

CHECKLIST OF MOSSES OF OREGON

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March 2014

This list is based on Christy et al. (1982) and supersedes earlier online versions. Additions to the flora since 1982 are marked by asterisks, with the earliest known verified sources noted in square brackets. Currently, 511 taxa and 167 genera are known to occur in the flora.

Unless noted otherwise, nomenclature conforms to [published](#) (Volume 27) and provisional (Volume 28) treatments for the Bryophyte Flora of North America (BFNA). Volume 28 is now in press and provisional treatments are no longer visible on the [BFNA website](#), but links provided with literature citations below are still active for the time being. For genera treated in Volume 28, sources of nomenclature are provided in parentheses following the name of the genus, and will be updated once Volume 28 is published. 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.

Acaulon

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

Aloina

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

bifrons (De Notaris) Delgadillo

Alsia

californica (Hooker & Arnott) Sullivant

Amblystegium

[*juratzkanum* Schimper = *Amblystegium serpens*]

[*polygamum* Bruch, Schimper & W. Gümbel = *Drepanocladus polygamus*]

[*riparium* (Hedwig) Bruch, Schimper & W. Gümbel = *Leptodictyum riparium*]
[*saxatile* Schimper = *Pseudocampylium radicale*]
serpens (Hedwig) Schimper
[*serpens* var. *juratzkanum* (Schimper) Rau & Hervey = *Amblystegium serpens*]
[*tenax* (Hedwig) C. Jensen = *Hygroamblystegium varium*]
[*trichopodium* (Schultz) Hartmann = *Hygroamblystegium varium* ssp. *varium* var. *humile*]

Amphidium

californicum (Müller Hal.) Brotherus
lapponicum (Hedwig) Schimper
mougeotii (Bruch, Schimper & W. Gümbel) Schimper

Anacolia

[*baueri* Hampe = *Anacolia menziesii*]
menziesii (Turner) Paris
[*menziesii* var. *baueri* (Hampe) Flowers = *Anacolia menziesii*]

Andreaea

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

**aestivum* (Hedwig) Mitten [Loring 3531B, ver. D.H. Norris]

Anomobryum

[*filiforme* (Dickson) Solms = *Anomobryum julaceum*]
julaceum (Schrader) Schimper

Antitrichia

californica Sullivant
curtipendula (Timm) Bridel
[*curtipendula* var. *gigantea* Sullivant & Lesquereux = *Antitrichia curtipendula*]
[*gigantea* (Sullivant & Lesquereux) Kindberg = *Antitrichia curtipendula*]

Arctoa

[*blyttii* (Bruch & Schimper) Loeske = *Kiaeria blyttii*]
[*falcata* (Hedwig) Loeske = *Kiaeria falcata*]
fulvella (Dickson) Bruch & Schimper
[*starkei* (Weber & D. Mohr) Loeske = *Kiaeria starkei*]

[Atractylocarpus = Campylopodia]

[*flagellaceus* (Müller Hal.) Williams = *Campylopodia flagellacea*]

Atrichum

selwynii Austin

Aulacomnium

androgynum (Hedwig) Schwägrichen

palustre (Hedwig) Schwägrichen

Barbula

[*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

ithyphylla Bridel

pomiformis Hedwig

rosamrosiae Damayanti, J. Muñoz, J.-P. Frahm & D. Quandt [Damayanti et al. 2012; *Kyan PLOE-MF-050212*, det D.H. Wagner]

[*stricta* Bridel = *Bartramia rosamrosiae*]

[Bestia, ours = Bryolawtonia]

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

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

Blindia

acuta (Hedwig) Bruch & Schimper

Brachydontium

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

Brachytheciastrum (Ignatov & Huttunen 2002)

collinum (Schleicher) Ignatov & Huttunen

leibergii (Grout) Ignatov & Huttunen

velutinum (Hedwig) Ignatov & Huttunen

Brachythecium (Ignatov & Huttunen 2002)

albicans (Hedwig) Schimper

bolanderi (Lesquereux) A. Jaeger

[*collinum* (Schleicher) Schimper = *Brachytheciastrum collinum*]

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

erythrorrhizon Schimper

frigidum (Müller Hal.) Bescherelle

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

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

laetum (Bridel) Bruch, Schimper & W. Gumbel

[*leibergii* Grout = *Brachytheciastrum leibergii*]

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

[*oxycladon* (Bridel) A. Jaeger = *Brachythecium laetum*; Robinson and Ignatov 1997]

[*plumosum* (Hedwig) Schimper = *Sciuro-hypnum plumosum*]
[*reflexum* var. *pacificum* Renaud & Cardot = *Sciuro-hypnum reflexum*]
rivulare Schimper
rutabulum (Hedwig) Schimper
salebrosum (Weber & D. Mohr) 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*]
[*velutinum* var. *venustum* (De Notaris) Arcangeli = *Brachytheciastrum velutinum*]

Bruchia

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

Bryoerythrophyllum

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

Bryolawtonia

vancouveriensis (Kindberg) D.H. Norris & E.J. Enroth

Bryum

[*algovicum* Sendtner = *Ptychostomum pendulum*]
[*alpinum* Hudson = *Imbribryum alpinum*]
[*amblyodon* Müller Hal. = *Ptychostomum inclinatum*]
[*angustirete* Kindb. = *Ptychostomum pendulum*]
argenteum Hedwig var. *argenteum*
[*barnesii* J.B. Wood = *Gemmabryum barnesii*]
[*bicolor* Dickson = *Gemmabryum dichotomum*]
[*caespiticium* Hedwig = *Gemmabryum caespiticium*]
**calobryoides* J.R. Spence [Spence 2011; Wagner 2572, 6022, OSC]
[*canariense* Bridel = *Rosulabryum canariense*]
[*capillare* Hedwig = *Rosulabryum capillare*]
[*creberrimum* Taylor = *Ptychostomum creberrimum*]
[*cyclophyllum* (Schwägri) Bruch, Schimper & W. Gümbel = *Ptychostomum cyclophyllum*]
[*dichotomum* Hedwig = *Gemmabryum dichotomum*, excluded]
[*gemmilucens* Wilczek & Demaret = *Gemmabryum gemmilucens*]
[*gemmaiparum* De Notaris = *Imbribryum gemmaiparum*]
**lanatum* (P. Beauvois) Bridel [Spence 2011; Wagner m2676]
[*lisae* var. *cuspidatum* (Bruch, Schimper & W. Gümbel) 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 = *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 = *Roellia roellii*
[*stenotrichum* = *Ptychostomum inclinatum*]
[*subapiculatum* Hampe = *Gemmabryum subapiculatum*]
[*turbinatum* (Hedwig) Turner = *Ptychostomum turbinatum*]
[*uliginosum* (Bridel) Bruch & Schimper = *Ptychostomum cernuum*]
[*violaceum* Crundw. & Nyholm = *Gemmabryum violaceum*]
[*weigelii* Sprengel = *Ptychostomum weigelii*]

Buckiella

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

aphylla Hedwig

piperi Best

viridis (de Candolle) de Candolle

Calliargon (Hedenäs 1993)

cordifolium (Hedwig) Kindberg

giganteum (Schimper) Kindberg

**richardsonii* (Mitten) Kindberg [*Dewey 092707-1216*, NY, var. N.G Miller and D.H. Wagner]

[*stramineum* (Bridel) Kindberg = *Straminergon stramineum*]

[*trifarium* (F. Weber & D. Mohr) Kindberg = *Pseudocalliargon trifarium*]

Calliargonella

cuspidata (Hedwig) Loeske

Campyliadelphus

chrysophyllus (Bridel) Kanda

Campylium

[*chrysophyllum* (Bridel) Lange = *Campyliadelphus chrysophyllus*]

[*hispidulum* (Bridel) Mitten = *Campylophyllum hispidulum*, excluded]

[*polygamum* (Bruch, Schimper & W.T. Gümbel) 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*].

Old reports from Oregon (see Christy et al. 1982) have never been verified.

Campylopodia

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

Campylopus

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

introflexus (Hedwig) Bridel

schmidii (Müller Hal.) A. Jaeger

**subulatus* Schimper [*Kofranek s.n.*, ver. J.-P. Frahm; Frahm 2007]

Ceratodon

**purpureus* ssp. *conicus* (Hampe) Dixon [McIntosh 2007b]

purpureus (Hedwig) Bridel ssp. *purpureus*

Claopodium

bolanderi Best

crispifolium (Hooker) Renault & Cardot

whippleanum (Sullivant) Renault & Cardot

Climacium (Norris and Shevock 2004a, 2004b)

dendroides (Hedwig) F. Weber & D. Mohr

[Codriophorus = Racomitrium]

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

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

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

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

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

Conardia

compacta (Müller Hal.) H. Robinson

Conostomum

tetragonum (Hedwig) Lindberg

Coscinodon

calyptratus (Hooker) C.E.O. Jensen

Cratoneuron (Norris and Shevock 2004a, 2004b)

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

filicinum (Hedwig) Spruce

Crumia

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

Cynodontium

jeneri (Schimper) Stirton

Dendroalsia

abietina (Hooker) E. Britton

[Desmatodon = Hennediella, Tortula]

[*heimii* (Hedwig) Mitten = *Hennediella heimii*]

[*latifolius* (Hedwig) Bridel = *Tortula hoppeana*]

[*obtusifolius* (Schwägrichen) Schimper = *Tortula obtusifolia*]

[*plinthobius* Sullivant & Lesquereux = *Tortula plinthobia*]

Dichelyma

**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

**olympicum* Renauld & Cardot [*Kofranek 2335*, ver. D.H. Wagner]

pellucidum (Hedwig) Schimper

Dicranella

crispa (Hedwig) Schimper

heteromalla (Hedwig) Schimper

palustris (Dickson) E.F. Warburg

rufescens (Withering) Schimper

schreberiana (Hedwig) Hilfert

varia (Hedwig) Schimper

Dicranoweisia

cirrata (Hedwig) Lindberg

crispula (Hedwig) Lindberg

[*crispula* var. *contermina* (Renauld & Cardot) Grout = *Dicranoweisia crispula*]

[*crispula* var. *roellii* (Kindberg) E. Lawton = *Dicranoweisia crispula*]

Dicranum

bonjeanii De Notaris Excluded by Christy et al. (1982), but reinstated here per Ireland (2007).

fuscescens Turner var. *fuscescens*

howellii Renauld & 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

[*strictum* D. Mohr = *Dicranum tauricum*]

tauricum Sapjegin

Didymodon

australasiae (Hooker & Greville) R.H. Zander

brachyphyllus (Sullivant) R.H. Zander

[*columbianus* F.J. Hermann & E. Lawton = *Bryoerythrophyllum columbianum*]

**eckleliae* R.H. Zander [*Toren 04-27-2008*; *Kellman and Shaw 5846*]

**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 was reportedly 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]

[*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

Distichium

capillaceum (Hedwig) Bruch & Schimper

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

Ditrichum

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

aduncus (Hedwig) Warnstorf

[*aduncus* var. *kneiffii* (Bruch, Schimper & W.T. Gümbel) Mönkemeyer = *Drepanocladus aduncus*]

[*exannulatus* (Bruch, Schimper & W.T. Gümbel) Warnstorf = *Sarmentypnum exannulatum*]

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

**longifolius* (Wilson) Brotherus. Excluded by Christy et al. (1982, as *Drepanocladus aduncus* var. *capillifolius*), but reinstated here per Hedenäs (2008a).

polygamus (Schimper) Hedenäs

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

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

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

[Dryptodon = Grimmia]

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

Encalypta

[*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

californicus (Sullivant & Lesquereux) H.A. Crum & L.E. Anderson
fascicularis (Hedwig) Müller Hal.
[*leibergii* E. Britton = *Entosthodon fascicularis*]

Ephemerum

crassinervium var. *crassinervium* (Schwägrichen) Hampe
serratum (Hedwig) Hampe

Epipterygium

tozeri (Greville) Lindberg

Eucladium

**verticillatum* (Bridel) Bruch & Schimper [Stone, Exeter, others]

Eurhynchiastrum

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) Bruch, Schimper & Gumbel 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, W.C. Steere & L.E. Anderson =
Eurhynchiastrum pulchellum var. *barnesii*]
[*riparioides* (Hedwig) P.W. Richards = *Rhynchostegium aquaticum*]

Fabronia

ciliaris (Bridel) Bridel
pusilla Raddi

Fissidens

adanthoides 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

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 2010; 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*]

Funaria

hygrometrica Hedwig var. *hygrometrica*
muhlenbergii Turner

Gemmabryum

**barnesii* (J.B. Wood) J.R. Spence [Vanderpoorten and Zartman 2002, as *Bryum barnesii*; Spence 2011; *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 2011]
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

[*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 by A.S. Foster near Willamette Falls in 1895 do not appear to have been annotated recently.

[*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

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

vernicosus (Mitten) Hedenäs

Haplocladium

microphyllum (Hedwig) Brotherus [Magill 2010]

Hedwigia

ciliata (Hedwig) Palisot de Beauvois

**detonsa* (M. Howe) W.R. Buck & D.H. Norris [Buck and Norris 1996]

**stellata* Hedenäs [Buck and Norris 1996; Eckel 2012; *Howell s.n.*, 1880, NY, ver. W.R. Buck]

Helodium

blandowii (F. Weber & D. Mohr) Warnstorf

Henediella

heimii var. *heimii* (Hedwig) R.H. Zander

Herzogiella

seligeri (Bridel) Z. Iwatsuki

Heterocladium (Norris and Shevock 2004a, 2004b)

dimorphum (Bridel) Schimper

macounii Best

procurrens (Mitten) A. Jaeger

Homalothecium (Hofmann 1997, 1998; Ignatov and Huttunen 2002; Hedenäs et al. 2009)

[*aeneum* (Mitten) E. Lawton = *H. nevadense* ssp. *aeneum*]

arenarium (Lesquereux) E. Lawton

aureum (Spruce) H. Robinson

fulgescens (Mitten) E. Lawton

megaptilum (Sullivant) H. Robinson

nevadense ssp. *aeneum* (Mitten) H. Hofmann

[*nitens* (Hedwig) H. Robinson = *Tomentypnum nitens*]

nuttallii (W.M. Wilson) A. Jaeger

[*pinnatifidum* (Sullivant & Lesquereux) E. Lawton = *H. aureum*]

Hookeria

lucens (Hedwig) Smith

Hygroamblystegium

[*tenax* (Hedwig) C. E. O. Jensen = *Hygroamblystegium varium*]

varium (Hedwig) Mönkemeyer var. *varium*

varium var. *humile* Vanderpoorten & Hedenäs

Hygrohypnum

bestii (Renauld & Bryhn) Holzinger

**cochlearifolium* (Venturi) Brotherus [Weiss 20133]

[*dilatatum* (Wilson) Kindberg = *Hygrohypnum duriusculum*]

duriusculum (De Notaris) D.W. Jamieson

luridum (Hedwig) Jennings

molle (Hedwig) Loeske

ochraceum (Turner) Loeske

smithii (Swartz) Brotherus

[Hylocomiadelphus = Rhytidiadelphus]

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

Hylocomium

splendens (Hedwig) Schimper

Hymenostylium

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

Hypnum

circinale Hooker

dieckii Renauld & Cardot

**lindbergii* Mitten [*Anderson 14499*, UBC; *Smith 1091*, ver. D.H. Wagner]. A specimens (NEB) collected by A.S. Foster near West Linn in 1905, originally identified by A.J. Grout and G.N. Best, does not appear to have been annotated recently.

pratense Spruce

revolutum (Mitten) Lindberg var. *revolutum*

subimponens Lesquereux

Imbricobryum

alpinum (Hudson) Pedersen. Voucher specimens for Campbell (1973, as *Bryum alpinum*, identified or verified by W.B. Schofield) have not been located, and were reportedly discarded (Campbell 2000). *Henderson s.n.* (ORE 107585), annotated by Christy in 1981, needs confirmation.

gemmiparum (De Notaris) J.R. Spence

miniatum (Lesquereux) J.R. Spence

muehlenbeckii (Bruch & Schimper) Pedersen. [Spence 2010a, 2011; *Wagner 8364*, OSC; *Buck 37702*, NY] Old reports in Christy et al. (1982, as *Bryum muehlenbeckii*) have not been verified.

Isopterygiopsis

pulchella (Hedwig) Z. Iwatsuki

[Isopterygium = Herzogiella, Isopterygiopsis, Pseudotaxiphyllum]

[*elegans* (Bridel) Lindberg = *Pseudotaxiphyllum elegans*]

[*pulchellum* (Hedwig) A. Jaeger & Sauerbeck = *Isopterygiopsis pulchella*]

[*seligeri* (Bridel) Dixon = *Herzogiella seligeri*]

Isothecium (Norris and Shevock 2004a, 2004b)

cristatum (Hampe) H. Robinson

stoloniferum Bridel

Iwatsukiella

leucotricha (Mitten) W.R. Buck & H.A. Crum

Kiaeria

blyttii (Bruch & Schimper) Brotherus

falcata (Hedwig) I. Hagen

starkei (Weber & D. Mohr) I. Hagen

Kindbergia

oregana (Sullivant) Ochyra

praelonga (Hedwig) Ochyra

Leptobryum (Norris and Shevock 2004a, 2004b)

pyriforme (Hedwig) W.M. Wilson

Leptodictyum

[*humile* (Palisot de Beauvois) Ochyra = *Hygroamblystegium varium* ssp. *varium* var. *humile*]
riparium (Hedwig) Warnstorf

[Lescuraea = 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) Arnell & C. Jensen = *Pseudoleskea patens*]
[*radicosa* (Mitten) Mönkemeyer = *Pseudoleskea radicata*]
[*saviana* (De Notaris) E. Lawton = *Pseudoleskea saviana*]
[*stenophylla* Renault & Cardot = *Pseudoleskea stenophylla*]

Leskea

polycarpa Hedwig

Leucolepis

acanthoneura (Schwägrichen) Lindberg
[*menziesii* (Hooker) W.C. Steere = *Leucolepis acanthoneura*]

Limbella

fryei (R.S. Williams) Ochyra

Meesia

triquetra (Jolyclerc) Ångström
**uliginosa* Hedwig [Wagner 6517, OSC]

Meiotrichum

lyallii (Mitten) G.L. Smith

[Metaneckera = Neckera]

[*menziesii* (Drummond) W.C. Steere = *Neckera menziesii*]

Micromitrium

**synoicum* (James) Austin [Bryan 2007; *Christy 8505-1*, DUKE, OSC, UBC, ver. V.S. Bryan]

Mielichhoferia

**elongata* (Hoppe & Hornschuch) Nees & Hornschuch [Wagner 8212a, OSC, ver. A.J. Shaw]

Mnium (Norris and Shevock 2004a, 2004b)

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

Neckera

douglasii Hooker
menziesii Drummond

**pennata* Hedwig [Sastre-de Jesús 2008b]. 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*]

Nogopterium

gracile (Hedwig) Crosby & W.R. Buck [Crosby and Buck 2011]

Oligotrichum

aligerum Mitten

hercynicum (Hedwig) Lamarck & de Candolle

Oncophorus

virens (Hedwig) Bridel

wahlenbergii Bridel

[Orthodicranum = Dicranum]

[*tauricum* = *Dicranum tauricum*]

Orthodontium

gracile (Wilson) Schwägrichen

**pellucens* (Hooker) Bruch, Schimper & W. Gümbel [Eckel 2011; *Christy* 9172, 9173, NY, UBC]

Orthotrichum

affine Bridel

alpestre Hornschuch

**bolanderi* Sullivant [*Kofranek* 1259, ver. D.H. Wagner]

consimile Mitten

cupulatum Bridel

[*cupulatum* var. *jamesianum* (Sullivant) E. Lawton = *Orthotrichum pellucidum*]

[*epapillosum* E. Lawton & F.J. Hermann = *Orthotrichum euryphyllum*]

**euryphyllum* Venturi [Lewinsky-Haapasaari and Norris 1998; Vitt 2009; *Weber* 2889, COLO, WTU, ver. J. Lewinsky-Haapasaari & D.H. Norris]

**hallii* Sullivant & Lesquereux [*Norris* 81102, UC; *Kofranek* 2062, 2100, ver. D.H. Wagner]

holzingeri Renauld & Cardot

laevigatum Zetterstedt

lyellii Hooker & Taylor

obtusifolium Bridel

**pellucidum* Lindberg [Vitt 2009: *Norris* 81106, UC; *Wagner* 8209]

**praemorsum* Venturi in J. Röhl [*Pike* M284, OSC; *Norris* 78946 and others, UC].

**pylaisii* Bridel [*Norris* 23666 and others, UC]

pulchellum Brunton

rivulare Turner

rupestre Schwägrichen

speciosum Nees

[*speciosum* var. *elegans* (Schwägrichen) Warnstorff = *Orthotrichum elegans*, excluded]

striatum Hedwig

Palustriella

falcata (Bridel) Hedenäs

[Phascum = Tortula]

[*cuspidatum* Hedwig = *Tortula acaulon*]

Philonotis

[*americana* (Dismier) Dismier = *Philonotis fontana* var. *americana*]

capillaris C. Hartman

fontana var. *americana* (Dismier) H.A. Crum

fontana (Hedwig) Bridel var. *fontana*

fontana var. *pumila* (Turner) Bridel

**marchica* (Hedwig) Bridel [Griffin 2003; Wagner 7847, 8932, NY]

**yezoana* Bescherelle & Cardot [*Loring 5488SL*, ver. D.H. Wagner]

Physcomitrella

**patens* (Hedwig) Bruch & Schimper [Tan 1978; *Henderson s.n.*, 1887, NY, ver. B.C. Tan]

Physcomitrium

hookeri Hampe

immersum Sullivant

[*kellermanii* E. Britton = *Physcomitrium pyriforme*]

[*megalocarpum* Kindberg = *Physcomitrium pyriforme*]

pyriforme (Hedwig) Hampe

Plagiobryum

[*bimum* (Schreber) Pedersen = *Ptychostomum bimum*]

[*capillare* (Hedwig) Pedersen = *Rosulabryum capillare*]

[*meesioides* (Kindberg) Pedersen = *Ptychostomum meesioides*]

[*pallens* (Swartz) Pedersen = *Ptychostomum pallens*]

[*pallescens* (Schleicher) Pedersen = *Ptychostomum pallescens*]

[*uliginosum* (Bridel) Pedersen = *Ptychostomum cernuum*]

zierii (Hedwig) Lindberg [includes "*zieri*"]

Plagiomnium (Norris and Shevock 2004a, 2004b)

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

[*oederi* (Bridel) Limpricht = *Plagiopus oederianus*]

oederianus (Swartz) H. Crum & L.E. Anderson [includes "*oederiana*"]

Plagiothecium

cavifolium (Bridel) Z. Iwatsuki

denticulatum (Hedwig) Bruch, Schimper & W. Gümbel
laetum Bruch, Schimper & W. Gümbel
piliferum (Hartman) Bruch, Schimper & W. Gümbel
[*roeseanum* Bruch, Schimper & W. Gümbel = *Plagiothecium cavifolium*]
[*undulatum* (Hedwig) Schimper = *Buckiella undulata*]

Platydictya

jungermannioides (Bridel) H.A. Crum

[Platyhypnidium = Rhynchostegium]

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

Pleuridium

**acuminatum* Lindberg [Yip 2007a; *Young* 432, WTU, ver. E. Lawton]

[*bolanderi* A. Jaeger = *Pleuridium acuminatum*]

subulatum (Hedwig) Rabenhorst

Pleurozium

schreberi (Bridel) Mitten

Pogonatum

[*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

annotina (Hedwig) Lindberg [Shaw 1982; *Becking* 5308755, WTU, ver. E. Lawton].

[*annotina* var. *decipiens* Loeske = *Pohlia prolifera*]

**bolanderi* (Lesquereux) Brotherus [Shaw 1982, 2009; *Foster s.n.*, 1906, WTU, ver. A.J. Shaw]

**camptotrachela* (Renauld & Cardot) Brotherus [Shaw 1981b; *Young* 436, WTU, ver. A.J. Shaw]

cardotii (Renauld) Brotherus

cruda (Hedwig) H. Lindberg

drummondii (Müller Hal.) Andrews

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

elongata Hedwig

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

**filum* (Schimper) Mårtensson [Shaw 1981b, 1982, 2009; *Frye s.n.*, 1921, WTU, ver. A.J. Shaw]

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

longibracteata Brotherus

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

ludwigii (Sprengel) Brotherus [*Wagner* 8419, DUKE, ver. A.J. Shaw]. A specimen collected by

Röll 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 were reportedly discarded (Campbell 2000).

nutans (Hedwig) H. Lindberg

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

pacifica A.J. Shaw

proligera (Kindberg) Brotherus

[*schleicheri* = *Pohlia filum*]

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

**tundrae* A.J. Shaw [Shaw 1981a, 1981b, 2009; mixed collection with *Hermann* 18873, COLO, ver. A.J. Shaw]

wahlenbergii (F. Weber & D. Mohr) Andrews

[Polytrichadelphus = Meiotrichum]

[*lyallii* Mitten = *Meiotrichum lyallii*]

Polytrichastrum

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

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

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) Fürnrohr = *Tortula truncata*]

Pseudephemerum

**nitidum* (Hedwig) Loeske [Yip 2002, 2007b; *Christy* 1593, UBC, det. K.L. Yip]

Pseudobraunia

californica (Lesquereux) Brotherus

Pseudocalliergon

trifarium (F. Weber & D. Mohr) Loeske

Pseudocampylium

radicale (P. Beauvois) Vanderpoorten & Hedenäs

Pseudocrossidium

**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 [Spence 2010d]

atricha (Kindberg) Kindberg

baileyi Best & 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) E. Lawton

**saviana* (De Notaris) Latzel [*Wagner 6532*, OSC]

stenophylla Renaud & Cardot

Pseudoleskeella

**serpentinensis* P. Wilson & Norris [Wilson and Norris 1989, as "*serpentinense*"; *Norris 23376*, UC]

**tectorum* (Funck) Kindberg [Spence 2010b; *Schofield & Lyford 73878*, DUKE]

Pseudoscleropodium

purum (Hedwig) Fleischer

Pseudotaxiphllum

elegans (Bridel) Z. Iwatsuki

Pterigynandrum

filiforme Hedwig

[Pterogonium = Nogopterium]

[*gracile* (Hedwig) Smith = *Nogopterium gracile*]

Pterygoneurum

ovatum (Hedwig) Dixon

subsessile var. *subsessile* (Bridel) Juratzka

Ptilium

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

gardneri Lesquereux

Ptychostomum

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

**arcticum* (R. Brown) J.R. Spence [Spence 2009, 2011]

bimum (Schreber) J.R. Spence

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* (Müll. Hal.) D. T. Holyoak & N. Pedersen = *Gemmabryum caespiticium*]
inclinatum (Swartz) J.R. Spence [Spence 2009, 2011]. An old report in Duvall (1938, as *Bryum stenotrichum*) has not been verified.

**lonchocaulon* (Müller Hal.) J.R. Spence [Spence 2009, 2011]. 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, 2009, 2011; *Wagner 7558*, OSC]. Older records do not appear to have been annotated recently.

pallescens (Schleicher) J.R. Spence

**pendulum* Hornschuch [Spence 2009, 2011; *Kofranek 2489*]

pseudotriquetrum (Hedwig) J.R. Spence

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

**schleicheri* (Schwägrichen) J.R. Spence [Spence 2009, 2011]

turbinatum (Hedwig) J.R. Spence [Spence 2009, 2011; *Wagner 8259*, OSC]. Old reports in Christy et al. (1982, as *Bryum turbinatum*) have not been verified.

weigeli (Sprengel) J.R. Spence

Racomitrium [= Rhacomitrium] The segregate genera of *Racomitrium* appear to be untenable phylogenetically, and we follow Larraín et al. (2013) in treating the genus in the traditional broad sense. It is also 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]. [Chapman and Sanborn 1941, as *Rhacomitrium 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 obesa* (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*]
- **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]
- Rhizomnium** (Norris and Shevock 2004a, 2004b)
- glabrescens* (Kindberg) T.J. Koponen
magnifolium (Horikawa) T.J. Koponen
nudum (E. Britton & R.S. Williams) T.J. Koponen
 [*perssonii* T.J. Koponen = *Rhizomnium magnifolium*]
pseudopunctatum (Bruch & Schimper) T.J. Koponen
- Rhynchostegium**
- aquaticum* A. Jaeger

[Rhynchostegiella = Conardia]

[*compacta* (Müller Hal.) Loeske = *Conardia compacta*]

Rhytidiadelphus

loreus (Hedwig) Warnstorf

squarrosus (Hedwig) Warnstorf

subpinnatus (Lindberg) T.J. Koponen

triquetrus (Hedwig) Warnstorf

Rhytidiopsis

robusta (Hooker) Brotherus

Rhytidium

rugosum (Hedwig) Kindberg

Roellia

roellii (Brotherus) Andrews

Rosulabryum

canariense (Bridel) Ochyra

capillare (Hedwig) J.R. Spence

**elegans* (Nees) J.R. Spence [Spence 2011; *Wagner*, ver. J.R. Spence]

**erythroloma* (Kindberg) J. R. Spence [Spence 2011]

**gemmascens* (Kindberg) J. R. Spence [Spence 2011; *McIntosh & Kruckeberg 4924*, 1980, UBC]

**laevifilum* (Syed) Ochyra [Spence 2011]

**torquescens* (Bruch ex De Not.) J. R. Spence [Spence 2011]

Sanionia

symmetrica (Renauld & Cardot) Wheldon

uncinata (Hedwig) Loeske var. *uncinata*

[*uncinata* var. *symmetrica* (Renauld & Cardot) H.A. Crum & L.E. Anderson = *Sanionia symmetrica*]

Sarmentypnum

exannulatum (Schimper) Hedenäs

Schistidium

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

strictum (Turner) Loeske

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

Schistostega

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

[Sciaromium = Limbella]

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

Sciuro-hypnum [Ignatov 2008]

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

oedipodium (Mitten) Ignatov & Huttunen

plumosum (Hedwig) Ignatov & Huttunen

reflexum (Starke) Ignatov & Huttunen

Scleropodium [Carter 2012a, 2012b]. Because of his detailed regional treatment of *Scleropodium*, we follow Carter instead of Ignatov (2009).

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

obtusifolium (Mitten) Kindberg

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

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

[*touretii* var. *colpophyllum* (Sullivant) E. Lawton = *Scleropodium cespitans* [Carter 2012a]

[Scopelophila = Crumia]

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

Scouleria

aquatica Hooker

marginata E. Britton

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

Sphagnum

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

**bartlettianum* Warnstorf [McQueen and Andrus 2007]

capillifolium (Ehrhart) Hedwig

compactum de Candolle

[*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]

**majus* (Russow) C.E.O. Jensen [*Wagner m0710*, ver. A.J. Shaw]

mendocinum Sullivant & Lesquereux

**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 *s. lat.* [populations from the Pacific Coast differ genetically from *S. subsecundum s. str.*, but have not yet been segregated taxonomically (Shaw et al. 2008, 2012)]
teres (Schimper) Ångström
warnstorffii Russow

Splachnum

ampullaceum Hedwig

Straminergon

stramineum (Dickson) Hedenäs

Stegonia

**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

**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

serrata (Hedwig) Bruch & Schimper

Tetraphis

**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

**mnioides* (Hedwig) Bruch & Schimper [Marino 2009; Schofield 81955; many other collectons]

Thamnobryum

neckeroides (Hooker) E. Lawton

Timmia

austriaca Hedwig

megapolitana Hedwig [Norris 80448, UC].

Timmiella

**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")

nitens (Hedwig) Loeske

Tortella

fragilis (Hooker & Wilson) Limpricht

**tortuosa* var. *arctica* (Arnell) Brotherus [Eckel 1998]

tortuosa var. *tortuosa* (Hedwig) Limpricht

Tortula

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

asanoi Tuzibe

[*boasii* W.B. Schofield = *Trematodon asanoi*]

Trichodon

cylindricus var. *cylindricus* (Hedwig) Schimper

[Trichostomopsis = Didymodon]

[*australasiae* (Hooker & Greville) H. Robinson = *Didymodon australasiae*]

Trichostomum

**crispulum* Bruch [*Weiss RW08-59*, ver. R.H. Zander]

**tenuirostre* var. *tenuirostre* (Hooker & Taylor) Lindberg [*Wagner m0610*, ver. R.H. Zander]

Tripterocladium

leucocladulum (Müller Hal.) Jaeger

Triquetrella

californica (Lesquereux) Grout

Ulota

[*crispa* var. *alaskana* (Cardot & Thériot) Grout = *Ulota obtusiuscula*]

megalospora Venturi

obtusiuscula Macoun & Kindberg

phyllantha Bridel

Warnstorfia

[*exannulata* (Schimper) Loeske = *Sarmentypnum exannulatum*]

fluitans (Hedwig) Loeske

Weissia

controversa Hedwig

Zygodon

viridissimus var. *rupestris* 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—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).

Brachythecium campestre (Müller Hal.) Schimper—An old report in Duvall (1938) has never been

verified. The closest report is from British Columbia (Ireland et al. 1987).

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 2000).

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) Warnstorf—Reported for Oregon (*M.J. Cutler s.n.*; *Wagner 8986*, NY; *Wagner m0756*, OSC), but the taxon has not been confirmed from North America, and most reports are referable to *Drepanocladu sordidus* (Lars Hedenäs, pers. comm. to D.H. Wagner, April 2009). The latter is known from both California and Washington, and can be expected in Oregon (see following section).

Grimmia donniana var. *triformis* (Carest. & 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 2008a).

Hookeria acutifolia W.J. 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—Old reports from Oregon (see Christy et al. 1982) have never been verified. Not present in western North America (Jamieson 2011).

Hygrohypnum norvegicum (Schimper) Amann—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 2011).

Hypnum cupressiforme var. *filiforme* Bridel—Reported from Oregon by Chapman and Sanborn (1941), but voucher specimens not found. This taxon does not occur in western North America, and presumably the specimen was misidentified. If introduced here, 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 2006), but it is not known to occur in western North America.

Isothecium myosuroides Bridel—Despite recent treatment of *I. stoloniferum* as a synonym of *I. myosuroides* (e.g., Allen 1983; Anderson et al. 1990; USDA Natural Resources Conservation Service 2011), we are not aware of authentic material of *I. myosuroides* from western North America. Molecular evidence supports retention of *I. stoloniferum* in western North America, but morphological differentiation between the two taxa remains problematic (Ryall et al. 2005).

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 2007a).

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 2009).

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 (*Lyll s.n.*, 1861, FH) collected in Idaho during the Northwest Boundary Survey of 1857-1861, which referred to the Pacific Northwest as "Oregon." An eastern species unlikely to occur in Oregon (Vitt 2009).

Orthotrichum tenellum Bridel—Duplicates of a specimen with this name from Hood River County (*Weber 2796*, DUKE) have been named *O. striatum* (MO, NY, WTU). Excluded from the California flora by Malcolm et al. (2009).

Pohlia lescuriana (Sullivant) Grout—Reports from western North America (including *Christy 465*, UBC, WTU) are referable to *Pohlia pacifica* (Shaw 1982, 2009).

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 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 2011).

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 2008).

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 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 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— 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 2009).

Thuidium recognitum (Hedwig) Lindberg—Although reported for Oregon by Buck and Crum (2010), it is highly likely that this is a legacy of earlier unverified reports (see Christy et al. 1982). A specimen from Multnomah County (*Potter 2900*, DUKE) was verified by Howard Crum in 1951, but we remain skeptical of this record until it is reexamined.

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 (2009), Norris and Shevock (2004a, 2004b), and Zander and Eckel (2007), were excluded from the California flora by Malcolm et al. (2009).

Barbula unguiculata Hedwig—California, Washington [Norris and Shevock 2004a, 2004b; Zander 2007c].

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].

Drepanocladus sordidus (Müller Hal.) Hedenäs—California, Washington [Norris and Shevock

2004a, 2004b; Hedenäs 2008a].
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 2006].
Myurella julacea (Schwägrichen) Schimper—California, Washington [Vitt 2004]. Old reports from Oregon (see Christy et al. 1982) have never been verified, but a recent report by Scot Loring may be this species.
Pohlia andalusica (Höhnelt) Brotherus—California, Washington [Shaw 2009].
Pohlia atropurpurea (Wahlenberg) H. Lindberg—California, Washington [Shaw 2009].
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.
Racomitrium molle Cardot—California, Washington [Norris and Shevock 2004a, 2004b; Bednarek-Ochyra and Ochyra 2007, as *Codriophorus mollis*].
Sciuro-hypnum latifolium (Kindberg) Ignatov & Huttunen—California, Washington [Ignatov 2008].
Syntrichia papillosa (Wilson) Juratzka—California, Washington [Mishler 2007].
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 [Hedenäs 2008b; Malcolm et al. 2009].

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