



American
Bryological and
Lichenological
Society

Checklist of Oregon Mosses

Author(s): John A. Christy, John H. Lyford and David H. Wagner

Source: *The Bryologist*, Vol. 85, No. 1 (Spring, 1982), pp. 22-36

Published by: [American Bryological and Lichenological Society](#)

Stable URL: <http://www.jstor.org/stable/3243138>

Accessed: 27/08/2013 18:52

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



American Bryological and Lichenological Society is collaborating with JSTOR to digitize, preserve and extend access to *The Bryologist*.

<http://www.jstor.org>

Checklist of Oregon Mosses

JOHN A. CHRISTY

Milwaukee Public Museum, 800 Wells St., Milwaukee, WI 53233

JOHN H. LYFORD

Department of General Science, Oregon State University, Corvallis, OR 97331

DAVID H. WAGNER

Herbarium, Department of Biology, University of Oregon, Eugene, OR 97403

Abstract. *The moss flora of Oregon presently includes 441 taxa, based on herbarium records and literature reports.*

This list enumerates 411 species and 30 varieties of mosses, representing 134 genera in 41 families, known or reported from the state of Oregon. New state records are included, and a literature search has revealed additional reports that remain unverified. Much of the state has been only superficially collected, and additions to the flora can be expected as bryological exploration intensifies.

An extensive literature search included papers and unpublished theses on vascular plant ecology, in addition to bryological works on systematics, floristics and ecology. Taxa were noted only if Oregon was specifically included in distributional data. The literature on Oregon bryology is widely scattered, and some publications have probably been overlooked.

The list uses as a base all taxa reported for Oregon by Lawton (1971). Taxa marked by asterisks are those not included by Lawton in the state flora; these names were obtained elsewhere in the literature or from recent field collecting. All such additions are accompanied by documentation. No attempt was made to verify literature reports. With a few exceptions, the systematic arrangement and nomenclature follow either Wijk et al. (1959–1969), Lawton (1971), Crum et al. (1973) or Crum and Anderson (1981). Synonyms are given in cases for which names used here differ from those used by Lawton (1971) or other recent authors. No attempt is made to list the original binomials under which species were reported in the early literature.

Voucher specimens of new state records are deposited as indicated.

SPHAGNACEAE

**Sphagnum angustifolium* (C. Jens. ex Russ.) C. Jens. (= *S. recurvum* var. *tenue* Klinggr.) (Miller & Shushan 1964; Andrus 1974; Crum & Anderson 1981).

**S. compactum* DC. (R. E. Andrus, pers. comm.). Not seen.

**S. contortum* Schultz (= *S. subsecundum* var. *contortum* (Schultz) Hüb.). DESCHUTES Co.: Deschutes National Forest, Middle Hanks Lake, 24 km NNE of Willamette Pass, T20S, R7E, S30, elev. 1647 m, peat under *Vaccinium occidentale*, S shore of lake, Christy 1161 (BING, herb. J. A. Christy). Now known from five additional localities in Deschutes and Lane Counties.

**S. fallax* (Klinggr.) Klinggr. (= *S. recurvum* var. *brevifolium* (Lindb. ex Braithw.) Warnst.) (Crum & Anderson 1981).

**S. fimbriatum* Wils. (R. E. Andrus, pers. comm.). Not seen.

**S. fuscum* (Schimp.) Klinggr. (Andrus 1974; Seyer 1979b).

007-2745/82/22-36\$2.25/0

- **S. girgensohnii* Russ. (Andrews 1913; Frye 1918b; Duvall 1938; Jennings 1951; Darlington 1964; Sjörs 1966; Crum 1976; Crum & Anderson 1981). Not seen.
- **S. henryense* Warnst. (Andrus 1980).
- **S. mendoicum* Sull. & Lesq. ex Sull. (Andrews 1921; Maass 1967).
- **S. nemoreum* Scop. (= *S. capillifolium* (Ehrh.) Hedw.) (Sullivant 1857; Duvall 1938; Seyer 1979b).
- **S. palustre* L. (Crum & Snider 1977).
- **S. papillosum* Lindb. (Crum & Snider 1977; W. B. Schofield, pers. comm.). Not seen.
- **S. platyphyllum* (Lindb.) Sull. ex Warnst. (= *S. subsecundum* var. *platyphyllum* (Lindb.) Card.) (R. E. Andrus, pers. comm.). Not seen.
- **S. quinquefarium* (Lindb. ex Braithw.) Warnst. (Crum 1976; Crum & Snider 1977; Andrus 1979a). Not seen.
- **S. rubellum* Wils. (= *S. capillifolium* var. *tenellum* (Schimp.) Crum) (Andrus 1979a,b).
- **S. russowii* Warnst. WALLOWA Co.: Wallowa-Whitman National Forest, Eagle Cap Wilderness, Chimney Lake, T3S, R43E, S22, elev. 2317 m, forming thick masses on banks of small creek in moist coniferous forest, W end of lake, Mason 7122 (ORE). Now known from five additional localities in Clackamas, Klamath and Lane Counties.
- **S. squarrosum* Crome (Sullivant 1857; Miller & Shushan 1964; Campbell 1973; Seyer 1979b).
- **S. subnitens* Russ. & Warnst. ex Warnst. LANE Co.: Darlingtonia Botanical Wayside State Park, 8 km N of Florence, T17S, R12W, S35, elev. 18 m, among stems of *Darlingtonia californica* in small mire, Christy 1238 (BING, herb. J. A. Christy). Now known from seven additional localities in Coos, Lane and Lincoln Counties.
- **S. subsecundum* Nees ex Sturm (Miller & Shushan 1964; Seyer 1979b).
- **S. tenellum* Ehrh. ex Hoffm. (Sullivant 1857; Lesquereux & James 1884; Cardot 1887; Renaud & Cardot 1892). Not seen.
- **S. teres* (Schimp.) Ångstr. ex C. Hartm. LANE Co.: Willamette National Forest, Gold Lake Bog Research Natural Area, 4 km N of Willamette Pass, T22S, R6E, S29, elev. 1463 m, along rivulets running through bog, Wagner 902 (BING, MICH, ORE, herb. J. A. Christy). Now known from seven additional localities in Clackamas, Deschutes, Douglas and Lane Counties.
- **S. warnstorffii* Russ. (Andrus 1974, 1979a).

ANDREAACEAE

- **Andreaea blyttii* B.S.G. (Christy 1980).
- **A. nivalis* Hook. (Renaud & Cardot 1892; Röll 1893, 1896; Barnes & Heald 1896; Brotherus 1901; Britton 1913; Sharp 1936; Podpéra 1954; W. B. Schofield, pers. comm.). Not seen.
- A. rothii* Web. & Mohr
- A. rupestris* Hedw.

FISSIDENTACEAE

- Fissidens adianthoides* Hedw.
- F. bryoides* Hedw.
- F. fontanus* (B.-Pyl.) Steud.
- F. grandifrons* Brid.
- F. osmundoides* Hedw.
- **F. pauperculus* Howe (Koch 1951, 1952; W. B. Schofield, pers. comm.). Not seen.
- F. taxifolius* Hedw. s. str. The only known specimen from W of the Rocky Mountains was collected in Oregon in 1921. Pursell (1976) speculated that it may have been a short-lived introduction.
- Fissidens aphelotaxifolius* Pursell, known from British Columbia, Washington and California, has not yet been reported from Oregon.
- F. ventricosus* Lesq.

DITRICHACEAE

- Ceratodon purpureus* (Hedw.) Brid.
- Distichium capillaceum* (Hedw.) B.S.G.
- Ditrichum ambiguum* Best
- **D. flexicaule* (Schwaegr.) Hampe. CLATSOP Co.: Saddle Mountain State Park, 15 km ESE of Seaside, T6N, R8W, elev. 975 m, damp rock surface near summit, Lyford 2119 (herb. J. H. Lyford).
- D. heteromallum* (Hedw.) Brid.
- D. montanum* Leib.
- **D. pusillum* (Hedw.) Hampe (Fulton 1912; Crum & Anderson 1981). Not seen.

D. schimperi (Lesq.) Kuntze

Pleuridium subulatum (Hedw.) Rabenh.

Trichodon cylindricus (Hedw.) Schimp. (= *Ditrichum cylindricum* (Hedw.) Grout).

SELIGERIACEAE

Blindia acuta (Hedw.) B.S.G.

DICRANACEAE

Arctoa fulvella (Dicks.) B.S.G.

**A. hyperborea* (With.) B.S.G. (Renauld & Cardot 1893; Röll 1893; Barnes & Heald 1896). Not seen.

**Bruchia bolanderi* Lesq. (Christy 1980).

**Campylopus aureus* Bosch & Lac. (Frahm 1980).

**C. introflexus* (Hedw.) Brid. Coos Co.: Muddy Lake, 8 km N of Langlois, T30S, R15W, SW1/4NW1/4S11, elev. 6 m, forming mat among stems of *Juncus lesueurii* on top of partially stabilized sand dune at NW edge of lake, Christy 3172 (DUIS, DUKE, MICH, NY, ORE, U, UBC, US, WTU, herb. J. A. Christy). Frahm (1980) described the occurrence of this species in northern California. Now known from one additional locality in Curry County.

**Cynodontium jenneri* (Schimp. ex Howie) Stirt. (W. B. Schofield, pers. comm.). Not seen.

Dichodontium pellucidum (Hedw.) Schimp.

Dicranella crispa (Hedw.) Schimp.

D. heteromalla (Hedw.) Schimp.

**D. pacifica* Schof. (W. B. Schofield, pers. comm.). Not seen.

D. palustris (Dicks.) Crundw. ex Warb.

D. rufescens (With.) Schimp.

D. schreberiana (Hedw.) Schimp.

**D. subulata* (Hedw.) Schimp. (Röll 1893). Not seen.

D. varia (Hedw.) Schimp.

**Dicranodontium denudatum* (Brid.) Britt. ex Williams (Crum & Anderson 1981). Not seen.

Dicranoweisia cirrata (Hedw.) Lindb. ex Milde

D. crispula var. *contermina* (Ren. & Card. ex Holz.) Grout

var. *roellii* (Kindb. ex Röll) Lawt.

**Dicranum fragilifolium* Lindb. (Grout 1937; Darlington 1964; Crum & Anderson 1981). Not seen.

D. fuscescens Turn.

D. howellii Ren. & Card.

D. pallidisetum (Bail. ex Holz.) Ire.

**D. polysetum* Sw. (Williams 1913; Grout 1937). Not seen.

D. scoparium Hedw.

**D. spadiceum* Zett. (Renauld & Cardot 1892; Williams 1913; Grout 1937; Miller & Shushan 1964; Flowers 1973). Not seen.

D. tauricum Sapeh.

Kiaeria blyttii (Schimp.) Broth. (= *Arctoa blyttii* (Schimp.) Loeske).

K. falcata (Hedw.) Hag. (= *Arctoa falcata* (Hedw.) Loeske).

K. starkei (Web. & Mohr) Hag. (= *Arctoa starkei* (Web. & Mohr) Loeske).

Oncophorus virens (Hedw.) Brid.

**O. wahlenbergii* Brid. HOOD RIVER Co.: Mt. Hood National Forest, Mt. Hood Wilderness, along Timberline Trail S from Cloud Cap, T2S, R9E, elev. 1980 m, sandy soil in basaltic boulder field, Lyford 2538 (herb. J. H. Lyford).

**Trematodon boasii* Schof. (Christy 1980).

ENCALYPTACEAE

**Encalypta brevicolla* (B.S.G.) Bruch ex Ångstr. (Christy 1980).

**E. brevipes* Schljak. (W. B. Schofield, pers. comm.). Not seen.

E. ciliata Hedw.

E. procera Bruch

E. rhaftocarpa Schwaegr. (= *E. vulgaris* var. *rhabdocarpa* (Schwaegr.) Lawt.).

E. vulgaris Hedw.

POTTIACEAE

**Acaulon muticum* var. *rufescens* (Jaeg.) Crum (Christy 1980).

**Aloina pilifera* (De Not.) Crum & Steere (= *A. bifrons* (De Not.) Delgadillo) (Christy 1980).

- Barbula convoluta* Hedw.
B. eustegia Card. & Thér.
Bryoerythrophyllum columbianum (Herm. & Lawt.) Zand. (= *Didymodon columbianus* Herm. & Lawt.).
B. recurvirostrum (Hedw.) Chen (= *Didymodon recurvirostris* (Hedw.) Jenn.).
Desmatodon latifolius (Hedw.) Brid.
**D. obtusifolius* (Schwaegr.) Schimp. (Christy 1980).
**D. plinthobius* Sull. & Lesq. ex Sull. (Christy 1980).
Didymodon australasii (Hook. & Grev.) Zand. (= *Trichostomopsis australasiae* (Hook. & Grev.) Robins.).
**D. brachiphyllus* (Sull. in Whipple.) Zand. (= *Barbula brachiphylla* Sull. in Whipple.) (Christy 1980).
**D. fallax* (Hedw.) Zand. (= *Barbula fallax* Hedw.) (Röll 1893). Röll indicated his specimen was sterile, making this identification suspect. Not seen.
D. occidentalis Zand. (= *Barbula rubiginosa* Mitt.).
D. rigidulus Hedw.
D. tophaceus (Brid.) Lisa
D. vinealis (Brid.) Zand. var. *vinealis* (= *Barbula vinealis* Brid.).
var. *flaccidus* (B.S.G.) Zand. (= *Barbula vinealis* var. *flaccida* B.S.G.; *Barbula cylindrica* (Tayl. ex Mackay) Schimp. ex Boul.).
Gymnostomum aeruginosum Sm.
Phascum cuspidatum Hedw.
**Pottia heimii* (Hedw.) Fürnr. ex Hampe (= *Desmatodon heimii* (Hedw.) Mitt.) (Christy 1980).
P. nevadensis Card. & Thér.
**P. truncata* (Hedw.) Fürnr. ex B.S.G. (Duvall 1938). Not seen.
**Pseudocrossidium revolutum* (Brid. in Schrad.) Zand. (= *Barbula platyneura* C. Müll. & Kindb. ex Macoun & Kindb.) (Duvall 1938; Zander 1979; W. B. Schofield, pers. comm.).
Pterygoneurum ovatum (Hedw.) Dix.
P. subsessile (Brid.) Jur.
Timmella crassinervis (Hampe) L. Koch.
**Tortella fragilis* (Drumm.) Limpr. (Crum 1976; Crum & Anderson 1981). Not seen.
T. tortuosa (Hedw.) Limpr.
**Tortula amplexa* (Lesq.) Steere (Renauld & Cardot 1892; W. B. Schofield, pers. comm.). Not seen.
T. bistratosa Flot.
T. bolanderi (Lesq.) Howe
T. brevipes (Lesq.) Broth.
T. laevipila (Brid.) Schwaegr.
T. latifolia Bruch ex C. J. Hartm.
T. muralis Hedw.
T. norvegica (Web.) Wahlenb. ex Lindb.
T. princeps De Not.
T. ruraliformis (Besch.) Dix.
T. ruralis (Hedw.) Gaertn., Meyer & Sauerb. var. *ruralis*
var. *hirsuta* (Vent.) Paris (= *T. papillosum* (Coppey) Broth. in Engl. & Prantl).
T. subulata Hedw.
**Triquetrella californica* (Lesq.) Grout (Stark 1980). Not seen.
Weissia controversa Hedw.

GRIMMIACEAE

- Dryptodon patens* (Hedw.) Brid. (= *Rhacomitrium patens* (Hedw.) Hüb.).
**Grimmia affinis* Hoppe & Hornsch. ex Hornsch. (Crum & Anderson 1981; W. B. Schofield, pers. comm.). Not seen.
G. agassizii (Sull. & Lesq. ex Sull.) Jaeg. & Sauerb.
G. alpestris (Web. & Mohr) Schleich. ex Nees var. *alpestris* (= *G. tenerima* Ren. & Card.).
*var. *holzingeri* (Card. & Thér.) Jones in Grout (= *G. tenerima* Ren. & Card.) (Christy 1980).
G. alpicola Hedw. var. *alpicola*
var. *dupretii* (Thér.) Crum (= *G. dupretii* Thér.).
var. *rivularis* (Brid.) Wahlenb.
G. anodon B.S.G.
G. apocarpa Hedw. var. *apocarpa*
var. *conferta* (Funck) Spreng.
var. *stricta* (Turn.) Hook. & Tayl.

- G. atricha* C. Müll. & Kindb. ex Macoun & Kindb.
G. calyprata Hook. ex Drumm.
G. cinctidontea C. Müll. ex Röll
G. donniana var. *triformis* (Carest. & De Not.) Loeske
**G. elatior* Bruch ex Bals. & De Not. (W. B. Schofield, pers. comm.). Not seen.
G. incurva Schwaegr.
G. laevigata (Brid.) Brid.
G. maritima Turn.
G. montana B.S.G.
**G. occidentalis* Lawt. GRANT Co.: Malheur National Forest, Strawberry Range, Buckhorn Meadows Trail above Canyon Meadows Campground, T15S, R33E, elev. c. 1890 m, rock in small stream, Lyford 2423, 2442 (herb. J. H. Lyford).
G. olympica Britt. ex Frye
**G. ovalis* (Hedw.) Lindb. (Duvall 1938; Miller & Shushan 1964). Not seen.
**G. pacifica* Lawt. (Lawton 1979). Not seen.
G. plagiopoda Hedw.
G. pulvinata (Hedw.) Sm.
**G. rauii* Aust. (Duvall 1938). Not seen.
G. torquata Hornsch.
G. trichophylla Grev. var. *trichophylla*
Rhacomitrium aciculare (Hedw.) Brid.
R. aquaticum (Brid. ex Schrad.) Brid.
R. canescens (Hedw.) Brid.
R. heterostichum (Hedw.) Brid. var. *heterostichum*
*var. *macounii* (Kindb. ex Macoun) Jones (W. B. Schofield, pers. comm.). Not seen.
var. *occidentale* Ren. & Card.
var. *sudeticum* (Funck) Dix. ex Bauer (= *R. sudeticum* (Funck) B.S.G.).
R. lanuginosum (Hedw.) Brid.
R. varium (Mitt.) Jaeg. & Sauerb.
Scouleria aquatica Hook.
S. marginata Britt.

EPHEMERACEAE

- **Ephemerum crassinervium* (Schwaegr.) Hampe (Christy 1980).
**E. serratum* (Hedw.) Hampe (Christy 1980; Crum & Anderson 1981).

FUNARIACEAE

- **Aphanorrhagma serratulum* (J. Hook. & Wils. ex Drumm.) Sull. (Renauld & Cardot 1892). Not seen.
Entosthodon californicus (Sull. & Lesq.) Crum & Anderson
**E. fascicularis* (Hedw.) C. Müll. (= *E. leibergii* Britt.) (Christy 1980).
Funaria hygrometrica Hedw.
**F. muhlenbergii* R. Hedw. ex Turn. (Renauld & Cardot 1890a, 1892; W. B. Schofield, pers. comm.).
**Physcomitrium hookeri* Hampe (W. B. Schofield, pers. comm.). Not seen.
P. immersum Sull.
P. megalocarpum Kindb. ex Macoun
P. pyriforme (Hedw.) Hampe (= *P. kellermannii* Britt.).

SPLACHNACEAE

- **Splachnum ampullaceum* Hedw. Klamath Co.: Winema National Forest, unnamed fen 8 km S of Lake of the Woods, T38S, R5E, NW¹/4NW¹/4S11, elev. 1524 m, forming a sod on old cow dung at edge of *Pinus contorta* woods along SE margin of mire, Christy 2144 (ORE, UBC, WTU, herb. J. A. Christy).
**Tayloria hornschuchii* (Grev. & Arnott) Broth. (Lesquereux & James 1884; Renauld & Cardot 1892; Brotherus 1903; Sayre 1935; Podpéra 1954). Not seen.
T. serrata (Hedw.) B.S.G.

BRYACEAE

- **Bryum alpinum* With. (Campbell 1973). Not seen.
B. argenteum Hedw.

- **B. bicolor* Dicks. (Christy 1980).
B. caespiticium Hedw.
B. canariense Brid.
B. capillare Hedw.
B. gemmiparum De Not.
B. lisae var. *cuspidatum* (B.S.G.) Marg. (= *B. creberrimum* Tayl.).
B. meesioides Kindb. ex Macoun (= *B. pallens* (Brid.) Sw. ex Röll.).
**B. microerythrocarpum* C. Müll. & Kindb. ex Macoun & Kindb. (Duvall 1938; Podpéra 1954). Not seen.
B. miniatum Lesq.
**B. muehlenbeckii* B.S.G. (Röll 1893; Podpéra 1954; Miller & Shushan 1964; W. B. Schofield, pers. comm.). Not seen.
B. pallescens Schleich. ex Schwaegr.
B. pseudotriquetrum (Hedw.) Gaertn. var. *pseudotriquetrum*
 *var. *bimum* (Schreb.) Lilj. (Renauld & Cardot 1893). Not seen.
 var. *crassirameum* (Ren. & Card.) Lawt.
**B. stenotrichum* C. Müll. (Duvall 1938). Not seen.
**B. turbinatum* (Hedw.) Turn. (Renauld & Cardot 1890b, 1893; Miller & Shushan 1964). Not seen.
B. uliginosum (Brid.) B.S.G.
**B. weigelii* Spreng. (Lesquereux & James 1884; Renauld & Cardot 1893; Seyer 1979a,b).
Epityrium tozeri (Grev.) Lindb.
Leptobryum pyriforme (Hedw.) Wils.
Orthodontium gracile (Wils. ex Sm.) Schwaegr. ex B.S.G.
**Plagiobryum zierii* (Hedw.) Lindb. (W. B. Schofield, pers. comm.). Not seen.
**Pohlia annotina* (Hedw.) Lindb. var. *annotina* (Röll 1893; Duvall 1938; Miller & Shushan 1964). Not seen.
 *var. *decipiens* Loeske (W. B. Schofield, pers. comm.). Not seen.
P. cardotii (Ren. ex Ren. & Card.) Broth.
P. cruda (Hedw.) Lindb.
P. drummondii (C. Müll.) Andr.
**P. elongata* Hedw. (Renauld & Cardot 1892; Duvall 1938; Podpéra 1954). Not seen.
**P. filiformis* (Dicks.) Andr. CLATSOP Co.: Saddle Mountain State Park, 15 km ESE of Seaside, T6N, R8W, rock near trail from parking lot to summit, *Lyford 2094* (herb. J. H. Lyford).
**P. lescuriana* (Sull.) Grout (Duvall 1938; Christy 1980).
P. longibracteata Broth. ex Röll
**P. longicolla* (Hedw.) Lindb. (Renault & Cardot 1892; Röll 1893; Podpéra 1954). Not seen.
**P. ludwigii* (Spreng. ex Schwaegr.) Broth. (Renauld & Cardot 1892; Röll 1893; Barnes & Heald 1896; Podpéra 1954; Campbell 1973). Not seen.
P. nutans (Hedw.) Lindb.
**P. obtusifolia* (Brid.) L. Koch (Renauld & Cardot 1892; Röll 1893; Podpéra 1954). Not seen.
**P. prolifera* (Kindb. ex Limpr.) Lindb. ex Arnell (Duvall 1938).
P. schleicheri Crum (= *P. drummondii* var. *gracilis* (B.S.G.) Podp.).
**P. sphagnicola* (B.S.G.) Lindb. ex Arnell. TILLAMOOK Co.: fen 2.4 km NNW of Sandlake, T3S, R10W, SW1/4SE1/4S8, elev. 24 m, among tightly packed capitula of *Sphagnum henryense* on hummock in center of mire, *Christy 1652* (herb. J. A. Christy; voucher slide at wtu).
P. wahlenbergii (Web. & Mohr) Andr.
Roellia roelli (Broth. ex Röll) Andr. ex Crum (= *Bryum sandbergii* Holz.).

MNIACEAE

- Leucolepis menziesii* (Hook.) Steere ex L. Koch
**Mnium blyttii* B.S.G. (Duvall 1938). Not seen.
M. lycopodioides Schwaegr.
**M. marginatum* (With.) Brid. ex P.-Beauv. (Duvall 1938). Not seen.
M. spinulosum B.S.G.
M. thomsonii Schimp. (= *M. orthorrhynchum* Brid.).
Plagiomnium cuspidatum (Hedw.) Kop.
**P. drummondii* (Bruch & Schimp.) Kop. (Lesquereux & James 1884; Renauld & Cardot 1893; Podpéra 1954). Not seen.
P. ellipticum (Brid.) Kop. (= *P. rugiculum* (Laur.) Kop.).
P. insigne (Mitt.) Kop.

P. medium (B.S.G.) Kop.

P. rostratum (Schrad.) Kop. (= *Mnium longirostrum* Brid.).

P. venustum (Mitt.) Kop.

Rhizomnium glabrescens (Kindb.) Kop.

R. magnifolium (Horik.) Kop. (= *R. personii* Kop.; *Mnium punctatum* var. *elatum* Schimp.).

**R. nudum* (Williams) Kop. (Duvall 1938; Campbell 1973). Not seen.

**R. pseudopunctatum* (Bruch & Schimp.) Kop. Klamath Co.: Winema National Forest, unnamed fen 8 km S of Lake of the Woods, T38S, R5E, NW $\frac{1}{4}$ NW $\frac{1}{4}$ S11, elev. 1524 m, mixed with *Helodium blandowii* and *Aulacomnium palustre* among stems of *Vaccinium occidentale*, edge of *Pinus contorta* woods along SE margin of mire, Christy 2143 (ORE, WTU, herb. J. A. Christy).

AULACOMNIACEAE

Aulacomnium androgynum (Hedw.) Schwaegr.

A. palustre (Hedw.) Schwaegr.

MEESIACEAE

Meesia triquetra (Richt.) Ångstr.

BARTRAMIACEAE

Anacolia menziesii (Turn.) Paris

Bartramia ithyphylla Brid.

B. pomiformis Hedw.

**Conostomum tetragonum* (Hedw.) Lindb. HOOD RIVER-CLACKAMAS Co. line: Mt. Hood National Forest, Mt. Hood Wilderness, McNeil Point, NW ridge of Mt. Hood, T2S, R8 $\frac{1}{2}$ E, S13, elev. 1830 m, with *Anthelia juratzkana* and *Lophozia alpestris* on peaty ledge at top of cliff, Wagner 2367 (ORE, herb. J. A. Christy).

Philonotis capillaris Lindb. ex C. J. Hartm.

P. fontana (Hedw.) Brid. var. *fontana*

var. *americana* (Dism.) Flow. ex Crum (= *P. americana* (Dism.) Dism.).

var. *pumila* (Turn.) Brid.

Plagiopus oederiana (Sw.) Limpr. (= *P. oederi* (Brid.) Limpr.).

TIMMIACEAE

Timmia austriaca Hedw.

PTYCHOMITRIACEAE

Ptychomitrium gardneri Lesq.

ORTHOTRICHACEAE

Amphidium californicum (Hampe ex C. Müll.) Broth.

A. lapponicum (Hedw.) Schimp.

A. mougeotii (B.S.G.) Schimp.

Orthotrichum affine Brid.

O. alpestris Hornsch. ex B.S.G.

**O. anomalum* Hedw. (Crum 1976). Not seen.

O. consimile Mitt.

O. cupulatum Brid.

O. holzingeri Ren. & Card. ex Holz.

O. laevigatum Zett.

O. lyellii Hook. & Tayl.

O. obtusifolium Brid.

O. pulchellum Brunt. ex Winch. & Gateh.

O. rivulare Turn.

O. rupestre Schleich. ex Schwaegr.

O. speciosum Nees ex Sturm var. *speciosum*

*var. *elegans* (Schwaegr. ex Hook. & Grev.) Warnst. (Crum & Anderson 1981). Not seen.

O. striatum Hedw.

- Ulota megalospora* Vent. ex Röll
U. obtusiuscula C. Müll. & Kindb. ex Macoun & Kindb. (= *U. crispa* var. *alaskana* (Card. & Thér.) Grout).
U. phyllantha Brid.
Zygodon viridissimus var. *rupestris* Lindb. ex C. J. Hartm. (= *Z. vulgaris* (Malta) Nyh.).

FONTINALACEAE

- **Dichelyma falcatum* (Hedw.) Myr. (Welch 1934). Not seen.
D. uncinatum Mitt. (= *D. falcatum* var. *uncinatum* (Mitt.) Lawt.).
Fontinalis antipyretica Hedw. var. *antipyretica*
var. *mollis* (C. Müll. ex Röll) Welch
var. *oregonensis* Ren. & Card.
F. neomexicana Sull. & Lesq.
F. patula Card. (= *F. antipyretica* var. *patula* (Card.) Welch ex Grout).

CLIMACIACEAE

- Climacium dendroides* (Hedw.) Web. & Mohr

HEDWIGIACEAE

- Hedwigia ciliata* (Hedw.) P.-Beauv.
Pseudobraunia californica (Lesq.) Broth.

CRYPHAEACEAE

- **Alsia californica* (Hook. & Arnott) Sull. (Christy 1980).
Bestia vancouverensis (Kindb. ex Macoun) Wijk & Marg.
Dendroalsia abietina (Hook.) Britt.

LEUCODONTACEAE

- Antitrichia californica* Sull. ex Lesq.
A. curtipendula (Hedw.) Brid.
Pterogonium gracile (Hedw.) Sm.

NECKERACEAE

- **Homalia trichomanoides* (Hedw.) B.S.G. (Crum 1976). Not seen.
Metaneckera menziesii (Hook. ex Drumm.) Steere (= *Neckera menziesii* Hook. ex Drumm.).
Neckera douglasii Hook.
Porotrichum bigelovii (Sull.) Kindb. (= *Porothamnium bigelovii* (Sull.) Fleisch. ex Broth.).
Thamnobryum neckeroides (Hook.) Lawt.

LEMBOPHYLLACEAE

- Tripterocladium leucocladulum* (C. Müll.) Jaeg. & Sauerb.

HOOKERIACEAE

- Hookeria lucens* (Hedw.) Sm.

THELIACEAE

- **Myurella julacea* (Schwaegr.) B.S.G. (Lesquereux & James 1884; Renauld & Cardot 1893; Grout 1934; Podpéra 1954; Darlington 1964; Crum 1976; Crum & Anderson 1981). Not seen.

FABRONIACEAE

- Fabronia ciliaris* (Brid.) Brid.
F. pusilla Radji
**Habrodon leucotrichus* (Mitt.) Perss. CLATSOP Co.: Saddle Mountain State Park, 15 km ESE of Seaside, T6N, R8W, bark of living *Abies procera* at first summit near trail from parking lot, Lyford 2125 (herb. J. H. Lyford).

LESKEACEAE

Leskeia polycarpa Hedw.

**Pseudoleskea atricha* (Kindb.) Kindb. (= *Lescuraea atricha* (Kindb.) Lawt.) (Campbell 1973). Not seen.

**P. baileyi* Best & Grout ex Grout (= *Lescuraea baileyi* (Best & Grout ex Grout) Lawt.) (W. B. Schofield, pers. comm.). Not seen.

P. incurvata (Hedw.) Loeske var. *incurvata* (= *Lescuraea incurvata* (Hedw.) Lawt.) var. *incurvata*. var. *gigantea* (Lawt.) Crum, Steere & Anderson (= *Lescuraea incurvata* var. *gigantea* Lawt.).

P. patens (Lindb.) Kindb. (= *Lescuraea patens* (Lindb.) Arn. & C. Jens.).

P. radicosa (Mitt.) Macoun & Kindb. (= *Lescuraea radicosa* (Mitt.) Mönk.).

P. stenophylla Ren. & Card. ex Röll (= *Lescuraea stenophylla* (Ren. & Card. ex Röll) Kindb.).

Pterigynandrum filiforme Hedw.

THUIDIACEAE

Claopodium bolanderi Best

C. crispifolium (Hook.) Ren. & Card.

C. whippleanum (Sull.) Ren. & Card.

**Helodium blandowii* (Web. & Mohr) Warnst. (Seyer 1979a,b).

Heterocladium dimorphum (Brid.) B.S.G.

H. macounii Best

H. procurrens (Mitt.) Rau & Herv.

**Thuidium recognitum* (Hedw.) Lindb. (Darlington 1964; Crum & Anderson 1981). Not seen.

AMBLYSTEGIACEAE

Amblystegium riparium (Hedw.) B.S.G.

A. serpens (Hedw.) B.S.G. var. *serpens*

var. *juratkanum* (Schimp.) Rau & Herv. (= *A. juratkanum* Schimp.).

A. tenax (Hedw.) C. Jens.

A. trichopodium (Schultz) Hartm.

Calliergon cordifolium (Hedw.) Kindb.

**C. giganteum* (Schimp.) Kindb. (Duvall 1938).

**C. stramineum* (Brid.) Kindb. (Campbell 1973; Crum 1976).

**C. trifarium* (Web. & Mohr) Kindb. (Crum 1976; Crum & Anderson 1981).

Calliergonella cuspidata (Hedw.) Loeske

**Campylium chrysophyllum* (Brid.) J. Lange (Crum 1976; Crum & Anderson 1981). Not seen.

**C. hispidulum* (Brid.) Mitt. (Wiedemann 1966). Not seen.

**C. polygamum* (B.S.G.) C. Jens. (= *Amblystegium polygamum* B.S.G.) (Miller & Shushan 1964; Seyer 1979b).

**C. radicale* (P.-Beauv.) Grout (= *Amblystegium saxatile* Schimp.) (Crum & Anderson 1981). Not seen.

**C. stellatum* (Hedw.) C. Jens. (Crum & Anderson 1981). Not seen.

Cratoneuron commutatum var. *falcatum* (Brid.) Mönk.

C. filicinum (Hedw.) Spruce

Drepanocladus aduncus (Hedw.) Warnst. var. *aduncus*

*var. *kniffii* (B.S.G.) Mönk. (Crum & Anderson 1981). Not seen.

D. exannulatus (B.S.G.) Warnst.

D. fluitans (Hedw.) Warnst.

D. uncinatus (Hedw.) Warnst. var. *uncinatus*

var. *symmetricus* (Ren. & Card.) Grout

**D. vernicosus* (Lindb. ex C. Hartm.) Warnst. (Crum 1976; Seyer 1979a,b; Crum & Anderson 1981).

Hygrohypnum bestii (Ren. & Bryhn ex Ren.) Holz. ex Broth.

H. luridum (Hedw.) Jenn.

H. molle (Hedw.) Loeske

**H. montanum* (Lindb.) Broth. (Röll 1896; Podpéra 1954). Not seen.

**H. norvegicum* (B.S.G.) Amann (Röll 1896; Kindberg 1896). Excluded from the North American flora by Crum et al. (1973) but since reported by Steere (1978) and Ireland et al. (1980). Not seen.

H. ochraceum (Turn. ex Wils.) Loeske

- **H. smithii* (Sw. ex Lilj.) Broth. (Röll 1890, 1893; Renauld & Cardot 1893; Barnes & Heald 1896; Miller & Shushan 1964; W. B. Schofield, pers. comm.). Not seen. Early reports were based on "Myrinia dieckii," which Grout (1934) and subsequently Wijk et al. (1959–1969) placed near *H. smithii*. Grout wrote: "Until better and more abundant material is at hand it is scarcely worth while [sic] to attempt naming it." Lawton (1971) considered it a synonym of *Scleropodium cespitans* var. *sublaeve*.
- Platydictya jungermannioides* (Brid.) Crum
Sciaromium tricostatum (Sull.) Mitt.

BRACHYTHECIACEAE

- Brachythecium albicans* (Hedw.) B.S.G.
B. bolanderi (Lesq.) Jaeg. & Sauerb.
**B. campestre* (C. Müll.) Besch. (Duvall 1938). Not seen.
B. collinum (Schleich. ex C. Müll.) B.S.G.
B. curturn (Lindb.) Limpr. (= *B. starkei* var. *explanatum* (Brid.) Mönk.).
**B. erythrorrhizon* B.S.G. (Duvall 1938). Not seen.
B. frigidum (C. Müll.) Besch.
**B. holzingeri* (Grout) Grout. CLACKAMAS Co.: Mt. Hood National Forest, Alpine Campground, just S of Timberline Lodge, T3S, R9E, S8, elev. 1980 m, rotting wood in *Tsuga mertensiana*/*Abies amabilis* community, Lyford 2501 (herb. J. H. Lyford).
B. hylostatum B. Hig. & N. Hig.
**B. leibergii* Grout (Duvall 1938; McNeil 1976).
**B. oxycladon* (Brid.) Jaeg. & Sauerb. (Jones 1936). Jones' specimen was sterile and may have been *B. salebrosum*. Not seen.
B. plumosum (Hedw.) B.S.G.
B. reflexum var. *pacificum* Ren. & Card. ex Röll (= *B. starkei* var. *pacificum* (Ren. & Card. ex Röll) Lawt.).
**B. rutabulum* (Hedw.) B.S.G. (Röll 1893; W. B. Schofield, pers. comm.). Not seen.
B. rivulare B.S.G.
B. salebrosum (Web. & Mohr) B.S.G.
B. velutinum (Hedw.) B.S.G. var. *velutinum*
 var. *venustum* (De Not.) Arc.
Conardia compacta (C. Müll.) Robins. (= *Rhynchostegiella compacta* (C. Müll.) Loeske).
Eurhynchium pulchellum (Hedw.) Jenn. var. *pulchellum*
 var. *barnesii* (Ren. & Card.) Crum, Steere & Anderson
E. riparioides (Hedw.) Rich.
Homalothecium aeneum (Mitt.) Lawt.
H. arenarium (Lesq.) Lawt.
H. fulgescens (Mitt. ex C. Müll.) Lawt.
H. megaptilum (Sull.) Robins.
H. nevadense (Lesq.) Ren. & Card.
H. nuttallii (Wils.) Jaeg. & Sauerb.
H. pinnatifidum (Sull. & Lesq.) Lawt.
Isothecium cristatum (Hampe) Robins.
I. stoloniferum Brid.
**Pseudoscleropodium purum* (Hedw.) Fleisch. (Crum & Anderson 1981). Not seen.
Scleropodium cespitans (C. Müll.) L. Koch var. *cespitosum*
 var. *sublaeve* (Ren. & Card.) Wijk & Marg.
S. obtusifolium (Jaeg. & Sauerb.) Kindb. ex Macoun & Kindb.
S. tourettei (Brid.) L. Koch var. *tourettei*
 var. *colpophyllum* (Sull.) Lawt. ex Crum
Stokesiella brittoniae (Grout) Robins. (= *Eurhynchium brittoniae* Grout).
S. oregana (Sull.) Robins. (= *Eurhynchium oreganum* (Sull.) Jaeg.).
**S. praelonga* (Hedw.) Robins. var. *praelonga* (= *Eurhynchium praelongum* (Hedw.) B.S.G. var. *praelongum*) (W. B. Schofield, pers. comm.). Not seen.
 var. *stokesii* (Turn.) Crum (= *Eurhynchium praelongum* var. *stokesii* (Turn.) Dix.).
**Tomenthypnum nitens* (Hedw.) Loeske (= *Homalothecium nitens* (Hedw.) Robins.). (Seyer 1979b; Christy 1980).

PLAGIOTHECIACEAE

**Plagiothecium cavifolium* (Brid.) Iwats. MULTNOMAH Co.: Mt. Hood National Forest, Oneonta Gorge Botanical Area, rock cliff in steep basaltic gorge with stream, *Lyford 2600* (herb. J. H. Lyford).

P. denticulatum (Hedw.) B.S.G.

P. laetum B.S.G.

P. piliferum (Sw. ex C. J. Hartm.) B.S.G.

P. undulatum (Hedw.) B.S.G.

HYPNACEAE

Herzogiella seligeri (Brid.) Iwats. (= *Isopterygium seligeri* (Brid.) Dix.).

Hypnum circinale Hook.

H. dieckii Ren. & Card. ex Röll

**H. fertile* Sendtn. (Roach 1952). Not seen.

H. pratense Koch ex Brid.

H. revolutum (Mitt.) Lindb.

H. subimponens Lesq.

Isopterygium elegans (Brid.) Lindb.

I. pulchellum (Hedw.) Jaeg. & Sauerb.

**Ptilium crista-castrensis* (Hedw.) De Not. (Crum 1976; Crum & Anderson 1981). Not seen.

RHYTIADIACEAE

**Rhytidium rugosum* (Hedw.) Kindb. (Crum & Anderson 1981; W. B. Schofield, pers. comm.).

HYLOCOMIACEAE

Hylocomium splendens (Hedw.) B.S.G.

Pleurozium schreberi (Brid.) Mitt.

Rhytidiodelphus loreus (Hedw.) Warnst.

R. squarrosus (Hedw.) Warnst.

R. triquetrus (Hedw.) Warnst.

Rhytidopsis robusta (Hedw.) Broth.

BUXBAUMIACEAE

Buxbaumia aphylla Hedw.

B. piperi Best

B. viridis (DC.) Moug. & Nestl.

TETRAPHIDACEAE

**Tetraphis geniculata* Girg. ex Milde (Grout 1936; Forman 1962; Crum & Anderson 1981). Not seen.

T. pellucida Hedw.

POLYTRICHACEAE

Atrichum selwynii Aust.

Oligotrichum aligerum Mitt.

O. hercynicum (Hedw.) DC.

Pogonatum alpinum (Hedw.) Röhl. var. *alpinum*

var. *sylvaticum* (Hoppe) Lawt.

P. contortum (Brid.) Lesq.

**P. dentatum* (Brid.) Brid. (Lesquereux & James 1884; Frye 1910, 1937; Podpěra 1954; Darlington 1964; Crum & Anderson 1981). Not seen.

P. urnigerum (Hedw.) P.-Beauv.

Polytrichum commune Hedw. var. *commune*

*var. *maximoviczii* Lindb. (= *P. commune* var. *jensenii* (Hag.) Mönk.) (Duvall 1938).

**P. formosum* Hedw. (Frye 1910, 1937; Podpěra 1954; Darlington 1964; Crum 1976). Not seen.

P. juniperinum Hedw.

**P. longisetum* Brid. (Foster 1909; Frye 1937; W. B. Schofield, pers. comm.).

- P. lyallii* (Mitt.) Kindb. (= *Polytrichadelphus lyallii* Mitt.).
P. piliferum Hedw.
**P. sexangulare* Brid. (Renauld & Cardot 1889a,b, 1893; Röll 1896; Frye 1910, 1937; Podpéra 1954; Campbell 1973).
**P. sphaerothecium* (Besch.) C. Müll. (Christy 1980).
**P. strictum* Brid. CLATSOP Co.: fen 3.2 km NE of Gearhart, T7N, R10W, S34, elev. 5 m, among stems of *Sphagnum henryense* on top of hummock near center of mire, Christy 1843 (ORE, WTU, herb. J. A. Christy).

EXCLUDED TAXA

- Dicranum bonjeanii* De Not. ex Lisa (Renauld & Cardot 1892; Röll 1896). Collections so named can be referred to *D. scoparium*, *D. howellii* or *D. polysetum* (cf. Lawton 1971; Crum 1976; Crum & Anderson 1981).
Barbula elata (Dur. & Mont.) C. Müll. (Renauld & Cardot 1892; Röll 1893, 1896). A North African species (Wijk et al. 1959–1969); North American reports presumably based on misidentifications.
Grimmia trichophylla var. *tenuis* (Wahlenb.) Wijk & Marg. (Foster 1909; Duvall 1938). Excluded from the North American flora, as none of the collections so named agree with European material (cf. Lawton 1971; Crum et al. 1973).
Rhacomitrium heterostichum var. *microcarpon* (Hedw.) Boul. (Frye 1918a; Jones 1933; Jennings 1951; Darlington 1964; Crum & Anderson 1981). Lawton (1971) stated that specimens so named from the Pacific Northwest do not agree with characters described for the variety.
Entosthodon attenuatus (Dicks.) Bryhn (Grout 1935; Podpéra 1954). The Oregon collection cited by Grout was redetermined as *E. californicus* by Crum and Anderson (1955).
Pohlia vexans (Limpr.) H. Lindb. (Lawton & Ireland 1963). This report, based on a sterile specimen, cannot be verified (E. Lawton, pers. comm.).
Rhodobryum roseum (Hedw.) Limpr. (Duvall 1938). Iwatsuki and Koponen (1972) suggested that this record and one from California be restudied. Duvall's collection was more likely *Roellia roellii* or *Bryum canariense* (cf. Koch 1950).
Plagiomnium affine (Bland. ex Funck) Kop. (Duvall 1938; Sanborn 1941). Reports can probably be referred to either *P. ciliare* (C. Müll.) Kop. or *P. ellipticum* (Brid.) Kop., treated by Crum and Anderson (1981) as poorly marked varieties of *P. affine* s. lat.
Fontinalis novae-angliae Sull. (Lesquereux & James 1884). Presumably misidentified, as this species is endemic to eastern North America.
Thamnium micro-allopecurum Kindb. (Kindberg 1895, 1896, 1902). Grout (1928) indicated that this is a *nomen dubium* and "may well be ignored."
Thamnobryum alleghaniense (C. Müll.) Nieuwl. (Duvall 1938). This species, with a habit similar to *Climaciump*, is known only from eastern North America (cf. Crum & Anderson 1981).
Anomodon viticulosus (Hedw.) Hook. & Tayl. (Duvall 1938). Presumably misidentified; the genus *Anomodon* is not otherwise known from western North America (cf. Sharp 1972; Crum & Anderson 1981).
Drepanocladus aduncus var. *capillifolius* (Warnst.) Riehm. (= *D. capillifolius* (Warnst.) Warnst.). (Wynne 1944). Wynne's report was based on Grout's *North American Musci Pleurocarpi* No. 332. The specimen is mislabelled "Oregon"; it was collected near the International Boundary on Henry Island, San Juan Co., Washington (E. Lawton, pers. comm.).
Brachythecium acutum (Mitt.) Sull. (Duvall 1938). Excluded from the North American flora by Crum and Anderson (1981); North American reports can be referred to *B. salebrosum*.
Hypnum imponens Hedw. (Duvall 1938). Not otherwise known from western United States; Duvall's specimen was probably *H. subimponens*.
Hylocomium brevirostre (Brid.) B.S.G. (Sullivant 1857). There are no verified records of this species from western North America. Sullivant's report may be based on the superficially similar *Rhytidadelphus loreus* or *R. squarrosum* (cf. Crum & Anderson 1981).
Atrichum altecristatum (Ren. & Card.) Irel. (Renauld & Cardot 1893). Ireland (1969, 1971) states that this taxon—a poorly delimited variety according to Crum and Anderson (1981)—is endemic to eastern North America, and suggests that western reports might be referred to *A. selwynii*.
A. crispum (James) Sull. (Frye 1937; Lowry 1954; Podpéra 1954; Darlington 1964). Ireland (1969) referred reports from western North America to either the common *A. selwynii* or *A. tenellum* (Röhl.) B.S.G. (Lawton 1971).
A. undulatum (Hedw.) P.-Beauv. (Koch 1952). Referable to *A. selwynii* (Ireland 1969).

Polytrichum ohioense Ren. & Card. (Frye 1937; Podpěra 1954). Reports from the Pacific Northwest are referable to *P. formosum* (Crum 1966). Sterile specimens of *Pogonatum alpinum* may be confused with this species (Ireland 1960).

The senior author wishes to thank Lois Brako (NY) and Geraldine Kaye (FH) for their help in locating bibliographic material. I also thank R. E. Andrus, H. A. Crum, A. J. Fife, J.-P. Frahm, E. Lawton and J. Shaw for verifying or identifying specimens.

- Andrews, A. L.** 1913. Sphagnaceae. *North American Flora* 15: 1–31.
 ———. 1921. Notes on North American Sphagnum, IX. The group Cuspidata Lindberg (continued). *THE BRYOLOGIST* 24: 81–86.
Andrus, R. E. 1974. *The Sphagna of New York State*. Ph.D. Dissertation, State University of New York, Syracuse, New York.
 ———. 1979a. *Sphagnum bartlettianum* in the southeastern United States. *THE BRYOLOGIST* 82: 198–203.
 ———. 1979b. *Sphagnum subtile* (Russow) Warnst. and allied species in North America. *Systematic Botany* 4: 351–362.
 ———. 1980. A large range extension for *Sphagnum henryense*. *THE BRYOLOGIST* 83: 239–242.
Barnes, C. R. & F. D. Heald. 1896. Analytic keys to the genera and species of North American mosses. *Bulletin of the University of Wisconsin, Science Series* 1: 157–368.
Britton, E. G. 1913. Andreeaceae. *North American Flora* 15: 33–39.
Brotherus, V. J. 1901–1909. Musci. In A. Engler, & K. Prantl, *Die natürlichen Pflanzenfamilien* 1: 265–1172.
Campbell, A. C. 1973. *Vegetative Ecology of Hunts Cove, Mt. Jefferson, Oregon*. M.S. Thesis, Oregon State University, Corvallis.
Cardot, J. 1887. Révision des Sphaignes de l'Amérique du Nord. *Bulletin de la Société Royale de Botanique de Belgique* 26: 41–61.
Christy, J. A. 1980. Additions to the moss flora of Oregon. *THE BRYOLOGIST* 83: 355–358.
Crum, H. A. 1966. A note on the taxonomy and distribution of *Polytrichum ohioense*. *Advancing Frontiers of Plant Science* 17: 23–26.
 ———. 1976. *Mosses of the Great Lakes Forest, Rev. Ed.* University of Michigan Herbarium, Ann Arbor.
 ——— & L. E. Anderson. 1955. Taxonomic studies in the Funariaceae. *THE BRYOLOGIST* 58: 1–15.
 ——— & ———. 1981. *Mosses of Eastern North America*. 2 Vols. Columbia University Press, New York.
 ——— & J. A. Snider. 1977. *Sphagnum quinquefarium* in the American West. *THE BRYOLOGIST* 80: 156–158.
 ———, W. C. Steere & L. E. Anderson. 1973. A new list of mosses of North America north of Mexico. *THE BRYOLOGIST* 76: 85–130.
Darlington, H. T. 1964. *The Mosses of Michigan*. Cranbrook Institute of Science Bulletin 47. Bloomfield Hills, Michigan.
Duvall, R. H. 1938. The moss flora of the Wallowa Mountains of Oregon. *THE BRYOLOGIST* 41: 90–95.
Flowers, S. 1973. *Mosses: Utah and the West*. Brigham Young University Press, Provo, Utah.
Forman, R. T. T. 1962. The family Tetraphidaceae in North America: continental distribution and ecology. *THE BRYOLOGIST* 65: 280–285.
Foster, A. S. 1909. Bryophytes from Mount Hood region, Oregon. *THE BRYOLOGIST* 12: 64.
Frahm, J.-P. 1980. Synopsis of the genus *Campylopus* in North America north of Mexico. *THE BRYOLOGIST* 83: 570–588.
Frye, T. C. 1910. The Polytrichaceae of western North America. *Proceedings of the Washington Academy of Sciences* 12: 271–328.
 ———. 1918a. The Rhacomitriums of western North America (concluded). *THE BRYOLOGIST* 21: 1–16.
 ———. 1918b. Illustrated key to the western Sphagnaceae. *THE BRYOLOGIST* 21: 37–48.
 ———. 1937. Polytrichaceae. In A. J. Grout, *Moss Flora of North America North of Mexico* 1(2): 99–128. Published by the author, Newfane, Vermont.
Fulton, M. 1912. *Notes on Oregon Mosses*. B.S. Thesis, University of Oregon, Eugene.
Grout, A. J. 1928–1941. *Moss Flora of North America North of Mexico*. 3 Vols. Published by the author, Newfane, Vermont.
Ireland, R. R. 1960. Notes on *Pogonatum alpinum* in eastern United States and Canada. *THE BRYOLOGIST* 63: 46–50.

- . 1969. Taxonomic studies on the genus *Atrichum* in North America. *Canadian Journal of Botany* 47: 353–368.
- . 1971. *Atrichum*. In E. Lawton, *Moss Flora of the Pacific Northwest*. Hattori Botanical Laboratory, Nichinan, Japan.
- , C. D. Bird, G. R. Brassard, W. B. Schofield & D. H. Vitt. 1980. Checklist of the mosses of Canada. *National Museums of Canada, Publications in Botany* 8: 1–75.
- Iwatsuki, Z. & T. Koponen. 1972. On the taxonomy and distribution of *Rhodobryum roseum* and its related species (Bryophyta). *Acta Botanica Fennica* 96: 1–22.
- Jennings, O. E. 1951. A manual of the mosses of western Pennsylvania and adjacent regions. *American Midland Naturalist Monographs* 6: 1–396.
- Jones, G. N. 1933. Grimmiaceae. In A. J. Grout, *Moss Flora of North America North of Mexico* 2(1): 1–65. Published by the author, Newfane, Vermont.
- . 1936. A report on a small collection of mosses from The Dalles, Oregon. *THE BRYOLOGIST* 39: 43–44.
- Kindberg, N. C. 1895. New or less known species of pleurocarpous mosses from North America and Europe. *Revue Bryologique* 15: 69–72.
- . 1896. *Species of European and North American Bryinae (Mosses) Synoptically Described. Part I. Pleurocarpous: 1–152*. Linköping, Sweden.
- . 1902. Grundzüge einer Monographie der Laubmoos-Gattung *Thamnium*. *Hedwigia* 41: 203–268.
- Koch, L. F. 1950. Mosses of California: an annotated list of species. *Leaflets of Western Botany* 6: 1–40.
- . 1951. *Fissidens pauperculus* Howe and *Orthodontium gracile* Bruch & Schimper: mosses associated with the coast redwood forest. *Science* 114: 571–572.
- . 1952. Bryophytes of Chetco River Redwood State Park, Oregon. *Madroño* 11: 209–214.
- Lawton, E. 1971. *Moss Flora of the Pacific Northwest*. Hattori Botanical Laboratory, Nichinan, Japan.
- . 1979. *Grimmia pacifica*, a new species from western North America. *THE BRYOLOGIST* 82: 276–280.
- & R. R. Ireland. 1963. New or noteworthy mosses from Washington. *THE BRYOLOGIST* 66: 200–203.
- Lesquereux, L. & T. P. James. 1884. *Manual of the Mosses of North America*. S. E. Cassino & Co., Boston, Massachusetts.
- Lowry, R. J. 1954. Chromosome numbers and relationships in the genus *Atrichum* in North America. *American Journal of Botany* 41: 410–414.
- Maass, W. S. G. 1967. Studies on taxonomy and distribution of *Sphagnum* IV. *Sphagnum majus*, *Sphagnum annulatum*, *Sphagnum mendocinum* and *Sphagnum obtusum* in North America. *Nova Hedwigia* 14: 187–214.
- McNeil, R. C. 1976. *Vegetation and Fire History of a Ponderosa Pine-White Fir Forest in Crater Lake National Park*. M.S. Thesis, Oregon State University, Corvallis.
- Miller, H. A. & S. Shushan. 1964. The 1962 foray in Oregon of the American Bryological Society. *THE BRYOLOGIST* 67: 60–72.
- Podpěra, J. 1954. *Conspectus Muscorum Europaeorum*. Československé Akademie Věd, Prague.
- Pursell, R. A. 1976. *Fissidens aphelotaxifolius* (Bryopsida: Fissidentaceae), a new species from the Pacific Northwest of North America. *Bulletin of the Torrey Botanical Club* 103: 35–38.
- Renaud F. & J. Cardot. 1889a. New mosses of North America. II. *Botanical Gazette* 14: 91–100.
- & —. 1889b. Mousses nouvelles de l'Amérique du Nord. *Bulletin de la Société Royale de Botanique de Belgique* 28: 121–134.
- & —. 1890a. New mosses of North America. III. *Botanical Gazette* 15: 39–45.
- & —. 1890b. New mosses of North America. IV. *Botanical Gazette* 15: 57–62.
- & —. 1892. *Musci Americae Septentrionalis*, ex operibus novissimus recensiti et methodice depositi. *Revue Bryologique* 19: 65–96.
- & —. 1893. *Musci Americae Septentrionalis*, ex operibus novissimus recensiti et methodice depositi (concluded). *Revue Bryologique* 20: 1–32.
- Roach, A. W. 1952. Phytosociology of the Nash Crater lava flows, Linn County, Oregon. *Ecological Monographs* 22: 169–193.
- Röll, J. 1890. Vorläufige Mittheilungen über die von mir im Jahre 1888 in Nord-Amerika gesammelten neuen Arten und Varietäten der Laubmose. *Botanisches Centralblatt* 44: 385–391, 417–424.
- . 1893. Nordamerikanische Laubmose, Torfmoose und Lebermose. *Hedwigia* 32: 181–203, 260–309, 334–402.

- . 1896. Nordamerikanische Laubmoose, Torfmoose und Lebermoose (concluded). *Hedwigia* 35: 58–72.
- Sanborn, E. I.** 1941. The bryophyte flora of Alsea Mountain, Benton County, Oregon. *THE BRYOLOGIST* 44: 111–114.
- Sayre, G.** 1935. Splachnaceae. In A. J. Grout, *Moss Flora of North America North of Mexico* 2(2): 89–102. Published by the author, Newfane, Vermont.
- Seyer, S. C.** 1979a. New mosses from Crater Lake National Park, Oregon. *THE BRYOLOGIST* 82: 82–83.
- . 1979b. *Vegetative Ecology of a Montane Mire, Crater Lake National Park, Oregon*. M.S. Thesis, Oregon State University, Corvallis.
- Sharp, A. J.** 1936. Andreaeaceae. In A. J. Grout, *Moss Flora of North America North of Mexico* 1(1): 1–4. Published by the author, Newfane, Vermont.
- . 1972. Phytogeographical correlations between the bryophytes of eastern Asia and North America. *Journal of the Hattori Botanical Laboratory* 35: 263–268.
- Sjörs, H. C.** 1966. *A Key to the Northern Sphagna*. Department of Botany, University of Minnesota. Mimeographed.
- Stark, L. R.** 1980. *Triquetrella* in North America. *THE BRYOLOGIST* 83: 363–364.
- Steere, W. C.** 1978. *The Mosses of Arctic Alaska*. Bryophytorum Bibliotheca 14. J. Cramer, Vaduz.
- Sullivant, W. S.** 1857. Mosses and liverworts. In H. L. Abbot (ed.), *Report upon Explorations for a Railroad Route, from the Sacramento Valley to the Columbia River. 1855. Reports of Explorations and Surveys for a Railroad from the Mississippi River to the Pacific Ocean in 1854–5*, Vol. 6. Part III, no. 2 (III): 93. United States War Department.
- Welch, W. H.** 1934. Fontinalaceae. In A. J. Grout, *Moss Flora of North America North of Mexico* 3(4): 233–262. Published by the author, Newfane, Vermont.
- Wiedemann, A. M.** 1966. *Contributions to the Plant Ecology of the Oregon Coastal Sand Dunes*. Ph.D. Dissertation, Oregon State University, Corvallis.
- Wijk, R. van der, W. D. Margadant & P. A. Florschütz.** 1959–1969. *Index Muscorum*. 5 Vols. Regnum Vegetabile 17: 1–548; 26: 1–535; 33: 1–529; 48: 1–604. Utrecht.
- Williams, R. S.** 1913. Dicranaceae. *North American Flora* 15: 77–158.
- Wynne, F. E.** 1944. Studies in *Drepanocladus* IV. Taxonomy. *THE BRYOLOGIST* 47: 147–189.
- Zander, R. H.** 1979. Notes on *Barbula* and *Pseudocrossidium* (Bryopsida) in North America and an annotated key to the taxa. *Phytologia* 44: 177–214.