

A Comparison of the Mosses Known and Reported for New Mexico with Flora North America, and a Current Catalog of the Mosses of New Mexico

Kelly W. Allred

Range Science Herbarium, Department of Animal & Range Sciences (emeritus)
New Mexico State University, Las Cruces, NM 88003 kallred@nmsu.edu

The recent completion of the two volumes of Flora North America that deal with the mosses (BFNA27-2007; BFNA28-2014) allows for a fuller accounting of the moss flora of New Mexico. I enumerate, first, mosses new to New Mexico as recorded in BFNA28 in 2014. (New records from BFNA27-2007, have already been incorporated into our list.) Second, I list, with references, moss species that were reported for New Mexico prior to 2007, but were not included in BFNA27-2007. Third, I list, with references, moss species that were reported for New Mexico prior to 2014, but were not included in BFNA28-2014. Fourth, I itemize mosses that were not recorded for New Mexico in BFNA27-2007, but have been found and reported for the state since the publication of that volume. Lastly, an up-to-date catalog of the mosses of New Mexico is provided, with validating references.

I. New Records for New Mexico from BFNA28-2014

1. *Bartramia stricta* Bridel
2. *Brachymenium macrocarpum* Cardot : This validates that our material is not *Brachymenium klotzschii* as reported in Conard & Redfearn (1979)
3. *Bryum argenteum* Hedwig var. *muticum* Bridel
4. *Entodon beyrichii* Schwägrichen
5. *Gemmabryum demaretianum* (Arts) J.R. Spence
6. *Gemmabryum exile* (Dozy & Molkenboer) J.R. Spence & H.P. Ramsay
7. *Gemmabryum kunzei* (Hornschuch) J.R. Spence
8. *Hygrohypnum bestii* (Renauld & Bryhn) Holzinger
9. *Hygrohypnum duriusculum* (DeNotaris) D.W. Jamieson
10. *Pohlia bolanderi* (Sullivant) Brotherus

II. Reported for New Mexico Prior to 2007, but not recorded in BFNA27-2007

1. *Andreaea heinemannii* Hampe & Müller Hal. [Mahler 1985]
2. *Bryoerythrophyllum recurvirostrum* (Hedwig) Chen [Bartram 1931; Mahler 1978]
3. *Dichodontium pellucidum* (Hedwig) Schimper [Allred et al. 1998]

4. *Dicranella varia* (Hedwig) Schimper [Ireland et al. 1981]
5. *Dicranoweissia cirrata* (Hedwig) Lindberg ex Milde [Mahler 1978]
6. *Didymodon rigidulus* Hedwig var. *icmadophilus* (Müller Hal.) Zander [Allred et al. 1998]
7. *Ditrichum flexicaule* (Schwägrichen) Hampe [Allred et al. 1998]
8. *Encalypta raptocarpa* Schwägrichen [Conard & Redfearn 1979]
9. *Funaria apiculatopilosa* Cardot [Worthington 1996]
10. *Funaria hygrometrica* Hedwig var. *calvescens* (Schwägrichen) Montagne [Darigo & Allred 2001]
11. *Funaria muhlenbergii* Turner [Stark & Castetter 1982]
12. *Grimmia elatior* Bruch ex Balsamo-Crivelli & De Notaris [Darigo & Allred 2001]
13. *Grimmia orbicularis* Bruch ex Wilson [Mahler 1978]
14. *Schistidium ambiguum* Sullivant [Sullivant 1849]
15. *Lorentziella imbricata* (Mitten) Brotherus [Allred et al. 1998]
16. *Microbryum starkeanum* (Hedwig) R.H. Zander var. *starkeanum* [Ireland et al. 1981]
17. *Physcomitrium pyriforme* (Hedwig) Hampe [Ireland et al. 1984]
18. *Polytrichastrum sexangulare* (Bridel) G.L. Smith [Mahler 1978]
19. *Saelania glaucescens* (Hedwig) Brotherus [Bartram 1931; Mahler 1978]
20. *Sphagnum fimbriatum* [Coop 2002]
21. *Tetraphis pellucida* Hedwig [Allred et al. 1998]
22. *Tortella humilis* (Hedwig) Jennings [Ireland et al. 1981]
23. *Tortula brevipes* (Lesquereux) Brotherus [Allred et al. 1998]
24. *Tortula cernua* (Hübener) Lindberg [Crum & Anderson 1981]
25. *Tortula protobryoides* R.H. Zander [Allred et al. 1998]
26. *Trichostomum brachydontium* Bruch [Ireland et al. 1984]
27. *Trichostomum tenuirostre* (Hooker & Taylor) Lindberg [Ireland et al. 1984]

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Botanice` est Scientia Naturalis quae Vegetabilium cognitiorem tradit.

— Linnaeus



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III. Reported for New Mexico Prior to 2014,
but not recorded in BFNA28-2014

1. *Anomodon julaceum* [Allred 2012]
2. *Atrichum tenellum* (Röhling) Bruch & Schimper [Romig & Allred 2013]
3. *Bartramia ithyphylla* [Bartram 1931; Mahler 1978]
4. *Brachythecium acuminatum* [Bartram 1931; Mahler 1978]
5. *Brachythecium albicans* [Stark & Castetter 1982]
6. *Campylophyllum hispidulum* [Bartram 1931; Mahler 1978]
7. *Campylophyllum hispidulum* [Bartram 1931; Mahler 1978]
8. *Dicranum tauricum* Sapjegin [Romig & Allred 2013]
9. *Drepanocladus longifolius* [Allred 2012]
10. *Entodon seductrix* [Blisard & Kleinman 2012]
11. *Fabronia pusilla* [Mahler 1978]
12. *Gemmabryum dichotomum* [Allred et al. 1998]
13. *Homomallium incurvatum* [Allred 2012]
14. *Hygrohypnum ochraceum* [Mahler 1985]
15. *Hylocomium splendens* [Bartram 1931; Mahler 1978]
16. *Hypnum pratense* [Allred et al. 1998]
17. *Imbriobryum miniatum* [Stark & Castetter 1982]
18. *Isopterygium tenerum* [Allred et al. 1998]
19. *Lescuraea saxicola* [Mahler 1985]
20. *Leskea angustata* [Worthington 2012]
21. *Orthotrichum cupulatum* [Worthington 2012]
22. *Orthotrichum laevigatum* [Allred et al. 1998]
23. *Orthotrichum pallens* Bridel [Romig & Allred 2013]
24. *Oxyrrhynchium hians* [Allred 2012; Conard & Redfean 1979; Grout 1928-40]
25. *Philonotis capillaris* [Mahler 1978]
26. *Philonotis fontana* (Hedwig) Bridel var. *americana* (Dismier) Flowers ex Crum [Flowers 1973]
27. *Philonotis fontana* (Hedwig) Bridel var. *pumila* (Turner) Bridel [Bartram 1931; Mahler 1978]
28. *Plagiomnium ciliare* [Allred 2012]
29. *Plagiomnium ellipticum* [Allred et al. 1998]
30. *Plagiomnium medium* [Allred 2012]
31. *Plagiomnium rostratum* [Bartram 1931; Mahler 1978]
32. *Platydictya subtilis* [Allred 2012]
33. *Platygyrium repens* [Allred 2012]
34. *Pohlia obtusifolia* [Worthington 2012]
35. *Pseudocampyllum radicale* [Mahler 1985]
36. *Pseudoleskea incurvata* [Mahler 1985]
37. *Pseudoleskeella rupestris* [Allred 2011]
38. *Ptychostomum pallescens* [Allred et al. 1998]
39. *Ptychostomum pseudotriquetrum* [Bartram 1931; Mahler 1978]
40. *Ptychostomum turbinatum* [Bartram 1931; Mahler 1978]
41. *Pylaisia selwynii* [Allred 2011]
42. *Rhizomnium magnifolium* [Crum & Anderson 1981]
43. *Rhizomnium pseudopunctatum* [Mahler 1985]
44. *Sciuro-hypnum plumosum* [Mahler 1985]
45. *Sciuro-hypnum populeum* [Bartram 1931; Mahler 1978]
46. *Scleropodium obtusifolium* [Allred 2012]
47. *Sphagnum girgensohnii* Russow [Romig & Allred 2013]
48. *Stereophyllum radiculosum* [Grout 1945; Mahler 1978]
49. *Tortella fragilis* (Hooker & Wilson) Limpricht [Romig &

Allred 2013]

50. *Tortella tortuosa* (Hedwig) Limpricht var. *fragilifolia* (Juratzska) Limpricht [Romig & Allred 2013]
51. *Warnstorfia exannulata* (Hedwig) Loeske [Romig & Allred 2013]
52. *Warnstorfia fluitans* [Price 2011]

IV. Not Recorded in BFNA27-2007, but Reported for New
Mexico Since the Publication of that Volume

1. *Crumia latifolia* (Kindberg) W.B. Schofield [Kleinman 2012]
2. *Distichium inclinatum* (Hedwig) Bruch & Schimper [Allred 2012]
3. *Ditrichum gracile* (Mitten) Kuntze [Allred 2011]
4. *Grimmia americana* Bartram [Allred 2011]
5. *Grimmia trichophylla* Grev. [Worthington 2011]
6. *Microbryum starckeanum* (Hedwig) R.H. Zander var. *fosbergii* (Bartr.) Zander [Allred 2011]
7. *Ptychomitrium serratum* Bruch & Schimper [Worthington 2011]
8. *Rhabdoweisia crispata* (Dickson ex Withering) Lindberg [Allred 2011]
9. *Schistidium dupretii* (Thériot) W.A. Weber [Allred 2011]
10. *Schistidium viride* H.H. Blom & Darigo [Allred 2011]
11. *Trematodon longicollis* Michaux [Allred 2011]
12. *Tuerckheimia svihlae* (Bartram) Zander [Worthington 2012]
13. *Weissia muhlenbergiana* (Swartz) W.D. Reese & B.A.E. Lemmon [Allred 2011]

Lists II and III comprise 79 taxa that had been reported for New Mexico in the literature, nearly all with validating vouchers, but were not noted in Flora North America as occurring in the state. In a few cases, the identifications in the reports may have been in error; in most cases, the BFNA authors were apparently unaware of the published reports, and did not examine specimens from New Mexico herbaria nor inquire with New Mexico bryologists. Some of these discrepancies, however, can serve as alerts for species needing verification.

The last official accounting of the mosses of New Mexico was 3½ years ago (Allred 2011). Below is presented a current catalog of the mosses of the state, complete with synonyms, index, and literature citations. The number of families has increased from 38 to 41, genera from 130 to 139, species from 302 to 343, and total taxa from 312 to 353.

The catalog of mosses, as well as other pertinent information about the bryophytes of New Mexico, may be found at floraneomexicana.org.

I am pleased to acknowledge the frequent and agreeable assistance of Karen Blisard, Russ Kleinman, and Kirsten Romig in finding and studying the mosses of New Mexico.

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MOSSES OF NEW MEXICO – FAMILY LIST

Total families = 41
Total genera = 139
Total species = 343
Total taxa = 353

Family AMBLYSTEGIACEAE

Amblystegium

- fluviatile* (Hedwig) Bruch, Schimper, & Gumbel = *Hygroamblystegium* varium (Hedwig) Mönkemeyer
humile (Beauvois) Bruch, Schimper, & Gumbel = *Hygroamblystegium* varium (Hedwig) Mönkemeyer var. *humile* (Beauvois) Vanderpoorten & Hedenas
juratzkanum = *Amblystegium* serpens (Hedwig) Bruch & Schimper
noterophilum (Sullivant & Lesquereux) Holzinger = *Hygroamblystegium* varium (Hedwig) Mönkemeyer
riparium (Hedwig) Schimper = *Leptodictyum* riparium (Hedwig) Warnstorf
serpens (Hedwig) Bruch & Schimper var. *juratzkanum* (Schimper) Rau & Hervey = *Amblystegium* serpens (Hedwig) Bruch & Schimper
serpens (Hedwig) Bruch & Schimper [Bartram 1931; Mahler 1978]
Amblystegium juratzkanum Schimper
Amblystegium serpens (Hedwig) Bruch & Schimper var. *juratzkanum* (Schimper) Rau & Hervey
tenax (Hedwig) C. Jensen = *Hygroamblystegium* varium (Hedwig) Mönkemeyer
varium (Hedwig) Lindberg = *Hygroamblystegium* varium (Hedwig) Mönkemeyer
Calliargon stramineum (Bridel) Kindberg = *Straminergon* stramineum (Bridel) Hedenäs

Campyliadelphus

- chrysophyllus* (Bridel) Kanda [Bartram 1931; Mahler 1978]
Campylium chrysophyllum (Bridel) J. Lange

Campylium

- chrysophyllum* (Bridel) J. Lange = *Campyliadelphus* chrysophyllus (Bridel) Kanda
hispidulum (Bridel) Mitten = *Campylophyllum* hispidulum (Brid.) Hedenäs
radicale (P. Beauvois) Grout = *Pseudocampylium* radicale (P. Beauvois) Vanderpoorten & Hedenäs
stellatum (Hedwig) C. Jensen [Conard & Redfearn 1979; Lawton 1971]

Campylophyllum

- hispidulum* (Bridel) Hedenäs [Bartram 1931; Mahler 1978]
Campylium hispidulum (Bridel) Mitten

Conardia

- compacta* (Müller Hal.) Robinson [Mahler 1978]
Rhynchostegiella compacta (Müller Hal.) Loeske

Cratoneuron

- commutatum* of American reports = *Palustriella* falcata (Bridel) Hedenäs
decepiens of American reports = *Palustriella* falcata (Bridel) Hedenäs
filicinum (Hedwig) Spruce [Bartram 1931; Mahler 1978]

Drepanocladus

- aduncus* (Hedwig) Warnstorf [Bartram 1931; Mahler 1978; Wynne 1944]
Drepanocladus aduncus (Hedwig) Warnstorf var. *kneiffii* (Schimper) Moenkemeyer
Drepanocladus aduncus (Hedwig) Warnstorf var. *polycarpus* (Blandow ex Voit) Roth
longifolius (Mitten) Brotherus ex Paris [Allred 2012]
aduncus (Hedwig) Warnstorf var. *kneiffii* (Schimper) Moenkemeyer = *Drepanocladus* aduncus (Hedwig) Warnstorf
aduncus (Hedwig) Warnstorf var. *polycarpus* (Blandow ex Voit) Roth = *Drepanocladus* aduncus (Hedwig) Warnstorf
sendtneri (Schimper) Warnstorf: this species not yet known from North America [BFNA28]; reported by various authors; our material is referred to *Drepanocladus* aduncus (Hedwig)

Warnstorf;

- Drepanocladus sendtneri* (Schimper) Warnstorf var. *wilsonii* fluitans (Hedwig) Warnstorf = *Warnstorfia* fluitans (Hedwig) Loeske
sendtneri var. *wilsonii* = *Drepanocladus* sendtneri Warnstorf
uncinatus (Hedwig) Warnstorf = *Sanionia* uncinata (Hedwig) Loeske

Hygroamblystegium

- fluviatile* (Hedwig) Loeske = *Hygroamblystegium* varium (Hedwig) Mönkemeyer
orthocladon (P. Beauvois) Macoun & Kindberg = *Hygroamblystegium* varium (Hedwig) Mönkemeyer
noterophilum (Sullivant & Lesquereux in Sullivant) Warnstorf = *Hygroamblystegium* varium (Hedwig) Mönkemeyer Holzinger
tenax (Hedwig) Jennings = *Hygroamblystegium* varium (Hedwig) Mönkemeyer
varium (Hedwig) Mönkemeyer var. **humile** (Beauvois) Vanderpoorten & Hedenas [Vanderpoorten 2014]
Amblystegium humile (Beauvois) Bruch, Schimper, & Gumbel
Leptodictyum humile (P. Beauvois) Ochyra
varium (Hedwig) Mönkemeyer var. **varium** [Bartram 1931; Mahler 1978]
Amblystegium fluviatile (Hedwig) Bruch, Schimper, & Gumbel
Amblystegium varium (Hedwig) Lindberg
Hygroamblystegium noterophilum (Sullivant & Lesquereux) Warnstorf
Hygroamblystegium orthocladon (P. Beauvois) Macoun & Kindberg
Hygroamblystegium tenax (Hedwig) Jennings
Leptodictyum trichopodium (Schulz) Warnstorf
luridum (Hedwig) Jennings var. *julaceum* (Schimper) Podpera = *Hygrohypnum* luridum (Hedwig) Jennings

Hygrohypnum

- bestii** (Renauld & Bryhn) Holzinger [Jamieson 2014]
Hypnum molle (Hedwig) Loeske subsp. *bestii* Renauld & Bryhn
duriusculum (DeNotaris) D.W. Jamieson [Jamieson 2014]
Limnobium duriusculum DeNotaris
luridum (Hedwig) Jennings [Bartram 1931; Mahler 1978]
Hygrohypnum luridum (Hedwig) Jennings var. *julaceum* (Schimper) Podpera
molle (Hedwig) Loeske [Bartram 1931; Mahler 1978] Note: This species is not included for NM in BFNA28, and has been confused with *H. bestii* and *H. duriusculum*; warrants verification.
ochraceum (Turner ex Wilson) Loeske [Mahler 1985]

Leptodictyum

- humile* (P. Beauvois) Ochyra = *Hygroamblystegium* varium (Hedwig) Mönkemeyer var. *humile* (Beauvois) Vanderpoorten & Hedenas
riparium (Hedwig) Warnstorf [Prior 1966]
Amblystegium riparium (Hedwig) Schimper
trichopodium (Schulz) Warnstorf = *Hygroamblystegium* varium (Hedwig) Mönkemeyer
Limnobium duriusculum DeNotaris = *Hygrohypnum* duriusculum (DeNotaris) D.W. Jamieson

Palustriella

- falcata** (Bridel) Hedenäs [Allred et al. 1998]
Cratoneuron commutatum of North American reports
Cratoneuron decepiens of North American reports
Palustriella commutata of North American reports
Palustriella decepiens of North American reports
commutata of North American reports = *Palustriella* falcata (Bridel) Hedenäs
decepiens of North American reports = *Palustriella* falcata (Bridel) Hedenäs

Platydictya

- jungermannioides** (Bridel) Crum [Mahler 1978]
subtilis (Hedwig) Crum [Allred 2012]

Pseudocampylium

- radicale** (P. Beauvois) Vanderpoorten & Hedenäs [Mahler 1985]
Campylium radicale (P. Beauvois) Grout

Sanionia

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uncinata (Hedwig) Loeske [Bartram 1931; Mahler 1978; Wynne 1944]
Drepanocladus uncinatus (Hedwig) Warnstorf
Straminergon : go to Calliergonaceae

Tomentypnum

nitens (Hedwig) Loeske [Crum & Anderson 1981]
Warnstorfia : go to Calliergonaceae

Family ANDREAEACEAE

Andreaea

heinemannii Hampe & Müller Hal. [Mahler 1985]
Andreaea rupestris sensu Mahler (1985)

Family ANOMODONTACEAE

Anomodon

atenuatus (Hedwig) Hübener [Bartram 1931; Mahler 1978]
minor (Hedwig) Fürnrohr [Ireland et al. 1984]
rostratus (Hedwig) Schimper [Bartram 1931; Mahler 1978]

Family AULACOMNIACEAE

Aulacomnium

palustre (Hedwig) Schwägrichen [Bartram 1931; Mahler 1978]
Aulacomnium palustre (Hedwig) Schwägrichen var. *imbricatum*
Bruch & Schimper
palustre (Hedwig) Schwägrichen var. *imbricatum* Bruch & Schimper =
Aulacomnium palustre (Hedwig) Schwägrichen

Family BARTRAMIACEAE

Anacolia

laevisphaera (Taylor) Flowers [Mahler 1978]
Anacolia subsessilis (Taylor) Brotherus
menziesii (Turner) Paris [Weber et al. 2003]
subsessilis (Taylor) Brotherus = *Anacolia laevisphaera* (Taylor) Flowers

Bartramia

brevifolia Bridel [Allred et al. 1998;]
ithyphylla Bridel [Bartram 1931; Mahler 1978]
potosica Montagne [Allred et al. 1998]
stricta Bridel [Griffin III, D.G. 2014]

Philonotis

capillaris Lindberg [Mahler 1978] Note : According to BFNA28-2014, this species is associated with an oceanic climate; warrants verification.
fontana (Hedwig) Bridel var. **americana** (Dismier) Flowers ex Crum [Flowers 1973]
fontana (Hedwig) Bridel var. **caespitosa** (Juratzka) Schimper [Stark & Castetter 1982]
fontana (Hedwig) Bridel var. **fontana** [Bartram 1931; Mahler 1978]
fontana (Hedwig) Bridel var. **pumila** (Turner) Bridel [Bartram 1931; Mahler 1978]
Philonotis tomentella Molendo
marchica (Hedwig) Bridel [Bartram 1931; Mahler 1978]
tomentella Molendo = *Philonotis fontana* (Hedwig) Bridel var. *pumila* (Turner) Bridel

Family BRACHYTHECIACEAE

Brachytheciastrum

collinum (Schleicher ex Müller Hal.) Ignatov & Huttunen [Bartram 1931; Mahler 1978]
Brachythecium collinum (Schleicher ex Müller Hal.) Schimper
Hypnum collinum Schleicher ex Müller Hal.
fendleri (Sullivant) Ochyra & Żarnowiec [Bartram 1931; Mahler 1978]
Brachythecium fendleri (Sullivant) Jaeger
Brachythecium utahense James
Leskea fendleri Sullivant
velutinum (Hedwig) Ignatov & Huttunen [Bartram 1931; Mahler 1978]
Brachytheciastrum velutinum (Hedwig) Ignatov & Huttunen var.
salicinum (Schimper) Ochyra & Żarnowiec
Brachythecium petrophilum R.S. Williams
Brachythecium suberythrorrhizon Renaud & Cardot

Brachythecium velutinum (Hedwig) Bruch & Schimper
Brachythecium velutinum (Hedwig) Bruch & Schimper var. *venustum*
(De Notaris) Arcangeli
Hypnum velutinum Hedwig
velutinum (Hedwig) Ignatov & Huttunen var. *salicinum* (Schimper) Ochyra
& Żarnowiec = *Brachytheciastrum velutinum* (Hedwig)
Ignatov & Huttunen

Brachythecium

acuminatum (Hedwig) Austin [Bartram 1931; Mahler 1978]
Leskea acuminata Hedwig
albicans (Hedwig) Schimper [Stark & Castetter 1982]
Hypnum albicans Hedwig
collinum (Schleicher ex Müller Hal.) Schimper = *Brachytheciastrum collinum* (Schleicher ex Müller Hal.) Ignatov & Huttunen
digastrum Muller Hal. ex Kindberg = *Brachythecium laetum* (Bridel) Schimper
erythrorrhizon Schimper var. **erythrorrhizon** [Bartram 1931; Mahler 1978]
fendleri (Sullivant) Jaeger = *Brachytheciastrum fendleri* (Sullivant) Ochyra & Żarnowiec
laetum (Bridel) Schimper [Worthington 1996]
Brachythecium digastrum Muller Hal. ex Kindberg
Brachythecium oxycladon (Bridel) Jaeger
Hypnum laetum Bridel
latifolium Kindberg = *Sciuro-hypnum latifolium* (Kindberg) Ignatov & Huttunen
nelsonii Grout = *Sciuro-hypnum latifolium* (Kindberg) Ignatov & Huttunen
oedipodium (Mitten) Jaeger = *Sciuro-hypnum oedipodium* (Mitten) Ignatov & Huttunen
oxycladon (Bridel) Jaeger = *Brachythecium laetum* (Bridel) Schimper in B.S.G.
petrophilum R.S. Williams = *Brachytheciastrum velutinum* (Hedwig) Ignatov & Huttunen
plumosum (Hedwig) Bruch & Schimper = *Sciuro-hypnum plumosum* (Hedwig) Ignatov & Huttunen
populeum (Hedwig) Bruch & Schimper = *Sciuro-hypnum populeum* (Hedwig) Ignatov & Huttunen
rivulare Bruch & Schimper [Bartram 1931; Mahler 1978]
rotaezanum DeNotaris [Allred 2012]
ruderales (Bridel) W.R. Buck [Grout 1926; Mahler 1978]
Brachythecium stereopoma (Spruce ex Mitten) Jaeger
Brachythesium wootonii Grout
Hypnum ruderales Bridel
salebrosus (Weber & Mohr) Bruch & Schimper [Bartram 1931; Lawton 1971; Mahler 1978; 1985]
Hypnum salebrosus Weber & Mohr
stereopoma (Spruce ex Mitten) Jaeger = *Brachythecium ruderales* (Bridel) W.R. Buck
suberythrorrhizon Renaud & Cardot = *Brachytheciastrum velutinum* (Hedwig) Ignatov & Huttunen
utahense James = *Brachythecium fendleri* (Sullivant) Jaeger
velutinum (Hedwig) Bruch & Schimper = *Brachytheciastrum velutinum* (Hedwig) Ignatov & Huttunen
wootonii Grout = *Brachythecium ruderales* (Bridel) W.R. Buck

Eurhynchiastrum

pulchellum (Hedwig) Ignatov & Huttunen var. **pulchellum** [Bartram 1931; Mahler 1978]
Eurhynchium diversifolium Schimper
Eurhynchium pulchellum (Hedwig) Jennings
Hypnum pulchellum Hedwig
Rhynchostegium pulchellum (Hedwig) Robinson
Eurhynchium diversifolium Schimper = *Eurhynchiastrum pulchellum* (Hedwig) Ignatov & Huttunen
hians (Hedwig) Sande Lacouture = *Oxyrrhynchium hians* (Hedwig) Loeske
pulchellum (Hedwig) Jennings = *Eurhynchiastrum pulchellum* (Hedwig) Ignatov & Huttunen
praelongum (Hedwig) Schimper = *Kindbergia praelonga* (Hedwig) Ochyra
Kindbergia praelonga (Hedwig) Ochyra : Reported tentatively by Worthington (1996), but not by BFNA28; awaits verification

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Eurhynchium praelongum (Hedwig) Schimper

Oxyrrhynchium

hians (Hedwig) Loeske [Allred 2012; Conard & Redfearn 1979; Grout 1928-40]

Eurhynchium hians (Hedwig) Sande Lacouture

Platyhypnidium aquaticum (A. Jaeger) M. Fleischer = *Rhynchostegium aquaticum* A. Jaeger

Rhynchostegiella compacta (Müller Hal.) Loeske = *Conardia compacta* (Müller Hal.) Robinson

Rhynchostegium

aquaticum A. Jaeger [Allred et al. 1998]

Platyhypnidium aquaticum (A. Jaeger) M. Fleischer

Rhynchostegium riparioides of American authors

pulchellum (Hedwig) Robinson = *Eurhynchiastrum pulchellum* (Hedwig) Ignatov & Huttunen

riparioides of American authors = *Rhynchostegium aquaticum* A. Jaeger

serrulatum (Hedwig) Jaeger & Sauerbeck [Stark & Castetter 1982]

Hypnum serrulatum Hedwig

Stereocleus serrulatus (Hedwig) Robinson

Sciuro-hypnum

latifolium (Kindberg) Ignatov & Huttunen [Allred et al. 1998]

Brachythecium latifolium Kindberg

Brachythecium nelsonii Grout

oedipodium (Mitten) Ignatov & Huttunen [Allred et al. 1998]

Brachythecium oedipodium (Mitten) Jaeger

plumosum (Hedwig) Ignatov & Huttunen [Mahler 1985]

Brachythecium plumosum (Hedwig) Bruch & Schimper

populeum (Hedwig) Ignatov & Huttunen [Bartram 1931; Mahler 1978]

Brachythecium populeum (Hedwig) Bruch & Schimper

Scleropodium

cespitans (Müller Hal.) Koch : Specimens from NM identified as this have been corrected to *Brachythecium*.

obtusifolium (Mitten) Kindberg [Allred 2012]

Stereocleus serrulatus (Hedwig) Robinson = *Rhynchostegium serrulatum* (Hedwig) Jaeger & Sauerbeck

Family BRUCHIACEAE

Trematodon

longicollis Michaux [Allred 2011]

Family BRYACEAE

Anomobryum

julaceum (Bridel) Schimper [Allred 2012]

Brachymenium

vinosulum Cardot [Spence 2007] = *Plagiobryoides vinosula* (Cardot) J.R. Spence

klotzschii (Schwägrichen) Paris : Reported by Conard & Redfearn (1979) but this species is found in Central and South America.

macrocarpum Cardot [Spence 2014]

systylium (Müller Hal.) Jaeger = *Leptostomopsis systylia* (Müller Hal.) J.R. Spence

Bryum

affine Lindberg & Arnell = *Bryum creberrimum* Taylor
algovicum Sendtner ex Müller Hal. = *Ptychostomum pendulum* Hornschuch
andicola Hooker = *Rosulabryum andicola* (Hooker) Ochyra

argenteum Hedwig var. *argenteum* [Bartram 1931; Mahler 1978]

argenteum Hedwig var. *muticum* Bridel [Spence 2014]

bicolor Dickson = *Bryum dichotomum* Hedwig

billarderi Schwägrichen = *Rosulabryum andicola* (Hooker) Ochyra

bolanderi Sullivant = *Pohlia bolanderi* (Sullivant) Brotherus

caespiticium Hedwig = *Gemmabryum caespiticium* (Hedwig) J.R. Spence

capillare Hedwig = *Rosulabryum capillare* (Hedwig) J.R. Spence

creberrimum Taylor = *Ptychostomum creberrimum* (Taylor) J.R. Spence & H.P. Ramsay

cyclophyllum (Schwägrichen) Bruch & Schimper = *Ptychostomum cyclophyllum* (Schwägrichen) J.R. Spence

demaretianum Arts = *Gemmabryum demaretianum* (Arts) J.R. Spence

dichotomum Hedwig = *Gemmabryum dichotomum* (Hedwig) Spence &

Ramsay

drummondii Müller Hal. = *Pohlia drummondii* (Müller Hal.) Andrews
exile Dozy & Molkenboer = *Gemmabryum exile* (Dozy & Molkenboer) J.R. Spence & H.P. Ramsay

gempiparum De Notaris = *Imbribryum gempiparum* (De Notaris) J.R. Spence

incrassatolimbatum Cardot = *Plagiobryoides incrassatolimbatum* (Cardot) J.R. Spence

kunzei Hornschuch = *Gemmabryum kunzei* (Hornschuch) J.R. Spence

laevifilum Syed = *Rosulabryum laevifilum* (Syed) Ochyra

lanatum (P. Beauvois) Bridel [Allred 2011]

lisae De Notaris var. *cuspidatum* (Bruch ex Schimper) Margadant = *Ptychostomum creberrimum* (Taylor) J.R. Spence & H.P. Ramsay

lonchocaulon Müller Hal. = *Ptychostomum lonchocaulon* (Müller Hal.) J.R. Spence

miniaturum Lesquereux = *Imbribryum miniaturum* (Lesquereux) J.R. Spence

muehlenbeckii Bruch & Schimper = *Imbribryum muehlenbeckii* (Bruch & Schimper) Pedersen

pallens (Bridel) Swartz = *Ptychostomum pallens* (Bridel) J.R. Spence

pallescens Schleicher ex Schwägrichen = *Ptychostomum pallescens* (Schleicher ex Schwägrichen) J.R. Spence

pendulum (Hornschuch) Schimper = *Ptychostomum pendulum* Hornschuch

pseudotriquetrum (Hedwig) Gaertner et al. = *Ptychostomum pseudotriquetrum* (Hedwig) J.R. Spence

pyriferum Crundwell & Whitehouse = *Bryum valparaisense* Thériot

systylium Müller Hal. = *Leptostomopsis systylia* (Müller Hal.) J.R. Spence

tortifolium Funck in Bridel = *Bryum cyclophyllum* (Schwägrichen) Bruch & Schimper

turbinatum (Hedwig) Turner = *Ptychostomum turbinatum* (Hedwig) J.R. Spence

uliginosum (Bridel) Bruch & Schimper = *Ptychostomum cernuum* Hornschuch

valparaisense Thériot = *Gemmabryum valparaisense* (Thériot) J.R. Spence

Gemmabryum

caespiticium (Hedwig) J.R. Spence [Allred et al. 1998]

Bryum caespiticium Hedwig

demaretianum (Arts) J.R. Spence [Spence 2014]

Bryum demaretianum Arts

dichotomum (Hedwig) Spence & Ramsay [Allred et al. 1998]

Bryum bicolor Dickson

Bryum dichotomum Hedwig

exile (Dozy & Molkenboer) J.R. Spence & H.P. Ramsay [Spence 2014]

Bryum exile Dozy & Molkenboer

kunzei (Hornschuch) J.R. Spence [Spence 2014]

Bryum kunzei Hornschuch

valparaisense (Thériot) J.R. Spence [Ireland et al. 1981, 1984]

Bryum pyriferum Crundwell & Whitehouse

Bryum valparaisense Thériot

Imbribryum

gempiparum (De Notaris) J.R. Spence [Ireland et al. 1981]

Bryum gempiparum De Notaris

miniaturum (Lesquereux) J.R. Spence [Stark & Castetter 1982]

Bryum miniaturum Lesquereux

muehlenbeckii (Bruch & Schimper) Pedersen [Ireland et al. 1981]

Bryum muehlenbeckii Bruch & Schimper

Leptobryum : go to Meesiaceae

Leptostomopsis

systylia (Müller Hal.) J.R. Spence [Mahler 1978]

Brachymenium systylium (Müller Hal.) Jaeger

Bryum systylium Müller Hal.

Plagiobryoides

incrassatolimbatum (Cardot) J.R. Spence [Darigo & Allred 2001]

Bryum incrassatolimbatum Cardot

vinosula (Cardot) J.R. Spence [Spence 2007]

Brachymenium vinosula Cardo

Pohlia : go to Mielichhoferiaceae

(Continued on page 6)



(Continued from page 5)

Ptychostomum

- cernuum** Hornschuch [Mahler 1978]
Bryum uliginosum (Bridel) Bruch & Schimper
- creberrimum** (Taylor) J.R. Spence & H.P. Ramsay [Bartram 1931; Mahler 1978]
Bryum affine Lindberg & Arnell
Bryum creberrimum Taylor
Bryum lisae De Notaris var. *cuspidatum* (Bruch ex Schimper) Margadant
- cyclophyllum** (Schwägrichen) J.R. Spence [Stark & Castetter 1982]
Bryum cyclophyllum (Schwägrichen) Bruch & Schimper
Bryum tortifolium Funck in Bridel
- lonchocaulon** (Müller Hal.) J.R. Spence [Mahler 1978]
Bryum lonchocaulon Müller Hal.
- pallens** (Bridel) J.R. Spence [Allred et al. 1998]
Bryum pallens (Bridel) Swartz
- pallescens** (Schleicher ex Schwägrichen) J.R. Spence [Allred et al. 1998]
Bryum pallescens Schleicher ex Schwägrichen
- pendulum** Hornschuch [Bartram 1931; Mahler 1978]
Bryum pendulum (Hornschuch) Schimper
Bryum algovicum Sendtner ex Müller Hal.
- pseudotriquetrum** (Hedwig) J.R. Spence [Bartram 1931; Mahler 1978]
Bryum pseudotriquetrum (Hedwig) Gaertner et al.
- turbinatum** (Hedwig) J.R. Spence [Bartram 1931; Mahler 1978]
Bryum turbinatum (Hedwig) Turner

Rhodobryum

- ontariense** (Kindberg) Kindberg [Mahler 1985]
roseum (Hedwig) Limpricht : Reported by Stark & Castetter (1986), but identification corrected to *Rhodobryum ontariense* (Kindberg) Kindberg

Rosulabryum

- andicola** (Hooker) Ochyra [Mohamed 1979]
Bryum billarderi Schwägrichen
- capillare** (Hedwig) J.R. Spence [Bartram 1931; Mahler 1978]
Bryum capillare Hedwig
- laevifilum** (Syed) Ochyra [Allred 2011]
Bryum laevifilum Syed

Webera nutans Hedwig = *Pohlia nutans* (Hedwig) Lindberg

Family BRYOXIPHIACEAE

Bryoxiphium

- norvegicum** (Bridel) Mitten [Allred et al. 1998]

Family CALLIERGONACEAE

Straminergon

- stramineum** (Bridel) Hedenäs [Flowers 1973]
Calliergon stramineum (Bridel) Kindberg

Warnstorfia

- exannulata** (Hedwig) Loeske [Romig & Allred 2013]
- fluitans** (Hedwig) Loeske [Price 2011]
Drepanocladus fluitans (Hedwig) Warnstorf
Hypnum fluitans Hedwig

Family CLIMACIACEAE

Climacium

- americanum** Bridel [Mahler 1985]
- dendroides** (Hedwig) Weber & Mohr [Bartram 1931; Mahler 1978]

Family DICRANACEAE

Brothera

- leana** (Sullivant) Muller Hal. [Kleinman et al. 2011]

Dichodontium

- pellucidum** (Hedwig) Schimper [Allred et al. 1998]

Dicranella

- varia** (Hedwig) Schimper [Ireland et al. 1981]

Dicranoweisia

- cirrata** (Hedwig) Lindberg ex Milde [Mahler 1978]
- crispula** (Hedwig) Lindberg ex Milde [Bartram 1931; Mahler 1978]

Dicranum

- acutifolium** (Lindberg & Arnell) Jensen [Ireland 2007]
- brevifolium** (Lindberg) Lindberg [Ireland 2007]
- fuscescens** Turner var. **fuscescens** [Allred et al. 1998]
- montanum** Hedwig [Bartram 1931; Mahler 1978]
- muehlenbeckii** Bruch & Schimper [Bartram 1931; Mahler 1978]
- rhabdocarpum** Sullivant [Bartram 1931; Mahler 1978]
- scoparium** Hedwig [Allred et al. 1998]
- tauricum** Sapjegin [Romig & Allred 2013]

Oncophorus

- virens** (Hedwig) Bridel [Bartram 1931; Mahler 1978]
- wahlenbergii** Bridel [Allred et al. 1998]

Paraleucobryum

- nerve** (Thedenius) Loeske [Bartram 1931; Mahler 1978]
- longifolium** (Hedwig) Loeske [Bartram 1931; Mahler 1978]

Rhabdoweisia

- crispata** (Dickson ex Withering) Lindberg [Allred 2011]

Symblepharis

- helicophylla** Montagne = *Symblepharis vaginata* (Hooker) Wijk & Margadant
- vaginata** (Hooker) Wijk & Margadant [Ireland et al. 1984; Mahler 1978]
Symblepharis helicophylla Montagne

Family DITRICHACEAE

Ceratodon

- purpureus** (Hedwig) Bridel subsp. **purpureus** [Bartram 1931; Mahler 1978]
- purpureus** (Hedwig) Bridel subsp. **stenocarpus** (Bruch & Schimper) Dixon [Darigo & Allred 2001]
stenocarpus Bruch & Schimper = *Ceratodon purpureus* (Hedwig) Bridel subsp. *stenocarpus* (Bruch & Schimper) Dixon

Distichium

- capillaceum** (Hedwig) Bruch & Schimper [Bartram 1931; Mahler 1978]
- inclinatatum** (Hedwig) Bruch & Schimper [Allred 2012]

Ditrichum

- flexicaule** (Schwägrichen) Hampe [Allred et al. 1998]
- gracile** (Mitten) Kuntze [Allred 2011]

Saelania

- glaucescens** (Hedwig) Brotherus [Bartram 1931; Mahler 1978]
Didymodon trifarius (Hedwig) Rohling

Family ENCALYPTACEAE

Encalypta

- ciliata** Hedwig [Bartram 1931; Mahler 1978]
- rhaptocharpa** Schwägrichen [Conard & Redfearn 1979]
- vulgaris** Hedwig [Chamberlain 1925; Bartram 1931]

Family ENTODONTACEAE

Entodon

- beyrichii** Schwägrichen [Buck 2014]
- cladorrhizans (Hedwig) Müller Hal. : Reported by Mahler (1978), but identification corrected to *Entodon schleicheri* (Schimper) Demeter [Darigo & Allred 2001]
- concinus** (De Notaris) Paris [Bartram 1931; Mahler 1978]
Entodon orthocarpus (Bridel) Lindberg
- orthocarpus** (Bridel) Lindberg = *Entodon concinns* (De Notaris) Paris
- schleicheri** (Schimper) Demeter [Buck & Crum 1978]
- seductrix** (Hedwig) Muller Hal. [Blisard & Kleinman 2012]
- sullivantii** (Müller Hal.) Lindberg [Crum & Anderson 1981]

Family FABRONIACEAE

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(Continued from page 6)

Fabronia

- ciliaris* (Bridel) Bridel [Bartram 1931; Mahler 1978]
Fabronia ciliaris (Bridel) Bridel var. *wrightii* (Sullivant) Buck
Fabronia gymnostoma Sullivant & Lesquereux ex Sullivant
Fabronia octoblepharis (Schleicher) Schwägrichen
Fabronia wrightii Sullivant
ciliaris (Bridel) Bridel var. *wrightii* (Sullivant) Buck = *Fabronia ciliaris* (Bridel) Bridel
gymnostoma Sullivant & Lesquereux ex Sullivant = *Fabronia ciliaris* (Bridel) Bridel
octoblepharis (Schleicher) Schwägrichen = *Fabronia ciliaris* (Bridel) Bridel
pusilla Raddi [Mahler 1978]
wrightii Sullivant = *Fabronia ciliaris* (Bridel) Bridel

Family FISSIDENTACEAE

Fissidens

- bryoides* Hedwig [Grout 1928-1940; Mahler 1978; Stark & Castetter 1982]
Fissidens bryoides Hedwig var. *pusillus* (Wilson) Pursell
Fissidens bryoides Hedwig var. *viridulus* (Swartz) Brotherus
Fissidens exiguus Sullivant forma *emarginatus* Grout
Fissidens viridulus (Swartz) Wahlenberg
bryoides Hedwig var. *pusillus* (Wilson) Pursell = *Fissidens bryoides* Hedwig
bryoides Hedwig var. *viridulus* (Swartz) Brotherus = *Fissidens bryoides* Hedwig
crispus Montagne [Darigo & Allred 2001; Mahler 1978]
exiguus Sullivant forma *emarginatus* Grout = *Fissidens bryoides* Hedwig var. *bryoides*
fontanus (B.-Pyl.) Steudel [Weber 1973]
limbatus Sullivant : Reported by Mahler (1978), but our material is referred to *Fissidens crispus* Montagne [Darigo & Allred 2001]
littlei (Williams) Grout [Allred 1998; Williams 1936]
Moenkemeyera littlei Williams
obtusifolius Wilson var. *acuminatus* Grout [Eckel 1986]
obtusifolius Wilson var. *apiculatus* Grout : Reported by Stark & Castetter (1982), but identification corrected to *Fissidens sublimbatus* Grout by Ron Pursell. [Darigo & Allred 2001]
sublimbatus Grout [Pursell 2007]
viridulus (Swartz) Wahlenberg = *Fissidens bryoides* Hedwig
Moenkemeyera littlei Williams = *Fissidens littlei* (Williams) Grout

Family FONTINALACEAE

Fontinalis

- antipyretica* Hedwig [Mahler 1978; Welch 1963]
hypnoides Hartman [Allred et al. 1998]
neomexicana Sullivant & Lesquereux [Bartram 1931; Mahler 1978; Sullivant & Lesquereux 1856]

Family FUNARIACEAE

Entosthodon

- attenuatus* (Dickson) Bryhn [Miller & Miller 2007]
rubiginosus (Williams) Grout [Ireland et al. 1984]

Funaria

- apiculatopilosa* Cardot [Worthington 1996]
Funaria orcuttii Bartram
calvescens Schwägrichen = *Funaria hygrometrica* Hedwig var. *calvescens* (Schwägrichen) Montagne
flavicans Michaux [Miller & Miller 2007]
hygrometrica Hedwig var. *calvescens* (Schwägrichen) Montagne [Darigo & Allred 2001]
Funaria calvescens Schwägrichen
hygrometrica Hedwig var. *hygrometrica* [Bartram 1931; Mahler 1978]
Funaria hygrometrica Hedwig var. *utahensis* Grout
hygrometrica Hedwig var. *utahensis* Grout = *Funaria hygrometrica*
muhlenbergii Turner [Stark & Castetter 1982]
orcuttii Bartram = *Funaria apiculatopilosa* Cardot

Physcomitrium

pyriforme (Hedwig) Hampe [Ireland et al. 1984]

Pyramidula

tetragona (Bridel) Bridel [Goffinet 2007]

Family GIGASPERMACEAE

Lorentziella

imbricata (Mitten) Brotherus [Allred et al. 1998]

Family GRIMMIACEAE

Coscinodon

- calyptratus* (Hooker) C. Jensen ex Kindberg [Bartram 1931; Hastings 1999; Mahler 1978]
Grimmia calyptrata Hooker
cribrosus (Hedwig) Spruce [Hastings 1999; Ireland et al. 1984]
Grimmia cribrosa Hedwig
wrightii Sullivant in Gray = *Jaffueliobryum wrightii* (Sullivant in Gray) Thériot

Grimmia

- affinis* Hoppe & Hornschuch ex Hornschuch = *Grimmia longirostris* Hooker
alpestris (Weber & Mohr) Schleicher [Hastings & Greven 2007]
Grimmia ungeri of New Mexico reports
alpicola of American authors = *Schistidium agassizii* Sullivant & Lesquereux
alpicola Swartz ex Hedwig var. *rivularis* = *Schistidium rivulare* (Bridel) Podpera var. *rivulare*
ambigua (Sullivant) Sullivant = *Schistidium ambiguum* Sullivant
americana Bartram [Allred 2011]
anodon Bruch & Schimper [Bartram 1931; Mahler 1978]
apocarpa Hedwig var. *ambigua* (Sullivant) G. Jones in Grout = *Schistidium ambiguum* Sullivant
apocarpa Hedwig var. *apocarpa* = *Schistidium apocarpum* (Hedwig) Bruch & Schimper
apocarpa Hedwig var. *conferta* (Funck) Sprengel = *Schistidium confertum* (Funck) Bruch & Schimper
apocarpa Hedwig var. *stricta* = *Schistidium apocarpum* (Hedwig) Bruch & Schimper
arizonae Renault & Cardot [Hastings & Greven 2007; Weber et al. 2003]
bernoullii Mueller Hal. : Reported by Weber et al. (2003), but duplicate specimens were considered to be *Grimmia ovalis* (Hedwig) Lindberg (Hastings & Greven 2007); awaits verification.
calyptrata Hooker = *Coscinodon calyptratus* (Hooker) C. Jensen ex Kindberg
catalinensis Bartram = *Grimmia longirostris* Hooker
converta Funck var. *obtusifolia* Schimper = *Schistidium apocarpum* (Hedwig) Bruch & Schimper
cribrosa Hedwig = *Coscinodon cribrosus* (Hedwig) Spruce
crinitoleucophaea Cardot [Hastings & Greven 2007]
Grimmia poecilostoma Cardot & Sebille
elator Bruch ex Balsamo-Crivelli & De Notaris [Darigo & Allred 2001]
donniana Smith : Reported by Mahler (1978), but material re-identified as *Grimmia longirostris* Hooker [Darigo & Allred 2001]
laevigata (Bridel) Bridel [Mahler 1978]
longirostris Hooker [Darigo & Allred 2001]
Grimmia affinis Hornschuch
Grimmia catalinensis Bartram
montana Bruch & Schimper [Darigo & Allred 2001]
orbicularis Bruch ex Wilson [Mahler 1978]
ovalis (Hedwig) Lindberg [Bartram 1931; Mahler 1978]
pilifera Beauvois [Darigo & Allred 2001]
plagiopodia Hedwig [Mahler 1978]
poecilostoma Cardot & Sebille = *Grimmia crinitoleucophaea* Cardot
pulvinata (Hedwig) Smith [Mahler 1978]
raui Austin = *Jaffueliobryum raii* Thériot
sessitana De Notaris [Hastings & Greven 2007]

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(Continued from page 7)

Grimmia tenerrima Renault & Cardot

tenerrima Renault & Cardot = *Grimmia sessitana* De Notaris

texicana Greven [Greven 2010]

trichophylla Grev. [Worthington 2011]

ungeri of New Mexico reports = *Grimmia alpestris* (Weber & Mohr) Schleicher

wrightii (Sullivant in Gray) Austin = *Jaffueliobryum wrightii* (Sullivant in Gray) Thériot

Jaffueliobryum

raui (Austin) Thériot [Ireland et al. 1981]

Grimmia raui Austin

wrightii (Sullivant in Gray) Thériot [Bartram 1931; Mahler 1978]

Coscinodon wrightii Sullivant in Gray

Grimmia wrightii (Sullivant in Gray) Austin

Schistidium

alpicola of Amer. authors = *Schistidium rivulare* (Bridel) Podpera

ambiguum Sullivant [Sullivant 1849] Note : The type is a Fendler specimen from Santa Fe; essentially ignored by bryologists since its publication; possibly conspecific with *Schistidium confertum* (Funck) Bruch & Schimper.

Grimmia ambigua (Sullivant) Sullivant

Grimmia apocarpa Hedwig var. *ambigua* (Sullivant) G. Jones in Grout

apocarpum (Hedwig) Bruch & Schimper : reported by Bartram (1931) and Mahler (1978), but this species occurs in norther U.S. and Canada (McIntosh 2007); our material is perhaps referred to *Schistidium ambiguum* Sullivant or *Schistidium confertum* (Funck) Bruch & Schimper

Grimmia apocarpa Hedwig

Grimmia apocarpa Hedwig var. *stricta*

Grimmia converta Funck var. *obtusifolia* Schimper

atrofusum (Schimper) Limpricht [McIntosh 2007]

confertum (Funck) Bruch & Schimper : not reported for NM, but material previously referred to *Schistidium apocarpum* (Hedwig) Bruch & Schimper may belong to this species; awaits verification.

Grimmia apocarpa Hedwig var. *conferta* (Funck) Sprengel

dupretii (Thériot) W.A. Weber [Allred 2011]

frigidum H.H. Blom [McIntosh 2007]

rivulare (Bridel) Podpera var. *latifolium* (Zetterstedt) Crum & Anderson = *Schistidium rivulare* (Bridel) Podpera

rivulare (Bridel) Podpera [Bartram 1931; Mahler 1978]

Grimmia alpicola of Amer. authors

Grimmia alpicola Swartz ex Hedwig var. *rivularis* (Bridel) Wahlenberg

Schistidium alpicola of Amer. authors

Schistidium rivulare (Bridel) Podpera var. *latifolium* (Zetterstedt) Crum & Anderson

viride H.H. Blom & Darigo [Allred 2011]

Family HEDWIGIACEAE

Braunia

secunda (Hooker) Bruch, Schimper, & Gumbel [Allred et al. 1998]

Hedwigia

ciliata (Hedwig) P. Beauvois [Bartram 1931; Mahler 1978]

Family HYLOCOMIACEAE

Hylocomium

splendens (Hedwig) Schimper [Bartram 1931; Mahler 1978]

Pleurozium

schreberi (Bridel) Mitten [Mahler 1985]

Family HYPNACEAE

Breidleria pratensis (Koch ex Spruce) Loeske = *Hypnum pratense* (Rabenh.) Spruce

arcuata (Lindberg) Loeske = *Hypnum lindbergii* Mitten

Calliergonella lindbergii (Mitten) Hedenäs = *Hypnum lindbergii* Mitten

Homomallium

adnatum (Hedwig) Brotherus : Plants previously thought to be *Homomallium adnatum* have all been verified by Bruce Allen (MO) as *Homomallium mexicanum* Cardot

incurvatum (Schrader ex Bridel) Loeske [Allred 2012]

mexicanum Cardot var. *latifolium* Cardot [Bartram 1931; Mahler 1978]

mexicanum Cardot var. *mexicanum* [Bartram 1931; Mahler 1978]

Hypnum

albicans Hedwig = *Brachythecium albicans* (Hedwig) Schimper

collinum Schleicher ex Müller Hal. = *Brachytheciastrum collinum* (Schleicher ex Müller Hal.) Ignatov & Huttunen

cupressiforme Hedwig var. *subjulaceum* Molendo [Bartram 1931; BFNA28; Little 1937]

fluitans Hedwig = *Warnstorfia fluitans* (Hedwig) Loeske

lindbergii Mitten [Bartram 1931; Mahler 1978]

Breidleria arcuata (Lindberg) Loeske

Calliergonella lindbergii (Mitten) Hedenäs

molle (Hedwig) Loeske subsp. *bestii* Renaud & Bryhn = *Hygrohypnum bestii* (Renaud & Bryhn) Holzinger

pallescens (Hedwig) P. Beauvois [Stark & Castetter 1982]

pratense (Rabenh.) Spruce [Allred et al. 1998]

Breidleria pratensis (Koch ex Spruce) Loeske

pulchellum Hedwig = *Eurhynchiastrum pulchellum* (Hedwig) Ignatov & Huttunen

revolutum (Mitten) Lindberg [Bartram 1931; Mahler 1978]

rudérale Bridel = *Brachythecium rudérale* (Bridel) W.R. Buck

salebrosum Weber & Mohr = *Brachythecium salebrosum* (Weber & Mohr) Schimper

serrulatum Hedwig = *Rhynchostegium serrulatum* (Hedwig) Jaeger & Sauerbeck

vaucheri Lesquereux [Ireland et al. 1981]

velutinum = *Brachytheciastrum velutinum* (Hedwig) Ignatov & Huttunen
wahlenbergii F. Weber & Mohr = *Pohlia wahlenbergii* (F. Weber & Mohr) Andrews

Isopterygiopsis

pulchella (Hedwig) Iwatsuki [Allred et al. 1998]

Isopterygium pulchellum (Hedwig) Jaeger

Plagiothecium pulchellum (Hedwig) Schimper

Isopterygium

homomallifolium Redfearn = *Pseudotaxiphyllum homomallifolium* (Redfearn) Ireland

pulchellum (Hedwig) Jaeger = *Isopterygiopsis pulchella* (Hedwig) Iwatsuki

tenerum Mitten [Allred et al. 1998]

Platygyrium

fuscoluteum Cardot [Mahler 1978; Reese 1999]

repens (Bridel) Schimper [Allred 2012]

Pseudotaxiphyllum

homomallifolium (Redfearn) Ireland [Ireland et al. 1984]

Isopterygium homomallifolium Redfearn

Pylaisia

polyantha (Hedwig) Schimper [Bartram 1931; Mahler 1978]

Pylaisiella polyantha (Hedwig) Grout

selwynii (Kindberg) Crum, Steere, & L.E. Anderson [Allred 2011]

Pylaisiella polyantha (Hedwig) Grout = *Pylaisia polyantha* (Hedwig) Schimper

Taxiphyllum

deplanatum (Bruch & Schimper ex Sullivant) Fleischer [Bartram 1931; Mahler 1978]

taxirameum (Mitten) Fleischer [Mahler 1978]

Family LESKEACEAE

Bryohaplocladium

angustifolium (Hampe & Müller Hal.) Watson & Iwatsuki = *Haplocladium angustifolium* (Hampe & Müller Hal.) Brotherus

microphyllum (Hedwig) Watson & Iwatsuki = *Haplocladium microphyllum* (Hedwig) Brotherus

Claopodium

pellucinerve (Mitten) Best [Mahler 1978]

Haplocladium

(Continued on page 9)



(Continued from page 8)

angustifolium (Hampe & Müller Hal.) Brotherus [Allred et al. 1998]
Bryohaplocladium angustifolium (Hampe & Müller Hal.) Watson & Iwatsuki

microphyllum (Hedwig) Brotherus [Bartram 1931; Mahler 1978; Stark & Castetter 1986]
Bryohaplocladium microphyllum (Hedwig) Watson & Iwatsuki

Leptopterigynandrum

australpinum Müller Hal. [Allred et al. 1998]

Lescuraea

arizonae (Williams) P. Wilson & Norris = *Pseudoleskeella arizonae* (Williams) Lawton

incurvata (Hedwig) Lawton = *Pseudoleskea incurvata* (Hedwig) Loeske

saxicola (Schimper) Milde [Mahler 1985]

Leskea

acuminata Hedwig = *Brachythecium acuminatum* (Hedwig) Austin

angustata Taylor [Worthington 2012]

fendleri Sullivant = *Brachytheciastrum fendleri* (Sullivant) Ochyra & Zarnowiec

Leskeella

nervosa (Bridel) Loeske [Stark & Castetter 1986]

Pseudoleskeella nervosa (Bridel) Nyholm

nervosa (Bridel) Loeske var. **sibirica** (Arnell) Brotherus = *Pseudoleskeella rupestris* (Berggren) Hedenas & Soderstrom

williamsii Best = *Pseudoleskeella tectorum* (Funck ex Bridel) Kindberg

Lindbergia

brachyptera (Mitten) Kindberg [Bartram 1931; Mahler 1978]

mexicana (Bescherele) Cardot ex Pringle [Bartram 1949]

Pseudoleskea

incurvata (Hedwig) Loeske [Mahler 1985]

Lescuraea incurvata (Hedwig) Lawton

radicosa (Mitten) Macoun & Kindberg var. **radicosa** [Worthington 1996]

Pseudoleskeella

arizonae (Williams) Lawton [Bartram 1931; Mahler 1978]

Lescuraea arizonae (Williams) P. Wilson & Norris

nervosa (Bridel) Nyholm = *Leskeella nervosa* (Bridel) Loeske var. **nervosa**

rupestris (Berggren) Hedenas & Soderstrom [Allred 2011]

Leskeella nervosa (Bridel) Loeske var. **sibirica** (Arnell) Brotherus

Pseudoleskeella sibirica (Arnell) P. Wilson & Norris

sibirica (Arnell) P. Wilson & Norris = *Pseudoleskeella rupestris* (Berggren) Hedenas & Soderstrom

tectorum var. **flagellifera** (Best) Amann = *Pseudoleskeella tectorum* (Funck ex Bridel) Kindberg

tectorum (Funck ex Bridel) Kindberg [Bartram 1931; Mahler 1978]

Leskeella williamsii Best

Pseudoleskeella tectorum var. **flagellifera** (Best) Amann

Family MEESIACEAE

Leptobryum

pyriforme (Hedwig) Wilson [Bartram 1931; Mahler 1978]

Family MIELICHHOFERIACEAE

Pohlia

bolanderi (Sullivant) Brotherus [Shaw, A.J. 2014]

Bryum bolanderi Sullivant

cruda (Hedwig) Lindberg [Bartram 1931; Mahler 1978]

Mnium crudum Hedwig

drummondii (Müller Hal.) Andrews [Stark & Castetter 1982]

Bryum drummondii Müller Hal.

elongata Hedwig [Allred et al. 1998]

nutans (Hedwig) Lindberg [Bartram 1931; Mahler 1978]

Webera nutans Hedwig

obtusifolia (Bridel) Koch [Worthington 2012]

tundrae A.J. Shaw [Allred 2012]

wahlenbergii (F. Weber & Mohr) Andrews [Ireland et al. 1981]

Hypnum wahlenbergii F. Weber & Mohr

Family MNIACEAE

Mnium

affine Bland. ex Funck var. **rugicum** (Laur.) Bruch & Schimper = *Plagiomnium ellipticum* (Bridel) T. Koponen

arizonicum Amann [Bartram 1931; Mahler 1978]

blyttii Bruch & Schimper [Bartram 1931; Mahler 1978]

crudum Hedwig = *Pohlia cruda* (Hedwig) Lindberg

marginatum (Dickson ex Withering) Bridel ex P. Beauvois [Bartram 1931; Mahler 1978]

thomsonii Schimper [Bartram 1931; Mahler 1978]

Plagiomnium

ciliare (Müller Hal.) Koponen [Allred 2012]

cuspidatum (Hedwig) Koponen [Bartram 1931; Mahler 1978]

ellipticum (Bridel) Koponen [Allred et al. 1998]

Mnium affine Bland. ex Funck var. **rugicum** (Laur.) Bruch & Schimper

medium (Bruch & Schimper) Koponen [Allred 2012]

rostratum (Schrader) Koponen [Bartram 1931; Mahler 1978]

Pohlia : go to Mielichhoferiaceae

Rhizomnium

magnifolium (Horik.) T. Koponen [Crum & Anderson 1981, as *Mnium punctatum*]

pseudopunctatum (Bruch & Schimper) Koponen [Mahler 1985]

punctatum (Hedwig) T. Koponen [Allred et al. 1998]

Family NECKERACEAE

Metaneckera menziesii (Drummond) Steere = *Neckera menziesii* Drummond

Neckera

menziesii Drummond [Cardot 1910; Mahler 1978]

Metaneckera menziesii (Drummond) Steere

Porotrichum neomexicanum (Cardot) Wagner

pennata Hedwig [Bartram 1931; Mahler 1978]

Neckera pennata Hedwig var. **tenera** Müller Hal.

pennata Hedwig var. **tenera** Müller Hal. = *Neckera pennata* Hedwig

Porotrichum neomexicanum (Cardot) Wagner = *Neckera menziesii* Drummond

Family ORTHOTRICHACEAE

Orthotrichum

alpestre Hornschuch ex Bruch & Schimper [Mahler 1978]

anomalum Hedwig [Bartram 1931; Mahler 1978]

cupulatum Bridel [Worthington 2012]

diaphanum Bridel [Mahler 1978]

hallii Sullivant & Lesquereux in Sullivant [Bartram 1931; Mahler 1978]

laevigatum Zetterstedt [Allred et al. 1998]

obtusifolium Bridel [Mahler 1978]

pallens Bridel [Romig & Allred 2013]

pellucidum Lindberg [Worthington 2012]

pumilum Swartz [Mahler 1978]

pycnophyllum Schimper [Vitt 1973]

rupestre Schleicher ex Schwägrichen [Bartram 1931; Mahler 1978]

tenellum Bruch ex Bridel : Reported by Mahler (1978), but this species occurs in the West Coast states and Nevada, and is not likely in NM; our material most likely referred to *Orthotrichum pumilum* Swartz.

Zygodon

viridissimus (Dickson) Bridel var. **rupestris** Lindberg ex Hartman [Bartram 1931; Mahler 1978]

Zygodon viridissimus (Dickson) Bridel var. **vulgaris** Malta

viridissimus (Dickson) Bridel var. **vulgaris** Malta = *Zygodon viridissimus* (Dickson) Bridel var. **rupestris** Lindberg ex Hartman

Family PLAGIOTHECIACEAE

Plagiothecium

denticulatum (Hedwig) Schimper [Ireland et al. 1981]

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laetum Schimper [Mahler 1978]
pulchellum (Hedwig) Schimper = *Isoterygiopsis pulchella* (Hedwig) Iwatsuki

Family POLYTRICHACEAE

Atrichum

rupestris Hedwig : Reported by Mahler (1985), but not included in North America by Smith-Merrill (2007); awaits verification.
selwynii Austin [Mahler 1985; Smith-Merrill 2007]
tenellum (Röhling) Bruch & Schimper [Romig & Allred 2013]
undulatum (Hedwig) P. Beauvois : Reported by Bartram (1931) and Mahler (1978), but scarcely in North America fide Smith-Merrill (2007); specimens await correct determination.

Meiotrichum

lyallii (Mitten) G.L. Smith [Conard & Redfearn 1979; Smith-Merrill 2007]
Polytrichum lyallii (Mitten) Kindberg
Pogonatum alpinum (Hedwig) Rhl. = *Polytrichastrum alpinum* (Hedwig) G.L. Smith

Polytrichastrum

alpinum (Hedwig) G.L. Smith var. **alpinum** [Bartram 1931; Mahler 1985]
Pogonatum alpinum (Hedwig) Rhl.
ohioense (Renaud & Cardot) G.L. Smith [Smith-Merrill 2007]
sexangulare (Bridel) G.L. Smith [Mahler 1978]
Polytrichum sexangulare Bridel

Polytrichum

juniperinum Hedwig [Bartram 1931; Mahler 1978]
lyallii (Mitten) Kindberg = *Meiotrichum lyallii* (Mitten) G.L. Smith
piliferum Hedwig [Mahler 1985; Smith-Merrill 2007]
sexangulare Bridel = *Polytrichastrum sexangulare* (Bridel) G.L. Smith

Family POTTIACEAE

Aloina

rigida (Hedwig) Limpricht var. **rigida** [Delgadillo-M. 2007; Mahler 1978]
Anoetangium obtusifolium (Brotherus & Paris in Cardot) Grout = *Molendoa sendtneriana* (Bruch & Schimper) Limpricht
Astomum phascoides (Drumm.) Grout = *Weissia phascopsis* Zander

Barbula

acuta (Bridel) Bridel = *Didymodon rigidulus* Hedwig var. **gracilis** (Schleicher ex Hooker & Greville) Zander
acuta (Bridel) Bridel var. **bescherellei** (Sauerbeck ex Jaeger) Crum = *Didymodon rigidulus* Hedwig var. **gracilis** (Schleicher ex Hooker & Greville) Zander
bescherellei Sauerbeck = *Didymodon rigidulus* Hedwig var. **gracilis** (Schleicher ex Hooker & Greville) Zander
bolleana (Müller Hal.) Brotherus [Eckel 1988; Zander 2007]
Barbula ehrenbergii (Lorentz) Fleischer
convoluta Hedwig var. **convoluta** [Zander 2007]
ehrenbergii (Lorentz) Fleischer = *Barbula bolleana* (Müller Hal.) Brotherus
gracilis Schwägrichen = *Didymodon rigidulus* Hedwig var. **gracilis** (Schleicher ex Hooker & Greville) Zander
indica (Hooker) Sprengel var. **indica** [Zander 2007]
reflexa (Bridel) Bridel = *Didymodon ferrugineus* (Schimper ex Bescherele) M.O. Hill
sinensis Müller Hal. = *Syntrichia sinensis* (Müller Hal.) Ochyra
spiralis (Schimper) ex Müller Hal. = *Pseudocrossidium replicatum* (Taylor) Zander
unguiculata Hedwig [Bartram 1931; Mahler 1978]

Bryoerythrophyllum

recurvirostrum (Hedwig) Chen [Bartram 1931; Mahler 1978]
Bryoerythrophyllum recurvirostrum (Hedwig) Chen var. **dentatum** (Schimper) Crum et al.
Didymodon recurvirostrum (Hedwig) Jennings
Weissia recurvirostra Hedwig
recurvirostrum (Hedwig) Chen var. **dentatum** (Schimper) Crum et al. = *Bryoerythrophyllum recurvirostrum* (Hedwig) Chen

Chenia

leptophylla (Müller Hal.) Zander [Ireland et al. 1984]

Chenia rhizophylla Sakurai) Zander
Tortula rhizophylla (Sakurai) Iwatsuki & Saito

Crossidium

aberrans Holzinger & Bartram [Ireland et al. 1981]
crassinervium (De Notaris) Juratzka var. **crassinervium** [Stark & Castetter 1986]
seriatum Crum & Steere [Delgadillo-M. 1996]

Crumia

latifolia (Kindberg) W.B. Schofield [Kleinman 2012]
Desmatodon cernuus (Hübner) Bruch & Schimper = *Tortula cernua* (Hübner) Lindberg
convolutus (Bridel) Grout = *Tortula atrovirens* (J.E. Smith) Lindberg
guepinii Bruch & Schimper = *Tortula guepinii* (Bruch & Schimper) Brotherus
heimii (Hedwig) Mitten = *Hennediella heimii* (Hedwig) Zander
latifolius (Hedwig) Bridel = *Tortula euryphylla* Zander
latifolius (Hedwig) Bridel var. **muticus** (Bridel) Bridel = *Tortula hoppeana* (Schultz) Ochyra
obtusifolius (Schwägrichen) Schimper = *Tortula obtusifolia* (Schwägrichen) Mathey
plinthobius Sull & Lesquereux = *Tortula plinthobia* (Sullivant & Lesquereux) Austin

Didymodon

anserinocapitatus (X.-j. Li) Zander [Zander & Weber 1997]
acutus (Bridel) Saito = *Didymodon rigidulus* Hedwig
australasiae (Greville & Hooker) Zander [Stark & Castetter 1986; Ireland et al. 1984]

Husnotiella torquescens (Cardot) Bartram

Trichostomopsis australasiae (Greville & Hooker) Robinson
australasiae (Hooker & Greville) Zander var. **umbrosus** (Müller Hal.) Zander = *Didymodon umbrosus* (Müller Hal.) Zander

brachyphyllus (Sullivant) Zander [Zander & Ochyra 2001]

Didymodon luridus of NM reports

fallax (Hedwig) Zander [Zander 2007]

fallax (Hedwig) Zander var. **reflexus** (Bridel) Zander = *Didymodon ferrugineus* (Schimper ex Bescherele) M.O. Hill

ferrugineus (Schimper ex Bescherele) M.O. Hill [Bartram 1931; Mahler 1978]

Barbula reflexa (Bridel) Bridel

Didymodon fallax (Hedwig) Zander var. **reflexus** (Bridel) Zander
luridus of NM reports = *Didymodon brachyphyllus* (Sullivant) Zander

nevadensis Zander [Zander 2007]

recurvirostrum (Hedwig) Jennings = *Bryoerythrophyllum recurvirostrum* (Hedwig) Chen

revolutus (Cardot) Williams [Stark & Castetter 1982]

rigidulus Hedwig var. **gracilis** (Schleicher ex Hooker & Greville) Zander [Bartram 1931; Mahler 1978; Stark & Castetter 1986]

Barbula acuta Bridel

Barbula acuta (Bridel) Bridel var. **bescherellei** (Sauerbeck ex Jaeger) Crum

Barbula beschereleii Sauerbeck

Didymodon acutus (Bridel) Saito

rigidulus Hedwig var. **icmadophilus** (Müller Hal.) Zander [Allred et al. 1998]

rigidulus Hedwig var. **rigidulus** [Bartram 1931]

tectorum (Müller Hal.) Saito [Zander & Ochyra 2001]

tophaceus (Bridel) Lisa [Bartram 1931; Mahler 1978]

trifarius (Hedwig) Rhl. = *Saelania glaucescens* (Hedwig) Brotherus (Ditrichaceae)

umbrosus (Müller Hal.) Zander [Zander 2007]

Didymodon australasiae (Hooker & Greville) R.H. Zander var.

umbrosus (Müller Hal.) R.H. Zander

vinealis (Bridel) Zander var. **luridus** of NM reports = *Didymodon brachyphyllus* (Sullivant) Zander

vinealis (Bridel) Zander var. **vinealis** [Stark & Castetter 1982]

Eucladium

verticillatum (Bridel) Bruch & Schimper [Bartram 1931; Mahler 1978]
Weissia verticillata Bridel

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Gymnostomum

- aeruginosum** Smith [Bartram 1931; Mahler 1978]
Gymnostomum calcareum of NM reports
calcareum of NM reports = *Gymnostomum aeruginosum* Smith

Hennediella

- heimii** (Hedwig) Zander var. **heimii** [Bartram 1931; Mahler 1978]
Desmatodon heimii (Hedwig) Mitten
Pottia heimii (Hedwig) Hampe
Husnotiella torquescens (Cardot) Bartram = *Didymodon australasiae* (Greville & Hooker) Zander
Hymenostomum tortile (Schwägrihen) Bruch & Schimper = *Weissia condensata* (Voit) Lindberg

Hymenostylium

- recurvirostrum** (Hedwig) Dixon var. **recurvirostrum** [Bartram 1931; Mahler 1978]
Gymnostomum recurvirostrum Hedwig

Leptodontium

- flexifolium** (Withering) Hampe in Lindberg [Mahler 1978]

Microbryum

- davallianum** (Smith) R.H. Zander var. **conicum** (Schwägrihen) R. H. Zander [Reported tentatively by Worthington 1996]
Pottia texana Wareham
starkeanum (Hedwig) R.H. Zander var. **fosbergii** (Bartr.) Zander [Allred 2011]
starkeanum (Hedwig) R.H. Zander var. **starkeanum** [Ireland et al. 1981]
Pottia arizonica Wareham var. *mucronulata* Wareham

Molendoa

- sendtneriana** (Bruch & Schimper) Limpricht [Ireland et al. 1981; Stark & Castetter 1982]
Anoetangium obtusifolium (Brotherus & Paris in Cardot) Grout
Neocardotia subnigra (Mitten) Thériot & Bartram = *Rhexophyllum subnigrum* (Mitten) Thériot ex Hilpert
Oxystegus tenuirostris (Hooker & Taylor) A.J.E. Smith = *Trichostomum tenuirostre* (Hooker & Taylor) Lindberg
Phascum cuspidatum Hedwig = *Tortula acaulon* (Withering) Zander

Pleurochaete

- luteola** (Bescherelle) Thériot [Mahler 1978]
Pleurochaete squarrosa of New World reports
squarrosa of New World reports = *Pleurochaete luteola* (Bescherelle) Thériot
Pottia arizonica Wareham var. *mucronulata* Wareham = *Microbryum starkeanum* (Hedw.) R. H. Zander [Ireland et al. 1981]
bryoides (Dickson) Mitten = *Tortula protobryoides* R.H. Zander
heimii (Hedwig) Hampe = *Hennediella heimii* (Hedwig) Zander
nevadensis Cardot & Thériot = *Tortula nevadensis* (Cardot & Thériot) R.H. Zander
texana Wareham = *Microbryum davallianum* (Smith) R.H. Zander var. *conicum* (Schwägrihen) R. H. Zander [Reported tentatively by Worthington 1996]

Pseudocrossidium

- crinitum** (Schultz) Zander [Mahler 1978]
Pseudocrossidium aureum (Bartram) Zander
Tortula aurea Bartram
aureum (Bartram) Zander = *Pseudocrossidium crinitum* (Schultz) Zander
obtusulum (Lindberg) Crum [Zander 2007]
replicatum (Taylor) Zander [Mahler 1978, as *Barbula spiralis*]
Barbula spiralis (Schimper) ex Müller Hal.

Pterygoneurum

- cavifolium** (Ehrh.) Juratzka = *Pterygoneurum ovatum* (Hedwig) Dixon
ovatum (Hedwig) Dixon [Mahler 1978]
Pterygoneurum cavifolium (Ehrh.) Juratzka
subsessile (Bridel) Juratzka var. **subsessile** [Ireland et al. 1981]

Rhexophyllum

- subnigrum** (Mitten) Thériot ex Hilpert [Bartram 1931; Mahler 1978]
Neocardotia subnigra (Mitten) Thériot & Bartram

Stegonia

- latifolia** (Schwägrihen) Venturi ex Brotherus var. **latifolia** [Zander

2007]

Syntrichia

- bartramii** (Steere) Zander [Mahler 1978]
Tortula bartramii Steere in Grout
caninervis Mitten [Flowers 1973, as *Tortula bistratosa* Flowers]
Tortula bistratosa Flowers
Tortula caninervis (Mitten) Brotherus
chisoa (Magill, Delgadillo, & Stark) Zander [Magill et al. 1983; Stark & Castetter 1986]
Tortula chisoa Magill, Delgadillo, & Stark
fragilis (Taylor) Ochyra [Bartram 1931; Mahler 1978]
Tortula fragilis Taylor
inermis (Bridel) Bruch = *Tortula inermis* (Bridel) Montagne
laevipila Bridel [Bartram 1931; Mahler 1978]
Tortula pagorum (Milde) De Notaris
montana Nees [Allred et al. 1998; Mishler 2007]
Tortula intermedia (Bridel) Berkeley
Tortula montana (Nees) Lindberg
norvegica Weber & Mohr [Allred et al. 1998; Flowers 1973]
Tortula norvegica (Weber & Mohr) Wahlenberg ex Lindberg
obtusissima (Müller Hal.) Zander [Ireland et al. 1981]
Tortula obtusissima (Müller Hal.) Mitten
pagorum (Milde) Amann = *Syntrichia laevipila* Bridel
papillosa (Wilson) Juratzka [Weber 1957]
Tortula papillosa Wilson
papillosissima (Copey) Loeske [Flowers 1973]
Tortula papillosissima (Copey) Brotherus
Tortula ruralis (Hedwig) Gaertner var. *hirsuta* (Venturi) Paris
ruralis (Hedwig) Weber & Mohr [Bartram 1931; Mahler 1978]
Tortula ruralis (Hedwig) Gaertner
Tortula ruralis (Hedwig) Gaertner et al. var. *crinita* De Notaris
sinensis (Müller Hal.) Ochyra [Mishler 2007]
Barbula sinensis Müller Hal.

Timmiella

- anomala** (Bruch & Schimper) Limpricht [Stark & Castetter 1986]

Tortella

- fragilis** (Hooker & Wilson) Limpricht [Romig & Allred 2013]
humilis (Hedwig) Jennings [Ireland et al. 1981]
tortuosa (Hedwig) Limpricht var. **fragilifolia** [Romig & Allred 2013]
tortuosa (Hedwig) Limpricht var. **tortuosa** [Stark & Castetter 1982]

Tortula

- aurea** Bartram = *Pseudocrossidium crinitum* (Schultz) Zander
acaulon (Withering) Zander [Ireland et al. 1981; Zander & Eckel 2007]
Phascum cuspidatum Hedwig
atrovirens (J.E. Smith) Lindberg [Stark & Castetter 1986]
Desmatodon convolutus (Bridel) Grout
bartramii Steere in Grout = *Syntrichia bartramii* (Steere) Zander
bistratosa Flowers = *Syntrichia caninervis* Mitten
brevipes (Lesquereux) Brotherus [Allred et al. 1998]
caninervis (Mitten) Brotherus = *Syntrichia caninervis* Mitten
cernua (Hübner) Lindberg [Crum & Anderson 1981]
Desmatodon cernuus (Hb.) Bruch & Schimper
chisoa Magill, Delgadillo, & Stark = *Syntrichia chisoa* (Magill, Delgadillo, & Stark) Zander
euryphylla Zander = *Tortula hoppeana* (Schultz) Ochyra
fragilis Taylor = *Syntrichia fragilis* (Taylor) Ochyra
guepinii (Bruch & Schimper) Brotherus [Mahler 1978]
Desmatodon guepinii Bruch & Schimper
hoppeana (Schultz) Ochyra [Mahler 1978; Zander & Eckel 2007]
Desmatodon latifolius (Hedwig) Bridel
Desmatodon latifolius (Hedwig) Bridel var. *muticus* (Bridel) Bridel
Tortula euryphylla Zander
inermis (Bridel) Montagne [Mahler 1978]
Syntrichia inermis (Bridel) Bruch
intermedia (Bridel) Berkeley = *Syntrichia montana* Nees
montana (Nees) Lindberg = *Syntrichia montana* Nees
mucronifolia Schwägrihen [Bartram 1931; Mahler 1978]

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nevadensis (Cardot & Thériot) R.H. Zander [Ireland et al. 1984]

Pottia nevadensis Cardot & Thériot
norvegica (Weber & Mohr) Wahlenberg ex Lindberg = *Syntrichia*
norvegica Weber & Mohr

obtusifolia (Schwägrichen) Mathieu [Bartram 1931; Mahler 1978]

Desmatodon obtusifolius (Schwägrichen) Schimper
obtusissima (Müller Hal.) Mitten = *Syntrichia obtusissima* (Müller Hal.)
Zander

pagorum (Milde) De Notaris = *Syntrichia laevipila* Bridel

papillosa Wilson = *Syntrichia papillosa* (Wilson) Juratzka

papillosissima (Coppey) Brotherus = *Syntrichia papillosissima* (Coppey)
Loeske

Tortula ruralis (Hedwig) Gaertner var. *hirsuta* (Venturi) Paris

plinthobia (Sullivant & Lesquereux) Austin [Mahler 1978]

Desmatodon plinthobius Sullivant & Lesquereux

protobryoides R.H. Zander [Allred et al. 1998]

Pottia bryoides (Dickson) Mitten

rhizophylla (Sakurai) Iwatsuki & Saito = *Chenia leptophylla* (Müller Hal.)
Zander

ruralis (Hedwig) Gaertner et al. var. *crinita* De Notaris = *Syntrichia ruralis*
(Hedwig) Weber & Mohr

ruralis (Hedwig) Gaertner var. *hirsuta* (Venturi) Paris = *Syntrichia*
papillosissima (Coppey) Loeske

ruralis (Hedwig) Gaertner = *Syntrichia ruralis* (Hedwig) Weber & Mohr

Tortula ruralis (Hedwig) Gaertner et al. var. *crinita* De Notaris

Trichostomopsis australasiae (Greville & Hooker) Robinson = *Didymodon*
australasiae (Greville & Hooker) Zander

Trichostomum

Trichostomum svihlae Bartram = *Tuerckheimia svihlae* (Bartram) Zander

brachydontium Bruch [Ireland et al. 1984]

crispulum Bruch [Ireland et al. 1984]

planifolium (Dixon) R.H. Zander [Stark 1996]

Trichostomum sweetii (Bartram) Stark

Weissia planifolia Dixon

Weissia sweetii Bartram

sweetii (Bartram) Stark = *Trichostomum planifolium* (Dixon) R.H. Zander

tenuirostre (Hooker & Taylor) Lindberg [Ireland et al. 1984]

Oxystegus tenuirostris (Hooker & Taylor) A.J.E. Smith

Weissia tenuirostris Hooker & Taylor

Tuerckheimia

svihlae (Bartram) Zander [Worthington 2012]

Trichostomum svihlae Bartram

Weissia

andersoniana Zander = *Weissia ligulifolia* (Bartram) Grout

condensa (Voit) Lindberg : Not known from North America [Zander
2007]; reports of this species in NM refer to *Weissia*
controversa Hedwig

Hymenostomum tortile (Schwägrichen) Bruch & Schimper

Weissia tortilis (Schwägrichen) Müller Hal.

controversa Hedwig [Bartram 1931; Mahler 1978]

Weissia condensata auct., non (Voit) Lindberg

Weissia viridula Hedwig

glauca Bartram = *Weissia ligulifolia* (Bartram) Grout

ligulifolia (Bartram) Grout [Ireland et al. 1981; Stark & Casteretter 1982]

Weissia andersoniana Zander

Weissia glauca Bartram

muhlenbergiana (Swartz) W.D. Reese & B.A.E. Lemmon [Allred
2011]

phascopsis Zander [Eckel 1986]

Astomum phascoides (Drummond) Grout [not *Weissia phascoides*
(Wilson) Müller Hal.]

planifolia Dixon = *Trichostomum planifolium* (Dixon) R.H. Zander
recurvirostra Hedwig = *Bryoerythrophyllum recurvirostrum* (Hedwig)
Chen

sweetii Bartram = *Trichostomum planifolium* (Dixon) R.H. Zander
tenuirostris Hooker & Taylor = *Trichostomum tenuirostre* (Hooker &
Taylor) Lindberg

tortilis (Schwägrichen) Müller Hal. = *Weissia condensata* (Voit.) Lindberg

verticillata Bridel = *Eucladium verticillatum* (Bridel) Bruch & Schimper

viridula Hedwig = *Weissia controversa* Hedwig

Family PTYCHOMITRIACEAE

Ptychomitrium

serratum Bruch & Schimper [Worthington 2011]

sinense (Mitten) A. Jaeger [Ireland et al. 1984; Reese 1998]

Ptychomitrium leibergii Best

leibergii Best = *Ptychomitrium sinense* (Mitten) A. Jaeger

Family RHYTIDIACEAE

Rhytidium

rugosum (Hedwig) Kindberg [Bartram 1931; Mahler 1978]

Family SELIGERIACEAE

Blindia acuta (Hedwig) Bruch & Schimper : Allred 988Q was identified as this,
but the specimen is corrected to *Hymenostylium*
recurvirostrum (Hedwig) Dixon

Family SPHAGNACEAE

Sphagnum

fimbriatum Wilson [Coop 2002]

girgensohnii Russow [Romig & Allred 2013]

Family SPLACHNACEAE

Tayloria

acuminata Hornschuch [Crum & Anderson 1981]

Family STEREOPHYLLACEAE

Stereophyllum

radiculosum (Hooker) Mitten [Grout 1945; Mahler 1978]

Family TETRAPHIDACEAE

Tetraphis

pellucida Hedwig [Allred et al. 1998]

Family THUIDIACEAE

Abietinella

abietina (Hedwig) Fleischer [Bartram 1931; Mahler 1978]

Thuidium abietinum (Hedwig) Schimper

Thuidium

abietinum (Hedwig) Schimper = *Abietinella abietina* (Hedwig) Fleischer

delicatulum (Hedwig) Schimper var. **radicans** (Kindberg) Crum et
al. [Bartram 1931; Mahler 1978]

Thidium philibertii Limpricht

philibertii Limpricht = *Thuidium delicatulum* (Hedwig) Schimper var.
radicans (Kindberg) Crum et al.

Family TIMMIACEAE

Timmia

austriaca Hedwig [Bartram 1931; Mahler 1978]

bavarica Hessler = *Timmia megapolitana* Hedwig var. *bavarica* (Hessler)
Bridel

megapolitana Hedwig var. **bavarica** (Hessler) Bridel [Mahler 1978]

Timmia bavarica Hessler

REFERENCES

- Allred, K.W. 1998. Second collection of a little moss, *Fissidens littlei*
(Williams) Grout, rediscovered from a little sinkhole in New
Mexico. *Evansia* 15(4):148-149.
Allred, K.W. 2011. Plant distribution reports. *The New Mexico Botanist*

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- 54:10.
- Allred, K.W. 2011. Mosses of New Mexico. *The New Mexico Botanist* 55:1-10.
- Allred, K.W. 2011. Plant distribution reports. *The New Mexico Botanist* 55:11.
- Allred, K.W. 2011. Report on the 2010 SO BE FREE Foray in southern New Mexico, with eight new moss records for the state. *Evansia* 28(3):74-77.
- Allred, K.W. 2012. Plant distribution reports. *The New Mexico Botanist* 56:2-3.
- Allred, K.W. 2012. Plant distribution reports. *The New Mexico Botanist* 57:4.
- Allred, K.W., C. Darigo, & R.D. Worthington. 1998. Additions to the moss flora of New Mexico. *Evansia* 15(3):95-98.
- Anderson, L.E., H.A. Crum, & W.R. Buck. 1990. List of the mosses of North America north of Mexico. *The Bryologist* 93(4):448-499.
- Bartram, E.B. 1924. *Grimmia poecilostoma* Car. & Seville in North America. *The Bryologist* 27:14-15.
- Bartram, E.B. 1931. Mosses of northern New Mexico collected by Bro. Arsene. *Ann. Crypt. Exot.* 4:153-160.
- Bartram, E.B. 1949. Mosses of Guatemala. *Fieldiana: Botany* 25:1-442.
- BFNA27-2007 = Flora of North America, vol. 27, Bryophyta, part 1. Oxford University Press. 2007.
- BFNA28-2014 = Flora of North America, vol. 28, Bryophyta, part 2. Oxford University Press. 2014.
- Blisard, K. & R. Kleinman. 2012. Plant distribution reports. *The New Mexico Botanist* 57:3.
- Buck, W.R. 2014. Entodontaceae, pp. 502-507. IN: Flora of North America, vol. 28. Oxford University Press.
- Buck, W.R. & H. Crum. 1978. *Entodon schleicheri* new to North America. *The Bryologist* 81(3):429-432.
- Cardot, J. 1910. Diagnoses préliminaires de mousses mexicaines, pt 4. *Revue Bryologique* 37:4-13.
- Chamberlain, E.B. 1925. On a new variety of *Encalypta vulgaris* from New Mexico. *The Bryologist* 28:4-6.
- Conard, H.S. & P.L. Redfearn, Jr. 1979. How to know the mosses and liverworts, 2nd ed. Wm. C. Brown Co.
- Coop, J. 2002. Plant distribution reports. *The New Mexico Botanist* 24:7.
- Crum, H.A. & L.E. Anderson. 1981. Mosses of Eastern North America. 2 vols. Columbia Univ. Press, New York.
- Darigo, C.E. & K.W. Allred. 2001. Mosses of New Mexico – County Checklist. *Evansia* 18(1):1-18.
- Delgadillo-M., C. 1996. Notes on the distribution of *Aloina* and *Crossidium* (Musci). *The Bryologist* 99(4):416-417.
- Delgadillo-M., C. 2007. *Aloina*, pp. 614-617. IN: Flora of North America, vol. 27. Oxford University Press.
- Eckel, P.M. 1986. *Weissia phascopsis* (= *Astomum phascoides*) new to the moss flora of New Mexico, with additional county records. *Evansia* 3(3):44-45.
- Eckel, P.M. 1988. *Barbula ehrenbergii* new to the moss flora of New Mexico with additional Eddy County records. *Evansia* 5:14-15.
- Flowers, S. (A. Holmgren, ed.). 1973. Mosses: Utah and the west. Brigham Young Univ. Press.
- Greven, H.C. 2010. *Grimmia texicana* sp. nov. (Grimmiaceae) from Texas and its separation from *Grimmia arizonae*. *The Bryologist* 113(2):360-364.
- Griffin III, D.G. 2014. *Bartramia*, pp. 101-105. IN: Flora of North America, vol. 28. Oxford University Press.
- Grout, A.J. 1926. Two interesting mosses from New Mexico. *The Bryologist* 29:8-9.
- Grout, A.J., ed. 1928-1940. Moss Flora of North America, North of Mexico. 3 Vols. Publ. by the author, Newfane, VT.
- Grout, A.J. 1945. A revision of the North American species of *Stereophyllum* and *Pilosium*, with descriptions of some South American species. *The Bryologist* 48:60-70.
- Hastings, R.I. 1999. Taxonomy and biogeography of the genus *Coscinodon* (Bryopsida, Grimmiaceae) in North America. *The Bryologist* 102(2):265-286.
- Hastings, R.I. & H.C. Greven. 2007. *Grimmia*, pp. 225-258. IN: Flora of North America, vol. 27. Oxford University Press.
- Ireland, R.R., S.S. Talbot, & T.K. Todsen. 1981. Bryophytes new to New Mexico. *The Bryologist* 84(3):423-425.
- Ireland, R.R., S.S. Talbot, & T.K. Todsen. 1984. New or rare mosses of New Mexico. *The Bryologist* 87(3):255-256.
- Jamieson, D.W. 2014. *Hygrohypnum*, pp. 269-282. IN: Flora of North America, vol. 28. Oxford University Press.
- Kleinman, R. 2012. Plant distribution reports [*Crumia latifolia*]. *The New Mexico Botanist* 56:1.
- Kleinman, R., K. Blissard, & K. Allred. 2011. *Brothera leana* (Sull.) Müll. Hal. (Dicranaceae) in New Mexico: A significant range extension for this acrocarpous moss in North America. *Evansia* 28(3):69-71.
- Lawton, E. 1971. Moss flora of the Pacific northwest. *J. Hattori Bot. Lab. Suppl.* 1:1-362.
- Little, E.L., Jr. 1937. Bryophytes of the Jornada Experimental Range, New Mexico. *The Bryologist* 40:81-83.
- Mahler, Wm.F. 1978. Preliminary checklist of mosses of New Mexico. *The Bryologist* 81(4):593-599.
- Mahler, Wm.F. 1985. Additions to the moss flora of New Mexico. *Evansia* 2(2):30-31.
- McIntosh, T. 2007. *Schistidium*, pp. 207-225. IN: Flora of North America, vol. 27. Oxford University Press.
- Miller, D.H. & H.A. Miller. 2007. pp. 188-194. IN: Flora of North America, vol. 27. Oxford University Press.
- Mishler, B.D. 2007. *Syntrichia*, pp. 618-627. IN: Flora of North America, vol. 27. Oxford University Press.
- Mohamed, M.A.H. 1979. A taxonomic study of *Bryum billardieri* Schwägrichen and related species. *J. Bryology* 10:401-465.
- Price, R. 2011. Plant distribution reports. *The New Mexico Botanist* 53:4.
- Prior, P.V. 1966. A new fungal parasite of mosses. *The Bryologist* 69:243-246.
- Reese, W.D. 1998. The moss family Ptychomitriaceae in North America. *Evansia* 15(4):137-145.
- Reese, W.D. 1999. *Platygyrium* in North America north of Mexico. *Evansia* 16(1):44-48.
- Romig, K.B. & K.W. Allred. 2013. Mosses new to New Mexico. *Evansia* 30(3):105-109.
- Sharp, A.J., H. Crum, & P.M. Eckel, eds. 1994. The Moss Flora of Mexico, pts 1-2. *Memoirs New York Botanical Garden*, Vol. 69.
- Shaw, A.J. 2014. *Pohlia*, pp. 193-212. IN: Flora of North America, vol. 28. Oxford University Press.
- Smith-Merrill, G.L. 2007. Polytrichaceae, pp. 121-161. IN: Flora of North America, vol. 27. Oxford University Press.
- Spence, J.R. 2007. Four species of the Bryaceae new to the U.S.A. *Evansia* 24(2):29-30.
- Spence, J.R. 2014. *Brachymenium*, pp. 122-124. IN: Flora of North America, vol. 28. Oxford University Press.
- Spence, J.R. 2014. *Bryum*, pp. 124-129. IN: Flora of North America, vol. 28. Oxford University Press.
- Spence, J.R. 2014. *Gemmabryum*, pp. 129-140. IN: Flora of North America, vol. 28. Oxford University Press.

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- Stark, L.R. 1996. The status of *Weissia sweetii*, a species endemic to the southwestern United States. *The Bryologist* 99(3):345-348.
- Stark, L.R. & R.C. Castetter. 1982. A preliminary list of bryophytes from the Organ Mountains, New Mexico. *The Bryologist* 85(3):307-311.
- Stark, L.R. & R.C. Castetter. 1986. Additions to the bryoflora of southern New Mexico. *Southw. Natural.* 31(3):398-399.
- Sullivant, W.S. 1849. *Mem. Amer. Acad. Arts Sci., new series* 4: 169-172.
- Sullivant, W.S. & C.L. Lesquereux. 1856. *Musci boreali-americi*. Columbus, Ohio.
- Vanderpoorten, A. 2014. *Hygroamblystegium*, pp. 302-305. IN: *Flora of North America*, vol. 28. Oxford University Press.
- Vitt, D.H. 1973. A revision of the genus *Orthotrichum* in North America, north of Mexico. *Bryophyt. Biblioth.* 1:1-208.
- Weber, W.A. 1957. *Tortula papillosa* in New Mexico. *The Bryologist* 60:143-144.
- Weber, W.A. 1973. Guide to the mosses of Colorado. *Inst. Arctic and Alpine Res., Occasional Paper No. 6*, Univ. of Colorado.
- Weber, W.A., R.C. Wittmann, & R. Worthington. 2003. *Grimmia bernoulii* Mueller Hal. in the United States. *Evansia* 20(3):104-106.
- Welch, W.H. 1963. *Fontinalaceae*. *N. Am. Flora II.* 3:1-51.
- Wynne, F.E. 1944. Studies in *Drepanocladus*. IV. Taxonomy. *The Bryologist* 47:147-189.
- Worthington, R.D. 1996. Review draft of an annotated checklist and inventory of the flora of the Organ Mountains, Dona Ana County, New Mexico. Available from author, Univ. Texas at El Paso.
- Worthington, R.D. 2011. Plant distribution reports. *The New Mexico Botanist* 54:10.
- Worthington, R.D. 2012. Plant distribution reports. *The New Mexico Botanist* 56:1.
- Zander, R.H. 2007. *Pottiaceae*, pp. 476-642. IN: *Flora of North America*, vol. 27. Oxford University Press.
- Zander, R.H. & P.M. Eckel. 2007. *Tortula*, pp. 586-603. IN: *Flora of North America*, vol. 27. Oxford University Press.
- Zander, R.H. & R. Ochyra. 2001. *Didymodon tectorum* and *D. brachyphyllus* (Musci, Pottiaceae) in North America. *The Bryologist* 104(3):372-377.
- Zander, R.H. & W.A. Weber. 1997. *Didymodon anserinocapitatus* (Musci, Pottiaceae) new to the New World. *The Bryologist* 100:237-238.

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