnoecetis macounii Austin = ***Odontoschisma macounii*** (Austin) Underw.
Sphenobolus ascendens Warnst. = ***Lophozia ascendens*** (Warnst.) R.M. Schust.
Sphenobolus exsectiformis (Breidl.) Steph. = ***Tritomaria exsectiformis*** (Breidl.) Loeske
Sphenobolus exsectiformis var. *aequilobus* (Culm.) Müll. Frib. = ***Tritomaria scitula*** (Taylor)
 Jörg.
Sphenobolus exsectus (Schmidel ex Schrad.) Steph. = ***Tritomaria exsecta*** (Schmidel ex
 Schrad.) Loeske
Sphenobolus hellerianus (Nees ex Lindenb.) Steph. = ***Anastrophyllum hellerianum*** (Nees ex
 Lindenb.) R. M. Schust.
Sphenobolus michauxii (F. Weber) Steph. = ***Anastrophyllum michauxii*** (F. Weber)
 H. Buch
Sphenobolus minutus (Schreb.) Berggr. = ***Anastrophyllum minutum*** (Schreb.) R. M. Schust.
Sphenobolus politus (Nees) Steph. = ***Tritomaria polita*** (Nees) Jörg.
Sphenobolus saxicolus (Schrad.) Steph. = ***Anastrophyllum saxicola*** (Schrad.) R. M. Schust.
Sphenobolus scitululus (Taylor) Steph. = ***Tritomaria scitula*** (Taylor) Jörg.
Staurophora pulchella Willd. nom. illeg. = ***Lunularia cruciata*** (L.) Lindb.
Stephanina complanata (L.) Kuntze = ***Radula complanata*** (L.) Dumort.
Strozzia conica (L.) Müll. Frib. = ***Conocephalum conicum*** (L.) Dumort.
Strozzia hemisphaerica (L.) Müll. Frib. = ***Reboulia hemisphaerica*** (L.) Raddi
Strozzius conicus (L.) Gray = ***Conocephalum conicum*** (L.) Dumort.
Strozzius hemisphaericus (L.) Gray = ***Reboulia hemisphaerica*** (L.) Raddi
Targionia bifurca Nees & Mont. = ***Targionia hypophylla*** L.
Targionia convoluta Lindenb. & Gottsche = ***Targionia hypophylla*** L.
Targionia germanica Corda nom. inval. = ***Targionia hypophylla*** L.
Targionia hypophylla var. *fimbriata* (Müll. Frib.) Müll. Frib. = ***Targionia hypophylla*** L.
Targionia hypophylla var. *lorbeeriana* (Müll. Frib.) Aleffi & Schumacker nom. inval. =
Targionia lorbeeriana Müll. Frib.
Targionia michelii Corda = ***Targionia hypophylla*** L.
Targionia sphaerocarpos Dicks. = ***Sphaerocarpos michelii*** Bellardi
Telaranea nematodes sensu auct. eur. non (Gottsche ex Austin) M. Howe = ***Telaranea***
europaea J.J. Engel & G.L.S. Merrill [66]
Telaranea sejuncta auct. eur. non (Ångstr.) S. W. Arnell = ***Telaranea europaea*** J.J. Engel &
 G.L.S. Merrill [67]
Telaranea setacea auct. non (Weber) Müll. Frib. = ***Kurzia pauciflora*** (Dicks.) Grolle

- Telaranea sylvatica* (A. Evans) Müll. Frib. = *Kurzia sylvatica* (A. Evans) Grolle
Telaranea trichoclados (Müll. Frib.) Müll. Frib. = *Kurzia trichoclados* (Müll. Frib.) Grolle
Temnoma setiforme (Ehrh.) M. Howe = *Tetralophozia setiformis* (Ehrh.) Schljakov
Tesselina coriandrina (Spreng.) Dumort. = *Corsinia coriandrina* (Spreng.) Lindb.
☞ *Tesselina paleacea* auct. = *Oxymitra incrassata* (Brot.) Sérgio & Sim-Sim
Tesselina pyramidata (Raddi) Dumort. non (Willd.) Dumort. = *Oxymitra incrassata* (Brot.) Sérgio & Sim-Sim
Tesselina pyramidata var. *paleacea* Lindb. = *Oxymitra incrassata* (Brot.) Sérgio & Sim-Sim
Tesselina pyramidata var. *paleacea* (Bisch. ex Lindenb.) Crozals nom. illeg. = *Oxymitra incrassata* (Brot.) Sérgio & Sim-Sim
Tesselina pyramidata var. *polycarpa* (Bisch. ex Lindenb.) Lindb. = *Oxymitra incrassata* (Brot.) Sérgio & Sim-Sim
Theдения blyttii (Moerch ex Hornem.) Hartm. nom. inval. = *Moerckia blyttii* (Moerch ex Hornem.) Brockm.
☞ *Trigonanthus curvifolius* (Dicks.) Spruce = *Nowellia curvifolia* (Dicks.) Mitt.
Trigonanthus francisci (Hook.) Hartm. = *Cladopodiella francisci* (Hook.) Jörg.
Tritomaria polymorpha (R. M. Schust.) Grolle = *Tritomaria polita* (Nees) Jörg.
Tritomaria scitula var. *savoica* Müll. Frib. = *Tritomaria scitula* (Taylor) Jörg.

Annotations

1. Bischler (2004) reported several taxa from Mediterranean countries without details of locality. The following require verification as they are the only known reports for their respective countries.

– For Algeria: *Calypogeia muelleriana* (Schiffn.) Müll. Frib., *Cephalozia connivens* (Dicks.) Lindb., *C. lunulifolia* (Dumort.) Dumort., *Diplophyllum albicans* (L.) Dumort., *Dumortiera hirsuta* (Sw.) Nees, *Jungermannia obovata* Nees, *J. pumila* With., *Leiocolea collaris* (Nees) Schljakov, *Lophocolea heterophylla* (Schrad.) Dumort., *L. minor* Nees, *Marsupella emarginata* (Ehrh.) Dumort., *Riccardia latifrons* (Lindb.) Lindb., *Riccia ligula* Steph. and *Scapania gracilis* Lindb.

– For Lebanon: *Anthoceros punctatus* L., *Athalamia hyalina* (Sommerf.) S. Hatt., *Barbilophozia barbata* (Schmidel ex Schreb.) Loeske, *Bazzania flaccida* (Dumort.) Grolle, *Blepharostoma trichophyllum* (L.) Dumort., *Cephaloziella calyculata* (Durieu & Mont.) Müll. Frib., *Cololejeunea minutissima* (Sm.) Schiffn., *Fossombronina angulosa* (Dicks.) Raddi, *F. caespitiformis* subsp. *multispira* (Schiffn.) J. R. Bray & D. C. Cargill (as *F. husnotii* Corb.), *Jungermannia leiantha* Grolle, *Lophocolea bidentata* (L.) Dumort., *Nardia compressa* (Hook.) Gray, *Pellia epiphylla* (L.) Corda, *Plagiochila porelloides* (Torrey ex Nees) Lindenb., *Porella arboris-vitae* (With.) Grolle, *P. platyphylla* (L.) Pfeiff., *Radula complanata* (L.) Dumort., *Riccia bifurca* Hoffm., *R. crystallina* L. emend. Raddi, *R. michelii* Raddi, *Scapania aequiloba* (Schwägr.) Dumort. and *S. aspera* Bernet & M. Bernet.

– For Morocco: *Riccia huebeneriana* Lindenb., *Riella cossoniana* Trab. and *R. parisii* Gottsche.

– For Tunisia: *Riccia warnstorffii* Lindenb. and *Sphaerocarpos texanus* Austin.

– For Turkey: *Plagiochila bifaria* (Sw.) Lindenb.

– For Europe, see Söderström *et al.* (2007).

2. The nomenclatural problems of *Anthoceros agrestis* Paton and its relationship with *A. punctatus* L. have been discussed by Söderström *et al.* (2002). In the

Mediterranean area the two species have been regularly confused, both on taxonomic and nomenclatural basis, but most records probably belong to *A. punctatus*. Further studies of Mediterranean material are needed (including *A. multifidus* L.) to clarify the distribution of the two taxa.

3. *Phaeoceros carolinianus* (Michx.) Prosk. was reported from Crete by Jovet-Ast & Bischler (1968). This is a doubtful record that is rejected here. Jovet-Ast & Bischler include Crete in the distribution of “*P. laevis* subsp. *carolinianus*”, citing the paper by Düll (1966, p. 743). However in this paper Düll does not distinguish subsp. *carolinianus* and subsp. *laevis*. He lists only *P. laevis*.

4. *Anthoceros beltrani* Casares-Gil was described by Casares-Gil (1915) from Spain, and later synonymized by Proskauer (1958) with *Phaeoceros laevis* (L.) Prosk. Nevertheless this synonymy is questionable because of the paroicous condition of *A. beltrani*. Further studies are needed.

5. *Anthoceros dichotomus* var. *gussonei* Zodda was synonymized with *Phaeoceros laevis* (L.) Prosk. by Proskauer (1958), although it often has been erroneously interpreted in the Mediterranean area as a synonym of *Phymatoceros bulbiculosus* (Brot.) Stotler, W. T. Doyle & Crand.-Stotl.

6. For the taxonomy of the genus *Phymathoceros*, we have followed Stotler *et al.* (2005) and Crandall-Stotler *et al.* (2006).

7. According to Schuster (1988), *Anthelia nivalis* (F. Weber & D. Mohr) Lindb. is a nomen dubium and could correspond to *Anthelia juratzkana* (Limpr.) Trevis. *p. p.* and *A. julacea* (L.) Durmort. *p. p.* (type probably *A. julacea*).

8. The presence of the American *Asterella elegans* (Spreng.) Trevis. was rejected from Corsica by Söderström *et al.* (2002) and the report from Turkey (Bornmüller, 1931) must also be rejected.

9. There has been some confusion in the literature with the name *Fimbriaria nana* Lindenb., that has been considered by some authors to be a synonym of *Asterella gracilis* (F. Weber) Underw., but Grolle (1980) clearly established its identity with *Athalamia hyalina* (Sommerf.) S. Hatt.

10. *Fimbriaria fragrans* (Balbis) Nees 1825 (\equiv *Marchantia fragrans* Balbis) is *Mannia fragrans* (Balbis) Frye & L. Clark while *F. fragrans* (Schleich.) Nees 1838 (\equiv *Marchantia fragrans* Schleich.) is a synonym to *Asterella saccata* (Wahlenb.) A. Evans. Both variants of *F. fragrans* have been used in the study area. It is likely that most of the Mediterranean reports correspond to *Mannia fragrans* rather than *Asterella saccata*, but further revision is needed.

11. The problems in applying the name *Calypogeia trichomanis* (L.) Corda are discussed by Söderström *et al.* (2002), who note that this name has been variously interpreted in Europe as both *C. azurea* Stotler & Crotz (Grolle & Long, 2000) and *C. muelleriana* (Schiffn.) Müll. Frib. The same is true of the Mediterranean area.

12. *Jungermannia scalaris* Schmidel *ex* Schreb. is a nomen dubium and could correspond either to *Calypogeia trichomanis* (L.) Corda nom. rejic. (currently equated by most authors with *Calypogeia azurea* Stotler & Crotz), or to *Odontoschisma* sp. (Vána, 1976).

13. *Cephalozia macrostachya* Kaal. was erroneously included in the checklist of Spain by Casas (1998). Therefore it should be excluded from Spain.

14. *Cephaloziella gallica* (Douin) Douin was considered by Müller (1954-1957) to be a synonym of *Cephaloziella calyculata* (Durieu & Mont.) Müll. Frib., but it has been synonymized with *C. hampeana* (Nees) Schiffn. by recent authors (Schumacker & Váňa, 2000, 2005; Söderström *et al.*, 2002) and that is the criterion followed here.

15. *Cephaloziella myriantha* (Lindb.) Schiffn. was considered by Schuster (1980) to be a synonym of *C. rubella* var. *elegans* (Heeg) R. M. Schust. (= *C. elegans* (Heeg) Schiffn.), but Damsholt (2002) referred it to *C. rubella* (Nees) Warnst. var. *rubella*, which is the interpretation followed here.

16. *Chiloscyphus pallescens* (Ehrh. ex Hoffm.) Dumort. and *Porella obtusata* (Taylor) Trevis., have been reported from localities formerly included in the Albanian territory, but now belong to Montenegro.

17. *Conocephalum salebrosum* Szweyk., Buczkowska & Odrzykoski has been recently described by Szweykowski *et al.* (2005) as a separated species from *C. conicum* (L.) Dumort. The new species is in some areas of Europe more common than *C. conicum* and it is impossible to know which species is meant by the latter name prior to 2005. *Conocephalum salebrosum* will certainly turn out to be more widespread in the Mediterranean area.

18. Recent studies on the genus *Fossombronia* Raddi by Stotler & Crandall-Stotler (2006) propose a new treatment for several taxa, and this treatment has been followed here.

19. *Fossombronia intestinalis* Taylor was erroneously reported from Algeria by Söderström *et al.* (2002). It is an Australian taxon that is also known from South Africa and it should be rejected from the Mediterranean area.

20. According to Scott & Pike (1988), *Fossombronia intermedia* Corb. ex Trab. nom. inval. (= *Fossombronia caespitifformis* var. *intermedia* Corb. ex Trab. nom. inval.) could be ascribed either to *F. caespitifformis* De Not. ex Rabenh. or to *F. wondraczekii* (Corda) Lindb. However Stotler & Crandall-Stotler (2006) consider it to be a synonym of *F. echinata* Macvicar. At present it is not possible to know the identity of the Mediterranean specimens so named.

21. *Jungermannia crispula* Brot. was described from Portuguese material and was later transferred to *Fossombronia* as *F. crispula* (Brot.) R. M. Schust. by Schuster (1992a), but no other report of this species has been found in European works. Machado (1925) included *J. crispula* in *Fossombronia pusilla* (L.) Nees *p. p.* and *F. caespitifformis p. p.*, but according to Sérgio & Carvalho (2003), no original material of *J. crispula* has been found. Therefore it should be considered a nomen dubium.

22. *Fossombronia crispa* is problematic and should be considered doubtful for Europe (cf. Söderström *et al.*, 2007).

23. The identity of *Fossombronia loitlesbergeri* Schiffn. is controversial. Paton (1999) and Scott & Pike (1988) considered it to be related to *Fossombronia wondraczekii* (Corda) Lindb., but Stotler & Crandall-Stotler (2006), whom we follow here, treated it as a synonym of *F. pusilla* (L.) Nees.

24. *Frullania muscicola* Steph. is an Asian species that was reported from Macaronesia by Sérgio (1985). Later Bisang *et al.* (1989) considered that the Asian and Macaronesian specimens would be better considered as *Frullania cesatiana* var. *muscicola* Bisang *et al.*, and Sim-Sim *et al.* (1995) assigned the Macaronesian specimens to the endemic *F. azorica* Sim-Sim *et al.*

The reports from the Canary islands of *Frullania riparia* Hampe *ex* Lehm. by Arnell (1961) also correspond to this taxon (Casas *et al.*, 1989).

25. Several infraspecific taxa have been recognized in *Frullania dilatata* (L.) Dumort. and *F. tamarisci* (L.) Dumort. for Portugal and Madeira by Sim-Sim (1999). In addition Losada Lima & Vanden Berghen (1985) described *Frullania dilatata* var. *elongata* from the Canary Islands, though it was subsequently synonymized with *F. ericoides* (Nees) Mont. by Bisang *et al.* (1989). However these territories form only a relatively small part of the Mediterranean Basin, and the criteria used by Sim-Sim (1989) are difficult to apply to the whole region. We have therefore adopted a conservative treatment in this checklist.

26. Grolle & Long (2000) referred *Frullania davurica* Hampe to *F. jackii* Gottsche. The Mediterranean material identified as *F. davurica* probably corresponds to *F. jackii*, which is also the interpretation of Schumacker & Vána (2005). Further confirmation is needed.

27. *Jubula pennsylvanica* (Steph.) A. Evans was reported doubtfully from Turkey by Schiffner (1909) sub *Jubula hutchinsiae* var. *sullivanti* Spruce. According to Grolle & Long (2000), it could be the same taxon as *Jubula hutchinsiae* subsp. *javanica* (Steph.) Verd. The relationship between the two taxa needs to be assessed. Two varieties have also been recognized in Macaronesia by Sim-Sim *et al.* (2002): *Jubula hutchinsiae* subsp. *hutchinsiae* var. *hutchinsiae* and *Jubula hutchinsiae* subsp. *hutchinsiae* var. *integrifolia* Lindb. However the correct author citation of the latter name is *Jubula hutchinsiae* subsp. *hutchinsiae* var. *integrifolia* (Steph.) S. Hatt., and it has previously been synonymized with subsp. *javanica* (see Söderström *et al.*, 2007).

28. *Jungermannia compacta* Mazziari nom. nud. non Roth., *J. foscardiana* Mazziari nom. nud., *J. guilfortiana* Mazziari nom. nud., *J. lacera* Mazziari nom. nud., and *J. limosa* Mazziari nom. nud. were reported from Greece by Mazziari (1851) but no other reference to these names has been found in the literature.

29. *Jungermannia jenseniana* Grolle was reported from Spain by Lloret *et al.* (1997), but after revision of the specimen by M. Infante, it was assigned to *Nardia scalaris* Gray. Therefore the species is at the moment rejected from the area.

30. *Nardia hyalina* var. *colorata* Samp. is a nomen nudum and is based on a separate type (from Portugal) than *Nardia hyalina* var. *colorata* (Mart.) Dalla Torre & Sarnth. (type from Germany). Vána (1975) treated the latter as a synonym of *Jungermannia gracillima*. Later Sérgio & Carvalho (2003) stated that “*Nardia hyalina* var. *colorata* Samp. = ?? *Jungermannia hyalina* Lyell”. Consequently the identity of the name remains uncertain and requires further studies.

31. *Leiocolea collaris* (Nees) Schljakov is sometimes treated as a synonym of *L. bantriensis* (Hook.) Jørg. Thus, the literature reports of the latter must be treated with caution.

32. *Leiocolea turbinata* f. *aquatica* Jelenc nom. nud. was reported by Jelenc (1955) from Morocco but no other record or reference to it has been found.

33. According to Schuster (1980), *Jungermannia serpyllifolia* Dicks. nom. illeg. corresponds to *Lejeunea patens* Lindb. but the name *Lejeunea serpyllifolia* sensu Lib. nom. illeg. refers to another taxon, which led Bonner & Miller (1960) to propose the new name *Lejeunea libertiae* Bonner & H. A. Miller. This was later synonymized with *L. cavifolia* (Ehrh.) Lindb. The literature reports of *L. serpyllifolia* are difficult to place but do mostly correspond to *L. cavifolia*.

34. Schuster (1980) confirmed the presence of *L. flava* subsp. *moorei* (Lindb.) R.M. Schust. in Ireland. In Macaronesia it has also been reported from Madeira. According to Grolle & Long (2000), the identity of the European and Macaronesian specimens referred to *L. flava* remains to be confirmed. In this paper they have been included in *Lejeunea flava* (Sw.) Nees.

35. *Lepidozia pearsonii* Spruce was reported by Reinoso (1985) from Spain and considered by Casas (1998) as a species whose occurrence in Spain needed confirmation, which led to Söderström *et al.* (2002) to exclude it from Spain. After that, the specimen has been revised by R. Schumacker as *Lepidozia reptans* (L.) Dumort. Therefore the species should be rejected from the Mediterranean area.

36. The report of *Lophozia latifolia* R. M. Schust. (sub *L. propagulifera* (Gottsche) Steph.) from Serbia given in Sabovljević & Natcheva (2006) is almost certainly erroneous. This is an arctic taxon that has been synonymized with *Lophozia jurensis* Müll. Frib. (whose type is from the Alps), but this synonymy is very questionable and “true” *L. propagulifera* has never been reported from central Europe (see Söderström *et al.*, 2007).

37. Recent molecular studies (Roo *et al.*, 2007) show that *Lophozia silvicola* H. Buch is a species well separated from *L. ventricosa* (Dicks.) Dumort.

38. *Lophozia confertifolia* Schiffn. is not conspecific with true *L. wenzelii* (Nees) Steph. as stated by Müller (1954-1957), and we have followed Schuster (1969) and Schumacker & Váňa (2005) who consider *Lophozia confertifolia* to be a synonym of *Lophozia ventricosa* (Dicks.) Dumort (see Söderström *et al.*, 2007).

39. *Grimaldia atlantica* Trab. nom. inval. (*Mannia atlantica* Jelenc nom. inval.) was reported by Trabut (1941) from Algeria, but no other record or reference to it have been found.

40. According to Grolle & So (2003), *Metzgeria violacea* (Ach.) Dumort. is the correct name for *M. fruticulosus* auct. eur.

41. The identity of the plants named *Nardia silvrettae* (Gottsche ex Dumort.) Trevis. is doubtful since it has been synonymized with both *N. geoscyphus* (De Not.) Lindb. (Váňa, 1976) and *N. insecta* Lindb. (Schumacker & Váňa, 2005). According to Geissler & Bischler (1989), its basionym is *Marsupella silvrettae* Gott. ex Dumort., 1874 (\equiv *Jungermannia silvrettae* Gottsche & Rabenh. nom. inval.). Schumacker & Váňa (2000, 2005) refer it to *Nardia insecta* Lindb., but cite it with a different authority – *Nardia silvrettae* Douin.

42. *Pellia fabbroniana* f. *undulata* Jelenc nom. inval. was reported by Jelenc (1955) from Algeria but no other record or reference to it has been found.

43. *Jungermannia fuciformis* Bory (= *Pellia fuciformis* (Bory) Nees) is an uncertain European name reported from Greece by Bory de Saint-Vicent (1832). Its identity is still to be assessed but Coppey (1908) stated that it could be a sterile form of *Pellia epiphylla* (L.) Corda.

44. *Plagiochila africana* Steph. was erroneously reported from Libya by Söderström *et al.* (2002). It is a west African tropical species that should be rejected from the Mediterranean area.

45. The nomenclatural history of *Plagiochila asplenioides* (L. emend. Taylor) Dumort. is complex and it is not always possible to know whether a particular report belongs to *P. asplenioides* s. str. or *P. porelloides* (Nees) Lindenb. Most earlier reports probably belong to the latter (cf. Söderström *et al.*, 2002).

46. *Plagiochila atlantica* Lindenb. *ex* Lehm. has been synonymized with *P. heterophylla* Lindenb. *ex* Lehm by Heinrichs (2002).

47. *Plagiochila maderensis* Gottsche *ex* Steph. has recently been reinstated for Madeira and the Canary Islands by Rycroft *et al.* (2004).

48. Fontinha (2005) excluded *Porella arboris-vitae* (With.) Grolle and *Porella platyphylla* (L.) Pfeiff. from Madeira. Bischler *et al.* (2006) stated that the first species is restricted to southern continental areas while the second has a “European and Asiatic (North American?)” distribution. Further studies are needed to establish conclusively their presence in the Canary Islands, in view of the ecological differences that characterize the individual islands.

49. *Madotheca canariensis* (F. Weber) Nees has been reported from Northern Africa by Trabut (1941) and others without mention of locality or country and Bischler (2004) placed it in Morocco. Trabut used this name for specimens intermediate between *Madotheca laevigata* (Schrad.) Dumort. and *Madotheca thuja* (Dicks.) Dumort. The two latter names are synonyms of *Porella arboris-vitae* (With.) Grolle, but *M. thuja* was earlier frequently used for *P. obtusata* (Taylor) Trevis. The identity of the North African plants is therefore questionable and *Porella canariensis* (F. Weber) Underw. should be rejected until it is positively verified.

50. Ros *et al.* (1999) erroneously reported *Porella cordaeana* (Huebener) Moore from Libya based on a supposed record of Rungby (1962). But this author reported this species only for Morocco in Northern Africa. In addition, *Porella pinnata* L. was reported erroneously by Ros *et al.* (1999) from Morocco and should be rejected from this country.

51. In several works *Achiton quadratum* (Scop.) Corda has been erroneously assigned to *Reboulia hemisphaerica* (L.) Raddi. According to Bonner (1962b) the basionym of this name is *Marchantia quadrata* Scop., which actually is the basionym of *Preissia quadrata* (Scop.) Nees.

52. Düll (1983) included the name *Radula physoloba* auct. as a synonym of *R. aquilegia* (Hook. f. & Taylor) Gottsche *et al.* Later Sérgio & Carvalho (2003) excluded this species from Portugal and considered it to be a synonym of *Radula lindenbergiana* Gottsche *ex* C. Hartm. In both cases the use of this name seems to be erroneous, as *Radula physoloba* Mont. is a species of New Zealand. Thus, it should be excluded from the Mediterranean lists.

53. For the taxonomy of the genus *Riccia* L., the monographic treatment by Jovet-Ast (1986) has been followed here.

54. Several species that have been reported from Northern Africa were not included in the monograph of the genus *Riccia* L. in the Mediterranean area by Jovet-Ast (1986), but mentioned by Söderström *et al.* (2002), and their identity remains doubtful.

– *Riccia chinensis* Herz. was proposed as new to Algeria by Hariot (1913) as *Riccia chinensis* Steph. *ex* Hariot from Tahount Arak (Mouydir), with the observation that the specific name given by Stephani was provisional because it seemed to be unsuitable for an African species. Moreover it lacked a Latin diagnosis and was therefore an invalid name. Herzog subsequently validated the name but using material from China as type. The identity of the Algerian material is therefore doubtful.

– *Riccia chudoana* Steph. was reported from Sahara *sine loco* by Jelenc (1955) but no other record or reference to it has been found. It is certainly a nom. nov. for *R. chinensis* Herz. as it is typified by the same specimen.

– *Riccia convexa* Steph. was invalidly published by Hariot (1913) on the basis of material from Dayet El-Tofla (Algeria). Later Stephani (1912-1917) validated the species but selecting material collected in China, transmitted by Hariot, as the type. The identity of the Algerian material is therefore doubtful.

– *Riccia mamillata* Trab. ex Steph. was reported from Algeria by Trabut (1941) but according to Casares-Gil (1919) it is similar to *Riccia macrocarpa* Levier.

– *Riccia polycarpa* (Trab.) Jelenc was reported from Algeria by Jelenc (1955). No other record or reference to it has been found.

55. Invalidly published names in the genus *Riccia* that have been used for material from Northern Africa are:

– *Riccia aculeata* Trab. nom. nud., reported by Trabut (1941) from Algeria. Grolle (1976) indicated that, according to Jovet-Ast *in litt.*, it is probably identical with *Riccia crozalsii* Levier.

– *Riccia battandieri* Trab. nom. nud., reported by Trabut (1941) from Algeria. Grolle (1976) indicated that, according to Jovet-Ast *in litt.*, it is a nomen dubium.

– *Riccia bischoffii* f. *armata* Trab. nom. nud., reported by Trabut (1941) from North Africa without indication of country. Jovet-Ast (1983) stated that this name corresponds, according to the description, with *Riccia gougetiana* var. *erinacea* Schiffn. nom. inval. (= var. *armatissima* Schiffn.).

– *Riccia echinulata* Trab. nom. nud., reported by Trabut (1941) from Algeria. Grolle (1976) indicated that, according to Jovet-Ast *in litt.*, it is a nomen dubium (it probably corresponds to *R. ciliifera* Link ex Lindenb.).

– *Riccia munita* Trab. nom. nud., reported by Trabut (1941) from Algeria. Grolle (1976) indicated that, according to Jovet-Ast *in litt.*, it is a nomen dubium (it probably corresponds to *R. sorocarpa* Bisch.).

– *Riccia riatensis* Trab. nom. nud., reported by Trabut (1941) from Morocco. Grolle (1976) indicated that, according to Jovet-Ast *in litt.*, it is a nomen dubium (it probably corresponds to *R. lamellosa* Raddi).

56. In the original description of *Riccia minutissima* Steph., the author cited two specimens, which Schuster (1992b) considered to belong to two different species (*Riccia bifurca* Hoffm. and *R. glauca* L.). Later Jovet-Ast (1986) stated that the correct synonymy of *Riccia minutissima* is with *R. bifurca*, and consequently the second specimen cited in the protologue was misidentified.

57. *Riccia ciliata* var. *intumescens* Bisch. was combined as *Riccia intumescens* by Heeg in 1894 but also Underwood in 1884 had used this name invalidly. According to Schuster (1992b), *R. intumescens* (Bisch.) Heeg is *R. ciliata*, whereas *R. intumescens* Underw. nom. inval. is *R. ciliata* subsp. *trichocarpa* (= *R. crinita* Taylor). Until the Mediterranean material identified as *Riccia intumescens* is re-examined, it is impossible to know the species to which the individual records refer.

58. *Riccia frostii* var. *crystallinoides* Schiffn. was reported from Syria by Schiffner (1913), but no other record of or reference to it has been found.

59. *Riella affinis* M. Howe & Underw. was erroneously included in Casas (1998). The only Spanish reports of this species are from the Canary Islands, and it must be excluded from mainland Spain.

60. Despite the statements by Grolle & Long (2000) and Geissler & Bischler (1990), *Riella numidica* Trab. and *Riella sersuensis* Trab. were validly described, since the protologue of both species includes a Latin diagnosis (in agreement with the article 36.1 of the Missouri ICBN).

61. *Scapania brevicaulis* Taylor has been reported from Italy by Potemkin (2002), and this is the only report for the Mediterranean area. Because the author did not give any indication of the locality, the report should be considered doubtful until specimens can be checked.

62. *Scapania calcicola* (Arnell & J. Perss.) Ingham was erroneously reported from the Balearic Islands by Casas *et al.* (2004) without giving any locality, and should be rejected.

63. *Jungermannia cordifolia* Brot. non Hook. was described from Portugal. On the basis of the original description, Sim-Sim (1989) stated that this taxon corresponded to *Scapania compacta* (A. Roth) Dumort. and proposed this synonymy without studying the type. Since the type cannot be located a formal synonymization should be made following designation of a neotype.

64. *Sphaerocarpos algeriensis* Trab. nom. nud. was reported by Trabut (1941) from Algeria. Jovet-Ast (1956) indicated that the morphological characters given for *S. algeriensis* fall within the range of variation observed in *S. texanus* Austin in Morocco and that it is probably only a synonym of that species.

65. Schumacker & Váňa (2005) proposed a new combination for *Lepidozia azorica* in the genus *Telaranea* as *T. azorica* (H. Buch & Perss.) Pócs *ex* Schumacker & Váňa.

66. *Telaranea nematodes* (Gottsche *ex* Austin) M. Howe was considered to be the correct name for the species present in Europe and Macaronesia until Engel & Merrill (2004) established a new name for it, *Telaranea europaea* J. J. Engel & G. L. S. Merrill.

67. *Telaranea sejuncta* auct. non (Angst.) Arnell is a confusing taxon. It was assigned to *T. nematodes* (Gottsche *ex* Austin) M. Howe by Arnell (1963), and this synonymy has been widely used. According to Engel & Merrill (2004), “all the published statements of distribution, descriptions and illustrations of *T. sejuncta* (apart from the type) are suspect, since they may include some or all the taxa formerly included in *T. nematodes*, as well as *T. diacantha*, when, in fact, it is none of these”. In our current state of knowledge, it can be assumed that all the Mediterranean reports of *T. nematodes* and *T. sejuncta* correspond to *T. europaea*.

68. *Trichocolea tomentella* (Ehrh.) Dumort. was recorded from Malta by Gulia (1858-59) and Sommier & Caruana Gatto (1915) as “*Jungermannia tomentella* (Ehr.)”. These reports are almost certainly erroneous and are here rejected.

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