

# CHECKLIST OF MOSSES OF OREGON

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This list is based on Christy et al. (1982) and supersedes any online versions posted prior to the date shown above. Additions to the flora since 1982 are marked by asterisks, with the earliest known verified sources noted in square brackets.

Unless noted otherwise, nomenclature conforms to Flora of North America Volumes 27 and 28. Most family placements follow [Goffinet et al. 2014](#). For convenience, synonyms used by Lawton (1971) and more recent works are provided in square brackets. In general, sources for nomenclatural changes can be found in the [TROPICOS database](#).

The checklist is followed by annotated lists of taxa excluded from the flora, and taxa expected to occur in Oregon that have been reported from neighboring states. A growing amount of specimen label data are now accessible online from the the [Consortium of Pacific Northwest Herbaria](#) and the [Consortium of North American Bryophyte Herbaria](#), but these records have not necessarily been verified recently. Increasingly, it is possible to identify the original specimens upon which historical reports were based (Christy et al. 1982; Christy 1983), but all old material needs to be reconfirmed by critical study.

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## **Acaulon** [Pottiaceae]

*muticum* var. *rufescens* (A. Jaeger) H.A. Crum

## **Aloina** [Pottiaceae]

[*pilifera* (De Notaris) H.A. Crum & W.C. Steere = *Aloina bifrons*]

*bifrons* (De Notaris) Delgadillo

## **Alsia** [Leptodontaceae]

*californica* (Hooker & Arnott) Sullivant

## **Amblystegium** [Amblystegiaceae]

[*juratzkanum* Schimper = *Amblystegium serpens*]  
 [*polygamum* Schimper in P. Bruch and W.P. Schimper = *Drepanocladus polygamus*]  
 [*riparium* (Hedwig) Schimper = *Leptodictyum riparium*]  
 [*saxatile* Schimper = *Pseudocampylium radicale*]  
*serpens* (Hedwig) Schimper in P. Bruch & W.P. Schimper  
 [*serpens* var. *juratzkanum* (Schimper) Rau & Hervey = *Amblystegium serpens*]  
 [*tenax* (Hedwig) C.E.O. Jensen = *Hygroamblystegium varium*]  
 [*trichopodium* (Schultz) Hartmann = *Hygroamblystegium varium*]  
**Amphidium** [Rhabdoweisiaceae, *fide* Goffinet et al. 2014]  
*californicum* (Hampe ex Müller Hal.) Brotherus in H.G.A. Engler & K. Prantl  
*lapponicum* (Hedwig) Schimper  
*mougeotii* (Bruch & Schimper) Schimper  
**Anacolia** [Bartramiaceae]  
*baueri* Hampe = *Anacolia menziesii*  
*menziesii* (Turner) Paris  
 [*menziesii* var. *baueri* (Hampe) Paris = *Anacolia menziesii*]  
**Andreaea** [Andreaeaceae]  
*blyttii* Schimper  
 \**heinemannii* Hampe & Müller Hal. [Zander 2007a; Weber B-35135, COLO, ver. B.M. Murray; Norris 83547, UC]  
*nivalis* Hooker  
*rothii* F. Weber & D. Mohr  
*rupestris* Hedwig  
 \**schofieldiana* B.M. Murray [Norris 77992, UC; Christy 1348]  
**Anoetangium** [Pottiaceae]  
 \**aestivum* (Hedwig) Mitten [Loring 3531B, ver. D.H. Norris; Kofranek 6116]  
**Anomobryum** [Bryaceae]  
*filiforme* (Dickson) Solms = *Anomobryum julaceum*  
*julaceum* (Schrader ex P. Gaertner, B. Meyer & Scherbius) Schimper  
**Antitrichia** [Leucodontaceae]  
*californica* Sullivant ex Lesquereux  
*curtipendula* (Hedwig) Bridel  
 [*curtipendula* var. *gigantea* Sullivant & Lesquereux = *Antitrichia curtipendula*]  
 [*gigantea* (Sullivant & Lesquereux) Kindberg = *Antitrichia curtipendula*]  
**Arctoa** [Rhabdoweisiaceae, *fide* Goffinet et al. 2014]  
 [*blyttii* (Bruch & Schimper) Loeske = *Kiaeria blyttii*]  
 [*falcata* (Hedwig) Loeske = *Kiaeria falcata*]  
*fulvella* (Dickson) Bruch & Schimper  
 [*starkei* (Weber & D. Mohr) Loeske = *Kiaeria starkei*]  
**[Atractylocarpus = Campylopediella]**  
 [*flagellaceus* (Müller Hal.) Williams = *Campylopediella flagellacea*]  
**Atrichum** [Polytrichaceae]  
*selwynii* Austin  
**Aulacomnium** [Aulacomniaceae]  
*androgynum* (Hedwig) Schwägrichen

*palustre* (Hedwig) Schwägrichen

**Barbula** [Pottiaceae]

[*brachyphylla* Sullivant = *Didymodon brachyphyllus*]

*convoluta* Hedwig var. *convoluta*

*convoluta* var. *eustegia* (Cardot & Thériot) R.H. Zander

[*cylindrica* (Taylor) Schimper = *Didymodon vinealis* var. *vinealis*]

[*eustegia* Cardot & Thériot = *Barbula convoluta* var. *eustegia*]

[*fallax* Hedwig = *Didymodon fallax*, excluded]

[*platyneura* Macoun & Kindberg = *Pseudocrossidium obtusulum*]

[*rubiginosa* Mitten = *Didymodon vinealis* var. *rubiginosus*]

\**unguiculata* Hedwig [Kofranek 6180, ver. D.H. Wagner]

[*vinealis* Bridel = *Didymodon vinealis* var. *vinealis*]

[*vinealis* var. *flaccida* Bruch & Schimper = *Didymodon vinealis* var. *vinealis*]

**Bartramia** [Bartramiaceae]

*ithyphylla* Bridel

*pomiformis* Hedwig

**[Bestia = Bryolawtonia, in part]**

[*longipes* (Sullivant & Lesquereux) Brotherus, excluded]

[*vancouveriensis* (Kindberg) Wijk & Margadant = *Bryolawtonia vancouveriensis*]

**Blindia** [Seligeriaceae]

*acuta* (Hedwig) Bruch & Schimper

**Brachydontium** [Seligeriaceae]

*olympicum* (E. Britton) T.T. McIntosh & J.R. Spence

**Brachytheciastrum** [Brachytheciaceae]

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

*leibergii* (Grout) Ignatov & Huttunen

*velutinum* (Hedwig) Ignatov & Huttunen var. *velutinum*

*velutinum* var. *salicinum* (Schimper) Ochyra & Żarnowiec

**Brachythecium** [Brachytheciaceae]

*albicans* (Hedwig) Schimper in P. Bruch and W.P. Schimper

*asperrimum* (Mitten ex Müller Hal) Sullivant. Synonymized with *B. frigidum* by Crum et al. (1973) and Ireland et al. (1987), resurrected by Ignatov (2014a).

*bolanderi* (Lesquereux) A. Jaeger

[*collinum* (Schleicher ex Müller Hal.) Schimper = *Brachytheciastrum collinum*]

[*curtum* (Lindberg) Limpricht = *Sciuro-hypnum curtum*, excluded]

*erythrorrhizon* Schimper in P. Bruch and W.P. Schimper var. *erythrorrhizon*

*frigidum* (Müller Hal.) Bescherville

[*holzingeri* (Grout) Grout = *Sciuro-hypnum oedipodium*]

[*hylotapetum* N.L. Higenbotham & B.L. Higenbotham = *Sciuro-hypnum hylotapetum*]

*laetum* (Bridel) Schimper in P. Bruch and W.P. Schimper

[*leibergii* Grout = *Brachytheciastrum leibergii*]

[*nelsonii* Grout = *Sciuro-hypnum latifolium*]

[*oedipodium* (Mitten) A. Jaeger = *Sciuro-hypnum oedipodium*]

[*oxycladon* (Bridel) A. Jaeger in North America = *Brachythecium laetum*; Robinson and Ignatov 1997; Ignatov 2014a]

[*plumosum* (Hedwig) Schimper = *Sciuro-hypnum plumosum*]  
 [*reflexum* var. *pacificum* Renaud & Cardot = *Sciuro-hypnum reflexum*]  
*rivulare* Schimper in P. Bruch and W.P. Schimper  
*rutabulum* (Hedwig) Schimper in P. Bruch and W.P. Schimper  
*salebrosum* (Hoffmann ex. F. Weber & D. Mohr) Schimper in P. Bruch and W.P. Schimper  
 [*starkei* var. *explanatum* (Bridel) Mönkmeyer = *Sciuro-hypnum curtum*, excluded]  
 [*starkei* var. *pacificum* (Renaud & Cardot) E. Lawton = *Sciuro-hypnum reflexum*]  
 [*velutinum* (Hedwig) Schimper var. *velutinum* = *Brachytheciastrum velutinum* var. *velutinum*]  
 [*velutinum* var. *venustum* (De Notaris) Arcangelico = *Brachytheciastrum velutinum* var. *salicinum*]

**Bruchia** [Bruchiaceae]

*bolanderi* Lesquereux  
 \**flexuosa* (Schwägrichen) Müller Hal. [Rushing and Christy 1984]

**Bryoerythrophyllum** [Pottiaceae]

*columbianum* (F.J. Hermann & E. Lawton) R.H. Zander  
*recurvirostrum* (Hedwig) P.C. Chen

**Bryolawtonia** [Neckeraceae]

*vancouveriensis* (Kindberg) D.H. Norris & Enroth

**Bryum** [Bryaceae]

[*algovicum* Sendtner ex. Müller Hal. = *Ptychostomum pendulum*]  
 [*alpinum* Hudson ex Withering = *Imbribryum alpinum*]  
 [*amblyodon* Müller Hal. = *Ptychostomum inclinatum*]  
 [*angustirete* Kindb. = *Ptychostomum pendulum*]  
*argenteum* Hedwig var. *argenteum*  
 [*barnesii* J.B. Wood ex Schimper = *Gemmabryum barnesii*]  
 [*bicolor* Dickson = *Gemmabryum dichotomum*]  
 [*caespiticium* Hedwig = *Gemmabryum caespiticium*]  
 \**calobryoides* J.R. Spence [Spence 2014a; Wagner 2572, 6022, OSC]  
 [*canariense* Bridel = *Rosulabryum canariense*]  
 [*capillare* Hedwig = *Rosulabryum capillare*]  
 [*creberrimum* Taylor = *Ptychostomum creberrimum*]  
 [*cyclophyllum* (Schwägrichen) Bruch & Schimper = *Ptychostomum cyclophyllum*]  
 [*dichotomum* Hedwig = *Gemmabryum dichotomum*]  
 [*gemmaeformis* R. Wilczek & Demaret = *Gemmabryum gemmaeformis*]  
 [*gemmaeformis* De Notaris = *Imbribryum gemmaeformis*]  
 \**lanatum* (P. Beauvois) Bridel [Spence 2014a; Wagner m2676]  
 [*lisa* var. *cuspidatum* (Bruch & Schimper) Margadant = *Ptychostomum creberrimum*]  
 [*meesioides* Kindberg = *Ptychostomum meesioides*]  
 [*microerythrocarpum* = *Gemmabryum subapiculatum*]  
 [*miniatum* Lesquereux = *Imbribryum miniatum*]  
 [*muehlenbeckii* Bruch & Schimper = *Imbribryum muehlenbeckii*]  
 [*pallens* Swartz = *Ptychostomum pallens*]  
 [*pallescens* Schleicher ex Schwägrichen = *Ptychostomum pallescens*]  
 [*pseudotriquetrum* (Hedwig) P. Gaertner, B. Meyer & Scherbius var. *pseudotriquetrum* =

- Ptychostomum pseudotriquetrum*]  
 [*pseudotriquetrum* var. *bimum* (Schreber) Lilj. = *Ptychostomum bimum*]  
 [*pseudotriquetrum* var. *crassirameum* (Renauld & Cardot) E. Lawton = *Ptychostomum bimum*]  
 [*sandbergii* Holzinger = *Roellobryon roellii*]  
 [*stenotrichum* Müller Hal. = *Ptychostomum inclinatum*]  
 [*subapiculatum* Hampe = *Gemmabryum subapiculatum*]  
 [*turbinatum* (Hedwig) Turner = *Ptychostomum turbinatum*]  
 [*uliginosum* (Bridel) Bruch & Schimper = *Ptychostomum cernuum*]  
 [*violaceum* Crundwell & Nyholm = *Gemmabryum violaceum*]  
 [*weigelii* Sprengel = *Ptychostomum weigelii*]
- Buckiella** [Hypnaceae]  
*undulata* (Hedwig) Ireland
- [Bucklandiella = Racomitrium]**  
 [*affinis* (F. Weber & D. Mohr) Bednarek-Ochyra & Ochyra = *Racomitrium affine*]  
 [*brevipes* (Kindb.) Bednarek-Ochyra & Ochyra = *Racomitrium brevipes*]  
 [*heterosticha* (Hedwig) Bednarek-Ochyra & Ochyra = *Racomitrium heterostichum* var. *heterostichum*]  
 [*lawtoniae* (Ireland) Bednarek-Ochyra & Ochyra = *Racomitrium lawtoniae*]  
 [*macounii* ssp. *alpina* (E. Lawton) Bednarek-Ochyra & Ochyra = *Racomitrium macounii* ssp. *alpinum*]  
 [*macounii* (Kindberg) Bednarek-Ochyra & Ochyra ssp. *macounii* = *Racomitrium heterostichum* var. *macounii*]  
 [*microcarpa* (Hedwig) Bednarek-Ochyra & Ochyra = *Racomitrium heterostichum* var. *microcarpon*]  
 [*obesa* (Frisvoll) Bednarek-Ochyra & Ochyra = *Racomitrium obesum*]  
 [*occidentalis* (Renauld & Cardot) Bednarek-Ochyra & Ochyra = *Racomitrium occidentale*]  
 [*pacifica* (Ireland & J.R. Spence) Bednarek-Ochyra & Ochyra = *Racomitrium pacificum*]  
 [*sudetica* (Funck) Bednarek-Ochyra & Ochyra = *Racomitrium sudeticum*]
- Buxbaumia** [Buxbaumiaceae]  
*aphylla* Hedwig  
*piperi* Best  
*viridis* (de Candolle) de Candolle
- Calliargon** [Calliargonaceae]  
*cordifolium* (Hedwig) Kindberg  
*giganteum* (Schimper) Kindberg  
 \**richardsonii* (Mitten) Kindberg [*Dewey 092707-1216*, NY, var. N.G Miller and D.H. Wagner]  
 [*stramineum* (Dickson ex Bridel) Kindberg = *Straminergon stramineum*]  
 [*trifarium* (F. Weber & D. Mohr) Loeske = *Pseudocalliargon trifarium*]
- Calliargonella** [Hypnaceae]  
*cuspidata* (Hedwig) Loeske
- Campyliadelphus** [Amblystegiaceae]  
*chrysophyllus* (Bridel) Kanda
- Campylium** [Amblystegiaceae]

[*chrysophyllum* (Bridel) Lange = *Campyliadelphus chrysophyllus*]  
[*hispidulum* (Bridel) Mitten = *Campylophyllum hispidulum*, excluded]  
[*polygamum* (Schimper) C.E.O. Jensen = *Drepanocladus polygamus*]  
[*radicale* (P. Beauvois) Grout = *Pseudocampylium radicale*]  
*stellatum* (Hedwig) C.E.O. Jensen [*Wagner 8236*, OSC, ver. D.H. Norris; *Emerson CJE1102b*; *Kofranek 2359A*]. Old reports from Oregon (see Christy et al. 1982) have never been verified.

**Campylopodiella** [Leucobryaceae, *fide* Goffinet et al. 2014]

\**flagellacea* (Müller Hal.) Frahm & Isoviita [*Loring 3404B*, ver. D.H. Norris]

**Campylopus** [Leucobryaceae, *fide* Goffinet et al. 2014]

[*aureus* Bosch & Sande La Coste = *Campylopus schmidii*]

*introflexus* (Hedwig) Bridel

*schmidii* (Müller Hal.) A. Jaeger

\**subulatus* Schimper [*Kofranek 1297*, ver. J.-P. Frahm; Frahm 2007]

**Ceratodon** [Ditrichaceae]

\**purpureus* ssp. *conicus* (Hampe) Dixon [McIntosh 2007b; *Kofranek 5381*]

*purpureus* (Hedwig) Bridel ssp. *purpureus*

**Claopodium** [Leskeaceae]

*bolanderi* Best

*crispifolium* (Hooker) Renauld & Cardot

*whippleanum* (Sullivant) Renauld & Cardot

**Climacium** [Climaciaceae]

*dendroides* (Hedwig) F. Weber & D. Mohr in F. Weber

[**Codriophorus** = **Racomitrium**]

[*acicularis* (Hedwig) P. Beauvois = *Racomitrium aciculare*]

[*depressus* (Lesquereux) Bednarek-Ochyra & Ochyra = *Racomitrium depressum*]

[*fascicularis* (Hedwig) Bednarek-Ochyra & Ochyra = *Racomitrium fasciculare*]

[*mollis* (Cardot) Bednarek-Ochyra & Ochyra = *Racomitrium molle*]

[*ryszardii* (Bednarek-Ochyra) Bednarek-Ochyra & Ochyra = *Racomitrium ryszardii*]

[*varius* (Mitten) Bednarek-Ochyra & Ochyra = *Racomitrium varium*]

**Conardia** [Amblystegiaceae]

*compacta* (Hooker) H. Robinson

**Conostomum** [Bartramiaceae]

*tetragonum* (Hedwig) Lindberg

**Coscinodon** [Grimmiaceae]

*calyptratus* (Hooker) C.E.O. Jensen

**Cratoneuron** [Amblystegiaceae]

[*commutatum* var. *falcatum* (Bridel) Mönkemeyer = *Palustriella falcata*]

*filicinum* (Hedwig) Spruce

**Crumia** [Pottiaceae]

\**latifolia* (Kindberg) W.B. Schofield [Zander 2007g; Norris 78262, NY, UC]

**Cynodontium** [Rhabdoweisiaceae, *fide* Goffinet et al. 2014]

*jenneri* (Schimper) Stirton

**Dendroalsia** [Cryphaeaceae]

*abietina* (Hooker) E. Britton in H.G.A. Engler & K. Prantl

**[Desmatodon = Hennediella, Tortula]**

- [*heimii* (Hedwig) Mitten = *Hennediella heimii*]
- [*latifolius* (Hedwig) Bridel = *Tortula hoppeana*]
- [*obtusifolius* (Schwägrichen) Schimper = *Tortula obtusifolia*]
- [*plinthobius* Sullivant & Lesquereux = *Tortula plinthobia*]

**Dichelyma** [Fontinalaceae]

\**falcatum* (Hedwig) Myrin. [*Sundberg 890*, WTU]. The report by Welch (1934) was based on a specimen collected in Tillamook County in 1878 [*Summers 2211*, NY]. Two Howell specimens from 1885 and 1886 [COLO, NY] do not appear to have been annotated recently.

[*falcatum* var. *uncinatum* (Mitten) E. Lawton = *Dichelyma uncinatum*]  
*uncinatum* Mitten

**Dichodontium** [Rhabdoweisiaceae, *fide* Goffinet et al. 2014]

\**olympicum* Renaud & Cardot [*Kofranek 2335*, ver. D.H. Wagner]  
*pellucidum* (Hedwig) Schimper

**Dicranella** [Dicranaceae]

*crispa* (Hedwig) Schimper  
*heteromalla* (Hedwig) Schimper  
*palustris* (Dickson) E.F. Warburg  
*rufescens* (Withering) Schimper  
*schreberiana* (Hedwig) Hilferty  
*varia* (Hedwig) Schimper

**Dicranoweisia** [Rhabdoweisiaceae, *fide* Goffinet et al. 2014]

*cirrata* (Hedwig) Lindberg  
*crispula* (Hedwig) Lindberg  
[*crispula* var. *contermina* (Renaud & Cardot) Grout = *Dicranoweisia crispula*]  
[*crispula* var. *roellii* (Kindberg) E. Lawton = *Dicranoweisia crispula*]

**Dicranum** [Dicranaceae]

*bonjeanii* De Notaris [Ireland 2007; *Kofranek 3193*].  
*fuscescens* Turner var. *fuscescens*  
*howellii* Renaud & Cardot [Lectotypified by Price and Maier 2013, based on material collected at Portland and Sauvie Island by Thomas Howell in 1882 and 1888.]  
*pallidisetum* (J.W. Bailey) Ireland  
*polysetum* Swartz  
*scoparium* Hedwig. Close to *D. bonjeanii* and *D. howellii*, both of which over the years have been confused and synonymized with *D. scoparium*.  
[*strictum* D. Mohr = *Dicranum tauricum*]  
*tauricum* Sappengin

**Didymodon** [Pottiaceae]

*australasiae* (Hooker & Greville) R.H. Zander  
*brachyphyllus* (Sullivant) R.H. Zander  
[*columbianus* F.J. Hermann & E. Lawton = *Bryoerythrophyllum columbianum*]  
\**eckeliae* R.H. Zander [*Kofranek 1651, 6393*, OSC, ver. Zander]  
\**fallax* (Hedwig) R.H. Zander [*Wagner 9211*, DUKE, NY, OSC, UC]. An old report from Oregon (see Christy et al. 1982) has never been verified, but reportedly was sterile. A

specimen at NY [339943] was probably collected at Portland by H.N. Bolander between 1883 and 1897.

\**nicholsonii* Culmann [Zander 1981, 2007d; Zander & Eckel 4422, MO]

\**norrisii* R.H. Zander [Zander 1999, 2007d; Kofranek 3595, OSC]

[*occidentalis* R.H. Zander = *Didymodon vinealis* var. *rubiginosus*]

[*recurvirostris* (Hedwig) Jenner = *Bryoerythrophyllum recurvirostrum*]

*rigidulus* var. *rigidulus* Hedwig

*tophaceus* (Bridel) Lisa

*vinealis* (Bridel) R.H. Zander var. *vinealis*

[*vinealis* var. *brachyphyllus* (Sullivant) R.H. Zander = *Didymodon brachyphyllus*]

[*vinealis* var. *flaccidus* (Bruch & Schimper) R.H. Zander = *Didymodon vinealis* var. *vinealis*]

[*vinealis* var. *nicholsonii* (Culmann) R.H. Zander = *Didymodon nicholsonii*]

*vinealis* var. *rubiginosus* (Mitten) R.H. Zander

**[Dilutineuron = Racomitrium]**

[*fasciculare* (Hedw.) Bednarek-Ochyra, Sawicki, Ochyra, Szczecińska & Plášek = *Racomitrium fasciculare*]

**Distichium** [Ditrichaceae]

*capillaceum* (Hedwig) Bruch & Schimper

\**inclinatum* (Hedwig) Bruch & Schimper [Wagner 8193, det. D.R. Toren]

**Ditrichum** [Ditrichaceae]

*ambiguum* Best

[*cylindricum* (Hedwig) Grout = *Trichodon cylindricus*]

*flexicaule* (Schwägrichen) Hampe

\**gracile* (Mitten) Kuntze [Wagner 8215, det. D.R. Toren]

*heteromallum* (Hedwig) E. Britton

*montanum* Leiberg

*schimperi* (Lesquereux) Kuntze

**Drepanocladus** [Amblystegiaceae]

*aduncus* (Hedwig) Warnstorf

[*aduncus* var. *kneiffii* (Schimper) Mönkemeyer = *Drepanocladus aduncus*]

[*exannulatus* (Schimper) Warnstorf = *Sarmentypnum exannulatum*]

[*fluitans* (Hedwig) Warnstorf = *Warnstorfia fluitans*]

\**longifolius* (Wilson ex Mitten) Brotherus ex Paris. Excluded by Christy et al. (1982, as *Drepanocladus aduncus* var. *capillifolius*), but reinstated here per Hedenäs (2014a).

*polygamus* (Schimper) Hedenäs

\**sordidus* (Müller Hal.) Hedenäs. [M.J. Cutler s.n.; Wagner 8986, NY; Wagner m0756, OSC]

[*uncinatus* (Hedwig) Warnstorf = *Sanionia uncinata*]

[*uncinatus* var. *symmetricus* (Renauld & Cardot) Grout = *Sanionia symmetrica*]

[*vernicosus* (Mitten) Warnstorf = *Hamatocaulis vernicosus*]

**[Dryptodon = Grimmia]**

[*patens* (Hedwig) Bridel = *Grimmia ramondii*]

**Elodium** [Helodiaceae]

*blandowii* (F. Weber & D. Mohr) Eckel

**Encalypta** [Encalyptaceae]

[*brevicolla* var. *crumiana* (D.G. Horton) H.A. Crum & L.E. Anderson = *Encalypta*



- brevicollis*  
*brevicollis* (Bruch & Schimper) Åongström  
*brevipes* Schljakov [*Schofield & Godfrey 68029*, UBC; Saddle Mt; Wagner, Mt. Bolivar]  
*ciliata* Hedwig  
[*intermedia* Juratzka = *Encalypta rhaptocarpa*]  
*procera* Bruch  
*rhaptocarpa* Schwägrichen  
*vulgaris* Hedwig  
[*vulgaris* var. *rhabdocarpa* (Schwägrichen) E. Lawton = *Encalypta rhaptocarpa*]
- Entosthodon** [Funariaceae]  
*californicus* (Sullivant & Lesquereux) H.A. Crum & L.E. Anderson  
*fascicularis* (Hedwig) Müller Hal.  
[*leibergii* E. Britton = *Entosthodon fascicularis*]
- Ephemerum** [Pottiaceae, *fide* Goffinet et al. 2014]  
*crassinervium* var. *crassinervium* (Schwägrichen) Hampe  
*serratum* (Hedwig) Hampe
- Epipterygium** [Mielichhoferiaceae]  
*tozeri* (Greville) Lindberg
- Eucladium** [Pottiaceae]  
\**verticillatum* (Bridel) Bruch & Schimper [*Stone, Exeter*, others]
- Eurhynchiastrum** [Brachytheciaceae]  
*pulchellum* (Hedwig) Ignatov & Huttunen var. *pulchellum*  
*pulchellum* var. *barnesii* (Renauld & Cardot) Ignatov
- [Eurhynchium = Kindbergia, Eurhynchiastrum, Rhynchostegium]**  
[*brittoniae* Grout = *Kindbergia praelonga*]  
[*oreganum* (Sullivant) A. Jaeger = *Kindbergia oregana*]  
[*praelongum* (Hedwig) Schimper var. *praelongum* = *Kindbergia praelonga*]  
[*praelongum* var. *stokesii* (Turner) Dixon = *Kindbergia praelonga*]  
[*pulchellum* (Hedwig) Jennings var. *pulchellum* = *Eurhynchiastrum pulchellum* var. *pulchellum*]  
[*pulchellum* var. *barnesii* (Renauld & Cardot) H.A. Crum, Steere & L.E. Anderson = *Eurhynchiastrum pulchellum* var. *barnesii*]  
[*riparioides* (Hedwig) P.W. Richards = *Rhynchostegium aquaticum*]
- Fabronia** [Fabroniaceae]  
*ciliaris* (Bridel) Bridel  
*pusilla* Raddi
- Fissidens** [Fissidentaceae]  
*adianthoides* Hedwig  
\**aphelotaxifolius* Pursell [Pursell 2007]  
*bryoides* Hedwig  
\**crispus* Montagne [Miller & Shushan 1964, as *F. limbatus*; Pursell 2007; Norris 78033, UC; Wagner 6927. Numerous older collections as *F. limbatus* need examination.]  
*fontanus* (Bachelot de la Pylaie) Steudel  
*grandifrons* Bridel  
[*limbatus* Sullivant = *Fissidens crispus*]

- osmundioides* Hedwig  
*pauperculus* Howe  
*\*sublimbatus* Grout [Norris]  
*taxifolius* Hedwig  
*ventricosus* Lesquereux
- Fontinalis** [Fontinalaceae]  
*antipyretica* Hedwig  
 [*antipyretica* var. *mollis* (Müller Hal.) Welch = *Fontinalis antipyretica*]  
 [*antipyretica* var. *oregonensis* Renauld & Cardot = *Fontinalis antipyretica*]  
 [*antipyretica* var. *patula* (Cardot) Welch = *Fontinalis antipyretica*]  
 [*chrysophylla* Cardot = *Fontinalis howellii*]  
*howellii* Renauld & Cardot  
*\*hypnoides* Hartman [Allen 2014; *Kofranek* 2239. Old collections at DUKE, NY, and UBC do not appear to have been annotated recently]  
 [*mollis* Müller Hal. = *Fontinalis antipyretica*]  
*neomexicana* Sullivant & Lesquereux  
 [*patula* Cardot = *Fontinalis antipyretica*]
- [Frisvolla = Racomitrium]**  
 [*varia* (Mitt.) Sawicki, Szczecińska, Bednarek-Ochyra & Ochyra = *Racomitrium varium*]
- Funaria** [Funariaceae]  
*hygrometrica* Hedwig var. *hygrometrica*  
*muhlenbergii* Turner
- Gemmabryum** [Bryaceae]  
*\*barnesii* (J.B. Wood ex Schimper) J.R. Spence [Vanderpoorten and Zartman 2002, as *Bryum barnesii*; Spence 2014b; *Christy* 1289, WTU; *Loring* 5489SL, ver. D.H. Wagner]  
 [*bicolor* (Dickson) J.R. Spence = *Gemmabryum dichotomum*]  
*caespiticium* (Hedwig) J.R. Spence  
*dichotomum* (Hedwig) J.R. Spence & H.P. Ramsay  
*\*gemmilucens* (Wilczek & Demaret) J.R. Spence [*Christy* 3030, UCNW; *Loring*]  
*\*radiculosum* (Bridel) J.R. Spence & H.P. Ramsay [Spence 2014b]  
*subapiculatum* (Hampe) J.R. Spence & H.P. Ramsay [Spence 1988, as *Bryum subapiculatum*]. Old reports in Christy et al. (1982, as *Bryum microerythrocarpum*) were never verified.  
*\*violaceum* (Crundwell & Nyholm) J.R. Spence [Norris]
- Grimmia** [Grimmiaceae]  
 [*affinis* Hornschuch = *Grimmia longirostris* ]  
 [*agassizii* (Sullivant & Lesquereux) A. Jaeger & Sauerbeck = *Schistidium agassizii*]  
*alpestris* (Weber & Mohr) Schleicher var. *alpestris*  
 [*alpestris* var. *holzingeri* (Cardot & Thériot) G.N. Jones = *Grimmia caespiticia*]  
 [*alpicola* Hedwig var. *alpicola* = *Schistidium agassizii*]  
 [*alpicola* var. *dupretii* (Thériot) H.A. Crum = *Schistidium dupretii*]  
 [*alpicola* var. *rivularis* (Bridel) Wahlenberg = *Schistidium rivulare*]  
*anodon* Bruch & Schimper  
*\*anomala* Hampe [Hastings and Greven 2007; *Wagner* 8350, 8394; *Christy* 8909-1]  
 [*apocarpa* Hedwig var. *apocarpa* = *Schistidium apocarpum*]

[*apocarpa* var. *conferta* (Funck) Sprengel = *Schistidium confertum*]  
[*apocarpa* var. *stricta* (Turner) Hooker & Taylor = *Schistidium strictum*]  
[*atricha* Müller Hal. & Kindberg = *Schistidium atrichum*]

*caespiticia* (Bridel) Juratzka

[*calyptrata* Hooker = *Coscinodon calyptratus*]

[*cinclidodonte*a Müller Hal. = *Schistidium cinclidodonteum*]

*donniana* Smith

[*dupretii* Thériot = *Schistidium dupretii*]

*elator* Bruch

\**hamulosa* Lesquereux [Hastings and Greven 2007]

[*hartmanii* var. *anomala* (Hampe) Mönkemeyer = *Grimmia anomala*]

*incurva* Schwägrichen

*laevigata* (Bridel) Bridel

\**leibergii* Paris [Hastings and Greven 2007; *Howell s.n.*, 1880, NY, det H.C. Greven]

\**lisae* De Notaris [Hastings and Greven 2007; *Kofranek 2910a*, ver. D.R. Toren]

*longirostris* Hooker

[*maritima* Turner = *Schistidium maritimum*]

*montana* Bruch & Schimper

\**muehlenbeckii* Schimper. Excluded by Christy et al. (1982, as *Grimmia trichophylla* var. *tenuis*), but reinstated here per Hastings and Greven (2007). Specimens (COLO, WIS) collected near Willamette Falls by A.S. Foster in 1895 do not appear to have been annotated recently, but Philip Gaddis determined specimen with similar label data at HPSU as *G. trichophylla*.

[*occidentalis* E. Lawton = *Schistidium occidentale*]

[*olympica* E. Britton = *Brachydontium olympicum*]

*ovalis* (Hedwig) Lindberg

[*pacifica* E. Lawton = *Schistidium cinclidodonteum*]

*plagiopodia* Hedwig

*pulvinata* (Hedwig) Smith

*ramondii* (Lamarck & De Candolle) Margadant

[*raui* Austin = *Jaffueliobryum raui*, excluded]

*sessitana* De Notaris

[*tenerrima* Renauld & Cardot = *Grimmia sessitana*]

*torquata* Drummond

*trichophylla* Greville

### **Gymnostomum** [Pottiaceae]

*aeruginosum* Smith

\**calcareum* Nees & Hornschuch [*Kofranek 2089*, ver. R.H. Zander]. A specimen (NY) collected at Sahalie Falls by W.D. Reese in 1991 does not appear to have been annotated recently.

[*recurvirostrum* Hedwig = *Hymenostylium recurvirostrum*]

\**viridulum* Bridel [*Wagner 7704*, MO, ver. D.R. Toren; *Loring 5487SL*, ver. D.H. Wagner]

### **[Habrodon = Iwatsukiella]**

[*leucotrichus* (Mitten) Persson = *Iwatsukiella leucotricha*]

### **Hamatocaulis** [Calliergonaceae]

*vernicosus* (Mitten) Hedenäs

**Haplocladium** [Leskeaceae]  
*microphyllum* (Hedwig) Brotherus in H.G.A. Engler & K. Prantl

**Hedwigia** [Hedwigiaceae]  
*ciliata* (Hedwig) P. Beauvois  
 \**detonsa* (M. Howe) W.R. Buck & D.H. Norris [Buck and Norris 1996]  
 \**stellata* Hedenäs [Buck and Norris 1996; Eckel 2014a; *Howell s.n.*, 1880, NY, ver. W.R. Buck]

**[Helodium = Elodium]**  
*blandowii* (F. Weber & D. Mohr) Warnstorf = *Elodium blandowii*

**Henediella** [Pottiaceae]  
*heimii* (Hedwig) R.H. Zander var. *heimii*

**Herzogiella** [Plagiotheciaceae]  
*seligeri* (Bridel) Z. Iwatsuki

**Heterocladium** [Pterigynandraceae]  
*dimorphum* (Bridel) Schimper in P. Bruch & W.P. Schimper  
*macounii* Best  
*procurrens* (Mitten) A. Jaeger

**Homalothecium** [Brachytheciaceae]  
*aeneum* (Mitten) E. Lawton.  
*arenarium* (Lesquereux) E. Lawton  
*aureum* (Spruce) H. Robinson  
 \**californicum* Hedenäs, Huttunen, Shevock & D.H. Norris [Loring coll., ver J. Shevock]  
*fulgescens* (Mitten ex Müller Hal.) A. Jaeger  
*megaptilum* (Sullivant) H. Robinson  
*nevadense* (Lesquereux) Renault & Cardot  
 [*nevadense* ssp. *aeneum* (Mitten) H. Hofmann = *H. aeneum*]  
 [*nitens* (Hedwig) H. Robinson = *Tomentypnum nitens*]  
*nuttallii* (Wilson) A. Jaeger  
 [*pinnatifidum* (Sullivant & Lesquereux) E. Lawton = *H. aureum*]

**Hookeria** [Hookeriaceae]  
*lucens* (Hedwig) Smith

**Hygroamblystegium** [Amblystegiaceae]  
*tenax* (Hedwig) C.E.O. Jensen = *Hygroamblystegium varium*  
*varium* (Hedwig) Mönkemeyer var. *varium*  
*varium* var. *humile* (P. Beauvois) Vanderpoorten & Hedenäs

**Hygrohypnum** [Amblystegiaceae]  
 \**alpinum* (Lindberg) Loeske [Wagner 8460, ver. W.B. Schofield]  
*bestii* (Renauld & Bryhn) Holzinger  
 \**cochlearifolium* (Venturi) Brotherus [Weiss 20133]  
 [*dilatatum* (Wilson) Loeske = *Hygrohypnum duriusculum*]  
*duriusculum* (De Notaris) D.W. Jamieson  
*luridum* (Hedwig) Jennings  
*molle* (Hedwig) Loeske  
*ochraceum* (Turner ex Wilson) Loeske

*smithii* (Swartz) Brotherus  
 \**styriacum* (Limpricht) Brotherus [*Wagner 6661*, det. D. Toren]

**[Hylocomiadelphus = Rhytidiadelphus]**  
 [*triquetrus* (Hedwig) Ochyra & Stebel = *Rhytidiadelphus triquetrus*]

**Hylocomium** [Hylocomiaceae]  
*splendens* (Hedwig) Schimper in P. Bruch & W.P. Schimper

**Hymenostylium** [Pottiaceae]  
 \**recurvirostrum* var. *recurvirostrum* (Hedwig) Dixon [*Buck 37690*, NY; *Loring s.n.*]

**Hypnum** [Hypnaceae]  
*circinale* Hooker  
*dieckii* Renaud & Cardot  
 \**lindbergii* Mitten [*Anderson 14499*, UBC; *Smith 1091*, ver. D.H. Wagner]. A specimen collected by A.S. Foster near West Linn in 1905 [NEB], originally identified by A.J. Grout and G.N. Best, does not appear to have been annotated recently.  
*pratense* Koch ex Spruce  
*revolutum* (Mitten) Lindberg var. *revolutum*  
*subimponens* Lesquereux

**Imbribryum** [Bryaceae]  
*alpinum* (Hudson ex Withering) N. Pedersen  
*gemmiparum* (De Notaris) J.R. Spence  
*miniatum* (Lesquereux) J.R. Spence  
 \**mildeanum* (Juratzka) J.R. Spence [*Hardman AH6092*, ver. J.R. Spence]  
*muehlenbeckii* (Bruch & Schimper) N. Pedersen [Spence 2014c; *Wagner 8364*, OSC; *Buck 37702*, NY] Old reports in Christy et al. (1982, as *Bryum muehlenbeckii*) have not been verified.

**Isopterygiopsis** [Plagiotheciaceae]  
*pulchella* (Hedwig) Z. Iwatsuki

**[Isopterygium = Herzogiella, Isopterygiopsis, Pseudotaxiphyllum]**  
 [*elegans* (Bridel) Lindberg = *Pseudotaxiphyllum elegans*]  
 [*pulchellum* (Hedwig) A. Jaeger = *Isopterygiopsis pulchella*]  
 [*seligeri* (Bridel) Dixon ex C.E.O Jensen = *Herzogiella seligeri*]

**Isothecium** [Lembophyllaceae]  
 \**cardotii* Kindberg [Schofield 2014b]  
*cristatum* (Hampe) H. Robinson  
*stoloniferum* Bridel

**Iwatsukiella** [Pterigynandraceae]  
*leucotricha* (Mitten) W.R. Buck & H.A. Crum

**Kiaeria** [Rhabdoweisiaceae, *vide* Goffinet et al. 2014]  
*blyttii* (Bruch & Schimper) Brotherus  
*falcata* (Hedwig) I. Hagen  
*starkei* (Weber & D. Mohr) I. Hagen

**Kindbergia** [Brachytheciaceae]  
*oregana* (Sullivant) Ochyra  
*praelonga* (Hedwig) Ochyra

**Leptobryum** [Meesiaceae]

- pyriforme* (Hedwig) Wilson
- Leptodictyum** [Amblystegiaceae]  
*humile* (P. Beauvois) Ochyra = *Hygroamblystegium varium* var. *humile*  
*riparium* (Hedwig) Warnstorf
- [Lescuraea, our taxa = Pseudoleskea]**  
*atricha* (Kindberg) E. Lawton = *Pseudoleskea atricha*  
*baileyi* (Best & Grout) E. Lawton = *Pseudoleskea baileyi*  
*incurvata* (Hedwig) E. Lawton var. *incurvata* = *Pseudoleskea incurvata* var. *incurvata*  
*incurvata* var. *gigantea* E. Lawton = *Pseudoleskea incurvata* var. *gigantea*  
*patens* Lindberg = *Pseudoleskea patens*  
*radicosa* (Mitten) Mönkemeyer var. *radicosa* = *Pseudoleskea radicosa* var. *radicosa*  
*radicosa* var. *compacta* (Best) E. Lawton = *Pseudoleskea radicosa* var. *compacta*  
*saviana* (De Notaris) E. Lawton = *Pseudoleskea saviana*  
*stenophylla* (Renault & Cardot) Kindberg = *Pseudoleskea stenophylla*
- Leskea** [Leskeaceae]  
*polycarpa* Hedwig
- Leucolepis** [Mniaceae]  
*acanthoneura* (Schwägrichen) Lindberg  
*menziesii* (Hooker) Steere = *Leucolepis acanthoneura*
- Lewinskya** [Orthotrichaceae]  
*affinis* (Schrader ex Bridel) F. Lara, Garilleti & Goffinet  
*bolanderi* (Sullivant) F. Lara, Garilleti & Goffinet [*Kofranek 1259*, ver. D.H. Wagner]  
*holzingeri* (Renault & Cardot) F. Lara, Garilleti & Goffinet  
*laevigata* (J.E. Zetterstedt) F. Lara, Garilleti & Goffinet  
*praemorsa* (Venturi) F. Lara, Garilleti & Goffinet [*Pike M284*, OSC; *Norris 78946* and others, UC].  
*pylaisii* (Bridel) F. Lara, Garilleti & Goffinet [*Norris 23666* and others, UC]  
*rupestris* (Schleicher ex Schwägrichen) F. Lara, Garilleti & Goffinet  
*speciosa* (Nees in J. Sturm et al.) F. Lara, Garilleti & Goffinet  
*striata* (Hedwig) F. Lara, Garilleti & Goffinet
- Limbella** [Amblystegiaceae]  
*fryei* (R.S. Williams) Ochyra
- Meesia** [Meesiaceae]  
*triquetra* (Linnaeus ex Jolyclerc) Ångström  
*uliginosa* Hedwig [*Wagner 6517*, OSC]
- Meiotrichum** [Polytrichaceae]  
*lyallii* (Mitten) G.L. Smith
- [Metaneckera = Neckera]**  
*menziesii* (Drummond) W.C. Steere = *Neckera menziesii*
- Micromitrium** [Micromitriaceae, *vide* Goffinet et al. 2014]  
*synoicum* (James) Austin [Bryan 2007; *Christy 8505-1*, DUKE, OSC, UBC, ver. V.S. Bryan]
- Mielichhoferia** [Mielichhoferiaceae]  
*elongata* (Hoppe & Hornschuch) Nees & Hornschuch in C.G.D. Nees et al. [*Wagner 8212a*, OSC, ver. A.J. Shaw]
- Mnium** [Mniaceae]

[*ambiguum* H. Müller = *Mnium lycopodioides*]  
*blyttii* Bruch & Schimper  
[*longirostrum* Bridel = *Plagiomnium rostratum*]  
*lycopodioides* Schwägrichen  
*marginatum* (Dickson ex Withering) P. Beauvois  
[*orthorrhynchum* Bridel = *Mnium thomsonii*]  
[*punctatum* var. *elatum* Schimper = *Rhizomnium magnifolium*]  
*spinulosum* Bruch & Schimper  
*thomsonii* Schimper

**Neckera** [Neckeraceae]

*douglasii* Hooker  
*menziesii* Drummond

\**pennata* Hedwig [Sastre-De Jesús 2014a]. A number of specimens (COLO, NY, OSC, TENN, WIS, WTU) do not appear to have been verified recently.

**[Niphotrichum = Racomitrium]**

[*canescens* ssp. *canescens* (Hedwig) Bednarek-Ochyra & Ochyra = *Racomitrium canescens*]  
[*elongatum* (Frisvoll) Bednarek-Ochyra & Ochyra = *Racomitrium elongatum*]  
[*ericoides* (Bridel) Bednarek-Ochyra & Ochyra = *Racomitrium ericoides*]  
[*pygmaeum* (Frisvoll) Bednarek-Ochyra & Ochyra = *Racomitrium pygmaeum*]

**Nogopterium** [Leucodontaceae]

*gracile* (Hedwig) Crosby & W.R. Buck

**Nyholmiella** [Orthotrichaceae]

*obtusifolia* (Bridel) Holmen & E. Warncke

**Oligotrichum** [Polytrichaceae]

*aligerum* Mitten  
*hercynicum* (Hedwig) Lamarck & de Candolle

**Oncophorus** [Rhabdoweisiaceae, *fide* Goffinet et al. 2014]

*virens* (Hedwig) Bridel  
*wahlenbergii* Bridel

**[Orthodicranum = Dicranum]**

[*tauricum* = *Dicranum tauricum*]

**Orthodontium** [Orthodontiaceae]

*gracile* (Wilson) Schwägrichen ex Bruch & Schimper  
\**pellucens* (Hooker) Bruch & Schimper in J.K.A. Müller [Eckel 2014b; *Christy* 9172, 9173, NY, UBC]

**Orthotrichum** [Orthotrichaceae]

[*affine* Schrader ex Bridel = *Lewinskya affinis*]  
*alpestre* Hornschuch ex Bruch & Schimper  
[*bolanderi* Sullivant = *Lewinskya bolanderi* [Kofranek 1259, ver. D.H. Wagner]  
*consimile* Mitten  
*cupulatum* Hoffmann ex Bridel  
[*cupulatum* var. *jamesianum* (James) E. Lawton = *Orthotrichum pellucidum*]  
\**diaphanum* Schrader ex Bridel [Harpel, Gaddis]  
[*epapillosum* E. Lawton & F.J. Hermann = *Orthotrichum euryphyllum* ]  
\**euryphyllum* Venturi [Lewinsky-Haapasaari and Norris 1998; Vitt 2014a; *Weber* 2889,

- COLO, WTU, ver. J. Lewinsky-Haapasaari & D.H. Norris]  
 \**hallii* Sullivant & Lesquereux in W.S. Sullivant [Norris 81102, UC; Kofranek 2062, 2100,  
 ver. D.H. Wagner]  
 [*holzingeri* Renauld & Cardot = *Lewinskya holzingeri*]  
 [*laevigatum* J.E. Zetterstedt = *Lewinskya laevigata*]  
 [*lyellii* Hooker & Taylor = *Pulvigerella lyellii*]  
 [*obtusifolium* Bridel = *Nyholmiella obtusifolia*]  
 \**pellucidum* Lindberg [Vitt 2014a: Norris 81106, UC; Wagner 8209]  
 [*praemorsum* Venturi = *Lewinskya praemorsa*]  
*pulchellum* Brunton  
 [*pylaisii* Bridel = *Lewinskya pylaisii*]  
*rivulare* Turner  
 [*rupestre* Schleicher ex Schwägrichen = *Lewinskya rupestris*]  
 [*speciosum* Nees in J. Sturm et al. = *Lewinskya speciosa*]  
 [*striatum* Hedwig = *Lewinskya striata*]
- Palustriella** [Amblystegiaceae]  
*falcata* (Bridel) Hedenäs
- [Phascum = Tortula]**  
 [*cuspidatum* Hedwig = *Tortula acaulon*]
- Philonotis** [Bartramiaceae]  
 [*americana* Dismier = *Philonotis fontana* var. *americana*]  
*capillaris* Lindberg  
*fontana* var. *americana* (Dismier) Flowers ex H.A. Crum  
*fontana* (Hedwig) Bridel var. *fontana*  
*fontana* var. *pumila* (Turner) Bridel  
 \**marchica* (Hedwig) Bridel [Griffin 2014; Wagner 7847, 8932, NY]  
 \**yezoana* Bescherelle & Cardot [*Loring 5488SL*, ver. D.H. Wagner]
- Physcomitrella** [Funariaceae]  
 \**patens* (Hedwig) Bruch & Schimper [Tan 1978; Henderson s.n., 1887, NY, ver. B.C. Tan]
- Physcomitrium** [Funariaceae]  
*hookeri* Hampe  
*immersum* Sullivant  
 [*kellermanii* E. Britton = *Physcomitrium pyriforme*]  
 [*megalocarpum* Kindberg = *Physcomitrium pyriforme*]  
*pyriforme* (Hedwig) Hampe
- Plagiobryum** [Bryaceae]  
 [*bimum* (Schreber) N. Pedersen = *Ptychostomum bimum*]  
 [*capillare* (Hedwig) N. Pedersen = *Rosulabryum capillare*]  
 [*meesioides* (Kindberg) N. Pedersen = *Ptychostomum meesioides*]  
 [*pallens* (Swartz) N. Pedersen = *Ptychostomum pallens*]  
 [*pallescens* (Schleicher ex Schwägrichen) N. Pedersen = *Ptychostomum pallescens*]  
 [*uliginosum* (Bridel) N. Pedersen = *Ptychostomum cernuum*]  
*zieri* (Dickson ex Hedwig) Lindberg [includes "*zierii*"]
- Plagiomnium** [Mniaceae]  
 \**ciliare* (Müller Hal.) T.J. Koponen [McIntosh & Newmaster 2014a]



*cuspidatum* (Hedwig) T.J. Koponen  
*drummondii* (Bruch & Schimper) T.J. Koponen  
*ellipticum* (Bridel) T.J. Koponen  
*insigne* (Mitten) T.J. Koponen  
*medium* (Bruch & Schimper) T.J. Koponen  
*rostratum* (Schrader) T.J. Koponen  
[*rugicum* (Laurer) T.J. Koponen = *Plagiomnium ellipticum*]  
*venustum* (Mitten) T.J. Koponen

**Plagiopus** [Bartramiaceae]

[*oederi* (Bridel) Limpricht = *Plagiopus oederianus*]  
*oederianus* (Swartz) H.A. Crum & L.E. Anderson [includes "*oederiana*"]

**Plagiothecium** [Plagiotheciaceae]

*cavifolium* (Bridel) Z. Iwatsuki  
*denticulatum* (Hedwig) Schimper in P. Bruch & W.P. Schimper  
*laetum* Schimper in P. Bruch & W.P. Schimper  
*piliferum* (Swartz) Schimper in P. Bruch & W.P. Schimper  
[*roeseanum* Schimper = *Plagiothecium cavifolium*]  
[*undulatum* (Hedwig) Schimper = *Buckiella undulata*]

**Platydictya** [Plagiotheciaceae]

*jungermannioides* (Bridel) H.A. Crum

**[Platyhypnidium = Rhynchostegium]**

[*riparioides* (Hedwig) Dixon = *Rhynchostegium aquaticum*]

**Pleuridium** [Ditrichaceae]

\**acuminatum* Lindberg [Yip 2007a; *Young* 432, WTU, ver. E. Lawton]  
[*bolanderi* A. Jaeger = *Pleuridium acuminatum*]  
*subulatum* (Hedwig) Rabenhorst

**Pleurozium** [Hylocomiaceae]

*schreberi* (Willdenow ex Bridel) Mitten

**Pogonatum** [Polytrichaceae]

[*alpinum* (Hedwig) Palisot de Beauvois var. *alpinum* = *Polytrichastrum alpinum* var. *alpinum*]  
[*alpinum* var. *sylvaticum* (Menzies) Lindberg = *Polytrichastrum alpinum* var. *sylvaticum*]  
*contortum* (Bridel) Lesquereux  
*dentatum* (Bridel) Bridel  
*urnigerum* (Hedwig) Palisot de Beauvois

**Pohlia** [Mielichhoferiaceae]

*annotina* (Hedwig) Lindberg [Shaw 1982; *Becking* 5308755, WTU, ver. E. Lawton].  
[*annotina* var. *decipiens* Loeske = *Pohlia prolifera*]  
\**bolanderi* (Lesquereux) Brotherus [Shaw 1982, 2014; *Foster s.n.*, 1906, WTU, ver. A.J. Shaw]  
\**camptotrachelia* (Renauld & Cardot) Brotherus in H.G.A. Engler & K. Prantl [Shaw 1981b; *Young* 436, WTU, ver. A.J. Shaw]  
*cardotii* (Renauld) Brotherus in H.G.A. Engler & K. Prantl  
*cruda* (Hedwig) Lindberg  
*drummondii* (Müller Hal.) A.L. Andrews in A.J. Grout

[*drummondii* var. *gracilis* = *Pohlia filum*]

*elongata* Hedwig

[*filiformis* (Dickson) Andrews = *Anomobryum julaceum*]

\**filum* (Schimper) Mårtensson [Shaw 1981b, 1982, 2014; *Frye s.n.*, 1921, WTU, ver. A.J. Shaw]

[*lescuriana* (Sullivant) Ochi from western North America = *Pohlia pacifica*]

*longibracteata* Brotherus

*longicolla* (Hedwig) Lindberg [includes "*longicollis*"]

*ludwigii* (Sprengel) Brotherus [*Wagner 8419*, DUKE, ver. A.J. Shaw]. A specimen collected by Röhl in 1888 [WS], presumably the basis for most historical reports, does not appear to have been annotated recently. Voucher specimens for Campbell (1973, identified or verified by W.B. Schofield) have not been located, and reportedly were discarded (Campbell 2000).

*nutans* (Hedwig) Lindberg

\**obtusifolia* (Villars ex Bridel) L.F. Koch [*Wagner m2288*, DUKE, ver. A.J. Shaw]

*pacifica* A.J. Shaw

*proliger*a (Kindberg) Lindberg ex Arnell

[*schleicheri* = *Pohlia filum*]

[*sphagnicola* (Bruch & Schimper) Lindberg & Arnell = *Pohlia nutans*]

\**tundrae* A.J. Shaw [Shaw 1981a, 1981b, 2014; mixed collection with *Hermann 18873*, COLO, ver. A.J. Shaw]

*wahlenbergii* (F. Weber & D. Mohr) A.L. Andrews in A.J. Grout

### [**Polytrichadelphus = Meiotrichum**]

[*lyallii* Mitten = *Meiotrichum lyallii*]

### **Polytrichastrum** [Polytrichaceae]

*alpinum* (Hedwig) G.L. Smith var. *alpinum*

*alpinum* var. *sylvaticum* (Menzies) G.L. Smith

*formosum* (Hedwig) G.L. Smith. Specimens from Oregon need examination to determine their varietal status.

*sexangulare* (Bridel) G.L. Smith var. *sexangulare*

*sexangulare* var. *vulcanicum* (C.E.O. Jensen) G.L. Smith

### **Polytrichum** [Polytrichaceae]

*commune* Hedwig var. *commune*

[*formosum* Hedwig = *Polytrichastrum formosum*, excluded]

*juniperinum* Hedwig

[*longisetum* Bridel = *Polytrichastrum longisetum*, excluded]

[*lyallii* (Mitten) Kindberg = *Meiotrichum lyallii*]

*piliferum* Hedwig

[*sexangulare* Bridel = *Polytrichastrum sexangulare* var. *sexangulare*]

[*sphaerothecium* (Bescherelle) Müller Hal. = *Polytrichastrum sexangulare* var. *vulcanicum*]

*strictum* Bridel

### [**Porothamnium = Porotrichum**]

[*bigelovii* (Sullivant) Fleischer = *Porotrichum bigelovii*]

### **Porotrichum** [Neckeraceae]

*bigelovii* (Sullivant) Kindberg

[*vancouveriense* (Kindberg) H.A. Crum = *Bryolawtonia vancouveriensis*]  
**[Pottia = Hennediella, Tortula]**  
 [*heimii* (Hedwig) Fürnrohr = *Hennediella heimii*]  
 [*nevadensis* Cardot & Thériot = *Tortula nevadensis*]  
 [*truncata* (Hedwig) Bruch & Schimper = *Tortula truncata*]  
**Pseudephemerum** [Dicranaceae, *fide* Goffinet et al. 2014]  
 \**nitidum* (Hedwig) Loeske [Yip 2002, 2007b; *Christy 1593*, UBC, det. K.L. Yip]  
**Pseudobraunia** [Hedwigiaceae]  
*californica* (Lesquereux) Brotherus in H.G.A. Engler & K. Prantl  
**Pseudocalliergon** [Amblystegiaceae]  
*trifarium* (F. Weber & D. Mohr) Loeske  
**Pseudocampyllum** [Amblystegiaceae]  
*radicale* (P. Beauvois) Vanderpoorten & Hedenäs  
**Pseudocrossidium** [Pottiaceae]  
 \**hornschuchianum* (Schultz) R.H. Zander [Zander 2007e; *Wagner 9183*, MO, OSC, det. R.H. Zander]  
*obtusulum* (Lindberg) H.A. Crum & L.E. Anderson  
 [*revolutum* var. *obtusulum* (Lindberg) B.C. Tan = *P. obtusulum*]  
**Pseudoleskea** [Leskeaceae]  
*atricha* (Kindberg) Kindberg  
*baileyi* Best & Grout in A.J. Grout  
*incurvata* (Hedwig) Loeske var. *incurvata*  
*incurvata* var. *gigantea* (E. Lawton) H.A. Crum, Steere & L.E. Anderson  
*patens* (Lindberg) Kindberg  
*radicosa* (Mitten) Macoun & Kindberg var. *radicosa*  
 \**radicosa* var. *compacta* Best [Spence 2014f]  
 \**saviana* (De Notaris) Latzel [*Wagner 6532*, OSC]  
*stenophylla* Renauld & Cardot  
**Pseudoleskeella** [Leskeaceae]  
 \**serpentinensis* P.S. Wilson & D.H. Norris [Wilson and Norris 1989, as "*serpentinense*"]  
 \**tectorum* (Funck ex Bridel) Kindberg [Spence 2014g; *Schofield & Lyford 73878*, DUKE]  
**Pseudoscleropodium** [Brachytheciaceae]  
*purum* (Hedwig) M. Fleischer ex Brotherus in H.G.A. Engler et al.  
**Pseudotaxiphyllum** [Plagiotheciaceae]  
*elegans* (Bridel) Z. Iwatsuki  
**Pterigynandrum** [Pterigynandraceae]  
*filiforme* Hedwig  
**[Pterogonium = Nogopterium]**  
 [*gracile* (Hedwig) Smith = *Nogopterium gracile*]  
**Pterygoneurum** [Pottiaceae]  
*ovatum* (Hedwig) Dixon  
*subsessile* var. *subsessile* (Bridel) Juratzka  
**Ptilium** [Hypnaceae]  
*crista-castrensis* (Hedwig) De Notaris [*Hardman 2401*, ver. D.H. Wagner]. Old reports from Oregon (e.g., Curry and Multnomah Counties [*Gabrielson & Ingram 2128*, RM; *Potter*

1801, DUKE] have never been verified. See also Christy et al. (1982).

**Ptychomitrium** [Ptychomitriaceae]

*gardneri* Lesquereux

**Ptychostomum** [Bryaceae]

[*angustifolium* (Bridel) J.R. Spence & H.P. Ramsay = *Gemmabryum caespiticium*]

\**arcticum* (R. Brown) J.R. Spence [Spence 2014d]

*bimum* (Schreber) J.R. Spence

*cernuum* (Hedwig) Hornschuch

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

\**cyclophyllum* (Schwägrichen) J.R. Spence [*Jessup s.n.*, OSC, ver. D.H. Wagner; *Helliwell 6044*, det. J.A. Harpel]. An old record (*Courtney & Tschopp 23*, 1953, BRIT, NY) does not appear to have been verified recently.

[*imbricatulum* (Müller Hal.) D. T. Holyoak & N. Pedersen = *Gemmabryum caespiticium*]

*inclinatum* (Swartz ex Bridel) J.R. Spence [Spence 2014d; *Wagner m1885*, det. J.R. Spence].

An old report in Duvall (1938, as *Bryum stenotrichum*) has not been verified.

\**lonchocaulon* (Müller Hal.) J.R. Spence [Spence 2014d]. A specimen (NY) collected by A.S. Foster at Oregon City in 1906 does not appear to have been annotated recently.

*meesioides* (Kindberg) J.R. Spence

\**pacificum* J.R. Spence & Shevock [Spence and Shevock 2012]

\**pallens* (Swartz) J.R. Spence [Spence 1988, 2014d; *Wagner 7558*, OSC]. Older records do not appear to have been annotated recently.

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

*pseudotriquetrum* (Hedwig) J.R. Spence & H.P. Ramsay ex Holyoak & N. Pedersen

[*pseudotriquetrum* var. *bimum* (Schreber) Holyoak & N. Pedersen = *Ptychostomum bimum*]

\**schleicheri* (Schwägrichen) J.R. Spence [Spence 2014d]

*turbinatum* (Hedwig) J.R. Spence [Spence 2014d; *Wagner 8259*, OSC]. Old reports in Christy et al. (1982, as *Bryum turbinatum*) have not been verified.

*weigeli* (Sprengel) J.R. Spence

**Pulviger** [Orthotrichaceae]

*lyellii* (Hooker & Taylor) Plášek, Sawicki & Ochyra

**Racomitrium** [= *Rhacomitrium*, Grimmiaceae] We follow Larraín et al. (2013) in treating the genus in the traditional broad sense, but segregation of the genus is ongoing (e.g., Sawicki et al. 2015; Bednarek-Ochyra et al. 2015). It is difficult to distinguish the segregate genera in the field (Wagner 2007).

*aciculare* (Hedwig) Bridel [= *Codriophorus acicularis* (Hedwig) P. Beauvois]

\**affine* (Schleicher) Lindberg [= *Bucklandiella affinis* (F. Weber & D.Mohr) Bednarek-Ochyra & Ochyra]. [Chapman and Sanborn 1941, as *Rhacomitrium affinis*; Frisvoll 1988; Ochyra and Bednarek-Ochyra 2007a, as *Bucklandiella affinis*; *Sheldon S.13107*, 1903, NY, ver. A.A. Frisvoll].

\**brevipes* Kindberg [= *Bucklandiella brevipes* (Kindberg) Bednarek-Ochyra & Ochyra]. [Frisvoll 1988; *Howell 37*, 1880, NY, ver. A.A. Frisvoll].

*canescens* (Hedwig) Bridel [= *Niphotrichum canescens* ssp. *canescens* (Hedwig) Bednarek-Ochyra & Ochyra]

[*canescens* var. *ericoides* (Hedwig) Hampe = *Racomitrium ericoides*]

\**depressum* Lesquereux [= *Codriophorus depressus* (Lesquereux) Bednarek-Ochyra &

- Ochyra]. [Bednarek-Ochyra and Ochyra 2007, as *Codriophorus depressus*; Wagner 9933, 1998, OSC]
- \**elongatum* Ehrhart [= *Niphotrichum elongatum* (Frisvoll) Bednarek-Ochyra & Ochyra]. [Frisvoll 1983; Ochyra & Bednarek-Ochyra 2007b, as *Niphotrichum elongatum*; Thompson 4030M, 1928, WTU, ver. A.A. Frisvoll].
- ericoides* (Weber) Bridel [= *Niphotrichum ericoides* (Bridel) Bednarek-Ochyra & Ochyra]. [Frisvoll 1983; Ochyra and Bednarek-Ochyra 2007b, as *Niphotrichum ericoides*].
- \**fasciculare* (Hedwig) Bridel [= *Codriophorus fascicularis* (Hedwig) Bednarek-Ochyra & Ochyra; *Dilutineuron fasciculare* (Hedw.) Bednarek-Ochyra, Sawicki, Ochyra, Szczecińska & Plášek]. [Chapman and Sanborn 1941, as *Racomitrium fasciculare*; Bednarek-Ochyra and Ochyra 2004, 2007, as *Codriophorus fascicularis*; Schofield 72374, 1979, DUKE]
- heterostichum* (Hedwig) Bridel var. *heterostichum* [= *Bucklandiella heterosticha* (Hedwig) Bednarek-Ochyra & Ochyra]
- \**heterostichum* var. *macounii* (Kindberg) G.N. Jones = *Bucklandiella macounii* (Kindberg) Bednarek-Ochyra & Ochyra ssp. *macounii*. [Ochyra and Bednarek-Ochyra 2007a, as *Bucklandiella macounii*].
- \**heterostichum* var. *microcarpon* (Hedwig) Boulay [= *Racomitrium heterostichum* var. "microcarpum," *Bucklandiella microcarpa* (Hedwig) Bednarek-Ochyra & Ochyra]. Excluded by Christy et al. (1982) but reinstated here per Ochyra and Bednarek-Ochyra 2007a, as *Bucklandiella microcarpa*].
- [*heterostichum* var. *occidentale* Renault & Cardot = *Racomitrium occidentale*]
- [*heterostichum* var. *sudeticum* (Funck) Dixon = *Racomitrium sudeticum*]
- lanuginosum* (Hedwig) Bridel
- \**lawtoniae* Ireland [= *Racomitrium "lawtonae;" Bucklandiella lawtoniae* (Ireland) Bednarek-Ochyra & Ochyra]. [Norris 73433, 1988, UC].
- [*macounii* Kindberg = *Racomitrium heterostichum* var. *macounii*]
- \**macounii* ssp. *alpinum* (E. Lawton) Frisvoll [= *Bucklandiella macounii* ssp. *alpina* (E. Lawton) Bednarek-Ochyra & Ochyra [Frisvoll 1988; Ochyra and Bednarek-Ochyra 2007a, as *Bucklandiella macounii* ssp. *alpina*; Lawton 3217, 1955, WTU, ver. A.A. Frisvoll]
- \**obesum* Frisvoll [= *Bucklandiella obesum* (Frisvoll) Bednarek-Ochyra & Ochyra]. [Frisvoll 1988; Frye s.n., 1931, WTU, ver. A.A. Frisvoll].
- occidentale* (Renauld & Cardot) Renauld & Cardot [= *Bucklandiella occidentalis* (Renauld & Cardot) Bednarek-Ochyra & Ochyra]
- \**pacificum* Ireland & J.R. Spence [= *Bucklandiella pacifica* (Ireland & J.R. Spence) Bednarek-Ochyra & Ochyra] [Ireland and Spence 1987; Frye s.n., 1933, DUKE, NY, WTU, det R.R. Ireland, T. Cao, A.A. Frisvoll]
- [*patens* (Hedwig) Huebener = *Grimmia ramondii*]
- \**pygmaeum* Frisvoll [*Schofield & Lyford 74075*, KRAM, UBC, det. R. Ochyra; Ellis et al. 2015]
- \**ryszardii* Bednarek-Ochyra [= *Codriophorus ryszardii* (Bednarek-Ochyra) Bednarek-Ochyra & Ochyra]. [Bednarek-Ochyra 2000; Bednarek-Ochyra and Ochyra 2007; Fennell & Exeter 31, OSC, ver. D.H. Wagner;].
- sudeticum* (Funck) Bruch & Schimper [= *Bucklandiella sudetica* (Funck) Bednarek-Ochyra

- & Ochyra]
- [*sudeticum* forma *alpinum* E. Lawton = *Racomitrium macounii* ssp. *alpinum*]  
 [*sudeticum* forma *brevipes* E. Lawton = *Racomitrium brevipes*]  
 [*sudeticum* forma *macounii* E. Lawton = *Racomitrium macounii*]  
 [*sudeticum* forma *sudeticum* E. Lawton = *Racomitrium sudeticum*]  
*varium* (Mitten) A. Jaeger [= *Codriophorus varius* (Mitten) Bednarek-Ochyra & Ochyra;  
*Frisvollia varia* (Mitten) Sawicki, Szczecińska, Bednarek-Ochyra & Ochyra]
- Rhizomnium** [Mniaceae]  
*glabrescens* (Kindberg) T.J. Koponen  
*magnifolium* (Horikawa) T.J. Koponen  
*nudum* (R.S. Williams) T.J. Koponen  
 [*perssonii* T.J. Koponen = *Rhizomnium magnifolium*]  
*pseudopunctatum* (Bruch & Schimper) T.J. Koponen
- Rhynchostegium** [Brachytheciaceae]  
*aquaticum* A. Jaeger
- [Rhynchostegiella = Conardia]**  
 [*compacta* (Hooker) Loeske = *Conardia compacta*]
- Rhytidiadelphus** [Hylocomiaceae]  
*loreus* (Hedwig) Warnstorf  
*squarrosus* (Hedwig) Warnstorf  
*subpinnatus* (Lindberg) T.J. Koponen  
*triquetrus* (Hedwig) Warnstorf
- Rhytidiopsis** [Hylocomiaceae]  
*robusta* (Hooker) Brotherus in H.G.A. Engler & K. Prantl
- Rhytidium** [Rhytidiaceae]  
*rugosum* (Hedwig) Kindberg
- [Roellia = Roellobryon]**  
 [*roellii* (Brotherus) A.L. Andrews ex H.A. Crum = *Roellobryon roellii*]
- Roellobryon** [Roellobryaceae]  
*roellii* (Brotherus) Ochyra
- Rosulabryum** [Bryaceae]  
*canariense* (Bridel) Ochyra  
*capillare* (Hedwig) J.R. Spence  
 \**elegans* (Nees) Ochyra [Spence 2014e; *Wagner m1467*, ver. J.R. Spence]  
 \**erythroloma* (Kindberg) J. R. Spence [Spence 2014e]  
 \**gemmascens* (Kindberg) J. R. Spence [Spence 2014e; *McIntosh & Kruckeberg 4924*, 1980, UBC]  
 \**laevifilum* (Syed) Ochyra [Spence 2014e]  
 \**torquescens* (Bruch ex De Notaris) J. R. Spence [Spence 2014e]
- Sanionia** [Amblystegiaceae]  
*symmetrica* (Renauld & Cardot) Wheldon  
*uncinata* (Hedwig) Loeske var. *uncinata*  
 [*uncinata* var. *symmetrica* (Renauld & Cardot) H.A. Crum & L.E. Anderson = *Sanionia symmetrica*]

**Sarmentypnum** [Calliergonaceae]

*exannulatum* (Schimper) Hedenäs

**Schistidium** [Grimmiaceae]

*agassizii* Sullivant & Lesquereux

*apocarpum* (Hedwig) Bruch & Schimper

*atrichum* (Müller Hal. & Kindberg) W.A. Weber

*cinclidodonteum* (Müller Hal.) B. Bremer

*confertum* (Funck) Bruch & Schimper

*dupretii* (Thériot) W.A. Weber

\**flaccidum* (De Notaris) Ochyra [*Kofranek; Stone 7935.7*]

\**frigidum* H.H. Blom [McIntosh 2007a; *Schofield & Lyford 74018*, 1979, UBC]

\**heterophyllum* (Kindberg) T.T. McIntosh [*Kofranek 5874*, ver. R.I. Hastings & D.R. Toren]

*maritimum* (Turner) Bruch & Schimper

*occidentale* (E. Lawton) Churchill

\**papillosum* Culmann [McIntosh 2007a; *Frye 4*, 1935, WTU, ver H.H. Blom]

*rivulare* (Bridel) Podpěra

\**squarrosum* T.T. McIntosh, H.H. Blom, D.R. Toren & Shevock [*Wagner 9563*, OSC]

*strictum* (Turner) Loeske

\**tenerum* (J.E. Zetterstedt) Nyholm [*Schofield & Lyford 73991*, 1978, DUKE]

**Schistostega** [Schistostegaceae]

\**pennata* (Hedwig) F. Weber & D. Mohr [Harpel 2007a; *Davis; Harpel 17774, 17848*]

**[Sciaromium = Limbella]**

[*fryei* R.S. Williams = *Limbella fryei*]

[*tricostatum* (Sullivant) Mitten in North America = *Limbella fryei*]

**Sciuro-hypnum** [Brachytheciaceae]

*hylotapetum* (N.L. Higinbotham & B.L. Higinbotham) Ignatov & Huttunen

*oedipodium* (Mitten) Ignatov & Huttunen

*plumosum* (Hedwig) Ignatov & Huttunen

*reflexum* (Starke) Ignatov & Huttunen

**Scleropodium** [Brachytheciaceae]

*californicum* (Lesquereux) Kindberg [*Bilderback DB-2010-M2*, det. B.E. Carter]

*cespitans* (Müller Hal.) L.F. Koch var. *cespitans*

[*cespitans* var. *sublaeve* (Renauld & Cardot) Wijk & Margadant = *Scleropodium julaceum* [Carter 2012a]

\**julaceum* E. Lawton [Wagner 8684; *Bilderback DB-2009-M1, DB-2009-M2*, det. B.E. Carter]

*obtusifolium* (Mitten) Kindberg in J. Macoun

\**occidentale* B.E. Carter [Carter 2012a, 2012b]

*touretii* (Bridel) L.F. Koch var. *tourettii*

*touretii* var. *colpophyllum* (Sullivant) E. Lawton ex H.A. Crum

**[Scopelophila = Crumia]**

[*latifolia* (Kindberg) Renauld & Cardot = *Crumia latifolia*]

**Scouleria** [Scouleriaceae]

*aquatica* Hooker

*marginata* E. Britton

\**siskiyouensis* Shevock & D. H. Norris [Shevock and Norris 2014]

**Sphagnum** [Sphagnaceae]

*angustifolium* (C.E.O. Jensen) C.E.O. Jensen

\**bartlettianum* Warnstorf [McQueen and Andrus 2007]

*capillifolium* (Ehrhart) Hedwig

\**compactum* de Candolle [McQueen and Andrus 2007]

[*fallax* (Klinggraf) Klinggraf on the Pacific coast = *Sphagnum pacificum*]

*fimbriatum* W.M. Wilson & J.D. Hooker ssp. *fimbriatum*

*fuscum* (Schimper) H. Klinggraf

*girgensohnii* Russow

[*henryense* Warstorf = *Sphagnum palustre*]

\**magellanicum* Bridel [McQueen and Andrus 2007]

*mendocinum* Sullivant & Lesquereux

*miyabeanum* Warnstorf

\**oregonense* Andrus [Andrus 2007; McQueen and Andrus 2007]

\**pacificum* Flatberg [Flatberg 1989]

*palustre* Linnaeus

*papillosum* Lindberg

*platyphyllum* (Lindberg) Sullivant

*rubellum* W.M. Wilson

*russowii* Warnstorf

*squarrosum* Crome

*subnitens* Russow & Warnstorf

[*subsecundum* Nees von Esenbeck from the Pacific coast = *Sphagnum miyabeanum* [Shaw et al. 2008, 2012, 2014]]

*teres* (Schimper) Ångström

*warnstorffii* Russow

**Splachnum** [Splachnaceae]

*ampullaceum* Hedwig

\**sphaericum* Hedwig [Dewey rd081414-1109, ver. D.H. Wagner]

**Straminergon** [Calliergonaceae]

*stramineum* (Dickson ex Bridel) Hedenäs

**Stegonia** [Pottiaceae]

\**latifolia* var. *latifolia* (Schwägrichen) Venturi [Zander 2007f]

**[Stokesiella = Kindbergia]**

[*brittoniae* (Grout) H. Robinson = *Kindbergia praelonga*]

[*oregana* (Sullivant) H. Robinson = *Kindbergia oregana*]

[*praelonga* (Hedwig) H. Robinson var. *praelonga* = *Kindbergia praelonga*]

[*praelonga* var. *stokesii* (Turner) H.A. Crum = *Kindbergia praelonga*]

**Syntrichia** [Pottiaceae]

\**bartramii* (W.C. Steere) R.H. Zander [Zander & Eckel 4426, 1980, MO, ver. B.D. Mishler]

*caninervis* Mitten

\**laevipila* Bridel [Merrifield 2000, 2001; Mishler 2007]

*latifolia* (Bruch) Huebener

\**montana* Nees [Mishler 2007]



- norvegica* F. Weber  
*papillosissima* (Coppey) Loeske  
*princeps* (De Notaris) Mitten  
*ruralis* (Hedwig) F. Weber & D. Mohr
- Tayloria** [Splachnaceae]  
*serrata* (Hedwig) Bruch & Schimper
- Tetraphis** [Tetraphidaceae]  
 \**geniculata* Milde. Old reports in Christy et al. (1982) were never verified, but since 1993 authentic material has been found by Davis, Harpel, and others [Harpel 2007b].  
*pellucida* Hedwig var. *pellucida*
- Tetraplodon** [Splachnaceae]  
 \**mnioides* (Hedwig) Bruch & Schimper [Marino 2014; *Schofield 81955* and many other collectons]
- Thamnobryum** [Neckeraceae]  
*neckeroides* (Hooker) E. Lawton
- Thuidium** [Thuidiaceae]  
 \**recognitum* (Hedwig) Lindberg [Crum 2014]. A mostly eastern and northern species but apparently present in Washington and British Columbia. A specimen from Multnomah County (*Potter 2900*, DUKE), verified by Howard Crum in 1951, needs to be reexamined.
- Timmia** [Timmiaceae]  
*austriaca* Hedwig  
*megapolitana* Hedwig [*Norris 80448*, UC].
- Timmiella** [Pottiaceae]  
 \**anomala* (Bruch & Schimper) Limpricht [*Hunt s.n.*, 1913, PH; *Brenner 42-3*, MO, det. E.B. Bartram; *Norris 76449*, UC]  
*crassinervis* (Hampe) L.F. Koch
- Tomentypnum** [= "Tomenthypnum"] [Brachytheciaceae]  
*nitens* (Hedwig) Loeske
- Tortella** [Pottiaceae]  
*fragilis* (Hooker & Wilson) Limpricht  
 \**tortuosa* var. *arctica* (Arnell) Brotherus [Eckel 1998]  
*tortuosa* var. *tortuosa* (Hedwig) Limpricht
- Tortula** [Pottiaceae]  
*acaulon* (Withering) R.H. Zander  
 [*bistratosa* Flowers = *Syntrichia caninervis*]  
*bolanderi* (Lesquereux & James) M. Howe  
*brevipes* (Lesquereux) Brotherus  
 [*caninervis* (Mitten) Brotherus = *Syntrichia caninervis*]  
*hoppeana* (Schultz) Ochyra  
 \**leucostoma* (R. Brown) Hooker & Greville [*Wagner 6004*, ver. R.H. Zander]  
 [*laevipila* var. *meridionalis* (Schimper) Wijk & Margadant = *Syntrichia laevipila*]  
 [*latifolia* Bruch = *Syntrichia latifolia*]  
 \**mucronifolia* Schwägrichen [Zander and Eckel 2007; *Christy 7772*; *Norris*; *Wagner 6004*]  
*muralis* Hedwig

*nevadensis* (Cardot & Thériot) R.H. Zander  
 [ *norvegica* (F. Weber) Lindberg = *Syntrichia norvegica* ]  
*obtusifolia* (Schwägrichen) Mathieu  
 [ *papillosissima* (Coppey) Brotherus = *Syntrichia papillosissima* ]  
*plinthobia* (Sullivant & Lesquereux) Brotherus  
 [ *princeps* De Notaris = *Syntrichia princeps* ]  
 \**protobryoides* Zander [ *Kofranek 6324A*, det. R.H. Zander ]  
 [ *ruraliformis* (Bescherelle) W. Ingham = *Syntrichia ruralis* ]  
 [ *ruralis* (Hedwig) P. Gaertner, B. Meyer & Scherbius = *Syntrichia ruralis* ]  
 [ *ruralis* var. *hirsuta* Venturi = *Syntrichia papillosissima* ]  
*subulata* Hedwig  
*truncata* (Hedwig) Mitten  
**[Trachybryum = Homalothecium]**  
 [ *megaptilum* (Sullivant) W.B. Schofield = *Homalothecium megaptilum* ]  
**Trematodon** [Bruchiaceae]  
*asanoi* Tuzibe  
 [ *boasii* W.B. Schofield = *Trematodon asanoi* ]  
**Trichodon** [Ditrichaceae]  
*cylindricus* var. *cylindricus* (Hedwig) Schimper  
**[Trichostomopsis = Didymodon]**  
 [ *australasiae* (Hooker & Greville) H. Robinson = *Didymodon australasiae* ]  
**Trichostomum** [Pottiaceae]  
 \**crispulum* Bruch [ *Weiss RW08-59*, ver. R.H. Zander ]  
 \**tenuirostre* var. *tenuirostre* (Hooker & Taylor) Lindberg [ *Wagner m0610*, ver. R.H. Zander ]  
**Tripterocladium** [Lembophyllaceae]  
*leuocladulum* (Müller Hal.) A. Jaeger  
**Triquetrella** [Pottiaceae]  
*californica* (Lesquereux) Grout  
**Ulota** [Orthotrichaceae]  
 [ *crispa* var. *alaskana* (Cardot & Thériot) Grout = *Ulota obtusiuscula* ]  
*megalospora* Venturi  
*obtusiuscula* Müller Hal. & Kindberg in J. Macoun & N.C. Kindberg  
*phyllantha* Bridel  
**[Vinealobryum = Didymodon]**  
 [ *eckeliae* (R.H.Zander) R.H.Zander = *eckleliae* ]  
**Warnstorfia** [Calliergonaceae]  
 [ *exannulata* (Schimper) Loeske = *Sarmentypnum exannulatum* ]  
*fluitans* (Hedwig) Loeske  
**Weissia** [Pottiaceae]  
*controversa* Hedwig  
**Zygodon** [Orthotrichaceae]  
*viridissimus* var. *rupestris* Lindberg in C.J. Hartman  
 [ *vulgaris* (Malta) Nyholm = *Zygodon viridissimus* var. *rupestris* ]

## TAXA EXCLUDED FROM OREGON

The following taxa have been reported from Oregon, but are known to be either errors or cannot be found in herbarium databases currently accessible online. A number of them occur in an adjoining state (California, Idaho, or Washington) and should be sought in Oregon. See also Christy et al. (1982) for earlier exclusions.

*Aphanorrhagma serratum* (Wilson & Hooker) Sullivant—Old reports from Oregon (see Christy et al. 1982) have never been verified. This taxon does not occur in western North America and presumably was misidentified.

*Arctoa hyperborea* (Gunnerus) Bruch & Schimper—Old reports from Oregon (see Christy et al. 1982) have never been verified. Not confirmed from North America (Newmaster 2007). A specimen from Mt. Hood [Röll 993, 1888, WIS] does not appear to have been annotated.

*Bestia longipes* (Sullivant & Lesquereux) Brotherus in H.G.A. Engler & K. Prantl—Reports from Oregon (Chapman and Sanborn 1941; Koch 1950; Howell, 1882 and Henderson 16865, both at NY) are referable to *Isothecium cristatum* (Shevock et al. 2008).

*Bartramia rosamrosiae* Damayanti, J. Muñoz, J.-P. Frahm & D. Quandt [= *B. stricta* Bridel s.l.; Damayanti et al. 2012]—Not confirmed from Oregon. An earlier report was based on a misidentification.

*Brachythecium campestre* (Müller Hal.) Schimper in P. Bruch and W.P. Schimper—An old report in Duvall (1938) has never been verified. Apparently restricted to east of the Rocky Mountains (Ignatov 2014a).

*Campylophyllum hispidulum* (Bridel) Hedenäs—An old report from Oregon (see Christy et al. 1982, as *Campylium hispidulum*) has never been verified. The closest reports are from California, Idaho, British Columbia, and Montana (Norris and Shevock 2004a, 2004b, as *Campylium hispidulum*; Hedenäs 2014b).

*Dicranodontium denudatum* (Bridel) E. Britton—An old report from Oregon (see Christy et al. 1982) has never been verified.

*Dicranum fragilifolium* Lindberg—Old reports from Oregon (see Christy et al. 1982) have never been verified. Specimens from Benton and Linn Counties (*Gilbert s.n.*, OSC; *Price 1807*, MO) need verification. Rarely found south of the Canadian border (Ireland 2007).

*Dicranum spadiceum* J.E. Zetterstedt—Old reports from Oregon (see Christy et al. 1982) have never been verified. The closest reports are from British Columbia, Montana, and Utah (Ireland 2007).

*Didymodon vinealis* var. *luridus* (Hornschuch) R.H. Zander, [*Didymodon luridus* Sprengel]—Reported from Oregon by McIntosh (1986, 1989), but excluded from North America by Zander (2007d). Reports from our flora are mostly referable to *D. brachyphyllus* (McIntosh 2013).

*Ditrichum pusillum* (Hedwig) Hampe—Old reports from Oregon (see Christy et al. 1982) have never been verified. A specimen from Grant County [*Manuel 153*, MO] needs to be verified. This taxon does not occur in western North America and presumably was misidentified.

*Drepanocladus sendtneri* (Schimper ex H. Müller) Warnstorff—Excluded from North America (Hedenäs 2014a). Reports from Oregon are referable to *Drepanocladu sordidus* (Lars Hedenäs, pers. comm. to D.H. Wagner, April 2009).

*Grimmia donniana* var. *triformis* (Crest. & De Notaris) Loeske—An old report from Oregon

- (see Christy et al. 1982) has never been verified. The variety is difficult to demonstrate and its status in North America is uncertain (Hastings 2011). Very rare in Europe (Muñoz 1998, as *G. triformis*).
- Homalia trichomanoides* (Hedwig) Schimper var. *trichomanoides*—An old report from Oregon (see Christy et al. 1982) has never been verified. The closest reports are from Washington and British Columbia (Sastre-De Jesús 2014b).
- Hookeria acutifolia* Hooker & Greville—An old report (Snider 1982) and a specimen at TENN have never been verified. Old reports from California were referred to *Hookeria lucens* (Norris and Shevock 2004a).
- Hygrohypnum montanum* (Lindberg) Brotherus in H.G.A. Engler & K. Prantl—Old reports from Oregon (see Christy et al. 1982) have never been verified. Not present in western North America (Jamieson 2014).
- Hygrohypnum norvegicum* (Schimper) J.J. Amann in J.J. Amann et al.—Old reports from Oregon (see Christy et al. 1982) have never been verified. The closest reports are from Washington and British Columbia (Lawton 1971; Jamieson 2014).
- Hypnum cupressiforme* var. *filiforme* Bridel—Reported from Oregon by Chapman and Sanborn (1941), but voucher specimens not found. This taxon is not known to occur in western North America (Schofield 2014a), and presumably the specimen was mistidentified. If present in our area, it would most likely occur as a lawn weed (Norris and Shevock 2004a).
- Hypnum fertile* Sendtner—An old report from Oregon (see Christy et al. 1982), and a specimen from Salem (*Slavens 496*, WTU) have never been verified. *Hypnum fertile* is European, and reports from North America are referable to *H. fauriei* (Schofield 2014a), but the latter is not known to occur in western North America.
- Imbricium alpinum* (Hudson ex Withering) N. Pedersen—Voucher specimens for Campbell (1973, as *Bryum alpinum*, identified or verified by W.B. Schofield) have not been located, and reportedly were discarded (Campbell 2000). *Henderson s.n.* (ORE 107585), annotated by Christy in 1981, needs confirmation.
- Isothecium myosuroides* Bridel—The closest authenticated records are from eastern North America, while the identity of western material remains unclear (Schofield 2014b).
- Jaffueliobryum rauii* (Austin) Thériot—An old report from Oregon (see Christy et al. 1982, as *Grimmia rauii*) has never been verified. The closest reports are from California, Nevada, and Montana (Norris and Shevock 2004a, 2004b; Spence 2007).
- Lewinskya elegans* [= *Orthotrichum elegans* Hooker & Greville]—An old report from Oregon (see Christy et al. 1982, as *O. speciosum* var. *elegans*) may be based on a specimen (*Lyall s.n.*, 1861, FH) collected in northern Idaho during the Northwest Boundary Survey of 1857-1861, which referred to the entire Pacific Northwest as "Oregon." Unlikely to occur in Oregon (Vitt 2014a).
- Micromitrium tenerum* (Bruch & Schimper) Crosby—Reported in Christy and Wagner (1999), but reannotated by Virginia Bryan as *Micromitrium synoicum*. The former is present in California (Bryan 2007; Malcolm et al. 2009). A specimen from Benton County (*Merrifield 1570*, OSC) needs reexamination.
- Orthotrichum anomalum* Hedwig—An old report from Oregon (see Christy et al. 1982) has never been verified. Specimens from Mt. Hood (*Henderson 1502*, NY) and Mt. Jefferson (*Horton 2449*, MO, OSC) need verification. The closest reports are from Idaho, Washington, and British Columbia (Vitt 2014a).

*Orthotrichum tenellum* Bruch ex Bridel—Duplicates of a specimen with this name from Hood River County (*Weber 2796*, DUKE) have been named *O. striatum* (MO, NY, WTU).

*Pohlia lescuriana* (Sullivant) Grout—Reports from western North America (including *Christy 465*, UBC, WTU) are referable to *Pohlia pacifica* (Shaw 1982, 2014).

*Polytrichastrum longisetum* (Bridel) G.L. Smith—Old reports from Oregon (see Christy et al. 1982, as *Polytrichum longisetum*) and a number of specimens (DUKE, NEB, NY, OSC, UBC) do not appear to have been verified recently. Merrill (2007a) indicated that the closest occurrences are in the Rocky Mountains of British Columbia, Montana, Wyoming, and Colorado.

*Polytrichum jensenii* I. Hagen—Old reports from Oregon (see Christy et al. 1982, as *Polytrichum commune* var. *maximoviczii* and *Polytrichum commune* var. *jensenii*) have never been verified. An arctic and arctic-alpine species, the closest report is from Wyoming (Merrill 2007b).

*Ptychostomum cernuum* (Hedwig) Hornschuch—An old report from Oregon (see Lawton 1971, as *Bryum uliginosum*) has never been verified. Specimens (*Wagner 2317*, OSC, WTU) need verification. The closest reports are from Colorado and British Columbia (Spence 2014d).

*Ptychostomum pendulum* Hornschuch—No known valid material from Oregon. A specimen [*Kofranek 2489*] previously identified by John Spence as this species has been redetermined as *P. inclinatum* [pers. comm. Spence to David Kofranek, 2016].

*Racomitrium aquaticum* (Bridel) Bridel [= *Codriophorus aquaticus* (Bridel) Bednarek-Ochyra and Ochyra]—Restricted to Eurasia (Bednarek-Ochyra 2000; Bednarek-Ochyra and Ochyra 2004). Records from North America are *Racomitrium rysardii*.

*Sciuro-hypnum curtum* (Lindberg) Ignatov—Reports from the Pacific coast are referable to *Sciuro-hypnum oedipodium* (Ignatov and Milyutina 2007; Ignatov 2014b).

*Sphagnum contortum* Schultz—Of hybrid origin, with no known valid material from Oregon (Shaw et al. 2012).

*Sphagnum fallax* (Klinggraf) Klinggraf—Reports from the Pacific coast are referable to *Sphagnum pacificum* (Flatberg 1989).

*Sphagnum majus* (Russow) C.E.O. Jensen. An earlier report was based on a misidentification.

*Sphagnum quinquefarium* (Lindberg) Warnstorf—Old reports from Oregon (see Christy et al. 1982) have never been verified. Reported from California (Norris and Shevock 2004a, 2004b) and British Columbia (McQueen and Andrus 2007).

*Sphagnum subsecundum* Nees von Esenbeck—Reports from the Pacific coast are referable to *Sphagnum miyabeaenum* (Shaw et al. 2008, 2012, 2014).

*Sphagnum tenellum* (Bridel) Bory—Old reports from Oregon (see Christy et al. 1982) have never been verified. A specimen from Curry County (*DuVall 1009*, WTU) needs reexamination. The closest report is from British Columbia (McQueen and Andrus 2007).

*Tayloria hornschuchii* (Greville & Arnott) Brotherus in H.G.A. Engler & K. Prant—Old reports from Oregon (see Christy et al. 1982) have never been verified. This high arctic and Rocky Mountain species is unlikely to occur in Oregon (LaFarge-England and Vitt 1985; Marino 2014).

## TAXA EXPECTED TO OCCUR IN OREGON

The following taxa are reported from both California and Washington, but have not been found in Oregon. Their presence to the north and south implies a continuous distribution and they should also be expected to occur here. We do not include species reported from only one adjoining state (California, Idaho, or Washington), because distribution is less likely to be continuous. *Orthotrichum tenellum* and *Tortula truncata*, reported from California and Washington by Vitt (2014a), Norris and Shevock (2004a, 2004b), and Zander and Eckel (2007), were excluded from the California flora by Malcolm et al. (2009).

*Dicranella pacifica* W.B. Schofield—California, Washington [Norris and Shevock 2004a, 2004b; Crum 2007]. Old reports from Oregon (see Christy et al. 1982) have never been verified.

*Dicranella subulata* (Hedwig) Schimper—California, Washington [Norris and Shevock 2004a, 2004b; Crum 2007]. An old report from Oregon (see Christy et al. 1982) with a voucher specimen collected on Mt. Hood [Röll 995, 1888, WIS] does not appear to have been annotated.

*Dicranum undulatum* Bridel—California, Washington [Norris and Shevock 2004a, 2004b; Ireland 2007]. The occurrence in California is reportedly a weedy introduction (Norris and Shevock 2004a, 2004b).

*Discelium nudum* (Dickson) Bridel—California, Washington [Norris and Shevock 2004a, 2004b; Schofield 2007].

*Gemmabryum tenuisetum* (Limpricht) J.R. Spence & H.P. Ramsey—California, Washington [Spence 2014b].

*Grimmia crinitoleucophaea* Cardot—California, Washington [Hastings and Greven 2007].

*Grimmia lesherae* Greven—California, Washington [Hastings and Greven 2007].

*Grimmia mollis* Bruch & Schimper—California, Washington [Hastings and Greven 2007].

*Hypnum vaucheri* Lesquereux—California, Washington [Schofield 2014a].

*Myurella julacea* (Schwägrichen) Schimper—California, Washington [Vitt 2014b]. Old reports from Oregon (see Christy et al. 1982) have never been verified, but a recent report by Scot Loring may be this species.

*Orthotrichum pumilum* Swartz—California, Washington [Vitt 2014a].

*Orthotrichum tenellum* Bruch ex Bridel—Excluded from the California flora by Malcolm et al. (2009), but reported from California and Washington by Vitt (2014a).

*Pohlia andalusica* (Höhnelt) Brotherus in H.G.A. Engler & K. Prantl—California, Washington [Shaw 2014].

*Pohlia atropurpurea* (Wahlenberg) H. Lindberg—California, Washington [Shaw 2014].

*Polytrichastrum alpinum* var. *septentrionale* (Bridel) G.L. Smith—California, Washington [Merrill 2007a].

*Polytrichastrum formosum* var. *densifolium* (Mitten) Z. Iwatsuki & A. Noguchi—California, Washington [Merrill 2007a]. Specimens of *Polytrichastrum formosum* from Oregon need examination to determine their varietal status.

*Rhizomnium punctatum* (Hedwig) T.J. Koponen—California, Washington [McIntosh & Newmaster 2014b].

*Syntrichia papillosa* (Wilson) Juratzka—California, Washington [Mishler 2007].

*Tayloria lingulata* (Dickson) Lindberg—California, Washington [Marino 2014].

*Tortella tortuosa* var. *fragilifolia* (Juratzka) Limpricht—California, Washington (Eckel 2007).

- Tortula amplexa* (Lesquereux) W.C. Steere—California, Washington [Zander and Eckel 2007]. Old reports from Oregon (see Christy et al. 1982) have never been verified.
- Warnstorfia pseudostraminea* (Müller Hal.) Tuomikoski & T. J. Koponen—California, Washington [Malcolm et al. 2009; Hedenäs 2014c].

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