BRYOPHYTES OF THE COLUMBIA BASIN, SOUTH OF THE CANADIAN BORDER

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PREFACE

The following report was prepared by either University scientists through cooperative agreement, project science staff, or contractors as part of the ongoing efforts of the Interior Columbia Basin Ecosystem Management Project, co-managed by the U.S. Forest Service and the Bureau of Land Management. It was prepared for the express purpose of compiling information, reviewing available literature, researching topics related to ecosystems within the Interior Columbia Basin, or exploring relationships among biophysical and economic/social resources.

This report has been reviewed by agency scientists as part of the ongoing ecosystem project. The report may be cited within the primary products produced by the project or it may have served its purposes by furthering our understanding of complex resource issues within the Basin. This report may become the basis for scientific journal articles or technical reports by the USDA Forest Service or USDI Bureau of Land Management. The attached report has not been through all the steps appropriate to final publishing as either a scientific journal article or a technical report.

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Purpose and scope of project

As part of the vegetation analysis of the Interior Columbia River Basin Ecosystem Management Project, the bryophyte (liverwort, hornwort and moss) flora was investigated. The study area included the Columbia River Basin south of the Canadian border, part of the northern Great Basin, and part of the upper Klamath River watershed (Fig. 1). The Cascade Range and northern Rocky Mountains are relatively well known bryologically, but the intermountain region is poorly known. Traditionally, these components of the basin have been treated separately south of the Canadian border, and usually separately by state. This project presented an excellent opportunity to collate information and treat the bryoflora of the Columbia basin as a cohesive floristic unit. The objectives of this project were to identify (1) what species are known to occur in the study area, (2) where they occur, (3) their role in the ecosystem, (4) rare species or habitats in need of special management, and (5) aspects of the regional bryoflora needing further investigation.

Previous work

Reference to bryophytes occurring in the Columbia River basin were found in papers on bryophyte taxonomy and floristics, as well as general plant ecology. Publications that we used to obtain distributional data for the Columbia basin are listed in Appendix A, but time did not permit a complete search for each state. There are virtually no publications that treat the bryophytes of the Columbia basin as a cohesive phytogeographic unit. Jones (1929) described the moss flora of portions of the Palouse, Columbia Basin, Okanogan Highland and Bitterroot Mountains sections. Flowers (1973) treated Utah, but his book is useful throughout the arid intermountain area. Spence (1988) compiled a checklist for the Great Basin that includes the southern portion of our study area.

Lawton (1971) treated the moss flora of the entire Pacific Northwest, but provided no distributional data within each state. All states but Washington and Wyoming have relatively recent checklists or floras of their bryophytes, but not all contain distributional data.

Idaho: Hong (1976), McCleary and Green (1971), Christy and Johnson (1988).
Montana: Hong (1975, 1977a), Eversman and Sharp (1980), Elliott and Moore (1989), Elliott (1993).
Nevada: Clark (1957), Lawton (1958), Lavin (1981).
Oregon: Hong (1978a), Christy et al. (1982).
Utah: Flowers (1961, 1973).
Washingon: Hong (1978b), Lawton (1971).
Wyoming: Porter (1933, 1935), Hong (1977b), Spence (1985).

The earliest documented collections of bryophytes in the study area were made along the

Columbia River by David Douglas in 1826-1827. Although mosses had been collected by the Lewis and Clark expedition of 1804-1806, none are known to have been gathered within the Columbia basin. John Newberry collected bryophytes in 1855 along the east slope of the Oregon Cascades during the California-Oregon railroad survey. David Lyall collected bryophytes along the U.S.-Canadian border during the international boundary survey of 1858-1861. Sereno Watson made collections in Nevada and Utah in 1869 during the government survey of the 40th parallel. Julius Roell collected on Mt. Hood, Yellowstone National Park and in the Ellensberg area of Washington in 1888, and John Leiberg collected in the Rockies between 1884-1905.

Widespread, general collecting by an increasing number of individuals began after 1900, and accounts for the majority of extant records from the Columbia basin. T.C. Frye, Lois Clark, George Neville Jones and their students became active in the 1920's and 1930's. Seville Flowers began collecting in Utah and elsewhere in the 1920's, and made excellent ecological observations. Fay MacFadden, William Weber and Betty and Noe Higinbotham began collecting in the region in the 1940's, Elva Lawton, Kathleen Young and Rexford Daubenmire in the 1950's, and Fred Hermann and Wilfred Schofield in the 1960's. Doyle Anderegg and Alma Steele collected widely in Idaho in the 1970's. Many of these specimens were distributed widely to herbaria throughout North America.

Griffiths (1902) is probably the first ecological work to refer to bryophytes in the study region, where he observed *Tortula ruralis* to be a significant soil binder in the northern Great Basin. Other ecological works, or floristic works that include ecology, are Flowers (1933), Cooke (1955), Hoffman (1966), Daubenmire (1970), McCune (1977, 1979), Steele (1978), Maurer (1980), Spence (1981), Rosentreter (1984, 1986), Eversman et al. (1987), McIntosh (1987), Eversman (1990), Lesica et al. (1990) and McCune and Lesica (1992). Distribution maps for many species in or adjacent to the Columbia River Basin were provided by Vitt et al. (1988) and Schofield (1992b).

METHODS

Before we could identify issues affecting diversity and distribution of bryophytes in the Columbia River basin, we had to construct a basic database of occurrences in the study area, to delimit the flora. The primary effort of the project was to obtain locality data from (1) herbarium collections and (2) the bryological literature.

Subdivision of study area. The study area (Fig. 1; Table 1) and data collection was divided among John Christy (Oregon, Utah, Nevada), Patricia Eckel (Wyoming), Joe Elliott (Montana), Alma Hanson (Idaho) and Judy Harpel (Washington). Rene Belland provided the database from the University of British Columbia, and John Davis provided collection data from the eastern Columbia River Gorge.

Database and herbaria. Collection data were stored in a Paradox database designed to

capture all label data. Table 2 identifies the 25 fields used in the database. Acronyms for herbarium collections cited as sources in the database are listed in Table 3, and literature cited as sources in the database were listed in Appendix A.

Ecological provinces. Specimens were assigned to 21 sections within 7 ecological provinces (Table 4), delineated by Bailey et al. (1994) and described by McNab and Avers (1994). Better resolution was obtained using a map prepared by Andy Wilson of the Region 6 GIS facility, combining a layer showing county boundaries with the Bailey section boundaries. Although most specimens could be assigned to a given section, inadequate locality data precluded placement of a number of specimens.

Substrate codes. To identify ecological groups, two-letter substrate codes (Table 5) were assigned to specimens whenever possible, based on information provided on labels, to sort them into habitat categories. Substrate categories were chosen from available data. We kept the categories conservative to simplify the sorting process. While many labels provided detailed substrate data, many others were inadequate, and in such cases substrate was assigned based on general knowledge of the species. Very few labels or references contained enough information to assign specimens to vascular plant communities or associations. Finally, many species occur within several substrate categories, depending on location or habitat.

Aquatic, submerged (AQ). This group includes both moving and ponded waters, regardless of pH. References to rocks or wet limestone were placed in wet rock category. References to rich fens were placed in the peatland category, unless specimens specifically were cited as being submerged.

Decaying wood, wet or dry (DW). Substrates were restricted to stumps and logs, wet or dry. Some humus and duff species also occur here.

Epiphytic (EP). This group includes species occurring at the base or higher on living trees and understory shrubs. Ground-dwelling species at the base of trees were sometimes placed in humus and duff category.

Humus and duff (HD). Species here were restricted to humus, duff, and litter on forest floor. Some species from the dry soil and decaying wood categories also occur here.

Peatlands, including fens and bogs (PE). This group included all species on peat or in wet areas referred to as bogs or fens, regardless of pH. Relatively few collectors distinguished between acid or calcareous conditions, or between bogs and fens.

Rock, calcareous (RC). These species were mentioned specifically as occurring on limestone, sandstone or conglomerate. Wet calcareous rocks were placed in the wet rock category.

Rock, other (RO). Species on all other non-calcareous rock types were lumped here. Most rocks mentioned were basalt and granite. Wet rocks were placed in the wet rock category.

Rock, wet (RW). All references to wet rocks in streams or ponded areas, regardless of pH, were lumped here. Many rocks described as "wet" or "moist" are probably seasonally dry, depending on exposure. Wet calcareous and other wet rock types were included here.

Soil, alkali (SA). All references to alkaline soil, wet or dry, were grouped here. There were relatively few references or specimens in this category, as few have collected in this habitat, and some collectors may not have realized they were in alkaline soils.

Soil, dry (SD). This group included all soil categories not mentioning moisture, including sand. Some duff or humus types probably occur here. Many of these soils were probably seasonally wet, but dry at the time of collection.

Soil, wet (SW). All species on damp soil or mud were placed here. Perennial moisture is inferred in this category, but seasonal moisture may be present in some cases. References to peat were placed in the peatland category.

Identity of specimens. Time did not permit verification of the identity of specimens. In general, specimens cited in recent monographic works should be correctly identified and annotated. The remaining specimens in regional herbaria vary widely on the reliability of identification, depending on the genus or group involved. In our experience, the more common or distinct mosses are misidentified only about 5% of the time, but 20-30% of specimens in difficult genera such as *Brachythecium* or *Grimmia* can be misnamed. Most *Sphagnum* collections in larger herbaria were revised by Richard Andrus in the last ten years. Up to 50% of the liverworts in regional herbaria may be misidentified, a legacy of errors made by Lois Clark and T.C. Frye earlier in the century (David H. Wagner, pers. comm. 1995).

Species nomenclature. Nomenclature from all sources was revised, and follows Anderson (1990) and Anderson et al. (1990) for mosses, and Stotler and Crandall-Stotler (1977) for liverworts. Old names as given on specimens or in citations were listed in the "miscellaneous" field in the database.

RESULTS

We compiled 12,671 records from 53 herbaria and 127 published and unpublished sources. Eleven institutional herbaria and seven personal collections were searched. A total of 808 species, subspecies and varieties were recorded from the study area (Appendix B), of which

3 were hornworts (0.4%), 200 were liverworts (25%), and 606 were mosses (75%) (Table 6).

The quality of the data on herbarium labels varied widely. Most did not have legal descriptions or latitude and longitude, and many lacked useful habitat or ecological information. Old collections, while being the most interesting from a historical perspective, have the least precise localty information, which can frustrate attempts to draw comparisons between the past and present bryoflora of an area.

Typographical errors and duplicate records in the database were corrected whenever possible, but many no doubt remain. We did not have time do an exhaustive search of literature reports, published and unpublished. Although most species no doubt were captured, there are probably many more additional occurrence records that could be added to round out distribution patterns within the study area. We also did not have time to examine the collections of Seville Flowers and William Weber, housed at COLO. We recorded taxa reported by Elliott (1993) to be housed at COLO and MONTU, but did not obtain label data for Montana specimens from those herbaria. Elliott's research was based on examination of material from both COLO and MONTU, and on Seville Flowers' field notes housed at COLO.

In general, mosses are better represented in collections and in both floristic and phytogeographical literature than are liverworts. This difficulty is compounded by the suspect identification of many liverwort specimens. When assessing the relative rarity of liverworts poorly represented in the Columbia River Basin, authoritative works by Hong and Schuster often are contradictory in their interpretation of distribution patterns and relative abundance.

Biogeography

Appendix C lists bryophyte taxa in the Columbia River Basin by ecological section ("physiographic province"). Although Bailey et al. (1994) divided the Columbia basin into 7 ecological provinces and 21 sections (Table 4), the bryoflora has not been treated previously at such a fine level of resolution. Numerous papers specifically describe global distribution patterns of bryophytes (e.g., Schuster 1983, Schofield 1992a), but few of these are at a scale useful for the Columbia basin assessment. Schofield (1969) provided the most comprehensive distributional information suitable for the study area, treating endemic species and those with broader global distributional patterns by geographic areas within the Pacific Northwest. Schofield (1980) and Hong (1987) treated the region in a somewhat broader continental context. Detailed studies of neighboring regions that are useful for the Columbia basin include Schofield (1976, 1988), Tan (1980), McIntosh (1986, 1989) and Spence (1987). Vitt et al. (1988) provided distribution maps for some species within the study area. In addition to papers specifically focused on phytogeography, floristic and ecological papers listed in Appendix A often provided additional information. As done in Appendix E, the bryoflora of the Columbia River Basin can be divided into the following phytogeographical groupings:

Circumpolar. The majority of bryophyte species in the Columbia basin have a circumpolar distribution, a broad category that includes taxa occurring in arctic, boreal and north temperate regions. Many so-called alpine taxa may occur in the mountains well below timberline, in suitable microhabitats. Mountainous areas within the study area include the Cascade Range, northern and central Rocky Mountains, the Blue Mountains, and the fault-block ranges within the northern Great Basin. Circumpolar species may be found throughout the study area, from coniferous forests to shrub-steppe. Many of the species more typical of eastern North America, occurring along the eastern edge of the Columbia River Basin, are circumpolar in distribution. They are absent from the Pacific Northwest, and are rare in the study area.

Disjunct taxa. The bryoflora of the Columbia River Basin includes a variety of taxa with discontinuous distributions, forming disjunct populations within the study area. These distributions include (1) bipolar, (2) North Pacific Ocean, (3) humid interior ("maritime extension"), (4) western North America-western Europe, (5) western North America-eastern North America, (5) circumalpine and (6) broken circumpolar. The most significant group of disjunct taxa is that exhibiting the humid interior or "maritime extension" pattern. It is an inland extension of coastal and Cascadian species that follow a lobe of moderated climate inland along the U.S.- Canadian border. This phenomenon extends as far east as the west slope of the Rocky Mountains in Glacier National Park, and as far south as the Bitterroot Range. It has been known since at least the 1920's to have influenced the distribution of many species of flowering plants, and it is also reflected in the distribution of non-vascular plants (Hong 1975; Schofield 1976; McCune 1984; Schofield 1988; Elliott and Moore 1989; DeBolt and McCune 1993; Elliott 1993). A few of the species exhibiting this distributional pattern also extend along the northern Pacific coast to Alaska, Russia and Japan.

Mediterranean and arid austral climates. Other disjunctive distributional pattern is that of taxa restricted to (1) arid winter wet-summer dry "Mediterranean" climates in the world (Schofield 1980, 1994), and (2) arid, low-elevation sites western North America and Eurasia (McIntosh 1986, 1989). Although the bryophyte flora of the arid lands is not rich, it contains species found nowhere else in the study area. It has been poorly collected because of the misconception that arid lands contain no bryophytes. Many of these species are important components of cryptogamic (also called "cryptobiotic" or "microphytic") soil crusts. Although such crusts are widespread throughout the Columbia River Basin, most have been degraded or destroyed by agriculture and grazing.

Endemism. About 50 taxa occurring in the Columbia River Basin are endemic to western North America (Appendix E, in part). Several of these have narrower ranges and can be categorized as being endemic to the (1) dry intermountain region (*Orthotrichum hallii, Orthotrichum holzingeri, Pseudocrossidium obtusulum, Pottia nevadensis*), (2) Columbia River Basin proper (*Bryoerythrophyllum columbianum, Grimmia brittoniae*), or (3) the central or northern Rocky Mountains (*Pseudoleskea incurvata* var. *tenuiretis*, *Pseudoleskea radicosa* var. *pallida*).

Ecological groups

Appendix D lists species by substrate code for each of the 21 sections of the ecological provinces. The taxa listed for each substrate were used as "ecological groups" to broadly define some function in the ecosystem. There are few specific references to ecological groups within the study area. Taxa did not always sort clearly by substrate group, because there were inconsistencies in the way substrate data were recorded on labels. For example, the calciphile *Fissidens grandifrons* may have been reported as occurring on wet rocks, or just "rocks", without reference to calcareous rocks. In such cases, the taxa for such habitats as calcareous rocks may be somewhat inaccurate in the summary statistics. Also, "wet soil" may have been reported by collectors as "dry soil" if they had visited the same site later in the season, hence skewing the figures for taxa restricted to wet soils versus dry soils.

Aquatic, submerged. This group occurs mostly in montane areas where water is abundant, although specimens have been collected in arid areas from irrigation ditches, vernal pools and water troughs. Habitats range from perennially cold, clear water to organic ooze in water with low or no flows. Many of these habitats may dry up seasonally, but it is usually impossible to tell from label data if this is the case. Most species involved, except some aquatic liverworts such as *Chiloscyphus polyanthos*, can tolerate seasonal drying. Plants may be abraded by waves, ice and other debris, and are habitat for a wide array of invertebrates, amphibians and fish. They also are efficient sediment trappers, removing suspended particles, but cannot tolerate prolonged periods of turbidity. Upstream land use patterns that affect water clarity can cause declines in these species.

Decaying wood, wet or dry. These species occur consistently as a group throughout the region, exclusively on decorticated to well-rotted logs and stumps. Cool to moist forest stands in deep shade are the most typical habitat, and most occur in riparian areas and stream terraces. The group contains the highest proportion of liverworts in the study area, and is composed of relatively common species that are widespread in forested habitats throughout the region. Species diversity is richest in old-growth stands that provide cool, moist conditions and much decayed wood. The group is very sensitive to changes in light level and moisture. Removal or thinning of the canopy results in elevated temperatures, desiccation and increased light levels, all of which will diminish viability. Their existence also depends on continued inputs of rotten wood in various decay classes and diameters for their required substrate. These logs are extremely important sites for vertebrate and invertebrate habitat, nitrogen fixation, mycorrhizal activity, seedbeds and retention of water. The liverworts have their own mycorrhizal fungi whose functions are poorly understood. They may be associated with decomposer fungi or mycorrhizae of vascular plants (During and van Tooren 1990).

Epiphytic. This group has not been well studied in the Columbia River Basin except in

Montana (Lesica et al. 1991; McCune and Lesica 1992), and has generally been underreported. One hundred taxa were listed as epiphytic, the majority occurring on the east slope of the Cascades (47 taxa), with a signifiant showing from the "maritime extension" zone, including the Palouse Prairie (26 taxa), Idaho Batholith and Bitterroot Valley (27 taxa each) and Okanogan Highlands (21 taxa). The remaining sections had fewer than 15 taxa reported from each. Epiphytic bryophytes are best developed in shaded, cool and humid forest conditions, especially in riparian areas and on stream terraces. Western red cedar, western hemlock, grand fir, subalpine fir and Engelmann spruce are the major tree species with good epiphyte cover. Douglas fir in drier sites contains a sparse epiphyte flora that is relatively drought-tolerant and produces little bryophyte biomass. Steele (1978) found *Dicranum tauricum* to be the only true epiphyte in her study plots. Ponderosa pine, lodgepole pine, pinyon pine and juniper have a poor bryophyte flora because of drier habitat and flaking bark (Hong 1975; Eversman 1982; Eversman et al. 1987; Eversman 1990).

Humus and duff. These species occur on shaded duff and humic soil in relatively dry forests at middle to upper elevations. They typically occur at midslope, on benches or in concave microtopography subject to snow accumulation. All but *Brachythecium hylotapetum* are common and widespread. *Rhytidiopsis robusta* is collected commercially for the floral trade and may be depleted locally. Canopy removal increases light levels and temperature, and ensuing desiccation leads to replacement of these species by a suite of other more drought-tolerant bryophytes. Steele (1978) found that species of moss occurring in mesic forest associations were limited to those associations, but those of drier forest associations spanned several different associations.

Peatlands, including fens and bogs. Although a number of palynological studies were done in peatlands (e.g., Hansen 1939a, 1939b, 1939c, 1942, 1947a, 1947b), the bryoflora has been neglected until recent work by Andrus and Layser (1976), Bursik and Moseley (1992a, 1992b), Bursik (1993), and Chadde and Shelly (1994). Bogs form when peat builds up high enough to inhibit upward capillary movement of groundwater that has been in contact with mineral soil. In these cases, precipitation becomes the only source of scarce nutrients available to plants growing on the peat. Fens, in contrast, are rich in nutrients because of calcareous soils or bedrock, and because peat does not build up high enough to inhibit the effects of enriched groundwater. A distinctive group of bryophyte species occurs in each wetland type, all of which are circumboreal in distribution. The peatland flora encountered in the study area is more similar to that in the northern Rocky Mountains of Alberta and British Columbia than it is to peatlands in the Cascade Range, reflecting the floristic differences of contrasting maritime and continental climates. These habits have not been explored adequately.

Rock, calcareous. As in fens, calcareous rocks have a characteristic bryophyte flora, although many common rock-inhabiting taxa also occur on calcareous rocks. Calcareous outcrops are uncommon in the Columbia basin, and few bryophytes have been collected

from them. Sixty-one taxa were recorded from calcareous substrates, including well-known calciphiles such as *Eucladium verticillatum, Fissidens grandifrons, Gymnostomum aeruginosum* and two species of *Seligeria*.

Rock, other. Rocks and rock outcrops are ubiquitous in the study area. They range from arid lands at low elevation to forested outcrops and talus slopes at middle to upper slopes and along ridgetops, as well as rocks at or above timberline. A distinctive array of bryophyte species occurs on rocks, tolerant of extremes in heat, cold and drought. Most are widespread throughout the region, and in many arid areas the bryophyte flora is composed exclusively of rock-dwelling species. Species diversity is much greater on undisturbed rocks and outcrops than in road cuts and clearcuts. In exposed areas at all elevations, most bryophyte cover occurs on shaded or otherwise protected rock faces where moisture persists longer (McCune 1977; Nash et al. 1977; Spence 1981; Lavin 1982). They may also be subject to nitrogen enrichment at bird roosts and packrat latrines, which can limit bryophyte growth on rock faces. Rock-dwelling species adapted to shade in forest stands, such as at the base of undisturbed outcrops, are replaced by xerophytic species when the forest canopy is removed. Because of their position on slopes and ridges, stands at the base of outcrops are subject to catastrophic fire, and the bryophytes in this species group probably develop only after long periods of canopy stability.

Rock, wet. This group occurs wherever there is perennial to seasonal water, both along streams and rivers, and on seasonally wet rock outcrops where seepage occurs. Rosentreter (1984) found species to occur in distinct zones, depending on substrate stability, current and hydroperiod. He found that the zone of normal seasonal high water was dominated by *Scouleria aquatica* and the lichen *Dermatocarpon reticulatum*, while the extreme high flood zone was dominated by *Didymodon vinealis* var. *rubiginosus* and *Grimmia montana*. Like aquatic bryophytes, these species are abraded by waves, ice and other debris, and perform many of the same functions for invertebrate, amphibian and fish habitat, and sediment trapping. Although they are efficient sediment trappers, these species cannot tolerate excessive turbidity or siltation. As with the aquatic group, species on wet rocks could be adversely affected by land use patterns upstream.

Soil, alkali. We found so few collections (4 records, 2 taxa) consistently labeled as coming from alkaline habitats that, for purposes of data analysis, we lumped them in the dry soil category. Few collectors have worked in these areas, but given the widespread occurrence of alkali, there is probably a richer flora than that reported here. Some collectors probably did not note that they were collecting in alkaline areas because they didn't realize it. The bryophyte flora of alkaline areas is poor, and is mostly restricted to where vascular plants such as *Sarcobatus, Atriplex, Kochia* and *Distichlis* can grow. Sites typically have some seasonal flooding that concentrates salts upon evaporation. Flowers (1933) noted that mosses can tolerate up to an average of about 0.8% alkali. He found no mosses on sodium carbonate, tolerance up to 0.5% of sodium chloride, but a

relative abundance of mosses on calcium phosphate. Flowers (1933, 1973) and McIntosh (1986) found some species characteristic of, or restricted to, alkaline sites (e.g., *Desmatodon heimii, Pottia nevadensis*), while other species could tolerate alkali but also grew in non-alkaline habitats (e.g., *Bryum caespiticium, Ceratodon purpureus, Conardia compacta, Funaria hygrometrica, Leptobryum pyriforme, Pterygoneurum subsessile, Tortula brevipes, Tortula ruralis*). The latter species may occur on alkali because of the seasonal availability of water. The bryoflora of this habitat needs further investigation in the Columbia basin.

Soil, dry. These species occur on exposed or shaded mineral soil at all elevations. Primary succession on recently-disturbed soil includes many common, opportunistic species that rapidly colonize sites, stabilize soil and enhance invasion by other cryptogams or vascular plants. These are often drought-tolerant, short-lived assemblages that are replaced by others within a year or two. At low elevation in arid areas, bryophytes are a significant component of soil crusts, where they harbor nitrogen-fixing bacteria, stabilize soil by trapping particles, reduce wind erosion, help maintain soil moisture, and enhance seed germination (Anderson and Rushforth 1976, Harper and Marble 1988). In contrast to pioneer associations on disturbed soil, these crusts take many years to form, are long-lived, and suffer long-term damage from fire and overgrazing (Johansen et al. 1984; Rosentreter 1986; Beymer and Klopatek 1992). At middle to higher elevations, soil-dwelling bryophytes occur in shaded forests, on root balls of windthrown trees, and exposed soil of trails, roads and earth slumps. Near timberline they occur on glacial moraines and outwash, especially where protected by rocks in areas where snow may accumulate (Spence 1981). Some of these associations may also be long-lived, rather than recent immigrants. The distribution of some soil-dwelling species is irregular and unpredictable.

Soil, wet. This group occurs on moist to wet soils, with or without organic content. Most species are widespread and occur wherever water is available. Habitats include edges of lakes and streams, moist organic soil over rocks in shrub thickets, margins of avalanche tracks, seepage areas and the bases of talus slopes. Sites often have late-lying snow beds. In spite of the widespread occurrence of this habitat, distribution of species may be sporadic and unpredictable. Some species need the shaded, moist microclimate provided by a forest canopy, and are very sensitive to desiccation. They are readily replaced by other species in more exposed situations. Common wet soil bryophytes in riparian areas, such as *Marchantia polymorpha* and *Philonotis fontana*, are readily extirpated by livestock trampling.

Rare or sensitive species

Schofield (1984) defined a rare bryophyte as "one that shows a restricted geographic range, usually of less than five square kilometers, or one that is known from fewer than five

localities, even when these localities are widely distant from each other." This definition of rarity is essentially the same as that developed by The Nature Conservancy, used by Natural Heritage Programs and Conservation Data Centers to rank global and state/provincial rarity of organisms or plant communities (Master 1991, Andrus et al. 1992). Using Paradox, we tallied the total number of occurrences of each taxon in the study area, and selected as potentially rare all taxa with five or fewer occurrences in the study area. Inherent in the interpretation of rarity in bryophytes is the problem of poorly collected areas. What looks rare on paper may actually be abundant in the field, and its apparent rarity is only an artifact of undercollecting.

A count of all taxa with five or fewer records in the Columbia River Basin yielded 411 taxa (Appendix E), of which 2 were hornworts (0.2%), 106 were liverworts (26%), and 303 were mosses (74%). Such an unacceptably large number, approximately half the total bryoflora of the study area, is congruent with attempts to rank bryophytes and lichens in Oregon, and reflects not the actual rarity of species, but only our ignorance about their distribution patterns (Christy 1991). It is important to recognize that this list is subject to change as few of these specimens have been verified.

To simplify interpretation of the results, the 411 taxa in Appendix E were assigned to 12 categories, some of which overlap, depending on type of category.

(1) endemic
- (a) western North American
- (b) dry interior
- (c) Columbia River Basin
- (d) central and northern Rocky Mountains

(2) Mediterranean climate in western North America
(3) eastern North America
(4) arid southern climate
(5) circumpolar
(6) discontinuous distribution, including:
- (a) bipolar disjuncts
- (b) North Pacific Ocean
- (c) humid interior "maritime extension"
- (d) western North America and western Europe
- (e) western North America and eastern North America
- (c) broken circumpolar
- (d) circumalpine

(7) cited in literature as rare
(8) problem taxa:, including:
- (a) species concepts poorly known
- (b) needing verification, possibly representing range extensions
- (c) invalid names or probable misidentifications

Tables 6a and 6b list 378 bryophyte taxa that appear to be rare in the Columbia River Basin. These include the 411 taxa listed in Appendix E, less the 52 "problem taxa" listed in Appendix E, section 12. Table 6 also includes several other taxa that are well documented as being rare, even though they may have more than five records from the study area. Table 6a is a simple list of taxa, while Table 6b lists taxa by state, physiographic province, and substrate.

Because these are the most poorly known of all the taxa in the region, some are lacking even the most basic information. We compiled this list within the context of the entire Columbia River basin, not individual states. Taxa considered rare in one state may be more common elsewhere in the study area, so our list will differ from those of individual states. State Heritage Programs in Idaho, Montana and Oregon are tracking occurrences of rare or sensitive bryophytes. A list for Washington is being compiled. The Bureau of Land Management, the Forest Service and the Oregon Department of Agriculture have included some or all of these species on their lists of sensitive plants. Undoubtedly, many of the taxa listed in Table 6 will be found to be more abundant than is presently known, but for the present we must list them as rare, until futher collecting shows otherwise.

Research and management needs

Appendix F lists specific localities, habitats and research needs for areas of the seven states within the study area. The data for Nevada and Utah are scanty. Despite the fact that thousands of collections of bryophytes have been made in the Columbia River Basin over the last 150 years, vast areas have not been collected systematically or at all. In particular, liverworts have been undercollected and chronically misidentified, and need careful attention in future work.

Surveys for rare species. Obviously, the rare taxa listed in Table 6 need to be sought throughout the study area, to better determine distributions and abundance. The localities of the taxa listed in Appendix E as occurring at the edge of their range (e.g., species primarily of eastern North America) are important for study for their role in migration or as relictual areas. Habitat needs for specific species are beyond the scope of this report.

Arid habitats and soil crusts. Arid habitats of all types are undercollected and need further attention throughout the region. These include desert, shrub-steppe, pinyon-juniper woodland, oak woodland, and ponderosa pine forest. The composition and function of soil crusts, while relatively well studied in the Great Basin, particularly in Utah, is virtually unknown in the Columbia River basin. Some general collecting has been done in a few areas, but the problem needs to be approached on a regional basis, studying crusts in different plant associations and on different soil types. The effects of livestock trampling should be included in any such studies.

Old-growth and late-successional forests. Most of the issues identified in Thomas and

Raphael (1993) also apply to forested areas of the Columbia River Basin and need not be repeated here. The greatest similarities in the bryophytes flora and relative biomass in these forests occur in the mesic forests of the so-called "maritime extension" area in Idaho and Montana. Commercial harvest of moss in these forests is a growing concern, and needs regulation and monitoring to ensure that rare or disjunct species are not being depleted, and that recruitment is adequate to sustain harvest levels. Ponderosa pine forests have few bryophytes as epiphytes or in the understory, but representative stands need to be protected and managed correctly to maintain floristic composition.

Calcareous rocks. Calcareous substrates provide habitat for a distinctive group of bryophyte species. A few calcium-rich areas have been collected, particularly in the northern Rocky Mountains and elsewhere in Idaho, but those of Oregon and Washington are poorly known and need further work

Mineralized areas. Mineral deposits, usually occurring in areas previously mined for gold, silver, copper, mercury and other materials, often provide substrate for a distinctive group of bryophytes. While these areas have received some attention in the Rocky Mountains, other sites within the study area have not been surveyed adequately for these species. It is the same sulfides, especially in mine runoff, that pollute streams and groundwater. Mine tailings and debris undoubtedly have increased suitable habitat for some of these species, which often favor disturbed or barren soils.

Peatlands. Until recently, wetlands were much ignored by land managers, and there is not a good history of collecting in these sites except by a few individuals. With the advent of wetland fill regulations and community classifications, they are receiving more attention and some records now thought rare should become more common. Included in this category are bogs and fens, the latter occurring on calcium-rich sites, which have been poorly-collected outside of the Rocky Mountain region. Impacts from grazing in peatlands have received little attention in the Pacific Northwest, but observations suggest that bryophytes are severely impacted by trampling, as noted in the wet soil group.

Floodplains. These habitats have received recent attention because of wetland and riparian protection. Thomas and Raphael (1993) identified how important floodplains were for bryophyte species diversity, and how many species, particularly liverworts, were concentrated in old-growth forests occurring there. A similar situation exists in the Columbia River basin, especially in the "maritime extension" areas of Idaho and Montana, where species depend on shade, wet soils, logs and other organic debris, and humid microclimate. As with the aquatic and splash zone species in streams, this group of species can be affected to some degree by land ownership patterns and adverse conditions originating upstream on non-federal lands, although impacts would be less pernicious because few of these species are in the stream channel. The effects of livestock trampling should be included in any such studies.

Geothermal areas. Geothermal areas are sometimes known for unusual assemblages of

plants that survive outside of their normal distributional limits, because heated ground provides snow-free conditions and a longer growing season (Lange 1973, Given 1980). Although many bryophyte specimens were collected from hot springs in Idaho and Montana, none appear to be restricted to this habitat on a regional basis, or to exhibit an unusual distributional pattern. Eversman (1990) found lichens to be absent from geyser areas, presumably because of particulate matter and sulfurous fumes from geysers, but the flora was more normal near thermal springs. More work needs to be done in these areas to better describe their effects on bryophytes.

Isolated gorges and narrow canyons. Steep, narrow canyons provide ideal conditions for bryophytes to persist in areas outside their normal distributional limits. Shade, moisture and cold air drainage all contribute to unusual species being found in these areas, sometimes as relics from cooler periglacial climates. Impacts from livestock and humans are often limited here because of restricted access. More work needs to be done to inventory such sites, particularly those with historical bryological collecting that can be used for comparative purposes to monitor changes in the flora.

Rivers and streams. Aquatic and splash zone bryophytes are subject to the same impacts described in Thomas and Raphael (1993), and need not be repeated here. Galvanized culverts, like roof flashing, may be toxic to aquatic bryophytes and may diminish species diversity on some streams (David H. Wagner, pers. comm.).

Program needs

Training for identification and management. Agencies need to implement programs for training of field personnel to survey and manage for bryophyte species. The limitations are essentially the same as those identified in Thomas and Raphael (1993). There are few bryophyte taxonomists in the region and very few individuals are now being trained in universities.

Typification of flora by plant association. Despite the great strides taken by regional ecology programs over the last twenty years to classify vegetation by plant association, no effort has been made to include bryophytes in plot data. A vast amount of habitat-specific information, with implications for management and distributional studies, could be obtained by including these plants in the classification scheme. Again, a lack of bryological training for ecologists is the principal reason for this shortcoming.

Inventory of protected areas. Research Natural Areas, ACEC's, wilderness areas, riparian zones and other administratively protected areas should be inventoried for bryophytes. Crater Lake National Park has been poorly collected, in contrast to Glacier, Yellowstone and Grand Teton National Parks, which have been collected heavily since the 1870's. Baseline data should include bryophytes to identify distributional and management issues, and to provide a historical basis to monitor future trends of the bryoflora.

Acknowledgements

This study could not have been completed without the assistance of many individuals. Rene Belland provided the extensive database from UBC. John Davis, Patricia Eckel, Joe Elliott and Alma Hansen provided critical data and many long hours in herbaria. Peter Neitlich provided additional records from a previous herbarium search. Joe Elliott and Alma Hanson also provided accounts for Montana and Idaho in Appendix F. Andy Wilson prepared much-needed maps that vastly simplified our work. The draft was much improved by valuable criticism from Patricia Eckel, Joe Elliott, Alma Hanson, Won Shic Hong, Daniel Norris, Roger Rosentreter, Wilfred Schofield and David Wagner. We are grateful to Lisa Croft for her support of the study, and her infinite patience with our many delays.

Table 1. Counties within Columbia River basin for which bryophyte occurrences were recorded.

IDAHO: all counties.

MONTANA: Deer Lodge, Flathead, Granite, Lewis and Clark, Lake, Lincoln, Mineral, Missoula, Powell, Ravalli, Sanders, Silver Bow.

NEVADA: Elko, Humboldt

OREGON: Baker, Crater Lake National Park, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco, Wheeler.

UTAH: Box Elder.

WASHINGTON: Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman, Yakima.

WYOMING: Fremont, Lincoln, Sublette, Teton.

Table 2. Explication of field names used in database of bryophytes in Columbia River basin.

GENUS
SPECIES
EXT -- variety (V) or subspecies (S)
EXT NAME -- varietal or subspecific name
M/H -- moss (M) or liverwort (H)
STATE -- two-letter acronym
COUNTY -- first four letters
AGENCY -- land ownership by federal or state agency
LOCALITY -- place of collection
TWP, RNG, SEC -- location by township, range, section
LAT, LONG -- location by latitiude and longitude
PHYSPROV -- ecological section, after Bailey et al. (1994)
SUBSTRATE -- two-letter substrate code (Table 4)
HABITAT
MISC -- synonymy, exsiccati, other miscellaneous
DET BY -- individual who identified specimen, if other than collector
ELEV -- elevation in feet(F) or meters (M)
COLL -- collector
OTHER COLL -- secondary collector
COLL NO -- collector's collection number
COLL DATA -- date of collection
SOURCE -- location of specimen, by herbarium acronym (Table 3), or source of literature citation (Appendix A)

Table 3. Herbaria housing bryophyte specimens from Columbia River basin, listed by acronym per *Index Herbariorum*. Asterisk (*) indicates herbaria systematically searched for records from study area.

ALTA	University of Alberta, Edmonton
BING	State University of New York, Binghamton
BM	British Museum (Natural History), London
*BUF	Buffalo Museum of Science, Buffalo
C	Botanical Museum, Cophenhagen
CANM	Canadian Museum of Nature, Ottawa
CAS	California Academy of Sciences, San Francisco
COLO	University of Colorado, Boulder
CS	Colorado State University, Fort Collins
CU	Cornell University, Ithaca
DPU	DePauw University, Greencastle
DUKE	Duke University, Durham
FH	Farlow Herbarium, Harvard University, Cambridge
G	Conservatory and Botanical Garden, Geneva
GFC	College of Great Falls, Great Falls
HSC	Humboldt State University, Arcata
IA	University of Iowa, Iowa City
*ID	University of Idaho, Moscow
K	Royal Botanic Gardens, Kew [now housed at BM]
MICH	University of Michigan, Ann Arbor
MIL	Milwaukee Public Museum, Milwaukee
MO	Missouri Botanical Garden, St. Louis
*MONTU	University of Montana, Missoula
NICH	Hattori Botanical Laboratory, Nichinan
NY	New York Botanical Garden, New York
*ORE	University of Oregon [now housed at OSC]
*OSC	Oregon State University, Corvallis
P	National Museum of Natural History, Paris
*PSU	Portland State University, Portland
*RM	University of Wyoming, Laramie
S	Swedish Museum of Natural History, Stockholm
SMS	Southwest Missouri State University, Springfield
SMU	Southern Methodist University, Dallas
*SRP	Boise State University, Boise
TENN	University of Tennessee, Knoxville
TRTC	University of Toronto, Toronto

UAC	University of Calgary, Calgary
*UBC	University of British Columbia, Vancouver
UCNW	University College of North Wales, Bangor
UWSP	University of Wisconsin, Stevens Point
*WS	Washington State University, Pullman
*WTU	University of Washington, Seattle
US	Smithsonian Institution, Washington D.C.
UT	University of Utah [now housed at COLO]

Without acronym: Grand Teton National Park herbarium, Yellowstone National Park herbarium.
Personal herbaria: Guy Brassard, Allan Chambers, John Christy, John Davis, Judith Harpel, Patricia Eckel, Barbara Hoisington

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Table 4. Ecological provinces and sections used in analysis of bryoflora of Columbia River basin, showing coverage in states within the study area (from Bailey et al. 1994).

Palouse Dry Steppe Province	
331A	Palouse Prairie (ID, WA)
Intermountain Semi-Desert Province	
342B	Northwestern Basin and Range (ID, NV, OR, UT)
342C	Owyhee Uplands (ID, NV, OR)
342D	Snake River Basalts (ID, WY)
342E	Bear Lake (ID)
342H	High Lava Plains (OR)
342I	Columbia Basin (OR, WA)
Southern Rocky Mountain Steppe: open woodland, coniferous forest, alpine meadow	
M331A	Yellowstone Highlands (ID, WY)
M331D	Overthrust Mountains (ID, WY)
Middle Rocky Mountain Steppe: coniferous forest, alpine meadow	
M332A	Idaho Batholith (ID)
M332B	Bitterroot Valley (MT)
M332E	Beaverhead Mountains (ID)
M332F	Challis Volcanics (ID)
M332G	Blue Mountains (ID, OR, WA)
Northern Rocky Mountain Forest-steppe: coniferous forest, alpine meadow	
M333A	Okanogan Highlands (ID, WA)
M333B	Flathead Valley (ID, MT)
M333C	Northern Rockies (MT)
M333D	Bitterroot Mountains (ID, MT, WA)
Cascade Mixed Forest: coniferous forest, alpine meadow	
M242C	Eastern Cascades (OR, WA)
Sierran Steppe: mixed forest, coniferous forest, alpine meadow	
M261D	Southern Cascades (OR)
M261G	Modoc Plateau (OR)

Table 5. Substrate codes assigned to collections.

AQ -- aquatic, submerged
DW -- decaying wood, wet or dry
EP -- epiphytic
HD -- humus and duff
PE -- peatlands, including fens and bogs
RC -- rock, calcareous
RO -- rock, other
RW -- rock, wet
SA -- soil, alkali
SD -- soil, dry
SW -- soil, wet

Table 6a. Columbia River Basin Rare Taxa

Genus	Species	Ext	Ext_name	M/H/A
ANTHOCEROS	FUSIFORMIS			A
PHAEOCEROS	HALLII			A
ANTHELIA	JULACEA			H
ANTHELIA	JURATZKANA			H
APOMETZGERIA	PUBESCENS			H
ASTERELLA	GRACILIS			H
ASTERELLA	LINDENBERGIANA			H
ASTERELLA	SACCATA			H
BARBILOPHOZIA	ATLANTICA			H
BARBILOPHOZIA	ATTENUATA			H
BARBILOPHOZIA	FLOERKEI			H
BARBILOPHOZIA	KUNZEANA			H
BARBILOPHOZIA	QUADRILOBA			H
BARBILOPHOZIA	QUADRILOBA	V	QUADRILOBA	H
BAZZANIA	TRICRENATA			H
BLEPHAROSTOMA	ARACHNOIDEUM			H
BLEPHAROSTOMA	TRICHOPHYLLUM	S	BREVIRETE	H
CALYPOGEIA	FISSA	S	NEOGAEA	H
CALYPOGEIA	INTEGRISTIPULA			H
CALYPOGEIA	NEESIANA			H
CALYPOGEIA	SPHAGNICOLA			H
CEPHALOZIA	BICUSPIDATA	S	AMBIGUA	H
CEPHALOZIA	BICUSPIDATA	S	LAMMERSIANA	H
CEPHALOZIA	CATENULATA			H
CEPHALOZIA	CONNIVENS			H
CEPHALOZIA	LACINULATA			H
CEPHALOZIA	LEUCANTHA			H
CEPHALOZIA	LOITLESBERGERI			H
CEPHALOZIELLA	ELACHISTA			H
DIPLOPHYLLUM	ALBICANS			H
DIPLOPHYLLUM	OBTUSIFOLIUM			H
DOUINIA	OVATA			H
FOSSOMBRONIA	FOVEOLATA			H
FOSSOMBRONIA	LONGISETA			H
FRULLANIA	FRANCISCANA			H
FRULLANIA	TAMARISCI	S	NISQUALLENSIS	H
GYMNOCOLEA	INFLATA			H
GYMNOMITRION	CONCINNATUM			H
GYMNOMITRION	OBTUSUM			H
HARPANTHUS	FLOTOVIANUS			H
HYGROBIELLA	LAXIFOLIA			H
JUNGERMANNIA	EVANSII			H
JUNGERMANNIA	GRACILLIMA			H
JUNGERMANNIA	HYALINA			H
JUNGERMANNIA	OBOVATA			H
JUNGERMANNIA	POLARIS			H
LOPHOCOLEA	BIDENTATA			H
LOPHOZIA	BADENSIS			H
LOPHOZIA	LATIFOLIA			H
LOPHOZIA	OPACIFOLIA			H
LOPHOZIA	WENZELII			H
LOPHOZIA	WENZELII	V	WENZELII	H
LUNULARIA	CRUCIATA			H
MANNIA	FRAGRANS			H
MARSUPELLA	BREVISSIMA			H
MARSUPELLA	SPHACELATA			H
MARSUPELLA	USTULATA			H
METZGERIA	CONJUGATA			H

Table 6a. Columbia River Basin Rare Taxa

Genus	Species	Ext	Ext_name	M/H/A
MOERCKIA	BLYTTII			H
NARDIA	BREIDLERI			H
NARDIA	COMPRESSA			H
NARDIA	GEOSCYPHUS			H
NARDIA	SCALARIS			H
ODONTOSCHISMA	SPHAGNI			H
PEDINOPHYLLUM	INTERRUPTUM			H
PLEUROCLADA	ALBESCENS			H
PORELLA	BOLANDERI			H
PORELLA	PLATYPHYLLOIDEA			H
PTILIDIUM	CILIARE			H
RADULA	BOLANDERI			H
RICCARDIA	CHAMEDRYFOLIA			H
RICCIA	CAMPBELLIANA			H
RICCIA	CAVERNOSA			H
RICCIA	FLUITANS			H
RICCIA	FROSTII			H
RICCIA	GLAUCA			H
RICCIA	TRICHOCARPA			H
SCAPANIA	APICULATA			H
SCAPANIA	BOLANDERI			H
SCAPANIA	CUSPIDULIGERA	V	CUSPIDULIGERA	H
SCAPANIA	GYMNOSTOMOPHILA			H
SCAPANIA	PALUDICOLA			H
SPHAEROCARPOS	HIANS			H
SPHAEROCARPOS	TEXANUS			H
TRITOMARIA	POLITA			H
TRITOMARIA	QUINQUEDENTATA			H
TRITOMARIA	QUINQUEDENTATA	V	QUINQUEDENTATA	H
ALOINA	BREVIROSTRIS			M
AMBLYODON	DEALBATUS			M
AMBLYSTEGIUM	VARIUM			M
AMPHIDIUM	CALIFORNICUM			M
ANACOLIA	MENZIESII	V	BAUERI	M
ANDREAEA	NIVALIS			M
ANOMODON	VITICULOSUS			M
ARCTOA	FULVELLA			M
ATRICHUM	ANGUSTATUM			M
ATRICHUM	CRISPUM			M
ATRICHUM	HAUSSKNECHTII			M
BARBULA	UNGUICULATA			M
BARTRAMIA	STRICTA			M
BRACHYTHECIUM	ACUTUM			M
BRACHYTHECIUM	BOLANDERI			M
BRACHYTHECIUM	CALCAREUM			M
BRACHYTHECIUM	CAMPESTRE			M
BRACHYTHECIUM	DIGASTRUM			M
BRACHYTHECIUM	ERYTHRORRHIZON	V	THEDENII	M
BRACHYTHECIUM	FENDLERI			M
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M
BRACHYTHECIUM	HOLZINGERI			M
BRACHYTHECIUM	OXYCLADON			M
BRACHYTHECIUM	POPULEUM			M
BRACHYTHECIUM	REFLEXUM			M
BRACHYTHECIUM	REFLEXUM	V	PACIFICUM	M
BRYOERYTHROPHYLLUM	COLUMBIANUM			M
BRACHYTHECIUM	TURGIDUM			M
BRYUM	ARCTICUM			M
BRYUM	CALOBRYOIDES			M

add: Brachia bolanderi

M

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Table 6a. Columbia River Basin Rare Taxa

Genus	Species	Ext	Ext_name	M/H/A
BRYUM	CALOPHYLLUM			M
BRYUM	CANARIENSE			M
BRYUM	CYCLOPHYLLUM			M
BRYUM	DICHOTOMUM			M
BRYUM	GEMMASCENS			M
BRYUM	GEMMILUCENS			M
BRYUM	MEESIOIDES			M
BRYUM	PALLENS			M
BRYUM	SCHLEICHERI			M
BRYUM	ULIGINOSUM			M
BRYUM	VIOLACEUM			M
BUXBAUMIA	APHYLLA			M
CALLICLADIUM	HALDANIANUM			M
CALLIERGON	RICHARDSONII			M
CALLIERGON	TRIFARIUM			M
CAMPYLIUM	HALLERI			M
CAMPYLIUM	HISPIDULUM			M
CAMPYLIUM	STELLATUM	V	PROTENSUM	M
CAMPYLOPUS	FRAGILIS			M
CAMPYLOPUS	SCHIMPERI			M
CATOSCOPIUM	NIGRITUM			M
CIRRIPHYLLUM	CIRROSUM			M
CLAOPODIUM	WHIPPLEANUM			M
CLIMACIUM	AMERICANUM			M
CONOSTOMUM	TETRAGONUM			M
CRUMIA	LATIFOLIA			M
CYNODONTIUM	GRACILESCENS			M
CYNODONTIUM	POLYCARPON			M
CYRTO-HYPNUM	MINUTULUM			M
DENDROALSIA	ABIETINA			M
DESMATODON	CERNUUS			M
DESMATODON	LEUCOSTOMA			M
DESMATODON	OBTUSIFOLIUS			M
DESMATODON	PLINTHOBIUS			M
DESMATODON	SYSTYLIUS			M
DICHODONTIUM	OLYMPICUM			M
DICRANELLA	HETEROMALLA			M
DICRANELLA	PALUSTRIS			M
DICRANELLA	RUFESCENS			M
DICRANELLA	SCHREBERIANA			M
DICRANELLA	SCHREBERIANA	V	ROBUSTA	M
DICRANUM	ACUTIFOLIUM			M
DICRANUM	ANGUSTUM			M
DICRANUM	ELONGATUM			M
DICRANUM	FRAGILIFOLIUM			M
DICRANUM	MAJUS			M
DICRANUM	MONTANUM			M
DICRANUM	RHABDOCARPUM			M
DICRANUM	SPADICEUM			M
DICRANUM	VIRIDE			M
DIDYMODON	ASPERIFOLIUS			M
DIDYMODON	FALLAX	V	REFLEXUS	M
DIDYMODON	RIGIDULUS	V	ICMADOPHILUS	M
DIDYMODON	TOPHACEUS			M
DIDYMODON	VINEALIS	V	NICHOLSONII	M
DISTICHIUM	CAPILLACEUM	V	COMPACTUM	M
DITRICHUM	AMBIGUUM			M
DITRICHUM	HETEROMALLUM			M
DITRICHUM	PUSILLUM			M

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Table 7a. Columbia River Basin Rare Taxa

Genus	Species	Ext	Ext_name	M/H/A
DREPANOCLADUS	ADUNCUS	V	POLYCARPUS	M
DREPANOCLADUS	BREVIFOLIUS			M
DREPANOCLADUS	FLUITANS			M
ENCALYPTA	AFFINIS	V	MACOUNII	M
ENCALYPTA	INTERMEDIA			M
ENCALYPTA	SPATHULATA			M
ENTOSTHODON	FASCICULARIS			M
EUCLADIUM	VERTICILLATUM			M
FABRONIA	PUSILLA			M
FISSIDENS	FONTANUS			M
FISSIDENS	GRANDIFRONS			M
FISSIDENS	HALLIANUS			M
FISSIDENS	TAXIFOLIUS			M
FISSIDENS	VENTRICOSUS			M
FONTINALIS	ANTIPYRETICA	V	GIGANTEA	M
FUNARIA	AMERICANA			M
FUNARIA	MUHLENBERGII			M
GRIMMIA	BRITTONIAE			M
GRIMMIA	DONNIANA			M
GRIMMIA	INCURVA			M
GRIMMIA	MOLLIS			M
GRIMMIA	PLAGIOPODIA			M
GRIMMIA	POECILOSTOMA			M
GRIMMIA	PULVINATA	V	AFRICANA	M
GRIMMIA	TRICHOPHYLLA	V	TENUIS	M
GRIMMIA	UNICOLOR			M
GYMNOSTOMUM	CALCAREUM			M
HAMATOCAULIS	VERNICOSUS			M
HERZOGIELLA	TURFACEA			M
HETEROCLADIUM	MACOUNII			M
HOMALOTHECIUM	ARENARIUM			M
HOOKERIA	LUCENS			M
HYGROAMBLYSTEGIUM	NOTEROPHILUM			M
HYGROAMBLYSTEGIUM	TENAX	V	SPINIFOLIUM	M
HYGROHYPNUM	ALPINUM			M
HYGROHYPNUM	COCHLEARIFOLIUM			M
HYGROHYPNUM	DURIUSCULUM			M
HYGROHYPNUM	OBTUSIFOLIUM			M
HYGROHYPNUM	STYRIACUM			M
HYPNUM	BAMBERGERI			M
HYPNUM	DIECKII			M
HYPNUM	IMPONENS			M
HYPNUM	PALLESCENS			M
HYPNUM	PRATENSE			M
HYPNUM	PROCERRIMUM			M
HYPNUM	RECURVATUM			M
HYPNUM	VAUCHERI			M
ISOTHECIUM	CRISTATUM			M
JAFFUELIOBRYUM	RAUI			M
LESKEA	POLYCARPA			M
LESKEELLA	NERVOSA			M
LIMPRICHTIA	REVOLVENS			M
MACROCOMA	SULLIVANTII			M
MEESIA	LONGISETA			M
MEESIA	TRIQUETRA			M
MEESIA	ULIGINOSA			M
MNIUM	ARIZONICUM			M
MNIUM	LYCOPODIOIDES			M
MYURELLA	JULACEA			M

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Table 6a. Columbia River Basin Rare Taxa

Genus	Species	Ext	Ext_name	M/H/A
MYURELLA	TENERRIMA			M
NECKERA	PENNATA			M
OLIGOTRICHUM	ALIGERUM			M
OLIGOTRICHUM	HERCYNICUM			M
OLIGOTRICHUM	PARALLELUM			M
ORTHOTHECIUM	CHRYSEUM			M
ORTHOTRICHUM	BOLANDERI			M
ORTHOTRICHUM	FLOWERSII			M
ORTHOTRICHUM	HALLII			M
ORTHOTRICHUM	HOLZINGERI			M
ORTHOTRICHUM	PALOUSENSE			M
ORTHOTRICHUM	PRAEMORSUM			M
ORTHOTRICHUM	PULCHELLUM			M
ORTHOTRICHUM	PUMILUM			M
ORTHOTRICHUM	PYLAISII			M
ORTHOTRICHUM	SORDIDUM			M
ORTHOTRICHUM	SPECIOSUM	V	ELEGANS	M
ORTHOTRICHUM	STRIATUM			M
OXYSTEGUS	TENUIROSTRIS			M
PALUDELLA	SQUARROSA			M
PALUSTRIELLA	DECIPIENS			M
PARALEUCOBRYUM	ENERVE			M
PARALEUCOBRYUM	LONGIFOLIUM			M
PHILONOTIS	FONTANA	V	CAESPITOSA	M
PHILONOTIS	MARCHICA			M
PHILONOTIS	MUEHLENBERGII			M
PHILONOTIS	YEZOANA			M
PHYSCOMITRIUM	HOOKERI			M
PHYSCOMITRIUM	PYGMAEUM			M
PLAGIOBRYUM	DEMISSUM			M
PLAGIOBRYUM	ZIERI			M
PLAGIOMNIUM	AFFINE			M
PLAGIOMNIUM	CILIARE			M
PLAGIOMNIUM	CUSPIDATUM			M
PLAGIOMNIUM	DRUMMONDII			M
PLAGIOPUS	OEDERIANA			M
PLAGIOTHECIUM	CAVIFOLIUM			M
PLAGIOTHECIUM	UNDULATUM			M
PLATYGYRIUM	REPENS			M
PLATYHYPNIDIUM	RIPARIOIDES			M
PLEURIDIUM	SUBULATUM			M
POGONATUM	CONTORTUM			M
POGONATUM	DENTATUM			M
POHLIA	ANDALUSICA			M
POHLIA	ATROPURPUREA			M
POHLIA	BOLANDERI			M
POHLIA	BOLANDERI	V	SERIATA	M
POHLIA	ELONGATA			M
POHLIA	ERECTA			M
POHLIA	FILUM			M
POHLIA	LONGICOLLA			M
POHLIA	LUDWIGII			M
POHLIA	ROTHII	V	COMPACTA	M
POHLIA	TUNDRAE			M
POLYTRICHUM	COMMUNE	V	JENSENII	M
POLYTRICHUM	COMMUNE	V	PERIGONIALE	M
POLYTRICHUM	FORMOSUM			M
POLYTRICHUM	NORVEGICUM			M
POLYTRICHUM	SPHAEROTHECIUM			M

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Table 7a. Columbia River Basin Rare Taxa

Genus	Species	Ext	Ext_name	M/H/A
POROTRICHUM	VANCOUVERIENSE			M
POTTIA	CRINITA			M
POTTIA	INTERMEDIA			M
POTTIA	LANCEOLATA			M
POTTIA	NEVADENSIS			M
PSEUDOCALLIERGON	TURGESCENS			M
PSEUDOCROSSIDIUM	OBTUSULUM			M
PSEUDOLESKEA	ATRICHA			M
PSEUDOLESKEA	INCURVATA	V	GIGANTEA	M
PSEUDOLESKEA	INCURVATA	V	TENUIRETIS	M
PSEUDOLESKEA	RADICOSA	V	DENUDATA	M
PSEUDOLESKEA	RADICOSA	V	PALLIDA	M
PSEUDOLESKEA	SAVIANA			M
PSEUDOTAXIPHYLLUM	ELEGANS			M
PTEROGONIUM	GRACILE			M
PTYCHOMITRIUM	POLYPHYLLUM			M
PYLAISIELLA	POLYANTHA			M
RACOMITRIUM	AFFINE			M
RACOMITRIUM	AQUATICUM			M
RACOMITRIUM	BREVIPES			M
RACOMITRIUM	DEPRESSUM			M
RACOMITRIUM	FASCICULARE			M
RACOMITRIUM	LANUGINOSUM			M
RACOMITRIUM	MUTICUM			M
RACOMITRIUM	OBESUM			M
RACOMITRIUM	VARIUM			M
RHIZOMNIUM	NUDUM			M
RHODOBRYUM	ONTARIENSE			M
RHODOBRYUM	ROSEUM			M
RHYTIDIADELPHUS	SUBPINNATUS			M
RHYTIDIUM	RUGOSUM			M
SCHISTIDIUM	CINCLIDODONTEUM			M
SCHISTIDIUM	MARITIMUM			M
SCHISTIDIUM	PULVINATUM			M
SCHISTIDIUM	TENERUM			M
SCHISTOSTEGA	PENNATA			M
SCLEROPODIUM	CESPITANS	V	SUBLAEVE	M
SCORPIDIUM	SCORPIOIDES			M
SELIGERIA	DONNIANA			M
~~SPHAGNUM~~	~~CAPILLIFOLIUM~~			M
SPHAGNUM	COMPACTUM			M
SPHAGNUM	CONTORTUM			M
SPHAGNUM	FALLAX			M
~~SPHAGNUM~~	~~FUSCUM~~			M
SPHAGNUM	JENSENII			M
SPHAGNUM	LESCURII			M
SPHAGNUM	PALUSTRE			M
SPHAGNUM	PLATYPHYLLUM			M
SPHAGNUM	RECURVUM			M
SPHAGNUM	RIPARIUM			M
SPHAGNUM	RUBELLUM			M
~~SPHAGNUM~~	~~SQUARROSUM~~			M
SPHAGNUM	SUBNITENS			M
SPHAGNUM	TENELLUM			M
~~SPHAGNUM~~	~~WARNSTORFII~~			M
SPLACHNUM	AMPULLACEUM			M
SPLACHNUM	SPHAERICUM			M
STEGONIA	LATIFOLIA			M
TAYLORIA	ACUMINATA			M

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Table 7a. Columbia River Basin Rare Taxa

Genus	Species	Ext	Ext_name	M/H/A
TAYLORIA	LIGULATA			M
TAYLORIA	SERRATA			M
TAYLORIA	SPLACHNOIDES			M
TETRAPHIS	GENICULATA			M
~~TETRAPLODON~~	~~ANGUSTATUS~~			M
THAMNOBRYUM	ALLEGHANIENSE			M
THUIDIUM	DELICATULUM			M
THUIDIUM	RECOGNITUM			M
TIMMIA	NORVEGICA			M
TIMMIELLA	ANOMALA			M
TIMMIELLA	CRASSINERVIS			M
TORTELLA	ARCTICA			M
TORTELLA	HUMILIS			M
TORTELLA	INCLINATA			M
TORTELLA	TORTELLOIDES			M
TORTULA	BARTRAMII			M
TORTULA	LAEVIPILA			M
TORTULA	LAEVIPILA	V	LAEVIPILA	M
TORTULA	LATIFOLIA			M
TORTULA	MURALIS			M
TORTULA	PAPILLOSA			M
~~TORTULA~~	~~RURALIS~~			M
TORTULA	SUBULATA			M
TRIPTEROCLADIUM	LEUCOCLADULUM			M
ULOTA	PHYLLANTHA			M

Table 6b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Subs
ANTHOCEROS	FUSIFORMIS			A	ID	M331A	SW
ANTHOCEROS	FUSIFORMIS			A	ID	M333D	V
PHAEOCEROS	HALLII			A	WA	M242C	V
ANTHELIA	JULACEA			H	MT		RW
ANTHELIA	JULACEA			H	OR	M242C	RO
ANTHELIA	JULACEA			H	OR	M242C	SD
ANTHELIA	JULACEA			H	OR	M332G	SD
ANTHELIA	JURATZKANA			H	OR	M242C	SW
ANTHELIA	JURATZKANA			H	WA	M242C	SD
APOMETZGERIA	PUBESCENS			H	ID	M333D	RO
APOMETZGERIA	PUBESCENS			H	MT	M333B	EP
APOMETZGERIA	PUBESCENS			H	MT	M333B	RO
APOMETZGERIA	PUBESCENS			H	MT	M333C	EP
APOMETZGERIA	PUBESCENS			H	MT	M333C	RO
ASTERELLA	GRACILIS			H	OR	M332G	SW
ASTERELLA	GRACILIS			H	WA	M333A	SW
ASTERELLA	GRACILIS			H	WY	M331D	SD
ASTERELLA	LINDENBERGIANA			H	MT		SW
ASTERELLA	LINDENBERGIANA			H	OR	M332G	SW
ASTERELLA	LINDENBERGIANA			H	WA	M242C	SW
ASTERELLA	SACCATA			H	ID		SW
ASTERELLA	SACCATA			H	MT		RO
ASTERELLA	SACCATA			H	OR	M332G	SW
ASTERELLA	SACCATA			H	WA	M333A	SD
BARBILOPHOZIA	ATLANTICA			H	MT	M332B	SW
BARBILOPHOZIA	ATTENUATA			H	MT		RO
BARBILOPHOZIA	ATTENUATA			H	WA	M242C	RO
BARBILOPHOZIA	ATTENUATA			H	WY	M331A	DW
BARBILOPHOZIA	FLOERKEI			H	MT	M333C	V
BARBILOPHOZIA	FLOERKEI			H	WA	M242C	J
BARBILOPHOZIA	FLOERKEI			H	WA	M333A	SW
BARBILOPHOZIA	KUNZEANA			H	ID	M333D	SD
BARBILOPHOZIA	KUNZEANA			H	MT	M332B	SW
BARBILOPHOZIA	KUNZEANA			H	MT	M333C	SW
BARBILOPHOZIA	KUNZEANA			H	WA	M333A	SD
BARBILOPHOZIA	KUNZEANA			H	WY	M331D	SD
BARBILOPHOZIA	QUADRILOBA			H	MT		SD
BARBILOPHOZIA	QUADRILOBA			H	MT	M333C	SD
BARBILOPHOZIA	QUADRILOBA	V	QUADRILOBA	H	WA	M242C	SD
BAZZANIA	TRICRENATA			H	ID	M333D	RW
BLEPHAROSTOMA	ARACHNOIDEUM			H	MT		DW
BLEPHAROSTOMA	TRICHOPHYLLUM	S	BREVIRETE	H	MT	M332B	SW
BLEPHAROSTOMA	TRICHOPHYLLUM	S	BREVIRETE	H	WA	M242C	DW
CALYPOGEIA	FISSA	S	NEOGAEA	H	WA	M242C	SW
CALYPOGEIA	INTEGRISTIPULA			H	MT	M332B	DW
CALYPOGEIA	INTEGRISTIPULA			H	WY	M331D	DW
CALYPOGEIA	NEESIANA			H	ID	M333D	DW
CALYPOGEIA	SPHAGNICOLA			H	MT	M332B	DW
CALYPOGEIA	SPHAGNICOLA			H	WA	M242C	PE
CEPHALOZIA	BICUSPIDATA	S	AMBIGUA	H	MT	M333C	RO
CEPHALOZIA	BICUSPIDATA	S	AMBIGUA	H	OR	M242C	RW
CEPHALOZIA	BICUSPIDATA	S	LAMMERSIANA	H	OR	M332G	PE
CEPHALOZIA	BICUSPIDATA	S	LAMMERSIANA	H	WA	M242C	DW
CEPHALOZIA	CATENULATA			H	ID		DW
CEPHALOZIA	CONNIVENS			H	ID	M332A	DW
CEPHALOZIA	CONNIVENS			H	MT		
CEPHALOZIA	CONNIVENS			H	MT	M332B	RO
CEPHALOZIA	CONNIVENS			H	MT	M332B	SD

Table 6b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substr
CEPHALOZIA	CONNIVENS			H	OR	M242C	SW
CEPHALOZIA	LACINULATA			H	MT		DW
CEPHALOZIA	LACINULATA			H	MT	M332B	DW
CEPHALOZIA	LEUCANTHA			H	MT	M333C	DW
CEPHALOZIA	LEUCANTHA			H	WA	M333A	DW
CEPHALOZIA	LOITLESBERGERI			H	MT		SD
CEPHALOZIA	LOITLESBERGERI			H	MT	M332B	SD
CEPHALOZIELLA	ELACHISTA			H	OR	M242C	SW
DIPLOPHYLLUM	ALBICANS			H	WA	342I	RW
DIPLOPHYLLUM	ALBICANS			H	WA	M333A	SW
DIPLOPHYLLUM	OBTUSIFOLIUM			H	WA	M242C	SD
DOUINIA	OVATA			H	OR	M242C	RO
FOSSOMBRONIA	FOVEOLATA			H	MT	M333C	SW
FOSSOMBRONIA	FOVEOLATA			H	OR	M242C	SW
FOSSOMBRONIA	FOVEOLATA			H	OR	M332G	SW
FOSSOMBRONIA	FOVEOLATA			H	WA	M242C	SW
FOSSOMBRONIA	LONGISETA			H	OR	M332G	SW
FRULLANIA	FRANCISCANA			H	OR	M242C	EP
FRULLANIA	TAMARISCI	S	NISQUALLENSIS	H	OR	M242C	EP
FRULLANIA	TAMARISCI	S	NISQUALLENSIS	H	OR	M332G	EP
GYMNOCOLEA	INFLATA			H	OR	M242C	SW
GYMNOCOLEA	INFLATA			H	WY	M331A	PE
GYMNOMITRION	CONCINNATUM			H	ID	M333A	RO
GYMNOMITRION	CONCINNATUM			H	MT		RO
GYMNOMITRION	CONCINNATUM			H	OR	M242C	PE
GYMNOMITRION	OBTUSUM			H	MT		RO
GYMNOMITRION	OBTUSUM			H	OR	M242C	RO
GYMNOMITRION	OBTUSUM			H	WA	M242C	RO
HARPANTHUS	FLOTOVIANUS			H	MT	M333C	SW
HARPANTHUS	FLOTOVIANUS			H	WY		HD
HYGROBIELLA	LAXIFOLIA			H	ID		RW
HYGROBIELLA	LAXIFOLIA			H	ID	M333B	RW
HYGROBIELLA	LAXIFOLIA			H	MT	M333C	RW
JUNGERMANNIA	EVANSII			H	OR	M242C	RO
JUNGERMANNIA	GRACILLIMA			H	MT	M333C	RO
JUNGERMANNIA	HYALINA			H	MT	M332B	RO
JUNGERMANNIA	HYALINA			H	MT	M333B	RO
JUNGERMANNIA	HYALINA			H	MT	M333C	RO
JUNGERMANNIA	OBOVATA			H	ID	M333A	RW
JUNGERMANNIA	OBOVATA			H	MT		HD
JUNGERMANNIA	OBOVATA			H	WA	M242C	RW
JUNGERMANNIA	POLARIS			H	MT		RO
LOPHOCOLEA	BIDENTATA			H	ID	M333B	SW
LOPHOCOLEA	BIDENTATA			H	ID	M333D	SW
LOPHOCOLEA	BIDENTATA			H	WA	M242C	SW
LOPHOZIA	BADENSIS			H	MT		RO
LOPHOZIA	BADENSIS			H	MT		SD
LOPHOZIA	BADENSIS			H	MT	M332B	SD
LOPHOZIA	BADENSIS			H	MT	M333C	SD
LOPHOZIA	LATIFOLIA			H	WA	M242C	PE
LOPHOZIA	OPACIFOLIA			H	WA	M242C	RO
LOPHOZIA	WENZELII			H	WA	M242C	SW
LOPHOZIA	WENZELII	V	WENZELII	H	WA	M333A	SD
LUNULARIA	CRUCIATA			H	ID	M331A	SW
LUNULARIA	CRUCIATA			H	MT	M333D	SD
MANNIA	FRAGRANS			H	ID		SD
MARSUPELLA	BREVISSIMA			H	OR	M242C	RO
MARSUPELLA	SPHACELATA			H	ID		SW
MARSUPELLA	SPHACELATA			H	MT	M333C	RO

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Table 7b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substrat
MARSUPELLA	USTULATA			H	WY		SD
METZGERIA	CONJUGATA			H	MT	M333C	[illegible]
MOERCKIA	BLYTTII			H	OR	M242C	[illegible]
NARDIA	BREIDLERI			H	MT		SW
NARDIA	COMPRESSA			H	MT	M332B	SD
NARDIA	GEOSCYPHUS			H	MT	M333B	HD
NARDIA	GEOSCYPHUS			H	OR	M332G	SW
NARDIA	SCALARIS			H	MT	M333C	SD
ODONTOSCHISMA	SPHAGNI			H	MT		EP
PEDINOPHYLLUM	INTERRUPTUM			H	MT		EP
PLEUROCLADA	ALBESCENS			H	MT		SW
PORELLA	BOLANDERI			H	WA	M242C	RO
PORELLA	PLATYPHYLLOIDEA			H	ID		RO
PORELLA	PLATYPHYLLOIDEA			H	MT		RO
PORELLA	PLATYPHYLLOIDEA			H	WA	M242C	SW
PTILIDIUM	CILIARE			H	MT	M332B	DW
PTILIDIUM	CILIARE			H	MT	M333B	SD
PTILIDIUM	CILIARE			H	WA	M333A	DW
RADULA	BOLANDERI			H	OR	M242C	EP
RADULA	BOLANDERI			H	WA	M242C	DW
RICCARDIA	CHAMEDRYFOLIA			H	WA	M242C	DW
RICCIA	CAMPBELLIANA			H	ID	342C	SD
RICCIA	CAMPBELLIANA			H	ID	M332A	SD
RICCIA	CAVERNOSA			H	ID		SW
RICCIA	CAVERNOSA			H	MT	M333B	SW
RICCIA	CAVERNOSA			H	WA	M242C	SW
RICCIA	FLUITANS			H	ID	M332E	AQ
RICCIA	FLUITANS			H	WY	M331A	AQ
RICCIA	FROSTII			H	ID		[illegible]
RICCIA	FROSTII			H	WA	331A	[illegible]
RICCIA	FROSTII			H	WA	M242C	SW
RICCIA	GLAUCA			H	OR	M242C	SD
RICCIA	GLAUCA			H	OR	M332G	SD
RICCIA	GLAUCA			H	WY	M331A	SW
RICCIA	TRICHOCARPA			H	WA	M242C	SW
SCAPANIA	APICULATA			H	MT		DW
SCAPANIA	BOLANDERI			H	MT		DW
SCAPANIA	BOLANDERI			H	WA	M242C	DW
SCAPANIA	BOLANDERI			H	WA	M242C	EP
SCAPANIA	CUSPIDULIGERA	V	CUSPIDULIGERA	H	WA	M333A	SD
SCAPANIA	GYMNOSTOMOPHILA			H	MT		SD
SCAPANIA	GYMNOSTOMOPHILA			H	WA	342I	RC
SCAPANIA	PALUDICOLA			H	MT		RO
SCAPANIA	PALUDICOLA			H	MT	M333C	RO
SPHAEROCARPOS	HIANS			H	ID	M331A	SW
SPHAEROCARPOS	HIANS			H	ID	M333D	SD
SPHAEROCARPOS	HIANS			H	WA	331A	SW
SPHAEROCARPOS	TEXANUS			H	OR	342I	SW
SPHAEROCARPOS	TEXANUS			H	WA	M242C	SD
TRITOMARIA	POLITA			H	MT	M332B	RW
TRITOMARIA	QUINQUEDENTATA			H	MT	M332B	DW
TRITOMARIA	QUINQUEDENTATA			H	WY	M331A	HD
TRITOMARIA	QUINQUEDENTATA	V	QUINQUEDENTATA	H	WA	342I	SW
ALOINA	BREVIROSTRIS			M	ID		SD
ALOINA	BREVIROSTRIS			M	MT		[illegible]
ALOINA	BREVIROSTRIS			M	MT	M333B	[illegible]
AMBLYODON	DEALBATUS			M	MT	M333B	[illegible]
AMBLYSTEGIUM	VARIUM			M	MT		SW
AMBLYSTEGIUM	VARIUM			M	WA	331A	SW

Table 6b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substr.
AMPHIDIUM	CALIFORNICUM			M	OR	342I	RO
AMPHIDIUM	CALIFORNICUM			M	WA	342I	RO
AMPHIDIUM	CALIFORNICUM			M	WA	M242C	RO
ANACOLIA	MENZIESII	V	BAUERI	M	ID	M332A	RW
ANACOLIA	MENZIESII	V	BAUERI	M	MT		RO
ANDREAEA	NIVALIS			M	WA	M242C	RO
ANOMODON	VITICULOSUS			M	OR	M332G	EP
ANOMODON	VITICULOSUS			M	WA	M332G	EP
ARCTOA	FULVELLA			M	OR	M242C	RO
ARCTOA	FULVELLA			M	WA	M242C	SD
ATRICHUM	ANGUSTATUM			M	WA	331A	SD
ATRICHUM	CRISPUM			M	ID		SD
ATRICHUM	CRISPUM			M	ID	M333A	SD
ATRICHUM	HAUSSKNECHTII			M	WA	M242C	SD
BARBULA	UNGUICULATA			M	ID	331A	SD
BARTRAMIA	STRICTA			M	MT	M333C	SD
BRACHYTHECIUM	ACUTUM			M	ID		SW
BRACHYTHECIUM	ACUTUM			M	MT		DW
BRACHYTHECIUM	BOLANDERI			M	OR	M332G	HD
BRACHYTHECIUM	CALCAREUM			M	WY	M331A	SD
BRACHYTHECIUM	CAMPESTRE			M	WY	M331A	SD
BRACHYTHECIUM	DIGASTRUM			M	ID	M332A	SD
BRACHYTHECIUM	DIGASTRUM			M	WY	M331A	SD
BRACHYTHECIUM	ERYTHRORRHIZON	V	THEDENII	M	ID	M332A	SD
BRACHYTHECIUM	FENDLERI			M	WY	M331A	SD
BRACHYTHECIUM	FENDLERI			M	WY	M331D	SD
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M	ID	331A	HD
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M	ID	M332A	DW
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M	ID	M333D	HD
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M	ID	M333D	RC
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M	ID	M333D	SD
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M	MT		HD
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M	OR	M332G	RO
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M	WA	331A	RO
~~BRACHYTHECIUM~~	~~GLAREOSUM~~			M	WY	M331A	SD
BRACHYTHECIUM	HOLZINGERI			M	MT		SD
BRACHYTHECIUM	HOLZINGERI			M	MT	M333C	HD
BRACHYTHECIUM	HOLZINGERI			M	WA	M242C	HD
BRACHYTHECIUM	OXYCLADON			M	ID	M332A	HD
BRACHYTHECIUM	OXYCLADON			M	ID	M332A	SW
BRACHYTHECIUM	OXYCLADON			M	WA	331A	RO
BRACHYTHECIUM	OXYCLADON			M	WY	M331A	SD
BRACHYTHECIUM	POPULEUM			M	MT		RO
BRACHYTHECIUM	REFLEXUM			M	MT		SD
BRACHYTHECIUM	REFLEXUM			M	OR	M332G	SD
BRACHYTHECIUM	REFLEXUM	V	PACIFICUM	M	WA	M242C	SD
BRACHYTHECIUM	TURGIDUM			M	MT		PE
BRACHYTHECIUM	TURGIDUM			M	MT		SW
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	MT	M33B	HD
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	OR	342H	SD
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	OR	342I	RO
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	OR	342I	SD
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	WA	342I	SD
BRYUM	ARCTICUM			M	MT		RO
BRYUM	ARCTICUM			M	MT		SD
BRYUM	ARCTICUM			M	WA	M332G	SW
BRYUM	CALOBRYOIDES			M	ID	M332A	RW
BRYUM	CALOBRYOIDES			M	MT		RW
BRYUM	CALOBRYOIDES			M	MT	M333B	RW

add: Bucbria bolanderi m OR M242C SD

Table 7b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substra
BRYUM	CALOBRYOIDES			M	MT	M333C	RW
BRYUM	CALOPHYLLUM			M	MT		[illegible]
BRYUM	CANARIENSE			M	WA	342I	[illegible]
BRYUM	CYCLOPHYLLUM			M	MT		[illegible]
BRYUM	CYCLOPHYLLUM			M	WY	M331D	SD
BRYUM	DICHOTOMUM			M	MT		RW
BRYUM	DICHOTOMUM			M	WA	M242C	RO
BRYUM	DICHOTOMUM			M	WA	M242C	SW
BRYUM	GEMMASCENS			M	OR	342I	RO
BRYUM	GEMMILUCENS			M	OR	342I	SD
BRYUM	MEESIOIDES			M	WA	M242C	SW
BRYUM	PALLENS			M	ID	M332A	RO
BRYUM	PALLENS			M	MT		SW
BRYUM	PALLENS			M	MT	M333B	SW
BRYUM	PALLENS			M	WA	M242C	SD
BRYUM	SCHLEICHERI			M	MT		SW
BRYUM	ULIGINOSUM			M	MT		SW
BRYUM	ULIGINOSUM			M	MT	M332B	SW
BRYUM	ULIGINOSUM			M	WY	M331D	SD
BRYUM	VIOLACEUM			M	MT	M333B	SD
BUXBAUMIA	APHYLLA			M	WA	M242C	DW
BUXBAUMIA	APHYLLA			M	WA	M333A	DW
BUXBAUMIA	APHYLLA			M	WY	M331A	SD
CALLICLADIUM	HALDANIANUM			M	MT		DW
CALLICLADIUM	HALDANIANUM			M	MT	M333B	DW
CALLIERGON	RICHARDSONII			M	ID	M333D	SW
CALLIERGON	RICHARDSONII			M	MT		SW
CALLIERGON	TRIFARIUM			M	MT		PE
CAMPYLIUM	HALLERI			M	MT		[illegible]
CAMPYLIUM	HALLERI			M	MT		[illegible]
CAMPYLIUM	HISPIDULUM			M	MT		DW
CAMPYLIUM	HISPIDULUM			M	MT		HD
CAMPYLIUM	STELLATUM	V	PROTENSUM	M	MT		PE
CAMPYLOPUS	FRAGILIS			M	WY	M331A	SD
CAMPYLOPUS	SCHIMPERI			M	WY	M331A	SD
CATOSCOPIUM	NIGRITUM			M	MT		PE
CIRRIPHYLLUM	CIRROSUM			M	ID	M332A	HD
CIRRIPHYLLUM	CIRROSUM			M	ID	M333D	DW
CLAOPODIUM	WHIPPLEANUM			M	ID		EP
CLIMACIUM	AMERICANUM			M	ID	M331A	SW
CLIMACIUM	AMERICANUM			M	ID	M333A	EP
CLIMACIUM	AMERICANUM			M	ID	M333D	SW
CLIMACIUM	AMERICANUM			M	WY	M331A	SD
CLIMACIUM	AMERICANUM			M	WY	M331D	SD
CONOSTOMUM	TETRAGONUM			M	MT		SW
CRUMIA	LATIFOLIA			M	OR	M332G	RW
CYNODONTIUM	GRACILESCENS			M	ID	M332A	HD
CYNODONTIUM	POLYCARPON			M	ID	M333A	RO
CYNODONTIUM	POLYCARPON			M	WA	M333A	RO
CYNODONTIUM	POLYCARPON			M	WY	M331A	SD
CYRTO-HYPNUM	MINUTULUM			M	ID	M333D	RO
DENDROALSIA	ABIETINA			M	MT		EP
DENDROALSIA	ABIETINA			M	OR	342I	EP
DENDROALSIA	ABIETINA			M	WA	M242C	EP
DESMATODON	CERNUUS			M	WY	M331A	SD
DESMATODON	LEUCOSTOMA			M	WY	M331D	[illegible]
DESMATODON	OBTUSIFOLIUS			M	MT		[illegible]
DESMATODON	OBTUSIFOLIUS			M	OR	M332G	SD
DESMATODON	PLINTHOBIUS			M	OR	342B	RO

Table 6b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substr
DESMATODON	PLINTHOBIUS			M	WA	342I	SD
DESMATODON	SYSTYLIUS			M	WY	M331D	SD
DICHODONTIUM	OLYMPICUM			M	ID		RW
DICHODONTIUM	OLYMPICUM			M	MT		RW
DICHODONTIUM	OLYMPICUM			M	MT	M333C	RW
DICHODONTIUM	OLYMPICUM			M	WA	M242C	SW
DICRANELLA	HETEROMALLA			M	ID	M333B	SW
DICRANELLA	HETEROMALLA			M	MT		SW
DICRANELLA	HETEROMALLA			M	MT	M333C	SW
DICRANELLA	HETEROMALLA			M	WA	M242C	SW
DICRANELLA	PALUSTRIS			M	MT		SW
DICRANELLA	PALUSTRIS			M	OR	M332G	AQ
DICRANELLA	PALUSTRIS			M	OR	M332G	PE
DICRANELLA	PALUSTRIS			M	WA	M242C	RO
DICRANELLA	RUFESCENS			M	MT	M333B	SD
DICRANELLA	SCHREBERIANA			M	MT		SW
DICRANELLA	SCHREBERIANA	V	ROBUSTA	M	MT		SW
DICRANUM	ACUTIFOLIUM			M	MT	M332B	RO
DICRANUM	ANGUSTUM			M	MT		DW
DICRANUM	ELONGATUM			M	MT		DW
DICRANUM	ELONGATUM			M	MT		SD
DICRANUM	ELONGATUM			M	MT	M333C	HD
DICRANUM	FRAGILIFOLIUM			M	MT		DW
DICRANUM	MAJUS			M	WA	M333A	HD
DICRANUM	MONTANUM			M	MT	M333C	SW
DICRANUM	RHABDOCARPUM			M	MT	M333B	DW
DICRANUM	RHABDOCARPUM			M	WY	M331D	SD
DICRANUM	SPADICEUM			M	MT		RW
DICRANUM	SPADICEUM			M	WY	M331A	SD
DICRANUM	SPADICEUM			M	WY	M331D	SD
DICRANUM	VIRIDE			M	WA	M242C	DW
DIDYMODON	ASPERIFOLIUS			M	WY	M331A	SD
DIDYMODON	FALLAX	V	REFLEXUS	M	MT	M333B	SC
DIDYMODON	FALLAX	V	REFLEXUS	M	WA	342I	SD
DIDYMODON	RIGIDULUS	V	ICMADOPHILUS	M	MT		RO
DIDYMODON	RIGIDULUS	V	ICMADOPHILUS	M	MT	M333C	SD
DIDYMODON	TOPHACEUS			M	ID	M332A	RW
DIDYMODON	TOPHACEUS			M	MT	M332B	SW
DIDYMODON	TOPHACEUS			M	MT	M333B	RO
DIDYMODON	TOPHACEUS			M	WA	342I	RC
DIDYMODON	VINEALIS	V	NICHOLSONII	M	OR	M251G	SD
DISTICHIUM	CAPILLACEUM	V	COMPACTUM	M	MT		SD
DITRICHUM	AMBIGUUM			M	MT	M333B	SW
DITRICHUM	HETEROMALLUM			M	MT		SD
DITRICHUM	PUSILLUM			M	MT	M333B	SD
DREPANOCLADUS	ADUNCUS	V	POLYCARPUS	M	ID	M332A	RO
DREPANOCLADUS	ADUNCUS	V	POLYCARPUS	M	WY	M331A	SW
DREPANOCLADUS	BREVIFOLIUS			M	MT		SW
DREPANOCLADUS	FLUITANS			M	ID	331A	AQ
DREPANOCLADUS	FLUITANS			M	ID	M333D	AQ
DREPANOCLADUS	FLUITANS			M	WY	M331A	SD
ENCALYPTA	AFFINIS	V	MACOUNII	M	MT		SD
ENCALYPTA	AFFINIS	V	MACOUNII	M	MT	M333C	SD
ENCALYPTA	INTERMEDIA			M	ID	M332E	RO
ENCALYPTA	INTERMEDIA			M	ID	M332F	SD
ENCALYPTA	INTERMEDIA			M	MT		SD
ENCALYPTA	INTERMEDIA			M	MT	M333B	RO
ENCALYPTA	INTERMEDIA			M	WY	M331D	RC
ENCALYPTA	SPATHULATA			M	MT	M333B	SD

Table 7b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substra
ENTOSTHODON	FASCICULARIS			M	ID	M333B	SW
EUCLADIUM	VERTICILLATUM			M	MT	M332B	[illegible]
FABRONIA	PUSILLA			M	OR	M332G	[illegible]
FABRONIA	PUSILLA			M	WA	331A	[illegible]
FABRONIA	PUSILLA			M	WA	M242C	EP
FISSIDENS	FONTANUS			M	MT	M332B	AQ
FISSIDENS	GRANDIFRONS			M	ID		AQ
FISSIDENS	HALLIANUS			M	ID	M333A	AQ
FISSIDENS	TAXIFOLIUS			M	WA	M242C	SW
FISSIDENS	VENTRICOSUS			M	ID	M333A	RW
FISSIDENS	VENTRICOSUS			M	WA	M242C	SW
FONTINALIS	ANTIPYRETICA	V	GIGANTEA	M	MT		AQ
FUNARIA	AMERICANA			M	WA	331A	SW
FUNARIA	MUHLENBERGII			M	WA	342I	SD
FUNARIA	MUHLENBERGII			M	WA	M242C	SD
GRIMMIA	BRITTONIAE			M	MT	M333B	RO
GRIMMIA	DONNIANA			M	ID	M333A	RO
GRIMMIA	DONNIANA			M	OR	M242C	RO
GRIMMIA	DONNIANA			M	WY	M331A	RO
GRIMMIA	INCURVA			M	MT	M332B	RO
GRIMMIA	INCURVA			M	WA	M242C	RO
GRIMMIA	MOLLIS			M	MT		RO
GRIMMIA	PLAGIOPODIA			M	OR	342B	RO
GRIMMIA	POECILOSTOMA			M	NV	342B	RO
GRIMMIA	PULVINATA	V	AFRICANA	M	OR	M242C	RO
GRIMMIA	TRICHOPHYLLA	V	TENUIS	M	OR	M242C	RO
GRIMMIA	TRICHOPHYLLA	V	TENUIS	M	OR	M332G	RO
GRIMMIA	UNICOLOR			M	ID	M333D	RO
GYMNOSTOMUM	CALCAREUM			M	WY		[illegible]
HAMATOCAULIS	VERNICOSUS			M	ID	331A	[illegible]
HAMATOCAULIS	VERNICOSUS			M	ID	M332F	[illegible]
HAMATOCAULIS	VERNICOSUS			M	ID	M333A	EP
HAMATOCAULIS	VERNICOSUS			M	MT		SW
HAMATOCAULIS	VERNICOSUS			M	WA	M333A	PE
HERZOGIELLA	TURFACEA			M	MT		DW
HERZOGIELLA	TURFACEA			M	MT		HD
HETEROCLADIUM	MACOUNII			M	WA	M333A	RO
HOMALOTHECIUM	ARENARIUM			M	ID	M332A	RO
HOMALOTHECIUM	ARENARIUM			M	OR	M332G	SD
HOOKERIA	LUCENS			M	ID	M333D	DW
HOOKERIA	LUCENS			M	ID	M333D	SW
HOOKERIA	LUCENS			M	OR	M332G	SW
HYGROAMBLYSTEGIUM	NOTEROPHILUM			M	MT		AQ
HYGROAMBLYSTEGIUM	NOTEROPHILUM			M	MT	M333B	AQ
HYGROAMBLYSTEGIUM	TENAX	V	SPINIFOLIUM	M	WY	M331A	RW
HYGROHYPNUM	ALPINUM			M	ID	M333A	RW
HYGROHYPNUM	ALPINUM			M	MT	M333C	SW
HYGROHYPNUM	COCHLEARIFOLIUM			M	MT	M333B	SW
HYGROHYPNUM	DURIUSCULUM			M	ID	M332A	RW
HYGROHYPNUM	DURIUSCULUM			M	MT		RW
HYGROHYPNUM	OBTUSIFOLIUM			M	MT		SW
HYGROHYPNUM	STYRIACUM			M	ID	M332F	RW
HYGROHYPNUM	STYRIACUM			M	MT	M333C	SW
HYPNUM	BAMBERGERI			M	MT		SW
HYPNUM	DIECKII			M	OR	M242C	RO
HYPNUM	DIECKII			M	WA	M242C	[illegible]
HYPNUM	IMPONENS			M	OR	M332G	[illegible]
HYPNUM	PALLESCENS			M	MT		EP
HYPNUM	PALLESCENS			M	MT		SW

Table 6b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substra
HYPNUM	PALLESCENS			M	MT	M332B	SW
HYPNUM	PALLESCENS			M	MT	M333B	RO
HYPNUM	PALLESCENS			M	OR	M242C	DW
HYPNUM	PRATENSE			M	ID	M332A	HD
HYPNUM	PRATENSE			M	ID	M333A	RO
HYPNUM	PRATENSE			M	MT		RO
HYPNUM	PRATENSE			M	MT		SW
HYPNUM	PROCERRIMUM			M	MT		SD
HYPNUM	RECURVATUM			M	MT		RO
HYPNUM	VAUCHERI			M	MT		RC
HYPNUM	VAUCHERI			M	MT	M333B	RC
HYPNUM	VAUCHERI			M	WA	M242C	RO
ISOTHECIUM	CRISTATUM			M	OR	M242C	SD
ISOTHECIUM	CRISTATUM			M	OR	M332G	SD
JAFFUELIOBRYUM	RAUI			M	OR	M332G	RO
LESKEA	POLYCARPA			M	MT		EP
LESKEA	POLYCARPA			M	OR	M332G	RO
LESKEELLA	NERVOSA			M	ID	M333A	RO
LESKEELLA	NERVOSA			M	MT		EP
LESKEELLA	NERVOSA			M	MT		RO
LIMPRICHTIA	REVOLVENS			M	ID	M332A	DW
LIMPRICHTIA	REVOLVENS			M	MT		PE
LIMPRICHTIA	REVOLVENS			M	MT	M333B	PE
MACROCOMA	SULLIVANTII			M	WY	M331A	EP
MEESIA	LONGISETA			M	MT		PE
MEESIA	TRIQUETRA			M	OR	M242C	PE
MEESIA	TRIQUETRA			M	OR	M242C	PE
MEESIA	ULIGINOSA			M	MT		PE
MNIUM	ARIZONICUM			M	WY		SD
MNIUM	ARIZONICUM			M	WY	M331D	SD
MNIUM	LYCOPODIOIDES			M	OR	M242C	SD
MNIUM	LYCOPODIOIDES			M	WA	M242C	SD
MYURELLA	JULACEA			M	MT		SD
MYURELLA	JULACEA			M	MT	M333B	SD
MYURELLA	TENERRIMA			M	MT		RO
NECKERA	PENNATA			M	MT		EP
OLIGOTRICHUM	ALIGERUM			M	ID	M333D	SW
OLIGOTRICHUM	ALIGERUM			M	MT	M333B	SD
OLIGOTRICHUM	ALIGERUM			M	WA	M242C	SW
OLIGOTRICHUM	HERCYNICUM			M	MT		SW
OLIGOTRICHUM	HERCYNICUM			M	OR	M242C	SD
OLIGOTRICHUM	HERCYNICUM			M	OR	M242C	SW
OLIGOTRICHUM	HERCYNICUM			M	WA	M242C	SD
OLIGOTRICHUM	PARALLELUM			M	WA	M242C	SD
ORTHOTHECIUM	CHRYSEUM			M	MT		RW
ORTHOTHECIUM	CHRYSEUM			M	MT		SW
ORTHOTRICHUM	BOLANDERI			M	WA	342I	RO
ORTHOTRICHUM	FLOWERSII			M	ID	342C	RO
ORTHOTRICHUM	HALLII			M	ID	M332E	RO
ORTHOTRICHUM	HALLII			M	WY	M331D	RC
ORTHOTRICHUM	HOLZINGERI			M	ID	331A	RO
ORTHOTRICHUM	HOLZINGERI			M	OR	M332G	RO
ORTHOTRICHUM	HOLZINGERI			M	WA	342I	RO
ORTHOTRICHUM	HOLZINGERI			M	WA	M242C	RO
ORTHOTRICHUM	HOLZINGERI			M	WY		RC
ORTHOTRICHUM	HOLZINGERI			M	WY	M331D	RC
ORTHOTRICHUM	PALOUSENSE			M	WA	331A	
ORTHOTRICHUM	PRAEMORSUM			M	MT		EP
ORTHOTRICHUM	PRAEMORSUM			M	WA	342I	RO

Table 7b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substrat
ORTHOTRICHUM	PRAEMORSUM			M	WY	M331A	RO
ORTHOTRICHUM	PULCHELLUM			M	ID	M332A	[illegible]
ORTHOTRICHUM	PULCHELLUM			M	OR	M332G	[illegible]
ORTHOTRICHUM	PUMILUM			M	ID		[illegible]
ORTHOTRICHUM	PUMILUM			M	MT		EP
ORTHOTRICHUM	PUMILUM			M	WA	M242C	EP
ORTHOTRICHUM	PYLAISII			M	ID	M332A	RO
ORTHOTRICHUM	PYLAISII			M	WY	M331A	RO
ORTHOTRICHUM	SORDIDUM			M	WA	331A	EP
ORTHOTRICHUM	SORDIDUM			M	WA	342I	EP
ORTHOTRICHUM	SPECIOSUM	V	ELEGANS	M	MT		EP
ORTHOTRICHUM	STRIATUM			M	ID		EP
ORTHOTRICHUM	STRIATUM			M	ID	M332A	EP
ORTHOTRICHUM	STRIATUM			M	OR	M242C	RO
ORTHOTRICHUM	STRIATUM			M	WA	M332G	EP
OXYSTEGUS	TENUIROSTRIS			M	MT		SD
PALUDELLA	SQUARROSA			M	MT		PE
PALUSTRIELLA	DECIPIENS			M	ID	M331D	RW
PALUSTRIELLA	DECIPIENS			M	ID	M332A	RW
PALUSTRIELLA	DECIPIENS			M	ID	M332F	RW
PALUSTRIELLA	DECIPIENS			M	WY	M331D	SW
PARALEUCOBRYUM	ENERVE			M	MT		RW
PARALEUCOBRYUM	ENERVE			M	MT		SW
PARALEUCOBRYUM	LONGIFOLIUM			M	MT	M333C	SD
PHILONOTIS	FONTANA	V	CAESPITOSA	M	ID		SW
PHILONOTIS	FONTANA	V	CAESPITOSA	M	WA	M242C	SW
PHILONOTIS	MARCHICA			M	ID	M332A	SW
PHILONOTIS	MUEHLENBERGII			M	ID	M333B	RW
PHILONOTIS	YEZOANA			M	MT		[illegible]
PHILONOTIS	YEZOANA			M	MT	M333B	[illegible]
PHYSCOMITRIUM	HOOKERI			M	UT	342B	[illegible]
PHYSCOMITRIUM	PYGMAEUM			M	ID	M332A	SW
PHYSCOMITRIUM	PYGMAEUM			M	WA	342I	SD
PLAGIOBRYUM	DEMISSUM			M	MT		RW
PLAGIOBRYUM	ZIERI			M	MT		SW
PLAGIOBRYUM	ZIERI			M	MT	M333C	SW
PLAGIOMNIUM	AFFINE			M	ID	M332A	SD
PLAGIOMNIUM	AFFINE			M	MT		SW
PLAGIOMNIUM	AFFINE			M	MT	M333B	SW
PLAGIOMNIUM	AFFINE			M	OR	M332G	SW
PLAGIOMNIUM	AFFINE			M	WY		HD
PLAGIOMNIUM	CILIARE			M	MT		SW
PLAGIOMNIUM	CUSPIDATUM			M	MT		SW
PLAGIOMNIUM	CUSPIDATUM			M	OR	M332G	RO
PLAGIOMNIUM	CUSPIDATUM			M	WY	M331D	SW
PLAGIOMNIUM	DRUMMONDII			M	MT		SW
PLAGIOPUS	OEDERIANA			M	MT		RC
PLAGIOPUS	OEDERIANA			M	MT	M333B	RC
PLAGIOTHECIUM	CAVIFOLIUM			M	ID	M333D	HD
PLAGIOTHECIUM	UNDULATUM			M	ID		DW
PLAGIOTHECIUM	UNDULATUM			M	WA	M242C	DW
PLAGIOTHECIUM	UNDULATUM			M	WA	M333A	HD
PLATYGYRIUM	REPENS			M	MT		DW
PLATYGYRIUM	REPENS			M	MT		RO
PLATYHYPNIDIUM	RIPARIOIDES			M	MT		RW
PLATYHYPNIDIUM	RIPARIOIDES			M	WA	342I	[illegible]
PLEURIDIUM	SUBULATUM			M	OR	342I	[illegible]
PLEURIDIUM	SUBULATUM			M	WA	M242C	SD
POGONATUM	CONTORTUM			M	ID	M333D	SW

Table 6b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substra
POGONATUM	CONTORTUM			M	WA	M242C	SW
POGONATUM	DENTATUM			M	ID	M333A	SW
POGONATUM	DENTATUM			M	ID	M333D	SD
POHLIA	ANDALUSICA			M	MT	M333B	SD
POHLIA	ANDALUSICA			M	WY		SD
POHLIA	ANDALUSICA			M	WY		SD
POHLIA	ANDALUSICA			M	WY	M331A	SD
POHLIA	ANDALUSICA			M	WY	M331D	SD
POHLIA	ATROPURPUREA			M	ID	M333A	SD
POHLIA	ATROPURPUREA			M	MT	M333B	SD
POHLIA	BOLANDERI			M	WA	M242C	SD
POHLIA	BOLANDERI			M	WY	M331D	SW
POHLIA	BOLANDERI	V	SERIATA	M	WY	M331D	SD
POHLIA	BOLANDERI	V	SERIATA	M	WY	M331D	SD
POHLIA	ELONGATA			M	OR	M332G	SW
POHLIA	ERECTA			M	WA	M242C	SD
POHLIA	FILUM			M	ID	M332F	SW
POHLIA	FILUM			M	OR	M242C	SW
POHLIA	LONGICOLLA			M	MT	M333B	SD
POHLIA	LONGICOLLA			M	WY	M331A	SD
POHLIA	LUDWIGII			M	WA	M242C	SD
POHLIA	LUDWIGII			M	WY	M331D	SD
POHLIA	ROTHII	V	COMPACTA	M	WY		SW
POHLIA	TUNDRAE			M	WY	M331A	SW
POHLIA	TUNDRAE			M	WY	M331D	SW
POLYTRICHUM	COMMUNE	V	JENSENII	M	MT		SD
POLYTRICHUM	COMMUNE	V	PERIGONIALE	M	WA	M242C	SD
POLYTRICHUM	FORMOSUM			M	ID	M332A	SD
POLYTRICHUM	FORMOSUM			M	ID	M333A	PE
POLYTRICHUM	FORMOSUM			M	MT		PE
POLYTRICHUM	FORMOSUM			M	MT	M332B	PE
POLYTRICHUM	FORMOSUM			M	MT	M333B	HD
POLYTRICHUM	NORVEGICUM			M	MT		SD
POLYTRICHUM	SPHAEROTHECIUM			M	OR	M242C	RO
POROTRICHUM	VANCOUVERIENSE			M	OR	M332G	RO
POTTIA	CRINITA			M	WA	331A	SD
POTTIA	INTERMEDIA			M	OR	M332G	SD
POTTIA	LANCEOLATA			M	ID	M332F	SD
POTTIA	NEVADENSIS			M.	ID	342D	SD
POTTIA	NEVADENSIS			M	OR	342B	SD
POTTIA	NEVADENSIS			M	WA	342I	SD
PSEUDOCALLIERGON	TURGESCENS			M	MT		PE
PSEUDOCROSSIDIUM	OBTUSULUM			M	OR	342I	SD
PSEUDOLESKEA	ATRICHA			M	MT	M333B	RO
PSEUDOLESKEA	INCURVATA	V	GIGANTEA	M	OR	M332G	RO
PSEUDOLESKEA	INCURVATA	V	TENUIRETIS	M	MT		RO
PSEUDOLESKEA	RADICOSA	V	DENUDATA	M	ID	M333A	RO
PSEUDOLESKEA	RADICOSA	V	PALLIDA	M	MT		RO
PSEUDOLESKEA	SAVIANA			M	ID	M332A	RO
PSEUDOTAXIPHYLLUM	ELEGANS			M	OR	M242C	HD
PSEUDOTAXIPHYLLUM	ELEGANS			M	WA	M333A	RW
PTEROGONIUM	GRACILE			M	OR	342I	RO
PTEROGONIUM	GRACILE			M	WA	M242C	EP
PTYCHOMITRIUM	POLYPHYLLUM			M	WA		RO
PYLAISIELLA	POLYANTHA			M	MT		DW
PYLAISIELLA	POLYANTHA			M	MT		EP
RACOMITRIUM	AFFINE			M	WA	M333A	RO
RACOMITRIUM	AQUATICUM			M	ID	M332A	RO
RACOMITRIUM	AQUATICUM			M	MT	M333C	RW

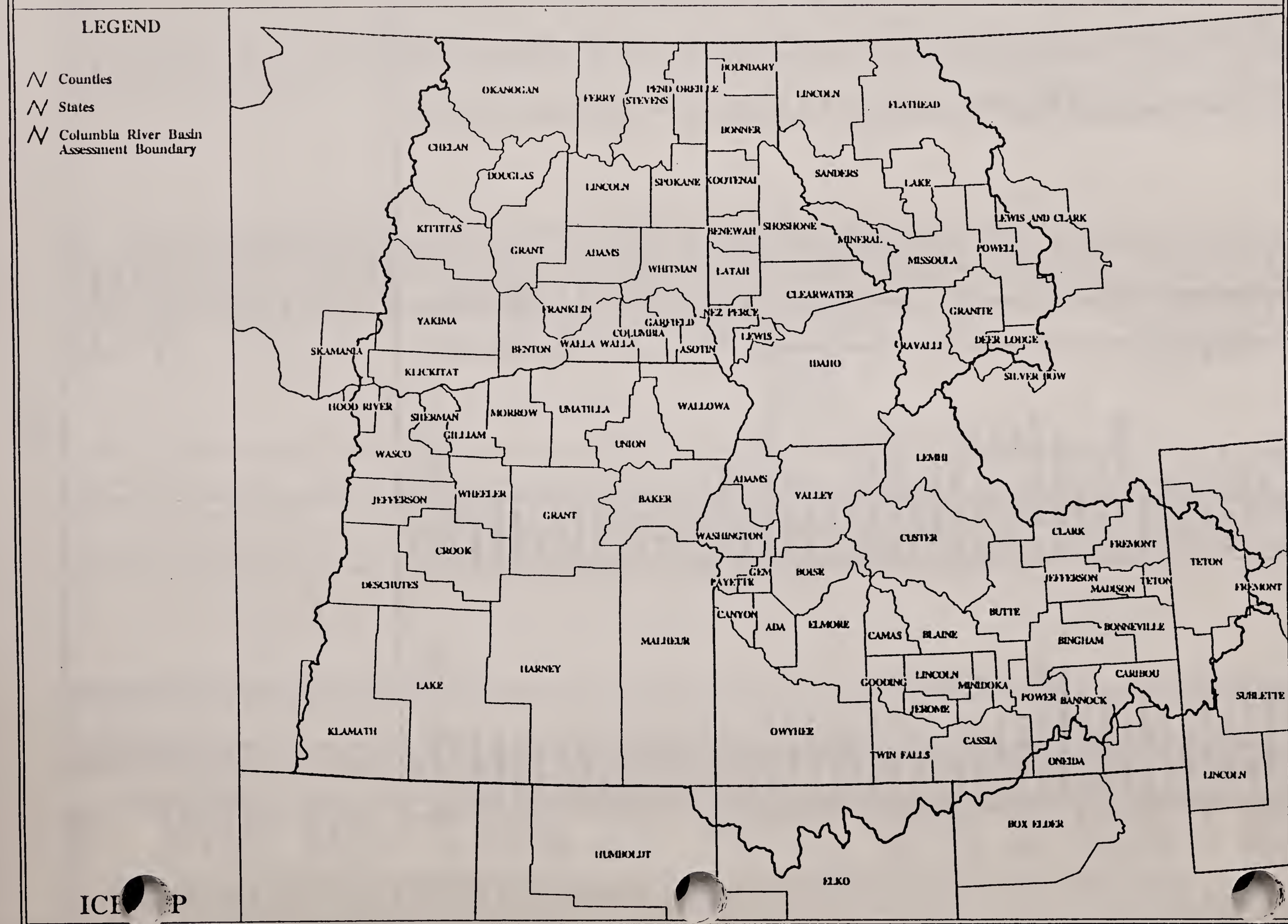
Table 7b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprov	Substra
RACOMITRIUM	BREVIPES			M	OR	M332G	RO
RACOMITRIUM	BREVIPES			M	WA	M242C	[illegible]
RACOMITRIUM	DEPRESSUM			M	WA	M242C	[illegible]
RACOMITRIUM	FASCICULARE			M	MT		RO
RACOMITRIUM	FASCICULARE			M	WY	M331D	RO
RACOMITRIUM	LANUGINOSUM			M	MT		RO
RACOMITRIUM	LANUGINOSUM			M	MT	M333B	RO
RACOMITRIUM	LANUGINOSUM			M	OR	M242C	RO
RACOMITRIUM	MUTICUM			M	WA	M242C	RO
RACOMITRIUM	OBESUM			M	OR	M242C	RO
RACOMITRIUM	VARIUM			M	ID	M333D	RO
RACOMITRIUM	VARIUM			M	MT		RO
RACOMITRIUM	VARIUM			M	OR	M242C	RO
RACOMITRIUM	VARIUM			M	WA	M242C	RO
RHIZOMNIUM	NUDUM			M	MT		SW
RHIZOMNIUM	NUDUM			M	OR	M332G	SW
RHODOBRYUM	ONTARIENSE			M	OR	M332G	HD
RHODOBRYUM	ROSEUM			M	ID	331A	SD
RHODOBRYUM	ROSEUM			M	ID	M332A	SD
RHODOBRYUM	ROSEUM			M	OR	M332G	SD
RHYTIDIADELPHUS	SUBPINNATUS			M	ID	M333D	RO
RHYTIDIUM	RUGOSUM			M	MT		SD
SCHISTIDIUM	CINCLIDODONTEUM			M	ID	M333D	RO
SCHISTIDIUM	CINCLIDODONTEUM			M	OR	M332G	RO
SCHISTIDIUM	CINCLIDODONTEUM			M	WA	3421	RC
SCHISTIDIUM	CINCLIDODONTEUM			M	WA	3421	RO
SCHISTIDIUM	MARITIMUM			M	OR	M332G	RO
SCHISTIDIUM	MARITIMUM			M	OR	M332G	RO
SCHISTIDIUM	PULVINATUM			M	NV	342B	[illegible]
SCHISTIDIUM	TENERUM			M	MT		
SCHISTIDIUM	TENERUM			M	MT		RO
SCHISTIDIUM	TENERUM			M	OR	M332G	RO
SCHISTOSTEGA	PENNATA			M	MT		SD
SCLEROPODIUM	CESPITANS	V	SUBLAEVE	M	WA	M242C	EP
SCORPIDIUM	SCORPIOIDES			M	MT		PE
SCORPIDIUM	SCORPIOIDES			M	MT	M333B	PE
SELIGERIA	DONNIANA			M	MT	M333B	RC
~~SPHAGNUM~~	~~CAPILLIFOLIUM~~			M	MT	M333C	PE
SPHAGNUM	COMPACTUM			M	MT	M332B	PE
SPHAGNUM	CONTORTUM			M	MT	M333C	PE
SPHAGNUM	CONTORTUM			M	OR	M242C	PE
SPHAGNUM	CONTORTUM			M	WA	M333A	PE
SPHAGNUM	FALLAX			M	MT		PE
~~SPHAGNUM~~	~~FUSCUM~~			M	MT		PE
~~SPHAGNUM~~	~~FUSCUM~~			M	MT	M333C	PE
SPHAGNUM	JENSENII			M	WA	M333A	PE
SPHAGNUM	LESCURII			M	WA	M242C	PE
SPHAGNUM	PALUSTRE			M	WA	M242C	PE
SPHAGNUM	PLATYPHYLLUM			M	MT		PE
SPHAGNUM	RECURVUM			M	ID	M333B	PE
SPHAGNUM	RECURVUM			M	WY	M331A	PE
SPHAGNUM	RIPARIUM			M	MT	M332B	PE
SPHAGNUM	RIPARIUM			M	WA	M333A	PE
SPHAGNUM	RUBELLUM			M	WA	M333A	PE
~~SPHAGNUM~~	~~SQUARROSUM~~			M	MT	M333C	RW
SPHAGNUM	SUBNITENS			M	MT		
SPHAGNUM	TENELLUM			M	MT		
~~SPHAGNUM~~	~~WARNSTORFII~~			M	MT		PE
SPLACHNUM	AMPULLACEUM			M	OR	M242C	PE

Table 6b. CRB Rare Taxa by State, Ecological Province & Substrate

Genus	Species	Ext	Ext_name	M/H/A	State	Physprovi	Substra
SPLACHNUM	SPHAERICUM			M	ID		SW
STEGONIA	LATIFOLIA			M	MT		RO
STEGONIA	LATIFOLIA			M	MT		SD
TAYLORIA	ACUMINATA			M	ID	M332A	HD
TAYLORIA	LIGULATA			M	MT		HD
TAYLORIA	SERRATA			M	MT		HD
TAYLORIA	SERRATA			M	WA	331A	HD
TAYLORIA	SERRATA			M	WA	M333A	HD
TAYLORIA	SPLACHNOIDES			M	ID	M332A	EP
TETRAPHIS	GENICULATA			M	ID		DW
TETRAPHIS	GENICULATA			M	MT	M333B	DW
~~TETRAPLODON~~	~~ANGUSTATUS~~			~~M~~	~~MT~~	~~M332B~~	~~HD~~
THAMNOBRYUM	ALLEGHANIENSE			M	OR	M332G	RW
THUIDIUM	DELICATULUM			M	MT	M333B	RO
THUIDIUM	DELICATULUM			M	MT	M333B	SW
THUIDIUM	RECOGNITUM			M	MT		HD
THUIDIUM	RECOGNITUM			M	MT		SD
TIMMIA	NORVEGICA			M	MT		RO
TIMMIELLA	ANOMALA			M	WA	M242C	SD
TIMMIELLA	CRASSINERVIS			M	OR	342I	SD
TIMMIELLA	CRASSINERVIS			M	WA	M242C	SD
TORTELLA	ARCTICA			M	WY	M331A	PE
TORTELLA	HUMILIS			M	WY	M331D	SD
TORTELLA	INCLINATA			M	MT		SW
TORTELLA	INCLINATA			M	MT	M333C	SW
TORTELLA	TORTELLOIDES			M	WY	M331D	RC
TORTULA	BARTRAMII			M	ID	342D	RO
TORTULA	BARTRAMII			M	ID	M332A	RO
TORTULA	BARTRAMII			M	OR	M242C	SD
TORTULA	LAEVIPILA			M	OR	M242C	EP
TORTULA	LAEVIPILA			M	WA	342I	SD
TORTULA	LAEVIPILA	V	LAEVIPILA	M	WA	M242C	EP
TORTULA	LATIFOLIA			M	WA	331A	EP
TORTULA	MURALIS			M	OR	342B	RO
TORTULA	MURALIS			M	WA	342I	SD
TORTULA	MURALIS			M	WA	M242C	SD
TORTULA	PAPILLOSA			M	MT		SD
~~TORTULA~~	~~RUPURIS~~			M	MT		RO
~~TORTULA~~	~~RUPURIS~~			M	MT	M333B	SD
~~TORTULA~~	~~RUPURIS~~			M	MT	M333C	RO
TORTULA	SUBULATA			M	MT		SD
TRIPTEROCLADIUM	LEUCOCLADULUM			M	ID	331A	EP
ULOTA	PHYLLANTHA			M	OR	M332G	RO

Fig 1 - Map of Study Area



ICE P

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Genus	Species	Ext	Ext_name	M/H/A
ANTHOCEROS	FUSIFORMIS			A
ANTHOCEROS	PUNCTATUS			A
PHAEOCEROS	HALLII			A
ANASTROPHYLLUM	HELLERANUM			H
ANASTROPHYLLUM	MICHAUXII			H
ANASTROPHYLLUM	MINUTUM			H
ANEURA	PINGUIS			H
ANTHELIA	JULACEA			H
ANTHELIA	JURATZKANA			H
APOMETZGERIA	PUBESCENS			H
ASTERELLA	GRACILIS			H
ASTERELLA	LINDENBERGIANA			H
ASTERELLA	LUDWIGII			H
ASTERELLA	SACCATA			H
ATHALAMIA	HYALINA			H
BARBILOPHOZIA	ATLANTICA			H
BARBILOPHOZIA	ATTENUATA			H
BARBILOPHOZIA	BARBATA			H
BARBILOPHOZIA	FLOERKEI			H
BARBILOPHOZIA	HATCHERI			H
BARBILOPHOZIA	KUNZEANA			H
BARBILOPHOZIA	LYCOPODIOIDES			H
BARBILOPHOZIA	QUADRILOBA			H
BARBILOPHOZIA	QUADRILOBA	V	QUADRILOBA	H
BAZZANIA	TRICRENATA			H
BLASIA	PUSILLA			H
BLEPHAROSTOMA	ARACHNOIDEUM			H
BLEPHAROSTOMA	TRICHOPHYLLUM			H
BLEPHAROSTOMA	TRICHOPHYLLUM	S	BREVIRETE	H
BLEPHAROSTOMA	TRICHOPHYLLUM	S	TRICHOPHYLLUM	H
CALYPOGEIA	AZUREA			H
CALYPOGEIA	FISSA			H
CALYPOGEIA	FISSA	S	NEOGAEA	H
CALYPOGEIA	INTEGRISTIPULA			H
CALYPOGEIA	MUELLERIANA			H
CALYPOGEIA	MUELLERIANA	S	MUELLERIANA	H
CALYPOGEIA	NEESIANA			H
CALYPOGEIA	SPHAGNICOLA			H
CALYPOGEIA	SUECICA			H
CEPHALOZIA	BICUSPIDATA			H
CEPHALOZIA	BICUSPIDATA	S	AMBIGUA	H
CEPHALOZIA	BICUSPIDATA	S	BICUSPIDATA	H
CEPHALOZIA	BICUSPIDATA	S	LAMMERSIANA	H
CEPHALOZIA	CATENULATA			H
CEPHALOZIA	CONNIVENS			H
CEPHALOZIA	LACINULATA			H
CEPHALOZIA	LEUCANTHA			H
CEPHALOZIA	LOITLESBERGERI			H
CEPHALOZIA	LUNULIFOLIA			H
CEPHALOZIA	MACOUNII			H
CEPHALOZIA	PLENICEPS			H
CEPHALOZIA	PLENICEPS	V	PLENICEPS	H
CEPHALOZIELLA	DIVARICATA			H
CEPHALOZIELLA	DIVARICATA	V	DIVARICATA	H
CEPHALOZIELLA	DIVARICATA	V	SCABRA	H
CEPHALOZIELLA	ELACHISTA			H
CEPHALOZIELLA	HAMPEANA			H
CEPHALOZIELLA	RUBELLA			H

Genus	Species	Ext	Ext_name	M/H/A
CEPHALOZIELLA	RUBELLA	V	RUBELLA	H
CHILOSCYPHUS	PALLESCENS			H
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H
CHILOSCYPHUS	PALLESCENS	V	PALLESCENS	H
CHILOSCYPHUS	POLYANTHOS			H
CHILOSCYPHUS	POLYANTHOS	V	POLYANTHOS	H
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H
CONOCEPHALUM	CONICUM			H
DIPLOPHYLLUM	ALBICANS			H
DIPLOPHYLLUM	OBTUSIFOLIUM			H
DIPLOPHYLLUM	TAXIFOLIUM			H
DIPLOPHYLLUM	TAXIFOLIUM	V	TAXIFOLIUM	H
DOUINIA	OVATA			H
FOSSOMBRONIA	FOVEOLATA			H
FOSSOMBRONIA	LONGISETA			H
FRULLANIA	BOLANDERI			H
FRULLANIA	FRANCISCANA			H
FRULLANIA	TAMARISCI	S	NISQUALLENSIS	H
GEOCALYX	GRAVEOLENS			H
GYMNOCOLEA	INFLATA			H
GYMNOMITRION	CONCINNATUM			H
GYMNOMITRION	OBTUSUM			H
HARPANTHUS	FLOTOVIANUS			H
HYGROBIELLA	LAXIFOLIA			H
JAMESONIELLA	AUTUMNALIS			H
JAMESONIELLA	AUTUMNALIS	V	AUTUMNALIS	H
JUNGERMANNIA	ATROVIRENS			H
JUNGERMANNIA	EVANSII			H
JUNGERMANNIA	EXSERTIFOLIA			H
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H
JUNGERMANNIA	GRACILLIMA			H
JUNGERMANNIA	HYALINA			H
JUNGERMANNIA	LEIANTHA			H
JUNGERMANNIA	OBOVATA			H
JUNGERMANNIA	POLARIS			H
JUNGERMANNIA	PUMILA			H
JUNGERMANNIA	RUBRA			H
JUNGERMANNIA	SPHAEROCARPA			H
LEPIDOZIA	REPTANS			H
LOPHOCOLEA	BIDENTATA			H
LOPHOCOLEA	CUSPIDATA			H
LOPHOCOLEA	HETEROPHYLLA			H
LOPHOCOLEA	MINOR			H
LOPHOZIA	ALPESTRIS			H
LOPHOZIA	ASCENDENS			H
LOPHOZIA	BADENSIS			H
LOPHOZIA	BANTRIENSIS			H
LOPHOZIA	COLLARIS			H
LOPHOZIA	EXCISA			H
LOPHOZIA	EXCISA	V	EXCISA	H
LOPHOZIA	GILLMANII			H
LOPHOZIA	GILLMANII	V	GILLMANII	H
LOPHOZIA	HETEROCOLPOS			H
LOPHOZIA	HETEROCOLPOS	V	HETEROCOLPOS	H
LOPHOZIA	INCISA			H
LOPHOZIA	INCISA	V	INCISA	H
LOPHOZIA	LATIFOLIA			H
LOPHOZIA	LONGIDENS			H
LOPHOZIA	LONGIDENS	S	LONGIDENS	H

Genus	Species	Ext	Ext_name	M/H/A
LOPHOZIA	LONGIFLORA			H
LOPHOZIA	OBTUSA			H
LOPHOZIA	OPACIFOLIA			H
LOPHOZIA	VENTRICOSA			H
LOPHOZIA	VENTRICOSA	V	LONGIFLORA	H
LOPHOZIA	VENTRICOSA	V	SILVICOLA	H
LOPHOZIA	VENTRICOSA	V	VENTRICOSA	H
LOPHOZIA	WENZELII			H
LOPHOZIA	WENZELII	V	WENZELII	H
LUNULARIA	CRUCIATA			H
MANNIA	FRAGRANS			H
MANNIA	TRIANDRA			H
MARCHANTIA	POLYMORPHA			H
MARSUPELLA	BREVISSIMA			H
MARSUPELLA	EMARGINATA			H
MARSUPELLA	SPHACELATA			H
MARSUPELLA	USTULATA			H
METZGERIA	CONJUGATA			H
MOERCKIA	BLYTTII			H
NARDIA	BREIDLERI			H
NARDIA	COMPRESSA			H
NARDIA	GEOSCYPHUS			H
NARDIA	SCALARIS			H
ODONTOSCHISMA	SPHAGNI			H
PEDINOPHYLLUM	INTERRUPTUM			H
PELLIA	ENDIVIIFOLIA			H
PELLIA	EPIPHYLLA			H
PELLIA	NEESIANA			H
PLAGIOCHILA	PORELLOIDES			H
PLEUROCLADA	ALBESCENS			H
PORELLA	BOLANDERI			H
PORELLA	CORDAEANA			H
PORELLA	NAVICULARIS			H
PORELLA	PLATYPHYLLA			H
PORELLA	PLATYPHYLLOIDEA			H
PORELLA	ROELLII			H
PREISSIA	QUADRATA			H
PTILIDIUM	CALIFORNICUM			H
PTILIDIUM	CILIARE			H
PTILIDIUM	PULCHERRIMUM			H
RADULA	BOLANDERI			H
RADULA	COMPLANATA			H
REBOULIA	HEMISPHAERICA			H
RICCARDIA	CHAMEDRYFOLIA			H
RICCARDIA	LATIFRONS			H
RICCARDIA	MULTIFIDA			H
RICCARDIA	MULTIFIDA	V	MULTIFIDA	H
RICCARDIA	PALMATA			H
RICCIA	BEYRICHIANA			H
RICCIA	CAMPBELLIANA			H
RICCIA	CAVERNOSA			H
RICCIA	FLUITANS			H
RICCIA	FROSTII			H
RICCIA	GLAUCA			H
RICCIA	SOROCARPA			H
RICCIA	TRICHOCARPA			H
RICCIOCARPOS	NATANS			H
SCAPANIA	AMERICANA			H
SCAPANIA	APICULATA			H

Genus	Species	Ext	Ext_name	M/H/A
SCAPANIA	BOLANDERI			H
SCAPANIA	CURTA			H
SCAPANIA	CURTA	V	CURTA	H
SCAPANIA	CUSPIDULIGERA	V	CUSPIDULIGERA	H
SCAPANIA	GLAUCOCEPHALA			H
SCAPANIA	GYMNOSTOMOPHILA			H
SCAPANIA	IRRIGUA			H
SCAPANIA	MUCRONATA			H
SCAPANIA	MUCRONATA	S	MUCRONATA	H
SCAPANIA	NEMOROSA			H
SCAPANIA	PALUDICOLA			H
SCAPANIA	PALUDOSA			H
SCAPANIA	SUBALPINA			H
SCAPANIA	UMBROSA			H
SCAPANIA	UNDULATA			H
SCAPANIA	UNDULATA	V	OAKESII	H
SCAPANIA	UNDULATA	V	UNDULATA	H
SPHAEROCARPOS	HIANS			H
SPHAEROCARPOS	TEXANUS			H
TARGIONIA	HYPOPHYLLA			H
TRITOMARIA	EXSECTA			H
TRITOMARIA	EXSECTIFORMIS			H
TRITOMARIA	EXSECTIFORMIS	S	EXSECTIFORMIS	H
TRITOMARIA	POLITA			H
TRITOMARIA	QUINQUEDENTATA			H
TRITOMARIA	QUINQUEDENTATA	V	QUINQUEDENTAT.	H
TRITOMARIA	SCITULA			H
ABIETINELLA	ABIETINA			M
ALOINA	BIFRONS			M
ALOINA	BREVIROSTRIS			M
AMBLYODON	DEALBATUS			M
AMBLYSTEGIUM	SERPENS			M
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M
AMBLYSTEGIUM	VARIUM			M
AMPHIDIUM	CALIFORNICUM			M
AMPHIDIUM	LAPPONICUM			M
AMPHIDIUM	MOUGEOTII			M
ANACOLIA	MENZIESII			M
ANACOLIA	MENZIESII	V	BAUERI	M
ANDREAEA	NIVALIS			M
ANDREAEA	RUPESTRIS			M
ANOMODON	VITICULOSUS			M
ANTITRICHIA	CALIFORNICA			M
ANTITRICHIA	CURTIPENDULA			M
ANTITRICHIA	CURTIPENDULA	V	GIGANTEA	M
ARCTOA	FULVELLA			M
ATRICHUM	ANGUSTATUM			M
ATRICHUM	CRISPUM			M
ATRICHUM	HAUSSKNECHTII			M
ATRICHUM	SELWYNII			M
ATRICHUM	UNDULATUM			M
AULACOMNIUM	ANDROGYNUM			M
AULACOMNIUM	PALUSTRE			M
BARBULA	CONVOLUTA			M
BARBULA	EUSTEGIA			M
BARBULA	UNGUICULATA			M
BARTRAMIA	ITHYPHYLLA			M
BARTRAMIA	POMIFORMIS			M
BARTRAMIA	STRICTA			M

Genus	Species	Ext	Ext_name	M/H/A
BLINDIA	ACUTA			M
BRACHYTHECIUM	ACUTUM			M
BRACHYTHECIUM	ALBICANS			M
BRACHYTHECIUM	BOLANDERI			M
BRACHYTHECIUM	CALCAREUM			M
BRACHYTHECIUM	CAMPESTRE			M
BRACHYTHECIUM	COLLINUM			M
BRACHYTHECIUM	DIGASTRUM			M
BRACHYTHECIUM	ERYTHRORRHIZON			M
BRACHYTHECIUM	ERYTHRORRHIZON	V	THEDENII	M
BRACHYTHECIUM	FENDLERI			M
BRACHYTHECIUM	FRIGIDUM			M
BRACHYTHECIUM	GLAREOSUM			M
BRACHYTHECIUM	HOLZINGERI			M
BRACHYTHECIUM	HYLOTAPETUM			M
BRACHYTHECIUM	LEIBERGII			M
BRACHYTHECIUM	NELSONII			M
BRACHYTHECIUM	OEDIPODIUM			M
BRACHYTHECIUM	OXYCLADON			M
BRACHYTHECIUM	PLUMOSUM			M
BRACHYTHECIUM	POPULEUM			M
BRACHYTHECIUM	REFLEXUM			M
BRACHYTHECIUM	REFLEXUM	V	PACIFICUM	M
BRACHYTHECIUM	RIVULARE			M
BRACHYTHECIUM	RUTABULUM			M
BRACHYTHECIUM	SALEBROSUM			M
BRACHYTHECIUM	STARKEI			M
BRACHYTHECIUM	TURGIDUM			M
BRACHYTHECIUM	VELUTINUM			M
BRACHYTHECIUM	VELUTINUM	V	VELUTINUM	M
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M
BRUCHIA	BOLANDERI			M
BRYOERYTHROPHYLLUM	COLUMBIANUM			M
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M
BRYUM	ALGOVICUM			M
BRYUM	ALGOVICUM	V	ALGOVICUM	M
BRYUM	AMBLYODON			M
BRYUM	ARCTICUM			M
BRYUM	ARGENTEUM			M
BRYUM	CAESPITICIUM			M
BRYUM	CALOBRYOIDES			M
BRYUM	CALOPHYLLUM			M
BRYUM	CANARIENSE			M
BRYUM	CAPILLARE			M
BRYUM	CAPILLARE	V	CAPILLARE	M
BRYUM	CYCLOPHYLLUM			M
BRYUM	DICHOTOMUM			M
BRYUM	GEMMASCENS			M
BRYUM	GEMMILUCENS			M
BRYUM	GEMMIPARUM			M
BRYUM	LISAE	V	CUSPIDATUM	M
BRYUM	LONCHOCAULON			M
BRYUM	MEESIOIDES			M
BRYUM	MINIATUM			M
BRYUM	MUEHLENBECKII			M
BRYUM	PALLENS			M
BRYUM	PALLESCENS			M
BRYUM	PSEUDOTRIQUETRUM			M
BRYUM	SCHLEICHERI			M

Genus	Species	Ext	Ext_name	M/H/A
BRYUM	TURBINATUM			M
BRYUM	ULIGINOSUM			M
BRYUM	VIOLACEUM			M
BRYUM	WEIGELII			M
BUXBAUMIA	APHYLLA			M
BUXBAUMIA	PIPERI			M
BUXBAUMIA	VIRIDIS			M
CALLICLADIUM	HALDANIANUM			M
CALLIERGON	CORDIFOLIUM			M
CALLIERGON	GIGANTEUM			M
CALLIERGON	RICHARDSONII			M
CALLIERGON	STRAMINEUM			M
CALLIERGON	TRIFARIUM			M
CALLIERGONELLA	CUSPIDATA			M
CAMPYLIUM	CHRYSOPHYLLUM			M
CAMPYLIUM	HALLERI			M
CAMPYLIUM	HISPIDULUM			M
CAMPYLIUM	POLYGAMUM			M
CAMPYLIUM	STELLATUM			M
CAMPYLIUM	STELLATUM	V	PROTENSUM	M
CAMPYLOPUS	FRAGILIS			M
CAMPYLOPUS	SCHIMPERI			M
CATOSCOPIUM	NIGRITUM			M
CERATODON	PURPUREUS			M
CIRRIPHYLLUM	CIRROSUM			M
CLAOPODIUM	BOLANDERI			M
CLAOPODIUM	CRISPIFOLIUM			M
CLAOPODIUM	WHIPPLEANUM			M
CLIMACIUM	AMERICANUM			M
CLIMACIUM	DENDROIDES			M
CONARDIA	COMPACTA			M
CONOSTOMUM	TETRAGONUM			M
COSCINODON	CALYPTRATUS			M
CRATONEURON	FILICINUM			M
CRUMIA	LATIFOLIA			M
CYNODONTIUM	GRACILESCENS			M
CYNODONTIUM	POLYCARPON			M
CYNODONTIUM	STRUMIFERUM			M
CYRTO-HYPNUM	MINUTULUM			M
DENDROALSIA	ABIETINA			M
DESMATODON	CERNUUS			M
DESMATODON	HEIMII			M
DESMATODON	HEIMII	V	HEIMII	M
DESMATODON	LATIFOLIUS			M
DESMATODON	LEUCOSTOMA			M
DESMATODON	OBTUSIFOLIUS			M
DESMATODON	PLINTHOBIUS			M
DESMATODON	SYSTYLIUS			M
DICHELYMA	FALCATUM			M
DICHELYMA	UNCINATUM			M
DICHODONTIUM	OLYMPICUM			M
DICHODONTIUM	PELLUCIDUM			M
DICRANELLA	CRISPA			M
DICRANELLA	GREVILLEANA			M
DICRANELLA	HETEROMALLA			M
DICRANELLA	PALUSTRIS			M
DICRANELLA	RUFESCENS			M
DICRANELLA	SCHREBERIANA			M
DICRANELLA	SCHREBERIANA	V	ROBUSTA	M

Genus	Species	Ext	Ext_name	M/H/A
DICRANELLA	SUBULATA			M
DICRANELLA	VARIA			M
DICRANOWEISIA	CIRRATA			M
DICRANOWEISIA	CRISPULA			M
DICRANUM	ACUTIFOLIUM			M
DICRANUM	ANGUSTUM			M
DICRANUM	BONJEANII			M
DICRANUM	ELONGATUM			M
DICRANUM	FLAGELLARE			M
DICRANUM	FRAGILIFOLIUM			M
DICRANUM	FUSCESCENS			M
DICRANUM	HOWELLII			M
DICRANUM	MAJUS			M
DICRANUM	MONTANUM			M
DICRANUM	MUEHLENBECKII			M
DICRANUM	PALLIDISETUM			M
DICRANUM	POLYSETUM			M
DICRANUM	RHABDOCARPUM			M
DICRANUM	SCOPARIUM			M
DICRANUM	SPADICEUM			M
DICRANUM	TAURICUM			M
DICRANUM	UNDULATUM			M
DICRANUM	VIRIDE			M
DIDYMODON	ASPERIFOLIUS			M
DIDYMODON	FALLAX			M
DIDYMODON	FALLAX	V	REFLEXUS	M
DIDYMODON	RIGIDULUS	V	GRACILIS	M
DIDYMODON	RIGIDULUS	V	ICMADOPHILUS	M
DIDYMODON	TOPHACEUS			M
DIDYMODON	VINEALIS			M
DIDYMODON	VINEALIS	V	BRACHYPHYLLUS	M
DIDYMODON	VINEALIS	V	FLACCIDUS	M
DIDYMODON	VINEALIS	V	LURIDUS	M
DIDYMODON	VINEALIS	V	NICHOLSONII	M
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M
DIDYMODON	VINEALIS	V	VINEALIS	M
DISTICHIUM	CAPILLACEUM			M
DISTICHIUM	CAPILLACEUM	V	COMPACTUM	M
DISTICHIUM	INCLINATUM			M
DITRICHUM	AMBIGUUM			M
DITRICHUM	FLEXICAULE			M
DITRICHUM	HETEROMALLUM			M
DITRICHUM	MONTANUM			M
DITRICHUM	PUSILLUM			M
DREPANOCLADUS	ADUNCUS			M
DREPANOCLADUS	ADUNCUS	V	KNEIFFII	M
DREPANOCLADUS	ADUNCUS	V	POLYCARPUS	M
DREPANOCLADUS	BREVIFOLIUS			M
DREPANOCLADUS	CAPILLIFOLIUS			M
DREPANOCLADUS	FLUITANS			M
DREPANOCLADUS	SENDTNERI			M
DRYPTODON	PATENS			M
ENCALYPTA	AFFINIS			M
ENCALYPTA	AFFINIS	V	MACOUNII	M
ENCALYPTA	CILIATA			M
ENCALYPTA	INTERMEDIA			M
ENCALYPTA	PROCERA			M
ENCALYPTA	RHAPTOCARPA			M
ENCALYPTA	SPATHULATA			M

Genus	Species	Ext	Ext_name	M/H/A
ENCALYPTA	VULGARIS			M
ENTOSTHODON	FASCICULARIS			M
EUCLADIUM	VERTICILLATUM			M
EURHYNCHIUM	OREGANUM			M
EURHYNCHIUM	PRAELONGUM			M
EURHYNCHIUM	PULCHELLUM			M
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M
EURHYNCHIUM	PULCHELLUM	V	PULCHELLUM	M
FABRONIA	PUSILLA			M
FISSIDENS	ADIANTHOIDES			M
FISSIDENS	BRYOIDES			M
FISSIDENS	FONTANUS			M
FISSIDENS	GRANDIFRONS			M
FISSIDENS	HALLIANUS			M
FISSIDENS	LIMBATUS			M
FISSIDENS	OSMUNDIOIDES			M
FISSIDENS	TAXIFOLIUS			M
FISSIDENS	VENTRICOSUS			M
FONTINALIS	ANTIPYRETICA			M
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M
FONTINALIS	ANTIPYRETICA	V	GIGANTEA	M
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M
FONTINALIS	HYPNOIDES			M
FONTINALIS	HYPNOIDES	V	DURIAEI	M
FONTINALIS	NEOMEXICANA			M
FUNARIA	AMERICANA			M
FUNARIA	HYGROMETRICA			M
FUNARIA	MUHLENBERGII			M
GRIMMIA	AFFINIS			M
GRIMMIA	ANODON			M
GRIMMIA	ANOMALA			M
GRIMMIA	BRITTONIAE			M
GRIMMIA	DONNIANA			M
GRIMMIA	ELATIOR			M
GRIMMIA	INCURVA			M
GRIMMIA	LAEVIGATA			M
GRIMMIA	MOLLIS			M
GRIMMIA	MONTANA			M
GRIMMIA	OVALIS			M
GRIMMIA	PLAGIOPODIA			M
GRIMMIA	POECILOSTOMA			M
GRIMMIA	PULVINATA			M
GRIMMIA	PULVINATA	V	AFRICANA	M
GRIMMIA	TENERRIMA			M
GRIMMIA	TORQUATA			M
GRIMMIA	TORQUATA	V	TORQUATA	M
GRIMMIA	TRICHOPHYLLA			M
GRIMMIA	TRICHOPHYLLA	V	TENUIS	M
GRIMMIA	UNICOLOR			M
GYMNOSTOMUM	AERUGINOSUM			M
GYMNOSTOMUM	CALCAREUM			M
HAMATOCAULIS	VERNICOSUS			M
HEDWIGIA	CILIATA			M
HELODIUM	BLANDOWII			M
HERZOGIELLA	SELIGERI			M
HERZOGIELLA	TURFACEA			M
HETEROCLADIUM	DIMORPHUM			M
HETEROCLADIUM	MACOUNII			M
HETEROCLADIUM	PROCURRENS			M

Genus	Species	Ext	Ext_name	M/H/A
HOMALOTHECIUM	AENEUM			M
HOMALOTHECIUM	ARENARIUM			M
HOMALOTHECIUM	FULGESCENS			M
HOMALOTHECIUM	NEVADENSE			M
HOMALOTHECIUM	NUTTALLII			M
HOMALOTHECIUM	PINNATIFIDUM			M
HOOKERIA	LUCENS			M
HYGROAMBLYSTEGIUM	NOTEROPHILUM			M
HYGROAMBLYSTEGIUM	TENAX			M
HYGROAMBLYSTEGIUM	TENAX	V	SPINIFOLIUM	M
HYGROHYPNUM	ALPINUM			M
HYGROHYPNUM	BESTII			M
HYGROHYPNUM	COCHLEARIFOLIUM			M
HYGROHYPNUM	DURIUSCULUM			M
HYGROHYPNUM	LURIDUM			M
HYGROHYPNUM	MOLLE			M
HYGROHYPNUM	OBTUSIFOLIUM			M
HYGROHYPNUM	OCHRACEUM			M
HYGROHYPNUM	SMITHII			M
HYGROHYPNUM	STYRIACUM			M
HYLOCOMIUM	SPLENDENS			M
HYMENOSTYLIUM	RECURVIROSTRE			M
HYPNUM	BAMBERGERI			M
HYPNUM	CIRCINALE			M
HYPNUM	CUPRESSIFORME			M
HYPNUM	DIECKII			M
HYPNUM	IMPONENS			M
HYPNUM	LINDBERGII			M
HYPNUM	PALLESCENS			M
HYPNUM	PRATENSE			M
HYPNUM	PROCERRIMUM			M
HYPNUM	RECURVATUM			M
HYPNUM	REVOLUTUM			M
HYPNUM	SUBIMPONENS			M
HYPNUM	VAUCHERI			M
ISOPTERYGIOPSIS	PULCHELLA			M
ISOTHECIUM	CRISTATUM			M
ISOTHECIUM	MYOSUROIDES			M
JAFFUELIOBRYUM	RAUI			M
KIAERIA	BLYTTII			M
KIAERIA	FALCATA			M
KIAERIA	STARKEI			M
LEPTOBRYUM	PYRIFORME			M
LEPTODICTYUM	HUMILE			M
LEPTODICTYUM	RIPARIUM			M
LESKEA	POLYCARPA			M
LESKEELLA	NERVOSA			M
LEUCOLEPIS	ACANTHONEURON			M
LIMPRICHTIA	REVOLVENS			M
MACROCOMA	SULLIVANTII			M
MEESIA	LONGISETA			M
MEESIA	TRIQUETRA			M
MEESIA	ULIGINOSA			M
METANECKERA	MENZIESII			M
MNIUM	AMBIGUUM			M
MNIUM	ARIZONICUM			M
MNIUM	BLYTTII			M
MNIUM	LYCOPODIOIDES			M
MNIUM	MARGINATUM			M

Genus	Species	Ext	Ext_name	M/H/A
MNIUM	SPINULOSUM			M
MNIUM	THOMSONII			M
MYURELLA	JULACEA			M
MYURELLA	TENERRIMA			M
NECKERA	DOUGLASII			M
NECKERA	PENNATA			M
OLIGOTRICHUM	ALIGERUM			M
OLIGOTRICHUM	HERCYNICUM			M
OLIGOTRICHUM	PARALLELUM			M
ONCOPHORUS	VIRENS			M
ONCOPHORUS	WAHLENBERGII			M
ORTHOTHECIUM	CHRYSEUM			M
ORTHOTRICHUM	AFFINE			M
ORTHOTRICHUM	ALPESTRE			M
ORTHOTRICHUM	ANOMALUM			M
ORTHOTRICHUM	BOLANDERI			M
ORTHOTRICHUM	CONSIMILE			M
ORTHOTRICHUM	CUPULATUM			M
ORTHOTRICHUM	FLOWERSII			M
ORTHOTRICHUM	HALLII			M
ORTHOTRICHUM	HOLZINGERI			M
ORTHOTRICHUM	LAEVIGATUM			M
ORTHOTRICHUM	LYELLII			M
ORTHOTRICHUM	OBTUSIFOLIUM			M
ORTHOTRICHUM	PALOUSENSE			M
ORTHOTRICHUM	PELLUCIDUM			M
ORTHOTRICHUM	PRAEMORSUM			M
ORTHOTRICHUM	PULCHELLUM			M
ORTHOTRICHUM	PUMILUM			M
ORTHOTRICHUM	PYLAISII			M
ORTHOTRICHUM	RIVULARE			M
ORTHOTRICHUM	RUPESTRE			M
ORTHOTRICHUM	SORDIDUM			M
ORTHOTRICHUM	SPECIOSUM			M
ORTHOTRICHUM	SPECIOSUM	V	ELEGANS	M
ORTHOTRICHUM	STRIATUM			M
OXYSTEGUS	TENUIROSTRIS			M
PALUDELLA	SQUARROSA			M
PALUSTRIELLA	COMMUTATA			M
PALUSTRIELLA	DECIPIENS			M
PARALEUCOBRYUM	ENERVE			M
PARALEUCOBRYUM	LONGIFOLIUM			M
PHASCUM	CUSPIDATUM			M
PHILONOTIS	CAPILLARIS			M
PHILONOTIS	FONTANA			M
PHILONOTIS	FONTANA	V	AMERICANA	M
PHILONOTIS	FONTANA	V	CAESPITOSA	M
PHILONOTIS	FONTANA	V	FONTANA	M
PHILONOTIS	FONTANA	V	PUMILA	M
PHILONOTIS	MARCHICA			M
PHILONOTIS	MUEHLENBERGII			M
PHILONOTIS	YEZOANA			M
PHYSCOMITRIUM	HOOKERI			M
PHYSCOMITRIUM	PYGMAEUM			M
PHYSCOMITRIUM	PYRIFORME			M
PLAGIOBRYUM	DEMISSUM			M
PLAGIOBRYUM	ZIERI			M
PLAGIOMNIUM	AFFINE			M
PLAGIOMNIUM	CILIARE			M

Genus	Species	Ext	Ext_name	M/H/A
PLAGIOMNIUM	CUSPIDATUM			M
PLAGIOMNIUM	DRUMMONDII			M
PLAGIOMNIUM	ELLIPTICUM			M
PLAGIOMNIUM	INSIGNE			M
PLAGIOMNIUM	MEDIUM			M
PLAGIOMNIUM	ROSTRATUM			M
PLAGIOMNIUM	VENUSTUM			M
PLAGIOPUS	OEDERIANA			M
PLAGIOTHECIUM	CAVIFOLIUM			M
PLAGIOTHECIUM	DENTICULATUM			M
PLAGIOTHECIUM	LAETUM			M
PLAGIOTHECIUM	PILIFERUM			M
PLAGIOTHECIUM	UNDULATUM			M
PLATYDICTYA	JUNGERMANNIOIDES			M
PLATYGYRIUM	REPENS			M
PLATYHYPNIDIUM	RIPARIOIDES			M
PLEURIDIUM	SUBULATUM			M
PLEUROZIUM	SCHREBERI			M
POGONATUM	CONTORTUM			M
POGONATUM	DENTATUM			M
POGONATUM	URNIGERUM			M
POHLIA	ANDALUSICA			M
POHLIA	ANNOTINA			M
POHLIA	ATROPURPUREA			M
POHLIA	BOLANDERI			M
POHLIA	BOLANDERI	V	SERIATA	M
POHLIA	CAMPTOTRACHELA			M
POHLIA	CRUDA			M
POHLIA	DRUMMONDII			M
POHLIA	ELONGATA			M
POHLIA	ERECTA			M
POHLIA	FILUM			M
POHLIA	LESCURIANA			M
POHLIA	LONGICOLLA			M
POHLIA	LUDWIGII			M
POHLIA	NUTANS			M
POHLIA	OBTUSIFOLIA			M
POHLIA	PROLIGERA			M
POHLIA	ROTHII	V	COMPACTA	M
POHLIA	TUNDRAE			M
POHLIA	WAHLENBERGII			M
POLYTRICHASTRUM	ALPINUM			M
POLYTRICHUM	COMMUNE			M
POLYTRICHUM	COMMUNE	V	COMMUNE	M
POLYTRICHUM	COMMUNE	V	JENSENII	M
POLYTRICHUM	COMMUNE	V	PERIGONIALE	M
POLYTRICHUM	FORMOSUM			M
POLYTRICHUM	JUNIPERINUM			M
POLYTRICHUM	LONGISETUM			M
POLYTRICHUM	LYALLII			M
POLYTRICHUM	NORVEGICUM			M
POLYTRICHUM	PILIFERUM			M
POLYTRICHUM	SEXANGULARE			M
POLYTRICHUM	SPHAEROTHECIUM			M
POLYTRICHUM	STRICTUM			M
POROTRICHUM	BIGELOVII			M
POROTRICHUM	VANCOUVERIENSE			M
POTTIA	CRINITA			M
POTTIA	INTERMEDIA			M

Genus	Species	Ext	Ext_name	M/H/A
POTTIA	LANCEOLATA			M
POTTIA	NEVADENSIS			M
PSEUDOBRAUNIA	CALIFORNICA			M
PSEUDOCALLIERGON	TURGESCENS			M
PSEUDOCROSSIDIUM	OBTUSULUM			M
PSEUDOCROSSIDIUM	REVOLUTUM			M
PSEUDOLESKEA	ATRICHA			M
PSEUDOLESKEA	INCURVATA			M
PSEUDOLESKEA	INCURVATA	V	GIGANTEA	M
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M
PSEUDOLESKEA	INCURVATA	V	TENUIRETIS	M
PSEUDOLESKEA	PATENS			M
PSEUDOLESKEA	RADICOSA			M
PSEUDOLESKEA	RADICOSA	V	COMPACTA	M
PSEUDOLESKEA	RADICOSA	V	DENUDATA	M
PSEUDOLESKEA	RADICOSA	V	PALLIDA	M
PSEUDOLESKEA	RADICOSA	V	RADICOSA	M
PSEUDOLESKEA	SAVIANA			M
PSEUDOLESKEA	STENOPHYLLA			M
PSEUDOLESKEELLA	TECTORUM			M
PSEUDOTAXIPHYLLUM	ELEGANS			M
PTERIGYNANDRUM	FILIFORME			M
PTEROGONIUM	GRACILE			M
PTERYGONEURUM	OVATUM			M
PTERYGONEURUM	SUBSESSILE			M
PTILIUM	CRISTA-CASTRENSIS			M
PTYCHOMITRIUM	GARDNERI			M
PTYCHOMITRIUM	POLYPHYLLUM			M
PYLAISIELLA	POLYANTHA			M
RACOMITRIUM	ACICULARE			M
RACOMITRIUM	AFFINE			M
RACOMITRIUM	AQUATICUM			M
RACOMITRIUM	BREVIPES			M
RACOMITRIUM	CANESCENS			M
RACOMITRIUM	DEPRESSUM			M
RACOMITRIUM	ELONGATUM			M
RACOMITRIUM	ERICOIDES			M
RACOMITRIUM	FASCICULARE			M
RACOMITRIUM	HETEROSTICHUM			M
RACOMITRIUM	LANUGINOSUM			M
RACOMITRIUM	MACOUNII			M
RACOMITRIUM	MICROCARPON			M
RACOMITRIUM	MUTICUM			M
RACOMITRIUM	OBESUM			M
RACOMITRIUM	OCCIDENTALE			M
RACOMITRIUM	SUDETICUM			M
RACOMITRIUM	VARIUM			M
RHIZOMNIUM	GLABRESCENS			M
RHIZOMNIUM	MAGNIFOLIUM			M
RHIZOMNIUM	NUDUM			M
RHIZOMNIUM	PSEUDOPUNCTATUM			M
RHIZOMNIUM	PUNCTATUM			M
RHODOBRYUM	ONTARIENSE			M
RHODOBRYUM	ROSEUM			M
RHYTIDIADELPHUS	LOREUS			M
RHYTIDIADELPHUS	SQUARROSUS			M
RHYTIDIADELPHUS	SUBPINNATUS			M
RHYTIDIADELPHUS	TRIQUETRUS			M
RHYTIDIOPSIS	ROBUSTA			M

Genus	Species	Ext	Ext_name	M/H/A
RHYTIDIUM	RUGOSUM			M
ROELLIA	ROELLII			M
SANIONIA	ADUNCUS			M
SANIONIA	UNCINATA			M
SANIONIA	UNCINATA	V	SYMMETRICA	M
SANIONIA	UNCINATA	V	UNCINATA	M
SARMENTHYPNUM	SARMENTOSUM			M
SCHISTIDIUM	AGASSIZII			M
SCHISTIDIUM	APOCARPUM			M
SCHISTIDIUM	CINCLIDODONTEUM			M
SCHISTIDIUM	HETEROPHYLLUM			M
SCHISTIDIUM	MARITIMUM			M
SCHISTIDIUM	OCCIDENTALE			M
SCHISTIDIUM	PULVINATUM			M
SCHISTIDIUM	RIVULARE			M
SCHISTIDIUM	RIVULARE	V	LATIFOLIUM	M
SCHISTIDIUM	RIVULARE	V	RIVULARE	M
SCHISTIDIUM	TENERUM			M
SCHISTOSTEGA	PENNATA			M
SCLEROPODIUM	CESPITANS			M
SCLEROPODIUM	CESPITANS	V	SUBLAEVE	M
SCLEROPODIUM	OBTUSIFOLIUM			M
SCLEROPODIUM	TOURETII			M
SCLEROPODIUM	TOURETII	V	COLPOPHYLLUM	M
SCORPIDIUM	SCORPIOIDES			M
SCOULERIA	AQUATICA			M
SCOULERIA	MARGINATA			M
SELIGERIA	CAMPYLOPODA			M
SELIGERIA	DONNIANA			M
SPHAGNUM	ANGUSTIFOLIUM			M
SPHAGNUM	CAPILLIFOLIUM			M
SPHAGNUM	CENTRALE			M
SPHAGNUM	COMPACTUM			M
SPHAGNUM	CONTORTUM			M
SPHAGNUM	FALLAX			M
SPHAGNUM	FIMBRIATUM			M
SPHAGNUM	FUSCUM			M
SPHAGNUM	GIRGENSOHNII			M
SPHAGNUM	JENSENII			M
SPHAGNUM	LESCURII			M
SPHAGNUM	MAGELLANICUM			M
SPHAGNUM	MENDOCINUM			M
SPHAGNUM	PALUSTRE			M
SPHAGNUM	PLATYPHYLLUM			M
SPHAGNUM	RECURVUM			M
SPHAGNUM	RIPARIUM			M
SPHAGNUM	RUBELLUM			M
SPHAGNUM	RUSSOWII			M
SPHAGNUM	SQUARROSUM			M
SPHAGNUM	SUBNITENS			M
SPHAGNUM	SUBSECUNDUM			M
SPHAGNUM	SUBSECUNDUM	V	SUBSECUNDUM	M
SPHAGNUM	TENELLUM			M
SPHAGNUM	TERES			M
SPHAGNUM	WARNSTORFII			M
SPLACHNUM	AMPULLACEUM			M
SPLACHNUM	SPHAERICUM			M
STEGONIA	LATIFOLIA			M
TAYLORIA	ACUMINATA			M

Genus	Species	Ext	Ext_name	M/H/A
TAYLORIA	LIGULATA			M
TAYLORIA	SERRATA			M
TAYLORIA	SPLACHNOIDES			M
TETRAPHIS	GENICULATA			M
TETRAPHIS	PELLUCIDA			M
~~TETRAPLODON~~	~~ANGUSTATUS~~			M
THAMNOBRYUM	ALLEGHANIENSE			M
THAMNOBRYUM	NECKEROIDES			M
THUIDIUM	DELICATULUM			M
THUIDIUM	RECOGNITUM			M
TIMMIA	AUSTRIACA			M
TIMMIA	MEGAPOLITANA			M
TIMMIA	MEGAPOLITANA	V	BAVARICA	M
TIMMIA	NORVEGICA			M
TIMMIELLA	ANOMALA			M
TIMMIELLA	CRASSINERVIS			M
TOMENTHYPNUM	NITENS			M
TORTELLA	ARCTICA			M
TORTELLA	FRAGILIS			M
TORTELLA	HUMILIS			M
TORTELLA	INCLINATA			M
TORTELLA	TORTELLOIDES			M
TORTELLA	TORTUOSA			M
TORTULA	BARTRAMII			M
TORTULA	BREVIPES			M
TORTULA	CANINERVIS			M
TORTULA	LAEVIPILA			M
TORTULA	LAEVIPILA	V	LAEVIPILA	M
TORTULA	LATIFOLIA			M
TORTULA	MUCRONIFOLIA			M
TORTULA	MURALIS			M
TORTULA	NORVEGICA			M
TORTULA	PAPILLOSA			M
TORTULA	PAPILLOSISSIMA			M
TORTULA	PRINCEPS			M
TORTULA	RURALIS			M
TORTULA	SUBULATA			M
TRACHYBRYUM	MEGAPTILUM			M
TRICHODON	CYLINDRICUS			M
TRICHOSTOMOPSIS	AUSTRALASIAE			M
TRIPTEROCLADIUM	LEUCOCLADULUM			M
ULOTA	PHYLLANTHA			M
WARNSTORFIA	EXANNULATA			M
WARNSTORFIA	FLUITANS			M
WEISSIA	CONTROVERSA			M

Palouse Dry Steppe Province

331A Palouse Prairie (ID, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANASTROPHYLLUM	MICHAUXII			H	331A
ATHALAMIA	HYALINA			H	331A
BLASIA	PUSILLA			H	331A
CALYPOGEIA	AZUREA			H	331A
CHILOSCYPHUS	PALLESCENS			H	331A
CHILOSCYPHUS	POLYANTHOS			H	331A
JUNGERMANNIA	ATROVIRENS			H	331A
LOPHOCOLEA	HETEROPHYLLA			H	331A
LOPHOCOLEA	MINOR			H	331A
LOPHOZIA	LONGIFLORA			H	331A
LOPHOZIA	VENTRICOSA			H	331A
MARCHANTIA	POLYMORPHA			H	331A
PELLIA	EPIPHYLLA			H	331A
PORELLA	CORDAEANA			H	331A
PTILIDIUM	CALIFORNICUM			H	331A
PTILIDIUM	PULCHERRIMUM			H	331A
RICCIA	FROSTII			H	331A
RICCIA	SOROCARPA			H	331A
RICCIOCARPOS	NATANS			H	331A
SCAPANIA	UMBROSA			H	331A
SPHAEROCARPOS	HIANS			H	331A
TARGIONIA	HYPOPHYLLA			H	331A
ALOINA	BIFRONS			M	331A
AMBLYSTEGIUM	SERPENS			M	331A
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	331A
AMBLYSTEGIUM	VARIUM			M	331A
ANACOLIA	MENZIESII			M	331A
ANTITRICHIA	CALIFORNICA			M	331A
ANTITRICHIA	CURTIPENDULA			M	331A
ANTITRICHIA	CURTIPENDULA	V	GIGANTEA	M	331A
ATRICHUM	ANGUSTATUM			M	331A
ATRICHUM	SELWYNII			M	331A
ATRICHUM	UNDULATUM			M	331A
AULACOMNIUM	ANDROGYNUM			M	331A
BARBULA	CONVOLUTA			M	331A
BARBULA	UNGUICULATA			M	331A
BARTRAMIA	POMIFORMIS			M	331A
BRACHYTHECIUM	ALBICANS			M	331A
BRACHYTHECIUM	COLLINUM			M	331A
BRACHYTHECIUM	ERYTHRORRHIZON			M	331A
BRACHYTHECIUM	FRIGIDUM			M	331A
BRACHYTHECIUM	GLAREOSUM			M	331A
BRACHYTHECIUM	HYLOTAPETUM			M	331A
BRACHYTHECIUM	OXYCLADON			M	331A
BRACHYTHECIUM	RUTABULUM			M	331A
BRACHYTHECIUM	SALEBROSUM			M	331A
BRACHYTHECIUM	VELUTINUM			M	331A
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	331A
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	331A
BRYUM	ALGOVICUM			M	331A
BRYUM	ARGENTEUM			M	331A
BRYUM	CAESPITICIUM			M	331A
BRYUM	CAPILLARE			M	331A
BRYUM	GEMMIPARUM			M	331A
BRYUM	LISAE	V	CUSPIDATUM	M	331A
BRYUM	MUEHLENBECKII			M	331A
BRYUM	PALLESCENS			M	331A
BRYUM	PSEUDOTRIQUETRUM			M	331A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
BUXBAUMIA	PIPERI			M	331A
CERATODON	PURPUREUS			M	331A
CLAOPODIUM	CRISPIFOLIUM			M	331A
COSCINODON	CALYPTRATUS			M	331A
DICRANOWEISIA	CIRRATA			M	331A
DICRANUM	FLAGELLARE			M	331A
DICRANUM	HOWELLII			M	331A
DICRANUM	SCOPARIUM			M	331A
DICRANUM	TAURICUM			M	331A
DIDYMODON	VINEALIS			M	331A
DIDYMODON	VINEALIS	V	BRACHYPHYLLUS	M	331A
DIDYMODON	VINEALIS	V	LURIDUS	M	331A
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	331A
DIDYMODON	VINEALIS	V	VINEALIS	M	331A
DISTICHIUM	CAPILLACEUM			M	331A
DREPANOCLADUS	ADUNCUS			M	331A
DREPANOCLADUS	FLUITANS			M	331A
DRYPTODON	PATENS			M	331A
ENCALYPTA	CILIATA			M	331A
ENCALYPTA	RHAPTOCARPA			M	331A
ENCALYPTA	VULGARIS			M	331A
EURHYNCHIUM	OREGANUM			M	331A
EURHYNCHIUM	PRAELONGUM			M	331A
EURHYNCHIUM	PULCHELLUM			M	331A
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	331A
FABRONIA	PUSILLA			M	331A
FISSIDENS	BRYOIDES			M	331A
FISSIDENS	GRANDIFRONS			M	331A
FISSIDENS	LIMBATUS			M	331A
FONTINALIS	NEOMEXICANA			M	331A
FUNARIA	AMERICANA			M	331A
FUNARIA	HYGROMETRICA			M	331A
GRIMMIA	AFFINIS			M	331A
GRIMMIA	LAEVIGATA			M	331A
GRIMMIA	MONTANA			M	331A
GRIMMIA	OVALIS			M	331A
GRIMMIA	PULVINATA			M	331A
GRIMMIA	TENERRIMA			M	331A
GRIMMIA	TRICHOPHYLLA			M	331A
HAMATOCAULIS	VERNICOSUS			M	331A
HEDWIGIA	CILIATA			M	331A
HERZOGIELLA	SELIGERI			M	331A
HETEROCLADIUM	PROCURRENS			M	331A
HOMALOTHECIUM	AENEUM			M	331A
HOMALOTHECIUM	FULGESCENS			M	331A
HOMALOTHECIUM	NEVADENSE			M	331A
HOMALOTHECIUM	PINNATIFIDUM			M	331A
HYLOCOMIUM	SPLENDENS			M	331A
HYPNUM	CIRCINALE			M	331A
HYPNUM	SUBIMPONENS			M	331A
ISOTHECIUM	MYOSUROIDES			M	331A
LEPTOBRYUM	PYRIFORME			M	331A
LEPTODICTYUM	HUMILE			M	331A
METANECKERA	MENZIESII			M	331A
MNIUM	SPINULOSUM			M	331A
MNIUM	THOMSONII			M	331A
NECKERA	DOUGLASII			M	331A
ORTHOTRICHUM	AFFINE			M	331A
ORTHOTRICHUM	ALPESTRE			M	331A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ORTHOTRICHUM	CONSIMILE			M	331A
ORTHOTRICHUM	CUPULATUM			M	331A
ORTHOTRICHUM	HOLZINGERI			M	331A
ORTHOTRICHUM	LAEVIGATUM			M	331A
ORTHOTRICHUM	PALOUSENSE			M	331A
ORTHOTRICHUM	RIVULARE			M	331A
ORTHOTRICHUM	RUPESTRE			M	331A
ORTHOTRICHUM	SORDIDUM			M	331A
ORTHOTRICHUM	SPECIOSUM			M	331A
PHASCUM	CUSPIDATUM			M	331A
PHILONOTIS	FONTANA	V	AMERICANA	M	331A
PHILONOTIS	FONTANA	V	PUMILA	M	331A
PLAGIOMNIUM	INSIGNE			M	331A
PLAGIOMNIUM	MEDIUM			M	331A
PLAGIOMNIUM	VENUSTUM			M	331A
POHLIA	CRUDA			M	331A
POHLIA	DRUMMONDII			M	331A
POHLIA	NUTANS			M	331A
POHLIA	WAHLENBERGII			M	331A
POLYTRICHUM	JUNIPERINUM			M	331A
POLYTRICHUM	PILIFERUM			M	331A
POTTIA	CRINITA			M	331A
PSEUDOLESKEA	STENOPHYLLA			M	331A
PTERIGYNANDRUM	FILIFORME			M	331A
PTERYGONEURUM	OVATUM			M	331A
PTYCHOMITRIUM	GARDNERI			M	331A
RACOMITRIUM	CANESCENS			M	331A
RACOMITRIUM	ERICOIDES			M	331A
RACOMITRIUM	HETEROSTICHUM			M	331A
RACOMITRIUM	MICROCARPON			M	331A
RHODOBRYUM	ROSEUM			M	331A
RHYTIDIADELPHUS	LOREUS			M	331A
RHYTIDIADELPHUS	TRIQUETRUS			M	331A
RHYTIDIOPSIS	ROBUSTA			M	331A
ROELLIA	ROELLII			M	331A
SANIONIA	UNCINATA			M	331A
SANIONIA	UNCINATA	V	SYMMETRICA	M	331A
SCHISTIDIUM	AGASSIZII			M	331A
SCHISTIDIUM	APOCARPUM			M	331A
SCHISTIDIUM	HETEROPHYLLUM			M	331A
SCLEROPODIUM	OBTUSIFOLIUM			M	331A
SCLEROPODIUM	TOURETII			M	331A
SCOULERIA	MARGINATA			M	331A
TAYLORIA	SERRATA			M	331A
TIMMIA	AUSTRIACA			M	331A
TORTULA	BREVIPES			M	331A
TORTULA	LATIFOLIA			M	331A
TORTULA	MUCRONIFOLIA			M	331A
TORTULA	PAPILLOSISSIMA			M	331A
TORTULA	PRINCEPS			M	331A
TORTULA	RURALIS			M	331A
TRACHYBRYUM	MEGAPTILUM			M	331A
TRIPTEROCLADIUM	LEUCOCLADULUM			M	331A
WEISSIA	CONTROVERSA			M	331A

Intermountain Semi-Desert Province

342B Northwestern Basin and Range (ID, NV, OR, UT)
342C Owyhee Uplands (ID, NV, OR)
342D Snake River Basalts (ID, WY)
342E Bear Lake (ID)
342H High Lava Plains (OR)
342I Columbia Basin (OR, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ATHALAMIA	HYALINA			H	342B
CHILOSCYPHUS	PALLESCENS			H	342B
MARCHANTIA	POLYMORPHA			H	342B
RICCIA	BEYRICHIANA			H	342B
AMBLYSTEGIUM	SERPENS			M	342B
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	342B
AULACOMNIUM	ANDROGYNUM			M	342B
AULACOMNIUM	PALUSTRE			M	342B
BRACHYTHECIUM	COLLINUM			M	342B
BRACHYTHECIUM	LEIBERGII			M	342B
BRACHYTHECIUM	RUTABULUM			M	342B
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	342B
BRYUM	ARGENTEUM			M	342B
BRYUM	LISAE	V	CUSPIDATUM	M	342B
BRYUM	MINIATUM			M	342B
BRYUM	MUEHLENBECKII			M	342B
BRYUM	PALLESCENS			M	342B
BRYUM	PSEUDOTRIQUETRUM			M	342B
BRYUM	WEIGELII			M	342B
CERATODON	PURPUREUS			M	342B
COSCINODON	CALYPTRATUS			M	342B
DESMATODON	PLINTHOBIUS			M	342B
DREPANOCLADUS	ADUNCUS			M	342B
ENCALYPTA	RHAPTOCARPA			M	342B
ENCALYPTA	VULGARIS			M	342B
FUNARIA	HYGROMETRICA			M	342B
GRIMMIA	ANODON			M	342B
GRIMMIA	LAEVIGATA			M	342B
GRIMMIA	MONTANA			M	342B
GRIMMIA	OVALIS			M	342B
GRIMMIA	PLAGIOPODIA			M	342B
GRIMMIA	POECILOSTOMA			M	342B
GRIMMIA	TENERRIMA			M	342B
HOMALOTHECIUM	FULGESCENS			M	342B
HYGROHYPNUM	MOLLE			M	342B
HYGROHYPNUM	OCHRACEUM			M	342B
HYPNUM	REVOLUTUM			M	342B
LEPTOBRYUM	PYRIFORME			M	342B
ORTHOTRICHUM	AFFINE			M	342B
ORTHOTRICHUM	ALPESTRE			M	342B
ORTHOTRICHUM	CUPULATUM			M	342B
ORTHOTRICHUM	LAEVIGATUM			M	342B
PHILONOTIS	FONTANA			M	342B
PHYSCOMITRIUM	HOOKERI			M	342B
POHLIA	CRUDA			M	342B
POHLIA	WAHLENBERGII			M	342B
POLYTRICHUM	JUNIPERINUM			M	342B
POLYTRICHUM	LONGISETUM			M	342B
POLYTRICHUM	LYALLII			M	342B
POTTIA	NEVADENSIS			M	342B
PTERYGONEURUM	OVATUM			M	342B
PTERYGONEURUM	SUBSESSILE			M	342B
SCHISTIDIUM	APOCARPUM			M	342B
SCHISTIDIUM	HETEROPHYLLUM			M	342B
SCHISTIDIUM	OCCIDENTALE			M	342B
SCHISTIDIUM	PULVINATUM			M	342B
SCHISTIDIUM	RIVULARE			M	342B
TORTULA	BREVIPES			M	342B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
TORTULA	CANINERVIS			M	342B
TORTULA	MUCRONIFOLIA			M	342B
TORTULA	MURALIS			M	342B
TORTULA	PAPILLOSISSIMA			M	342B
TORTULA	PRINCEPS			M	342B
TORTULA	RURALIS			M	342B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ATHALAMIA	HYALINA			H	342C
CEPHALOZIELLA	DIVARICATA			H	342C
RICCIA	CAMPBELLIANA			H	342C
RICCIA	SOROCARPA			H	342C
ALOINA	BIFRONS			M	342C
BRACHYTHECIUM	COLLINUM			M	342C
BRYUM	ARGENTEUM			M	342C
BRYUM	CAPILLARE			M	342C
BRYUM	LISAE	V	CUSPIDATUM	M	342C
BRYUM	PSEUDOTRIQUETRUM			M	342C
CERATODON	PURPUREUS			M	342C
COSCINODON	CALYPTRATUS			M	342C
DREPANOCLADUS	ADUNCUS			M	342C
ENCALYPTA	RHAPTOCARPA			M	342C
ENCALYPTA	VULGARIS			M	342C
FUNARIA	HYGROMETRICA			M	342C
GRIMMIA	MONTANA			M	342C
GRIMMIA	TENERRIMA			M	342C
HOMALOTHECIUM	NEVADENSE			M	342C
HYPNUM	REVOLUTUM			M	342C
ORTHOTRICHUM	FLOWERSII			M	342C
PHILONOTIS	CAPILLARIS			M	342C
PHILONOTIS	FONTANA			M	342C
PTERYGONEURUM	OVATUM			M	342C
PTERYGONEURUM	SUBSESSILE			M	342C
SCOULERIA	AQUATICA			M	342C
TORTULA	CANINERVIS			M	342C
TORTULA	PAPILLOSISSIMA			M	342C
TORTULA	RURALIS			M	342C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ATHALAMIA	HYALINA			H	342D
BRYUM	ARGENTEUM			M	342D
BRYUM	CAESPITICIUM			M	342D
BRYUM	WEIGELII			M	342D
CONARDIA	COMPACTA			M	342D
COSCINODON	CALYPTRATUS			M	342D
CRATONEURON	FILICINUM			M	342D
ENCALYPTA	VULGARIS			M	342D
FISSIDENS	GRANDIFRONS			M	342D
FONTINALIS	HYPNOIDES			M	342D
FUNARIA	HYGROMETRICA			M	342D
GRIMMIA	ANODON			M	342D
GRIMMIA	PULVINATA			M	342D
GRIMMIA	TENERRIMA			M	342D
HOMALOTHECIUM	NEVADENSE			M	342D
HYGROAMBLYSTEGIUM	TENAX			M	342D
HYGROHYPNUM	BESTII			M	342D
HYGROHYPNUM	LURIDUM			M	342D
ORTHOTRICHUM	LAEVIGATUM			M	342D
PLAGIOMNIUM	ELLIPTICUM			M	342D
POTTIA	NEVADENSIS			M	342D
PTERYGONEURUM	OVATUM			M	342D
TORTULA	BARTRAMII			M	342D
TORTULA	CANINERVIS			M	342D
TORTULA	RURALIS			M	342D

Genus	Species	Ext	Ext_name	M/H/A	Physprov
BRACHYTHECIUM	OEDIPODIUM			M	342E

Genus	Species	Ext	Ext_name	M/H/A	Physprov
CHILOSCYPHUS	PALLESCENS			H	342H
PORELLA	CORDAEANA			H	342H
SCAPANIA	UNDULATA			H	342H
ANACOLIA	MENZIESII			M	342H
BRACHYTHECIUM	FRIGIDUM			M	342H
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	342H
BRYUM	ARGENTEUM			M	342H
CERATODON	PURPUREUS			M	342H
COSCINODON	CALYPTRATUS			M	342H
DESMATODON	HEIMII			M	342H
FONTINALIS	NEOMEXICANA			M	342H
GRIMMIA	LAEVIGATA			M	342H
GRIMMIA	MONTANA			M	342H
LEPTOBRYUM	PYRIFORME			M	342H
ORTHOTRICHUM	LAEVIGATUM			M	342H
PHILONOTIS	FONTANA			M	342H
PLATYDICTYA	JUNGERMANNIOIDES			M	342H
POLYTRICHUM	PILIFERUM			M	342H
TIMMIA	AUSTRIACA			M	342H
TORTULA	PAPILLOSISSIMA			M	342H
TORTULA	RURALIS			M	342H

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ATHALAMIA	HYALINA			H	342I
BARBILOPHOZIA	BARBATA			H	342I
BARBILOPHOZIA	HATCHERI			H	342I
CEPHALOZIELLA	DIVARICATA			H	342I
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	342I
CHILOSCYPHUS	POLYANTHOS			H	342I
DIPLOPHYLLUM	ALBICANS			H	342I
LEPIDOZIA	REPTANS			H	342I
LOPHOZIA	ALPESTRIS			H	342I
LOPHOZIA	HETEROCOLPOS			H	342I
MANNIA	TRIANDRA			H	342I
MARCHANTIA	POLYMORPHA			H	342I
PTILIDIUM	CALIFORNICUM			H	342I
REBOULIA	HEMISPHAERICA			H	342I
RICCIA	BEYRICHIANA			H	342I
RICCIA	SOROCARPA			H	342I
RICCIOCARPOS	NATANS			H	342I
SCAPANIA	AMERICANA			H	342I
SCAPANIA	GYMNOSTOMOPHILA			H	342I
SCAPANIA	IRRIGUA			H	342I
SCAPANIA	UNDULATA	V	OAKESII	H	342I
SPHAEROCARPOS	TEXANUS			H	342I
TARGIONIA	HYPOPHYLLA			H	342I
TRITOMARIA	EXSECTA			H	342I
TRITOMARIA	QUINQUEDENTATA	V	QUINQUEDENTAT.	H	342I
ALOINA	BIFRONS			M	342I
AMBLYSTEGIUM	SERPENS			M	342I
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	342I
AMPHIDIUM	CALIFORNICUM			M	342I
AMPHIDIUM	LAPPONICUM			M	342I
AMPHIDIUM	MOUGEOTII			M	342I
ANACOLIA	MENZIESII			M	342I
ANTITRICHIA	CALIFORNICA			M	342I
ANTITRICHIA	CURTIPENDULA			M	342I
AULACOMNIUM	ANDROGYNUM			M	342I
AULACOMNIUM	PALUSTRE			M	342I
BARBULA	CONVOLUTA			M	342I
BRACHYTHECIUM	ALBICANS			M	342I
BRACHYTHECIUM	ERYTHRORRHIZON			M	342I
BRACHYTHECIUM	FRIGIDUM			M	342I
BRACHYTHECIUM	HYLOTAPETUM			M	342I
BRACHYTHECIUM	RIVULARE			M	342I
BRACHYTHECIUM	SALEBROSUM			M	342I
BRACHYTHECIUM	VELUTINUM			M	342I
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	342I
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	342I
BRYUM	ALGOVICUM			M	342I
BRYUM	ALGOVICUM	V	ALGOVICUM	M	342I
BRYUM	ARGENTEUM			M	342I
BRYUM	CAESPITICIUM			M	342I
BRYUM	CANARIENSE			M	342I
BRYUM	CAPILLARE			M	342I
BRYUM	GEMMASCENS			M	342I
BRYUM	GEMMILUCENS			M	342I
BRYUM	LISAE	V	CUSPIDATUM	M	342I
BRYUM	MINIATUM			M	342I
BRYUM	PSEUDOTRIQUETRUM			M	342I
CALLIERGON	CORDIFOLIUM			M	342I

Genus	Species	Ext	Ext_name	M/H/A	Physprov
CERATODON	PURPUREUS			M	342I
CONARDIA	COMPACTA			M	342I
COSCINODON	CALYPTRATUS			M	342I
CRATONEURON	FILICINUM			M	342I
DENDROALSIA	ABIETINA			M	342I
DESMATODON	HEIMII	V	HEIMII	M	342I
DESMATODON	LATIFOLIUS			M	342I
DESMATODON	PLINTHOBIUS			M	342I
DICRANUM	FLAGELLARE			M	342I
DICRANUM	HOWELLII			M	342I
DICRANUM	SCOPARIUM			M	342I
DICRANUM	STRICTUM			M	342I
DICRANUM	TAURICUM			M	342I
DIDYMODON	FALLAX	V	REFLEXUS	M	342I
DIDYMODON	TOPHACEUS			M	342I
DIDYMODON	VINEALIS			M	342I
DIDYMODON	VINEALIS	V	BRACHYPHYLLUS	M	342I
DIDYMODON	VINEALIS	V	FLACCIDUS	M	342I
DIDYMODON	VINEALIS	V	LURIDUS	M	342I
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	342I
DIDYMODON	VINEALIS	V	VINEALIS	M	342I
DREPANOCLADUS	ADUNCUS			M	342I
DRYPTODON	PATENS			M	342I
ENCALYPTA	AFFINIS			M	342I
ENCALYPTA	RHAPTOCARPA			M	342I
ENCALYPTA	VULGARIS			M	342I
EURHYNCHIUM	OREGANUM			M	342I
EURHYNCHIUM	PRAELONGUM			M	342I
EURHYNCHIUM	PULCHELLUM			M	342I
FONTINALIS	ANTIPYRETICA			M	342I
FONTINALIS	NEOMEXICANA			M	342I
FUNARIA	HYGROMETRICA			M	342I
FUNARIA	MUHLENBERGII			M	342I
GRIMMIA	AFFINIS			M	342I
GRIMMIA	ANODON			M	342I
GRIMMIA	LAEVIGATA			M	342I
GRIMMIA	MONTANA			M	342I
GRIMMIA	OVALIS			M	342I
GRIMMIA	PULVINATA			M	342I
GRIMMIA	TENERRIMA			M	342I
GRIMMIA	TORQUATA			M	342I
GRIMMIA	TRICHOPHYLLA			M	342I
HOMALOTHECIUM	AENEUM			M	342I
HOMALOTHECIUM	FULGESCENS			M	342I
HOMALOTHECIUM	NEVADENSE			M	342I
HOMALOTHECIUM	NUTTALLII			M	342I
HOMALOTHECIUM	PINNATIFIDUM			M	342I
HYGROAMBLYSTEGIUM	TENAX			M	342I
HYGROHYPNUM	BESTII			M	342I
HYPNUM	SUBIMPONENS			M	342I
LEPTOBRYUM	PYRIFORME			M	342I
LEPTODICTYUM	HUMILE			M	342I
LEPTODICTYUM	RIPARIUM			M	342I
METANECKERA	MENZIESII			M	342I
ORTHOTRICHUM	AFFINE			M	342I
ORTHOTRICHUM	ALPESTRE			M	342I
ORTHOTRICHUM	ANOMALUM			M	342I
ORTHOTRICHUM	BOLANDERI			M	342I
ORTHOTRICHUM	CUPULATUM			M	342I

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ORTHOTRICHUM	HOLZINGERI			M	342I
ORTHOTRICHUM	LAEVIGATUM			M	342I
ORTHOTRICHUM	LYELLII			M	342I
ORTHOTRICHUM	OBTUSIFOLIUM			M	342I
ORTHOTRICHUM	PRAEMORSUM			M	342I
ORTHOTRICHUM	RIVULARE			M	342I
ORTHOTRICHUM	RUPESTRE			M	342I
ORTHOTRICHUM	SORDIDUM			M	342I
ORTHOTRICHUM	SPECIOSUM			M	342I
PHASCUM	CUSPIDATUM			M	342I
PHILONOTIS	FONTANA			M	342I
PHYSCOMITRIUM	PYGMAEUM			M	342I
PLAGIOMNIUM	INSIGNE			M	342I
PLAGIOMNIUM	MEDIUM			M	342I
PLAGIOMNIUM	VENUSTUM			M	342I
PLATYHYPNIDIUM	RIPARIOIDES			M	342I
PLEURIDIUM	SUBULATUM			M	342I
POLYTRICHUM	JUNIPERINUM			M	342I
POLYTRICHUM	PILIFERUM			M	342I
POTTIA	NEVADENSIS			M	342I
PSEUDOBRAUNIA	CALIFORNICA			M	342I
PSEUDOCROSSIDIUM	OBTUSULUM			M	342I
PSEUDOCROSSIDIUM	REVOLUTUM			M	342I
PTERIGYNANDRUM	FILIFORME			M	342I
PTEROGONIUM	GRACILE			M	342I
PTERYGONEURUM	OVATUM			M	342I
PTERYGONEURUM	SUBSESSILE			M	342I
PTYCHOMITRIUM	GARDNERI			M	342I
RACOMITRIUM	ACICULARE			M	342I
RACOMITRIUM	CANESCENS			M	342I
RACOMITRIUM	ERICOIDES			M	342I
RACOMITRIUM	HETEROSTICHUM			M	342I
RACOMITRIUM	OCCIDENTALE			M	342I
RACOMITRIUM	SUDETICUM			M	342I
RHYTIDIADELPHUS	TRIQUETRUS			M	342I
SANIONIA	UNCINATA			M	342I
SCHISTIDIUM	APOCARPUM			M	342I
SCHISTIDIUM	CINCLIDODONTEUM			M	342I
SCHISTIDIUM	HETEROPHYLLUM			M	342I
SCLEROPODIUM	CESPITANS			M	342I
SCLEROPODIUM	OBTUSIFOLIUM			M	342I
SCLEROPODIUM	TOURETII			M	342I
SCLEROPODIUM	TOURETII	V	COLPOPHYLLUM	M	342I
SCOULERIA	AQUATICA			M	342I
SCOULERIA	MARGINATA			M	342I
TIMMIA	AUSTRIACA			M	342I
TIMMIELLA	CRASSINERVIS			M	342I
TOMENTHYPNUM	NITENS			M	342I
TORTULA	BREVIPES			M	342I
TORTULA	CANINERVIS			M	342I
TORTULA	LAEVIPILA			M	342I
TORTULA	MURALIS			M	342I
TORTULA	PAPILLOSISSIMA			M	342I
TORTULA	PRINCEPS			M	342I
TORTULA	RURALIS			M	342I
TRACHYBRYUM	MEGAPTILUM			M	342I
TRICHOSTOMOPSIS	AUSTRALASIAE			M	342I

Southern Rocky Mountain Steppe:

open woodlands, coniferous forest, alpine meadow

M331A Yellowstone Highlands (ID, WY)
M331D Overthrust Mountains (ID, WY)

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANTHOCEROS	FUSIFORMIS			A	M331A
ANASTROPHYLLUM	MICHAUXII			H	M331A
ANEURA	PINGUIS			H	M331A
BARBILOPHOZIA	ATTENUATA			H	M331A
BARBILOPHOZIA	HATCHERI			H	M331A
BARBILOPHOZIA	LYCOPODIOIDES			H	M331A
BLASIA	PUSILLA			H	M331A
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M331A
CALYPOGEIA	FISSA			H	M331A
CALYPOGEIA	TRICHOMANIS			H	M331A
CEPHALOZIA	BICUSPIDATA			H	M331A
CEPHALOZIA	LUNULIFOLIA			H	M331A
CEPHALOZIA	PLENICEPS			H	M331A
CEPHALOZIELLA	DIVARICATA			H	M331A
CEPHALOZIELLA	DIVARICATA	V	SCABRA	H	M331A
CHILOSCYPHUS	POLYANTHOS			H	M331A
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M331A
CONOCEPHALUM	CONICUM			H	M331A
GYMNOCOLEA	INFLATA			H	M331A
JUNGERMANNIA	EXSERTIFOLIA			H	M331A
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M331A
JUNGERMANNIA	LEIANTHA			H	M331A
JUNGERMANNIA	RUBRA			H	M331A
JUNGERMANNIA	SPHAEROCARPA			H	M331A
LEPIDOZIA	REPTANS			H	M331A
LOPHOCOLEA	HETEROPHYLLA			H	M331A
LOPHOCOLEA	MINOR			H	M331A
LOPHOZIA	EXCISA			H	M331A
LOPHOZIA	INCISA			H	M331A
LOPHOZIA	LONGIFLORA			H	M331A
LOPHOZIA	VENTRICOSA			H	M331A
LOPHOZIA	VENTRICOSA	V	LONGIFLORA	H	M331A
LUNULARIA	CRUCIATA			H	M331A
MARCHANTIA	POLYMORPHA			H	M331A
PELLIA	ENDIVIIFOLIA			H	M331A
PELLIA	EPIPHYLLA			H	M331A
PLAGIOCHILA	PORELLOIDES			H	M331A
PORELLA	CORDAEANA			H	M331A
PORELLA	NAVICULARIS			H	M331A
PORELLA	ROELLII			H	M331A
PREISSIA	QUADRATA			H	M331A
PTILIDIUM	PULCHERRIMUM			H	M331A
REBOULIA	HEMISPHAERICA			H	M331A
RICCARDIA	LATIFRONS			H	M331A
RICCARDIA	PALMATA			H	M331A
RICCIA	BEYRICHIANA			H	M331A
RICCIA	FLUITANS			H	M331A
RICCIA	GLAUCA			H	M331A
SCAPANIA	CURTA			H	M331A
SCAPANIA	NEMOROSA			H	M331A
SCAPANIA	SUBALPINA			H	M331A
SCAPANIA	UNDULATA			H	M331A
SCAPANIA	UNDULATA	V	OAKESII	H	M331A
SPHAEROCARPOS	HIANS			H	M331A
TARGIONIA	HYPOPHYLLA			H	M331A
TRITOMARIA	QUINQUEDENTATA			H	M331A
ABIETINELLA	ABIETINA			M	M331A
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M331A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
AMPHIDIUM	LAPPONICUM			M	M331A
ANACOLIA	MENZIESII			M	M331A
ANDREAEA	RUPESTRIS			M	M331A
ATRICHUM	SELWYNII			M	M331A
AULACOMNIUM	ANDROGYNUM			M	M331A
AULACOMNIUM	PALUSTRE			M	M331A
BRACHYTHECIUM	ALBICANS			M	M331A
BRACHYTHECIUM	CALCAREUM			M	M331A
BRACHYTHECIUM	CAMPESTRE			M	M331A
BRACHYTHECIUM	COLLINUM			M	M331A
BRACHYTHECIUM	DIGASTRUM			M	M331A
BRACHYTHECIUM	ERYTHRORRHIZON			M	M331A
BRACHYTHECIUM	FENDLERI			M	M331A
BRACHYTHECIUM	FRIGIDUM			M	M331A
BRACHYTHECIUM	GLAREOSUM			M	M331A
BRACHYTHECIUM	NELSONII			M	M331A
BRACHYTHECIUM	OXYCLADON			M	M331A
BRACHYTHECIUM	RIVULARE			M	M331A
BRACHYTHECIUM	SALEBROSUM			M	M331A
BRACHYTHECIUM	STARKEI			M	M331A
BRACHYTHECIUM	VELUTINUM			M	M331A
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M331A
BRYUM	CAESPITICIUM			M	M331A
BRYUM	CAPILLARE			M	M331A
BRYUM	CAPILLARE	V	CAPILLARE	M	M331A
BRYUM	LISAE	V	CUSPIDATUM	M	M331A
BRYUM	MUEHLENBECKII			M	M331A
BRYUM	PALLESCENS			M	M331A
BRYUM	PSEUDOTRIQUETRUM			M	M331A
BRYUM	TURBINATUM			M	M331A
BRYUM	WEIGELII			M	M331A
BUXBAUMIA	APHYLLA			M	M331A
CALLIERGON	CORDIFOLIUM			M	M331A
CALLIERGONELLA	CUSPIDATA			M	M331A
CAMPYLIUM	STELLATUM			M	M331A
CAMPYLOPUS	FRAGILIS			M	M331A
CAMPYLOPUS	SCHIMPERI			M	M331A
CERATODON	PURPUREUS			M	M331A
CLIMACIUM	AMERICANUM			M	M331A
CLIMACIUM	DENDROIDES			M	M331A
CONARDIA	COMPACTA			M	M331A
COSCINODON	CALYPTRATUS			M	M331A
CRATONEURON	FILICINUM			M	M331A
CYNODONTIUM	POLYCARPON			M	M331A
DESMATODON	CERNUUS			M	M331A
DESMATODON	LATIFOLIUS			M	M331A
DICHELYMA	FALCATUM			M	M331A
DICHELYMA	UNCINATUM			M	M331A
DICRANELLA	CRISPA			M	M331A
DICRANELLA	SUBULATA			M	M331A
DICRANOWEISIA	CIRRATA			M	M331A
DICRANOWEISIA	CRISPULA			M	M331A
DICRANUM	FUSCESCENS			M	M331A
DICRANUM	MUEHLENBECKII			M	M331A
DICRANUM	SCOPARIUM			M	M331A
DICRANUM	SPADICEUM			M	M331A
DICRANUM	TAURICUM			M	M331A
DIDYMODON	ASPERIFOLIUS			M	M331A
DIDYMODON	VINEALIS			M	M331A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
DISTICHIUM	CAPILLACEUM			M	M331A
DISTICHIUM	INCLINATUM			M	M331A
DITRICHUM	FLEXICAULE			M	M331A
DREPANOCLADUS	ADUNCUS			M	M331A
DREPANOCLADUS	ADUNCUS	V	KNEIFFII	M	M331A
DREPANOCLADUS	ADUNCUS	V	POLYCARPUS	M	M331A
DREPANOCLADUS	FLUITANS			M	M331A
ENCALYPTA	RHAPTOCARPA			M	M331A
ENCALYPTA	VULGARIS			M	M331A
EURHYNCHIUM	PULCHELLUM			M	M331A
FISSIDENS	ADIANTHOIDES			M	M331A
FISSIDENS	GRANDIFRONS			M	M331A
FONTINALIS	ANTIPYRETICA			M	M331A
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M331A
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M331A
FONTINALIS	HYPNOIDES			M	M331A
FONTINALIS	HYPNOIDES	V	DURIAEI	M	M331A
FONTINALIS	NEOMEXICANA			M	M331A
FUNARIA	HYGROMETRICA			M	M331A
GRIMMIA	AFFINIS			M	M331A
GRIMMIA	DONNIANA			M	M331A
GRIMMIA	MONTANA			M	M331A
GRIMMIA	OVALIS			M	M331A
GRIMMIA	TENERRIMA			M	M331A
GRIMMIA	TORQUATA			M	M331A
GRIMMIA	TRICHOPHYLLA			M	M331A
GYMNOSTOMUM	AERUGINOSUM			M	M331A
HELODIUM	BLANDOWII			M	M331A
HETEROCLADIUM	DIMORPHUM			M	M331A
HOMALOTHECIUM	AENEUM			M	M331A
HOMALOTHECIUM	FULGESCENS			M	M331A
HOMALOTHECIUM	NEVADENSE			M	M331A
HOMALOTHECIUM	PINNATIFIDUM			M	M331A
HYGROAMBLYSTEGIUM	TENAX			M	M331A
HYGROAMBLYSTEGIUM	TENAX	V	SPINIFOLIUM	M	M331A
HYGROHYPNUM	BESTII			M	M331A
HYGROHYPNUM	LURIDUM			M	M331A
HYGROHYPNUM	MOLLE			M	M331A
HYGROHYPNUM	OCHRACEUM			M	M331A
HYLOCOMIUM	SPLENDENS			M	M331A
HYPNUM	REVOLUTUM			M	M331A
HYPNUM	UNCINATUM			M	M331A
LEPTOBRYUM	PYRIFORME			M	M331A
LEPTODICTYUM	RIPARIUM			M	M331A
MACROCOMA	SULLIVANTII			M	M331A
MNIUM	MARGINATUM			M	M331A
ONCOPHORUS	VIRENS			M	M331A
ORTHOTRICHUM	AFFINE			M	M331A
ORTHOTRICHUM	ALPESTRE			M	M331A
ORTHOTRICHUM	LAEVIGATUM			M	M331A
ORTHOTRICHUM	PRAEMORSUM			M	M331A
ORTHOTRICHUM	PYLAISII			M	M331A
ORTHOTRICHUM	RIVULARE			M	M331A
ORTHOTRICHUM	RUPESTRE			M	M331A
ORTHOTRICHUM	SPECIOSUM			M	M331A
PHILONOTIS	FONTANA			M	M331A
PHILONOTIS	FONTANA	V	AMERICANA	M	M331A
PHILONOTIS	FONTANA	V	PUMILA	M	M331A
PLAGIOMNIUM	ELLIPTICUM			M	M331A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
PLAGIOMNIUM	ROSTRATUM			M	M331A
PLAGIOTHECIUM	DENTICULATUM			M	M331A
PLATYDICTYA	JUNGERMANNIOIDES			M	M331A
PLEUROZIUM	SCHREBERI			M	M331A
POHLIA	ANDALUSICA			M	M331A
POHLIA	CRUDA			M	M331A
POHLIA	LESCURIANA			M	M331A
POHLIA	LONGICOLLA			M	M331A
POHLIA	NUTANS			M	M331A
POHLIA	PROLIGERA			M	M331A
POHLIA	TUNDRAE			M	M331A
POLYTRICHASTRUM	ALPINUM			M	M331A
POLYTRICHUM	COMMUNE			M	M331A
POLYTRICHUM	JUNIPERINUM			M	M331A
POLYTRICHUM	LONGISETUM			M	M331A
POLYTRICHUM	LYALLII			M	M331A
POLYTRICHUM	PILIFERUM			M	M331A
PSEUDOLESKEA	RADICOSA			M	M331A
PSEUDOLESKEELLA	TECTORUM			M	M331A
PTERIGYNANDRUM	FILIFORME			M	M331A
PTILIUM	CRISTA-CASTRENSIS			M	M331A
RACOMITRIUM	CANESCENS			M	M331A
RACOMITRIUM	ELONGATUM			M	M331A
RACOMITRIUM	ERICOIDES			M	M331A
RHIZOMNIUM	MAGNIFOLIUM			M	M331A
RHIZOMNIUM	PUNCTATUM			M	M331A
RHYTIDIADELPHUS	TRIQUETRUS			M	M331A
ROELLIA	ROELLII			M	M331A
SANIONIA	ADUNCUS			M	M331A
SCHISTIDIUM	AGASSIZII			M	M331A
SCHISTIDIUM	APOCARPUM			M	M331A
SCHISTIDIUM	RIVULARE			M	M331A
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M331A
SCOULERIA	AQUATICA			M	M331A
SPHAGNUM	CAPILLIFOLIUM			M	M331A
SPHAGNUM	FIMBRIATUM			M	M331A
SPHAGNUM	RECURVUM			M	M331A
SPHAGNUM	SQUARROSUM			M	M331A
TETRAPHIS	PELLUCIDA			M	M331A
TIMMIA	AUSTRIACA			M	M331A
TIMMIA	MEGAPOLITANA	V	BAVARICA	M	M331A
TORTELLA	ARCTICA			M	M331A
TORTELLA	FRAGILIS			M	M331A
TORTULA	MUCRONIFOLIA			M	M331A
TORTULA	NORVEGICA			M	M331A
TORTULA	RURALIS			M	M331A
WARNSTORFIA	FLUITANS			M	M331A
WEISSIA	CONTROVERSA			M	M331A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ASTERELLA	GRACILIS			H	M331D
BARBILOPHOZIA	BARBATA			H	M331D
BARBILOPHOZIA	HATCHERI			H	M331D
BARBILOPHOZIA	KUNZEANA			H	M331D
BARBILOPHOZIA	LYCOPODIOIDES			H	M331D
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M331D
CALYPOGEIA	INTEGRISTIPULA			H	M331D
CALYPOGEIA	MUELLERIANA			H	M331D
CALYPOGEIA	SUECICA			H	M331D
CEPHALOZIA	PLENICEPS			H	M331D
CEPHALOZIELLA	DIVARICATA	V	DIVARICATA	H	M331D
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	M331D
CHILOSCYPHUS	POLYANTHOS			H	M331D
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M331D
CONOCEPHALUM	CONICUM			H	M331D
LOPHOCOLEA	HETEROPHYLLA			H	M331D
LOPHOCOLEA	MINOR			H	M331D
LOPHOZIA	ALPESTRIS			H	M331D
LOPHOZIA	EXCISA			H	M331D
LOPHOZIA	INCISA			H	M331D
LOPHOZIA	LONGIDENS			H	M331D
LOPHOZIA	LONGIFLORA			H	M331D
LOPHOZIA	OBTUSA			H	M331D
LOPHOZIA	VENTRICOSA			H	M331D
MARCHANTIA	POLYMORPHA			H	M331D
PELLIA	ENDIVIIFOLIA			H	M331D
RADULA	COMPLANATA			H	M331D
RICCIOCARPOS	NATANS			H	M331D
SCAPANIA	IRRIGUA			H	M331D
SCAPANIA	MUCRONATA			H	M331D
SCAPANIA	UNDULATA			H	M331D
AMBLYSTEGIUM	SERPENS			M	M331D
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M331D
AMPHIDIUM	LAPPONICUM			M	M331D
ATRICHUM	SELWYNII			M	M331D
ATRICHUM	UNDULATUM			M	M331D
AULACOMNIUM	ANDROGYNUM			M	M331D
AULACOMNIUM	PALUSTRE			M	M331D
BARTRAMIA	ITHYPHYLLA			M	M331D
BLINDIA	ACUTA			M	M331D
BRACHYTHECIUM	ALBICANS			M	M331D
BRACHYTHECIUM	COLLINUM			M	M331D
BRACHYTHECIUM	ERYTHRORRHIZON			M	M331D
BRACHYTHECIUM	FENDLERI			M	M331D
BRACHYTHECIUM	FRIGIDUM			M	M331D
BRACHYTHECIUM	NELSONII			M	M331D
BRACHYTHECIUM	OEDIPODIUM			M	M331D
BRACHYTHECIUM	RIVULARE			M	M331D
BRACHYTHECIUM	RUTABULUM			M	M331D
BRACHYTHECIUM	SALEBROSUM			M	M331D
BRACHYTHECIUM	STARKEI			M	M331D
BRACHYTHECIUM	VELUTINUM	V	VELUTINUM	M	M331D
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M331D
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M331D
BRYUM	ALGOVICUM			M	M331D
BRYUM	AMBLYODON			M	M331D
BRYUM	ARGENTEUM			M	M331D
BRYUM	CAESPITICIUM			M	M331D

Genus	Species	Ext	Ext_name	M/H/A	Physprov
BRYUM	CAPILLARE			M	M331D
BRYUM	CYCLOPHYLLUM			M	M331D
BRYUM	GEMMIPARUM			M	M331D
BRYUM	LISAE			M	M331D
BRYUM	LISAE	V	CUSPIDATUM	M	M331D
BRYUM	PALLESCENS			M	M331D
BRYUM	PSEUDOTRIQUETRUM			M	M331D
BRYUM	TURBINATUM			M	M331D
BRYUM	ULIGINOSUM			M	M331D
BRYUM	WEIGELII			M	M331D
BUXBAUMIA	PIPERI			M	M331D
BUXBAUMIA	VIRIDIS			M	M331D
CALLIERGON	STRAMINEUM			M	M331D
CAMPYLIUM	CHRYSOPHYLLUM			M	M331D
CAMPYLIUM	POLYGAMUM			M	M331D
CERATODON	PURPUREUS			M	M331D
CLIMACIUM	AMERICANUM			M	M331D
CLIMACIUM	DENDROIDES			M	M331D
CONARDIA	COMPACTA			M	M331D
COSCINODON	CALYPTRATUS			M	M331D
CRATONEURON	FILICINUM			M	M331D
DESMATODON	HEIMII			M	M331D
DESMATODON	LATIFOLIUS			M	M331D
DESMATODON	LEUCOSTOMA			M	M331D
DESMATODON	SYSTYLIUS			M	M331D
DICHELYMA	FALCATUM			M	M331D
DICRANOWEISIA	CIRRATA			M	M331D
DICRANOWEISIA	CRISPULA			M	M331D
DICRANUM	HOWELLII			M	M331D
DICRANUM	RHABDOCARPUM			M	M331D
DICRANUM	SCOPARIUM			M	M331D
DICRANUM	SPADICEUM			M	M331D
DIDYMODON	RIGIDULUS	V	GRACILIS	M	M331D
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	M331D
DISTICHIUM	CAPILLACEUM			M	M331D
DISTICHIUM	INCLINATUM			M	M331D
DREPANOCLADUS	ADUNCUS			M	M331D
ENCALYPTA	INTERMEDIA			M	M331D
ENCALYPTA	RHAPTOCARPA			M	M331D
ENCALYPTA	VULGARIS			M	M331D
EURHYNCHIUM	PRAELONGUM			M	M331D
EURHYNCHIUM	PULCHELLUM			M	M331D
FISSIDENS	ADIANTHOIDES			M	M331D
FISSIDENS	GRANDIFRONS			M	M331D
FISSIDENS	OSMUNDIOIDES			M	M331D
FONTINALIS	ANTIPYRETICA			M	M331D
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M331D
FONTINALIS	HYPNOIDES			M	M331D
FONTINALIS	HYPNOIDES	V	DURIAEI	M	M331D
FONTINALIS	NEOMEXICANA			M	M331D
GRIMMIA	AFFINIS			M	M331D
GRIMMIA	ANODON			M	M331D
GRIMMIA	ANOMALA			M	M331D
GRIMMIA	ELATIOR			M	M331D
GRIMMIA	MONTANA			M	M331D
GRIMMIA	OVALIS			M	M331D
GRIMMIA	TENERRIMA			M	M331D
GRIMMIA	TORQUATA	V	TORQUATA	M	M331D
GRIMMIA	TRICHOPHYLLA			M	M331D

Genus	Species	Ext	Ext_name	M/H/A	Physprov
GYMNOSTOMUM	AERUGINOSUM			M	M331D
HYGROAMBLYSTEGIUM	TENAX			M	M331D
HYGROHYPNUM	BESTII			M	M331D
HYGROHYPNUM	LURIDUM			M	M331D
HYGROHYPNUM	MOLLE			M	M331D
HYGROHYPNUM	OCHRACEUM			M	M331D
HYPNUM	CUPRESSIFORME			M	M331D
HYPNUM	LINDBERGII			M	M331D
HYPNUM	REVOLUTUM			M	M331D
ISOPTERYGIOPSIS	PULCHELLA			M	M331D
LEPTOBRYUM	PYRIFORME			M	M331D
LEPTODICTYUM	RIPARIUM			M	M331D
MNIUM	ARIZONICUM			M	M331D
MNIUM	BLYTTII			M	M331D
MNIUM	MARGINATUM			M	M331D
MNIUM	MINIATUM			M	M331D
MNIUM	SPINULOSUM			M	M331D
MNIUM	THOMSONII			M	M331D
ONCOPHORUS	VIRENS			M	M331D
ORTHOTRICHUM	AFFINE			M	M331D
ORTHOTRICHUM	ALPESTRE			M	M331D
ORTHOTRICHUM	CUPULATUM			M	M331D
ORTHOTRICHUM	HALLII			M	M331D
ORTHOTRICHUM	HOLZINGERI			M	M331D
ORTHOTRICHUM	LAEVIGATUM			M	M331D
ORTHOTRICHUM	OBTUSIFOLIUM			M	M331D
ORTHOTRICHUM	PELLUCIDUM			M	M331D
ORTHOTRICHUM	RUPESTRE			M	M331D
ORTHOTRICHUM	SPECIOSUM			M	M331D
PALUSTRIELLA	COMMUTATA			M	M331D
PALUSTRIELLA	DECIPIENS			M	M331D
PHILONOTIS	FONTANA			M	M331D
PHILONOTIS	FONTANA	V	AMERICANA	M	M331D
PHILONOTIS	FONTANA	V	FONTANA	M	M331D
PHILONOTIS	FONTANA	V	PUMILA	M	M331D
PLAGIOMNIUM	CUSPIDATUM			M	M331D
PLAGIOMNIUM	ELLIPTICUM			M	M331D
PLAGIOMNIUM	ROSTRATUM			M	M331D
PLAGIOTHECIUM	DENTICULATUM			M	M331D
PLAGIOTHECIUM	PILIFERUM			M	M331D
PLATYDICTYA	JUNGERMANNIOIDES			M	M331D
POHLIA	ANDALUSICA			M	M331D
POHLIA	ANNOTINA			M	M331D
POHLIA	BOLANDERI			M	M331D
POHLIA	BOLANDERI	V	SERIATA	M	M331D
POHLIA	CAMPTOTRACHELA			M	M331D
POHLIA	CRUDA			M	M331D
POHLIA	DRUMMONDII			M	M331D
POHLIA	LUDWIGII			M	M331D
POHLIA	NUTANS			M	M331D
POHLIA	OBTUSIFOLIA			M	M331D
POHLIA	PROLIGERA			M	M331D
POHLIA	TUNDRAE			M	M331D
POHLIA	WAHLENBERGII			M	M331D
POLYTRICHASTRUM	ALPINUM			M	M331D
POLYTRICHUM	COMMUNE			M	M331D
POLYTRICHUM	JUNIPERINUM			M	M331D
POLYTRICHUM	LYALLII			M	M331D
POLYTRICHUM	PILIFERUM			M	M331D

Genus	Species	Ext	Ext_name	M/H/A	Physprov
POLYTRICHUM	STRICTUM			M	M331D
PSEUDOLESKEA	INCURVATA			M	M331D
PSEUDOLESKEA	PATENS			M	M331D
PSEUDOLESKEA	RADICOSA			M	M331D
PSEUDOLESKEA	RADICOSA	V	COMPACTA	M	M331D
PSEUDOLESKEA	RADICOSA	V	RADICOSA	M	M331D
PSEUDOLESKEA	STENOPHYLLA			M	M331D
PSEUDOLESKEELLA	TECTORUM			M	M331D
PTERYGONEURUM	OVATUM			M	M331D
PTERYGONEURUM	SUBSESSILE			M	M331D
RACOMITRIUM	CANESCENS			M	M331D
RACOMITRIUM	ERICOIDES			M	M331D
RACOMITRIUM	FASCICULARE			M	M331D
RHIZOMNIUM	MAGNIFOLIUM			M	M331D
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M331D
RHIZOMNIUM	PUNCTATUM			M	M331D
ROELLIA	ROELLII			M	M331D
SANIONIA	ADUNCUS			M	M331D
SARMENTHYPNUM	SARMENTOSUM			M	M331D
SCHISTIDIUM	AGASSIZII			M	M331D
SCHISTIDIUM	APOCARPUM			M	M331D
SCHISTIDIUM	RIVULARE			M	M331D
SCHISTIDIUM	RIVULARE	V	LATIFOLIUM	M	M331D
SCOULERIA	AQUATICA			M	M331D
SPHAGNUM	GIRGENSOHNII			M	M331D
SPHAGNUM	RUSSOWII			M	M331D
SPHAGNUM	SQUARROSUM			M	M331D
TETRAPHIS	PELLUCIDA			M	M331D
TIMMIA	AUSTRIACA			M	M331D
TORTELLA	HUMILIS			M	M331D
TORTELLA	TORTELLOIDES			M	M331D
TORTELLA	TORTUOSA			M	M331D
TORTULA	NORVEGICA			M	M331D
TORTULA	RURALIS			M	M331D
WARNSTORFIA	EXANNULATA			M	M331D

Middle Rocky Mountain Steppe:
coniferous forest, alpine meadow

M332A Idaho Batholith (ID)
M332B Bitterroot Valley (MT)
M332E Beaverhead Mountains (ID)
M332F Challis Volcanics (ID)
M332G Blue Mountains (ID, OR, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANASTROPHYLLUM	HELLERANUM			H	M332A
ANEURA	PINGUIS			H	M332A
ATHALAMIA	HYALINA			H	M332A
BARBILOPHOZIA	HATCHERI			H	M332A
BLASIA	PUSILLA			H	M332A
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332A
CALYPOGEIA	MUELLERIANA			H	M332A
CALYPOGEIA	SUECICA			H	M332A
CEPHALOZIA	BICUSPIDATA	S	BICUSPIDATA	H	M332A
CEPHALOZIA	CONNIVENS			H	M332A
CEPHALOZIA	LUNULIFOLIA			H	M332A
CEPHALOZIA	PLENICEPS			H	M332A
CEPHALOZIELLA	DIVARICATA			H	M332A
CHILOSCYPHUS	PALLESCENS			H	M332A
CHILOSCYPHUS	POLYANTHOS			H	M332A
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M332A
CONOCEPHALUM	CONICUM			H	M332A
DIPLOPHYLLUM	TAXIFOLIUM			H	M332A
GEOCALYX	GRAVEOLENS			H	M332A
JAMESONIELLA	AUTUMNALIS			H	M332A
JUNGERMANNIA	ATROVIRENS			H	M332A
JUNGERMANNIA	EXSERTIFOLIA			H	M332A
JUNGERMANNIA	LEIANTHA			H	M332A
JUNGERMANNIA	SPHAEROCARPA			H	M332A
LEPIDOZIA	REPTANS			H	M332A
LOPHOCOLEA	CUSPIDATA			H	M332A
LOPHOZIA	ASCENDENS			H	M332A
LOPHOZIA	EXCISA			H	M332A
LOPHOZIA	HETEROCOLPOS			H	M332A
LOPHOZIA	INCISA			H	M332A
LOPHOZIA	LONGIFLORA			H	M332A
LOPHOZIA	OBTUSA			H	M332A
LOPHOZIA	VENTRICOSA			H	M332A
LOPHOZIA	VENTRICOSA	V	SILVICOLA	H	M332A
MARCHANTIA	POLYMORPHA			H	M332A
PLAGIOCHILA	PORELLOIDES			H	M332A
PORELLA	CORDAEANA			H	M332A
PORELLA	ROELLII			H	M332A
PREISSIA	QUADRATA			H	M332A
PTILIDIUM	CALIFORNICUM			H	M332A
PTILIDIUM	PULCHERRIMUM			H	M332A
RADULA	COMPLANATA			H	M332A
RICCARDIA	LATIFRONS			H	M332A
RICCARDIA	PALMATA			H	M332A
RICCIA	CAMPBELLIANA			H	M332A
SCAPANIA	AMERICANA			H	M332A
SCAPANIA	CURTA			H	M332A
SCAPANIA	IRRIGUA			H	M332A
SCAPANIA	MUCRONATA			H	M332A
SCAPANIA	PALUDOSA			H	M332A
SCAPANIA	UMBROSA			H	M332A
SCAPANIA	UNDULATA			H	M332A
AMBLYSTEGIUM	SERPENS			M	M332A
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M332A
AMPHIDIUM	LAPPONICUM			M	M332A
ANACOLIA	MENZIESII			M	M332A
ANACOLIA	MENZIESII	V	BAUERI	M	M332A
ANDREAEA	RUPESTRIS			M	M332A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANTITRICHIA	CALIFORNICA			M	M332A
ANTITRICHIA	CURTIPENDULA			M	M332A
ATRICHUM	SELWYNII			M	M332A
AULACOMNIUM	ANDROGYNUM			M	M332A
AULACOMNIUM	PALUSTRE			M	M332A
BARBULA	EUSTEGIA			M	M332A
BARTRAMIA	POMIFORMIS			M	M332A
BRACHYTHECIUM	ALBICANS			M	M332A
BRACHYTHECIUM	COLLINUM			M	M332A
BRACHYTHECIUM	DIGASTRUM			M	M332A
BRACHYTHECIUM	ERYTHRORRHIZON			M	M332A
BRACHYTHECIUM	ERYTHRORRHIZON	V	THEDENII	M	M332A
BRACHYTHECIUM	FRIGIDUM			M	M332A
BRACHYTHECIUM	GLAREOSUM			M	M332A
BRACHYTHECIUM	HYLOTAPETUM			M	M332A
BRACHYTHECIUM	LEIBERGII			M	M332A
BRACHYTHECIUM	NELSONII			M	M332A
BRACHYTHECIUM	OEDIPODIUM			M	M332A
BRACHYTHECIUM	OXYCLADON			M	M332A
BRACHYTHECIUM	RIVULARE			M	M332A
BRACHYTHECIUM	RUTABULUM			M	M332A
BRACHYTHECIUM	STARKEI			M	M332A
BRACHYTHECIUM	VELUTINUM			M	M332A
BRACHYTHECIUM	VELUTINUM	V	VELUTINUM	M	M332A
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M332A
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332A
BRYUM	ALGOVICUM			M	M332A
BRYUM	CAESPITICIUM			M	M332A
BRYUM	LISAE	V	CUSPIDATUM	M	M332A
BRYUM	MINIATUM			M	M332A
BRYUM	MUEHLENBECKII			M	M332A
BRYUM	PALLENS			M	M332A
BRYUM	PALLESCENS			M	M332A
BRYUM	PSEUDOTRIQUETRUM			M	M332A
BRYUM	TURBINATUM			M	M332A
BRYUM	WEIGELII			M	M332A
BUXBAUMIA	PIPERI			M	M332A
BUXBAUMIA	VIRIDIS			M	M332A
CALLIERGON	STRAMINEUM			M	M332A
CALLIERGONELLA	CUSPIDATA			M	M332A
CAMPYLIUM	POLYGAMUM			M	M332A
CAMPYLIUM	STELLATUM			M	M332A
CERATODON	PURPUREUS			M	M332A
CIRRIPHYLLUM	CIRROSUM			M	M332A
CLAOPODIUM	BOLANDERI			M	M332A
CLIMACIUM	DENDROIDES			M	M332A
COSCINODON	CALYPTRATUS			M	M332A
CRATONEURON	FILICINUM			M	M332A
CYNODONTIUM	GRACILESCENS			M	M332A
DICHELYMA	FALCATUM			M	M332A
DICHODONTIUM	PELLUCIDUM			M	M332A
DICRANELLA	VARIA			M	M332A
DICRANOWEISIA	CRISPULA			M	M332A
DICRANUM	FUSCESCENS			M	M332A
DICRANUM	HOWELLII			M	M332A
DICRANUM	SCOPARIUM			M	M332A
DICRANUM	TAURICUM			M	M332A
DIDYMODON	TOPHACEUS			M	M332A
DIDYMODON	VINEALIS			M	M332A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
DIDYMODON	VINEALIS	V	VINEALIS	M	M332A
DITRICHUM	FLEXICAULE			M	M332A
DITRICHUM	MONTANUM			M	M332A
DREPANOCLADUS	ADUNCUS			M	M332A
DREPANOCLADUS	ADUNCUS	V	KNEIFFII	M	M332A
DREPANOCLADUS	ADUNCUS	V	POLYCARPUS	M	M332A
DRYPTODON	PATENS			M	M332A
ENCALYPTA	RHAPTOCARPA			M	M332A
ENCALYPTA	VULGARIS			M	M332A
EURHYNCHIUM	OREGANUM			M	M332A
EURHYNCHIUM	PRAELONGUM			M	M332A
EURHYNCHIUM	PULCHELLUM			M	M332A
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M332A
FISSIDENS	BRYOIDES			M	M332A
FISSIDENS	GRANDIFRONS			M	M332A
FISSIDENS	LIMBATUS			M	M332A
FISSIDENS	OSMUNDIOIDES			M	M332A
FONTINALIS	ANTIPYRETICA			M	M332A
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M332A
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M332A
FONTINALIS	NEOMEXICANA			M	M332A
FUNARIA	HYGROMETRICA			M	M332A
GRIMMIA	AFFINIS			M	M332A
GRIMMIA	ANODON			M	M332A
GRIMMIA	ELATIOR			M	M332A
GRIMMIA	MONTANA			M	M332A
GRIMMIA	OVALIS			M	M332A
GRIMMIA	PULVINATA			M	M332A
GRIMMIA	TENERRIMA			M	M332A
GRIMMIA	TORQUATA			M	M332A
GRIMMIA	TRICHOPHYLLA			M	M332A
HEDWIGIA	CILIATA			M	M332A
HELODIUM	BLANDOWII			M	M332A
HERZOGIELLA	SELIGERI			M	M332A
HETEROCLADIUM	DIMORPHUM			M	M332A
HETEROCLADIUM	PROCURRENS			M	M332A
HOMALOTHECIUM	AENEUM			M	M332A
HOMALOTHECIUM	ARENARIUM			M	M332A
HOMALOTHECIUM	FULGESCENS			M	M332A
HOMALOTHECIUM	NEVADENSE			M	M332A
HYGROHYPNUM	BESTII			M	M332A
HYGROHYPNUM	DURIUSCULUM			M	M332A
HYGROHYPNUM	LURIDUM			M	M332A
HYGROHYPNUM	MOLLE			M	M332A
HYGROHYPNUM	OCHRACEUM			M	M332A
HYLOCOMIUM	SPLENDENS			M	M332A
HYPNUM	CIRCINALE			M	M332A
HYPNUM	PRATENSE			M	M332A
HYPNUM	REVOLUTUM			M	M332A
HYPNUM	SUBIMPONENS			M	M332A
ISOPTERYGIOPSIS	PULCHELLA			M	M332A
ISOTHECIUM	MYOSUROIDES			M	M332A
KIAERIA	STARKEI			M	M332A
LEPTOBRYUM	PYRIFORME			M	M332A
LEPTODICTYUM	HUMILE			M	M332A
LEPTODICTYUM	RIPARIUM			M	M332A
LEUCOLEPIS	ACANTHONEURON			M	M332A
LIMPRICHTIA	REVOLVENS			M	M332A
METANECKERA	MENZIESII			M	M332A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
MNIUM	BLYTTII			M	M332A
MNIUM	MARGINATUM			M	M332A
MNIUM	SPINULOSUM			M	M332A
NECKERA	DOUGLASII			M	M332A
ONCOPHORUS	VIRENS			M	M332A
ONCOPHORUS	WAHLENBERGII			M	M332A
ORTHOTRICHUM	AFFINE			M	M332A
ORTHOTRICHUM	ANOMALUM			M	M332A
ORTHOTRICHUM	CONSIMILE			M	M332A
ORTHOTRICHUM	LAEVIGATUM			M	M332A
ORTHOTRICHUM	OBTUSIFOLIUM			M	M332A
ORTHOTRICHUM	PULCHELLUM			M	M332A
ORTHOTRICHUM	PYLAISII			M	M332A
ORTHOTRICHUM	RIVULARE			M	M332A
ORTHOTRICHUM	RUPESTRE			M	M332A
ORTHOTRICHUM	SPECIOSUM			M	M332A
ORTHOTRICHUM	STRIATUM			M	M332A
PALUSTRIELLA	COMMUTATA			M	M332A
PALUSTRIELLA	DECIPIENS			M	M332A
PHILONOTIS	CAPILLARIS			M	M332A
PHILONOTIS	FONTANA			M	M332A
PHILONOTIS	FONTANA	V	AMERICANA	M	M332A
PHILONOTIS	FONTANA	V	FONTANA	M	M332A
PHILONOTIS	FONTANA	V	PUMILA	M	M332A
PHILONOTIS	MARCHICA			M	M332A
PHYSCOMITRIUM	PYGMAEUM			M	M332A
PHYSCOMITRIUM	PYRIFORME			M	M332A
PLAGIOMNIUM	AFFINE			M	M332A
PLAGIOMNIUM	MEDIUM			M	M332A
PLAGIOMNIUM	ROSTRATUM			M	M332A
PLAGIOTHECIUM	DENTICULATUM			M	M332A
PLAGIOTHECIUM	LAETUM			M	M332A
PLATYDICTYA	JUNGERMANNIOIDES			M	M332A
POGONATUM	URNIGERUM			M	M332A
POHLIA	CRUDA			M	M332A
POHLIA	DRUMMONDII			M	M332A
POHLIA	NUTANS			M	M332A
POHLIA	PROLIGERA			M	M332A
POHLIA	WAHLENBERGII			M	M332A
POLYTRICHASTRUM	ALPINUM			M	M332A
POLYTRICHUM	FORMOSUM			M	M332A
POLYTRICHUM	JUNIPERINUM			M	M332A
POLYTRICHUM	LYALLII			M	M332A
POLYTRICHUM	PILIFERUM			M	M332A
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M	M332A
PSEUDOLESKEA	PATENS			M	M332A
PSEUDOLESKEA	RADICOSA			M	M332A
PSEUDOLESKEA	RADICOSA	V	RADICOSA	M	M332A
PSEUDOLESKEA	SAVIANA			M	M332A
PSEUDOLESKEA	STENOPHYLLA			M	M332A
PTERIGYNANDRUM	FILIFORME			M	M332A
PTYCHOMITRIUM	GARDNERI			M	M332A
RACOMITRIUM	ACICULARE			M	M332A
RACOMITRIUM	AQUATICUM			M	M332A
RACOMITRIUM	CANESCENS			M	M332A
RACOMITRIUM	ELONGATUM			M	M332A
RACOMITRIUM	ERICOIDES			M	M332A
RACOMITRIUM	HETEROSTICHUM			M	M332A
RACOMITRIUM	MICROCARPON			M	M332A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
RACOMITRIUM	OCCIDENTALE			M	M332A
RACOMITRIUM	SUDETICUM			M	M332A
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M332A
RHIZOMNIUM	PUNCTATUM			M	M332A
RHODOBRYUM	ROSEUM			M	M332A
RHYTIDIADELPHUS	TRIQUETRUS			M	M332A
RHYTIDIOPSIS	ROBUSTA			M	M332A
ROELLIA	ROELLII			M	M332A
SANIONIA	UNCINATA			M	M332A
SANIONIA	UNCINATA	V	SYMMETRICA	M	M332A
SANIONIA	UNCINATA	V	UNCINATA	M	M332A
SCHISTIDIUM	APOCARPUM			M	M332A
SCHISTIDIUM	RIVULARE			M	M332A
SCHISTIDIUM	RIVULARE	V	LATIFOLIUM	M	M332A
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M332A
SCLEROPODIUM	OBTUSIFOLIUM			M	M332A
SCOULERIA	AQUATICA			M	M332A
SCOULERIA	MARGINATA			M	M332A
SPHAGNUM	FIMBRIATUM			M	M332A
SPHAGNUM	MENDOCINUM			M	M332A
SPHAGNUM	RUSSOWII			M	M332A
SPHAGNUM	SQUARROSUM			M	M332A
SPHAGNUM	SUBSECUNDUM			M	M332A
SPHAGNUM	TERES			M	M332A
SPHAGNUM	WARNSTORFII			M	M332A
TAYLORIA	ACUMINATA			M	M332A
TAYLORIA	SPLACHNOIDES			M	M332A
TETRAPHIS	PELLUCIDA			M	M332A
THAMNOBRYUM	NECKEROIDES			M	M332A
TIMMIA	AUSTRIACA			M	M332A
TORTULA	BARTRAMII			M	M332A
TORTULA	NORVEGICA			M	M332A
TORTULA	PRINCEPS			M	M332A
TORTULA	RURALIS			M	M332A
TRACHYBRYUM	MEGAPTILUM			M	M332A
TRICHODON	CYLINDRICUS			M	M332A
WARNSTORFIA	EXANNULATA			M	M332A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANASTROPHYLLUM	HELLERANUM			H	M332B
ANASTROPHYLLUM	MINUTUM			H	M332B
ANEURA	PINGUIS			H	M332B
BARBILOPHOZIA	ATLANTICA			H	M332B
BARBILOPHOZIA	BARBATA			H	M332B
BARBILOPHOZIA	HATCHERI			H	M332B
BARBILOPHOZIA	KUNZEANA			H	M332B
BARBILOPHOZIA	LYCOPODIOIDES			H	M332B
BLASIA	PUSILLA			H	M332B
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332B
BLEPHAROSTOMA	TRICHOPHYLLUM	S	BREVIRETE	H	M332B
CALYPOGEIA	AZUREA			H	M332B
CALYPOGEIA	INTEGRISTIPULA			H	M332B
CALYPOGEIA	MUELLERIANA			H	M332B
CALYPOGEIA	SPHAGNICOLA			H	M332B
CALYPOGEIA	SUECICA			H	M332B
CEPHALOZIA	BICUSPIDATA			H	M332B
CEPHALOZIA	CONNIVENS			H	M332B
CEPHALOZIA	LACINULATA			H	M332B
CEPHALOZIA	LOITLESBERGERI			H	M332B
CEPHALOZIA	LUNULIFOLIA			H	M332B
CEPHALOZIA	MACOUNII			H	M332B
CEPHALOZIA	PLENICEPS			H	M332B
CEPHALOZIELLA	DIVARICATA			H	M332B
CEPHALOZIELLA	HAMPEANA			H	M332B
CEPHALOZIELLA	RUBELLA			H	M332B
CHILOSCYPHUS	PALLESCENS			H	M332B
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	M332B
CHILOSCYPHUS	POLYANTHOS			H	M332B
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M332B
CONOCEPHALUM	CONICUM			H	M332B
DIPLOPHYLLUM	TAXIFOLIUM			H	M332B
GEOCALYX	GRAVEOLENS			H	M332B
JAMESONIELLA	AUTUMNALIS			H	M332B
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M332B
JUNGERMANNIA	HYALINA			H	M332B
JUNGERMANNIA	LEIANTHA			H	M332B
JUNGERMANNIA	PUMILA			H	M332B
JUNGERMANNIA	SPHAEROCARPA			H	M332B
LEPIDOZIA	REPTANS			H	M332B
LOPHOCOLEA	CUSPIDATA			H	M332B
LOPHOCOLEA	HETEROPHYLLA			H	M332B
LOPHOCOLEA	MINOR			H	M332B
LOPHOZIA	ASCENDENS			H	M332B
LOPHOZIA	BADENSIS			H	M332B
LOPHOZIA	BANTRIENSIS			H	M332B
LOPHOZIA	COLLARIS			H	M332B
LOPHOZIA	EXCISA			H	M332B
LOPHOZIA	GILLMANII			H	M332B
LOPHOZIA	HETEROCOLPOS			H	M332B
LOPHOZIA	INCISA			H	M332B
LOPHOZIA	LONGIDENS			H	M332B
LOPHOZIA	LONGIFLORA			H	M332B
LOPHOZIA	OBTUSA			H	M332B
LOPHOZIA	VENTRICOSA			H	M332B
MARCHANTIA	POLYMORPHA			H	M332B
MARSUPELLA	EMARGINATA			H	M332B
NARDIA	COMPRESSA			H	M332B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
PELLIA	ENDIVIFOLIA			H	M332B
PELLIA	EPIPHYLLA			H	M332B
PELLIA	NEESIANA			H	M332B
PLAGIOCHILA	PORELLOIDES			H	M332B
PORELLA	CORDAEANA			H	M332B
PORELLA	ROELLII			H	M332B
PTILIDIUM	CILIARE			H	M332B
PTILIDIUM	PULCHERRIMUM			H	M332B
RADULA	COMPLANATA			H	M332B
RICCARDIA	LATIFRONS			H	M332B
RICCARDIA	PALMATA			H	M332B
SCAPANIA	CURTA			H	M332B
SCAPANIA	GLAUCOCEPHALA			H	M332B
SCAPANIA	IRRIGUA			H	M332B
SCAPANIA	MUCRONATA			H	M332B
SCAPANIA	NEMOROSA			H	M332B
SCAPANIA	PALUDOSA			H	M332B
SCAPANIA	SUBALPINA			H	M332B
SCAPANIA	UMBROSA			H	M332B
SCAPANIA	UNDULATA			H	M332B
TRITOMARIA	EXSECTA			H	M332B
TRITOMARIA	EXSECTIFORMIS			H	M332B
TRITOMARIA	POLITA			H	M332B
TRITOMARIA	QUINQUEDENTATA			H	M332B
TRITOMARIA	SCITULA			H	M332B
ABIETINELLA	ABIETINA			M	M332B
ANDREAEA	RUPESTRIS			M	M332B
ATRICHUM	SELWYNII			M	M332B
BRACHYTHECIUM	ALBICANS			M	M332B
BRACHYTHECIUM	COLLINUM			M	M332B
BRACHYTHECIUM	ERYTHRORRHIZON			M	M332B
BRACHYTHECIUM	FRIGIDUM			M	M332B
BRACHYTHECIUM	HYLOTAPETUM			M	M332B
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332B
BRYUM	CAESPITICIUM			M	M332B
BRYUM	PALLESCENS			M	M332B
BRYUM	ULIGINOSUM			M	M332B
BRYUM	WEIGELII			M	M332B
CAMPYLIUM	CHRYSOPHYLLUM			M	M332B
CERATODON	PURPUREUS			M	M332B
CLIMACIUM	DENDROIDES			M	M332B
COSCINODON	CALYPTRATUS			M	M332B
CRATONEURON	FILICINUM			M	M332B
DICRANOWEISIA	CRISPULA			M	M332B
DICRANUM	ACUTIFOLIUM			M	M332B
DICRANUM	BONJEANII			M	M332B
DICRANUM	MUEHLENBECKII			M	M332B
DICRANUM	SCOPARIUM			M	M332B
DICRANUM	TAURICUM			M	M332B
DIDYMODON	RIGIDULUS	V	GRACILIS	M	M332B
DIDYMODON	TOPHACEUS			M	M332B
DISTICHIUM	CAPILLACEUM			M	M332B
ENCALYPTA	VULGARIS			M	M332B
EUCLADIUM	VERTICILLATUM			M	M332B
EURHYNCHIUM	PULCHELLUM			M	M332B
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M332B
FISSIDENS	FONTANUS			M	M332B
FISSIDENS	GRANDIFRONS			M	M332B
FUNARIA	HYGROMETRICA			M	M332B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
GRIMMIA	AFFINIS			M	M332B
GRIMMIA	ANODON			M	M332B
GRIMMIA	INCURVA			M	M332B
GRIMMIA	MONTANA			M	M332B
HOMALOTHECIUM	AENEUM			M	M332B
HOMALOTHECIUM	NEVADENSE			M	M332B
HYGROAMBLYSTEGIUM	TENAX			M	M332B
HYGROHYPNUM	BESTII			M	M332B
HYGROHYPNUM	LURIDUM			M	M332B
HYLOCOMIUM	SPLENDENS			M	M332B
HYMENOSTYLIUM	RECURVIROSTRE			M	M332B
HYPNUM	CUPRESSIFORME			M	M332B
HYPNUM	LINDBERGII			M	M332B
HYPNUM	PALLESCENS			M	M332B
HYPNUM	REVOLUTUM			M	M332B
HYPNUM	SUBIMPONENS			M	M332B
LEPTOBRYUM	PYRIFORME			M	M332B
LEPTODICTYUM	RIPARIUM			M	M332B
MNIUM	BLYTTII			M	M332B
ORTHOTRICHUM	AFFINE			M	M332B
ORTHOTRICHUM	ALPESTRE			M	M332B
ORTHOTRICHUM	ANOMALUM			M	M332B
ORTHOTRICHUM	LAEVIGATUM			M	M332B
ORTHOTRICHUM	RUPESTRE			M	M332B
PHILONOTIS	FONTANA			M	M332B
PLAGIOMNIUM	ELLIPTICUM			M	M332B
PLAGIOMNIUM	MEDIUM			M	M332B
PLAGIOMNIUM	ROSTRATUM			M	M332B
PLAGIOMNIUM	VENUSTUM			M	M332B
POHLIA	CRUDA			M	M332B
POHLIA	NUTANS			M	M332B
POHLIA	WAHLENBERGII			M	M332B
POLYTRICHUM	COMMUNE	V	COMMUNE	M	M332B
POLYTRICHUM	FORMOSUM			M	M332B
POLYTRICHUM	JUNIPERINUM			M	M332B
POLYTRICHUM	LYALLII			M	M332B
POROTRICHUM	BIGELOVII			M	M332B
PSEUDOLESKEELLA	TECTORUM			M	M332B
PTERIGYNANDRUM	FILIFORME			M	M332B
PTERYGONEURUM	OVATUM			M	M332B
PTILIUM	CRISTA-CASTRENSIS			M	M332B
RACOMITRIUM	HETEROSTICHUM			M	M332B
RHYTIDIADELPHUS	TRIQUETRUS			M	M332B
ROELLIA	ROELLII			M	M332B
SANIONIA	UNCINATA			M	M332B
SCHISTIDIUM	APOCARPUM			M	M332B
SCOULERIA	AQUATICA			M	M332B
SPHAGNUM	COMPACTUM			M	M332B
SPHAGNUM	FIMBRIATUM			M	M332B
SPHAGNUM	MAGELLANICUM			M	M332B
SPHAGNUM	RIPARIUM			M	M332B
SPHAGNUM	RUSSOWII			M	M332B
TETRAPHIS	PELLUCIDA			M	M332B
~~TETRAPLODON~~	~~ANGUSTATUS~~			M	M332B
TIMMIA	AUSTRIACA			M	M332B
TIMMIA	MEGAPOLITANA			M	M332B
TOMENTHYPNUM	NITENS			M	M332B
TORTELLA	FRAGILIS			M	M332B
TORTELLA	TORTUOSA			M	M332B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
TORTULA	MUCRONIFOLIA			M	M332B
TORTULA	RURALIS			M	M332B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ASTERELLA	LUDWIGII			H	M332E
CHILOSCYPHUS	POLYANTHOS			H	M332E
JAMESONIELLA	AUTUMNALIS			H	M332E
RICCIA	FLUITANS			H	M332E
AULACOMNIUM	PALUSTRE			M	M332E
BRACHYTHECIUM	COLLINUM			M	M332E
BRACHYTHECIUM	HYLOTAPETUM			M	M332E
BRACHYTHECIUM	SALEBROSUM			M	M332E
BRYUM	ALGOVICUM			M	M332E
BRYUM	ARGENTEUM			M	M332E
BRYUM	CAESPITICIUM			M	M332E
BRYUM	LISAE	V	CUSPIDATUM	M	M332E
CONARDIA	COMPACTA			M	M332E
COSCINODON	CALYPTRATUS			M	M332E
CRATONEURON	FILICINUM			M	M332E
DICRANOWEISIA	CRISPULA			M	M332E
DISTICHIUM	CAPILLACEUM			M	M332E
DREPANOCLADUS	ADUNCUS			M	M332E
ENCALYPTA	INTERMEDIA			M	M332E
ENCALYPTA	RHAPTOCARPA			M	M332E
ENCALYPTA	VULGARIS			M	M332E
FONTINALIS	HYPNOIDES	V	DURIAEI	M	M332E
FUNARIA	HYGROMETRICA			M	M332E
GRIMMIA	ANODON			M	M332E
HYGROHYPNUM	LURIDUM			M	M332E
HYGROHYPNUM	OCHRACEUM			M	M332E
HYPNUM	REVOLUTUM			M	M332E
LEPTODICTYUM	HUMILE			M	M332E
LEPTODICTYUM	RIPARIUM			M	M332E
ORTHOTRICHUM	CUPULATUM			M	M332E
ORTHOTRICHUM	HALLII			M	M332E
ORTHOTRICHUM	LAEVIGATUM			M	M332E
ORTHOTRICHUM	PELLUCIDUM			M	M332E
PLAGIOMNIUM	INSIGNE			M	M332E
POHLIA	ANNOTINA			M	M332E
POHLIA	NUTANS			M	M332E
POHLIA	PROLIGERA			M	M332E
PSEUDOLESKEELLA	TECTORUM			M	M332E
PTERYGONEURUM	OVATUM			M	M332E
TETRAPHIS	PELLUCIDA			M	M332E
TIMMIA	AUSTRIACA			M	M332E
TIMMIA	MEGAPOLITANA	V	BAVARICA	M	M332E
TORTELLA	FRAGILIS			M	M332E
TORTELLA	TORTUOSA			M	M332E

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ATHALAMIA	HYALINA			H	M332F
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332F
CHILOSCYPHUS	POLYANTHOS			H	M332F
AULACOMNIUM	PALUSTRE			M	M332F
BRACHYTHECIUM	ERYTHRORRHIZON			M	M332F
BRACHYTHECIUM	FRIGIDUM			M	M332F
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M332F
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332F
BRYUM	LISAE	V	CUSPIDATUM	M	M332F
BRYUM	MUEHLENBECKII			M	M332F
BRYUM	PSEUDOTRIQUETRUM			M	M332F
COSCINODON	CALYPTRATUS			M	M332F
CRATONEURON	FILICINUM			M	M332F
DICRANOWEISIA	CRISPULA			M	M332F
DISTICHIUM	CAPILLACEUM			M	M332F
DREPANOCLADUS	ADUNCUS			M	M332F
ENCALYPTA	INTERMEDIA			M	M332F
ENCALYPTA	RHAPTOCARPA			M	M332F
FUNARIA	HYGROMETRICA			M	M332F
GRIMMIA	TENERRIMA			M	M332F
HAMATOCAULIS	VERNICOSUS			M	M332F
HYGROHYPNUM	LURIDUM			M	M332F
HYGROHYPNUM	STYRIACUM			M	M332F
HYPNUM	REVOLUTUM			M	M332F
LEPTOBRYUM	PYRIFORME			M	M332F
ONCOPHORUS	VIRENS			M	M332F
ORTHOTRICHUM	LAEVIGATUM			M	M332F
ORTHOTRICHUM	RUPESTRE			M	M332F
PALUSTRIELLA	COMMUTATA			M	M332F
PALUSTRIELLA	DECIPIENS			M	M332F
PHILONOTIS	FONTANA			M	M332F
POHLIA	FILUM			M	M332F
POTTIA	LANCEOLATA			M	M332F
PSEUDOLESKEA	PATENS			M	M332F
SCOULERIA	AQUATICA			M	M332F
TORTULA	RURALIS			M	M332F

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANTHOCEROS	PUNCTATUS			A	M332G
ANEURA	PINGUIS			H	M332G
ANTHELIA	JULACEA			H	M332G
ASTERELLA	GRACILIS			H	M332G
ASTERELLA	LINDENBERGIANA			H	M332G
ASTERELLA	SACCATA			H	M332G
ATHALAMIA	HYALINA			H	M332G
BARBILOPHOZIA	HATCHERI			H	M332G
BARBILOPHOZIA	LYCOPODIOIDES			H	M332G
BLASIA	PUSILLA			H	M332G
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332G
CALYPOGEIA	AZUREA			H	M332G
CALYPOGEIA	SUECICA			H	M332G
CEPHALOZIA	BICUSPIDATA	S	LAMMERSIANA	H	M332G
CEPHALOZIA	LUNULIFOLIA			H	M332G
CEPHALOZIA	PLENICEPS			H	M332G
CEPHALOZIELLA	DIVARICATA			H	M332G
CHILOSCYPHUS	PALLESCENS			H	M332G
CHILOSCYPHUS	POLYANTHOS			H	M332G
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M332G
CONOCEPHALUM	CONICUM			H	M332G
FOSSOMBRONIA	FOVEOLATA			H	M332G
FOSSOMBRONIA	LONGISETA			H	M332G
FRULLANIA	TAMARISCI	S	NISQUALLENSIS	H	M332G
JAMESONIELLA	AUTUMNALIS			H	M332G
JUNGERMANNIA	EXSERTIFOLIA			H	M332G
JUNGERMANNIA	LEIANTHA			H	M332G
LEPIDOZIA	REPTANS			H	M332G
LOPHOCOLEA	CUSPIDATA			H	M332G
LOPHOCOLEA	MINOR			H	M332G
LOPHOZIA	ASCENDENS			H	M332G
LOPHOZIA	BANTRIENSIS			H	M332G
LOPHOZIA	COLLARIS			H	M332G
LOPHOZIA	EXCISA			H	M332G
LOPHOZIA	HETEROCOLPOS			H	M332G
LOPHOZIA	INCISA			H	M332G
LOPHOZIA	LONGIFLORA			H	M332G
LOPHOZIA	OBTUSA			H	M332G
LOPHOZIA	VENTRICOSA			H	M332G
MARCHANTIA	POLYMORPHA			H	M332G
NARDIA	GEOSCYPHUS			H	M332G
PELLIA	ENDIVIIFOLIA			H	M332G
PELLIA	EPIPHYLLA			H	M332G
PORELLA	CORDAEANA			H	M332G
PREISSIA	QUADRATA			H	M332G
PTILIDIUM	PULCHERRIMUM			H	M332G
RADULA	COMPLANATA			H	M332G
REBOULIA	HEMISPHAERICA			H	M332G
RICCARDIA	LATIFRONS			H	M332G
RICCARDIA	MULTIFIDA			H	M332G
RICCIA	BEYRICHIANA			H	M332G
RICCIA	GLAUCA			H	M332G
RICCIA	SOROCARPA			H	M332G
SCAPANIA	IRRIGUA			H	M332G
SCAPANIA	UNDULATA			H	M332G
TARGIONIA	HYPOPHYLLA			H	M332G
AMBLYSTEGIUM	SERPENS			M	M332G
ANOMODON	VITICULOSUS			M	M332G

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANTITRICHIA	CALIFORNICA			M	M332G
ATRICHUM	SELWYNII			M	M332G
ATRICHUM	UNDULATUM			M	M332G
AULACOMNIUM	ANDROGYNUM			M	M332G
AULACOMNIUM	PALUSTRE			M	M332G
BARBULA	CONVOLUTA			M	M332G
BARBULA	EUSTEGIA			M	M332G
BARTRAMIA	ITHYPHYLLA			M	M332G
BARTRAMIA	POMIFORMIS			M	M332G
BRACHYTHECIUM	ALBICANS			M	M332G
BRACHYTHECIUM	BOLANDERI			M	M332G
BRACHYTHECIUM	COLLINUM			M	M332G
BRACHYTHECIUM	ERYTHRORRHIZON			M	M332G
BRACHYTHECIUM	FRIGIDUM			M	M332G
BRACHYTHECIUM	GLAREOSUM			M	M332G
BRACHYTHECIUM	HYLOTAPETUM			M	M332G
BRACHYTHECIUM	LEIBERGII			M	M332G
BRACHYTHECIUM	PLUMOSUM			M	M332G
BRACHYTHECIUM	REFLEXUM			M	M332G
BRACHYTHECIUM	RIVULARE			M	M332G
BRACHYTHECIUM	RUTABULUM			M	M332G
BRACHYTHECIUM	SALEBROSUM			M	M332G
BRACHYTHECIUM	VELUTINUM	V	VELUTINUM	M	M332G
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M332G
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332G
BRYUM	AMBLYODON			M	M332G
BRYUM	ARCTICUM			M	M332G
BRYUM	ARGENTEUM			M	M332G
BRYUM	CAESPITICIUM			M	M332G
BRYUM	LISAE	V	CUSPIDATUM	M	M332G
BRYUM	LONCHOCAULON			M	M332G
BRYUM	MINIATUM			M	M332G
BRYUM	MUEHLENBECKII			M	M332G
BRYUM	PALLESCENS			M	M332G
BRYUM	PSEUDOTRIQUETRUM			M	M332G
BUXBAUMIA	PIPERI			M	M332G
BUXBAUMIA	VIRIDIS			M	M332G
CALLIERGON	CORDIFOLIUM			M	M332G
CAMPYLIUM	POLYGAMUM			M	M332G
CERATODON	PURPUREUS			M	M332G
CLAOPODIUM	CRISPIFOLIUM			M	M332G
COSCINODON	CALYPTRATUS			M	M332G
CRATONEURON	FILICINUM			M	M332G
CRUMIA	LATIFOLIA			M	M332G
DESMATODON	LATIFOLIUS			M	M332G
DESMATODON	OBTUSIFOLIUS			M	M332G
DICHELYMA	FALCATUM			M	M332G
DICHODONTIUM	PELLUCIDUM			M	M332G
DICRANELLA	PALUSTRIS			M	M332G
DICRANOWEISIA	CIRRATA			M	M332G
DICRANOWEISIA	CRISPULA			M	M332G
DICRANUM	BONJEANII			M	M332G
DICRANUM	HOWELLII			M	M332G
DICRANUM	POLYSETUM			M	M332G
DICRANUM	SCOPARIUM			M	M332G
DICRANUM	TAURICUM			M	M332G
DIDYMODON	VINEALIS			M	M332G
DIDYMODON	VINEALIS	V	LURIDUS	M	M332G
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	M332G

Genus	Species	Ext	Ext_name	M/H/A	Physprov
DITRICHUM	MONTANUM			M	M332G
DREPANOCLADUS	ADUNCUS			M	M332G
DRYPTODON	PATENS			M	M332G
ENCALYPTA	VULGARIS			M	M332G
EURHYNCHIUM	OREGANUM			M	M332G
EURHYNCHIUM	PRAELONGUM			M	M332G
EURHYNCHIUM	PULCHELLUM			M	M332G
FABRONIA	PUSILLA			M	M332G
FISSIDENS	BRYOIDES			M	M332G
FONTINALIS	ANTIPYRETICA			M	M332G
FONTINALIS	HOWELLII			M	M332G
FONTINALIS	NEOMEXICANA			M	M332G
FUNARIA	HYGROMETRICA			M	M332G
GRIMMIA	LAEVIGATA			M	M332G
GRIMMIA	MONTANA			M	M332G
GRIMMIA	OVALIS			M	M332G
GRIMMIA	PULVINATA			M	M332G
GRIMMIA	TENERRIMA			M	M332G
GRIMMIA	TORQUATA			M	M332G
GRIMMIA	TRICHOPHYLLA	V	TENUIS	M	M332G
HEDWIGIA	CILIATA			M	M332G
HERZOGIELLA	SELIGERI			M	M332G
HETEROCLADIUM	PROCURRENS			M	M332G
HOMALOTHECIUM	AENEUM			M	M332G
HOMALOTHECIUM	ARENARIUM			M	M332G
HOMALOTHECIUM	FULGESCENS			M	M332G
HOMALOTHECIUM	NEVADENSE			M	M332G
HOMALOTHECIUM	NUTTALLII			M	M332G
HOMALOTHECIUM	PINNATIFIDUM			M	M332G
HOOKERIA	LUCENS			M	M332G
HYGROHYPNUM	LURIDUM			M	M332G
HYGROHYPNUM	OCHRACEUM			M	M332G
HYPNUM	IMPONENS			M	M332G
HYPNUM	SUBIMPONENS			M	M332G
ISOPTERYGIOPSIS	PULCHELLA			M	M332G
ISOTHECIUM	CRISTATUM			M	M332G
ISOTHECIUM	MYOSUROIDES			M	M332G
JAFFUELIOBRYUM	RAUI			M	M332G
LEPTOBRYUM	PYRIFORME			M	M332G
LEPTODICTYUM	RIPARIUM			M	M332G
LESKEA	POLYCARPA			M	M332G
METANECKERA	MENZIESII			M	M332G
MNIUM	BLYTTII			M	M332G
MNIUM	MARGINATUM			M	M332G
MNIUM	SPINULOSUM			M	M332G
MNIUM	THOMSONII			M	M332G
ORTHOTRICHUM	AFFINE			M	M332G
ORTHOTRICHUM	CUPULATUM			M	M332G
ORTHOTRICHUM	HOLZINGERI			M	M332G
ORTHOTRICHUM	LAEVIGATUM			M	M332G
ORTHOTRICHUM	LYELLII			M	M332G
ORTHOTRICHUM	OBTUSIFOLIUM			M	M332G
ORTHOTRICHUM	PULCHELLUM			M	M332G
ORTHOTRICHUM	RIVULARE			M	M332G
ORTHOTRICHUM	RUPESTRE			M	M332G
ORTHOTRICHUM	SPECIOSUM			M	M332G
ORTHOTRICHUM	STRIATUM			M	M332G
PHILONOTIS	CAPILLARIS			M	M332G
PHILONOTIS	FONTANA			M	M332G

Genus	Species	Ext	Ext_name	M/H/A	Physprov
PHILONOTIS	FONTANA	V	AMERICANA	M	M332G
PLAGIOMNIUM	AFFINE			M	M332G
PLAGIOMNIUM	CUSPIDATUM			M	M332G
PLAGIOMNIUM	ELLIPTICUM			M	M332G
PLAGIOMNIUM	MEDIUM			M	M332G
PLAGIOMNIUM	ROSTRATUM			M	M332G
PLEUROZIUM	SCHREBERI			M	M332G
POHLIA	ANNOTINA			M	M332G
POHLIA	CRUDA			M	M332G
POHLIA	ELONGATA			M	M332G
POHLIA	LESCURIANA			M	M332G
POHLIA	NUTANS			M	M332G
POHLIA	PROLIGERA			M	M332G
POHLIA	WAHLENBERGII			M	M332G
POLYTRICHASTRUM	ALPINUM			M	M332G
POLYTRICHUM	COMMUNE			M	M332G
POLYTRICHUM	JUNIPERINUM			M	M332G
POLYTRICHUM	LYALLII			M	M332G
POLYTRICHUM	PILIFERUM			M	M332G
POROTRICHUM	VANCOUVERIENSE			M	M332G
POTTIA	INTERMEDIA			M	M332G
PSEUDOBRAUNIA	CALIFORNICA			M	M332G
PSEUDOCROSSIDIUM	REVOLUTUM			M	M332G
PSEUDOLESKEA	INCURVATA			M	M332G
PSEUDOLESKEA	INCURVATA	V	GIGANTEA	M	M332G
PSEUDOLESKEA	PATENS			M	M332G
PSEUDOLESKEA	RADICOSA			M	M332G
PSEUDOLESKEELLA	TECTORUM			M	M332G
PTERIGYNANDRUM	FILIFORME			M	M332G
PTYCHOMITRIUM	GARDNERI			M	M332G
RACOMITRIUM	BREVIPES			M	M332G
RACOMITRIUM	ERICOIDES			M	M332G
RHIZOMNIUM	GLABRESCENS			M	M332G
RHIZOMNIUM	MAGNIFOLIUM			M	M332G
RHIZOMNIUM	NUDUM			M	M332G
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M332G
RHODOBRYUM	ONTARIENSE			M	M332G
RHODOBRYUM	ROSEUM			M	M332G
RHYTIDIADELPHUS	TRIQUETRUS			M	M332G
RHYTIDIOPSIS	ROBUSTA			M	M332G
ROELLIA	ROELLII			M	M332G
SANIONIA	UNCINATA			M	M332G
SCHISTIDIUM	AGASSIZII			M	M332G
SCHISTIDIUM	APOCARPUM			M	M332G
SCHISTIDIUM	CINCLIDODONTEUM			M	M332G
SCHISTIDIUM	MARITIMUM			M	M332G
SCHISTIDIUM	OCCIDENTALE			M	M332G
SCHISTIDIUM	RIVULARE			M	M332G
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M332G
SCHISTIDIUM	TENERUM			M	M332G
SCLEROPODIUM	CESPITANS			M	M332G
SCLEROPODIUM	OBTUSIFOLIUM			M	M332G
SCOULERIA	AQUATICA			M	M332G
SPHAGNUM	CAPILLIFOLIUM			M	M332G
SPHAGNUM	GIRGENSOHNII			M	M332G
SPHAGNUM	RUSSOWII			M	M332G
SPHAGNUM	SQUARROSUM			M	M332G
TETRAPHIS	PELLUCIDA			M	M332G
THAMNOBRYUM	ALLEGHANIENSE			M	M332G

Genus	Species	Ext	Ext_name	M/H/A	Physprov
TIMMIA	AUSTRIACA			M	M332G
TORTELLA	TORTUOSA			M	M332G
TORTULA	NORVEGICA			M	M332G
TORTULA	PRINCEPS			M	M332G
TORTULA	RURALIS			M	M332G
TRICHODON	CYLINDRICUS			M	M332G
ULOTA	PHYLLANTHA			M	M332G

Northern Rocky Mountain Forest-Steppe:
coniferous forest, alpine meadow

M333A	Okanogan Highlands (ID, WA)
M333B	Flathead Valley (ID, MT)
M333C	Northern Rockies (MT)
M333D	Bitterroot Mountains (ID, MT, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANTHOCEROS	PUNCTATUS			A	M333A
ANASTROPHYLLUM	HELLERANUM			H	M333A
ANASTROPHYLLUM	MICHAUXII			H	M333A
ANEURA	PINGUIS			H	M333A
ASTERELLA	GRACILIS			H	M333A
ASTERELLA	SACCATA			H	M333A
BARBILOPHOZIA	FLOERKII			H	M333A
BARBILOPHOZIA	HATCHERI			H	M333A
BARBILOPHOZIA	KUNZEANA			H	M333A
BLASIA	PUSILLA			H	M333A
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333A
BLEPHAROSTOMA	TRICHOPHYLLUM	S	TRICHOPHYLLUM	H	M333A
CEPHALOZIA	LEUCANTHA			H	M333A
CEPHALOZIA	LUNULIFOLIA			H	M333A
CEPHALOZIA	PLENICEPS	V	PLENICEPS	H	M333A
CEPHALOZIELLA	RUBELLA			H	M333A
CEPHALOZIELLA	RUBELLA	V	RUBELLA	H	M333A
CHILOSCYPHUS	PALLESCENS			H	M333A
CHILOSCYPHUS	PALLESCENS	V	PALLESCENS	H	M333A
CHILOSCYPHUS	POLYANTHOS			H	M333A
CHILOSCYPHUS	POLYANTHOS	V	POLYANTHOS	H	M333A
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M333A
CONOCEPHALUM	CONICUM			H	M333A
DIPLOPHYLLUM	ALBICANS			H	M333A
GEOCALYX	GRAVEOLENS			H	M333A
GYMNOMITRION	CONCINNATUM			H	M333A
JAMESONIELLA	AUTUMNALIS			H	M333A
JAMESONIELLA	AUTUMNALIS	V	AUTUMNALIS	H	M333A
JUNGERMANNIA	ATROVIRENS			H	M333A
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333A
JUNGERMANNIA	LEIANTHA			H	M333A
JUNGERMANNIA	OBOVATA			H	M333A
LEPIDOZIA	REPTANS			H	M333A
LOPHOCOLEA	HETEROPHYLLA			H	M333A
LOPHOCOLEA	MINOR			H	M333A
LOPHOZIA	ASCENDENS			H	M333A
LOPHOZIA	COLLARIS			H	M333A
LOPHOZIA	EXCISA	V	EXCISA	H	M333A
LOPHOZIA	HETEROCOLPOS			H	M333A
LOPHOZIA	HETEROCOLPOS	V	HETEROCOLPOS	H	M333A
LOPHOZIA	INCISA			H	M333A
LOPHOZIA	INCISA	V	INCISA	H	M333A
LOPHOZIA	LONGIDENS			H	M333A
LOPHOZIA	LONGIDENS	S	LONGIDENS	H	M333A
LOPHOZIA	LONGIFLORA			H	M333A
LOPHOZIA	VENTRICOSA			H	M333A
LOPHOZIA	VENTRICOSA	V	LONGIFLORA	H	M333A
LOPHOZIA	VENTRICOSA	V	SILVICOLA	H	M333A
LOPHOZIA	VENTRICOSA	V	VENTRICOSA	H	M333A
LOPHOZIA	WENZELII	V	WENZELII	H	M333A
MARCHANTIA	POLYMORPHA			H	M333A
MARSUPELLA	EMARGINATA			H	M333A
PELLIA	ENDIVIIFOLIA			H	M333A
PELLIA	EPIPHYLLA			H	M333A
PLAGIOCHILA	PORELLOIDES			H	M333A
PORELLA	CORDAEANA			H	M333A
PORELLA	NAVICULARIS			H	M333A
PORELLA	PLATYPHYLLA			H	M333A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
PORELLA	ROELLII			H	M333A
PTILIDIUM	CALIFORNICUM			H	M333A
PTILIDIUM	CILIARE			H	M333A
PTILIDIUM	PULCHERRIMUM			H	M333A
RADULA	COMPLANATA			H	M333A
RICCARDIA	LATIFRONS			H	M333A
RICCARDIA	MULTIFIDA	V	MULTIFIDA	H	M333A
RICCARDIA	PALMATA			H	M333A
SCAPANIA	CURTA			H	M333A
SCAPANIA	CUSPIDULIGERA	V	CUSPIDULIGERA	H	M333A
SCAPANIA	MUCRONATA	S	MUCRONATA	H	M333A
SCAPANIA	UMBROSA			H	M333A
SCAPANIA	UNDULATA			H	M333A
SCAPANIA	UNDULATA	V	UNDULATA	H	M333A
TRITOMARIA	EXSECTA			H	M333A
TRITOMARIA	EXSECTIFORMIS	S	EXSECTIFORMIS	H	M333A
AMBLYSTEGIUM	SERPENS			M	M333A
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M333A
AMPHIDIUM	LAPPONICUM			M	M333A
AMPHIDIUM	MOUGEOTII			M	M333A
ANACOLIA	MENZIESII			M	M333A
ANDREAEA	RUPESTRIS			M	M333A
ANTITRICHIA	CALIFORNICA			M	M333A
ANTITRICHIA	CURTIPENDULA			M	M333A
ATRICHUM	CRISPUM			M	M333A
ATRICHUM	SELWYNII			M	M333A
ATRICHUM	UNDULATUM			M	M333A
AULACOMNIUM	ANDROGYNUM			M	M333A
AULACOMNIUM	PALUSTRE			M	M333A
BARTRAMIA	POMIFORMIS			M	M333A
BRACHYTHECIUM	ALBICANS			M	M333A
BRACHYTHECIUM	ERYTHRORRHIZON			M	M333A
BRACHYTHECIUM	FRIGIDUM			M	M333A
BRACHYTHECIUM	HYLOTAPETUM			M	M333A
BRACHYTHECIUM	LEIBERGII			M	M333A
BRACHYTHECIUM	NELSONII			M	M333A
BRACHYTHECIUM	PLUMOSUM			M	M333A
BRACHYTHECIUM	RIVULARE			M	M333A
BRACHYTHECIUM	RUTABULUM			M	M333A
BRACHYTHECIUM	SALEBROSUM			M	M333A
BRACHYTHECIUM	STARKEI			M	M333A
BRACHYTHECIUM	VELUTINUM	V	VELUTINUM	M	M333A
BRYUM	ARGENTEUM			M	M333A
BRYUM	CAESPITICIUM			M	M333A
BRYUM	LISAE	V	CUSPIDATUM	M	M333A
BRYUM	LONCHOCAULON			M	M333A
BRYUM	PSEUDOTRIQUETRUM			M	M333A
BRYUM	TURBINATUM			M	M333A
BRYUM	WEIGELII			M	M333A
BUXBAUMIA	APHYLLA			M	M333A
CALLIERGON	CORDIFOLIUM			M	M333A
CALLIERGON	GIGANTEUM			M	M333A
CALLIERGON	STRAMINEUM			M	M333A
CERATODON	PURPUREUS			M	M333A
CLAOPODIUM	BOLANDERI			M	M333A
CLIMACIUM	AMERICANUM			M	M333A
CLIMACIUM	DENDROIDES			M	M333A
CONARDIA	COMPACTA			M	M333A
COSCINODON	CALYPTRATUS			M	M333A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
CRATONEURON	FILICINUM			M	M333A
CYNODONTIUM	POLYCARPON			M	M333A
DESMATODON	LATIFOLIUS			M	M333A
DICHODONTIUM	PELLUCIDUM			M	M333A
DICRANELLA	CRISPA			M	M333A
DICRANELLA	GREVILLEANA			M	M333A
DICRANELLA	SUBULATA			M	M333A
DICRANUM	BONJEANII			M	M333A
DICRANUM	FUSCESCENS			M	M333A
DICRANUM	HOWELLII			M	M333A
DICRANUM	MAJUS			M	M333A
DICRANUM	POLYSETUM			M	M333A
DICRANUM	SCOPARIUM			M	M333A
DICRANUM	TAURICUM			M	M333A
DIDYMODON	FALLAX			M	M333A
DIDYMODON	VINEALIS			M	M333A
DIDYMODON	VINEALIS	V	VINEALIS	M	M333A
DISTICHIUM	CAPILLACEUM			M	M333A
DREPANOCLADUS	ADUNCUS			M	M333A
DREPANOCLADUS	CAPILLIFOLIUS			M	M333A
DRYPTODON	PATENS			M	M333A
ENCALYPTA	CILIATA			M	M333A
ENCALYPTA	RHAPTOCARPA			M	M333A
ENCALYPTA	VULGARIS			M	M333A
EURHYNCHIUM	OREGANUM			M	M333A
EURHYNCHIUM	PRAELONGUM			M	M333A
EURHYNCHIUM	PULCHELLUM			M	M333A
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333A
FISSIDENS	ADIANTHOIDES			M	M333A
FISSIDENS	BRYOIDES			M	M333A
FISSIDENS	GRANDIFRONS			M	M333A
FISSIDENS	HALLIANUS			M	M333A
FISSIDENS	VENTRICOSUS			M	M333A
FONTINALIS	ANTIPYRETICA			M	M333A
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M333A
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M333A
FONTINALIS	HYPNOIDES			M	M333A
FONTINALIS	NEOMEXICANA			M	M333A
FUNARIA	HYGROMETRICA			M	M333A
GRIMMIA	DONNIANA			M	M333A
GRIMMIA	LAEVIGATA			M	M333A
GRIMMIA	MONTANA			M	M333A
GRIMMIA	OVALIS			M	M333A
GRIMMIA	PULVINATA			M	M333A
GRIMMIA	TENERRIMA			M	M333A
GRIMMIA	TORQUATA			M	M333A
GRIMMIA	TRICHOPHYLLA			M	M333A
GYMNOSTOMUM	AERUGINOSUM			M	M333A
HAMATOCAULIS	VERNICOSUS			M	M333A
HEDWIGIA	CILIATA			M	M333A
HELODIUM	BLANDOWII			M	M333A
HERZOGIELLA	SELIGERI			M	M333A
HETEROCLADIUM	MACOUNII			M	M333A
HETEROCLADIUM	PROCURRENS			M	M333A
HOMALOTHECIUM	AENEUM			M	M333A
HOMALOTHECIUM	FULGESCENS			M	M333A
HOMALOTHECIUM	NEVADENSE			M	M333A
HOMALOTHECIUM	PINNATIFIDUM			M	M333A
HYGROHYPNUM	ALPINUM			M	M333A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
HYGROHYPNUM	BESTII			M	M333A
HYGROHYPNUM	LURIDUM			M	M333A
HYGROHYPNUM	OCHRACEUM			M	M333A
HYLOCOMIUM	SPLENDENS			M	M333A
HYMENOSTYLIUM	RECURVIROSTRE			M	M333A
HYPNUM	CIRCINALE			M	M333A
HYPNUM	PRATENSE			M	M333A
ISOPTERYGIOPSIS	PULCHELLA			M	M333A
KIAERIA	STARKEI			M	M333A
LEPTOBRYUM	PYRIFORME			M	M333A
LESKEELLA	NERVOSA			M	M333A
LEUCOLEPIS	ACANTHONEURON			M	M333A
METANECKERA	MENZIESII			M	M333A
MNIUM	AMBIGUUM			M	M333A
MNIUM	MARGINATUM			M	M333A
MNIUM	SPINULOSUM			M	M333A
ORTHOTRICHUM	AFFINE			M	M333A
ORTHOTRICHUM	ALPESTRE			M	M333A
ORTHOTRICHUM	CUPULATUM			M	M333A
ORTHOTRICHUM	LAEVIGATUM			M	M333A
ORTHOTRICHUM	LYELLII			M	M333A
ORTHOTRICHUM	OBTUSIFOLIUM			M	M333A
ORTHOTRICHUM	RIVULARE			M	M333A
ORTHOTRICHUM	SPECIOSUM			M	M333A
PALUSTRIELLA	COMMUTATA			M	M333A
PHASCUM	CUSPIDATUM			M	M333A
PHILONOTIS	FONTANA			M	M333A
PHILONOTIS	FONTANA	V	PUMILA	M	M333A
PLAGIOMNIUM	ELLIPTICUM			M	M333A
PLAGIOMNIUM	INSIGNE			M	M333A
PLAGIOMNIUM	MEDIUM			M	M333A
PLAGIOMNIUM	ROSTRATUM			M	M333A
PLAGIOMNIUM	VENUSTUM			M	M333A
PLAGIOTHECIUM	DENTICULATUM			M	M333A
PLAGIOTHECIUM	LAETUM			M	M333A
PLAGIOTHECIUM	PILIFERUM			M	M333A
PLAGIOTHECIUM	UNDULATUM			M	M333A
PLATYDICTYA	JUNGERMANNIOIDES			M	M333A
PLEUROZIUM	SCHREBERI			M	M333A
POGONATUM	DENTATUM			M	M333A
POGONATUM	URNIGERUM			M	M333A
POHLIA	ATROPURPUREA			M	M333A
POHLIA	CRUDA			M	M333A
POHLIA	NUTANS			M	M333A
POLYTRICHASTRUM	ALPINUM			M	M333A
POLYTRICHUM	COMMUNE			M	M333A
POLYTRICHUM	FORMOSUM			M	M333A
POLYTRICHUM	JUNIPERINUM			M	M333A
POLYTRICHUM	LYALLII			M	M333A
POLYTRICHUM	PILIFERUM			M	M333A
POLYTRICHUM	STRICTUM			M	M333A
POROTRICHUM	BIGELOVII			M	M333A
PSEUDOLESKEA	INCURVATA			M	M333A
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M	M333A
PSEUDOLESKEA	RADICOSA			M	M333A
PSEUDOLESKEA	RADICOSA	V	DENUDATA	M	M333A
PSEUDOLESKEA	STENOPHYLLA			M	M333A
PSEUDOTAXIPHYLLUM	ELEGANS			M	M333A
PTERIGYNANDRUM	FILIFORME			M	M333A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
PTILIUM	CRISTA-CASTRENSIS			M	M333A
RACOMITRIUM	AFFINE			M	M333A
RACOMITRIUM	CANESCENS			M	M333A
RACOMITRIUM	ERICOIDES			M	M333A
RACOMITRIUM	HETEROSTICHUM			M	M333A
RACOMITRIUM	MICROCARPON			M	M333A
RACOMITRIUM	SUDETICUM			M	M333A
RHIZOMNIUM	MAGNIFOLIUM			M	M333A
RHIZOMNIUM	PUNCTATUM			M	M333A
RHYTIDIADELPHUS	LOREUS			M	M333A
RHYTIDIADELPHUS	SQUARROSUS			M	M333A
RHYTIDIADELPHUS	TRIQUETRUS			M	M333A
RHYTIDIOPSIS	ROBUSTA			M	M333A
ROELLIA	ROELLII			M	M333A
SANIONIA	UNCINATA			M	M333A
SANIONIA	UNCINATA	V	SYMMETRICA	M	M333A
SANIONIA	UNCINATA	V	UNCINATA	M	M333A
SCHISTIDIUM	APOCARPUM			M	M333A
SCHISTIDIUM	HETEROPHYLLUM			M	M333A
SCHISTIDIUM	RIVULARE			M	M333A
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M333A
SCLEROPODIUM	OBTUSIFOLIUM			M	M333A
SCLEROPODIUM	TOURETII	V	COLPOPHYLLUM	M	M333A
SCOULERIA	AQUATICA			M	M333A
SCOULERIA	MARGINATA			M	M333A
SPHAGNUM	ANGUSTIFOLIUM			M	M333A
SPHAGNUM	CAPILLIFOLIUM			M	M333A
SPHAGNUM	CENTRALE			M	M333A
SPHAGNUM	CONTORTUM			M	M333A
SPHAGNUM	FIMBRIATUM			M	M333A
SPHAGNUM	FUSCUM			M	M333A
SPHAGNUM	JENSENII			M	M333A
SPHAGNUM	MAGELLANICUM			M	M333A
SPHAGNUM	MENDOCINUM			M	M333A
SPHAGNUM	RIPARIUM			M	M333A
SPHAGNUM	RUBELLUM			M	M333A
SPHAGNUM	RUSSOWII			M	M333A
SPHAGNUM	SQUARROSUM			M	M333A
SPHAGNUM	SUBSECUNDUM			M	M333A
SPHAGNUM	TERES			M	M333A
SPHAGNUM	WARNSTORFII			M	M333A
TAYLORIA	SERRATA			M	M333A
TETRAPHIS	PELLUCIDA			M	M333A
THAMNOBRYUM	NECKEROIDES			M	M333A
TIMMIA	AUSTRIACA			M	M333A
TORTULA	NORVEGICA			M	M333A
TORTULA	PRINCEPS			M	M333A
TORTULA	RURALIS			M	M333A
TRACHYBRYUM	MEGAPTILUM			M	M333A
WARNSTORFIA	EXANNULATA			M	M333A
WARNSTORFIA	FLUITANS			M	M333A

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANASTROPHYLLUM	HELLERANUM			H	M333B
APOMETZGERIA	PUBESCENS			H	M333B
BARBILOPHOZIA	BARBATA			H	M333B
BARBILOPHOZIA	HATCHERI			H	M333B
BLASIA	PUSILLA			H	M333B
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333B
CALYPOGEIA	SUECICA			H	M333B
CEPHALOZIA	BICUSPIDATA			H	M333B
CEPHALOZIA	LUNULIFOLIA			H	M333B
CEPHALOZIA	MACOUNII			H	M333B
CEPHALOZIA	PLENICEPS			H	M333B
CEPHALOZIELLA	RUBELLA			H	M333B
CHILOSCYPHUS	PALLESCENS			H	M333B
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	M333B
CHILOSCYPHUS	POLYANTHOS			H	M333B
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M333B
CONOCEPHALUM	CONICUM			H	M333B
GEOCALYX	GRAVEOLENS			H	M333B
HYGROBIELLA	LAXIFOLIA			H	M333B
JAMESONIELLA	AUTUMNALIS			H	M333B
JUNGERMANNIA	ATROVIRENS			H	M333B
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333B
JUNGERMANNIA	HYALINA			H	M333B
JUNGERMANNIA	LEIANTHA			H	M333B
JUNGERMANNIA	RUBRA			H	M333B
JUNGERMANNIA	SPHAEROCARPA			H	M333B
LEPIDOZIA	REPTANS			H	M333B
LOPHOCOLEA	BIDENTATA			H	M333B
LOPHOCOLEA	CUSPIDATA			H	M333B
LOPHOCOLEA	HETEROPHYLLA			H	M333B
LOPHOCOLEA	MINOR			H	M333B
LOPHOZIA	ALPESTRIS			H	M333B
LOPHOZIA	ASCENDENS			H	M333B
LOPHOZIA	COLLARIS			H	M333B
LOPHOZIA	EXCISA			H	M333B
LOPHOZIA	GILLMANII			H	M333B
LOPHOZIA	HETEROCOLPOS			H	M333B
LOPHOZIA	INCISA			H	M333B
LOPHOZIA	LONGIDENS			H	M333B
LOPHOZIA	LONGIFLORA			H	M333B
LOPHOZIA	VENTRICOSA			H	M333B
MARCHANTIA	POLYMORPHA			H	M333B
NARDIA	GEOSCYPHUS			H	M333B
PELLIA	ENDIVIIFOLIA			H	M333B
PLAGIOCHILA	PORELLOIDES			H	M333B
PORELLA	CORDAEANA			H	M333B
PTILIDIUM	CALIFORNICUM			H	M333B
PTILIDIUM	CILIARE			H	M333B
PTILIDIUM	PULCHERRIMUM			H	M333B
RADULA	COMPLANATA			H	M333B
RICCARDIA	LATIFRONS			H	M333B
RICCARDIA	MULTIFIDA			H	M333B
RICCIA	CAVERNOSA			H	M333B
RICCIOCARPOS	NATANS			H	M333B
SCAPANIA	AMERICANA			H	M333B
SCAPANIA	GLAUCOCEPHALA			H	M333B
SCAPANIA	MUCRONATA			H	M333B
SCAPANIA	NEMOROSA			H	M333B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
SCAPANIA	SUBALPINA			H	M333B
SCAPANIA	UMBROSA			H	M333B
SCAPANIA	UNDULATA			H	M333B
TRITOMARIA	EXSECTA			H	M333B
TRITOMARIA	EXSECTIFORMIS			H	M333B
ALOINA	BREVIROSTRIS			M	M333B
AMBLYODON	DEALBATUS			M	M333B
AMBLYSTEGIUM	SERPENS			M	M333B
AMPHIDIUM	LAPPONICUM			M	M333B
ANACOLIA	MENZIESII			M	M333B
ANTITRICHIA	CALIFORNICA			M	M333B
ANTITRICHIA	CURTIPENDULA			M	M333B
ATRICHUM	SELWYNII			M	M333B
ATRICHUM	UNDULATUM			M	M333B
AULACOMNIUM	ANDROGYNUM			M	M333B
BARBULA	CONVOLUTA			M	M333B
BARBULA	EUSTEGIA			M	M333B
BARTRAMIA	ITHYPHYLLA			M	M333B
BARTRAMIA	POMIFORMIS			M	M333B
BLINDIA	ACUTA			M	M333B
BRACHYTHECIUM	ALBICANS			M	M333B
BRACHYTHECIUM	COLLINUM			M	M333B
BRACHYTHECIUM	FRIGIDUM			M	M333B
BRACHYTHECIUM	HYLOTAPETUM			M	M333B
BRACHYTHECIUM	RIVULARE			M	M333B
BRACHYTHECIUM	SALEBROSUM			M	M333B
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M333B
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	M333B
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M333B
BRYUM	CAESPITICIUM			M	M333B
BRYUM	CALOBRYOIDES			M	M333B
BRYUM	PALLENS			M	M333B
BRYUM	TURBINATUM			M	M333B
BRYUM	VIOLACEUM			M	M333B
BUXBAUMIA	PIPERI			M	M333B
CALLICLADIUM	HALDANIANUM			M	M333B
CALLIERGON	CORDIFOLIUM			M	M333B
CALLIERGON	GIGANTEUM			M	M333B
CALLIERGON	STRAMINEUM			M	M333B
CAMPYLIUM	STELLATUM			M	M333B
CERATODON	PURPUREUS			M	M333B
CLAOPODIUM	BOLANDERI			M	M333B
CLIMACIUM	DENDROIDES			M	M333B
COSCINODON	CALYPTRATUS			M	M333B
CRATONEURON	FILICINUM			M	M333B
CYNODONTIUM	STRUMIFERUM			M	M333B
DESMATODON	HEIMII			M	M333B
DESMATODON	LATIFOLIUS			M	M333B
DICHELYMA	FALCATUM			M	M333B
DICHODONTIUM	PELLUCIDUM			M	M333B
DICRANELLA	HETEROMALLA			M	M333B
DICRANELLA	RUFESCENS			M	M333B
DICRANELLA	SUBULATA			M	M333B
DICRANELLA	VARIA			M	M333B
DICRANOWEISIA	CRISPULA			M	M333B
DICRANUM	BONJEANII			M	M333B
DICRANUM	FLAGELLARE			M	M333B
DICRANUM	FUSCESCENS			M	M333B
DICRANUM	PALLIDISETUM			M	M333B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
DICRANUM	RHABDOCARPUM			M	M333B
DICRANUM	SCOPARIUM			M	M333B
DICRANUM	TAURICUM			M	M333B
DICRANUM	UNDULATUM			M	M333B
DIDYMODON	FALLAX			M	M333B
DIDYMODON	FALLAX	V	REFLEXUS	M	M333B
DIDYMODON	RIGIDULUS	V	GRACILIS	M	M333B
DIDYMODON	TOPHACEUS			M	M333B
DIDYMODON	VINEALIS			M	M333B
DIDYMODON	VINEALIS	V	FLACCIDUS	M	M333B
DIDYMODON	VINEALIS	V	VINEALIS	M	M333B
DISTICHIUM	CAPILLACEUM			M	M333B
DISTICHIUM	INCLINATUM			M	M333B
DITRICHUM	AMBIGUUM			M	M333B
DITRICHUM	FLEXICAULE			M	M333B
DITRICHUM	PUSILLUM			M	M333B
DREPANOCLADUS	ADUNCUS			M	M333B
DREPANOCLADUS	ADUNCUS	V	KNEIFFII	M	M333B
DREPANOCLADUS	CAPILLIFOLIUS			M	M333B
DREPANOCLADUS	SENDTNERI			M	M333B
DRYPTODON	PATENS			M	M333B
ENCALYPTA	AFFINIS			M	M333B
ENCALYPTA	CILIATA			M	M333B
ENCALYPTA	INTERMEDIA			M	M333B
ENCALYPTA	PROCERA			M	M333B
ENCALYPTA	RHAPTOCARPA			M	M333B
ENCALYPTA	SPATHULATA			M	M333B
ENCALYPTA	VULGARIS			M	M333B
ENTOSTHODON	FASCICULARIS			M	M333B
EURHYNCHIUM	OREGANUM			M	M333B
EURHYNCHIUM	PRAELONGUM			M	M333B
EURHYNCHIUM	PULCHELLUM			M	M333B
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333B
FISSIDENS	BRYOIDES			M	M333B
FISSIDENS	GRANDIFRONS			M	M333B
FONTINALIS	ANTIPYRETICA			M	M333B
FONTINALIS	HYPNOIDES			M	M333B
FONTINALIS	NEOMEXICANA			M	M333B
GRIMMIA	BRITTONIAE			M	M333B
GRIMMIA	ELATIOR			M	M333B
GRIMMIA	MONTANA			M	M333B
GRIMMIA	OVALIS			M	M333B
GRIMMIA	TENERRIMA			M	M333B
GRIMMIA	TORQUATA			M	M333B
GRIMMIA	TRICHOPHYLLA			M	M333B
GYMNOSTOMUM	AERUGINOSUM			M	M333B
HEDWIGIA	CILIATA			M	M333B
HERZOGIELLA	SELIGERI			M	M333B
HETEROCLADIUM	DIMORPHUM			M	M333B
HETEROCLADIUM	PROCURRENS			M	M333B
HOMALOTHECIUM	AENEUM			M	M333B
HOMALOTHECIUM	FULGESCENS			M	M333B
HOMALOTHECIUM	NEVADENSE			M	M333B
HYGROAMBLYSTEGIUM	NOTEROPHILUM			M	M333B
HYGROHYPNUM	BESTII			M	M333B
HYGROHYPNUM	COCHLEARIFOLIUM			M	M333B
HYGROHYPNUM	LURIDUM			M	M333B
HYGROHYPNUM	OCHRACEUM			M	M333B
HYGROHYPNUM	SMITHII			M	M333B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
HYLOCOMIUM	SPLENDENS			M	M333B
HYPNUM	CIRCINALE			M	M333B
HYPNUM	CUPRESSIFORME			M	M333B
HYPNUM	LINDBERGII			M	M333B
HYPNUM	PALLESCENS			M	M333B
HYPNUM	REVOLUTUM			M	M333B
HYPNUM	SUBIMPONENS			M	M333B
HYPNUM	VAUCHERI			M	M333B
ISOPTERYGIOPSIS	PULCHELLA			M	M333B
ISOTHECIUM	MYOSUROIDES			M	M333B
KIAERIA	STARKEI			M	M333B
LEPTOBRYUM	PYRIFORME			M	M333B
LIMPRICHTIA	REVOLVENS			M	M333B
METANECKERA	MENZIESII			M	M333B
MNIUM	AMBIGUUM			M	M333B
MNIUM	BLYTTII			M	M333B
MNIUM	MARGINATUM			M	M333B
MNIUM	SPINULOSUM			M	M333B
MNIUM	THOMSONII			M	M333B
MYURELLA	JULACEA			M	M333B
NECKERA	DOUGLASII			M	M333B
OLIGOTRICHUM	ALIGERUM			M	M333B
ONCOPHORUS	VIRENS			M	M333B
ONCOPHORUS	WAHLENBERGII			M	M333B
ORTHOTRICHUM	CUPULATUM			M	M333B
ORTHOTRICHUM	LAEVIGATUM			M	M333B
ORTHOTRICHUM	OBTUSIFOLIUM			M	M333B
ORTHOTRICHUM	PELLUCIDUM			M	M333B
ORTHOTRICHUM	RUPESTRE			M	M333B
ORTHOTRICHUM	SPECIOSUM			M	M333B
PALUSTRIELLA	COMMUTATA			M	M333B
PHILONOTIS	FONTANA			M	M333B
PHILONOTIS	FONTANA	V	FONTANA	M	M333B
PHILONOTIS	MUEHLENBERGII			M	M333B
PHILONOTIS	YEZOANA			M	M333B
PLAGIOMNIUM	AFFINE			M	M333B
PLAGIOMNIUM	MEDIUM			M	M333B
PLAGIOMNIUM	ROSTRATUM			M	M333B
PLAGIOMNIUM	VENUSTUM			M	M333B
PLAGIOPUS	OEDERIANA			M	M333B
PLAGIOTHECIUM	PILIFERUM			M	M333B
PLATYDICTYA	JUNGERMANNIOIDES			M	M333B
PLEUROZIUM	SCHREBERI			M	M333B
POHLIA	ANDALUSICA			M	M333B
POHLIA	ANNOTINA			M	M333B
POHLIA	ATROPURPUREA			M	M333B
POHLIA	CAMPTOTRACHELA			M	M333B
POHLIA	LONGICOLLA			M	M333B
POHLIA	NUTANS			M	M333B
POHLIA	PROLIGERA			M	M333B
POLYTRICHASTRUM	ALPINUM			M	M333B
POLYTRICHUM	COMMUNE			M	M333B
POLYTRICHUM	FORMOSUM			M	M333B
POLYTRICHUM	JUNIPERINUM			M	M333B
POLYTRICHUM	LONGISETUM			M	M333B
POLYTRICHUM	LYALLII			M	M333B
POLYTRICHUM	PILIFERUM			M	M333B
PSEUDOLESKEA	ATRICHA			M	M333B
PSEUDOLESKEA	INCURVATA			M	M333B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
PSEUDOLESKEA	PATENS			M	M333B
PSEUDOLESKEELLA	TECTORUM			M	M333B
PTERIGYNANDRUM	FILIFORME			M	M333B
PTERYGONEURUM	OVATUM			M	M333B
PTILIUM	CRISTA-CASTRENSIS			M	M333B
RACOMITRIUM	ACICULARE			M	M333B
RACOMITRIUM	ERICOIDES			M	M333B
RACOMITRIUM	HETEROSTICHUM			M	M333B
RACOMITRIUM	LANUGINOSUM			M	M333B
RACOMITRIUM	OCCIDENTALE			M	M333B
RHIZOMNIUM	MAGNIFOLIUM			M	M333B
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M333B
RHIZOMNIUM	PUNCTATUM			M	M333B
RHYTIDIADELPHUS	LOREUS			M	M333B
RHYTIDIADELPHUS	SQUARROSUS			M	M333B
RHYTIDIADELPHUS	TRIQUETRUS			M	M333B
RHYTIDIOPSIS	ROBUSTA			M	M333B
ROELLIA	ROELLII			M	M333B
SANIONIA	UNCINATA			M	M333B
SCHISTIDIUM	AGASSIZII			M	M333B
SCHISTIDIUM	APOCARPUM			M	M333B
SCHISTIDIUM	RIVULARE			M	M333B
SCLEROPODIUM	OBTUSIFOLIUM			M	M333B
SCORPIDIUM	SCORPIOIDES			M	M333B
SCOULERIA	AQUATICA			M	M333B
SELIGERIA	CAMPYLOPODA			M	M333B
SELIGERIA	DONNIANA			M	M333B
SPHAGNUM	CENTRALE			M	M333B
SPHAGNUM	GIRGENSOHNII			M	M333B
SPHAGNUM	RECURVUM			M	M333B
SPHAGNUM	RUSSOWII			M	M333B
SPHAGNUM	SQUARROSUM			M	M333B
SPHAGNUM	SUBSECUNDUM			M	M333B
SPHAGNUM	TERES			M	M333B
SPHAGNUM	WARNSTORFII			M	M333B
TETRAPHIS	GENICULATA			M	M333B
TETRAPHIS	PELLUCIDA			M	M333B
THAMNOBRYUM	NECKEROIDES			M	M333B
THUIDIUM	DELICATULUM			M	M333B
TIMMIA	AUSTRIACA			M	M333B
TIMMIA	MEGAPOLITANA	V	BAVARICA	M	M333B
TORTELLA	TORTUOSA			M	M333B
TORTULA	NORVEGICA			M	M333B
TORTULA	PRINCEPS			M	M333B
TORTULA	RURALIS			M	M333B
TRACHYBRYUM	MEGAPTILUM			M	M333B
TRICHODON	CYLINDRICUS			M	M333B
WARNSTORFIA	EXANNULATA			M	M333B
WARNSTORFIA	FLUITANS			M	M333B

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANASTROPHYLLUM	HELLERANUM			H	M333C
ANEURA	PINGUIS			H	M333C
APOMETZGERIA	PUBESCENS			H	M333C
BARBILOPHOZIA	BARBATA			H	M333C
BARBILOPHOZIA	FLOERKEI			H	M333C
BARBILOPHOZIA	HATCHERI			H	M333C
BARBILOPHOZIA	KUNZEANA			H	M333C
BARBILOPHOZIA	LYCOPODIOIDES			H	M333C
BARBILOPHOZIA	QUADRILOBA			H	M333C
BLASIA	PUSILLA			H	M333C
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333C
CALYPOGEIA	AZUREA			H	M333C
CALYPOGEIA	MUELLERIANA			H	M333C
CALYPOGEIA	SUECICA			H	M333C
CEPHALOZIA	BICUSPIDATA			H	M333C
CEPHALOZIA	BICUSPIDATA	S	AMBIGUA	H	M333C
CEPHALOZIA	LEUCANTHA			H	M333C
CEPHALOZIA	LUNULIFOLIA			H	M333C
CEPHALOZIA	MACOUNII			H	M333C
CEPHALOZIA	PLENICEPS			H	M333C
CEPHALOZIELLA	HAMPEANA			H	M333C
CEPHALOZIELLA	RUBELLA			H	M333C
CHILOSCYPHUS	PALLESCENS			H	M333C
CHILOSCYPHUS	POLYANTHOS			H	M333C
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M333C
CONOCEPHALUM	CONICUM			H	M333C
FOSSOMBRONIA	FOVEOLATA			H	M333C
GEOCALYX	GRAVEOLENS			H	M333C
HARPANTHUS	FLOTOVIANUS			H	M333C
HYGROBIELLA	LAXIFOLIA			H	M333C
JAMESONIELLA	AUTUMNALIS			H	M333C
JUNGERMANNIA	ATROVIRENS			H	M333C
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333C
JUNGERMANNIA	GRACILLIMA			H	M333C
JUNGERMANNIA	HYALINA			H	M333C
JUNGERMANNIA	LEIANTHA			H	M333C
JUNGERMANNIA	PUMILA			H	M333C
JUNGERMANNIA	RUBRA			H	M333C
JUNGERMANNIA	SPHAEROCARPA			H	M333C
LEPIDOZIA	REPTANS			H	M333C
LOPHOCOLEA	MINOR			H	M333C
LOPHOZIA	ASCENDENS			H	M333C
LOPHOZIA	BADENSIS			H	M333C
LOPHOZIA	COLLARIS			H	M333C
LOPHOZIA	GILLMANII			H	M333C
LOPHOZIA	HETEROCOLPOS			H	M333C
LOPHOZIA	INCISA			H	M333C
LOPHOZIA	LONGIDENS			H	M333C
LOPHOZIA	LONGIFLORA			H	M333C
LOPHOZIA	VENTRICOSA			H	M333C
MANNIA	TRIANDRA			H	M333C
MARCHANTIA	POLYMORPHA			H	M333C
MARSUPELLA	EMARGINATA			H	M333C
MARSUPELLA	SPHACELATA			H	M333C
METZGERIA	CONJUGATA			H	M333C
NARDIA	SCALARIS			H	M333C
PELLIA	ENDIVIIFOLIA			H	M333C
PELLIA	NEESIANA			H	M333C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
PLAGIOCHILA	PORELLOIDES			H	M333C
PORELLA	CORDAEANA			H	M333C
PORELLA	NAVICULARIS			H	M333C
PORELLA	PLATYPHYLLA			H	M333C
PORELLA	ROELLII			H	M333C
PREISSIA	QUADRATA			H	M333C
PTILIDIUM	PULCHERRIMUM			H	M333C
RADULA	COMPLANATA			H	M333C
REBOULIA	HEMISPHAERICA			H	M333C
RICCARDIA	LATIFRONS			H	M333C
RICCARDIA	MULTIFIDA			H	M333C
RICCIA	SOROCARPA			H	M333C
SCAPANIA	CURTA			H	M333C
SCAPANIA	IRRIGUA			H	M333C
SCAPANIA	NEMOROSA			H	M333C
SCAPANIA	PALUDICOLA			H	M333C
SCAPANIA	PALUDOSA			H	M333C
SCAPANIA	SUBALPINA			H	M333C
SCAPANIA	UMBROSA			H	M333C
SCAPANIA	UNDULATA			H	M333C
TRITOMARIA	EXSECTA			H	M333C
TRITOMARIA	EXSECTIFORMIS			H	M333C
TRITOMARIA	SCITULA			H	M333C
AMBLYSTEGIUM	SERPENS			M	M333C
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M333C
AMPHIDIUM	LAPPONICUM			M	M333C
AMPHIDIUM	MOUGEOTII			M	M333C
ANDREAEA	RUPESTRIS			M	M333C
ANTITRICHIA	CURTIPENDULA			M	M333C
ATRICHUM	SELWYNII			M	M333C
AULACOMNIUM	ANDROGYNUM			M	M333C
AULACOMNIUM	PALUSTRE			M	M333C
BARBULA	CONVOLUTA			M	M333C
BARTRAMIA	POMIFORMIS			M	M333C
BARTRAMIA	STRICTA			M	M333C
BRACHYTHECIUM	ALBICANS			M	M333C
BRACHYTHECIUM	COLLINUM			M	M333C
BRACHYTHECIUM	ERYTHRORRHIZON			M	M333C
BRACHYTHECIUM	FRIGIDUM			M	M333C
BRACHYTHECIUM	HOLZINGERI			M	M333C
BRACHYTHECIUM	HYLOTAPETUM			M	M333C
BRACHYTHECIUM	LEIBERGII			M	M333C
BRACHYTHECIUM	NELSONII			M	M333C
BRACHYTHECIUM	RIVULARE			M	M333C
BRACHYTHECIUM	SALEBROSUM			M	M333C
BRACHYTHECIUM	STARKEI			M	M333C
BRYUM	CAESPITICIUM			M	M333C
BRYUM	CALOBRYOIDES			M	M333C
BRYUM	GEMMIPARUM			M	M333C
BRYUM	LONCHOCAULON			M	M333C
BRYUM	MUEHLENBECKII			M	M333C
BRYUM	PALLESCENS			M	M333C
BRYUM	PSEUDOTRIQUETRUM			M	M333C
BUXBAUMIA	PIPERI			M	M333C
CALLIERGON	CORDIFOLIUM			M	M333C
CALLIERGON	GIGANTEUM			M	M333C
CALLIERGON	STRAMINEUM			M	M333C
CAMPYLIUM	CHRYSOPHYLLUM			M	M333C
CAMPYLIUM	STELLATUM			M	M333C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
CERATODON	PURPUREUS			M	M333C
CLAOPODIUM	BOLANDERI			M	M333C
CLIMACIUM	DENDROIDES			M	M333C
CRATONEURON	FILICINUM			M	M333C
CYNODONTIUM	STRUMIFERUM			M	M333C
DESMATODON	LATIFOLIUS			M	M333C
DICHELYMA	FALCATUM			M	M333C
DICHELYMA	UNCINATUM			M	M333C
DICHODONTIUM	OLYMPICUM			M	M333C
DICHODONTIUM	PELLUCIDUM			M	M333C
DICRANELLA	CRISPA			M	M333C
DICRANELLA	HETEROMALLA			M	M333C
DICRANOWEISIA	CRISPULA			M	M333C
DICRANUM	ELONGATUM			M	M333C
DICRANUM	FUSCESCENS			M	M333C
DICRANUM	HOWELLII			M	M333C
DICRANUM	MONTANUM			M	M333C
DICRANUM	POLYSETUM			M	M333C
DICRANUM	SCOPARIUM			M	M333C
DICRANUM	TAURICUM			M	M333C
DIDYMODON	FALLAX			M	M333C
DIDYMODON	RIGIDULUS	V	ICMADOPHILUS	M	M333C
DISTICHIUM	CAPILLACEUM			M	M333C
DITRICHUM	FLEXICAULE			M	M333C
DREPANOCLADUS	ADUNCUS			M	M333C
DREPANOCLADUS	CAPILLIFOLIUS			M	M333C
DREPANOCLADUS	SENDTNERI			M	M333C
DRYPTODON	PATENS			M	M333C
ENCALYPTA	AFFINIS	V	MACOUNII	M	M333C
ENCALYPTA	PROCERA			M	M333C
ENCALYPTA	VULGARIS			M	M333C
EURHYNCHIUM	PRAELONGUM			M	M333C
EURHYNCHIUM	PULCHELLUM			M	M333C
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333C
FISSIDENS	BRYOIDES			M	M333C
FISSIDENS	LIMBATUS			M	M333C
FISSIDENS	OSMUNDIOIDES			M	M333C
FONTINALIS	ANTIPYRETICA			M	M333C
FONTINALIS	NEOMEXICANA			M	M333C
FUNARIA	HYGROMETRICA			M	M333C
GRIMMIA	ANOMALA			M	M333C
GRIMMIA	MONTANA			M	M333C
GRIMMIA	TENERRIMA			M	M333C
GRIMMIA	TORQUATA			M	M333C
GYMNOSTOMUM	AERUGINOSUM			M	M333C
HERZOGIELLA	SELIGERI			M	M333C
HETEROCLADIUM	DIMORPHUM			M	M333C
HETEROCLADIUM	PROCURRENS			M	M333C
HOMALOTHECIUM	AENEUM			M	M333C
HOMALOTHECIUM	NEVADENSE			M	M333C
HYGROHYPNUM	ALPINUM			M	M333C
HYGROHYPNUM	BESTII			M	M333C
HYGROHYPNUM	LURIDUM			M	M333C
HYGROHYPNUM	MOLLE			M	M333C
HYGROHYPNUM	OCHRACEUM			M	M333C
HYGROHYPNUM	SMITHII			M	M333C
HYGROHYPNUM	STYRIACUM			M	M333C
HYLOCOMIUM	SPLENDENS			M	M333C
HYMENOSTYLIUM	RECURVIROSTRE			M	M333C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
HYPNUM	CIRCINALE			M	M333C
HYPNUM	REVOLUTUM			M	M333C
HYPNUM	SUBIMPONENS			M	M333C
ISOPTERYGIOPSIS	PULCHELLA			M	M333C
ISOTHECIUM	MYOSUROIDES			M	M333C
KIAERIA	BLYTTII			M	M333C
KIAERIA	STARKEI			M	M333C
LEPTODICTYUM	RIPARIUM			M	M333C
METANECKERA	MENZIESII			M	M333C
MNIUM	BLYTTII			M	M333C
MNIUM	MARGINATUM			M	M333C
MNIUM	SPINULOSUM			M	M333C
MNIUM	THOMSONII			M	M333C
ONCOPHORUS	VIRENS			M	M333C
ORTHOTRICHUM	AFFINE			M	M333C
ORTHOTRICHUM	ALPESTRE			M	M333C
ORTHOTRICHUM	CUPULATUM			M	M333C
ORTHOTRICHUM	OBTUSIFOLIUM			M	M333C
ORTHOTRICHUM	SPECIOSUM			M	M333C
PALUSTRIELLA	COMMUTATA			M	M333C
PARALEUCOBRYUM	LONGIFOLIUM			M	M333C
PHILONOTIS	FONTANA			M	M333C
PHILONOTIS	FONTANA	V	PUMILA	M	M333C
PLAGIOBRYUM	ZIERI			M	M333C
PLAGIOMNIUM	INSIGNE			M	M333C
PLAGIOTHECIUM	DENTICULATUM			M	M333C
PLAGIOTHECIUM	LAETUM			M	M333C
PLAGIOTHECIUM	PILIFERUM			M	M333C
PLATYDICTYA	JUNGERMANNIOIDES			M	M333C
PLEUROZIUM	SCHREBERI			M	M333C
POGONATUM	URNIGERUM			M	M333C
POHLIA	CAMPTOTRACHELA			M	M333C
POHLIA	CRUDA			M	M333C
POHLIA	DRUMMONDII			M	M333C
POHLIA	NUTANS			M	M333C
POHLIA	WAHLENBERGII			M	M333C
POLYTRICHASTRUM	ALPINUM			M	M333C
POLYTRICHUM	COMMUNE			M	M333C
POLYTRICHUM	JUNIPERINUM			M	M333C
POLYTRICHUM	LYALLII			M	M333C
POLYTRICHUM	PILIFERUM			M	M333C
POLYTRICHUM	SEXANGULARE			M	M333C
PSEUDOLESKEA	INCURVATA			M	M333C
PSEUDOLESKEA	RADICOSA			M	M333C
PSEUDOLESKEA	RADICOSA	V	COMPACTA	M	M333C
PSEUDOLESKEA	STENOPHYLLA			M	M333C
PTERIGYNANDRUM	FILIFORME			M	M333C
PTILIUM	CRISTA-CASTRENSIS			M	M333C
RACOMITRIUM	AQUATICUM			M	M333C
RACOMITRIUM	CANESCENS			M	M333C
RACOMITRIUM	ELONGATUM			M	M333C
RACOMITRIUM	ERICOIDES			M	M333C
RACOMITRIUM	HETEROSTICHUM			M	M333C
RACOMITRIUM	MACOUNII			M	M333C
RHIZOMNIUM	MAGNIFOLIUM			M	M333C
RHYTIDIADELPHUS	SQUARROSUS			M	M333C
RHYTIDIADELPHUS	TRIQUETRUS			M	M333C
RHYTIDIOPSIS	ROBUSTA			M	M333C
ROELLIA	ROELLII			M	M333C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
SANIONIA	UNCINATA			M	M333C
SANIONIA	UNCINATA	V	SYMMETRICA	M	M333C
SARMENTHYPNUM	SARMENTOSUM			M	M333C
SCHISTIDIUM	AGASSIZII			M	M333C
SCHISTIDIUM	APOCARPUM			M	M333C
SCHISTIDIUM	RIVULARE	V	LATIFOLIUM	M	M333C
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M333C
SCLEROPODIUM	OBTUSIFOLIUM			M	M333C
SCOULERIA	AQUATICA			M	M333C
SELIGERIA	CAMPYLOPODA			M	M333C
SPHAGNUM	CAPILLIFOLIUM			M	M333C
SPHAGNUM	CENTRALE			M	M333C
SPHAGNUM	CONTORTUM			M	M333C
SPHAGNUM	FUSCUM			M	M333C
SPHAGNUM	MAGELLANICUM			M	M333C
SPHAGNUM	SQUARROSUM			M	M333C
SPHAGNUM	SUBSECUNDUM			M	M333C
SPHAGNUM	SUBSECUNDUM	V	SUBSECUNDUM	M	M333C
SPHAGNUM	TERES			M	M333C
SPHAGNUM	WARNSTORFII			M	M333C
TETRAPHIS	PELLUCIDA			M	M333C
THAMNOBRYUM	NECKEROIDES			M	M333C
TIMMIA	AUSTRIACA			M	M333C
TIMMIA	MEGAPOLITANA	V	BAVARICA	M	M333C
TOMENTHYPNUM	NITENS			M	M333C
TORTELLA	FRAGILIS			M	M333C
TORTELLA	INCLINATA			M	M333C
TORTELLA	TORTUOSA			M	M333C
TORTULA	RURALIS			M	M333C
TRICHODON	CYLINDRICUS			M	M333C
WEISSIA	CONTROVERSA			M	M333C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANTHOCEROS	FUSIFORMIS			A	M333D
ANTHOCEROS	PUNCTATUS			A	M333D
ANASTROPHYLLUM	HELLERANUM			H	M333D
APOMETZGERIA	PUBESCENS			H	M333D
BARBILOPHOZIA	BARBATA			H	M333D
BARBILOPHOZIA	HATCHERI			H	M333D
BARBILOPHOZIA	KUNZEANA			H	M333D
BAZZANIA	TRICRENATA			H	M333D
BLASIA	PUSILLA			H	M333D
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333D
CALYPOGEIA	FISSA			H	M333D
CALYPOGEIA	MUELLERIANA			H	M333D
CALYPOGEIA	NEESIANA			H	M333D
CALYPOGEIA	SUECICA			H	M333D
CEPHALOZIA	BICUSPIDATA			H	M333D
CEPHALOZIA	LUNULIFOLIA			H	M333D
CEPHALOZIELLA	DIVARICATA			H	M333D
CEPHALOZIELLA	HAMPEANA			H	M333D
CEPHALOZIELLA	RUBELLA			H	M333D
CHILOSCYPHUS	PALLESCENS			H	M333D
CHILOSCYPHUS	POLYANTHOS			H	M333D
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M333D
CONOCEPHALUM	CONICUM			H	M333D
GEOCALYX	GRAVEOLENS			H	M333D
JAMESONIELLA	AUTUMNALIS			H	M333D
JUNGERMANNIA	ATROVIRENS			H	M333D
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333D
JUNGERMANNIA	LEIANTHA			H	M333D
JUNGERMANNIA	PUMILA			H	M333D
JUNGERMANNIA	RUBRA			H	M333D
LEPIDOZIA	REPTANS			H	M333D
LOPHOCOLEA	BIDENTATA			H	M333D
LOPHOCOLEA	CUSPIDATA			H	M333D
LOPHOCOLEA	HETEROPHYLLA			H	M333D
LOPHOCOLEA	MINOR			H	M333D
LOPHOZIA	ASCENDENS			H	M333D
LOPHOZIA	BANTRIENSIS			H	M333D
LOPHOZIA	COLLARIS			H	M333D
LOPHOZIA	GILLMANII			H	M333D
LOPHOZIA	HETEROCOLPOS			H	M333D
LOPHOZIA	INCISA			H	M333D
LOPHOZIA	LONGIDENS			H	M333D
LOPHOZIA	LONGIFLORA			H	M333D
LOPHOZIA	VENTRICOSA			H	M333D
LUNULARIA	CRUCIATA			H	M333D
MARCHANTIA	POLYMORPHA			H	M333D
PELLIA	ENDIVIIFOLIA			H	M333D
PELLIA	NEESIANA			H	M333D
PLAGIOCHILA	PORELLOIDES			H	M333D
PORELLA	CORDAEANA			H	M333D
PTILIDIUM	CALIFORNICUM			H	M333D
PTILIDIUM	PULCHERRIMUM			H	M333D
RADULA	COMPLANATA			H	M333D
RICCARDIA	LATIFRONS			H	M333D
RICCARDIA	MULTIFIDA			H	M333D
RICCARDIA	PALMATA			H	M333D
SCAPANIA	CURTA			H	M333D
SCAPANIA	NEMOROSA			H	M333D

Genus	Species	Ext	Ext_name	M/H/A	Physprov
SCAPANIA	PALUDOSA			H	M333D
SCAPANIA	SUBALPINA			H	M333D
SCAPANIA	UMBROSA			H	M333D
SCAPANIA	UNDULATA			H	M333D
SCAPANIA	UNDULATA	V	OAKESII	H	M333D
SPHAEROCARPOS	HIANS			H	M333D
TRITOMARIA	EXSECTA			H	M333D
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M333D
AMPHIDIUM	LAPPONICUM			M	M333D
ANACOLIA	MENZIESII			M	M333D
ANDREAEA	RUPESTRIS			M	M333D
ANTITRICHIA	CURTIPENDULA			M	M333D
ANTITRICHIA	CURTIPENDULA	V	GIGANTEA	M	M333D
ATRICHUM	SELWYNII			M	M333D
ATRICHUM	UNDULATUM			M	M333D
AULACOMNIUM	ANDROGYNUM			M	M333D
AULACOMNIUM	PALUSTRE			M	M333D
BARBULA	EUSTEGIA			M	M333D
BARTRAMIA	POMIFORMIS			M	M333D
BRACHYTHECIUM	ALBICANS			M	M333D
BRACHYTHECIUM	COLLINUM			M	M333D
BRACHYTHECIUM	ERYTHRORRHIZON			M	M333D
BRACHYTHECIUM	FRIGIDUM			M	M333D
BRACHYTHECIUM	GLAREOSUM			M	M333D
BRACHYTHECIUM	HYLOTAPETUM			M	M333D
BRACHYTHECIUM	LEIBERGII			M	M333D
BRACHYTHECIUM	OEDIPODIUM			M	M333D
BRACHYTHECIUM	RIVULARE			M	M333D
BRACHYTHECIUM	RUTABULUM			M	M333D
BRACHYTHECIUM	SALEBROSUM			M	M333D
BRACHYTHECIUM	VELUTINUM			M	M333D
BRYUM	CAESPITICIUM			M	M333D
BRYUM	CAPILLARE			M	M333D
BRYUM	LONCHOCAULON			M	M333D
BRYUM	TURBINATUM			M	M333D
BUXBAUMIA	PIPERI			M	M333D
BUXBAUMIA	VIRIDIS			M	M333D
CALLIERGON	GIGANTEUM			M	M333D
CALLIERGON	RICHARDSONII			M	M333D
CAMPYLIUM	CHRYSOPHYLLUM			M	M333D
CERATODON	PURPUREUS			M	M333D
CIRRIPHYLLUM	CIRROSUM			M	M333D
CLAOPODIUM	BOLANDERI			M	M333D
CLAOPODIUM	CRISPIFOLIUM			M	M333D
CLIMACIUM	AMERICANUM			M	M333D
CLIMACIUM	DENDROIDES			M	M333D
CRATONEURON	FILICINUM			M	M333D
CYRTO-HYPNUM	MINUTULUM			M	M333D
DICHELYMA	UNCINATUM			M	M333D
DICHODONTIUM	PELLUCIDUM			M	M333D
DICRANELLA	CRISPA			M	M333D
DICRANELLA	GREVILLEANA			M	M333D
DICRANELLA	SUBULATA			M	M333D
DICRANELLA	VARIA			M	M333D
DICRANOWEISIA	CIRRATA			M	M333D
DICRANOWEISIA	CRISPULA			M	M333D
DICRANUM	FUSCESCENS			M	M333D
DICRANUM	HOWELLII			M	M333D
DICRANUM	MUEHLENBECKII			M	M333D

Genus	Species	Ext	Ext_name	M/H/A	Physprov
DICRANUM	PALLIDISETUM			M	M333D
DICRANUM	SCOPARIUM			M	M333D
DICRANUM	TAURICUM			M	M333D
DIDYMODON	VINEALIS			M	M333D
DISTICHIUM	CAPILLACEUM			M	M333D
DREPANOCLADUS	ADUNCUS			M	M333D
DREPANOCLADUS	FLUITANS			M	M333D
DRYPTODON	PATENS			M	M333D
ENCALYPTA	CILIATA			M	M333D
EURHYNCHIUM	OREGANUM			M	M333D
EURHYNCHIUM	PRAELONGUM			M	M333D
EURHYNCHIUM	PULCHELLUM			M	M333D
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333D
EURHYNCHIUM	PULCHELLUM	V	PULCHELLUM	M	M333D
FISSIDENS	BRYOIDES			M	M333D
FISSIDENS	GRANDIFRONS			M	M333D
FISSIDENS	LIMBATUS			M	M333D
FONTINALIS	ANTIPYRETICA			M	M333D
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M333D
FONTINALIS	NEOMEXICANA			M	M333D
FUNARIA	HYGROMETRICA			M	M333D
GRIMMIA	AFFINIS			M	M333D
GRIMMIA	LAEVIGATA			M	M333D
GRIMMIA	MONTANA			M	M333D
GRIMMIA	PULVINATA			M	M333D
GRIMMIA	TORQUATA			M	M333D
GRIMMIA	TRICHOPHYLLA			M	M333D
GRIMMIA	UNICOLOR			M	M333D
HERZOGIELLA	SELIGERI			M	M333D
HETEROCLADIUM	PROCURRENS			M	M333D
HOMALOTHECIUM	AENEUM			M	M333D
HOMALOTHECIUM	FULGESCENS			M	M333D
HOMALOTHECIUM	NEVADENSE			M	M333D
HOMALOTHECIUM	NUTTALLII			M	M333D
HOMALOTHECIUM	PINNATIFIDUM			M	M333D
HOOKERIA	LUCENS			M	M333D
HYGROAMBLYSTEGIUM	TENAX			M	M333D
HYGROHYPNUM	LURIDUM			M	M333D
HYGROHYPNUM	OCHRACEUM			M	M333D
HYLOCOMIUM	SPLENDENS			M	M333D
HYPNUM	CIRCINALE			M	M333D
HYPNUM	SUBIMPONENS			M	M333D
ISOTHECIUM	MYOSUROIDES			M	M333D
LEPTOBRYUM	PYRIFORME			M	M333D
LEPTODICTYUM	RIPARIUM			M	M333D
LEUCOLEPIS	ACANTHONEURON			M	M333D
METANECKERA	MENZIESII			M	M333D
MNIUM	AMBIGUUM			M	M333D
MNIUM	BLYTTII			M	M333D
MNIUM	SPINULOSUM			M	M333D
MNIUM	THOMSONII			M	M333D
NECKERA	DOUGLASII			M	M333D
OLIGOTRICHUM	ALIGERUM			M	M333D
ORTHOTRICHUM	AFFINE			M	M333D
ORTHOTRICHUM	LAEVIGATUM			M	M333D
ORTHOTRICHUM	OBTUSIFOLIUM			M	M333D
ORTHOTRICHUM	RUPESTRE			M	M333D
ORTHOTRICHUM	SPECIOSUM			M	M333D
PHILONOTIS	CAPILLARIS			M	M333D

Genus	Species	Ext	Ext_name	M/H/A	Physprov
PHILONOTIS	FONTANA			M	M333D
PHILONOTIS	FONTANA	V	AMERICANA	M	M333D
PHILONOTIS	FONTANA	V	PUMILA	M	M333D
PHYSCOMITRIUM	PYRIFORME			M	M333D
PLAGIOMNIUM	ELLIPTICUM			M	M333D
PLAGIOMNIUM	INSIGNE			M	M333D
PLAGIOMNIUM	MEDIUM			M	M333D
PLAGIOTHECIUM	CAVIFOLIUM			M	M333D
PLAGIOTHECIUM	DENTICULATUM			M	M333D
PLAGIOTHECIUM	LAETUM			M	M333D
PLEUROZIUM	SCHREBERI			M	M333D
POGONATUM	CONTORTUM			M	M333D
POGONATUM	DENTATUM			M	M333D
POGONATUM	URNIGERUM			M	M333D
POHLIA	ANNOTINA			M	M333D
POHLIA	CAMPTOTRACHELA			M	M333D
POHLIA	CRUDA			M	M333D
POHLIA	NUTANS			M	M333D
POHLIA	PROLIGERA			M	M333D
POLYTRICHASTRUM	ALPINUM			M	M333D
POLYTRICHUM	JUNIPERINUM			M	M333D
POLYTRICHUM	LYALLII			M	M333D
POLYTRICHUM	PILIFERUM			M	M333D
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M	M333D
PSEUDOLESKEA	PATENS			M	M333D
PSEUDOLESKEA	RADICOSA			M	M333D
PSEUDOLESKEA	STENOPHYLLA			M	M333D
PSEUDOLESKEELLA	TECTORUM			M	M333D
PTERIGYNANDRUM	FILIFORME			M	M333D
PTYCHOMITRIUM	GARDNERI			M	M333D
RACOMITRIUM	ACICULARE			M	M333D
RACOMITRIUM	ERICOIDES			M	M333D
RACOMITRIUM	HETEROSTICHUM			M	M333D
RACOMITRIUM	MICROCARPON			M	M333D
RACOMITRIUM	VARIUM			M	M333D
RHIZOMNIUM	GLABRESCENS			M	M333D
RHIZOMNIUM	MAGNIFOLIUM			M	M333D
RHIZOMNIUM	PUNCTATUM			M	M333D
RHYTIDIADELPHUS	SQUARROSUS			M	M333D
RHYTIDIADELPHUS	SUBPINNATUS			M	M333D
RHYTIDIADELPHUS	TRIQUETRUS			M	M333D
RHYTIDIOPSIS	ROBUSTA			M	M333D
ROELLIA	ROELLII			M	M333D
SANIONIA	UNCINATA			M	M333D
SANIONIA	UNCINATA	V	SYMMETRICA	M	M333D
SANIONIA	UNCINATA	V	UNCINATA	M	M333D
SCHISTIDIUM	APOCARPUM			M	M333D
SCHISTIDIUM	CINCLIDODONTEUM			M	M333D
SCHISTIDIUM	RIVULARE			M	M333D
SCLEROPODIUM	OBTUSIFOLIUM			M	M333D
SCOULERIA	AQUATICA			M	M333D
SCOULERIA	MARGINATA			M	M333D
SPHAGNUM	CENTRALE			M	M333D
SPHAGNUM	MENDOCINUM			M	M333D
SPHAGNUM	SQUARROSUM			M	M333D
SPHAGNUM	SUBSECUNDUM			M	M333D
SPHAGNUM	TERES			M	M333D
TETRAPHIS	PELLUCIDA			M	M333D
THAMNOBRYUM	NECKEROIDES			M	M333D

Genus	Species	Ext	Ext_name	M/H/A	Physprov
TIMMIA	AUSTRIACA			M	M333D
TIMMIA	MEGAPOLITANA			M	M333D
TORTULA	PRINCEPS			M	M333D
TORTULA	RURALIS			M	M333D
TRACHYBRYUM	MEGAPTILUM			M	M333D

Cascade Mixed Forest:
coniferous forest, alpine meadow

M242C Eastern Cascades (OR, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov
ANTHOCEROS	PUNCTATUS			A	M242C
PHAEOCEROS	HALLII			A	M242C
ANASTROPHYLLUM	MINUTUM			H	M242C
ANEURA	PINGUIS			H	M242C
ANTHELIA	JULACEA			H	M242C
ANTHELIA	JURATZKANA			H	M242C
ASTERELLA	LINDENBERGIANA			H	M242C
ASTERELLA	LUDWIGII			H	M242C
ATHALAMIA	HYALINA			H	M242C
BARBILOPHOZIA	ATTENUATA			H	M242C
BARBILOPHOZIA	BARBATA			H	M242C
BARBILOPHOZIA	FLOERKEI			H	M242C
BARBILOPHOZIA	HATCHERI			H	M242C
BARBILOPHOZIA	LYCOPODIOIDES			H	M242C
BARBILOPHOZIA	QUADRILOBA	V	QUADRILOBA	H	M242C
BLASIA	PUSILLA			H	M242C
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M242C
BLEPHAROSTOMA	TRICHOPHYLLUM	S	BREVIRETE	H	M242C
BLEPHAROSTOMA	TRICHOPHYLLUM	S	TRICHOPHYLLUM	H	M242C
CALYPOGEIA	AZUREA			H	M242C
CALYPOGEIA	FISSA			H	M242C
CALYPOGEIA	FISSA	S	NEOGAEA	H	M242C
CALYPOGEIA	MUELLERIANA			H	M242C
CALYPOGEIA	MUELLERIANA	S	MUELLERIANA	H	M242C
CALYPOGEIA	SPHAGNICOLA			H	M242C
CALYPOGEIA	SUECICA			H	M242C
CEPHALOZIA	BICUSPIDATA			H	M242C
CEPHALOZIA	BICUSPIDATA	S	AMBIGUA	H	M242C
CEPHALOZIA	BICUSPIDATA	S	BICUSPIDATA	H	M242C
CEPHALOZIA	BICUSPIDATA	S	LAMMERSIANA	H	M242C
CEPHALOZIA	CONNIVENS			H	M242C
CEPHALOZIA	LUNULIFOLIA			H	M242C
CEPHALOZIA	PLENICEPS			H	M242C
CEPHALOZIA	PLENICEPS	V	PLENICEPS	H	M242C
CEPHALOZIELLA	DIVARICATA			H	M242C
CEPHALOZIELLA	DIVARICATA	V	DIVARICATA	H	M242C
CEPHALOZIELLA	DIVARICATA	V	SCABRA	H	M242C
CEPHALOZIELLA	ELACHISTA			H	M242C
CHILOSCYPHUS	PALLESCENS			H	M242C
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	M242C
CHILOSCYPHUS	POLYANTHOS			H	M242C
CHILOSCYPHUS	POLYANTHOS	V	POLYANTHOS	H	M242C
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M242C
CONOCEPHALUM	CONICUM			H	M242C
DIPLOPHYLLUM	OBTUSIFOLIUM			H	M242C
DIPLOPHYLLUM	TAXIFOLIUM			H	M242C
DIPLOPHYLLUM	TAXIFOLIUM	V	TAXIFOLIUM	H	M242C
DOUINIA	OVATA			H	M242C
FOSSOMBRONIA	FOVEOLATA			H	M242C
FRULLANIA	BOLANDERI			H	M242C
FRULLANIA	FRANCISCANA			H	M242C
FRULLANIA	TAMARISCI	S	NISQUALLENSIS	H	M242C
GEOCALYX	GRAVEOLENS			H	M242C
GYMNOCOLEA	INFLATA			H	M242C
GYMNOMITRION	CONCINNATUM			H	M242C
GYMNOMITRION	OBTUSUM			H	M242C
JAMESONIELLA	AUTUMNALIS			H	M242C
JUNGERMANNIA	ATROVIRENS			H	M242C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
JUNGERMANNIA	EVANSII			H	M242C
JUNGERMANNIA	EXSERTIFOLIA			H	M242C
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M242C
JUNGERMANNIA	LEIANTHA			H	M242C
JUNGERMANNIA	OBOVATA			H	M242C
JUNGERMANNIA	PUMILA			H	M242C
JUNGERMANNIA	RUBRA			H	M242C
JUNGERMANNIA	SPHAEROCARPA			H	M242C
LEPIDOZIA	REPTANS			H	M242C
LOPHOCOLEA	BIDENTATA			H	M242C
LOPHOCOLEA	CUSPIDATA			H	M242C
LOPHOCOLEA	HETEROPHYLLA			H	M242C
LOPHOCOLEA	MINOR			H	M242C
LOPHOZIA	ALPESTRIS			H	M242C
LOPHOZIA	COLLARIS			H	M242C
LOPHOZIA	EXCISA			H	M242C
LOPHOZIA	GILLMANII	V	GILLMANII	H	M242C
LOPHOZIA	HETEROCOLPOS			H	M242C
LOPHOZIA	INCISA			H	M242C
LOPHOZIA	INCISA	V	INCISA	H	M242C
LOPHOZIA	LATIFOLIA			H	M242C
LOPHOZIA	LONGIDENS			H	M242C
LOPHOZIA	LONGIDENS	S	LONGIDENS	H	M242C
LOPHOZIA	LONGIFLORA			H	M242C
LOPHOZIA	OPACIFOLIA			H	M242C
LOPHOZIA	VENTRICOSA			H	M242C
LOPHOZIA	VENTRICOSA	V	LONGIFLORA	H	M242C
LOPHOZIA	VENTRICOSA	V	SILVICOLA	H	M242C
LOPHOZIA	VENTRICOSA	V	VENTRICOSA	H	M242C
LOPHOZIA	WENZELII			H	M242C
MANNIA	TRIANDRA			H	M242C
MARCHANTIA	POLYMORPHA			H	M242C
MARSUPELLA	BREVISSIMA			H	M242C
MARSUPELLA	EMARGINATA			H	M242C
MOERCKIA	BLYTTII			H	M242C
PELLIA	ENDIVIIFOLIA			H	M242C
PELLIA	EPIPHYLLA			H	M242C
PELLIA	NEESIANA			H	M242C
PLAGIOCHILA	PORELLOIDES			H	M242C
PORELLA	BOLANDERI			H	M242C
PORELLA	CORDAEANA			H	M242C
PORELLA	NAVICULARIS			H	M242C
PORELLA	PLATYPHYLLA			H	M242C
PORELLA	PLATYPHYLLOIDEA			H	M242C
PORELLA	ROELLII			H	M242C
PREISSIA	QUADRATA			H	M242C
PTILIDIUM	CALIFORNICUM			H	M242C
PTILIDIUM	PULCHERRIMUM			H	M242C
RADULA	BOLANDERI			H	M242C
RADULA	COMPLANATA			H	M242C
REBOULIA	HEMISPHAERICA			H	M242C
RICCARDIA	CHAMEDRYFOLIA			H	M242C
RICCARDIA	LATIFRONS			H	M242C
RICCARDIA	MULTIFIDA			H	M242C
RICCARDIA	MULTIFIDA	V	MULTIFIDA	H	M242C
RICCARDIA	PALMATA			H	M242C
RICCIA	BEYRICHIANA			H	M242C
RICCIA	CAVERNOSA			H	M242C
RICCIA	FROSTII			H	M242C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
RICCIA	GLAUCA			H	M242C
RICCIA	SOROCARPA			H	M242C
RICCIA	TRICHOCARPA			H	M242C
RICCIOCARPOS	NATANS			H	M242C
SCAPANIA	AMERICANA			H	M242C
SCAPANIA	BOLANDERI			H	M242C
SCAPANIA	CURTA			H	M242C
SCAPANIA	CURTA	V	CURTA	H	M242C
SCAPANIA	GLAUCOCEPHALA			H	M242C
SCAPANIA	IRRIGUA			H	M242C
SCAPANIA	NEMOROSA			H	M242C
SCAPANIA	PALUDOSA			H	M242C
SCAPANIA	SUBALPINA			H	M242C
SCAPANIA	UMBROSA			H	M242C
SCAPANIA	UNDULATA			H	M242C
SCAPANIA	UNDULATA	V	OAKESII	H	M242C
SPHAEROCARPOS	TEXANUS			H	M242C
TARGIONIA	HYPOPHYLLA			H	M242C
TRITOMARIA	EXSECTIFORMIS			H	M242C
AMBLYSTEGIUM	SERPENS			M	M242C
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M242C
AMPHIDIUM	CALIFORNICUM			M	M242C
AMPHIDIUM	LAPPONICUM			M	M242C
AMPHIDIUM	MOUGEOTII			M	M242C
ANACOLIA	MENZIESII			M	M242C
ANDREAEA	NIVALIS			M	M242C
ANDREAEA	RUPESTRIS			M	M242C
ANTITRICHIA	CALIFORNICA			M	M242C
ANTITRICHIA	CURTIPENDULA			M	M242C
ARCTOA	FULVELLA			M	M242C
ATRICHUM	HAUSSKNECHTII			M	M242C
AULACOMNIUM	ANDROGYNUM			M	M242C
AULACOMNIUM	PALUSTRE			M	M242C
BARBULA	CONVOLUTA			M	M242C
BARBULA	EUSTEGIA			M	M242C
BARTRAMIA	ITHYPHYLLA			M	M242C
BARTRAMIA	POMIFORMIS			M	M242C
BLINDIA	ACUTA			M	M242C
BRACHYTHECIUM	ALBICANS			M	M242C
BRACHYTHECIUM	ASPERRIMUM			M	M242C
BRACHYTHECIUM	COLLINUM			M	M242C
BRACHYTHECIUM	ERYTHRORRHIZON			M	M242C
BRACHYTHECIUM	FRIGIDUM			M	M242C
BRACHYTHECIUM	HOLZINGERI			M	M242C
BRACHYTHECIUM	HYLOTAPETUM			M	M242C
BRACHYTHECIUM	LEIBERGII			M	M242C
BRACHYTHECIUM	NELSONII			M	M242C
BRACHYTHECIUM	PLUMOSUM			M	M242C
BRACHYTHECIUM	REFLEXUM	V	PACIFICUM	M	M242C
BRACHYTHECIUM	RIVULARE			M	M242C
BRACHYTHECIUM	SALEBROSUM			M	M242C
BRACHYTHECIUM	STARKEI			M	M242C
BRACHYTHECIUM	VELUTINUM			M	M242C
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M242C
BRUCHIA	BOLANDERI			M	M242C
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M242C
BRYUM	ALGOVICUM			M	M242C
BRYUM	ARGENTEUM			M	M242C
BRYUM	CAESPITICIUM			M	M242C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
BRYUM	CAPILLARE			M	M242C
BRYUM	DICHOTOMUM			M	M242C
BRYUM	GEMMIPARUM			M	M242C
BRYUM	LISAE	V	CUSPIDATUM	M	M242C
BRYUM	LONCHOCAULON			M	M242C
BRYUM	MEESIOIDES			M	M242C
BRYUM	MINIATUM			M	M242C
BRYUM	MUEHLENBECKII			M	M242C
BRYUM	PALLENS			M	M242C
BRYUM	PALLESCENS			M	M242C
BRYUM	PSEUDOTRIQUETRUM			M	M242C
BRYUM	WEIGELII			M	M242C
BUXBAUMIA	APHYLLA			M	M242C
BUXBAUMIA	PIPERI			M	M242C
BUXBAUMIA	VIRIDIS			M	M242C
CALLIERGON	CORDIFOLIUM			M	M242C
CALLIERGON	STRAMINEUM			M	M242C
CAMPYLIUM	POLYGAMUM			M	M242C
CERATODON	PURPUREUS			M	M242C
CLAOPODIUM	BOLANDERI			M	M242C
CLAOPODIUM	CRISPIFOLIUM			M	M242C
CONARDIA	COMPACTA			M	M242C
COSCINODON	CALYPTRATUS			M	M242C
CRATONEURON	FILICINUM			M	M242C
DENDROALSIA	ABIETINA			M	M242C
DESMATODON	LATIFOLIUS			M	M242C
DICHELYMA	UNCINATUM			M	M242C
DICHODONTIUM	OLYMPICUM			M	M242C
DICHODONTIUM	PELLUCIDUM			M	M242C
DICRANELLA	HETEROMALLA			M	M242C
DICRANELLA	PALUSTRIS			M	M242C
DICRANOWEISIA	CIRRATA			M	M242C
DICRANOWEISIA	CRISPULA			M	M242C
DICRANUM	BONJEANII			M	M242C
DICRANUM	FUSCESCENS			M	M242C
DICRANUM	HOWELLII			M	M242C
DICRANUM	PALLIDISETUM			M	M242C
DICRANUM	SCOPARIUM			M	M242C
DICRANUM	TAURICUM			M	M242C
DICRANUM	VIRIDE			M	M242C
DIDYMODON	VINEALIS			M	M242C
DIDYMODON	VINEALIS	V	BRACHYPHYLLUS	M	M242C
DIDYMODON	VINEALIS	V	LURIDUS	M	M242C
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	M242C
DIDYMODON	VINEALIS	V	VINEALIS	M	M242C
DISTICHIUM	CAPILLACEUM			M	M242C
DITRICHUM	FLEXICAULE			M	M242C
DITRICHUM	MONTANUM			M	M242C
DREPANOCLADUS	ADUNCUS			M	M242C
DREPANOCLADUS	CAPILLIFOLIUS			M	M242C
DRYPTODON	PATENS			M	M242C
ENCALYPTA	CILIATA			M	M242C
ENCALYPTA	RHAPTOCARPA			M	M242C
ENCALYPTA	VULGARIS			M	M242C
EURHYNCHIUM	OREGANUM			M	M242C
EURHYNCHIUM	PRAELONGUM			M	M242C
EURHYNCHIUM	PULCHELLUM	V	PULCHELLUM	M	M242C
FABRONIA	PUSILLA			M	M242C
FISSIDENS	ADIANTHOIDES			M	M242C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
FISSIDENS	BRYOIDES			M	M242C
FISSIDENS	TAXIFOLIUS			M	M242C
FISSIDENS	VENTRICOSUS			M	M242C
FONTINALIS	ANTIPYRETICA			M	M242C
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M242C
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M242C
FONTINALIS	HOWELLII			M	M242C
FONTINALIS	HYPNOIDES	V	DURIAEI	M	M242C
FONTINALIS	NEOMEXICANA			M	M242C
FUNARIA	HYGROMETRICA			M	M242C
FUNARIA	MUHLENBERGII			M	M242C
GRIMMIA	AFFINIS			M	M242C
GRIMMIA	ANODON			M	M242C
GRIMMIA	ANOMALA			M	M242C
GRIMMIA	DONNIANA			M	M242C
GRIMMIA	INCURVA			M	M242C
GRIMMIA	LAEVIGATA			M	M242C
GRIMMIA	MONTANA			M	M242C
GRIMMIA	PULVINATA			M	M242C
GRIMMIA	PULVINATA	V	AFRICANA	M	M242C
GRIMMIA	TENERRIMA			M	M242C
GRIMMIA	TORQUATA			M	M242C
GRIMMIA	TRICHOPHYLLA			M	M242C
GRIMMIA	TRICHOPHYLLA	V	TENUIS	M	M242C
GYMNOSTOMUM	AERUGINOSUM			M	M242C
HEDWIGIA	CILIATA			M	M242C
HELODIUM	BLANDOWII			M	M242C
HERZOGIELLA	SELIGERI			M	M242C
HETEROCLADIUM	DIMORPHUM			M	M242C
HETEROCLADIUM	PROCURRENS			M	M242C
HOMALOTHECIUM	AENEUM			M	M242C
HOMALOTHECIUM	FULGESCENS			M	M242C
HOMALOTHECIUM	NEVADENSE			M	M242C
HOMALOTHECIUM	NUTTALLII			M	M242C
HOMALOTHECIUM	PINNATIFIDUM			M	M242C
HYGROHYPNUM	BESTII			M	M242C
HYGROHYPNUM	LURIDUM			M	M242C
HYGROHYPNUM	MOLLE			M	M242C
HYGROHYPNUM	OCHRACEUM			M	M242C
HYGROHYPNUM	SMITHII			M	M242C
HYLOCOMIUM	SPLENDENS			M	M242C
HYMENOSTYLIUM	RECURVIROSTRE			M	M242C
HYPNUM	CIRCINALE			M	M242C
HYPNUM	DIECKII			M	M242C
HYPNUM	LINDBERGII			M	M242C
HYPNUM	PALLESCENS			M	M242C
HYPNUM	REVOLUTUM			M	M242C
HYPNUM	SUBIMPONENS			M	M242C
HYPNUM	VAUCHERI			M	M242C
ISOPTERYGIOPSIS	PULCHELLA			M	M242C
ISOTHECIUM	CRISTATUM			M	M242C
ISOTHECIUM	MYOSUROIDES			M	M242C
KIAERIA	BLYTTII			M	M242C
KIAERIA	FALCATA			M	M242C
KIAERIA	STARKEI			M	M242C
LEPTOBRYUM	PYRIFORME			M	M242C
LEPTODICTYUM	HUMILE			M	M242C
LEPTODICTYUM	RIPARIUM			M	M242C
LEUCOLEPIS	ACANTHONEURON			M	M242C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
MEESIA	TRIQUETRA			M	M242C
METANECKERA	MENZIESII			M	M242C
MNIUM	BLYTTII			M	M242C
MNIUM	LYCOPODIOIDES			M	M242C
MNIUM	MARGINATUM			M	M242C
MNIUM	SPINULOSUM			M	M242C
OLIGOTRICHUM	ALIGERUM			M	M242C
OLIGOTRICHUM	HERCYNICUM			M	M242C
OLIGOTRICHUM	PARALLELUM			M	M242C
ONCOPHORUS	VIRENS			M	M242C
ONCOPHORUS	WAHLENBERGII			M	M242C
ORTHOTRICHUM	AFFINE			M	M242C
ORTHOTRICHUM	ANOMALUM			M	M242C
ORTHOTRICHUM	CONSIMILE			M	M242C
ORTHOTRICHUM	CUPULATUM			M	M242C
ORTHOTRICHUM	HOLZINGERI			M	M242C
ORTHOTRICHUM	LAEVIGATUM			M	M242C
ORTHOTRICHUM	LYELLII			M	M242C
ORTHOTRICHUM	OBTUSIFOLIUM			M	M242C
ORTHOTRICHUM	PUMILUM			M	M242C
ORTHOTRICHUM	RIVULARE			M	M242C
ORTHOTRICHUM	RUPESTRE			M	M242C
ORTHOTRICHUM	SPECIOSUM			M	M242C
ORTHOTRICHUM	STRIATUM			M	M242C
PALUSTRIELLA	COMMUTATA			M	M242C
PHASCUM	CUSPIDATUM			M	M242C
PHILONOTIS	CAPILLARIS			M	M242C
PHILONOTIS	FONTANA			M	M242C
PHILONOTIS	FONTANA	V	AMERICANA	M	M242C
PHILONOTIS	FONTANA	V	CAESPITOSA	M	M242C
PHILONOTIS	FONTANA	V	FONTANA	M	M242C
PHILONOTIS	FONTANA	V	PUMILA	M	M242C
PHYSCOMITRIUM	PYRIFORME			M	M242C
PLAGIOMNIUM	INSIGNE			M	M242C
PLAGIOMNIUM	MEDIUM			M	M242C
PLAGIOMNIUM	ROSTRATUM			M	M242C
PLAGIOMNIUM	VENUSTUM			M	M242C
PLAGIOTHECIUM	DENTICULATUM			M	M242C
PLAGIOTHECIUM	LAETUM			M	M242C
PLAGIOTHECIUM	UNDULATUM			M	M242C
PLATYDICTYA	JUNGERMANNIOIDES			M	M242C
PLEURIDIUM	SUBULATUM			M	M242C
PLEUROZIUM	SCHREBERI			M	M242C
POGONATUM	CONTORTUM			M	M242C
POHLIA	ANNOTINA			M	M242C
POHLIA	BOLANDERI			M	M242C
POHLIA	CAMPTOTRACHELA			M	M242C
POHLIA	CRUDA			M	M242C
POHLIA	DRUMMONDII			M	M242C
POHLIA	ERECTA			M	M242C
POHLIA	FILUM			M	M242C
POHLIA	LUDWIGII			M	M242C
POHLIA	NUTANS			M	M242C
POHLIA	OBTUSIFOLIA			M	M242C
POHLIA	PROLIGERA			M	M242C
POHLIA	WAHLENBERGII			M	M242C
POLYTRICHASTRUM	ALPINUM			M	M242C
POLYTRICHUM	COMMUNE			M	M242C
POLYTRICHUM	COMMUNE	V	PERIGONIALE	M	M242C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
POLYTRICHUM	JUNIPERINUM			M	M242C
POLYTRICHUM	LONGISETUM			M	M242C
POLYTRICHUM	LYALLII			M	M242C
POLYTRICHUM	PILIFERUM			M	M242C
POLYTRICHUM	SEXANGULARE			M	M242C
POLYTRICHUM	SPHAEROTHECIUM			M	M242C
POLYTRICHUM	STRICTUM			M	M242C
POROTRICHUM	BIGELOVII			M	M242C
PSEUDOBRAUNIA	CALIFORNICA			M	M242C
PSEUDOCROSSIDIUM	REVOLUTUM			M	M242C
PSEUDOLESKEA	INCURVATA			M	M242C
PSEUDOLESKEA	PATENS			M	M242C
PSEUDOLESKEA	RADICOSA			M	M242C
PSEUDOLESKEA	STENOPHYLLA			M	M242C
PSEUDOTAXIPHYLLUM	ELEGANS			M	M242C
PTERIGYNANDRUM	FILIFORME			M	M242C
PTEROGONIUM	GRACILE			M	M242C
PTYCHOMITRIUM	GARDNERI			M	M242C
RACOMITRIUM	ACICULARE			M	M242C
RACOMITRIUM	BREVIPES			M	M242C
RACOMITRIUM	CANESCENS			M	M242C
RACOMITRIUM	DEPRESSUM			M	M242C
RACOMITRIUM	ELONGATUM			M	M242C
RACOMITRIUM	ERICOIDES			M	M242C
RACOMITRIUM	HETEROSTICHUM			M	M242C
RACOMITRIUM	LANUGINOSUM			M	M242C
RACOMITRIUM	MACOUNII			M	M242C
RACOMITRIUM	MICROCARPON			M	M242C
RACOMITRIUM	MUTICUM			M	M242C
RACOMITRIUM	OBESUM			M	M242C
RACOMITRIUM	OCCIDENTALE			M	M242C
RACOMITRIUM	SUDETICUM			M	M242C
RACOMITRIUM	VARIUM			M	M242C
RHIZOMNIUM	GLABRESCENS			M	M242C
RHIZOMNIUM	MAGNIFOLIUM			M	M242C
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M242C
RHIZOMNIUM	PUNCTATUM			M	M242C
RHYTIDIADELPHUS	LOREUS			M	M242C
RHYTIDIADELPHUS	SQUARROSUS			M	M242C
RHYTIDIADELPHUS	TRIQUETRUS			M	M242C
RHYTIDIOPSIS	ROBUSTA			M	M242C
ROELLIA	ROELLII			M	M242C
SANIONIA	UNCINATA			M	M242C
SCHISTIDIUM	AGASSIZII			M	M242C
SCHISTIDIUM	APOCARPUM			M	M242C
SCHISTIDIUM	HETEROPHYLLUM			M	M242C
SCHISTIDIUM	RIVULARE			M	M242C
SCLEROPODIUM	CESPITANS			M	M242C
SCLEROPODIUM	CESPITANS	V	SUBLAEVE	M	M242C
SCLEROPODIUM	OBTUSIFOLIUM			M	M242C
SCLEROPODIUM	TOURETII			M	M242C
SCLEROPODIUM	TOURETII	V	COLPOPHYLLUM	M	M242C
SCOULERIA	AQUATICA			M	M242C
SCOULERIA	MARGINATA			M	M242C
SPHAGNUM	CONTORTUM			M	M242C
SPHAGNUM	FUSCUM			M	M242C
SPHAGNUM	GIRGENSOHNII			M	M242C
SPHAGNUM	LESCURII			M	M242C
SPHAGNUM	MENDOCINUM			M	M242C

Genus	Species	Ext	Ext_name	M/H/A	Physprov
SPHAGNUM	PALUSTRE			M	M242C
SPHAGNUM	RUSSOWII			M	M242C
SPHAGNUM	SQUARROSUM			M	M242C
SPHAGNUM	SUBSECUNDUM			M	M242C
SPHAGNUM	SUBSECUNDUM	V	SUBSECUNDUM	M	M242C
SPHAGNUM	TERES			M	M242C
SPHAGNUM	WARNSTORFII			M	M242C
SPLACHNUM	AMPULLACEUM			M	M242C
TETRAPHIS	PELLUCIDA			M	M242C
THAMNOBRYUM	NECKEROIDES			M	M242C
TIMMIA	AUSTRIACA			M	M242C
TIMMIELLA	ANOMALA			M	M242C
TIMMIELLA	CRASSINERVIS			M	M242C
TOMENTHYPNUM	NITENS			M	M242C
TORTELLA	TORTUOSA			M	M242C
TORTULA	BARTRAMII			M	M242C
TORTULA	CANINERVIS			M	M242C
TORTULA	LAEVIPILA			M	M242C
TORTULA	LAEVIPILA	V	LAEVIPILA	M	M242C
TORTULA	MUCRONIFOLIA			M	M242C
TORTULA	MURALIS			M	M242C
TORTULA	NORVEGICA			M	M242C
TORTULA	PAPILLOSISSIMA			M	M242C
TORTULA	PRINCEPS			M	M242C
TORTULA	RURALIS			M	M242C
TRACHYBRYUM	MEGAPTILUM			M	M242C
WARNSTORFIA	EXANNULATA			M	M242C
WARNSTORFIA	FLUITANS			M	M242C
WEISSIA	CONTROVERSA			M	M242C

Sierran Steppe:

coniferous forest, alpine meadow

M261D Southern Cascades (OR)
M261G Modoc Plateau (OR)

Genus	Species	Ext	Ext_name	M/H/A	Physprov
EURHYNCHIUM	OREGANUM			M	M261D
ORTHOTRICHUM	SPECIOSUM			M	M261D
TORTULA	PRINCEPS			M	M261D
TORTULA	RURALIS			M	M261D

Genus	Species	Ext	Ext_name	M/H/A	Physprov
CHILOSCYPHUS	PALLESCENS			H	M261G
MARCHANTIA	POLYMORPHA			H	M261G
DIDYMODON	VINEALIS			M	M261G
DIDYMODON	VINEALIS	V	NICHOLSONII	M	M261G
FONTINALIS	ANTIPYRETICA			M	M261G
ORTHOTRICHUM	CUPULATUM			M	M261G
ORTHOTRICHUM	LAEVIGATUM			M	M261G
POLYTRICHUM	LONGISETUM			M	M261G
SCHISTIDIUM	OCCIDENTALE			M	M261G
TORTULA	PRINCEPS			M	M261G

Palouse Dry Steppe Province

331A Palouse Prairie (ID, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
RICCIOCARPOS	NATANS			H	331A	AQ
ANASTROPHYLLUM	MICHAUXII			H	331A	D
CALYPOGEIA	AZUREA			H	331A	DW
LOPHOCOLEA	HETEROPHYLLA			H	331A	DW
LOPHOZIA	VENTRICOSA			H	331A	DW
PTILIDIUM	PULCHERRIMUM			H	331A	DW
ATHALAMIA	HYALINA			H	331A	RO
PORELLA	CORDAEANA			H	331A	RO
PTILIDIUM	CALIFORNICUM			H	331A	RO
BLASIA	PUSILLA			H	331A	RW
CHILOSCYPHUS	PALLESCENS			H	331A	SD
JUNGERMANNIA	ATROVIRENS			H	331A	SD
LOPHOCOLEA	MINOR			H	331A	SD
LOPHOZIA	LONGIFLORA			H	331A	SD
PELLIA	EPIPHYLLA			H	331A	SD
RICCIA	SOROCARPA			H	331A	SD
SCAPANIA	UMBROSA			H	331A	SD
CHILOSCYPHUS	POLYANTHOS			H	331A	SW
MARCHANTIA	POLYMORPHA			H	331A	SW
RICCIA	FROSTII			H	331A	SW
SPHAEROCARPOS	HIANS			H	331A	SW
TARGIONIA	HYPOPHYLLA			H	331A	SW
BRACHYTHECIUM	GLAREOSUM			M	331A	
ORTHOTRICHUM	PALOUSENSE			M	331A	
DREPANOCLADUS	FLUITANS			M	331A	AQ
FONTINALIS	NEOMEXICANA			M	331A	AQ
AULACOMNIUM	ANDROGYNUM			M	331A	DW
AULACOMNIUM	ANDROGYNUM			M	331A	DW
BRACHYTHECIUM	VELUTINUM			M	331A	D
BUXBAUMIA	PIPERI			M	331A	DW
CERATODON	PURPUREUS			M	331A	DW
DICRANOWEISIA	CIRRATA			M	331A	DW
DICRANUM	FLAGELLARE			M	331A	DW
DICRANUM	SCOPARIUM			M	331A	DW
DICRANUM	TAURICUM			M	331A	DW
EURHYNCHIUM	OREGANUM			M	331A	DW
FISSIDENS	BRYOIDES			M	331A	DW
HERZOGIELLA	SELIGERI			M	331A	DW
HETEROCLADIUM	PROCURRENS			M	331A	DW
HOMALOTHECIUM	FULGESCENS			M	331A	DW
HYPNUM	CIRCINALE			M	331A	DW
HYPNUM	SUBIMPONENS			M	331A	DW
MNIUM	SPINULOSUM			M	331A	DW
POHLIA	NUTANS			M	331A	DW
POLYTRICHUM	JUNIPERINUM			M	331A	DW
PTERIGYNANDRUM	FILIFORME			M	331A	DW
SANIONIA	UNCINATA	V	SYMMETRICA	M	331A	DW
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	331A	EP
ANTITRICHIA	CURTIPENDULA			M	331A	EP
ANTITRICHIA	CURTIPENDULA	V	GIGANTEA	M	331A	EP
BRACHYTHECIUM	ALBICANS			M	331A	EP
BRACHYTHECIUM	VELUTINUM			M	331A	EP
CLAOPODIUM	CRISPIFOLIUM			M	331A	EP
DICRANOWEISIA	CIRRATA			M	331A	EP
DICRANUM	TAURICUM			M	331A	EP
HOMALOTHECIUM	AENEUM			M	331A	E
HYPNUM	CIRCINALE			M	331A	EP
HYPNUM	SUBIMPONENS			M	331A	EP

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
METANECKERA	MENZIESII			M	331A	EP
NECKERA	DOUGLASII			M	331A	EP
ORTHOTRICHUM	AFFINE			M	331A	EP
ORTHOTRICHUM	SORDIDUM			M	331A	EP
ORTHOTRICHUM	SPECIOSUM			M	331A	EP
PSEUDOLESKEA	STENOPHYLLA			M	331A	EP
SANIONIA	UNCINATA			M	331A	EP
TORTULA	LATIFOLIA			M	331A	EP
TORTULA	PRINCEPS			M	331A	EP
TORTULA	RURALIS			M	331A	EP
TRIPTEROCLADIUM	LEUCOCLADULUM			M	331A	EP
BRACHYTHECIUM	GLAREOSUM			M	331A	HD
BRACHYTHECIUM	HYLOTAPETUM			M	331A	HD
DICRANUM	HOWELLII			M	331A	HD
DICRANUM	SCOPARIUM			M	331A	HD
EURHYNCHIUM	OREGANUM			M	331A	HD
HAMATOCAULIS	VERNICOSUS			M	331A	HD
HERZOGIELLA	SELIGERI			M	331A	HD
HYLOCOMIUM	SPLENDENS			M	331A	HD
HYPNUM	SUBIMPONENS			M	331A	HD
MNIUM	SPINULOSUM			M	331A	HD
PLAGIOMNIUM	INSIGNE			M	331A	HD
PLAGIOMNIUM	VENUSTUM			M	331A	HD
RHYTIDIADELPHUS	TRIQUETRUS			M	331A	HD
RHYTIDIOPSIS	ROBUSTA			M	331A	HD
ROELLIA	ROELLII			M	331A	HD
TAYLORIA	SERRATA			M	331A	HD
TIMMIA	AUSTRIACA			M	331A	HD
TORTULA	RURALIS			M	331A	HD
TRACHYBRYUM	MEGAPTILUM			M	331A	HD
FISSIDENS	GRANDIFRONS			M	331A	RC
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	331A	RO
ANACOLIA	MENZIESII			M	331A	RO
ANTITRICHIA	CALIFORNICA			M	331A	RO
AULACOMNIUM	ANDROGYNUM			M	331A	RO
BARTRAMIA	POMIFORMIS			M	331A	RO
BRACHYTHECIUM	ALBICANS			M	331A	RO
BRACHYTHECIUM	OXYCLADON			M	331A	RO
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	331A	RO
BRYUM	ALGOVICUM			M	331A	RO
BRYUM	ARGENTEUM			M	331A	RO
BRYUM	CAESPITICIUM			M	331A	RO
BRYUM	CAPILLARE			M	331A	RO
BRYUM	GEMMIPARUM			M	331A	RO
BRYUM	PSEUDOTRIQUETRUM			M	331A	RO
CERATODON	PURPUREUS			M	331A	RO
COSCINODON	CALYPTRATUS			M	331A	RO
DICRANOWEISIA	CIRRATA			M	331A	RO
DIDYMODON	VINEALIS			M	331A	RO
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	331A	RO
DISTICHIUM	CAPILLACEUM			M	331A	RO
DRYPTODON	PATENS			M	331A	RO
ENCALYPTA	CILIATA			M	331A	RO
ENCALYPTA	RHAPTOCARPA			M	331A	RO
FABRONIA	PUSILLA			M	331A	RO
GRIMMIA	AFFINIS			M	331A	RO
GRIMMIA	LAEVIGATA			M	331A	RO
GRIMMIA	MONTANA			M	331A	RO
GRIMMIA	OVALIS			M	331A	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
GRIMMIA	PULVINATA			M	331A	RO
GRIMMIA	TENERRIMA			M	331A	[illegible]
GRIMMIA	TRICHOPHYLLA			M	331A	[illegible]
HEDWIGIA	CILIATA			M	331A	RO
HOMALOTHECIUM	AENEUM			M	331A	RO
HOMALOTHECIUM	FULGESCENS			M	331A	RO
HOMALOTHECIUM	NEVADENSE			M	331A	RO
HOMALOTHECIUM	PINNATIFIDUM			M	331A	RO
HYLOCOMIUM	SPLENDENS			M	331A	RO
HYPNUM	SUBIMPONENS			M	331A	RO
ISOTHECIUM	MYOSUROIDES			M	331A	RO
METANECKERA	MENZIESII			M	331A	RO
ORTHOTRICHUM	AFFINE			M	331A	RO
ORTHOTRICHUM	ALPESTRE			M	331A	RO
ORTHOTRICHUM	CONSIMILE			M	331A	RO
ORTHOTRICHUM	CUPULATUM			M	331A	RO
ORTHOTRICHUM	HOLZINGERI			M	331A	RO
ORTHOTRICHUM	LAEVIGATUM			M	331A	RO
ORTHOTRICHUM	RIVULARE			M	331A	RO
ORTHOTRICHUM	RUPESTRE			M	331A	RO
PLAGIOMNIUM	INSIGNE			M	331A	RO
PLAGIOMNIUM	VENUSTUM			M	331A	RO
POLYTRICHUM	JUNIPERINUM			M	331A	RO
PTERIGYNANDRUM	FILIFORME			M	331A	RO
PTYCHOMITRIUM	GARDNERI			M	331A	RO
RACOMITRIUM	CANESCENS			M	331A	RO
RACOMITRIUM	ERICOIDES			M	331A	RO
RACOMITRIUM	HETEROSTICHUM			M	331A	RO
RACOMITRIUM	MICROCARPON			M	331A	[illegible]
RHYTIDIADELPHUS	TRIQUETRUS			M	331A	[illegible]
SCHISTIDIUM	AGASSIZII			M	331A	RO
SCHISTIDIUM	APOCARPUM			M	331A	RO
SCHISTIDIUM	HETEROPHYLLUM			M	331A	RO
SCLEROPODIUM	TOURETII			M	331A	RO
TIMMIA	AUSTRIACA			M	331A	RO
TORTULA	PAPILLOSISSIMA			M	331A	RO
TORTULA	PRINCEPS			M	331A	RO
TORTULA	RURALIS			M	331A	RO
AMBLYSTEGIUM	SERPENS			M	331A	RW
BRYUM	PSEUDOTRIQUETRUM			M	331A	RW
CERATODON	PURPUREUS			M	331A	RW
DIDYMODON	VINEALIS			M	331A	RW
SCLEROPODIUM	OBTUSIFOLIUM			M	331A	RW
SCOULERIA	MARGINATA			M	331A	RW
ALOINA	BIFRONS			M	331A	SD
ATRICHUM	ANGUSTATUM			M	331A	SD
ATRICHUM	SELWYNII			M	331A	SD
ATRICHUM	UNDULATUM			M	331A	SD
BARBULA	CONVOLUTA			M	331A	SD
BARBULA	UNGUICULATA			M	331A	SD
BRACHYTHECIUM	ALBICANS			M	331A	SD
BRACHYTHECIUM	COLLINUM			M	331A	SD
BRACHYTHECIUM	HYLOTAPETUM			M	331A	SD
BRACHYTHECIUM	RUTABULUM			M	331A	SD
BRACHYTHECIUM	SALEBROSUM			M	331A	SD
BRACHYTHECIUM	VELUTINUM			M	331A	[illegible]
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	331A	[illegible]
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	331A	SD
BRYUM	ARGENTEUM			M	331A	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
BRYUM	CAESPITICIUM			M	331A	SD
BRYUM	CAPILLARE			M	331A	SD
BRYUM	LISAE	V	CUSPIDATUM	M	331A	SD
BRYUM	MUEHLENBECKII			M	331A	SD
BRYUM	PALLESCENS			M	331A	SD
BRYUM	PSEUDOTRIQUETRUM			M	331A	SD
CERATODON	PURPUREUS			M	331A	SD
CLAOPODIUM	CRISPIFOLIUM			M	331A	SD
DIDYMODON	VINEALIS			M	331A	SD
DIDYMODON	VINEALIS	V	BRACHYPHYLLUS	M	331A	SD
DIDYMODON	VINEALIS	V	LURIDUS	M	331A	SD
DIDYMODON	VINEALIS	V	VINEALIS	M	331A	SD
ENCALYPTA	RHAPTOCARPA			M	331A	SD
ENCALYPTA	VULGARIS			M	331A	SD
EURHYNCHIUM	OREGANUM			M	331A	SD
EURHYNCHIUM	PULCHELLUM			M	331A	SD
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	331A	SD
FISSIDENS	BRYOIDES			M	331A	SD
FISSIDENS	LIMBATUS			M	331A	SD
FUNARIA	HYGROMETRICA			M	331A	SD
HOMALOTHECIUM	FULGESCENS			M	331A	SD
LEPTOBRYUM	PYRIFORME			M	331A	SD
MNIUM	SPINULOSUM			M	331A	SD
PHASCUM	CUSPIDATUM			M	331A	SD
PLAGIOMNIUM	INSIGNE			M	331A	SD
PLAGIOMNIUM	MEDIUM			M	331A	SD
POHLIA	CRUDA			M	331A	SD
POHLIA	DRUMMONDII			M	331A	SD
POLYTRICHUM	JUNIPERINUM			M	331A	SD
POLYTRICHUM	PILIFERUM			M	331A	SD
POTTIA	CRINITA			M	331A	SD
PTERIGYNANDRUM	FILIFORME			M	331A	SD
PTERYGONEURUM	OVATUM			M	331A	SD
RHODOBRYUM	ROSEUM			M	331A	SD
RHYTIDIADELPHUS	LOREUS			M	331A	SD
RHYTIDIADELPHUS	TRIQUETRUS			M	331A	SD
TIMMIA	AUSTRIACA			M	331A	SD
TORTULA	BREVIPES			M	331A	SD
TORTULA	MUCRONIFOLIA			M	331A	SD
TORTULA	PRINCEPS			M	331A	SD
TORTULA	RURALIS			M	331A	SD
TRACHYBRYUM	MEGAPTILUM			M	331A	SD
WEISSIA	CONTROVERSA			M	331A	SD
AMBLYSTEGIUM	SERPENS			M	331A	SW
AMBLYSTEGIUM	VARIUM			M	331A	SW
ATRICHUM	SELWYNII			M	331A	SW
BRACHYTHECIUM	ALBICANS			M	331A	SW
BRACHYTHECIUM	ERYTHRORRHIZON			M	331A	SW
BRACHYTHECIUM	FRIGIDUM			M	331A	SW
BRYUM	PSEUDOTRIQUETRUM			M	331A	SW
DREPANOCLADUS	ADUNCUS			M	331A	SW
EURHYNCHIUM	PRAELONGUM			M	331A	SW
FUNARIA	AMERICANA			M	331A	SW
FUNARIA	HYGROMETRICA			M	331A	SW
HYLOCOMIUM	SPLENDENS			M	331A	SW
LEPTODICTYUM	HUMILE			M	331A	SW
MNIUM	THOMSONII			M	331A	SW
PHILONOTIS	FONTANA	V	AMERICANA	M	331A	SW
PHILONOTIS	FONTANA	V	PUMILA	M	331A	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
PLAGIOMNIUM	INSIGNE			M	331A	SW
POHLIA	WAHLENBERGII			M	331A	
RHYTIDIADELPHUS	TRIQUETRUS			M	331A	
SANIONIA	UNCINATA			M	331A	SW
SANIONIA	UNCINATA	V	SYMMETRICA	M	331A	SW

Intermountain Semi-Desert Province

342B	Northwestern Basin and Range (ID, NV, OR, UT)
342C	Owyhee Uplands (ID, NV, OR)
342D	Snake River Basalts (ID, WY)
342E	Bear Lake (ID)
342H	High Lava Plains (OR)
342I	Columbia Basin (OR, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
ATHALAMIA	HYALINA			H	342B	SD
RICCIA	BEYRICHIANA			H	342B	[illegible]
CHILOSCYPHUS	PALLESCENS			H	342B	[illegible]
MARCHANTIA	POLYMORPHA			H	342B	SW
AMBLYSTEGIUM	SERPENS			M	342B	DW
AULACOMNIUM	ANDROGYNUM			M	342B	DW
ORTHOTRICHUM	AFFINE			M	342B	EP
AULACOMNIUM	PALUSTRE			M	342B	PE
DREPANOCLADUS	ADUNCUS			M	342B	PE
BRYUM	ARGENTEUM			M	342B	RO
COSCINODON	CALYPTRATUS			M	342B	RO
DESMATODON	PLINTHOBIUS			M	342B	RO
ENCALYPTA	VULGARIS			M	342B	RO
GRIMMIA	ANODON			M	342B	RO
GRIMMIA	LAEVIGATA			M	342B	RO
GRIMMIA	MONTANA			M	342B	RO
GRIMMIA	OVALIS			M	342B	RO
GRIMMIA	PLAGIOPODIA			M	342B	RO
GRIMMIA	POECILOSTOMA			M	342B	RO
GRIMMIA	TENERRIMA			M	342B	RO
HOMALOTHECIUM	FULGESCENS			M	342B	RO
HYPNUM	REVOLUTUM			M	342B	RO
ORTHOTRICHUM	ALPESTRE			M	342B	RO
ORTHOTRICHUM	CUPULATUM			M	342B	RO
ORTHOTRICHUM	LAEVIGATUM			M	342B	RO
SCHISTIDIUM	APOCARPUM			M	342B	RO
SCHISTIDIUM	HETEROPHYLLUM			M	342B	RO
SCHISTIDIUM	PULVINATUM			M	342B	RO
TORTULA	MURALIS			M	342B	[illegible]
TORTULA	PAPILLOSISSIMA			M	342B	[illegible]
HYGROHYPNUM	MOLLE			M	342B	RW
HYGROHYPNUM	OCHRACEUM			M	342B	RW
SCHISTIDIUM	OCCIDENTALE			M	342B	RW
SCHISTIDIUM	RIVULARE			M	342B	RW
BRACHYTHECIUM	COLLINUM			M	342B	SD
BRACHYTHECIUM	LEIBERGII			M	342B	SD
BRACHYTHECIUM	RUTABULUM			M	342B	SD
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	342B	SD
BRYUM	ARGENTEUM			M	342B	SD
BRYUM	LISAE	V	CUSPIDATUM	M	342B	SD
BRYUM	MINIATUM			M	342B	SD
CERATODON	PURPUREUS			M	342B	SD
ENCALYPTA	RHAPTOCARPA			M	342B	SD
FUNARIA	HYGROMETRICA			M	342B	SD
LEPTOBRYUM	PYRIFORME			M	342B	SD
POHLIA	CRUDA			M	342B	SD
POLYTRICHUM	JUNIPERINUM			M	342B	SD
POLYTRICHUM	LONGISETUM			M	342B	SD
POLYTRICHUM	LYALLII			M	342B	SD
POTTIA	NEVADENSIS			M	342B	SD
PTERYGONEURUM	OVATUM			M	342B	SD
PTERYGONEURUM	SUBSESSILE			M	342B	SD
TORTULA	BREVIPES			M	342B	SD
TORTULA	CANINERVIS			M	342B	SD
TORTULA	MUCRONIFOLIA			M	342B	[illegible]
TORTULA	PRINCEPS			M	342B	[illegible]
TORTULA	RURALIS			M	342B	[illegible]
AMBLYSTEGIUM	SERPENS			M	342B	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	342B	SW
BRYUM	MUEHLENBECKII			M	342B	SW
BRYUM	PALLESCENS			M	342B	SW
BRYUM	PSEUDOTRIQUETRUM			M	342B	SW
BRYUM	WEIGELII			M	342B	SW
DREPANOCLADUS	ADUNCUS			M	342B	SW
PHILONOTIS	FONTANA			M	342B	SW
PHYSCOMITRIUM	HOOKERI			M	342B	SW
POHLIA	CRUDA			M	342B	SW
POHLIA	WAHLENBERGII			M	342B	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
ATHALAMIA	HYALINA			H	342C	[illegible]
CEPHALOZIELLA	DIVARICATA			H	342C	[illegible]
RICCIA	CAMPBELLIANA			H	342C	[illegible]
RICCIA	SOROCARPA			H	342C	SD
SCOULERIA	AQUATICA			M	342C	AQ
BRACHYTHECIUM	COLLINUM			M	342C	HD
ENCALYPTA	RHAPTOCARPA			M	342C	HD
HYPNUM	REVOLUTUM			M	342C	HD
COSCINODON	CALYPTRATUS			M	342C	RO
GRIMMIA	MONTANA			M	342C	RO
GRIMMIA	TENERRIMA			M	342C	RO
ORTHOTRICHUM	FLOWERSII			M	342C	RO
PHILONOTIS	CAPILLARIS			M	342C	RO
TORTULA	RURALIS			M	342C	RO
ALOINA	BIFRONS			M	342C	SD
BRYUM	ARGENTEUM			M	342C	SD
CERATODON	PURPUREUS			M	342C	SD
COSCINODON	CALYPTRATUS			M	342C	SD
ENCALYPTA	VULGARIS			M	342C	SD
FUNARIA	HYGROMETRICA			M	342C	SD
HOMALOTHECIUM	NEVADENSE			M	342C	SD
PTERYGONEURUM	OVATUM			M	342C	SD
PTERYGONEURUM	SUBSESSILE			M	342C	SD
TORTULA	CANINERVIS			M	342C	SD
TORTULA	PAPILLOSISSIMA			M	342C	SD
TORTULA	RURALIS			M	342C	SD
BRYUM	CAPILLARE			M	342C	SW
BRYUM	LISAE	V	CUSPIDATUM	M	342C	[illegible]
BRYUM	PSEUDOTRIQUETRUM			M	342C	[illegible]
DREPANOCLADUS	ADUNCUS			M	342C	[illegible]
PHILONOTIS	FONTANA			M	342C	SW
TORTULA	PAPILLOSISSIMA			M	342C	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
ATHALAMIA	HYALINA			H	342D	SD
FISSIDENS	GRANDIFRONS			M	342D	AQ
FONTINALIS	HYPNOIDES			M	342D	AQ
PLAGIOMNIUM	ELLIPTICUM			M	342D	HD
COSCINODON	CALYPTRATUS			M	342D	RO
GRIMMIA	ANODON			M	342D	RO
GRIMMIA	PULVINATA			M	342D	RO
GRIMMIA	TENERRIMA			M	342D	RO
HOMALOTHECIUM	NEVADENSE			M	342D	RO
ORTHOTRICHUM	LAEVIGATUM			M	342D	RO
TORTULA	BARTRAMII			M	342D	RO
TORTULA	CANINERVIS			M	342D	RO
TORTULA	RURALIS			M	342D	RO
FISSIDENS	GRANDIFRONS			M	342D	RW
HYGROHYPNUM	BESTII			M	342D	RW
HYGROHYPNUM	LURIDUM			M	342D	RW
BRYUM	CAESPITICIUM			M	342D	SD
ENCALYPTA	VULGARIS			M	342D	SD
FUNARIA	HYGROMETRICA			M	342D	SD
POTTIA	NEVADENSIS			M	342D	SD
PTERYGONEURUM	OVATUM			M	342D	SD
TORTULA	RURALIS			M	342D	SD
BRYUM	ARGENTEUM			M	342D	SW
BRYUM	WEIGELII			M	342D	SW
CONARDIA	COMPACTA			M	342D	SW
CRATONEURON	FILICINUM			M	342D	SW
HYGROAMBLYSTEGIUM	TENAX			M	342D	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
BRACHYTHECIUM	OEDIPODIUM			M	342E	HP

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
CHILOSCYPHUS	PALLESCENS			H	342H	DW
PORELLA	CORDAEANA			H	342H	RW
SCAPANIA	UNDULATA			H	342H	RW
PLATYDICTYA	JUNGERMANNIOIDES			M	342H	DW
ANACOLIA	MENZIESII			M	342H	RO
COSCINODON	CALYPTRATUS			M	342H	RO
GRIMMIA	LAEVIGATA			M	342H	RO
GRIMMIA	MONTANA			M	342H	RO
ORTHOTRICHUM	LAEVIGATUM			M	342H	RO
TORTULA	PAPILLOSISSIMA			M	342H	RO
BRACHYTHECIUM	FRIGIDUM			M	342H	RW
FONTINALIS	NEOMEXICANA			M	342H	RW
DESMATODON	HEIMII			M	342H	SA
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	342H	SD
BRYUM	ARGENTEUM			M	342H	SD
CERATODON	PURPUREUS			M	342H	SD
GRIMMIA	LAEVIGATA			M	342H	SD
POLYTRICHUM	PILIFERUM			M	342H	SD
TIMMIA	AUSTRIACA			M	342H	SD
TORTULA	RURALIS			M	342H	SD
BRACHYTHECIUM	FRIGIDUM			M	342H	SW
LEPTOBRYUM	PYRIFORME			M	342H	SW
PHILONOTIS	FONTANA			M	342H	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
RICCIOCARPOS	NATANS			H	342I	AQ
LEPIDOZIA	REPTANS			H	342I	[illegible]
LOPHOZIA	HETEROCOLPOS			H	342I	[illegible]
PTILIDIUM	CALIFORNICUM			H	342I	DW
TRITOMARIA	EXSECTA			H	342I	DW
PTILIDIUM	CALIFORNICUM			H	342I	EP
SCAPANIA	IRRIGUA			H	342I	PE
SCAPANIA	GYMNOSTOMOPHILA			H	342I	RC
ATHALAMIA	HYALINA			H	342I	RO
CEPHALOZIELLA	DIVARICATA			H	342I	RO
SCAPANIA	UNDULATA	V	OAKESII	H	342I	RO
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	342I	RW
CHILOSCYPHUS	POLYANTHOS			H	342I	RW
DIPLOPHYLLUM	ALBICANS			H	342I	RW
SCAPANIA	AMERICANA			H	342I	RW
BARBILOPHOZIA	HATCHERI			H	342I	SD
CEPHALOZIELLA	DIVARICATA			H	342I	SD
LOPHOZIA	ALPESTRIS			H	342I	SD
RICCIA	BEYRICHIANA			H	342I	SD
RICCIA	SOROCARPA			H	342I	SD
RICCIOCARPOS	NATANS			H	342I	SD
TARGIONIA	HYPOPHYLLA			H	342I	SD
BARBILOPHOZIA	BARBATA			H	342I	SW
MANNIA	TRIANDRA			H	342I	SW
MARCHANTIA	POLYMORPHA			H	342I	SW
REBOULIA	HEMISPHAERICA			H	342I	SW
SPHAEROCARPOS	TEXANUS			H	342I	SW
TRITOMARIA	QUINQUEDENTATA	V	QUINQUEDENTAT.	H	342I	SW
FONTINALIS	ANTIPYRETICA			M	342I	[illegible]
FONTINALIS	NEOMEXICANA			M	342I	[illegible]
LEPTODICTYUM	RIPARIUM			M	342I	AQ
SCLEROPODIUM	OBTUSIFOLIUM			M	342I	AQ
SCOULERIA	AQUATICA			M	342I	AQ
SCOULERIA	MARGINATA			M	342I	AQ
AMBLYSTEGIUM	SERPENS			M	342I	DW
AULACOMNIUM	ANDROGYNUM			M	342I	DW
DICRANUM	FLAGELLARE			M	342I	DW
DICRANUM	STRICTUM			M	342I	DW
DICRANUM	TAURICUM			M	342I	DW
FUNARIA	HYGROMETRICA			M	342I	DW
HYPNUM	SUBIMPONENS			M	342I	DW
ORTHOTRICHUM	AFFINE			M	342I	DW
DENDROALSIA	ABIETINA			M	342I	EP
ENCALYPTA	AFFINIS			M	342I	EP
GRIMMIA	MONTANA			M	342I	EP
HOMALOTHECIUM	FULGESCENS			M	342I	EP
HOMALOTHECIUM	NEVADENSE			M	342I	EP
HOMALOTHECIUM	NUTTALLII			M	342I	EP
ORTHOTRICHUM	AFFINE			M	342I	EP
ORTHOTRICHUM	LYELLII			M	342I	EP
ORTHOTRICHUM	OBTUSIFOLIUM			M	342I	EP
ORTHOTRICHUM	RIVULARE			M	342I	EP
ORTHOTRICHUM	SORDIDUM			M	342I	EP
ORTHOTRICHUM	SPECIOSUM			M	342I	EP
SCLEROPODIUM	CESPITANS			M	342I	[illegible]
TORTULA	PRINCEPS			M	342I	[illegible]
TORTULA	RURALIS			M	342I	[illegible]
BRACHYTHECIUM	ERYTHRORRHIZON			M	342I	HD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
BRACHYTHECIUM	HYLOTAPETUM			M	342I	HD
BRYUM	CAPILLARE			M	342I	HD
DICRANUM	HOWELLII			M	342I	HD
DICRANUM	SCOPARIUM			M	342I	HD
EURHYNCHIUM	OREGANUM			M	342I	HD
EURHYNCHIUM	PULCHELLUM			M	342I	HD
RHYTIDIADELPHUS	TRIQUETRUS			M	342I	HD
TRACHYBRYUM	MEGAPTILUM			M	342I	HD
TOMENTHYPNUM	NITENS			M	342I	PE
CONARDIA	COMPACTA			M	342I	RC
CRATONEURON	FILICINUM			M	342I	RC
DIDYMODON	TOPHACEUS			M	342I	RC
ENCALYPTA	VULGARIS			M	342I	RC
PLATYHYPNIDIUM	RIPARIOIDES			M	342I	RC
SANIONIA	UNCINATA			M	342I	RC
SCHISTIDIUM	CINCLIDODONTEUM			M	342I	RC
TIMMIA	AUSTRIACA			M	342I	RC
AMPHIDIUM	CALIFORNICUM			M	342I	RO
AMPHIDIUM	LAPPONICUM			M	342I	RO
AMPHIDIUM	MOUGEOTII			M	342I	RO
ANACOLIA	MENZIESII			M	342I	RO
ANTITRICHIA	CALIFORNICA			M	342I	RO
ANTITRICHIA	CURTIPENDULA			M	342I	RO
BRACHYTHECIUM	VELUTINUM			M	342I	RO
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	342I	RO
BRYUM	GEMMASCENS			M	342I	RO
COSCINODON	CALYPTRATUS			M	342I	RO
DESMATODON	LATIFOLIUS			M	342I	RO
DIDYMODON	VINEALIS			M	342I	RO
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	342I	RO
DRYPTODON	PATENS			M	342I	RO
ENCALYPTA	VULGARIS			M	342I	RO
FUNARIA	HYGROMETRICA			M	342I	RO
GRIMMIA	AFFINIS			M	342I	RO
GRIMMIA	ANODON			M	342I	RO
GRIMMIA	LAEVIGATA			M	342I	RO
GRIMMIA	MONTANA			M	342I	RO
GRIMMIA	OVALIS			M	342I	RO
GRIMMIA	PULVINATA			M	342I	RO
GRIMMIA	TENERRIMA			M	342I	RO
GRIMMIA	TORQUATA			M	342I	RO
GRIMMIA	TRICHOPHYLLA			M	342I	RO
HOMALOTHECIUM	AENEUM			M	342I	RO
HOMALOTHECIUM	FULGESCENS			M	342I	RO
HOMALOTHECIUM	NEVADENSE			M	342I	RO
HOMALOTHECIUM	PINNATIFIDUM			M	342I	RO
HYGROAMBLYSTEGIUM	TENAX			M	342I	RO
HYPNUM	SUBIMPONENS			M	342I	RO
METANECKERA	MENZIESII			M	342I	RO
ORTHOTRICHUM	ALPESTRE			M	342I	RO
ORTHOTRICHUM	ANOMALUM			M	342I	RO
ORTHOTRICHUM	BOLANDERI			M	342I	RO
ORTHOTRICHUM	CUPULATUM			M	342I	RO
ORTHOTRICHUM	HOLZINGERI			M	342I	RO
ORTHOTRICHUM	LAEVIGATUM			M	342I	RO
ORTHOTRICHUM	PRAEMORSUM			M	342I	RO
ORTHOTRICHUM	RUPESTRE			M	342I	RO
PLAGIOMNIUM	INSIGNE			M	342I	RO
PLAGIOMNIUM	VENUSTUM			M	342I	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
PSEUDOBRAUNIA	CALIFORNICA			M	342I	RO
PTEROGONIUM	GRACILE			M	342I	[illegible]
PTYCHOMITRIUM	GARDNERI			M	342I	[illegible]
RACOMITRIUM	ACICULARE			M	342I	RO
RACOMITRIUM	CANESCENS			M	342I	RO
RACOMITRIUM	ERICOIDES			M	342I	RO
RACOMITRIUM	HETEROSTICHUM			M	342I	RO
RACOMITRIUM	OCCIDENTALE			M	342I	RO
RACOMITRIUM	SUDETICUM			M	342I	RO
SCHISTIDIUM	APOCARPUM			M	342I	RO
SCHISTIDIUM	CINCLIDODONTEUM			M	342I	RO
SCHISTIDIUM	HETEROPHYLLUM			M	342I	RO
SCLEROPODIUM	TOURETII	V	COLPOPHYLLUM	M	342I	RO
TOMENTHYPNUM	NITENS			M	342I	RO
TORTULA	PRINCEPS			M	342I	RO
TORTULA	RURALIS			M	342I	RO
AMPHIDIUM	MOUGEOTII			M	342I	RW
ANTITRICHIA	CALIFORNICA			M	342I	RW
BRYUM	MINIATUM			M	342I	RW
FONTINALIS	ANTIPYRETICA			M	342I	RW
HYGROHYPNUM	BESTII			M	342I	RW
SCOULERIA	AQUATICA			M	342I	RW
ALOINA	BIFRONS			M	342I	SD
ANACOLIA	MENZIESII			M	342I	SD
ANTITRICHIA	CALIFORNICA			M	342I	SD
BARBULA	CONVOLUTA			M	342I	SD
BRACHYTHECIUM	ALBICANS			M	342I	SD
BRACHYTHECIUM	FRIGIDUM			M	342I	SD
BRACHYTHECIUM	SALEBROSUM			M	342I	[illegible]
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	342I	[illegible]
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	342I	SD
BRYUM	ARGENTEUM			M	342I	SD
BRYUM	CAESPITICIUM			M	342I	SD
BRYUM	CANARIENSE			M	342I	SD
BRYUM	CAPILLARE			M	342I	SD
BRYUM	GEMMILUCENS			M	342I	SD
BRYUM	LISAE	V	CUSPIDATUM	M	342I	SD
CERATODON	PURPUREUS			M	342I	SD
DESMATODON	HEIMII	V	HEIMII	M	342I	SD
DESMATODON	LATIFOLIUS			M	342I	SD
DESMATODON	PLINTHOBIUS			M	342I	SD
DIDYMODON	FALLAX	V	REFLEXUS	M	342I	SD
DIDYMODON	VINEALIS			M	342I	SD
DIDYMODON	VINEALIS	V	BRACHYPHYLLUS	M	342I	SD
DIDYMODON	VINEALIS	V	FLACCIDUS	M	342I	SD
DIDYMODON	VINEALIS	V	LURIDUS	M	342I	SD
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	342I	SD
DIDYMODON	VINEALIS	V	VINEALIS	M	342I	SD
ENCALYPTA	RHAPTOCARPA			M	342I	SD
ENCALYPTA	VULGARIS			M	342I	SD
FUNARIA	HYGROMETRICA			M	342I	SD
FUNARIA	MUHLENBERGII			M	342I	SD
GRIMMIA	MONTANA			M	342I	SD
GRIMMIA	PULVINATA			M	342I	SD
HOMALOTHECIUM	AENEUM			M	342I	[illegible]
HOMALOTHECIUM	PINNATIFIDUM			M	342I	[illegible]
LEPTOBRYUM	PYRIFORME			M	342I	[illegible]
ORTHOTRICHUM	LAEVIGATUM			M	342I	SD
PHASCUM	CUSPIDATUM			M	342I	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
PHYSCOMITRIUM	PYGMAEUM			M	342I	SD
PLEURIDIUM	SUBULATUM			M	342I	SD
POLYTRICHUM	JUNIPERINUM			M	342I	SD
POLYTRICHUM	PILIFERUM			M	342I	SD
POTTIA	NEVADENSIS			M	342I	SD
PSEUDOCROSSIDIUM	OBTUSULUM			M	342I	SD
PSEUDOCROSSIDIUM	REVOLUTUM			M	342I	SD
PTERIGYNANDRUM	FILIFORME			M	342I	SD
PTERYGONEURUM	OVATUM			M	342I	SD
PTERYGONEURUM	SUBSESSILE			M	342I	SD
RACOMITRIUM	HETEROSTICHUM			M	342I	SD
SCLEROPODIUM	CESPITANS			M	342I	SD
SCLEROPODIUM	TOURETII			M	342I	SD
TIMMIELLA	CRASSINERVIS			M	342I	SD
TORTULA	BREVIPES			M	342I	SD
TORTULA	CANINERVIS			M	342I	SD
TORTULA	LAEVIPILA			M	342I	SD
TORTULA	MURALIS			M	342I	SD
TORTULA	PAPILLOSISSIMA			M	342I	SD
TORTULA	PRINCEPS			M	342I	SD
TORTULA	RURALIS			M	342I	SD
TRICHOSTOMOPSIS	AUSTRALASIAE			M	342I	SD
AMBLYSTEGIUM	SERPENS			M	342I	SW
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	342I	SW
AULACOMNIUM	PALUSTRE			M	342I	SW
BRACHYTHECIUM	FRIGIDUM			M	342I	SW
BRACHYTHECIUM	RIVULARE			M	342I	SW
BRYUM	ALGOVICUM			M	342I	SW
BRYUM	ALGOVICUM	V	ALGOVICUM	M	342I	SW
BRYUM	PSEUDOTRIQUETRUM			M	342I	SW
CALLIERGON	CORDIFOLIUM			M	342I	SW
DREPANOCLADUS	ADUNCUS			M	342I	SW
EURHYNCHIUM	PRAELONGUM			M	342I	SW
LEPTODICTYUM	HUMILE			M	342I	SW
LEPTODICTYUM	RIPARIUM			M	342I	SW
PHASCUM	CUSPIDATUM			M	342I	SW
PHILONOTIS	FONTANA			M	342I	SW
PLAGIOMNIUM	MEDIUM			M	342I	SW

Southern Rocky Mountain Steppe:
open woodlands, coniferous forest, alpine meadow

M331A Yellowstone Highlands (ID, WY)
M331D Overthrust Mountains (ID, WY)

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
ANTHOCEROS	FUSIFORMIS			A	M331A	SW
CHILOSCYPHUS	POLYANTHOS			H	M331A	[illegible]
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M331A	[illegible]
RICCIA	FLUITANS			H	M331A	AQ
ANASTROPHYLLUM	MICHAUXII			H	M331A	DW
BARBILOPHOZIA	ATTENUATA			H	M331A	DW
BARBILOPHOZIA	LYCOPODIOIDES			H	M331A	DW
BLASIA	PUSILLA			H	M331A	DW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M331A	DW
CALYPOGEIA	TRICHOMANIS			H	M331A	DW
CEPHALOZIA	BICUSPIDATA			H	M331A	DW
CEPHALOZIA	LUNULIFOLIA			H	M331A	DW
CEPHALOZIELLA	DIVARICATA			H	M331A	DW
CHILOSCYPHUS	POLYANTHOS			H	M331A	DW
LEPIDOZIA	REPTANS			H	M331A	DW
LOPHOCOLEA	HETEROPHYLLA			H	M331A	DW
LOPHOZIA	INCISA			H	M331A	DW
LOPHOZIA	VENTRICOSA			H	M331A	DW
LOPHOZIA	VENTRICOSA	V	LONGIFLORA	H	M331A	DW
PTILIDIUM	PULCHERRIMUM			H	M331A	DW
RICCARDIA	LATIFRONS			H	M331A	DW
RICCARDIA	PALMATA			H	M331A	DW
SCAPANIA	CURTA			H	M331A	DW
SCAPANIA	NEMOROSA			H	M331A	DW
SCAPANIA	UNDULATA			H	M331A	DW
PORELLA	NAVICULARIS			H	M331A	EP
PTILIDIUM	PULCHERRIMUM			H	M331A	EP
JUNGERMANNIA	EXSERTIFOLIA			H	M331A	HD
TRITOMARIA	QUINQUEDENTATA			H	M331A	[illegible]
GYMNOCOLEA	INFLATA			H	M331A	[illegible]
CEPHALOZIA	LUNULIFOLIA			H	M331A	RO
CEPHALOZIELLA	DIVARICATA			H	M331A	RO
JUNGERMANNIA	SPHAEROCARPA			H	M331A	RO
LOPHOZIA	EXCISA			H	M331A	RO
PORELLA	CORDAEANA			H	M331A	RO
PORELLA	ROELLII			H	M331A	RO
SCAPANIA	NEMOROSA			H	M331A	RO
SCAPANIA	SUBALPINA			H	M331A	RO
SCAPANIA	UNDULATA			H	M331A	RO
CEPHALOZIA	PLENICEPS			H	M331A	RW
CONOCEPHALUM	CONICUM			H	M331A	RW
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M331A	RW
JUNGERMANNIA	RUBRA			H	M331A	RW
JUNGERMANNIA	SPHAEROCARPA			H	M331A	RW
LOPHOZIA	VENTRICOSA			H	M331A	RW
MARCHANTIA	POLYMORPHA			H	M331A	RW
PELLIA	ENDIVIIFOLIA			H	M331A	RW
PREISSIA	QUADRATA			H	M331A	RW
REBOULIA	HEMISPHAERICA			H	M331A	RW
SCAPANIA	UNDULATA			H	M331A	RW
BARBILOPHOZIA	HATCHERI			H	M331A	SD
BARBILOPHOZIA	LYCOPODIOIDES			H	M331A	SD
CEPHALOZIA	LUNULIFOLIA			H	M331A	SD
CEPHALOZIELLA	DIVARICATA	V	SCABRA	H	M331A	SD
LOPHOCOLEA	MINOR			H	M331A	[illegible]
LOPHOZIA	LONGIFLORA			H	M331A	[illegible]
RICCIA	BEYRICHIANA			H	M331A	[illegible]
SCAPANIA	CURTA			H	M331A	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
SCAPANIA	NEMOROSA			H	M331A	SD
SCAPANIA	SUBALPINA			H	M331A	SD
SCAPANIA	UNDULATA			H	M331A	SD
SCAPANIA	UNDULATA	V	OAKESII	H	M331A	SD
TARGIONIA	HYPOPHYLLA			H	M331A	SD
ANEURA	PINGUIS			H	M331A	SW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M331A	SW
CALYPOGEIA	FISSA			H	M331A	SW
CEPHALOZIA	BICUSPIDATA			H	M331A	SW
CEPHALOZIA	LUNULIFOLIA			H	M331A	SW
CEPHALOZIA	PLENICEPS			H	M331A	SW
CONOCEPHALUM	CONICUM			H	M331A	SW
JUNGERMANNIA	LEIANTHA			H	M331A	SW
JUNGERMANNIA	SPHAEROCARPA			H	M331A	SW
LUNULARIA	CRUCIATA			H	M331A	SW
MARCHANTIA	POLYMORPHA			H	M331A	SW
PELLIA	ENDIVIIFOLIA			H	M331A	SW
PELLIA	EPIPHYLLA			H	M331A	SW
PLAGIOCHILA	PORELLOIDES			H	M331A	SW
PREISSIA	QUADRATA			H	M331A	SW
REBOULIA	HEMISPHAERICA			H	M331A	SW
RICCIA	BEYRICHIANA			H	M331A	SW
RICCIA	GLAUCA			H	M331A	SW
SPHAEROCARPOS	HIANS			H	M331A	SW
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M331A	AQ
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M331A	AQ
DICRANUM	SCOPARIUM			M	M331A	DW
DICRANUM	TAURICUM			M	M331A	DW
HETEROCLADIUM	DIMORPHUM			M	M331A	DW
POHLIA	NUTANS			M	M331A	DW
TETRAPHIS	PELLUCIDA			M	M331A	DW
MACROCOMA	SULLIVANTII			M	M331A	EP
ORTHOTRICHUM	AFFINE			M	M331A	EP
BRACHYTHECIUM	ALBICANS			M	M331A	HD
HYLOCOMIUM	SPLENDENS			M	M331A	HD
PTILIUM	CRISTA-CASTRENSIS			M	M331A	HD
TIMMIA	AUSTRIACA			M	M331A	HD
BRYUM	PSEUDOTRIQUETRUM			M	M331A	PE
SPHAGNUM	CAPILLIFOLIUM			M	M331A	PE
SPHAGNUM	FIMBRIATUM			M	M331A	PE
SPHAGNUM	RECURVUM			M	M331A	PE
SPHAGNUM	SQUARROSUM			M	M331A	PE
TORTELLA	ARCTICA			M	M331A	PE
ABIETINELLA	ABIETINA			M	M331A	RC
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M331A	RC
CONARDIA	COMPACTA			M	M331A	RC
FISSIDENS	GRANDIFRONS			M	M331A	RC
PSEUDOLESKEELLA	TECTORUM			M	M331A	RC
AMPHIDIUM	LAPPONICUM			M	M331A	RO
ANACOLIA	MENZIESII			M	M331A	RO
ANDREAEA	RUPESTRIS			M	M331A	RO
COSCINODON	CALYPTRATUS			M	M331A	RO
DICRANOWEISIA	CRISPULA			M	M331A	RO
ENCALYPTA	RHAPTOCARPA			M	M331A	RO
ENCALYPTA	VULGARIS			M	M331A	RO
GRIMMIA	AFFINIS			M	M331A	RO
GRIMMIA	DONNIANA			M	M331A	RO
GRIMMIA	MONTANA			M	M331A	RO
GRIMMIA	OVALIS			M	M331A	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
GRIMMIA	TENERRIMA			M	M331A	RO
GRIMMIA	TORQUATA			M	M331A	RO
GRIMMIA	TRICHOPHYLLA			M	M331A	[illegible]
GYMNOSTOMUM	AERUGINOSUM			M	M331A	[illegible]
HELODIUM	BLANDOWII			M	M331A	RO
HOMALOTHECIUM	NEVADENSE			M	M331A	RO
HOMALOTHECIUM	PINNATIFIDUM			M	M331A	RO
HYPNUM	REVOLUTUM			M	M331A	RO
ORTHOTRICHUM	ALPESTRE			M	M331A	RO
ORTHOTRICHUM	LAEVIGATUM			M	M331A	RO
ORTHOTRICHUM	PRAEMORSUM			M	M331A	RO
ORTHOTRICHUM	PYLAISII			M	M331A	RO
ORTHOTRICHUM	RUPESTRE			M	M331A	RO
ORTHOTRICHUM	SPECIOSUM			M	M331A	RO
POHLIA	CRUDA			M	M331A	RO
POLYTRICHUM	PILIFERUM			M	M331A	RO
PSEUDOLESKEA	RADICOSA			M	M331A	RO
RACOMITRIUM	CANESCENS			M	M331A	RO
RACOMITRIUM	ELONGATUM			M	M331A	RO
RACOMITRIUM	ERICOIDES			M	M331A	RO
SANIONIA	ADUNCUS			M	M331A	RO
SCHISTIDIUM	AGASSIZII			M	M331A	RO
SCHISTIDIUM	APOCARPUM			M	M331A	RO
SCHISTIDIUM	RIVULARE			M	M331A	RO
TORTELLA	FRAGILIS			M	M331A	RO
TORTULA	RURALIS			M	M331A	RO
CRATONEURON	FILICINUM			M	M331A	RW
DISTICHIUM	INCLINATUM			M	M331A	RW
FISSIDENS	GRANDIFRONS			M	M331A	RW
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M331A	[illegible]
FONTINALIS	NEOMEXICANA			M	M331A	[illegible]
HYGROAMBLYSTEGIUM	TENAX			M	M331A	RW
HYGROAMBLYSTEGIUM	TENAX	V	SPINIFOLIUM	M	M331A	RW
HYGROHYPNUM	LURIDUM			M	M331A	RW
ORTHOTRICHUM	RIVULARE			M	M331A	RW
SCHISTIDIUM	RIVULARE			M	M331A	RW
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M331A	RW
SCOULERIA	AQUATICA			M	M331A	RW
ABIETINELLA	ABIETINA			M	M331A	SD
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M331A	SD
ATRICHUM	SELWYNII			M	M331A	SD
BRACHYTHECIUM	ALBICANS			M	M331A	SD
BRACHYTHECIUM	CALCAREUM			M	M331A	SD
BRACHYTHECIUM	CAMPESTRE			M	M331A	SD
BRACHYTHECIUM	COLLINUM			M	M331A	SD
BRACHYTHECIUM	DIGASTRUM			M	M331A	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M331A	SD
BRACHYTHECIUM	FENDLERI			M	M331A	SD
BRACHYTHECIUM	GLAREOSUM			M	M331A	SD
BRACHYTHECIUM	NELSONII			M	M331A	SD
BRACHYTHECIUM	OXYCLADON			M	M331A	SD
BRACHYTHECIUM	RIVULARE			M	M331A	SD
BRACHYTHECIUM	SALEBROSUM			M	M331A	SD
BRACHYTHECIUM	VELUTINUM			M	M331A	SD
BRYUM	CAESPITICIUM			M	M331A	SD
BRYUM	CAPILLARE			M	M331A	[illegible]
BRYUM	CAPILLARE	V	CAPILLARE	M	M331A	[illegible]
BRYUM	LISAE	V	CUSPIDATUM	M	M331A	[illegible]
BRYUM	MUEHLENBECKII			M	M331A	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
BRYUM	PALLESCENS			M	M331A	SD
BRYUM	TURBINATUM			M	M331A	SD
BUXBAUMIA	APHYLLA			M	M331A	SD
CAMPYLIUM	STELLATUM			M	M331A	SD
CAMPYLOPUS	FRAGILIS			M	M331A	SD
CAMPYLOPUS	SCHIMPERI			M	M331A	SD
CERATODON	PURPUREUS			M	M331A	SD
CLIMACIUM	AMERICANUM			M	M331A	SD
CLIMACIUM	DENDROIDES			M	M331A	SD
CYNODONTIUM	POLYCARPON			M	M331A	SD
DESMATODON	CERNUUS			M	M331A	SD
DESMATODON	LATIFOLIUS			M	M331A	SD
DICHELYMA	FALCATUM			M	M331A	SD
DICRANELLA	CRISPA			M	M331A	SD
DICRANELLA	SUBULATA			M	M331A	SD
DICRANOWEISIA	CIRRATA			M	M331A	SD
DICRANUM	FUSCESCENS			M	M331A	SD
DICRANUM	MUEHLENBECKII			M	M331A	SD
DICRANUM	SCOPARIUM			M	M331A	SD
DICRANUM	SPADICEUM			M	M331A	SD
DIDYMODON	ASPERIFOLIUS			M	M331A	SD
DIDYMODON	VINEALIS			M	M331A	SD
DISTICHIUM	CAPILLACEUM			M	M331A	SD
DISTICHIUM	INCLINATUM			M	M331A	SD
DITRICHUM	FLEXICAULE			M	M331A	SD
DREPANOCLADUS	FLUITANS			M	M331A	SD
EURHYNCHIUM	PULCHELLUM			M	M331A	SD
FISSIDENS	ADIANTHOIDES			M	M331A	SD
FONTINALIS	ANTIPYRETICA			M	M331A	SD
HYPNUM	REVOLUTUM			M	M331A	SD
HYPNUM	UNCINATUM			M	M331A	SD
LEPTOBRYUM	PYRIFORME			M	M331A	SD
MNIUM	MARGINATUM			M	M331A	SD
ONCOPHORUS	VIRENS			M	M331A	SD
PLAGIOMNIUM	ELLIPTICUM			M	M331A	SD
PLAGIOMNIUM	ROSTRATUM			M	M331A	SD
PLAGIOTHECIUM	DENTICULATUM			M	M331A	SD
PLATYDICTYA	JUNGERMANNIOIDES			M	M331A	SD
POHLIA	ANDALUSICA			M	M331A	SD
POHLIA	CRUDA			M	M331A	SD
POHLIA	LONGICOLLA			M	M331A	SD
POLYTRICHUM	COMMUNE			M	M331A	SD
POLYTRICHUM	JUNIPERINUM			M	M331A	SD
POLYTRICHUM	LONGISETUM			M	M331A	SD
POLYTRICHUM	LYALLII			M	M331A	SD
POLYTRICHUM	PILIFERUM			M	M331A	SD
POLYTRICHUM	PILIFERUM			M	M331A	SD
PTERIGYNANDRUM	FILIFORME			M	M331A	SD
TIMMIA	AUSTRIACA			M	M331A	SD
TIMMIA	MEGAPOLITANA	V	BAVARICA	M	M331A	SD
TORTULA	MUCRONIFOLIA			M	M331A	SD
TORTULA	NORVEGICA			M	M331A	SD
TORTULA	RURALIS			M	M331A	SD
WEISSIA	CONTROVERSA			M	M331A	SD
AULACOMNIUM	ANDROGYNUM			M	M331A	SW
AULACOMNIUM	PALUSTRE			M	M331A	SW
BRACHYTHECIUM	FRIGIDUM			M	M331A	SW
BRACHYTHECIUM	NELSONII			M	M331A	SW
BRACHYTHECIUM	RIVULARE			M	M331A	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
BRACHYTHECIUM	SALEBROSUM			M	M331A	SW
BRACHYTHECIUM	STARKEI			M	M331A	[illegible]
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M331A	[illegible]
BRYUM	CAESPITICIUM			M	M331A	[illegible]
BRYUM	CAPILLARE	V	CAPILLARE	M	M331A	SW
BRYUM	PSEUDOTRIQUETRUM			M	M331A	SW
BRYUM	WEIGELII			M	M331A	SW
CALLIERGON	CORDIFOLIUM			M	M331A	SW
CALLIERGONELLA	CUSPIDATA			M	M331A	SW
CLIMACIUM	AMERICANUM			M	M331A	SW
CLIMACIUM	DENDROIDES			M	M331A	SW
DICHELYMA	UNCINATUM			M	M331A	SW
DICRANUM	MUEHLENBECKII			M	M331A	SW
DREPANOCLADUS	ADUNCUS			M	M331A	SW
DREPANOCLADUS	ADUNCUS	V	KNEIFFII	M	M331A	SW
DREPANOCLADUS	ADUNCUS	V	POLYCARPUS	M	M331A	SW
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M331A	SW
FONTINALIS	HYPNOIDES			M	M331A	SW
FONTINALIS	HYPNOIDES	V	DURIAEI	M	M331A	SW
FONTINALIS	NEOMEXICANA			M	M331A	SW
FUNARIA	HYGROMETRICA			M	M331A	SW
HOMALOTHECIUM	AENEUM			M	M331A	SW
HOMALOTHECIUM	FULGESCENS			M	M331A	SW
HYGROHYPNUM	BESTII			M	M331A	SW
HYGROHYPNUM	MOLLE			M	M331A	SW
HYGROHYPNUM	OCHRACEUM			M	M331A	SW
HYLOCOMIUM	SPLENDENS			M	M331A	SW
LEPTOBRYUM	PYRIFORME			M	M331A	SW
LEPTODICTYUM	RIPARIUM			M	M331A	[illegible]
PHILONOTIS	FONTANA			M	M331A	[illegible]
PHILONOTIS	FONTANA	V	AMERICANA	M	M331A	[illegible]
PHILONOTIS	FONTANA	V	PUMILA	M	M331A	SW
PLAGIOMNIUM	ELLIPTICUM			M	M331A	SW
PLEUROZIUM	SCHREBERI			M	M331A	SW
POHLIA	LESCURIANA			M	M331A	SW
POHLIA	NUTANS			M	M331A	SW
POHLIA	PROLIGERA			M	M331A	SW
POHLIA	TUNDRAE			M	M331A	SW
POLYTRICHASTRUM	ALPINUM			M	M331A	SW
POLYTRICHUM	COMMUNE			M	M331A	SW
RHIZOMNIUM	MAGNIFOLIUM			M	M331A	SW
RHIZOMNIUM	PUNCTATUM			M	M331A	SW
RHYTIDIADELPHUS	TRIQUETRUS			M	M331A	SW
ROELLIA	ROELLII			M	M331A	SW
SANIONIA	ADUNCUS			M	M331A	SW
SANIONIA	ADUNCUS			M	M331A	SW
TIMMIA	AUSTRIACA			M	M331A	SW
WARNSTORFIA	FLUITANS			M	M331A	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	M331D	AQ
CHILOSCYPHUS	POLYANTHOS			H	M331D	AQ
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M331D	AQ
RICCIOCARPOS	NATANS			H	M331D	AQ
BARBILOPHOZIA	HATCHERI			H	M331D	DW
BARBILOPHOZIA	LYCOPODIOIDES			H	M331D	DW
CALYPOGEIA	INTEGRISTIPULA			H	M331D	DW
CALYPOGEIA	MUELLERIANA			H	M331D	DW
CALYPOGEIA	SUECICA			H	M331D	DW
CEPHALOZIELLA	DIVARICATA	V	DIVARICATA	H	M331D	DW
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	M331D	DW
LOPHOCOLEA	HETEROPHYLLA			H	M331D	DW
LOPHOZIA	INCISA			H	M331D	DW
LOPHOZIA	LONGIDENS			H	M331D	DW
LOPHOZIA	LONGIFLORA			H	M331D	DW
LOPHOZIA	VENTRICOSA			H	M331D	DW
SCAPANIA	IRRIGUA			H	M331D	DW
SCAPANIA	MUCRONATA			H	M331D	DW
CALYPOGEIA	MUELLERIANA			H	M331D	HD
CEPHALOZIA	PLENICEPS			H	M331D	HD
LOPHOCOLEA	MINOR			H	M331D	RO
LOPHOZIA	ALPESTRIS			H	M331D	RO
LOPHOZIA	EXCISA			H	M331D	RO
LOPHOZIA	OBTUSA			H	M331D	RO
RADULA	COMPLANATA			H	M331D	RO
MARCHANTIA	POLYMORPHA			H	M331D	RW
SCAPANIA	UNDULATA			H	M331D	RW
ASTERELLA	GRACILIS			H	M331D	SD
BARBILOPHOZIA	HATCHERI			H	M331D	SD
BARBILOPHOZIA	KUNZEANA			H	M331D	SD
BARBILOPHOZIA	LYCOPODIOIDES			H	M331D	SD
LOPHOCOLEA	MINOR			H	M331D	SD
LOPHOZIA	LONGIFLORA			H	M331D	SD
BARBILOPHOZIA	BARBATA			H	M331D	SW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M331D	SW
CEPHALOZIA	PLENICEPS			H	M331D	SW
CONOCEPHALUM	CONICUM			H	M331D	SW
MARCHANTIA	POLYMORPHA			H	M331D	SW
PELLIA	ENDIVIIFOLIA			H	M331D	SW
SCAPANIA	IRRIGUA			H	M331D	SW
FONTINALIS	HYPNOIDES	V	DURIAEI	M	M331D	AQ
BRACHYTHECIUM	COLLINUM			M	M331D	DW
BRACHYTHECIUM	ERYTHRORRHIZON			M	M331D	DW
BRACHYTHECIUM	SALEBROSUM			M	M331D	DW
BUXBAUMIA	PIPERI			M	M331D	DW
BUXBAUMIA	VIRIDIS			M	M331D	DW
DICRANOWEISIA	CRISPULA			M	M331D	DW
HYGROHYPNUM	OCHRACEUM			M	M331D	DW
HYPNUM	REVOLUTUM			M	M331D	DW
LEPTOBRYUM	PYRIFORME			M	M331D	DW
POHLIA	NUTANS			M	M331D	DW
TETRAPHIS	PELLUCIDA			M	M331D	DW
EURHYNCHIUM	PULCHELLUM			M	M331D	EP
ORTHOTRICHUM	OBTUSIFOLIUM			M	M331D	EP
PSEUDOLESKEA	STENOPHYLLA			M	M331D	EP
BRACHYTHECIUM	ALBICANS			M	M331D	HD
BRACHYTHECIUM	OEDIPODIUM			M	M331D	HD
BRACHYTHECIUM	SALEBROSUM			M	M331D	HD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
BRACHYTHECIUM	STARKEI			M	M331D	HD
BRYUM	LISAE	V	CUSPIDATUM	M	M331D	[illegible]
BRYUM	PSEUDOTRIQUETRUM			M	M331D	[illegible]
CLIMACIUM	DENDROIDES			M	M331D	[illegible]
DICRANUM	SCOPARIUM			M	M331D	HD
EURHYNCHIUM	PULCHELLUM			M	M331D	HD
PLAGIOMNIUM	ELLIPTICUM			M	M331D	HD
TIMMIA	AUSTRIACA			M	M331D	HD
CALLIERGON	STRAMINEUM			M	M331D	PE
SPHAGNUM	GIRGENSOHNII			M	M331D	PE
SPHAGNUM	RUSSOWII			M	M331D	PE
SPHAGNUM	SQUARROSUM			M	M331D	PE
WARNSTORFIA	EXANNULATA			M	M331D	PE
CONARDIA	COMPACTA			M	M331D	RC
ENCALYPTA	INTERMEDIA			M	M331D	RC
GRIMMIA	ANODON			M	M331D	RC
GYMNOSTOMUM	AERUGINOSUM			M	M331D	RC
ORTHOTRICHUM	AFFINE			M	M331D	RC
ORTHOTRICHUM	CUPULATUM			M	M331D	RC
ORTHOTRICHUM	HALLII			M	M331D	RC
ORTHOTRICHUM	HOLZINGERI			M	M331D	RC
ORTHOTRICHUM	PELLUCIDUM			M	M331D	RC
PSEUDOLESKEELLA	TECTORUM			M	M331D	RC
TORTELLA	TORTELLOIDES			M	M331D	RC
TORTULA	RURALIS			M	M331D	RC
AMBLYSTEGIUM	SERPENS			M	M331D	RO
AMPHIDIUM	LAPPONICUM			M	M331D	RO
BARTRAMIA	ITHYPHYLLA			M	M331D	RO
BRACHYTHECIUM	RIVULARE			M	M331D	[illegible]
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M331D	[illegible]
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M331D	[illegible]
BRYUM	CAPILLARE			M	M331D	RO
CERATODON	PURPUREUS			M	M331D	RO
COSCINODON	CALYPTRATUS			M	M331D	RO
CRATONEURON	FILICINUM			M	M331D	RO
DICHELYMA	FALCATUM			M	M331D	RO
DICRANOWEISIA	CRISPULA			M	M331D	RO
DISTICHIUM	CAPILLACEUM			M	M331D	RO
ENCALYPTA	RHAPTOCARPA			M	M331D	RO
ENCALYPTA	VULGARIS			M	M331D	RO
GRIMMIA	AFFINIS			M	M331D	RO
GRIMMIA	ANODON			M	M331D	RO
GRIMMIA	ANOMALA			M	M331D	RO
GRIMMIA	ELATIOR			M	M331D	RO
GRIMMIA	MONTANA			M	M331D	RO
GRIMMIA	OVALIS			M	M331D	RO
GRIMMIA	TENERRIMA			M	M331D	RO
GRIMMIA	TORQUATA	V	TORQUATA	M	M331D	RO
GRIMMIA	TRICHOPHYLLA			M	M331D	RO
HYPNUM	REVOLUTUM			M	M331D	RO
ORTHOTRICHUM	ALPESTRE			M	M331D	RO
ORTHOTRICHUM	CUPULATUM			M	M331D	RO
ORTHOTRICHUM	LAEVIGATUM			M	M331D	RO
ORTHOTRICHUM	PELLUCIDUM			M	M331D	RO
ORTHOTRICHUM	RUPESTRE			M	M331D	RO
ORTHOTRICHUM	SPECIOSUM			M	M331D	[illegible]
PLAGIOMNIUM	ELLIPTICUM			M	M331D	[illegible]
POLYTRICHUM	STRICTUM			M	M331D	[illegible]
PSEUDOLESKEA	INCURVATA			M	M331D	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
PSEUDOLESKEA	PATENS			M	M331D	RO
PSEUDOLESKEA	RADICOSA			M	M331D	RO
PSEUDOLESKEA	RADICOSA	V	COMPACTA	M	M331D	RO
PSEUDOLESKEA	RADICOSA	V	RADICOSA	M	M331D	RO
PSEUDOLESKEA	STENOPHYLLA			M	M331D	RO
RACOMITRIUM	CANESCENS			M	M331D	RO
RACOMITRIUM	ERICOIDES			M	M331D	RO
RACOMITRIUM	FASCICULARE			M	M331D	RO
SCHISTIDIUM	AGASSIZII			M	M331D	RO
SCHISTIDIUM	APOCARPUM			M	M331D	RO
TORTULA	RURALIS			M	M331D	RO
BRACHYTHECIUM	FRIGIDUM			M	M331D	RW
BRYUM	ARGENTEUM			M	M331D	RW
FISSIDENS	GRANDIFRONS			M	M331D	RW
HYGROAMBLYSTEGIUM	TENAX			M	M331D	RW
HYGROHYPNUM	LURIDUM			M	M331D	RW
PALUSTRIELLA	DECIPIENS			M	M331D	RW
SCHISTIDIUM	RIVULARE			M	M331D	RW
SCHISTIDIUM	RIVULARE	V	LATIFOLIUM	M	M331D	RW
SCOULERIA	AQUATICA			M	M331D	RW
AMBLYSTEGIUM	SERPENS			M	M331D	SD
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M331D	SD
ATRICHUM	SELWYNII			M	M331D	SD
ATRICHUM	UNDULATUM			M	M331D	SD
BLINDIA	ACUTA			M	M331D	SD
BRACHYTHECIUM	ALBICANS			M	M331D	SD
BRACHYTHECIUM	COLLINUM			M	M331D	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M331D	SD
BRACHYTHECIUM	FENDLERI			M	M331D	SD
BRACHYTHECIUM	NELSONII			M	M331D	SD
BRACHYTHECIUM	OEDIPODIUM			M	M331D	SD
BRACHYTHECIUM	RIVULARE			M	M331D	SD
BRACHYTHECIUM	SALEBROSUM			M	M331D	SD
BRACHYTHECIUM	VELUTINUM	V	VELUTINUM	M	M331D	SD
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M331D	SD
BRYUM	ALGOVICUM			M	M331D	SD
BRYUM	AMBLYODON			M	M331D	SD
BRYUM	ARGENTEUM			M	M331D	SD
BRYUM	CAESPITICIUM			M	M331D	SD
BRYUM	CAPILLARE			M	M331D	SD
BRYUM	CYCLOPHYLLUM			M	M331D	SD
BRYUM	GEMMIPARUM			M	M331D	SD
BRYUM	LISAE			M	M331D	SD
BRYUM	LISAE	V	CUSPIDATUM	M	M331D	SD
BRYUM	PALLESCENS			M	M331D	SD
BRYUM	TURBINATUM			M	M331D	SD
BRYUM	ULIGINOSUM			M	M331D	SD
BUXBAUMIA	VIRIDIS			M	M331D	SD
CAMPYLIUM	CHRYSOPHYLLUM			M	M331D	SD
CAMPYLIUM	POLYGAMUM			M	M331D	SD
CERATODON	PURPUREUS			M	M331D	SD
CLIMACIUM	AMERICANUM			M	M331D	SD
CLIMACIUM	DENDROIDES			M	M331D	SD
DESMATODON	HEIMII			M	M331D	SD
DESMATODON	LATIFOLIUS			M	M331D	SD
DESMATODON	LEUCOSTOMA			M	M331D	SD
DESMATODON	SYSTYLIUS			M	M331D	SD
DICHELYMA	FALCATUM			M	M331D	SD
DICRANOWEISIA	CIRRATA			M	M331D	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
DICRANOWEISIA	CRISPULA			M	M331D	SD
DICRANUM	HOWELLII			M	M331D	[illegible]
DICRANUM	RHABDOCARPUM			M	M331D	[illegible]
DICRANUM	SCOPARIUM			M	M331D	SD
DICRANUM	SPADICEUM			M	M331D	SD
DIDYMODON	RIGIDULUS	V	GRACILIS	M	M331D	SD
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	M331D	SD
DISTICHIUM	CAPILLACEUM			M	M331D	SD
DISTICHIUM	INCLINATUM			M	M331D	SD
EURHYNCHIUM	PRAELONGUM			M	M331D	SD
EURHYNCHIUM	PULCHELLUM			M	M331D	SD
FISSIDENS	ADIANTHOIDES			M	M331D	SD
HYPNUM	CUPRESSIFORME			M	M331D	SD
HYPNUM	LINDBERGII			M	M331D	SD
HYPNUM	REVOLUTUM			M	M331D	SD
ISOPTERYGIOPSIS	PULCHELLA			M	M331D	SD
LEPTOBRYUM	PYRIFORME			M	M331D	SD
MNIUM	ARIZONICUM			M	M331D	SD
MNIUM	BLYTTII			M	M331D	SD
MNIUM	MARGINATUM			M	M331D	SD
MNIUM	MINIATUM			M	M331D	SD
MNIUM	SPINULOSUM			M	M331D	SD
MNIUM	THOMSONII			M	M331D	SD
ONCOPHORUS	VIRENS			M	M331D	SD
PLAGIOMNIUM	ELLIPTICUM			M	M331D	SD
PLAGIOMNIUM	ROSTRATUM			M	M331D	SD
PLAGIOTHECIUM	DENTICULATUM			M	M331D	SD
PLAGIOTHECIUM	PILIFERUM			M	M331D	SD
PLATYDICTYA	JUNGERMANNIOIDES			M	M331D	[illegible]
POHLIA	ANDALUSICA			M	M331D	[illegible]
POHLIA	ANNOTINA			M	M331D	SD
POHLIA	BOLANDERI	V	SERIATA	M	M331D	SD
POHLIA	CAMPTOTRACHELA			M	M331D	SD
POHLIA	CRUDA			M	M331D	SD
POHLIA	DRUMMONDII			M	M331D	SD
POHLIA	LUDWIGII			M	M331D	SD
POLYTRICHASTRUM	ALPINUM			M	M331D	SD
POLYTRICHUM	COMMUNE			M	M331D	SD
POLYTRICHUM	JUNIPERINUM			M	M331D	SD
POLYTRICHUM	JUNIPERINUM			M	M331D	SD
POLYTRICHUM	LYALLII			M	M331D	SD
POLYTRICHUM	PILIFERUM			M	M331D	SD
PTERYGONEURUM	OVATUM			M	M331D	SD
PTERYGONEURUM	SUBSESSILE			M	M331D	SD
TIMMIA	AUSTRIACA			M	M331D	SD
TORTELLA	HUMILIS			M	M331D	SD
TORTELLA	TORTUOSA			M	M331D	SD
TORTULA	NORVEGICA			M	M331D	SD
TORTULA	RURALIS			M	M331D	SW
AMBLYSTEGIUM	SERPENS			M	M331D	SW
AULACOMNIUM	ANDROGYNUM			M	M331D	SW
AULACOMNIUM	PALUSTRE			M	M331D	SW
BRACHYTHECIUM	FRIGIDUM			M	M331D	SW
BRACHYTHECIUM	RIVULARE			M	M331D	SW
BRACHYTHECIUM	RUTABULUM			M	M331D	[illegible]
BRACHYTHECIUM	SALEBROSUM			M	M331D	[illegible]
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M331D	SW
BRYUM	CAESPITICIUM			M	M331D	SW
BRYUM	PSEUDOTRIQUETRUM			M	M331D	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
BRYUM	WEIGELII			M	M331D	SW
CRATONEURON	FILICINUM			M	M331D	SW
DISTICHIUM	CAPILLACEUM			M	M331D	SW
DREPANOCLADUS	ADUNCUS			M	M331D	SW
FISSIDENS	OSMUNDIOIDES			M	M331D	SW
FONTINALIS	ANTIPYRETICA			M	M331D	SW
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M331D	SW
FONTINALIS	HYPNOIDES			M	M331D	SW
FONTINALIS	NEOMEXICANA			M	M331D	SW
HYGROHYPNUM	BESTII			M	M331D	SW
HYGROHYPNUM	MOLLE			M	M331D	SW
HYGROHYPNUM	OCHRACEUM			M	M331D	SW
LEPTODICTYUM	RIPARIUM			M	M331D	SW
MNIUM	BLYTTII			M	M331D	SW
PALUSTRIELLA	COMMUTATA			M	M331D	SW
PALUSTRIELLA	DECIPIENS			M	M331D	SW
PHILONOTIS	FONTANA			M	M331D	SW
PHILONOTIS	FONTANA	V	AMERICANA	M	M331D	SW
PHILONOTIS	FONTANA	V	FONTANA	M	M331D	SW
PHILONOTIS	FONTANA	V	PUMILA	M	M331D	SW
PLAGIOMNIUM	CUSPIDATUM			M	M331D	SW
PLATYDICTYA	JUNGERMANNIOIDES			M	M331D	SW
POHLIA	BOLANDERI			M	M331D	SW
POHLIA	CRUDA			M	M331D	SW
POHLIA	NUTANS			M	M331D	SW
POHLIA	OBTUSIFOLIA			M	M331D	SW
POHLIA	OBTUSIFOLIA			M	M331D	SW
POHLIA	PROLIGERA			M	M331D	SW
POHLIA	TUNDRAE			M	M331D	SW
POHLIA	WAHLENBERGII			M	M331D	SW
POLYTRICHASTRUM	ALPINUM			M	M331D	SW
POLYTRICHUM	COMMUNE			M	M331D	SW
RHIZOMNIUM	MAGNIFOLIUM			M	M331D	SW
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M331D	SW
RHIZOMNIUM	PUNCTATUM			M	M331D	SW
ROELLIA	ROELLII			M	M331D	SW
SANIONIA	ADUNCUS			M	M331D	SW
SARMENTHYPNUM	SARMENTOSUM			M	M331D	SW
TORTULA	NORVEGICA			M	M331D	SW
TORTULA	RURALIS			M	M331D	SW
WARNSTORFIA	EXANNULATA			M	M331D	SW

Middle Rocky Mountain Steppe:
coniferous forest, alpine meadow

M332A	Idaho Batholith (ID)
M332B	Bitterroot Valley (MT)
M332E	Beaverhead Mountains (ID)
M332F	Challis Volcanics (ID)
M332G	Blue Mountains (ID, OR, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M332A	AO
ANASTROPHYLLUM	HELLERANUM			H	M332A	[illegible]
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332A	[illegible]
CALYPOGEIA	SUECICA			H	M332A	DW
CEPHALOZIA	CONNIVENS			H	M332A	DW
CEPHALOZIA	LUNULIFOLIA			H	M332A	DW
CEPHALOZIA	PLENICEPS			H	M332A	DW
CHILOSCYPHUS	POLYANTHOS			H	M332A	DW
GEOCALYX	GRAVEOLENS			H	M332A	DW
JUNGERMANNIA	LEIANTHA			H	M332A	DW
LEPIDOZIA	REPTANS			H	M332A	DW
LOPHOZIA	ASCENDENS			H	M332A	DW
LOPHOZIA	HETEROCOLPOS			H	M332A	DW
LOPHOZIA	INCISA			H	M332A	DW
LOPHOZIA	LONGIFLORA			H	M332A	DW
LOPHOZIA	VENTRICOSA			H	M332A	DW
LOPHOZIA	VENTRICOSA	V	SILVICOLA	H	M332A	DW
PTILIDIUM	CALIFORNICUM			H	M332A	DW
PTILIDIUM	PULCHERRIMUM			H	M332A	DW
RICCARDIA	LATIFRONS			H	M332A	DW
RICCARDIA	PALMATA			H	M332A	DW
SCAPANIA	CURTA			H	M332A	DW
SCAPANIA	MUCRONATA			H	M332A	DW
SCAPANIA	UMBROSA			H	M332A	DW
PTILIDIUM	CALIFORNICUM			H	M332A	EP
PTILIDIUM	PULCHERRIMUM			H	M332A	EP
RADULA	COMPLANATA			H	M332A	EP
CEPHALOZIA	BICUSPIDATA	S	BICUSPIDATA	H	M332A	RO
CEPHALOZIA	LUNULIFOLIA			H	M332A	[illegible]
CHILOSCYPHUS	PALLESCENS			H	M332A	[illegible]
CHILOSCYPHUS	POLYANTHOS			H	M332A	RO
JAMESONIELLA	AUTUMNALIS			H	M332A	RO
JUNGERMANNIA	ATROVIRENS			H	M332A	RO
LOPHOCOLEA	CUSPIDATA			H	M332A	RO
LOPHOZIA	OBTUSA			H	M332A	RO
PLAGIOCHILA	PORELLOIDES			H	M332A	RO
PORELLA	CORDAEANA			H	M332A	RO
PORELLA	ROELLII			H	M332A	RO
RADULA	COMPLANATA			H	M332A	RO
SCAPANIA	AMERICANA			H	M332A	RO
SCAPANIA	CURTA			H	M332A	RO
SCAPANIA	MUCRONATA			H	M332A	RO
SCAPANIA	UMBROSA			H	M332A	RO
SCAPANIA	UNDULATA			H	M332A	RO
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332A	RW
JUNGERMANNIA	SPHAEROCARPA			H	M332A	RW
MARCHANTIA	POLYMORPHA			H	M332A	RW
PLAGIOCHILA	PORELLOIDES			H	M332A	RW
ATHALAMIA	HYALINA			H	M332A	SD
BARBILOPHOZIA	HATCHERI			H	M332A	SD
CEPHALOZIA	BICUSPIDATA	S	BICUSPIDATA	H	M332A	SD
CEPHALOZIA	LUNULIFOLIA			H	M332A	SD
CEPHALOZIA	PLENICEPS			H	M332A	SD
DIPLOPHYLLUM	TAXIFOLIUM			H	M332A	SD
LOPHOCOLEA	CUSPIDATA			H	M332A	SD
LOPHOZIA	LONGIFLORA			H	M332A	[illegible]
LOPHOZIA	OBTUSA			H	M332A	[illegible]
LOPHOZIA	VENTRICOSA			H	M332A	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
RICCIA	CAMPBELLIANA			H	M332A	SD
SCAPANIA	CURTA			H	M332A	SD
SCAPANIA	IRRIGUA			H	M332A	SD
SCAPANIA	UMBROSA			H	M332A	SD
SCAPANIA	UNDULATA			H	M332A	SD
ANEURA	PINGUIS			H	M332A	SW
BLASIA	PUSILLA			H	M332A	SW
CALYPOGEIA	MUELLERIANA			H	M332A	SW
CEPHALOZIA	PLENICEPS			H	M332A	SW
CEPHALOZIELLA	DIVARICATA			H	M332A	SW
CHILOSCYPHUS	POLYANTHOS			H	M332A	SW
CONOCEPHALUM	CONICUM			H	M332A	SW
JUNGERMANNIA	ATROVIRENS			H	M332A	SW
JUNGERMANNIA	EXSERTIFOLIA			H	M332A	SW
LOPHOCOLEA	CUSPIDATA			H	M332A	SW
LOPHOZIA	EXCISA			H	M332A	SW
LOPHOZIA	HETEROCOLPOS			H	M332A	SW
MARCHANTIA	POLYMORPHA			H	M332A	SW
PREISSIA	QUADRATA			H	M332A	SW
SCAPANIA	PALUDOSA			H	M332A	SW
DREPANOCLADUS	ADUNCUS			M	M332A	AQ
DREPANOCLADUS	ADUNCUS	V	KNEIFFII	M	M332A	AQ
FISSIDENS	GRANDIFRONS			M	M332A	AQ
FONTINALIS	ANTIPYRETICA			M	M332A	AQ
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M332A	AQ
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M332A	AQ
FONTINALIS	NEOMEXICANA			M	M332A	AQ
LEPTODICTYUM	RIPARIUM			M	M332A	AQ
WARNSTORFIA	EXANNULATA			M	M332A	AQ
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M332A	DW
ANTITRICHIA	CURTIPENDULA			M	M332A	DW
AULACOMNIUM	ANDROGYNUM			M	M332A	DW
BRACHYTHECIUM	FRIGIDUM			M	M332A	DW
BRACHYTHECIUM	GLAREOSUM			M	M332A	DW
BRACHYTHECIUM	VELUTINUM	V	VELUTINUM	M	M332A	DW
BRYUM	CAESPITICIUM			M	M332A	DW
BRYUM	LISAE	V	CUSPIDATUM	M	M332A	DW
BUXBAUMIA	PIPERI			M	M332A	DW
BUXBAUMIA	VIRIDIS			M	M332A	DW
CALLIERGON	STRAMINEUM			M	M332A	DW
CERATODON	PURPUREUS			M	M332A	DW
DICRANOWEISIA	CRISPULA			M	M332A	DW
DICRANUM	FUSCESCENS			M	M332A	DW
DICRANUM	HOWELLII			M	M332A	DW
DICRANUM	SCOPARIUM			M	M332A	DW
DICRANUM	TAURICUM			M	M332A	DW
DREPANOCLADUS	ADUNCUS			M	M332A	DW
EURHYNCHIUM	OREGANUM			M	M332A	DW
HERZOGIELLA	SELIGERI			M	M332A	DW
HETEROCLADIUM	PROCURRENS			M	M332A	DW
HOMALOTHECIUM	FULGESCENS			M	M332A	DW
ISOPTERYGIOPSIS	PULCHELLA			M	M332A	DW
LEPTOBRYUM	PYRIFORME			M	M332A	DW
LEUCOLEPIS	ACANTHONEURON			M	M332A	DW
LIMPRICHTIA	REVOLVENS			M	M332A	DW
MNIUM	SPINULOSUM			M	M332A	DW
ONCOPHORUS	VIRENS			M	M332A	DW
ONCOPHORUS	WAHLENBERGII			M	M332A	DW
PHILONOTIS	FONTANA	V	AMERICANA	M	M332A	DW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
PLAGIOTHECIUM	LAETUM			M	M332A	DW
PLATYDICTYA	JUNGERMANNIOIDES			M	M332A	D
POGONATUM	URNIGERUM			M	M332A	D
POHLIA	NUTANS			M	M332A	DW
POLYTRICHUM	JUNIPERINUM			M	M332A	DW
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M	M332A	DW
PSEUDOLESKEA	RADICOSA			M	M332A	DW
PTERIGYNANDRUM	FILIFORME			M	M332A	DW
TETRAPHIS	PELLUCIDA			M	M332A	DW
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M332A	EP
BRACHYTHECIUM	FRIGIDUM			M	M332A	EP
BRACHYTHECIUM	LEIBERGII			M	M332A	EP
DICRANUM	FUSCESCENS			M	M332A	EP
DICRANUM	SCOPARIUM			M	M332A	EP
DICRANUM	TAURICUM			M	M332A	EP
HOMALOTHECIUM	AENEUM			M	M332A	EP
HOMALOTHECIUM	FULGESCENS			M	M332A	EP
HYPNUM	CIRCINALE			M	M332A	EP
HYPNUM	SUBIMPONENS			M	M332A	EP
ISOTHECIUM	MYOSUROIDES			M	M332A	EP
NECKERA	DOUGLASII			M	M332A	EP
ORTHOTRICHUM	AFFINE			M	M332A	EP
ORTHOTRICHUM	OBTUSIFOLIUM			M	M332A	EP
ORTHOTRICHUM	PULCHELLUM			M	M332A	EP
ORTHOTRICHUM	SPECIOSUM			M	M332A	EP
ORTHOTRICHUM	STRIATUM			M	M332A	EP
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M	M332A	EP
PSEUDOLESKEA	STENOPHYLLA			M	M332A	EP
PTERIGYNANDRUM	FILIFORME			M	M332A	E
RACOMITRIUM	CANESCENS			M	M332A	
SANIONIA	UNCINATA			M	M332A	EP
TAYLORIA	SPLACHNOIDES			M	M332A	EP
TETRAPHIS	PELLUCIDA			M	M332A	EP
ANTITRICHIA	CALIFORNICA			M	M332A	HD
BRACHYTHECIUM	HYLOTAPETUM			M	M332A	HD
BRACHYTHECIUM	LEIBERGII			M	M332A	HD
BRACHYTHECIUM	OEDIPODIUM			M	M332A	HD
BRACHYTHECIUM	OXYCLADON			M	M332A	HD
BRACHYTHECIUM	STARKEI			M	M332A	HD
BRACHYTHECIUM	VELUTINUM			M	M332A	HD
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M332A	HD
CAMPYLIUM	POLYGAMUM			M	M332A	HD
CIRRIPHYLLUM	CIRROSUM			M	M332A	HD
CYNODONTIUM	GRACILESCENS			M	M332A	HD
DICRANUM	SCOPARIUM			M	M332A	HD
EURHYNCHIUM	OREGANUM			M	M332A	HD
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M332A	HD
HOMALOTHECIUM	NEVADENSE			M	M332A	HD
HYLOCOMIUM	SPLENDENS			M	M332A	HD
HYPNUM	PRATENSE			M	M332A	HD
LEUCOLEPIS	ACANTHONEURON			M	M332A	HD
MNIUM	MARGINATUM			M	M332A	HD
MNIUM	SPINULOSUM			M	M332A	HD
PLAGIOTHECIUM	DENTICULATUM			M	M332A	HD
PLAGIOTHECIUM	LAETUM			M	M332A	HD
POHLIA	PROLIGERA			M	M332A	
PSEUDOLESKEA	RADICOSA			M	M332A	
RHYTIDIADELPHUS	TRIQUETRUS			M	M332A	HD
RHYTIDIOPSIS	ROBUSTA			M	M332A	HD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
ROELLIA	ROELLII			M	M332A	HD
SANIONIA	UNCINATA			M	M332A	HD
TAYLORIA	ACUMINATA			M	M332A	HD
TIMMIA	AUSTRIACA			M	M332A	HD
TRACHYBRYUM	MEGAPTILUM			M	M332A	HD
AULACOMNIUM	PALUSTRE			M	M332A	PE
HELODIUM	BLANDOWII			M	M332A	PE
SPHAGNUM	FIMBRIATUM			M	M332A	PE
SPHAGNUM	MENDOCINUM			M	M332A	PE
SPHAGNUM	RUSSOWII			M	M332A	PE
SPHAGNUM	SQUARROSUM			M	M332A	PE
SPHAGNUM	SUBSECUNDUM			M	M332A	PE
SPHAGNUM	TERES			M	M332A	PE
SPHAGNUM	WARNSTORFII			M	M332A	PE
GRIMMIA	OVALIS			M	M332A	RC
ORTHOTRICHUM	LAEVIGATUM			M	M332A	RC
AMPHIDIUM	LAPPONICUM			M	M332A	RO
ANACOLIA	MENZIESII			M	M332A	RO
ANDREAEA	RUPESTRIS			M	M332A	RO
AULACOMNIUM	PALUSTRE			M	M332A	RO
BARTRAMIA	POMIFORMIS			M	M332A	RO
BRACHYTHECIUM	NELSONII			M	M332A	RO
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M332A	RO
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332A	RO
BRYUM	PALLENS			M	M332A	RO
BRYUM	TURBINATUM			M	M332A	RO
CERATODON	PURPUREUS			M	M332A	RO
CLAOPODIUM	BOLANDERI			M	M332A	RO
COSCINODON	CALYPTRATUS			M	M332A	RO
DICRANOWEISIA	CRISPULA			M	M332A	RO
DICRANUM	HOWELLII			M	M332A	RO
DICRANUM	SCOPARIUM			M	M332A	RO
DIDYMODON	VINEALIS	V	VINEALIS	M	M332A	RO
DITRICHUM	FLEXICAULE			M	M332A	RO
DITRICHUM	MONTANUM			M	M332A	RO
DREPANOCLADUS	ADUNCUS	V	POLYCARPUS	M	M332A	RO
DRYPTODON	PATENS			M	M332A	RO
GRIMMIA	AFFINIS			M	M332A	RO
GRIMMIA	ANODON			M	M332A	RO
GRIMMIA	ELATIOR			M	M332A	RO
GRIMMIA	MONTANA			M	M332A	RO
GRIMMIA	OVALIS			M	M332A	RO
GRIMMIA	PULVINATA			M	M332A	RO
GRIMMIA	TENERRIMA			M	M332A	RO
GRIMMIA	TORQUATA			M	M332A	RO
GRIMMIA	TRICHOPHYLLA			M	M332A	RO
HEDWIGIA	CILIATA			M	M332A	RO
HOMALOTHECIUM	AENEUM			M	M332A	RO
HOMALOTHECIUM	ARENARIUM			M	M332A	RO
HOMALOTHECIUM	NEVADENSE			M	M332A	RO
HYLOCOMIUM	SPLENDENS			M	M332A	RO
HYPNUM	REVOLUTUM			M	M332A	RO
HYPNUM	SUBIMPONENS			M	M332A	RO
ISOPTERYGIOPSIS	PULCHELLA			M	M332A	RO
ISOTHECIUM	MYOSUROIDES			M	M332A	RO
KIAERIA	STARKEI			M	M332A	RO
METANECKERA	MENZIESII			M	M332A	RO
ORTHOTRICHUM	ANOMALUM			M	M332A	RO
ORTHOTRICHUM	CONSIMILE			M	M332A	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
ORTHOTRICHUM	LAEVIGATUM			M	M332A	RO
ORTHOTRICHUM	PYLAISII			M	M332A	[illegible]
ORTHOTRICHUM	RIVULARE			M	M332A	[illegible]
ORTHOTRICHUM	RUPESTRE			M	M332A	RO
POHLIA	CRUDA			M	M332A	RO
POLYTRICHASTRUM	ALPINUM			M	M332A	RO
POLYTRICHUM	JUNIPERINUM			M	M332A	RO
POLYTRICHUM	PILIFERUM			M	M332A	RO
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M	M332A	RO
PSEUDOLESKEA	RADICOSA			M	M332A	RO
PSEUDOLESKEA	RADICOSA	V	RADICOSA	M	M332A	RO
PSEUDOLESKEA	SAVIANA			M	M332A	RO
PTERIGYNANDRUM	FILIFORME			M	M332A	RO
PTYCHOMITRIUM	GARDNERI			M	M332A	RO
RACOMITRIUM	ACICULARE			M	M332A	RO
RACOMITRIUM	AQUATICUM			M	M332A	RO
RACOMITRIUM	CANESCENS			M	M332A	RO
RACOMITRIUM	ELONGATUM			M	M332A	RO
RACOMITRIUM	ERICOIDES			M	M332A	RO
RACOMITRIUM	HETEROSTICHUM			M	M332A	RO
RACOMITRIUM	MICROCARPON			M	M332A	RO
RACOMITRIUM	OCCIDENTALE			M	M332A	RO
RACOMITRIUM	SUDETICUM			M	M332A	RO
RHYTIDIADELPHUS	TRIQUETRUS			M	M332A	RO
RHYTIDIOPSIS	ROBUSTA			M	M332A	RO
SANIONIA	UNCINATA			M	M332A	RO
SCHISTIDIUM	APOCARPUM			M	M332A	RO
SCHISTIDIUM	RIVULARE			M	M332A	RO
SCHISTIDIUM	RIVULARE	V	LATIFOLIUM	M	M332A	[illegible]
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M332A	[illegible]
SCLEROPODIUM	OBTUSIFOLIUM			M	M332A	RO
THAMNOBRYUM	NECKEROIDES			M	M332A	RO
TORTULA	BARTRAMII			M	M332A	RO
TORTULA	NORVEGICA			M	M332A	RO
TORTULA	RURALIS			M	M332A	RO
TRACHYBRYUM	MEGAPTILUM			M	M332A	RO
ANACOLIA	MENZIESII	V	BAUERI	M	M332A	RW
BRACHYTHECIUM	FRIGIDUM			M	M332A	RW
BRACHYTHECIUM	RIVULARE			M	M332A	RW
BRYUM	MINIATUM			M	M332A	RW
BRYUM	PALLESCENS			M	M332A	RW
BRYUM	PSEUDOTRIQUETRUM			M	M332A	RW
DICHODONTIUM	PELLUCIDUM			M	M332A	RW
DIDYMODON	TOPHACEUS			M	M332A	RW
DIDYMODON	VINEALIS	V	VINEALIS	M	M332A	RW
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M332A	RW
FISSIDENS	LIMBATUS			M	M332A	RW
FONTINALIS	ANTIPYRETICA			M	M332A	RW
FONTINALIS	NEOMEXICANA			M	M332A	RW
HETEROCLADIUM	DIMORPHUM			M	M332A	RW
HOMALOTHECIUM	AENEUM			M	M332A	RW
HYGROHYPNUM	BESTII			M	M332A	RW
HYGROHYPNUM	DURIUSCULUM			M	M332A	RW
HYGROHYPNUM	LURIDUM			M	M332A	RW
HYGROHYPNUM	MOLLE			M	M332A	RW
HYGROHYPNUM	OCHRACEUM			M	M332A	[illegible]
PALUSTRIELLA	COMMUTATA			M	M332A	[illegible]
PALUSTRIELLA	DECIPIENS			M	M332A	RW
PHILONOTIS	FONTANA			M	M332A	RW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
PHILONOTIS	FONTANA	V	FONTANA	M	M332A	RW
PHILONOTIS	FONTANA	V	PUMILA	M	M332A	RW
PLATYDICTYA	JUNGERMANNIOIDES			M	M332A	RW
POHLIA	PROLIGERA			M	M332A	RW
SCOULERIA	AQUATICA			M	M332A	RW
SCOULERIA	MARGINATA			M	M332A	RW
TORTULA	PRINCEPS			M	M332A	RW
ATRICHUM	SELWYNII			M	M332A	SD
BARBULA	EUSTEGIA			M	M332A	SD
BRACHYTHECIUM	ALBICANS			M	M332A	SD
BRACHYTHECIUM	COLLINUM			M	M332A	SD
BRACHYTHECIUM	DIGASTRUM			M	M332A	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M332A	SD
BRACHYTHECIUM	ERYTHRORRHIZON	V	THEDENII	M	M332A	SD
BRACHYTHECIUM	HYLOTAPETUM			M	M332A	SD
BRACHYTHECIUM	RUTABULUM			M	M332A	SD
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332A	SD
BRYUM	ALGOVICUM			M	M332A	SD
BRYUM	CAESPITICIUM			M	M332A	SD
BRYUM	LISAE	V	CUSPIDATUM	M	M332A	SD
BRYUM	PALLESCENS			M	M332A	SD
BRYUM	PSEUDOTRIQUETRUM			M	M332A	SD
CERATODON	PURPUREUS			M	M332A	SD
DICRANELLA	VARIA			M	M332A	SD
DIDYMODON	VINEALIS			M	M332A	SD
DITRICHUM	MONTANUM			M	M332A	SD
EURHYNCHIUM	OREGANUM			M	M332A	SD
EURHYNCHIUM	PULCHELLUM			M	M332A	SD
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M332A	SD
FISSIDENS	BRYOIDES			M	M332A	SD
FUNARIA	HYGROMETRICA			M	M332A	SD
HYPNUM	REVOLUTUM			M	M332A	SD
LEPTOBRYUM	PYRIFORME			M	M332A	SD
MNIUM	SPINULOSUM			M	M332A	SD
PLAGIOMNIUM	AFFINE			M	M332A	SD
POGONATUM	URNIGERUM			M	M332A	SD
POHLIA	CRUDA			M	M332A	SD
POHLIA	DRUMMONDII			M	M332A	SD
POHLIA	NUTANS			M	M332A	SD
POHLIA	WAHLENBERGII			M	M332A	SD
POLYTRICHUM	FORMOSUM			M	M332A	SD
POLYTRICHUM	JUNIPERINUM			M	M332A	SD
POLYTRICHUM	LYALLII			M	M332A	SD
POLYTRICHUM	PILIFERUM			M	M332A	SD
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M	M332A	SD
PSEUDOLESKEA	PATENS			M	M332A	SD
RACOMITRIUM	CANESCENS			M	M332A	SD
RACOMITRIUM	HETEROSTICHUM			M	M332A	SD
RHODOBRYUM	ROSEUM			M	M332A	SD
RHYTIDIADELPHUS	TRIQUETRUS			M	M332A	SD
SANIONIA	UNCINATA			M	M332A	SD
TORTULA	RURALIS			M	M332A	SD
TRICHODON	CYLINDRICUS			M	M332A	SD
AMBLYSTEGIUM	SERPENS			M	M332A	SW
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M332A	SW
ATRICHUM	SELWYNII			M	M332A	SW
AULACOMNIUM	PALUSTRE			M	M332A	SW
BRACHYTHECIUM	COLLINUM			M	M332A	SW
BRACHYTHECIUM	ERYTHRORRHIZON			M	M332A	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
BRACHYTHECIUM	FRIGIDUM			M	M332A	SW
BRACHYTHECIUM	NELSONII			M	M332A	S
BRACHYTHECIUM	OXYCLADON			M	M332A	
BRACHYTHECIUM	RIVULARE			M	M332A	SW
BRYUM	CAESPITICIUM			M	M332A	SW
BRYUM	MINIATUM			M	M332A	SW
BRYUM	MUEHLENBECKII			M	M332A	SW
BRYUM	PSEUDOTRIQUETRUM			M	M332A	SW
BRYUM	WEIGELII			M	M332A	SW
CALLIERGONELLA	CUSPIDATA			M	M332A	SW
CAMPYLIUM	POLYGAMUM			M	M332A	SW
CAMPYLIUM	STELLATUM			M	M332A	SW
CERATODON	PURPUREUS			M	M332A	SW
CLIMACIUM	DENDROIDES			M	M332A	SW
CRATONEURON	FILICINUM			M	M332A	SW
DICHELYMA	FALCATUM			M	M332A	SW
DICHODONTIUM	PELLUCIDUM			M	M332A	SW
DICRANELLA	VARIA			M	M332A	SW
ENCALYPTA	RHAPTOCARPA			M	M332A	SW
ENCALYPTA	VULGARIS			M	M332A	SW
EURHYNCHIUM	PRAELONGUM			M	M332A	SW
EURHYNCHIUM	PULCHELLUM			M	M332A	SW
FISSIDENS	OSMUNDIOIDES			M	M332A	SW
HYGROHYPNUM	OCHRACEUM			M	M332A	SW
LEPTOBRYUM	PYRIFORME			M	M332A	SW
LEPTODICTYUM	HUMILE			M	M332A	SW
MNIUM	BLYTTII			M	M332A	SW
ONCOPHORUS	VIRENS			M	M332A	SW
ONCOPHORUS	WAHLENBERGII			M	M332A	S
PHILONOTIS	CAPILLARIS			M	M332A	
PHILONOTIS	FONTANA			M	M332A	SW
PHILONOTIS	FONTANA	V	AMERICANA	M	M332A	SW
PHILONOTIS	FONTANA	V	FONTANA	M	M332A	SW
PHILONOTIS	FONTANA	V	PUMILA	M	M332A	SW
PHILONOTIS	MARCHICA			M	M332A	SW
PHYSCOMITRIUM	PYGMAEUM			M	M332A	SW
PHYSCOMITRIUM	PYRIFORME			M	M332A	SW
PLAGIOMNIUM	MEDIUM			M	M332A	SW
PLAGIOMNIUM	ROSTRATUM			M	M332A	SW
POGONATUM	URNIGERUM			M	M332A	SW
POHLIA	CRUDA			M	M332A	SW
POHLIA	NUTANS			M	M332A	SW
POHLIA	WAHLENBERGII			M	M332A	SW
POLYTRICHUM	JUNIPERINUM			M	M332A	SW
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M332A	SW
RHIZOMNIUM	PUNCTATUM			M	M332A	SW
SANIONIA	UNCINATA			M	M332A	SW
SANIONIA	UNCINATA	V	SYMMETRICA	M	M332A	SW
SANIONIA	UNCINATA	V	UNCINATA	M	M332A	SW
SPHAGNUM	SQUARROSUM			M	M332A	SW
TIMMIA	AUSTRIACA			M	M332A	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
CHILOSCYPHUS	PALLESCENS			H	M332B	AQ
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	M332B	AQ
CHILOSCYPHUS	POLYANTHOS			H	M332B	AQ
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M332B	AQ
ANASTROPHYLLUM	HELLERANUM			H	M332B	DW
ANASTROPHYLLUM	MINUTUM			H	M332B	DW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332B	DW
CALYPOGEIA	AZUREA			H	M332B	DW
CALYPOGEIA	INTEGRISTIPULA			H	M332B	DW
CALYPOGEIA	MUELLERIANA			H	M332B	DW
CALYPOGEIA	SPHAGNICOLA			H	M332B	DW
CALYPOGEIA	SUECICA			H	M332B	DW
CEPHALOZIA	LACINULATA			H	M332B	DW
CEPHALOZIELLA	RUBELLA			H	M332B	DW
LEPIDOZIA	REPTANS			H	M332B	DW
LOPHOCOLEA	CUSPIDATA			H	M332B	DW
LOPHOCOLEA	HETEROPHYLLA			H	M332B	DW
LOPHOZIA	ASCENDENS			H	M332B	DW
LOPHOZIA	HETEROCOLPOS			H	M332B	DW
LOPHOZIA	INCISA			H	M332B	DW
LOPHOZIA	LONGIDENS			H	M332B	DW
LOPHOZIA	LONGIFLORA			H	M332B	DW
LOPHOZIA	OBTUSA			H	M332B	DW
LOPHOZIA	VENTRICOSA			H	M332B	DW
PTILIDIUM	CILIARE			H	M332B	DW
PTILIDIUM	PULCHERRIMUM			H	M332B	DW
RICCARDIA	LATIFRONS			H	M332B	DW
RICCARDIA	PALMATA			H	M332B	DW
SCAPANIA	CURTA			H	M332B	DW
SCAPANIA	GLAUCOCEPHALA			H	M332B	DW
SCAPANIA	IRRIGUA			H	M332B	DW
SCAPANIA	MUCRONATA			H	M332B	DW
SCAPANIA	NEMOROSA			H	M332B	DW
SCAPANIA	UMBROSA			H	M332B	DW
TRITOMARIA	EXSECTA			H	M332B	DW
TRITOMARIA	EXSECTIFORMIS			H	M332B	DW
TRITOMARIA	QUINQUEDENTATA			H	M332B	DW
RADULA	COMPLANATA			H	M332B	EP
GEOCALYX	GRAVEOLENS			H	M332B	HD
BARBILOPHOZIA	BARBATA			H	M332B	RO
CEPHALOZIA	BICUSPIDATA			H	M332B	RO
CEPHALOZIA	CONNIVENS			H	M332B	RO
CEPHALOZIELLA	DIVARICATA			H	M332B	RO
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M332B	RO
JUNGERMANNIA	HYALINA			H	M332B	RO
JUNGERMANNIA	LEIANTHA			H	M332B	RO
JUNGERMANNIA	PUMILA			H	M332B	RO
JUNGERMANNIA	SPHAEROCARPA			H	M332B	RO
LOPHOCOLEA	MINOR			H	M332B	RO
LOPHOZIA	EXCISA			H	M332B	RO
LOPHOZIA	OBTUSA			H	M332B	RO
MARSUPELLA	EMARGINATA			H	M332B	RO
PORELLA	CORDAEANA			H	M332B	RO
PORELLA	ROELLII			H	M332B	RO
RADULA	COMPLANATA			H	M332B	RO
SCAPANIA	NEMOROSA			H	M332B	RO
SCAPANIA	SUBALPINA			H	M332B	RO
SCAPANIA	UNDULATA			H	M332B	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
BLASIA	PUSILLA			H	M332B	RW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332B	R
CHILOSCYPHUS	POLYANTHOS			H	M332B	R
CONOCEPHALUM	CONICUM			H	M332B	RW
JAMESONIELLA	AUTUMNALIS			H	M332B	RW
MARCHANTIA	POLYMORPHA			H	M332B	RW
PELLIA	ENDIVIIFOLIA			H	M332B	RW
PELLIA	EPIPHYLLA			H	M332B	RW
PELLIA	NEESIANA			H	M332B	RW
PLAGIOCHILA	PORELLOIDES			H	M332B	RW
TRITOMARIA	POLITA			H	M332B	RW
BARBILOPHOZIA	HATCHERI			H	M332B	SD
BARBILOPHOZIA	LYCOPODIOIDES			H	M332B	SD
CEPHALOZIA	BICUSPIDATA			H	M332B	SD
CEPHALOZIA	CONNIVENS			H	M332B	SD
CEPHALOZIA	LOITLESBERGERI			H	M332B	SD
CEPHALOZIA	LUNULIFOLIA			H	M332B	SD
CEPHALOZIA	MACOUNII			H	M332B	SD
CEPHALOZIA	PLENICEPS			H	M332B	SD
CEPHALOZIELLA	HAMPEANA			H	M332B	SD
JUNGERMANNIA	LEIANTHA			H	M332B	SD
LOPHOCOLEA	MINOR			H	M332B	SD
LOPHOZIA	BADENSIS			H	M332B	SD
LOPHOZIA	BANTRIENSIS			H	M332B	SD
LOPHOZIA	COLLARIS			H	M332B	SD
LOPHOZIA	GILLMANII			H	M332B	SD
LOPHOZIA	LONGIFLORA			H	M332B	SD
LOPHOZIA	VENTRICOSA			H	M332B	SD
NARDIA	COMPRESSA			H	M332B	S
SCAPANIA	CURTA			H	M332B	S
SCAPANIA	IRRIGUA			H	M332B	SD
SCAPANIA	PALUDOSA			H	M332B	SD
SCAPANIA	UMBROSA			H	M332B	SD
SCAPANIA	UNDULATA			H	M332B	SD
TRITOMARIA	SCITULA			H	M332B	SD
ANEURA	PINGUIS			H	M332B	SW
BARBILOPHOZIA	ATLANTICA			H	M332B	SW
BARBILOPHOZIA	HATCHERI			H	M332B	SW
BARBILOPHOZIA	KUNZEANA			H	M332B	SW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332B	SW
BLEPHAROSTOMA	TRICHOPHYLLUM	S	BREVIRETE	H	M332B	SW
CEPHALOZIA	BICUSPIDATA			H	M332B	SW
CEPHALOZIA	PLENICEPS			H	M332B	SW
CHILOSCYPHUS	POLYANTHOS			H	M332B	SW
CONOCEPHALUM	CONICUM			H	M332B	SW
DIPLOPHYLLUM	TAXIFOLIUM			H	M332B	SW
GEOCALYX	GRAVEOLENS			H	M332B	SW
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M332B	SW
LOPHOZIA	INCISA			H	M332B	SW
MARCHANTIA	POLYMORPHA			H	M332B	SW
PELLIA	ENDIVIIFOLIA			H	M332B	SW
PLAGIOCHILA	PORELLOIDES			H	M332B	SW
FISSIDENS	FONTANUS			M	M332B	AQ
HYGROAMBLYSTEGIUM	TENAX			M	M332B	AQ
LEPTODICTYUM	RIPARIUM			M	M332B	AQ
DICRANUM	MUEHLENBECKII			M	M332B	D
DICRANUM	SCOPARIUM			M	M332B	D
DICRANUM	TAURICUM			M	M332B	DW
SANIONIA	UNCINATA			M	M332B	DW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
TETRAPHIS	PELLUCIDA			M	M332B	DW
EURHYNCHIUM	PULCHELLUM			M	M332B	EP
HYPNUM	SUBIMPONENS			M	M332B	EP
ORTHOTRICHUM	AFFINE			M	M332B	EP
PSEUDOLESKEELLA	TECTORUM			M	M332B	EP
ABIETINELLA	ABIETINA			M	M332B	HD
BRACHYTHECIUM	ALBICANS			M	M332B	HD
BRACHYTHECIUM	HYLOTAPETUM			M	M332B	HD
DICRANUM	SCOPARIUM			M	M332B	HD
HYLOCOMIUM	SPLENDENS			M	M332B	HD
PLAGIOMNIUM	VENUSTUM			M	M332B	HD
PTILIUM	CRISTA-CASTRENSIS			M	M332B	HD
RACOMITRIUM	HETEROSTICHUM			M	M332B	HD
RHYTIDIADELPHUS	TRIQUETRUS			M	M332B	HD
ROELLIA	ROELLII			M	M332B	HD
~~TETRAPLODON~~	~~ANGUSTATUS~~			M	M332B	HD
TIMMIA	AUSTRIACA			M	M332B	HD
POLYTRICHUM	FORMOSUM			M	M332B	PE
SPHAGNUM	COMPACTUM			M	M332B	PE
SPHAGNUM	FIMBRIATUM			M	M332B	PE
SPHAGNUM	MAGELLANICUM			M	M332B	PE
SPHAGNUM	RIPARIUM			M	M332B	PE
SPHAGNUM	RUSSOWII			M	M332B	PE
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332B	RC
DIDYMODON	RIGIDULUS	V	GRACILIS	M	M332B	RC
EUCLADIUM	VERTICILLATUM			M	M332B	RC
FISSIDENS	GRANDIFRONS			M	M332B	RC
GRIMMIA	ANODON			M	M332B	RC
HYGROAMBLYSTEGIUM	TENAX			M	M332B	RC
HYMENOSTYLIUM	RECURVIROSTRE			M	M332B	RC
ANDREAEA	RUPESTRIS			M	M332B	RO
COSCINODON	CALYPTRATUS			M	M332B	RO
DICRANOWEISIA	CRISPULA			M	M332B	RO
DICRANUM	ACUTIFOLIUM			M	M332B	RO
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M332B	RO
GRIMMIA	AFFINIS			M	M332B	RO
GRIMMIA	INCURVA			M	M332B	RO
GRIMMIA	MONTANA			M	M332B	RO
HOMALOTHECIUM	NEVADENSE			M	M332B	RO
ORTHOTRICHUM	ALPESTRE			M	M332B	RO
ORTHOTRICHUM	ANOMALUM			M	M332B	RO
ORTHOTRICHUM	LAEVIGATUM			M	M332B	RO
ORTHOTRICHUM	RUPESTRE			M	M332B	RO
PTERIGYNANDRUM	FILIFORME			M	M332B	RO
SCHISTIDIUM	APOCARPUM			M	M332B	RO
TORTULA	MUCRONIFOLIA			M	M332B	RW
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332B	RW
CRATONEURON	FILICINUM			M	M332B	RW
HYGROHYPNUM	BESTII			M	M332B	RW
POROTRICHUM	BIGELOVII			M	M332B	RW
SCOULERIA	AQUATICA			M	M332B	SD
ABIETINELLA	ABIETINA			M	M332B	SD
ATRICHUM	SELWYNII			M	M332B	SD
BRACHYTHECIUM	ALBICANS			M	M332B	SD
BRACHYTHECIUM	COLLINUM			M	M332B	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M332B	SD
BRYUM	CAESPITICIUM			M	M332B	SD
CAMPYLIUM	CHRYSOPHYLLUM			M	M332B	SD
CERATODON	PURPUREUS			M	M332B	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
DICRANUM	BONJEANII			M	M332B	SD
DISTICHIUM	CAPILLACEUM			M	M332B	[illegible]
ENCALYPTA	VULGARIS			M	M332B	[illegible]
FUNARIA	HYGROMETRICA			M	M332B	[illegible]
HOMALOTHECIUM	AENEUM			M	M332B	SD
HYPNUM	CUPRESSIFORME			M	M332B	SD
HYPNUM	REVOLUTUM			M	M332B	SD
LEPTOBRYUM	PYRIFORME			M	M332B	SD
POHLIA	CRUDA			M	M332B	SD
POHLIA	NUTANS			M	M332B	SD
POLYTRICHUM	COMMUNE	V	COMMUNE	M	M332B	SD
POLYTRICHUM	JUNIPERINUM			M	M332B	SD
POLYTRICHUM	LYALLII			M	M332B	SD
PTERIGYNANDRUM	FILIFORME			M	M332B	SD
PTERYGONEURUM	OVATUM			M	M332B	SD
TIMMIA	AUSTRIACA			M	M332B	SD
TIMMIA	MEGAPOLITANA			M	M332B	SD
TORTELLA	FRAGILIS			M	M332B	SD
TORTELLA	TORTUOSA			M	M332B	SD
TORTULA	RURALIS			M	M332B	SD
BRACHYTHECIUM	FRIGIDUM			M	M332B	SW
BRYUM	PALLESCENS			M	M332B	SW
BRYUM	ULIGINOSUM			M	M332B	SW
BRYUM	WEIGELII			M	M332B	SW
CLIMACIUM	DENDROIDES			M	M332B	SW
CRATONEURON	FILICINUM			M	M332B	SW
DIDYMODON	TOPHACEUS			M	M332B	SW
HYGROHYPNUM	LURIDUM			M	M332B	SW
HYPNUM	LINDBERGII			M	M332B	[illegible]
HYPNUM	PALLESCENS			M	M332B	[illegible]
MNIUM	BLYTTII			M	M332B	[illegible]
PHILONOTIS	FONTANA			M	M332B	SW
PLAGIOMNIUM	ELLIPTICUM			M	M332B	SW
PLAGIOMNIUM	MEDIUM			M	M332B	SW
PLAGIOMNIUM	ROSTRATUM			M	M332B	SW
PLAGIOMNIUM	VENUSTUM			M	M332B	SW
POHLIA	WAHLENBERGII			M	M332B	SW
TOMENTHYPNUM	NITENS			M	M332B	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
CHILOSCYPHUS	POLYANTHOS			H	M332E	AQ
RICCIA	FLUITANS			H	M332E	AQ
JAMESONIELLA	AUTUMNALIS			H	M332E	RO
ASTERELLA	LUDWIGII			H	M332E	SW
DREPANOCLADUS	ADUNCUS			M	M332E	AQ
FONTINALIS	HYPNOIDES	V	DURIAEI	M	M332E	AQ
LEPTODICTYUM	RIPARIUM			M	M332E	AQ
AULACOMNIUM	PALUSTRE			M	M332E	HD
BRACHYTHECIUM	COLLINUM			M	M332E	HD
BRACHYTHECIUM	HYLOTAPETUM			M	M332E	HD
BRACHYTHECIUM	SALEBROSUM			M	M332E	HD
ENCALYPTA	RHAPTOCARPA			M	M332E	HD
HYPNUM	REVOLUTUM			M	M332E	HD
PLAGIOMNIUM	INSIGNE			M	M332E	HD
POHLIA	NUTANS			M	M332E	HD
POHLIA	PROLIGERA			M	M332E	HD
TETRAPHIS	PELLUCIDA			M	M332E	HD
TIMMIA	AUSTRIACA			M	M332E	HD
GRIMMIA	ANODON			M	M332E	RC
HYPNUM	REVOLUTUM			M	M332E	RC
ORTHOTRICHUM	CUPULATUM			M	M332E	RC
PSEUDOLESKEELLA	TECTORUM			M	M332E	RC
TORTELLA	TORTUOSA			M	M332E	RC
COSCINODON	CALYPTRATUS			M	M332E	RO
DICRANOWEISIA	CRISPULA			M	M332E	RO
DISTICHIUM	CAPILLACEUM			M	M332E	RO
ENCALYPTA	INTERMEDIA			M	M332E	RO
ORTHOTRICHUM	HALLII			M	M332E	RO
ORTHOTRICHUM	LAEVIGATUM			M	M332E	RO
ORTHOTRICHUM	PELLUCIDUM			M	M332E	RO
PSEUDOLESKEELLA	TECTORUM			M	M332E	RO
TIMMIA	MEGAPOLITANA	V	BAVARICA	M	M332E	RO
TORTELLA	FRAGILIS			M	M332E	RO
HYGROHYPNUM	OCHRACEUM			M	M332E	RW
BRYUM	ALGOVICUM			M	M332E	SD
BRYUM	ARGENTEUM			M	M332E	SD
BRYUM	CAESPITICIUM			M	M332E	SD
BRYUM	LISAE	V	CUSPIDATUM	M	M332E	SD
ENCALYPTA	VULGARIS			M	M332E	SD
FUNARIA	HYGROMETRICA			M	M332E	SD
HYPNUM	REVOLUTUM			M	M332E	SD
POHLIA	ANNOTINA			M	M332E	SD
PTERYGONEURUM	OVATUM			M	M332E	SD
TIMMIA	MEGAPOLITANA	V	BAVARICA	M	M332E	SD
BRYUM	ARGENTEUM			M	M332E	SW
BRYUM	LISAE	V	CUSPIDATUM	M	M332E	SW
CONARDIA	COMPACTA			M	M332E	SW
CRATONEURON	FILICINUM			M	M332E	SW
HYGROHYPNUM	LURIDUM			M	M332E	SW
LEPTODICTYUM	HUMILE			M	M332E	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332F	DW
CHILOSCYPHUS	POLYANTHOS			H	M332F	D
ATHALAMIA	HYALINA			H	M332F	S
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332F	SD
DREPANOCLADUS	ADUNCUS			M	M332F	AQ
BRACHYTHECIUM	FRIGIDUM			M	M332F	DW
AULACOMNIUM	PALUSTRE			M	M332F	HD
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M332F	HD
HYPNUM	REVOLUTUM			M	M332F	HD
HAMATOCAULIS	VERNICOSUS			M	M332F	PE
COSCINODON	CALYPTRATUS			M	M332F	RO
DICRANOWEISIA	CRISPULA			M	M332F	RO
GRIMMIA	TENERRIMA			M	M332F	RO
HYPNUM	REVOLUTUM			M	M332F	RO
ORTHOTRICHUM	LAEVIGATUM			M	M332F	RO
ORTHOTRICHUM	RUPESTRE			M	M332F	RO
BRACHYTHECIUM	FRIGIDUM			M	M332F	RW
HYGROHYPNUM	LURIDUM			M	M332F	RW
HYGROHYPNUM	STYRIACUM			M	M332F	RW
PALUSTRIELLA	COMMUTATA			M	M332F	RW
PALUSTRIELLA	DECIPIENS			M	M332F	RW
SCOULERIA	AQUATICA			M	M332F	RW
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332F	SD
BRYUM	LISAE	V	CUSPIDATUM	M	M332F	SD
ENCALYPTA	INTERMEDIA			M	M332F	SD
ENCALYPTA	RHAPTOCARPA			M	M332F	SD
FUNARIA	HYGROMETRICA			M	M332F	SD
HYPNUM	REVOLUTUM			M	M332F	SD
LEPTOBRYUM	PYRIFORME			M	M332F	S
POTTIA	LANCEOLATA			M	M332F	S
PSEUDOLESKEA	PATENS			M	M332F	SD
TORTULA	RURALIS			M	M332F	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M332F	SW
BRACHYTHECIUM	FRIGIDUM			M	M332F	SW
BRYUM	MUEHLENBECKII			M	M332F	SW
BRYUM	PSEUDOTRIQUETRUM			M	M332F	SW
CRATONEURON	FILICINUM			M	M332F	SW
DISTICHIUM	CAPILLACEUM			M	M332F	SW
HYPNUM	REVOLUTUM			M	M332F	SW
LEPTOBRYUM	PYRIFORME			M	M332F	SW
ONCOPHORUS	VIRENS			M	M332F	SW
PHILONOTIS	FONTANA			M	M332F	SW
POHLIA	FILUM			M	M332F	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
ANTHOCEROS	PUNCTATUS			A	M332G	HD
CHILOSCYPHUS	POLYANTHOS			H	M332G	AQ
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M332G	AQ
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M332G	DW
CEPHALOZIA	LUNULIFOLIA			H	M332G	DW
CEPHALOZIA	PLENICEPS			H	M332G	DW
CHILOSCYPHUS	PALLESCENS			H	M332G	DW
LEPIDOZIA	REPTANS			H	M332G	DW
LOPHOZIA	INCISA			H	M332G	DW
LOPHOZIA	LONGIFLORA			H	M332G	DW
LOPHOZIA	OBTUSA			H	M332G	DW
LOPHOZIA	VENTRICOSA			H	M332G	DW
SCAPANIA	UNDULATA			H	M332G	DW
FRULLANIA	TAMARISCI	S	NISQUALLENSIS	H	M332G	EP
PTILIDIUM	PULCHERRIMUM			H	M332G	EP
RADULA	COMPLANATA			H	M332G	EP
CALYPOGEIA	AZUREA			H	M332G	HD
CEPHALOZIA	LUNULIFOLIA			H	M332G	HD
LOPHOZIA	VENTRICOSA			H	M332G	HD
CEPHALOZIA	BICUSPIDATA	S	LAMMERSIANA	H	M332G	PE
CEPHALOZIA	PLENICEPS			H	M332G	PE
CHILOSCYPHUS	PALLESCENS			H	M332G	PE
LOPHOCOLEA	CUSPIDATA			H	M332G	PE
LOPHOZIA	ASCENDENS			H	M332G	PE
BARBILOPHOZIA	HATCHERI			H	M332G	RO
BARBILOPHOZIA	LYCOPODIOIDES			H	M332G	RO
CALYPOGEIA	SUECICA			H	M332G	RO
CEPHALOZIELLA	DIVARICATA			H	M332G	RO
CHILOSCYPHUS	POLYANTHOS			H	M332G	RO
JAMESONIELLA	AUTUMNALIS			H	M332G	RO
LOPHOZIA	HETEROCOLPOS			H	M332G	RO
PORELLA	CORDAEANA			H	M332G	RO
RADULA	COMPLANATA			H	M332G	RO
CHILOSCYPHUS	PALLESCENS			H	M332G	RW
CONOCEPHALUM	CONICUM			H	M332G	RW
JUNGERMANNIA	EXSERTIFOLIA			H	M332G	RW
LOPHOZIA	HETEROCOLPOS			H	M332G	RW
MARCHANTIA	POLYMORPHA			H	M332G	RW
PORELLA	CORDAEANA			H	M332G	RW
SCAPANIA	IRRIGUA			H	M332G	RW
ANTHELIA	JULACEA			H	M332G	SD
LOPHOZIA	EXCISA			H	M332G	SD
REBOULIA	HEMISPHAERICA			H	M332G	SD
RICCIA	BEYRICHIANA			H	M332G	SD
RICCIA	GLAUCA			H	M332G	SD
RICCIA	SOROCARPA			H	M332G	SD
TARGIONIA	HYPOPHYLLA			H	M332G	SD
ANEURA	PINGUIS			H	M332G	SW
ASTERELLA	GRACILIS			H	M332G	SW
ASTERELLA	LINDENBERGIANA			H	M332G	SW
ASTERELLA	SACCATA			H	M332G	SW
ATHALAMIA	HYALINA			H	M332G	SW
BLASIA	PUSILLA			H	M332G	SW
CEPHALOZIA	LUNULIFOLIA			H	M332G	SW
CEPHALOZIA	PLENICEPS			H	M332G	SW
CHILOSCYPHUS	PALLESCENS			H	M332G	SW
CONOCEPHALUM	CONICUM			H	M332G	SW
FOSSOMBRONIA	FOVEOLATA			H	M332G	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
FOSSOMBRONIA	LONGISETA			H	M332G	SW
JUNGERMANNIA	LEIANTHA			H	M332G	[illegible]
LOPHOCOLEA	CUSPIDATA			H	M332G	[illegible]
LOPHOCOLEA	MINOR			H	M332G	SW
LOPHOZIA	BANTRIENSIS			H	M332G	SW
LOPHOZIA	COLLARIS			H	M332G	SW
LOPHOZIA	INCISA			H	M332G	SW
LOPHOZIA	VENTRICOSA			H	M332G	SW
MARCHANTIA	POLYMORPHA			H	M332G	SW
NARDIA	GEOSCYPHUS			H	M332G	SW
PELLIA	ENDIVIIFOLIA			H	M332G	SW
PELLIA	EPIPHYLLA			H	M332G	SW
PREISSIA	QUADRATA			H	M332G	SW
RICCARDIA	LATIFRONS			H	M332G	SW
RICCARDIA	MULTIFIDA			H	M332G	SW
SCAPANIA	UNDULATA			H	M332G	SW
DICRANELLA	PALUSTRIS			M	M332G	AQ
AMBLYSTEGIUM	SERPENS			M	M332G	DW
AULACOMNIUM	ANDROGYNUM			M	M332G	DW
BRACHYTHECIUM	SALEBROSUM			M	M332G	DW
BUXBAUMIA	PIPERI			M	M332G	DW
CAMPYLIUM	POLYGAMUM			M	M332G	DW
DICHELYMA	FALCATUM			M	M332G	DW
DICRANOWEISIA	CIRRATA			M	M332G	DW
DICRANOWEISIA	CRISPULA			M	M332G	DW
DICRANUM	SCOPARIUM			M	M332G	DW
DICRANUM	TAURICUM			M	M332G	DW
HOMALOTHECIUM	AENEUM			M	M332G	DW
HYPNUM	IMPONENS			M	M332G	[illegible]
HYPNUM	SUBIMPONENS			M	M332G	[illegible]
LEPTOBRYUM	PYRIFORME			M	M332G	DW
POHLIA	CRUDA			M	M332G	DW
POHLIA	NUTANS			M	M332G	DW
SANIONIA	UNCINATA			M	M332G	DW
SCLEROPODIUM	OBTUSIFOLIUM			M	M332G	DW
TETRAPHIS	PELLUCIDA			M	M332G	DW
ANOMODON	VITICULOSUS			M	M332G	EP
ANOMODON	VITICULOSUS			M	M332G	EP
CLAOPODIUM	CRISPIFOLIUM			M	M332G	EP
HOMALOTHECIUM	NUTTALLII			M	M332G	EP
ORTHOTRICHUM	AFFINE			M	M332G	EP
ORTHOTRICHUM	LYELLII			M	M332G	EP
ORTHOTRICHUM	OBTUSIFOLIUM			M	M332G	EP
ORTHOTRICHUM	PULCHELLUM			M	M332G	EP
ORTHOTRICHUM	SPECIOSUM			M	M332G	EP
ORTHOTRICHUM	STRIATUM			M	M332G	EP
SCLEROPODIUM	CESPITANS			M	M332G	EP
AULACOMNIUM	ANDROGYNUM			M	M332G	HD
BRACHYTHECIUM	BOLANDERI			M	M332G	HD
BRACHYTHECIUM	FRIGIDUM			M	M332G	HD
BRACHYTHECIUM	HYLOTAPETUM			M	M332G	HD
BRACHYTHECIUM	VELUTINUM	V	VELUTINUM	M	M332G	HD
BUXBAUMIA	VIRIDIS			M	M332G	HD
DICRANUM	HOWELLII			M	M332G	HD
DICRANUM	POLYSETUM			M	M332G	HD
EURHYNCHIUM	OREGANUM			M	M332G	[illegible]
HERZOGIELLA	SELIGERI			M	M332G	[illegible]
ISOPTERYGIOPSIS	PULCHELLA			M	M332G	HD
MNIUM	MARGINATUM			M	M332G	HD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
PLAGIOMNIUM	AFFINE			M	M332G	HD
PLEUROZIUM	SCHREBERI			M	M332G	HD
POHLIA	NUTANS			M	M332G	HD
POLYTRICHUM	LYALLII			M	M332G	HD
RHIZOMNIUM	GLABRESCENS			M	M332G	HD
RHODOBRYUM	ONTARIENSE			M	M332G	HD
RHYTIDIADELPHUS	TRIQUETRUS			M	M332G	HD
RHYTIDIOPSIS	ROBUSTA			M	M332G	HD
ROELLIA	ROELLII			M	M332G	HD
SANIONIA	UNCINATA			M	M332G	HD
TIMMIA	AUSTRIACA			M	M332G	HD
AULACOMNIUM	PALUSTRE			M	M332G	PE
CALLIERGON	CORDIFOLIUM			M	M332G	PE
DICRANELLA	PALUSTRIS			M	M332G	PE
DREPANOCLADUS	ADUNCUS			M	M332G	PE
SPHAGNUM	CAPILLIFOLIUM			M	M332G	PE
SPHAGNUM	GIRGENSOHNII			M	M332G	PE
SPHAGNUM	RUSSOWII			M	M332G	PE
SPHAGNUM	SQUARROSUM			M	M332G	PE
DIDYMODON	VINEALIS	V	LURIDUS	M	M332G	RC
ANTITRICHIA	CALIFORNICA			M	M332G	RO
BARTRAMIA	ITHYPHYLLA			M	M332G	RO
BARTRAMIA	POMIFORMIS			M	M332G	RO
BRACHYTHECIUM	COLLINUM			M	M332G	RO
BRACHYTHECIUM	GLAREOSUM			M	M332G	RO
BRACHYTHECIUM	LEIBERGII			M	M332G	RO
BRACHYTHECIUM	RUTABULUM			M	M332G	RO
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332G	RO
COSCINODON	CALYPTRATUS			M	M332G	RO
DESMATODON	LATIFOLIUS			M	M332G	RO
DICRANOWEISIA	CRISPULA			M	M332G	RO
DICRANUM	HOWELLII			M	M332G	RO
DIDYMODON	VINEALIS			M	M332G	RO
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	M332G	RO
DRYPTODON	PATENS			M	M332G	RO
GRIMMIA	LAEVIGATA			M	M332G	RO
GRIMMIA	MONTANA			M	M332G	RO
GRIMMIA	OVALIS			M	M332G	RO
GRIMMIA	PULVINATA			M	M332G	RO
GRIMMIA	TENERRIMA			M	M332G	RO
GRIMMIA	TORQUATA			M	M332G	RO
GRIMMIA	TRICHOPHYLLA	V	TENUIS	M	M332G	RO
HEDWIGIA	CILIATA			M	M332G	RO
HETEROCLADIUM	PROCURRENS			M	M332G	RO
HOMALOTHECIUM	AENEUM			M	M332G	RO
HOMALOTHECIUM	FULGESCENS			M	M332G	RO
HOMALOTHECIUM	NEVADENSE			M	M332G	RO
HOMALOTHECIUM	NUTTALLII			M	M332G	RO
HOMALOTHECIUM	PINNATIFIDUM			M	M332G	RO
HYPNUM	SUBIMPONENS			M	M332G	RO
ISOTHECIUM	MYOSUROIDES			M	M332G	RO
JAFFUELIOBRYUM	RAUI			M	M332G	RO
LESKEA	POLYCARPA			M	M332G	RO
METANECKERA	MENZIESII			M	M332G	RO
ORTHOTRICHUM	CUPULATUM			M	M332G	RO
ORTHOTRICHUM	HOLZINGERI			M	M332G	RO
ORTHOTRICHUM	LAEVIGATUM			M	M332G	RO
ORTHOTRICHUM	RIVULARE			M	M332G	RO
ORTHOTRICHUM	RUPESTRE			M	M332G	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substr
ORTHOTRICHUM	SPECIOSUM			M	M332G	RO
PLAGIOMNIUM	CUSPIDATUM			M	M332G	[illegible]
POHLIA	CRUDA			M	M332G	[illegible]
POROTRICHUM	VANCOUVERIENSE			M	M332G	[illegible]
PSEUDOBRAUNIA	CALIFORNICA			M	M332G	RO
PSEUDOLESKEA	INCURVATA			M	M332G	RO
PSEUDOLESKEA	INCURVATA	V	GIGANTEA	M	M332G	RO
PSEUDOLESKEA	PATENS			M	M332G	RO
PSEUDOLESKEA	RADICOSA			M	M332G	RO
PSEUDOLESKEELLA	TECTORUM			M	M332G	RO
PTERIGYNANDRUM	FILIFORME			M	M332G	RO
PTYCHOMITRIUM	GARDNERI			M	M332G	RO
RACOMITRIUM	BREVIPES			M	M332G	RO
RACOMITRIUM	ERICOIDES			M	M332G	RO
RHYTIDIADELPHUS	TRIQUETRUS			M	M332G	RO
SCHISTIDIUM	AGASSIZII			M	M332G	RO
SCHISTIDIUM	APOCARPUM			M	M332G	RO
SCHISTIDIUM	CINCLIDODONTEUM			M	M332G	RO
SCHISTIDIUM	MARITIMUM			M	M332G	RO
SCHISTIDIUM	MARITIMUM			M	M332G	RO
SCHISTIDIUM	TENERUM			M	M332G	RO
SCLEROPODIUM	OBTUSIFOLIUM			M	M332G	RO
TORTULA	NORVEGICA			M	M332G	RO
TORTULA	PRINCEPS			M	M332G	RO
TORTULA	RURALIS			M	M332G	RO
ULOTA	PHYLLANTHA			M	M332G	RO
ANTITRICHIA	CALIFORNICA			M	M332G	RW
BRACHYTHECIUM	FRIGIDUM			M	M332G	RW
BRACHYTHECIUM	RUTABULUM			M	M332G	[illegible]
CRUMIA	LATIFOLIA			M	M332G	[illegible]
FONTINALIS	ANTIPYRETICA			M	M332G	[illegible]
FONTINALIS	HOWELLII			M	M332G	RW
FONTINALIS	NEOMEXICANA			M	M332G	RW
HYGROHYPNUM	LURIDUM			M	M332G	RW
HYGROHYPNUM	OCHRACEUM			M	M332G	RW
SCHISTIDIUM	OCCIDENTALE			M	M332G	RW
SCHISTIDIUM	RIVULARE			M	M332G	RW
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M332G	RW
SCOULERIA	AQUATICA			M	M332G	RW
THAMNOBRYUM	ALLEGHANIENSE			M	M332G	RW
TORTULA	NORVEGICA			M	M332G	RW
ATRICHUM	SELWYNII			M	M332G	SD
ATRICHUM	UNDULATUM			M	M332G	SD
BARBULA	CONVOLUTA			M	M332G	SD
BARBULA	EUSTEGIA			M	M332G	SD
BRACHYTHECIUM	ALBICANS			M	M332G	SD
BRACHYTHECIUM	COLLINUM			M	M332G	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M332G	SD
BRACHYTHECIUM	PLUMOSUM			M	M332G	SD
BRACHYTHECIUM	REFLEXUM			M	M332G	SD
BRACHYTHECIUM	SALEBROSUM			M	M332G	SD
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M332G	SD
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M332G	SD
BRYUM	AMBLYODON			M	M332G	SD
BRYUM	ARGENTEUM			M	M332G	[illegible]
BRYUM	CAESPITICIUM			M	M332G	[illegible]
BRYUM	LISAE	V	CUSPIDATUM	M	M332G	SD
BRYUM	LONCHOCAULON			M	M332G	SD
BRYUM	MINIATUM			M	M332G	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
BRYUM	MUEHLENBECKII			M	M332G	SD
CERATODON	PURPUREUS			M	M332G	SD
DESMATODON	OBTUSIFOLIUS			M	M332G	SD
DICRANUM	BONJEANII			M	M332G	SD
DIDYMODON	VINEALIS			M	M332G	SD
DITRICHUM	MONTANUM			M	M332G	SD
ENCALYPTA	VULGARIS			M	M332G	SD
EURHYNCHIUM	PULCHELLUM			M	M332G	SD
FABRONIA	PUSILLA			M	M332G	SD
FISSIDENS	BRYOIDES			M	M332G	SD
FUNARIA	HYGROMETRICA			M	M332G	SD
HOMALOTHECIUM	AENEUM			M	M332G	SD
HOMALOTHECIUM	ARENARIUM			M	M332G	SD
HOMALOTHECIUM	PINNATIFIDUM			M	M332G	SD
ISOTHECIUM	CRISTATUM			M	M332G	SD
LEPTOBRYUM	PYRIFORME			M	M332G	SD
MNIUM	BLYTTII			M	M332G	SD
MNIUM	SPINULOSUM			M	M332G	SD
MNIUM	THOMSONII			M	M332G	SD
POHLIA	CRUDA			M	M332G	SD
POHLIA	NUTANS			M	M332G	SD
POLYTRICHASTRUM	ALPINUM			M	M332G	SD
POLYTRICHUM	COMMUNE			M	M332G	SD
POLYTRICHUM	JUNIPERINUM			M	M332G	SD
POLYTRICHUM	LYALLII			M	M332G	SD
POLYTRICHUM	PILIFERUM			M	M332G	SD
POTTIA	INTERMEDIA			M	M332G	SD
PSEUDOCROSSIDIUM	REVOLUTUM			M	M332G	SD
RHODOBRYUM	ROSEUM			M	M332G	SD
RHYTIDIOPSIS	ROBUSTA			M	M332G	SD
ROELLIA	ROELLII			M	M332G	SD
SCHISTIDIUM	APOCARPUM			M	M332G	SD
TIMMIA	AUSTRIACA			M	M332G	SD
TORTELLA	TORTUOSA			M	M332G	SD
TORTULA	NORVEGICA			M	M332G	SD
TORTULA	PRINCEPS			M	M332G	SD
TORTULA	RURALIS			M	M332G	SD
TRICHODON	CYLINDRICUS			M	M332G	SD
AULACOMNIUM	PALUSTRE			M	M332G	SW
BARBULA	CONVOLUTA			M	M332G	SW
BRACHYTHECIUM	FRIGIDUM			M	M332G	SW
BRACHYTHECIUM	RIVULARE			M	M332G	SW
BRYUM	ARCTICUM			M	M332G	SW
BRYUM	MUEHLENBECKII			M	M332G	SW
BRYUM	PALLESCENS			M	M332G	SW
BRYUM	PSEUDOTRIQUETRUM			M	M332G	SW
CRATONEURON	FILICINUM			M	M332G	SW
DICHODONTIUM	PELLUCIDUM			M	M332G	SW
DREPANOCLADUS	ADUNCUS			M	M332G	SW
EURHYNCHIUM	PRAELONGUM			M	M332G	SW
HOOKERIA	LUCENS			M	M332G	SW
LEPTOBRYUM	PYRIFORME			M	M332G	SW
LEPTODICTYUM	RIPARIUM			M	M332G	SW
PHILONOTIS	CAPILLARIS			M	M332G	SW
PHILONOTIS	FONTANA			M	M332G	SW
PHILONOTIS	FONTANA	V	AMERICANA	M	M332G	SW
PLAGIOMNIUM	ELLIPTICUM			M	M332G	SW
PLAGIOMNIUM	MEDIUM			M	M332G	SW
PLAGIOMNIUM	ROSTRATUM			M	M332G	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
POHLIA	ANNOTINA			M	M332G	SW
POHLIA	CRUDA			M	M332G	S
POHLIA	ELONGATA			M	M332G	S
POHLIA	LESCURIANA			M	M332G	SW
POHLIA	PROLIGERA			M	M332G	SW
POHLIA	WAHLENBERGII			M	M332G	SW
POLYTRICHUM	COMMUNE			M	M332G	SW
RHIZOMNIUM	MAGNIFOLIUM			M	M332G	SW
RHIZOMNIUM	NUDUM			M	M332G	SW
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M332G	SW
SANIONIA	UNCINATA			M	M332G	SW

Northern Rocky Mountain Forest-Steppe:
coniferous forest, alpine meadow

M333A	Okanogan Highlands (ID, WA)
M333B	Flathead Valley (ID, MT)
M333C	Northern Rockies (MT)
M333D	Bitterroot Mountains (ID, MT, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
ANTHOCEROS	PUNCTATUS			A	M333A	SW
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M333A	[illegible]
SCAPANIA	UNDULATA			H	M333A	[illegible]
ANASTROPHYLLUM	HELLERANUM			H	M333A	DW
ANASTROPHYLLUM	MICHAUXII			H	M333A	DW
ANASTROPHYLLUM	MICHAUXII			H	M333A	DW
BARBILOPHOZIA	FLOERKII			H	M333A	DW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333A	DW
CEPHALOZIA	LEUCANTHA			H	M333A	DW
CEPHALOZIA	LUNULIFOLIA			H	M333A	DW
CEPHALOZIA	PLENICEPS	V	PLENICEPS	H	M333A	DW
CEPHALOZIELLA	RUBELLA			H	M333A	DW
CEPHALOZIELLA	RUBELLA	V	RUBELLA	H	M333A	DW
CHILOSCYPHUS	PALLESCENS			H	M333A	DW
CHILOSCYPHUS	PALLESCENS	V	PALLESCENS	H	M333A	DW
CHILOSCYPHUS	POLYANTHOS			H	M333A	DW
CHILOSCYPHUS	POLYANTHOS	V	POLYANTHOS	H	M333A	DW
JAMESONIELLA	AUTUMNALIS			H	M333A	DW
JAMESONIELLA	AUTUMNALIS			H	M333A	DW
JAMESONIELLA	AUTUMNALIS	V	AUTUMNALIS	H	M333A	DW
JUNGERMANNIA	LEIANTHA			H	M333A	DW
LEPIDOZIA	REPTANS			H	M333A	DW
LOPHOCOLEA	HETEROPHYLLA			H	M333A	DW
LOPHOCOLEA	MINOR			H	M333A	DW
LOPHOZIA	ASCENDENS			H	M333A	DW
LOPHOZIA	HETEROCOLPOS			H	M333A	DW
LOPHOZIA	INCISA			H	M333A	DW
LOPHOZIA	INCISA			H	M333A	DW
LOPHOZIA	INCISA	V	INCISA	H	M333A	[illegible]
LOPHOZIA	LONGIDENS			H	M333A	[illegible]
LOPHOZIA	LONGIDENS	S	LONGIDENS	H	M333A	DW
LOPHOZIA	LONGIFLORA			H	M333A	DW
LOPHOZIA	VENTRICOSA			H	M333A	DW
LOPHOZIA	VENTRICOSA	V	LONGIFLORA	H	M333A	DW
LOPHOZIA	VENTRICOSA	V	SILVICOLA	H	M333A	DW
LOPHOZIA	VENTRICOSA	V	VENTRICOSA	H	M333A	DW
PTILIDIUM	CALIFORNICUM			H	M333A	DW
PTILIDIUM	CILIARE			H	M333A	DW
PTILIDIUM	PULCHERRIMUM			H	M333A	DW
SCAPANIA	MUCRONATA	S	MUCRONATA	H	M333A	DW
SCAPANIA	UMBROSA			H	M333A	DW
SCAPANIA	UNDULATA			H	M333A	DW
SCAPANIA	UNDULATA	V	UNDULATA	H	M333A	DW
TRITOMARIA	EXSECTA			H	M333A	DW
TRITOMARIA	EXSECTA			H	M333A	DW
TRITOMARIA	EXSECTIFORMIS	S	EXSECTIFORMIS	H	M333A	DW
PORELLA	CORDAEANA			H	M333A	EP
PORELLA	PLATYPHYLLA			H	M333A	EP
PTILIDIUM	CALIFORNICUM			H	M333A	EP
PTILIDIUM	PULCHERRIMUM			H	M333A	EP
MARCHANTIA	POLYMORPHA			H	M333A	PE
PELLIA	EPIPHYLLA			H	M333A	PE
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333A	RO
CEPHALOZIA	LUNULIFOLIA			H	M333A	RO
CHILOSCYPHUS	POLYANTHOS			H	M333A	R[illegible]
GYMNOMITRION	CONCINNATUM			H	M333A	[illegible]
JAMESONIELLA	AUTUMNALIS			H	M333A	R[illegible]
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333A	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
LOPHOCOLEA	MINOR			H	M333A	RO
LOPHOZIA	LONGIDENS			H	M333A	RO
PLAGIOCHILA	PORELLOIDES			H	M333A	RO
PORELLA	NAVICULARIS			H	M333A	RO
PORELLA	ROELLII			H	M333A	RO
PTILIDIUM	CALIFORNICUM			H	M333A	RO
RADULA	COMPLANATA			H	M333A	RO
BLASIA	PUSILLA			H	M333A	RW
CHILOSCYPHUS	POLYANTHOS			H	M333A	RW
CHILOSCYPHUS	POLYANTHOS	V	POLYANTHOS	H	M333A	RW
JAMESONIELLA	AUTUMNALIS	V	AUTUMNALIS	H	M333A	RW
JUNGERMANNIA	ATROVIRENS			H	M333A	RW
JUNGERMANNIA	ATROVIRENS			H	M333A	RW
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333A	RW
JUNGERMANNIA	LEIANTHA			H	M333A	RW
JUNGERMANNIA	OBOVATA			H	M333A	RW
MARCHANTIA	POLYMORPHA			H	M333A	RW
PELLIA	ENDIVIIFOLIA			H	M333A	RW
PLAGIOCHILA	PORELLOIDES			H	M333A	RW
SCAPANIA	UNDULATA			H	M333A	RW
ANEURA	PINGUIS			H	M333A	SD
ASTERELLA	SACCATA			H	M333A	SD
BARBILOPHOZIA	HATCHERI			H	M333A	SD
BARBILOPHOZIA	KUNZEANA			H	M333A	SD
CEPHALOZIA	LUNULIFOLIA			H	M333A	SD
CEPHALOZIA	PLENICEPS	V	PLENICEPS	H	M333A	SD
CEPHALOZIELLA	RUBELLA			H	M333A	SD
LOPHOZIA	COLLARIS			H	M333A	SD
LOPHOZIA	EXCISA	V	EXCISA	H	M333A	SD
LOPHOZIA	HETEROCOLPOS	V	HETEROCOLPOS	H	M333A	SD
LOPHOZIA	LONGIFLORA			H	M333A	SD
LOPHOZIA	WENZELII	V	WENZELII	H	M333A	SD
SCAPANIA	CUSPIDULIGERA	V	CUSPIDULIGERA	H	M333A	SD
ASTERELLA	GRACILIS			H	M333A	SW
BLASIA	PUSILLA			H	M333A	SW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333A	SW
BLEPHAROSTOMA	TRICHOPHYLLUM	S	TRICHOPHYLLUM	H	M333A	SW
CHILOSCYPHUS	POLYANTHOS			H	M333A	SW
CONOCEPHALUM	CONICUM			H	M333A	SW
DIPLOPHYLLUM	ALBICANS			H	M333A	SW
GEOCALYX	GRAVEOLENS			H	M333A	SW
LOPHOCOLEA	MINOR			H	M333A	SW
MARCHANTIA	POLYMORPHA			H	M333A	SW
MARSUPELLA	EMARGINATA			H	M333A	SW
PELLIA	ENDIVIIFOLIA			H	M333A	SW
RICCARDIA	LATIFRONS			H	M333A	SW
RICCARDIA	MULTIFIDA	V	MULTIFIDA	H	M333A	SW
RICCARDIA	PALMATA			H	M333A	SW
SCAPANIA	CURTA			H	M333A	SW
CRATONEURON	FILICINUM			M	M333A	AQ
FISSIDENS	HALLIANUS			M	M333A	AQ
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M333A	AQ
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M333A	AQ
FONTINALIS	HYPNOIDES			M	M333A	AQ
FONTINALIS	NEOMEXICANA			M	M333A	AQ
SCLEROPODIUM	OBTUSIFOLIUM			M	M333A	AQ
SCOULERIA	AQUATICA			M	M333A	AQ
AULACOMNIUM	ANDROGYNUM			M	M333A	DW
BRACHYTHECIUM	SALEBROSUM			M	M333A	DW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
BUXBAUMIA	APHYLLA			M	M333A	DW
DICRANUM	FUSCESCENS			M	M333A	[illegible]
DICRANUM	HOWELLII			M	M333A	[illegible]
DICRANUM	SCOPARIUM			M	M333A	[illegible]
DICRANUM	TAURICUM			M	M333A	DW
EURHYNCHIUM	PULCHELLUM			M	M333A	DW
HERZOGIELLA	SELIGERI			M	M333A	DW
HOMALOTHECIUM	FULGESCENS			M	M333A	DW
HOMALOTHECIUM	NEVADENSE			M	M333A	DW
HYLOCOMIUM	SPLENDENS			M	M333A	DW
MNIUM	SPINULOSUM			M	M333A	DW
PLAGIOMNIUM	ROSTRATUM			M	M333A	DW
PLAGIOTHECIUM	DENTICULATUM			M	M333A	DW
PLAGIOTHECIUM	LAETUM			M	M333A	DW
POHLIA	NUTANS			M	M333A	DW
PTERIGYNANDRUM	FILIFORME			M	M333A	DW
RHYTIDIOPSIS	ROBUSTA			M	M333A	DW
SANIONIA	UNCINATA			M	M333A	DW
TETRAPHIS	PELLUCIDA			M	M333A	DW
TORTULA	RURALIS			M	M333A	DW
ANTITRICHIA	CURTIPENDULA			M	M333A	EP
CLIMACIUM	AMERICANUM			M	M333A	EP
CONARDIA	COMPACTA			M	M333A	EP
DICRANUM	FUSCESCENS			M	M333A	EP
DICRANUM	TAURICUM			M	M333A	EP
EURHYNCHIUM	PULCHELLUM			M	M333A	EP
HAMATOCAULIS	VERNICOSUS			M	M333A	EP
HYPNUM	CIRCINALE			M	M333A	EP
ORTHOTRICHUM	AFFINE			M	M333A	[illegible]
ORTHOTRICHUM	LYELLII			M	M333A	[illegible]
ORTHOTRICHUM	OBTUSIFOLIUM			M	M333A	DW
ORTHOTRICHUM	SPECIOSUM			M	M333A	EP
PLAGIOTHECIUM	LAETUM			M	M333A	EP
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M	M333A	EP
PSEUDOLESKEA	STENOPHYLLA			M	M333A	EP
BRACHYTHECIUM	HYLOTAPETUM			M	M333A	HD
BRACHYTHECIUM	LEIBERGII			M	M333A	HD
BRACHYTHECIUM	VELUTINUM	V	VELUTINUM	M	M333A	HD
BRYUM	TURBINATUM			M	M333A	HD
DICRANUM	HOWELLII			M	M333A	HD
DICRANUM	MAJUS			M	M333A	HD
EURHYNCHIUM	OREGANUM			M	M333A	HD
EURHYNCHIUM	PULCHELLUM			M	M333A	HD
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333A	HD
HETEROCLADIUM	PROCURRENS			M	M333A	HD
HYLOCOMIUM	SPLENDENS			M	M333A	HD
LEUCOLEPIS	ACANTHONEURON			M	M333A	HD
MNIUM	MARGINATUM			M	M333A	HD
MNIUM	SPINULOSUM			M	M333A	HD
PLAGIOMNIUM	ELLIPTICUM			M	M333A	HD
PLAGIOMNIUM	INSIGNE			M	M333A	HD
PLAGIOTHECIUM	DENTICULATUM			M	M333A	HD
PLAGIOTHECIUM	LAETUM			M	M333A	HD
PLAGIOTHECIUM	UNDULATUM			M	M333A	HD
PLEUROZIUM	SCHREBERI			M	M333A	HD
POLYTRICHASTRUM	ALPINUM			M	M333A	[illegible]
PTILIUM	CRISTA-CASTRENSIS			M	M333A	[illegible]
RHYTIDIADELPHUS	LOREUS			M	M333A	HD
RHYTIDIADELPHUS	SQUARROSUS			M	M333A	HD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
RHYTIDIADELPHUS	TRIQUETRUS			M	M333A	HD
RHYTIDIOPSIS	ROBUSTA			M	M333A	HD
TAYLORIA	SERRATA			M	M333A	HD
TIMMIA	AUSTRIACA			M	M333A	HD
TRACHYBRYUM	MEGAPTILUM			M	M333A	HD
AULACOMNIUM	PALUSTRE			M	M333A	PE
CALLIERGON	STRAMINEUM			M	M333A	PE
FONTINALIS	NEOMEXICANA			M	M333A	PE
HAMATOCAULIS	VERNICOSUS			M	M333A	PE
HELODIUM	BLANDOWII			M	M333A	PE
POHLIA	NUTANS			M	M333A	PE
POLYTRICHUM	FORMOSUM			M	M333A	PE
POLYTRICHUM	JUNIPERINUM			M	M333A	PE
POLYTRICHUM	STRICTUM			M	M333A	PE
SPHAGNUM	ANGUSTIFOLIUM			M	M333A	PE
SPHAGNUM	CAPILLIFOLIUM			M	M333A	PE
SPHAGNUM	CENTRALE			M	M333A	PE
SPHAGNUM	CONTORTUM			M	M333A	PE
SPHAGNUM	FIMBRIATUM			M	M333A	PE
SPHAGNUM	FUSCUM			M	M333A	PE
SPHAGNUM	JENSENII			M	M333A	PE
SPHAGNUM	MAGELLANICUM			M	M333A	PE
SPHAGNUM	MENDOCINUM			M	M333A	PE
SPHAGNUM	RIPARIUM			M	M333A	PE
SPHAGNUM	RUBELLUM			M	M333A	PE
SPHAGNUM	RUSSOWII			M	M333A	PE
SPHAGNUM	SQUARROSUM			M	M333A	PE
SPHAGNUM	SUBSECUNDUM			M	M333A	PE
SPHAGNUM	TERES			M	M333A	PE
SPHAGNUM	WARNSTORFII			M	M333A	PE
WARNSTORFIA	EXANNULATA			M	M333A	PE
CONARDIA	COMPACTA			M	M333A	RC
DISTICHIUM	CAPILLACEUM			M	M333A	RC
FISSIDENS	GRANDIFRONS			M	M333A	RC
HYMENOSTYLIUM	RECURVIROSTRE			M	M333A	RC
METANECKERA	MENZIESII			M	M333A	RC
ORTHOTRICHUM	CUPULATUM			M	M333A	RC
PALUSTRIELLA	COMMUTATA			M	M333A	RC
PHILONOTIS	FONTANA	V	PUMILA	M	M333A	RC
PLAGIOMNIUM	VENUSTUM			M	M333A	RC
SANIONIA	UNCINATA	V	UNCINATA	M	M333A	RC
TIMMIA	AUSTRIACA			M	M333A	RC
AMPHIDIUM	LAPPONICUM			M	M333A	RO
AMPHIDIUM	MOUGEOTII			M	M333A	RO
ANACOLIA	MENZIESII			M	M333A	RO
ANDREAEA	RUPESTRIS			M	M333A	RO
ANTITRICHIA	CALIFORNICA			M	M333A	RO
BARTRAMIA	POMIFORMIS			M	M333A	RO
BRACHYTHECIUM	ERYTHRORRHIZON			M	M333A	RO
BRACHYTHECIUM	LEIBERGII			M	M333A	RO
BRACHYTHECIUM	NELSONII			M	M333A	RO
BRACHYTHECIUM	PLUMOSUM			M	M333A	RO
BRYUM	ARGENTEUM			M	M333A	RO
CLAOPODIUM	BOLANDERI			M	M333A	RO
COSCINODON	CALYPTRATUS			M	M333A	RO
CYNODONTIUM	POLYCARPON			M	M333A	RO
DESMATODON	LATIFOLIUS			M	M333A	RO
DICRANUM	BONJEANII			M	M333A	RO
DICRANUM	FUSCESCENS			M	M333A	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
DICRANUM	POLYSETUM			M	M333A	RO
DICRANUM	SCOPARIUM			M	M333A	[illegible]
DIDYMODON	VINEALIS			M	M333A	[illegible]
DIDYMODON	VINEALIS	V	VINEALIS	M	M333A	RO
DRYPTODON	PATENS			M	M333A	RO
ENCALYPTA	RHAPTOCARPA			M	M333A	RO
EURHYNCHIUM	PULCHELLUM			M	M333A	RO
GRIMMIA	DONNIANA			M	M333A	RO
GRIMMIA	LAEVIGATA			M	M333A	RO
GRIMMIA	MONTANA			M	M333A	RO
GRIMMIA	OVALIS			M	M333A	RO
GRIMMIA	PULVINATA			M	M333A	RO
GRIMMIA	TENERRIMA			M	M333A	RO
GRIMMIA	TORQUATA			M	M333A	RO
GRIMMIA	TRICHOPHYLLA			M	M333A	RO
HEDWIGIA	CILIATA			M	M333A	RO
HETEROCLADIUM	MACOUNII			M	M333A	RO
HETEROCLADIUM	PROCURRENS			M	M333A	RO
HOMALOTHECIUM	AENEUM			M	M333A	RO
HOMALOTHECIUM	FULGESCENS			M	M333A	RO
HOMALOTHECIUM	NEVADENSE			M	M333A	RO
HOMALOTHECIUM	PINNATIFIDUM			M	M333A	RO
HYLOCOMIUM	SPLENDENS			M	M333A	RO
HYPNUM	CIRCINALE			M	M333A	RO
HYPNUM	PRATENSE			M	M333A	RO
ISOPTERYGIOPSIS	PULCHELLA			M	M333A	RO
KIAERIA	STARKEI			M	M333A	RO
LESKEELLA	NERVOSA			M	M333A	RO
METANECKERA	MENZIESII			M	M333A	[illegible]
MNIUM	MARGINATUM			M	M333A	[illegible]
MNIUM	SPINULOSUM			M	M333A	RO
ORTHOTRICHUM	AFFINE			M	M333A	RO
ORTHOTRICHUM	ALPESTRE			M	M333A	RO
ORTHOTRICHUM	LAEVIGATUM			M	M333A	RO
ORTHOTRICHUM	RIVULARE			M	M333A	RO
PLAGIOTHECIUM	PILIFERUM			M	M333A	RO
PLEUROZIUM	SCHREBERI			M	M333A	RO
POHLIA	NUTANS			M	M333A	RO
POLYTRICHASTRUM	ALPINUM			M	M333A	RO
PSEUDOLESKEA	INCURVATA			M	M333A	RO
PSEUDOLESKEA	RADICOSA			M	M333A	RO
PSEUDOLESKEA	RADICOSA	V	DENUDATA	M	M333A	RO
PTERIGYNANDRUM	FILIFORME			M	M333A	RO
PTILIUM	CRISTA-CASTRENSIS			M	M333A	RO
RACOMITRIUM	AFFINE			M	M333A	RO
RACOMITRIUM	CANESCENS			M	M333A	RO
RACOMITRIUM	ERICOIDES			M	M333A	RO
RACOMITRIUM	HETEROSTICHUM			M	M333A	RO
RACOMITRIUM	MICROCARPON			M	M333A	RO
RACOMITRIUM	SUDETICUM			M	M333A	RO
RHYTIDIADELPHUS	LOREUS			M	M333A	RO
RHYTIDIOPSIS	ROBUSTA			M	M333A	RO
ROELLIA	ROELLII			M	M333A	RO
SANIONIA	UNCINATA			M	M333A	RO
SCHISTIDIUM	APOCARPUM			M	M333A	RO
SCHISTIDIUM	HETEROPHYLLUM			M	M333A	[illegible]
SCHISTIDIUM	RIVULARE			M	M333A	[illegible]
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M333A	RO
SCLEROPODIUM	OBTUSIFOLIUM			M	M333A	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
TIMMIA	AUSTRIACA			M	M333A	RO
TORTULA	NORVEGICA			M	M333A	RO
TORTULA	PRINCEPS			M	M333A	RO
TORTULA	RURALIS			M	M333A	RO
BRACHYTHECIUM	RIVULARE			M	M333A	RW
DICHODONTIUM	PELLUCIDUM			M	M333A	RW
DIDYMODON	VINEALIS			M	M333A	RW
FISSIDENS	ADIANTHOIDES			M	M333A	RW
FISSIDENS	GRANDIFRONS			M	M333A	RW
FISSIDENS	VENTRICOSUS			M	M333A	RW
FONTINALIS	ANTIPYRETICA			M	M333A	RW
GYMNOSTOMUM	AERUGINOSUM			M	M333A	RW
HYGROHYPNUM	ALPINUM			M	M333A	RW
HYGROHYPNUM	BESTII			M	M333A	RW
HYGROHYPNUM	LURIDUM			M	M333A	RW
HYGROHYPNUM	OCHRACEUM			M	M333A	RW
KIAERIA	STARKEI			M	M333A	RW
MNIUM	MARGINATUM			M	M333A	RW
PLATYDICTYA	JUNGERMANNIOIDES			M	M333A	RW
POROTRICHUM	BIGELOVII			M	M333A	RW
PSEUDOTAXIPHYLLUM	ELEGANS			M	M333A	RW
RHIZOMNIUM	PUNCTATUM			M	M333A	RW
SANIONIA	UNCINATA			M	M333A	RW
SCLEROPODIUM	TOURETII	V	COLPOPHYLLUM	M	M333A	RW
SCOULERIA	AQUATICA			M	M333A	RW
SCOULERIA	MARGINATA			M	M333A	RW
THAMNOBRYUM	NECKEROIDES			M	M333A	RW
TIMMIA	AUSTRIACA			M	M333A	RW
ATRICHUM	CRISPUM			M	M333A	SD
ATRICHUM	SELWYNII			M	M333A	SD
ATRICHUM	UNDULATUM			M	M333A	SD
BRACHYTHECIUM	ALBICANS			M	M333A	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M333A	SD
BRACHYTHECIUM	HYLOTAPETUM			M	M333A	SD
BRACHYTHECIUM	RUTABULUM			M	M333A	SD
BRACHYTHECIUM	STARKEI			M	M333A	SD
BRYUM	CAESPITICIUM			M	M333A	SD
BRYUM	LONCHOCAULON			M	M333A	SD
CERATODON	PURPUREUS			M	M333A	SD
DICRANELLA	CRISPA			M	M333A	SD
DICRANUM	FUSCESCENS			M	M333A	SD
DICRANUM	TAURICUM			M	M333A	SD
ENCALYPTA	CILIATA			M	M333A	SD
ENCALYPTA	RHAPTOCARPA			M	M333A	SD
ENCALYPTA	VULGARIS			M	M333A	SD
EURHYNCHIUM	PULCHELLUM			M	M333A	SD
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333A	SD
FISSIDENS	BRYOIDES			M	M333A	SD
FUNARIA	HYGROMETRICA			M	M333A	SD
HETEROCLADIUM	PROCURRENS			M	M333A	SD
LEPTOBRYUM	PYRIFORME			M	M333A	SD
PHASCUM	CUSPIDATUM			M	M333A	SD
POGONATUM	URNIGERUM			M	M333A	SD
POHLIA	ATROPURPUREA			M	M333A	SD
POHLIA	CRUDA			M	M333A	SD
POHLIA	NUTANS			M	M333A	SD
POLYTRICHUM	COMMUNE			M	M333A	SD
POLYTRICHUM	JUNIPERINUM			M	M333A	SD
POLYTRICHUM	LYALLII			M	M333A	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
POLYTRICHUM	PILIFERUM			M	M333A	SD
RACOMITRIUM	HETEROSTICHUM			M	M333A	[illegible]
ROELLIA	ROELLII			M	M333A	[illegible]
SCLEROPODIUM	OBTUSIFOLIUM			M	M333A	SD
TORTULA	RURALIS			M	M333A	SD
AMBLYSTEGIUM	SERPENS			M	M333A	SW
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M333A	SW
AULACOMNIUM	PALUSTRE			M	M333A	SW
BRACHYTHECIUM	FRIGIDUM			M	M333A	SW
BRACHYTHECIUM	RIVULARE			M	M333A	SW
BRYUM	LISAE	V	CUSPIDATUM	M	M333A	SW
BRYUM	PSEUDOTRIQUETRUM			M	M333A	SW
BRYUM	WEIGELII			M	M333A	SW
CALLIERGON	CORDIFOLIUM			M	M333A	SW
CALLIERGON	GIGANTEUM			M	M333A	SW
CALLIERGON	STRAMINEUM			M	M333A	SW
CLIMACIUM	DENDROIDES			M	M333A	SW
CRATONEURON	FILICINUM			M	M333A	SW
DICHODONTIUM	PELLUCIDUM			M	M333A	SW
DICRANELLA	CRISPA			M	M333A	SW
DICRANELLA	GREVILLEANA			M	M333A	SW
DICRANELLA	SUBULATA			M	M333A	SW
DIDYMODON	FALLAX			M	M333A	SW
DISTICHIUM	CAPILLACEUM			M	M333A	SW
DREPANOCLADUS	ADUNCUS			M	M333A	SW
DREPANOCLADUS	CAPILLIFOLIUS			M	M333A	SW
EURHYNCHIUM	PRAELONGUM			M	M333A	SW
FUNARIA	HYGROMETRICA			M	M333A	SW
HELODIUM	BLANDOWII			M	M333A	[illegible]
HYGROHYPNUM	OCHRACEUM			M	M333A	[illegible]
MNIUM	AMBIGUUM			M	M333A	SW
PHILONOTIS	FONTANA			M	M333A	SW
PHILONOTIS	FONTANA	V	PUMILA	M	M333A	SW
PLAGIOMNIUM	INSIGNE			M	M333A	SW
PLAGIOMNIUM	MEDIUM			M	M333A	SW
POGONATUM	DENTATUM			M	M333A	SW
POGONATUM	URNIGERUM			M	M333A	SW
POHLIA	CRUDA			M	M333A	SW
POLYTRICHASTRUM	ALPINUM			M	M333A	SW
RHIZOMNIUM	MAGNIFOLIUM			M	M333A	SW
RHIZOMNIUM	PUNCTATUM			M	M333A	SW
SANIONIA	UNCINATA			M	M333A	SW
SANIONIA	UNCINATA	V	SYMMETRICA	M	M333A	SW
TIMMIA	AUSTRIACA			M	M333A	SW
WARNSTORFIA	EXANNULATA			M	M333A	SW
WARNSTORFIA	FLUITANS			M	M333A	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
CHILOSCYPHUS	PALLESCENS			H	M333B	AQ
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	M333B	AQ
CHILOSCYPHUS	POLYANTHOS			H	M333B	AQ
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M333B	AQ
RICCIOCARPOS	NATANS			H	M333B	AQ
ANASTROPHYLLUM	HELLERANUM			H	M333B	DW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333B	DW
CALYPOGEIA	SUECICA			H	M333B	DW
CEPHALOZIA	LUNULIFOLIA			H	M333B	DW
CEPHALOZIELLA	RUBELLA			H	M333B	DW
LEPIDOZIA	REPTANS			H	M333B	DW
LOPHOCOLEA	CUSPIDATA			H	M333B	DW
LOPHOCOLEA	HETEROPHYLLA			H	M333B	DW
LOPHOZIA	ASCENDENS			H	M333B	DW
LOPHOZIA	INCISA			H	M333B	DW
LOPHOZIA	LONGIDENS			H	M333B	DW
PTILIDIUM	PULCHERRIMUM			H	M333B	DW
RICCARDIA	LATIFRONS			H	M333B	DW
SCAPANIA	AMERICANA			H	M333B	DW
SCAPANIA	GLAUCOCEPHALA			H	M333B	DW
SCAPANIA	NEMOROSA			H	M333B	DW
SCAPANIA	UMBROSA			H	M333B	DW
TRITOMARIA	EXSECTA			H	M333B	DW
TRITOMARIA	EXSECTIFORMIS			H	M333B	DW
APOMETZGERIA	PUBESCENS			H	M333B	EP
PTILIDIUM	CALIFORNICUM			H	M333B	EP
PTILIDIUM	PULCHERRIMUM			H	M333B	EP
RADULA	COMPLANATA			H	M333B	EP
GEOCALYX	GRAVEOLENS			H	M333B	HD
JAMESONIELLA	AUTUMNALIS			H	M333B	HD
JUNGERMANNIA	ATROVIRENS			H	M333B	HD
NARDIA	GEOSCYPHUS			H	M333B	HD
PLAGIOCHILA	PORELLOIDES			H	M333B	HD
APOMETZGERIA	PUBESCENS			H	M333B	RO
BARBILOPHOZIA	BARBATA			H	M333B	RO
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333B	RO
JUNGERMANNIA	HYALINA			H	M333B	RO
JUNGERMANNIA	LEIANTHA			H	M333B	RO
JUNGERMANNIA	RUBRA			H	M333B	RO
JUNGERMANNIA	SPHAEROCARPA			H	M333B	RO
LOPHOCOLEA	CUSPIDATA			H	M333B	RO
LOPHOZIA	EXCISA			H	M333B	RO
LOPHOZIA	HETEROCOLPOS			H	M333B	RO
PORELLA	CORDAEANA			H	M333B	RO
RADULA	COMPLANATA			H	M333B	RO
SCAPANIA	MUCRONATA			H	M333B	RO
SCAPANIA	NEMOROSA			H	M333B	RO
SCAPANIA	SUBALPINA			H	M333B	RO
SCAPANIA	UNDULATA			H	M333B	RO
CHILOSCYPHUS	POLYANTHOS			H	M333B	RW
CONOCEPHALUM	CONICUM			H	M333B	RW
HYGROBIELLA	LAXIFOLIA			H	M333B	RW
JAMESONIELLA	AUTUMNALIS			H	M333B	RW
JUNGERMANNIA	ATROVIRENS			H	M333B	RW
LOPHOCOLEA	MINOR			H	M333B	RW
LOPHOZIA	VENTRICOSA			H	M333B	RW
MARCHANTIA	POLYMORPHA			H	M333B	RW
PELLIA	ENDIVIIFOLIA			H	M333B	RW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
PLAGIOCHILA	PORELLOIDES			H	M333B	RW
PORELLA	CORDAEANA			H	M333B	RW
SCAPANIA	UNDULATA			H	M333B	[illegible]
BARBILOPHOZIA	HATCHERI			H	M333B	[illegible]
CEPHALOZIA	BICUSPIDATA			H	M333B	SD
CEPHALOZIA	LUNULIFOLIA			H	M333B	SD
CEPHALOZIA	MACOUNII			H	M333B	SD
CEPHALOZIA	PLENICEPS			H	M333B	SD
CEPHALOZIELLA	RUBELLA			H	M333B	SD
JUNGERMANNIA	LEIANTHA			H	M333B	SD
LOPHOCOLEA	MINOR			H	M333B	SD
LOPHOZIA	ALPESTRIS			H	M333B	SD
LOPHOZIA	COLLARIS			H	M333B	SD
LOPHOZIA	GILLMANII			H	M333B	SD
LOPHOZIA	HETEROCOLPOS			H	M333B	SD
LOPHOZIA	LONGIFLORA			H	M333B	SD
LOPHOZIA	VENTRICOSA			H	M333B	SD
PTILIDIUM	CILIARE			H	M333B	SD
RICCARDIA	MULTIFIDA			H	M333B	SD
SCAPANIA	UMBROSA			H	M333B	SD
SCAPANIA	UNDULATA			H	M333B	SD
BLASIA	PUSILLA			H	M333B	SW
CHILOSCYPHUS	POLYANTHOS			H	M333B	SW
JUNGERMANNIA	LEIANTHA			H	M333B	SW
JUNGERMANNIA	RUBRA			H	M333B	SW
LOPHOCOLEA	BIDENTATA			H	M333B	SW
MARCHANTIA	POLYMORPHA			H	M333B	SW
PELLIA	ENDIVIIFOLIA			H	M333B	SW
PLAGIOCHILA	PORELLOIDES			H	M333B	SW
RICCIA	CAVERNOSA			H	M333B	[illegible]
DICHELYMA	FALCATUM			M	M333B	[illegible]
FONTINALIS	ANTIPYRETICA			M	M333B	AQ
FONTINALIS	HYPNOIDES			M	M333B	AQ
FONTINALIS	NEOMEXICANA			M	M333B	AQ
HYGROAMBLYSTEGIUM	NOTEROPHILUM			M	M333B	AQ
WARNSTORFIA	EXANNULATA			M	M333B	AQ
WARNSTORFIA	FLUITANS			M	M333B	AQ
AMBLYSTEGIUM	SERPENS			M	M333B	DW
ANTITRICHIA	CALIFORNICA			M	M333B	DW
AULACOMNIUM	ANDROGYNUM			M	M333B	DW
BRACHYTHECIUM	ALBICANS			M	M333B	DW
BRACHYTHECIUM	HYLOTAPETUM			M	M333B	DW
BRACHYTHECIUM	SALEBROSUM			M	M333B	DW
BUXBAUMIA	PIPERI			M	M333B	DW
CALLICLADIUM	HALDANIANUM			M	M333B	DW
CLIMACIUM	DENDROIDES			M	M333B	DW
DICRANUM	BONJEANII			M	M333B	DW
DICRANUM	FUSCESCENS			M	M333B	DW
DICRANUM	PALLIDISETUM			M	M333B	DW
DICRANUM	RHABDOCARPUM			M	M333B	DW
DICRANUM	SCOPARIUM			M	M333B	DW
DICRANUM	TAURICUM			M	M333B	DW
EURHYNCHIUM	PULCHELLUM			M	M333B	DW
HERZOGIELLA	SELIGERI			M	M333B	DW
HETEROCLADIUM	DIMORPHUM			M	M333B	DW
HOMALOTHECIUM	FULGESCENS			M	M333B	[illegible]
LEPTOBRYUM	PYRIFORME			M	M333B	[illegible]
MNIUM	MARGINATUM			M	M333B	DW
MNIUM	SPINULOSUM			M	M333B	DW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
ONCOPHORUS	VIRENS			M	M333B	DW
ONCOPHORUS	WAHLENBERGII			M	M333B	DW
PLATYDICTYA	JUNGERMANNIOIDES			M	M333B	DW
PLEUROZIUM	SCHREBERI			M	M333B	DW
RHYTIDIADELPHUS	SQUARROSUS			M	M333B	DW
RHYTIDIADELPHUS	TRIQUETRUS			M	M333B	DW
SANIONIA	UNCINATA			M	M333B	DW
TETRAPHIS	GENICULATA			M	M333B	DW
TETRAPHIS	PELLUCIDA			M	M333B	DW
ANTITRICHIA	CALIFORNICA			M	M333B	EP
ANTITRICHIA	CURTIPENDULA			M	M333B	EP
DICRANUM	FLAGELLARE			M	M333B	EP
EURHYNCHIUM	PULCHELLUM			M	M333B	EP
HERZOGIELLA	SELIGERI			M	M333B	EP
HOMALOTHECIUM	FULGESCENS			M	M333B	EP
HYPNUM	CIRCINALE			M	M333B	EP
HYPNUM	SUBIMPONENS			M	M333B	EP
ISOTHECIUM	MYOSUROIDES			M	M333B	EP
NECKERA	DOUGLASII			M	M333B	EP
ORTHOTRICHUM	OBTUSIFOLIUM			M	M333B	EP
ORTHOTRICHUM	SPECIOSUM			M	M333B	EP
AULACOMNIUM	ANDROGYNUM			M	M333B	HD
BRACHYTHECIUM	ALBICANS			M	M333B	HD
BRACHYTHECIUM	HYLOTAPETUM			M	M333B	HD
BRACHYTHECIUM	SALEBROSUM			M	M333B	HD
BRYOERYTHROPHYLLUM	COLUMBIANUM			M	M333B	HD
DICRANUM	BONJEANII			M	M333B	HD
DICRANUM	SCOPARIUM			M	M333B	HD
EURHYNCHIUM	OREGANUM			M	M333B	HD
EURHYNCHIUM	PRAELONGUM			M	M333B	HD
HYLOCOMIUM	SPLENDENS			M	M333B	HD
HYPNUM	CUPRESSIFORME			M	M333B	HD
MNIUM	THOMSONII			M	M333B	HD
PLAGIOMNIUM	VENUSTUM			M	M333B	HD
PLEUROZIUM	SCHREBERI			M	M333B	HD
POLYTRICHUM	FORMOSUM			M	M333B	HD
PTILIUM	CRISTA-CASTRENSIS			M	M333B	HD
RHYTIDIADELPHUS	LOREUS			M	M333B	HD
RHYTIDIADELPHUS	TRIQUETRUS			M	M333B	HD
RHYTIDIOPSIS	ROBUSTA			M	M333B	HD
ROELLIA	ROELLII			M	M333B	HD
TRACHYBRYUM	MEGAPTILUM			M	M333B	HD
AMBLYODON	DEALBATUS			M	M333B	PE
CALLIERGON	STRAMINEUM			M	M333B	PE
CAMPYLIUM	STELLATUM			M	M333B	PE
DICRANUM	UNDULATUM			M	M333B	PE
DREPANOCLADUS	SENDTNERI			M	M333B	PE
LIMPRICHTIA	REVOLVENS			M	M333B	PE
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M333B	PE
SCORPIDIUM	SCORPIOIDES			M	M333B	PE
SPHAGNUM	CENTRALE			M	M333B	PE
SPHAGNUM	GIRGENSOHNII			M	M333B	PE
SPHAGNUM	RECURVUM			M	M333B	PE
SPHAGNUM	RUSSOWII			M	M333B	PE
SPHAGNUM	SQUARROSUM			M	M333B	PE
SPHAGNUM	SUBSECUNDUM			M	M333B	PE
SPHAGNUM	TERES			M	M333B	PE
SPHAGNUM	WARNSTORFII			M	M333B	PE
BRACHYTHECIUM	FRIGIDUM			M	M333B	RC

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M333B	RC
DIDYMODON	VINEALIS	V	VINEALIS	M	M333B	[illegible]
DITRICHUM	FLEXICAULE			M	M333B	[illegible]
FISSIDENS	GRANDIFRONS			M	M333B	RC
GYMNOSTOMUM	AERUGINOSUM			M	M333B	RC
HYPNUM	VAUCHERI			M	M333B	RC
MNIUM	THOMSONII			M	M333B	RC
PLAGIOPUS	OEDERIANA			M	M333B	RC
SELIGERIA	CAMPYLOPODA			M	M333B	RC
SELIGERIA	DONNIANA			M	M333B	RC
AMPHIDIUM	LAPPONICUM			M	M333B	RO
ANACOLIA	MENZIESII			M	M333B	RO
ANTITRICHIA	CALIFORNICA			M	M333B	RO
BARTRAMIA	ITHYPHYLLA			M	M333B	RO
BARTRAMIA	POMIFORMIS			M	M333B	RO
BRACHYTHECIUM	SALEBROSUM			M	M333B	RO
BRYUM	TURBINATUM			M	M333B	RO
CLAOPODIUM	BOLANDERI			M	M333B	RO
COSCINODON	CALYPTRATUS			M	M333B	RO
DICRANOWEISIA	CRISPULA			M	M333B	RO
DICRANUM	FUSCESCENS			M	M333B	RO
DIDYMODON	TOPHACEUS			M	M333B	RO
DIDYMODON	VINEALIS	V	FLACCIDUS	M	M333B	RO
DIDYMODON	VINEALIS	V	VINEALIS	M	M333B	RO
DRYPTODON	PATENS			M	M333B	RO
ENCALYPTA	INTERMEDIA			M	M333B	RO
ENCALYPTA	VULGARIS			M	M333B	RO
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333B	RO
GRIMMIA	BRITTONIAE			M	M333B	[illegible]
GRIMMIA	ELATIOR			M	M333B	[illegible]
GRIMMIA	MONTANA			M	M333B	RO
GRIMMIA	OVALIS			M	M333B	RO
GRIMMIA	TENERRIMA			M	M333B	RO
GRIMMIA	TORQUATA			M	M333B	RO
GRIMMIA	TRICHOPHYLLA			M	M333B	RO
HEDWIGIA	CILIATA			M	M333B	RO
HETEROCLADIUM	DIMORPHUM			M	M333B	RO
HOMALOTHECIUM	AENEUM			M	M333B	RO
HOMALOTHECIUM	NEVADENSE			M	M333B	RO
HYPNUM	PALLESCENS			M	M333B	RO
METANECKERA	MENZIESII			M	M333B	RO
ORTHOTRICHUM	CUPULATUM			M	M333B	RO
ORTHOTRICHUM	LAEVIGATUM			M	M333B	RO
ORTHOTRICHUM	PELLUCIDUM			M	M333B	RO
ORTHOTRICHUM	RUPESTRE			M	M333B	RO
PLATYDICTYA	JUNGERMANNIOIDES			M	M333B	RO
PSEUDOLESKEA	ATRICHA			M	M333B	RO
PSEUDOLESKEA	INCURVATA			M	M333B	RO
PSEUDOLESKEA	PATENS			M	M333B	RO
PSEUDOLESKEELLA	TECTORUM			M	M333B	RO
PTERIGYNANDRUM	FILIFORME			M	M333B	RO
RACOMITRIUM	ACICULARE			M	M333B	RO
RACOMITRIUM	ERICOIDES			M	M333B	RO
RACOMITRIUM	HETEROSTICHUM			M	M333B	RO
RACOMITRIUM	LANUGINOSUM			M	M333B	RO
RACOMITRIUM	OCCIDENTALE			M	M333B	[illegible]
RHYTIDIOPSIS	ROBUSTA			M	M333B	[illegible]
SANIONIA	UNCINATA			M	M333B	RO
SCHISTIDIUM	APOCARPUM			M	M333B	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
SCHISTIDIUM	RIVULARE			M	M333B	RO
THUIDIUM	DELICATULUM			M	M333B	RO
TIMMIA	MEGAPOLITANA	V	BAVARICA	M	M333B	RO
TORTELLA	TORTUOSA			M	M333B	RO
TORTULA	RURALIS			M	M333B	RO
BLINDIA	ACUTA			M	M333B	RW
BRACHYTHECIUM	RIVULARE			M	M333B	RW
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M333B	RW
BRYUM	CALOBRYOIDES			M	M333B	RW
DICHODONTIUM	PELLUCIDUM			M	M333B	RW
FISSIDENS	BRYOIDES			M	M333B	RW
FONTINALIS	NEOMEXICANA			M	M333B	RW
HYGROHYPNUM	BESTII			M	M333B	RW
HYGROHYPNUM	LURIDUM			M	M333B	RW
HYGROHYPNUM	OCHRACEUM			M	M333B	RW
HYGROHYPNUM	SMITHII			M	M333B	RW
KIAERIA	STARKEI			M	M333B	RW
ONCOPHORUS	VIRENS			M	M333B	RW
PHILONOTIS	MUEHLENBERGII			M	M333B	RW
PLAGIOTHECIUM	PILIFERUM			M	M333B	RW
POLYTRICHASTRUM	ALPINUM			M	M333B	RW
SANIONIA	UNCINATA			M	M333B	RW
SCHISTIDIUM	AGASSIZII			M	M333B	RW
SCLEROPODIUM	OBTUSIFOLIUM			M	M333B	RW
SCOULERIA	AQUATICA			M	M333B	RW
THAMNOBRYUM	NECKEROIDES			M	M333B	RW
DIDYMODON	FALLAX			M	M333B	SC
DIDYMODON	FALLAX	V	REFLEXUS	M	M333B	SC
ALOINA	BREVIROSTRIS			M	M333B	SD
ATRICHUM	SELWYNII			M	M333B	SD
ATRICHUM	UNDULATUM			M	M333B	SD
BARBULA	CONVOLUTA			M	M333B	SD
BARBULA	EUSTEGIA			M	M333B	SD
BARTRAMIA	ITHYPHYLLA			M	M333B	SD
BARTRAMIA	POMIFORMIS			M	M333B	SD
BRACHYTHECIUM	COLLINUM			M	M333B	SD
BRACHYTHECIUM	HYLOTAPETUM			M	M333B	SD
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M333B	SD
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M333B	SD
BRYUM	CAESPITICIUM			M	M333B	SD
BRYUM	VIOLACEUM			M	M333B	SD
CERATODON	PURPUREUS			M	M333B	SD
CLAOPODIUM	BOLANDERI			M	M333B	SD
CYNODONTIUM	STRUMIFERUM			M	M333B	SD
DESMATODON	HEIMII			M	M333B	SD
DESMATODON	LATIFOLIUS			M	M333B	SD
DICRANELLA	RUFESCENS			M	M333B	SD
DICRANUM	SCOPARIUM			M	M333B	SD
DIDYMODON	FALLAX			M	M333B	SD
DIDYMODON	RIGIDULUS	V	GRACILIS	M	M333B	SD
DIDYMODON	VINEALIS			M	M333B	SD
DIDYMODON	VINEALIS	V	VINEALIS	M	M333B	SD
DISTICHIUM	CAPILLACEUM			M	M333B	SD
DISTICHIUM	INCLINATUM			M	M333B	SD
DITRICHUM	PUSILLUM			M	M333B	SD
ENCALYPTA	AFFINIS			M	M333B	SD
ENCALYPTA	CILIATA			M	M333B	SD
ENCALYPTA	PROCERA			M	M333B	SD
ENCALYPTA	RHAPTOCARPA			M	M333B	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
ENCALYPTA	SPATHULATA			M	M333B	SD
ENCALYPTA	VULGARIS			M	M333B	[illegible]
GRIMMIA	TORQUATA			M	M333B	[illegible]
HETEROCLADIUM	PROCURRENS			M	M333B	[illegible]
HOMALOTHECIUM	AENEUM			M	M333B	SD
HYPNUM	REVOLUTUM			M	M333B	SD
ISOPTERYGIOPSIS	PULCHELLA			M	M333B	SD
LEPTOBRYUM	PYRIFORME			M	M333B	SD
MNIUM	AMBIGUUM			M	M333B	SD
MYURELLA	JULACEA			M	M333B	SD
OLIGOTRICHUM	ALIGERUM			M	M333B	SD
POHLIA	ANDALUSICA			M	M333B	SD
POHLIA	ATROPURPUREA			M	M333B	SD
POHLIA	LONGICOLLA			M	M333B	SD
POHLIA	NUTANS			M	M333B	SD
POLYTRICHASTRUM	ALPINUM			M	M333B	SD
POLYTRICHUM	COMMUNE			M	M333B	SD
POLYTRICHUM	JUNIPERINUM			M	M333B	SD
POLYTRICHUM	LONGISETUM			M	M333B	SD
POLYTRICHUM	LYALLII			M	M333B	SD
POLYTRICHUM	PILIFERUM			M	M333B	SD
PTERIGYNANDRUM	FILIFORME			M	M333B	SD
PTERYGONEURUM	OVATUM			M	M333B	SD
RHYTIDIOPSIS	ROBUSTA			M	M333B	SD
ROELLIA	ROELLII			M	M333B	SD
THAMNOBRYUM	NECKEROIDES			M	M333B	SD
TIMMIA	AUSTRIACA			M	M333B	SD
TORTELLA	TORTUOSA			M	M333B	SD
TORTULA	NORVEGICA			M	M333B	[illegible]
TORTULA	PRINCEPS			M	M333B	[illegible]
TORTULA	RURALIS			M	M333B	[illegible]
TRACHYBRYUM	MEGAPTILUM			M	M333B	SD
TRICHODON	CYLINDRICUS			M	M333B	SD
BRACHYTHECIUM	FRIGIDUM			M	M333B	SW
BRACHYTHECIUM	RIVULARE			M	M333B	SW
BRACHYTHECIUM	SALEBROSUM			M	M333B	SW
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M333B	SW
BRYUM	PALLENS			M	M333B	SW
CALLIERGON	CORDIFOLIUM			M	M333B	SW
CALLIERGON	GIGANTEUM			M	M333B	SW
CRATONEURON	FILICINUM			M	M333B	SW
DICHODONTIUM	PELLUCIDUM			M	M333B	SW
DICRANELLA	HETEROMALLA			M	M333B	SW
DICRANELLA	SUBULATA			M	M333B	SW
DICRANELLA	VARIA			M	M333B	SW
DITRICHUM	AMBIGUUM			M	M333B	SW
DREPANOCLADUS	ADUNCUS			M	M333B	SW
DREPANOCLADUS	ADUNCUS	V	KNEIFFII	M	M333B	SW
DREPANOCLADUS	CAPILLIFOLIUS			M	M333B	SW
ENTOSTHODON	FASCICULARIS			M	M333B	SW
FISSIDENS	BRYOIDES			M	M333B	SW
HYGROHYPNUM	COCHLEARIFOLIUM			M	M333B	SW
HYGROHYPNUM	LURIDUM			M	M333B	SW
HYPNUM	LINDBERGII			M	M333B	SW
KIAERIA	STARKEI			M	M333B	SW
MNIUM	BLYTTII			M	M333B	[illegible]
MNIUM	MARGINATUM			M	M333B	[illegible]
MNIUM	SPINULOSUM			M	M333B	[illegible]
ONCOPHORUS	VIRENS			M	M333B	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
ONCOPHORUS	WAHLENBERGII			M	M333B	SW
PALUSTRIELLA	COMMUTATA			M	M333B	SW
PHILONOTIS	FONTANA			M	M333B	SW
PHILONOTIS	FONTANA	V	FONTANA	M	M333B	SW
PHILONOTIS	YEZOANA			M	M333B	SW
PLAGIOMNIUM	AFFINE			M	M333B	SW
PLAGIOMNIUM	MEDIUM			M	M333B	SW
PLAGIOMNIUM	ROSTRATUM			M	M333B	SW
PLAGIOMNIUM	VENUSTUM			M	M333B	SW
POHLIA	ANNOTINA			M	M333B	SW
POHLIA	CAMPTOTRACHELA			M	M333B	SW
POHLIA	PROLIGERA			M	M333B	SW
POLYTRICHASTRUM	ALPINUM			M	M333B	SW
RHIZOMNIUM	MAGNIFOLIUM			M	M333B	SW
RHIZOMNIUM	PUNCTATUM			M	M333B	SW
THUIDIUM	DELICATULUM			M	M333B	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
CHILOSCYPHUS	PALLESCENS			H	M333C	AC
CHILOSCYPHUS	POLYANTHOS			H	M333C	[illegible]
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M333C	[illegible]
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333C	DW
CALYPOGEIA	AZUREA			H	M333C	DW
CALYPOGEIA	MUELLERIANA			H	M333C	DW
CALYPOGEIA	SUECICA			H	M333C	DW
CEPHALOZIA	BICUSPIDATA			H	M333C	DW
CEPHALOZIA	LEUCANTHA			H	M333C	DW
CEPHALOZIA	LUNULIFOLIA			H	M333C	DW
LEPIDOZIA	REPTANS			H	M333C	DW
LOPHOZIA	ASCENDENS			H	M333C	DW
LOPHOZIA	HETEROCOLPOS			H	M333C	DW
LOPHOZIA	INCISA			H	M333C	DW
LOPHOZIA	LONGIDENS			H	M333C	DW
LOPHOZIA	LONGIFLORA			H	M333C	DW
LOPHOZIA	VENTRICOSA			H	M333C	DW
PTILIDIUM	PULCHERRIMUM			H	M333C	DW
RICCARDIA	LATIFRONS			H	M333C	DW
RICCARDIA	MULTIFIDA			H	M333C	DW
SCAPANIA	CURTA			H	M333C	DW
SCAPANIA	UMBROSA			H	M333C	DW
TRITOMARIA	EXSECTA			H	M333C	DW
TRITOMARIA	EXSECTIFORMIS			H	M333C	DW
APOMETZGERIA	PUBESCENS			H	M333C	EP
PTILIDIUM	PULCHERRIMUM			H	M333C	EP
RADULA	COMPLANATA			H	M333C	EP
GEOCALYX	GRAVEOLENS			H	M333C	HD
JAMESONIELLA	AUTUMNALIS			H	M333C	[illegible]
JUNGERMANNIA	ATROVIRENS			H	M333C	[illegible]
ANASTROPHYLLUM	HELLERANUM			H	M333C	RO
APOMETZGERIA	PUBESCENS			H	M333C	RO
BARBILOPHOZIA	BARBATA			H	M333C	RO
BARBILOPHOZIA	LYCOPODIOIDES			H	M333C	RO
CEPHALOZIA	BICUSPIDATA			H	M333C	RO
CEPHALOZIA	BICUSPIDATA	S	AMBIGUA	H	M333C	RO
JAMESONIELLA	AUTUMNALIS			H	M333C	RO
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333C	RO
JUNGERMANNIA	GRACILLIMA			H	M333C	RO
JUNGERMANNIA	HYALINA			H	M333C	RO
JUNGERMANNIA	PUMILA			H	M333C	RO
JUNGERMANNIA	SPHAEROCARPA			H	M333C	RO
LOPHOCOLEA	MINOR			H	M333C	RO
LOPHOZIA	INCISA			H	M333C	RO
MARSUPELLA	SPHACELATA			H	M333C	RO
METZGERIA	CONJUGATA			H	M333C	RO
PORELLA	CORDAEANA			H	M333C	RO
PORELLA	NAVICULARIS			H	M333C	RO
PORELLA	PLATYPHYLLA			H	M333C	RO
PORELLA	ROELLII			H	M333C	RO
RADULA	COMPLANATA			H	M333C	RO
SCAPANIA	NEMOROSA			H	M333C	RO
SCAPANIA	PALUDICOLA			H	M333C	RO
SCAPANIA	SUBALPINA			H	M333C	RO
SCAPANIA	UNDULATA			H	M333C	RO
BLASIA	PUSILLA			H	M333C	[illegible]
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333C	R[illegible]
CHILOSCYPHUS	POLYANTHOS			H	M333C	RW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
HYGROBIELLA	LAXIFOLIA			H	M333C	RW
JUNGERMANNIA	ATROVIRENS			H	M333C	RW
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333C	RW
MARCHANTIA	POLYMORPHA			H	M333C	RW
PELLIA	ENDIVIIFOLIA			H	M333C	RW
PELLIA	NEESIANA			H	M333C	RW
PLAGIOCHILA	PORELLOIDES			H	M333C	RW
PORELLA	CORDAEANA			H	M333C	RW
SCAPANIA	PALUDOSA			H	M333C	RW
BARBILOPHOZIA	HATCHERI			H	M333C	SD
BARBILOPHOZIA	LYCOPODIOIDES			H	M333C	SD
BARBILOPHOZIA	QUADRILOBA			H	M333C	SD
CEPHALOZIA	BICUSPIDATA			H	M333C	SD
CEPHALOZIA	LUNULIFOLIA			H	M333C	SD
CEPHALOZIA	MACOUNII			H	M333C	SD
CEPHALOZIA	PLENICEPS			H	M333C	SD
CEPHALOZIELLA	HAMPEANA			H	M333C	SD
CEPHALOZIELLA	RUBELLA			H	M333C	SD
JUNGERMANNIA	LEIANTHA			H	M333C	SD
LOPHOCOLEA	MINOR			H	M333C	SD
LOPHOZIA	BADENSIS			H	M333C	SD
LOPHOZIA	COLLARIS			H	M333C	SD
LOPHOZIA	GILLMANII			H	M333C	SD
LOPHOZIA	HETEROCOLPOS			H	M333C	SD
LOPHOZIA	LONGIFLORA			H	M333C	SD
LOPHOZIA	VENTRICOSA			H	M333C	SD
NARDIA	SCALARIS			H	M333C	SD
SCAPANIA	CURTA			H	M333C	SD
SCAPANIA	IRRIGUA			H	M333C	SD
SCAPANIA	PALUDOSA			H	M333C	SD
SCAPANIA	UMBROSA			H	M333C	SD
SCAPANIA	UNDULATA			H	M333C	SD
TRITOMARIA	SCITULA			H	M333C	SD
ANEURA	PINGUIS			H	M333C	SW
BARBILOPHOZIA	FLOERKEI			H	M333C	SW
BARBILOPHOZIA	KUNZEANA			H	M333C	SW
CHILOSCYPHUS	POLYANTHOS			H	M333C	SW
CONOCEPHALUM	CONICUM			H	M333C	SW
FOSSOMBRONIA	FOVEOLATA			H	M333C	SW
HARPANTHUS	FLOTOVIANUS			H	M333C	SW
JUNGERMANNIA	LEIANTHA			H	M333C	SW
JUNGERMANNIA	RUBRA			H	M333C	SW
LOPHOZIA	VENTRICOSA			H	M333C	SW
MANNIA	TRIANDRA			H	M333C	SW
MARCHANTIA	POLYMORPHA			H	M333C	SW
MARSUPELLA	EMARGINATA			H	M333C	SW
PELLIA	NEESIANA			H	M333C	SW
PREISSIA	QUADRATA			H	M333C	SW
REBOULIA	HEMISPHAERICA			H	M333C	SW
RICCIA	SOROCARPA			H	M333C	SW
TRITOMARIA	EXSECTIFORMIS			H	M333C	SW
DICHELYMA	FALCATUM			M	M333C	AQ
DICHELYMA	UNCINATUM			M	M333C	AQ
FONTINALIS	ANTIPYRETICA			M	M333C	AQ
FONTINALIS	NEOMEXICANA			M	M333C	AQ
LEPTODICTYUM	RIPARIUM			M	M333C	AQ
AULACOMNIUM	ANDROGYNUM			M	M333C	DW
BUXBAUMIA	PIPERI			M	M333C	DW
DICRANUM	FUSCESCENS			M	M333C	DW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
DICRANUM	HOWELLII			M	M333C	DW
DICRANUM	SCOPARIUM			M	M333C	[illegible]
DICRANUM	TAURICUM			M	M333C	[illegible]
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333C	DW
HERZOGIELLA	SELIGERI			M	M333C	DW
HYPNUM	CIRCINALE			M	M333C	DW
HYPNUM	SUBIMPONENS			M	M333C	DW
MNIUM	MARGINATUM			M	M333C	DW
MNIUM	SPINULOSUM			M	M333C	DW
PLAGIOTHECIUM	DENTICULATUM			M	M333C	DW
PLATYDICTYA	JUNGERMANNIOIDES			M	M333C	DW
PLEUROZIUM	SCHREBERI			M	M333C	DW
POHLIA	NUTANS			M	M333C	DW
PSEUDOLESKEA	RADICOSA			M	M333C	DW
RHYTIDIADELPHUS	TRIQUETRUS			M	M333C	DW
SANIONIA	UNCINATA	V	SYMMETRICA	M	M333C	DW
TETRAPHIS	PELLUCIDA			M	M333C	DW
ANTITRICHIA	CURTIPENDULA			M	M333C	EP
AULACOMNIUM	ANDROGYNUM			M	M333C	EP
CAMPYLIUM	CHRYSOPHYLLUM			M	M333C	EP
CLAOPODIUM	BOLANDERI			M	M333C	EP
EURHYNCHIUM	PULCHELLUM			M	M333C	EP
HYPNUM	CIRCINALE			M	M333C	EP
ISOPTERYGIOPSIS	PULCHELLA			M	M333C	EP
ISOTHECIUM	MYOSUROIDES			M	M333C	EP
ORTHOTRICHUM	AFFINE			M	M333C	EP
ORTHOTRICHUM	OBTUSIFOLIUM			M	M333C	EP
ORTHOTRICHUM	SPECIOSUM			M	M333C	EP
PSEUDOLESKEA	RADICOSA			M	M333C	[illegible]
PSEUDOLESKEA	STENOPHYLLA			M	M333C	[illegible]
PTERIGYNANDRUM	FILIFORME			M	M333C	EP
THAMNOBRYUM	NECKEROIDES			M	M333C	EP
BRACHYTHECIUM	ALBICANS			M	M333C	HD
BRACHYTHECIUM	HOLZINGERI			M	M333C	HD
BRACHYTHECIUM	HYLOTAPETUM			M	M333C	HD
BRACHYTHECIUM	LEIBERGII			M	M333C	HD
BRACHYTHECIUM	SALEBROSUM			M	M333C	HD
BRACHYTHECIUM	STARKEI			M	M333C	HD
BRYUM	PSEUDOTRIQUETRUM			M	M333C	HD
CALLIERGON	CORDIFOLIUM			M	M333C	HD
DICRANUM	ELONGATUM			M	M333C	HD
DICRANUM	POLYSETUM			M	M333C	HD
EURHYNCHIUM	PRAELONGUM			M	M333C	HD
HERZOGIELLA	SELIGERI			M	M333C	HD
HETEROCLADIUM	DIMORPHUM			M	M333C	HD
HYLOCOMIUM	SPLENDENS			M	M333C	HD
PLAGIOMNIUM	INSIGNE			M	M333C	HD
PLAGIOTHECIUM	DENTICULATUM			M	M333C	HD
PLAGIOTHECIUM	LAETUM			M	M333C	HD
PLEUROZIUM	SCHREBERI			M	M333C	HD
PTILIUM	CRISTA-CASTRENSIS			M	M333C	HD
RHYTIDIADELPHUS	TRIQUETRUS			M	M333C	HD
RHYTIDIOPSIS	ROBUSTA			M	M333C	HD
ROELLIA	ROELLII			M	M333C	HD
TIMMIA	AUSTRIACA			M	M333C	HD
TOMENTHYPNUM	NITENS			M	M333C	[illegible]
AULACOMNIUM	PALUSTRE			M	M333C	[illegible]
CALLIERGON	STRAMINEUM			M	M333C	PE
CAMPYLIUM	STELLATUM			M	M333C	PE

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
DREPANOCLADUS	SENDTNERI			M	M333C	PE
SARMENTHYPNUM	SARMENTOSUM			M	M333C	PE
SPHAGNUM	CAPILLIFOLIUM			M	M333C	PE
SPHAGNUM	CENTRALE			M	M333C	PE
SPHAGNUM	CONTORTUM			M	M333C	PE
SPHAGNUM	FUSCUM			M	M333C	PE
SPHAGNUM	MAGELLANICUM			M	M333C	PE
SPHAGNUM	SQUARROSUM			M	M333C	PE
SPHAGNUM	SUBSECUNDUM			M	M333C	PE
SPHAGNUM	SUBSECUNDUM	V	SUBSECUNDUM	M	M333C	PE
SPHAGNUM	TERES			M	M333C	PE
SPHAGNUM	WARNSTORFII			M	M333C	PE
GYMNOSTOMUM	AERUGINOSUM			M	M333C	RC
HYMENOSTYLIUM	RECURVIROSTRE			M	M333C	RC
MNIUM	THOMSONII			M	M333C	RC
SELIGERIA	CAMPYLOPODA			M	M333C	RC
AMPHIDIUM	LAPPONICUM			M	M333C	RO
AMPHIDIUM	MOUGEOTII			M	M333C	RO
ANDREAEA	RUPESTRIS			M	M333C	RO
BRYUM	GEMMIPARUM			M	M333C	RO
CLAOPODIUM	BOLANDERI			M	M333C	RO
DICRANOWEISIA	CRISPULA			M	M333C	RO
DRYPTODON	PATENS			M	M333C	RO
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333C	RO
FISSIDENS	OSMUNDIOIDES			M	M333C	RO
GRIMMIA	ANOMALA			M	M333C	RO
GRIMMIA	MONTANA			M	M333C	RO
GRIMMIA	TENERRIMA			M	M333C	RO
GRIMMIA	TORQUATA			M	M333C	RO
HETEROCLADIUM	PROCURRENS			M	M333C	RO
HOMALOTHECIUM	AENEUM			M	M333C	RO
HOMALOTHECIUM	NEVADENSE			M	M333C	RO
HYPNUM	CIRCINALE			M	M333C	RO
HYPNUM	REVOLUTUM			M	M333C	RO
METANECKERA	MENZIESII			M	M333C	RO
ORTHOTRICHUM	ALPESTRE			M	M333C	RO
ORTHOTRICHUM	CUPULATUM			M	M333C	RO
PSEUDOLESKEA	INCURVATA			M	M333C	RO
PSEUDOLESKEA	RADICOSA			M	M333C	RO
PSEUDOLESKEA	RADICOSA	V	COMPACTA	M	M333C	RO
PTERIGYNANDRUM	FILIFORME			M	M333C	RO
RACOMITRIUM	ELONGATUM			M	M333C	RO
RACOMITRIUM	ERICOIDES			M	M333C	RO
RACOMITRIUM	HETEROSTICHUM			M	M333C	RO
RACOMITRIUM	MACOUNII			M	M333C	RO
SANIONIA	UNCINATA			M	M333C	RO
SCHISTIDIUM	AGASSIZII			M	M333C	RO
SCHISTIDIUM	APOCARPUM			M	M333C	RO
SCHISTIDIUM	RIVULARE	V	LATIFOLIUM	M	M333C	RO
SCHISTIDIUM	RIVULARE	V	RIVULARE	M	M333C	RO
TIMMIA	MEGAPOLITANA	V	BAVARICA	M	M333C	RO
TORTELLA	FRAGILIS			M	M333C	RO
TORTELLA	TORTUOSA			M	M333C	RO
TORTULA	RURALIS			M	M333C	RO
BRACHYTHECIUM	RIVULARE			M	M333C	RW
BRYUM	CALOBRYOIDES			M	M333C	RW
CRATONEURON	FILICINUM			M	M333C	RW
DICHODONTIUM	OLYMPICUM			M	M333C	RW
DICHODONTIUM	PELLUCIDUM			M	M333C	RW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substr
FISSIDENS	BRYOIDES			M	M333C	RW
HYGROHYPNUM	BESTII			M	M333C	RW
HYGROHYPNUM	LURIDUM			M	M333C	[illegible]
HYGROHYPNUM	MOLLE			M	M333C	[illegible]
HYGROHYPNUM	OCHRACEUM			M	M333C	RW
HYGROHYPNUM	SMITHII			M	M333C	RW
PLAGIOTHECIUM	PILIFERUM			M	M333C	RW
RACOMITRIUM	AQUATICUM			M	M333C	RW
SCHISTIDIUM	AGASSIZII			M	M333C	RW
SCLEROPODIUM	OBTUSIFOLIUM			M	M333C	RW
SCOULERIA	AQUATICA			M	M333C	RW
ATRICHUM	SELWYNII			M	M333C	SD
BARBULA	CONVOLUTA			M	M333C	SD
BARTRAMIA	POMIFORMIS			M	M333C	SD
BARTRAMIA	STRICTA			M	M333C	SD
BRACHYTHECIUM	COLLINUM			M	M333C	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M333C	SD
BRACHYTHECIUM	HYLOTAPETUM			M	M333C	SD
BRYUM	CAESPITICIUM			M	M333C	SD
BRYUM	LONCHOCAULON			M	M333C	SD
CERATODON	PURPUREUS			M	M333C	SD
CLAOPODIUM	BOLANDERI			M	M333C	SD
CYNODONTIUM	STRUMIFERUM			M	M333C	SD
DESMATODON	LATIFOLIUS			M	M333C	SD
DICRANELLA	CRISPA			M	M333C	SD
DICRANUM	POLYSETUM			M	M333C	SD
DICRANUM	SCOPARIUM			M	M333C	SD
DIDYMODON	FALLAX			M	M333C	SD
DIDYMODON	RIGIDULUS	V	ICMADOPHILUS	M	M333C	SD
DISTICHIUM	CAPILLACEUM			M	M333C	[illegible]
DITRICHUM	FLEXICAULE			M	M333C	[illegible]
ENCALYPTA	AFFINIS	V	MACOUNII	M	M333C	SD
ENCALYPTA	PROCERA			M	M333C	SD
ENCALYPTA	VULGARIS			M	M333C	SD
EURHYNCHIUM	PULCHELLUM			M	M333C	SD
FISSIDENS	BRYOIDES			M	M333C	SD
FISSIDENS	LIMBATUS			M	M333C	SD
FUNARIA	HYGROMETRICA			M	M333C	SD
GRIMMIA	TORQUATA			M	M333C	SD
HETEROCLADIUM	DIMORPHUM			M	M333C	SD
HYPNUM	REVOLUTUM			M	M333C	SD
KIAERIA	BLYTTII			M	M333C	SD
MNIUM	SPINULOSUM			M	M333C	SD
PARALEUCOBRYUM	LONGIFOLIUM			M	M333C	SD
PLAGIOTHECIUM	LAETUM			M	M333C	SD
POGONATUM	URNIGERUM			M	M333C	SD
POHLIA	CAMPTOTRACHELA			M	M333C	SD
POHLIA	CRUDA			M	M333C	SD
POHLIA	NUTANS			M	M333C	SD
POLYTRICHASTRUM	ALPINUM			M	M333C	SD
POLYTRICHUM	COMMUNE			M	M333C	SD
POLYTRICHUM	JUNIPERINUM			M	M333C	SD
POLYTRICHUM	LYALLII			M	M333C	SD
POLYTRICHUM	PILIFERUM			M	M333C	SD
POLYTRICHUM	SEXANGULARE			M	M333C	SD
PTERIGYNANDRUM	FILIFORME			M	M333C	[illegible]
RACOMITRIUM	CANESCENS			M	M333C	[illegible]
ROELLIA	ROELLII			M	M333C	[illegible]
TORTULA	RURALIS			M	M333C	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
TRICHODON	CYLINDRICUS			M	M333C	SD
WEISSIA	CONTROVERSA			M	M333C	SD
AMBLYSTEGIUM	SERPENS			M	M333C	SW
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M333C	SW
BRACHYTHECIUM	FRIGIDUM			M	M333C	SW
BRACHYTHECIUM	NELSONII			M	M333C	SW
BRACHYTHECIUM	RIVULARE			M	M333C	SW
BRYUM	MUEHLENBECKII			M	M333C	SW
BRYUM	PALLESCENS			M	M333C	SW
CALLIERGON	CORDIFOLIUM			M	M333C	SW
CALLIERGON	GIGANTEUM			M	M333C	SW
CAMPYLIUM	CHRYSOPHYLLUM			M	M333C	SW
CLIMACIUM	DENDROIDES			M	M333C	SW
DICHODONTIUM	PELLUCIDUM			M	M333C	SW
DICRANELLA	HETEROMALLA			M	M333C	SW
DICRANUM	MONTANUM			M	M333C	SW
DREPANOCLADUS	ADUNCUS			M	M333C	SW
DREPANOCLADUS	CAPILLIFOLIUS			M	M333C	SW
EURHYNCHIUM	PRAELONGUM			M	M333C	SW
FISSIDENS	BRYOIDES			M	M333C	SW
HYGROHYPNUM	ALPINUM			M	M333C	SW
HYGROHYPNUM	MOLLE			M	M333C	SW
HYGROHYPNUM	OCHRACEUM			M	M333C	SW
HYGROHYPNUM	STYRIACUM			M	M333C	SW
KIAERIA	STARKEI			M	M333C	SW
LEPTODICTYUM	RIPARIUM			M	M333C	SW
MNIUM	BLYTTII			M	M333C	SW
MNIUM	SPINULOSUM			M	M333C	SW
ONCOPHORUS	VIRENS			M	M333C	SW
PALUSTRIELLA	COMMUTATA			M	M333C	SW
PHILONOTIS	FONTANA			M	M333C	SW
PHILONOTIS	FONTANA	V	PUMILA	M	M333C	SW
PHILONOTIS	FONTANA	V	PUMILA	M	M333C	SW
PLAGIOBRYUM	ZIERI			M	M333C	SW
PLAGIOMNIUM	INSIGNE			M	M333C	SW
POHLIA	DRUMMONDII			M	M333C	SW
POHLIA	WAHLENBERGII			M	M333C	SW
RACOMITRIUM	MACOUNII			M	M333C	SW
RHIZOMNIUM	MAGNIFOLIUM			M	M333C	SW
RHYTIDIADELPHUS	SQUARROSUS			M	M333C	SW
SANIONIA	UNCINATA			M	M333C	SW
TORTELLA	INCLINATA			M	M333C	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
ANTHOCEROS	FUSIFORMIS			A	M333D	SW
ANTHOCEROS	PUNCTATUS			A	M333D	[illegible]
CHILOSCYPHUS	POLYANTHOS			H	M333D	[illegible]
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M333D	AQ
ANASTROPHYLLUM	HELLERANUM			H	M333D	DW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333D	DW
CALYPOGEIA	FISSA			H	M333D	DW
CALYPOGEIA	MUELLERIANA			H	M333D	DW
CALYPOGEIA	NEESIANA			H	M333D	DW
CALYPOGEIA	SUECICA			H	M333D	DW
CEPHALOZIA	BICUSPIDATA			H	M333D	DW
CEPHALOZIA	LUNULIFOLIA			H	M333D	DW
CEPHALOZIELLA	DIVARICATA			H	M333D	DW
CEPHALOZIELLA	RUBELLA			H	M333D	DW
CHILOSCYPHUS	PALLESCENS			H	M333D	DW
CHILOSCYPHUS	POLYANTHOS			H	M333D	DW
CONOCEPHALUM	CONICUM			H	M333D	DW
GEOCALYX	GRAVEOLENS			H	M333D	DW
JAMESONIELLA	AUTUMNALIS			H	M333D	DW
JUNGERMANNIA	LEIANTHA			H	M333D	DW
LEPIDOZIA	REPTANS			H	M333D	DW
LOPHOCOLEA	CUSPIDATA			H	M333D	DW
LOPHOCOLEA	HETEROPHYLLA			H	M333D	DW
LOPHOCOLEA	MINOR			H	M333D	DW
LOPHOZIA	ASCENDENS			H	M333D	DW
LOPHOZIA	INCISA			H	M333D	DW
LOPHOZIA	LONGIDENS			H	M333D	DW
LOPHOZIA	LONGIFLORA			H	M333D	DW
LOPHOZIA	VENTRICOSA			H	M333D	[illegible]
PTILIDIUM	PULCHERRIMUM			H	M333D	[illegible]
RICCARDIA	LATIFRONS			H	M333D	DW
RICCARDIA	MULTIFIDA			H	M333D	DW
RICCARDIA	PALMATA			H	M333D	DW
SCAPANIA	CURTA			H	M333D	DW
SCAPANIA	UMBROSA			H	M333D	DW
SCAPANIA	UNDULATA			H	M333D	DW
TRITOMARIA	EXSECTA			H	M333D	DW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333D	EP
LOPHOZIA	LONGIDENS			H	M333D	EP
LOPHOZIA	VENTRICOSA			H	M333D	EP
PTILIDIUM	CALIFORNICUM			H	M333D	EP
RADULA	COMPLANATA			H	M333D	EP
SCAPANIA	UMBROSA			H	M333D	EP
APOMETZGERIA	PUBESCENS			H	M333D	RO
CEPHALOZIELLA	DIVARICATA			H	M333D	RO
CHILOSCYPHUS	PALLESCENS			H	M333D	RO
CHILOSCYPHUS	POLYANTHOS			H	M333D	RO
JUNGERMANNIA	ATROVIRENS			H	M333D	RO
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M333D	RO
LOPHOZIA	VENTRICOSA			H	M333D	RO
PLAGIOCHILA	PORELLOIDES			H	M333D	RO
PORELLA	CORDAEANA			H	M333D	RO
PTILIDIUM	CALIFORNICUM			H	M333D	RO
RADULA	COMPLANATA			H	M333D	RO
SCAPANIA	NEMOROSA			H	M333D	RO
SCAPANIA	UNDULATA			H	M333D	[illegible]
BAZZANIA	TRICRENATA			H	M333D	[illegible]
BLASIA	PUSILLA			H	M333D	RW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M333D	RW
CHILOSCYPHUS	POLYANTHOS			H	M333D	RW
CONOCEPHALUM	CONICUM			H	M333D	RW
JUNGERMANNIA	PUMILA			H	M333D	RW
JUNGERMANNIA	RUBRA			H	M333D	RW
LOPHOZIA	HETEROCOLPOS			H	M333D	RW
MARCHANTIA	POLYMORPHA			H	M333D	RW
PELLIA	NEESIANA			H	M333D	RW
PLAGIOCHILA	PORELLOIDES			H	M333D	RW
PORELLA	CORDAEANA			H	M333D	RW
SCAPANIA	UNDULATA	V	OAKESII	H	M333D	RW
BARBILOPHOZIA	BARBATA			H	M333D	SD
BARBILOPHOZIA	HATCHERI			H	M333D	SD
BARBILOPHOZIA	KUNZEANA			H	M333D	SD
CEPHALOZIA	LUNULIFOLIA			H	M333D	SD
CEPHALOZIELLA	DIVARICATA			H	M333D	SD
CEPHALOZIELLA	HAMPEANA			H	M333D	SD
CEPHALOZIELLA	RUBELLA			H	M333D	SD
CHILOSCYPHUS	PALLESCENS			H	M333D	SD
JUNGERMANNIA	ATROVIRENS			H	M333D	SD
JUNGERMANNIA	LEIANTHA			H	M333D	SD
LEPIDOZIA	REPTANS			H	M333D	SD
LOPHOCOLEA	MINOR			H	M333D	SD
LOPHOZIA	COLLARIS			H	M333D	SD
LOPHOZIA	GILLMANII			H	M333D	SD
LOPHOZIA	LONGIFLORA			H	M333D	SD
LOPHOZIA	VENTRICOSA			H	M333D	SD
LUNULARIA	CRUCIATA			H	M333D	SD
PELLIA	ENDIVIIFOLIA			H	M333D	SD
SCAPANIA	SUBALPINA			H	M333D	SD
SCAPANIA	UMBROSA			H	M333D	SD
SCAPANIA	UNDULATA			H	M333D	SD
SPHAEROCARPOS	HIANS			H	M333D	SD
BLASIA	PUSILLA			H	M333D	SW
CALYPOGEIA	FISSA			H	M333D	SW
CHILOSCYPHUS	PALLESCENS			H	M333D	SW
CHILOSCYPHUS	POLYANTHOS			H	M333D	SW
CONOCEPHALUM	CONICUM			H	M333D	SW
JUNGERMANNIA	LEIANTHA			H	M333D	SW
LOPHOCOLEA	BIDENTATA			H	M333D	SW
LOPHOZIA	BANTRIENSIS			H	M333D	SW
LOPHOZIA	GILLMANII			H	M333D	SW
MARCHANTIA	POLYMORPHA			H	M333D	SW
PELLIA	NEESIANA			H	M333D	SW
RICCARDIA	PALMATA			H	M333D	SW
SCAPANIA	PALUDOSA			H	M333D	SW
CALLIERGON	GIGANTEUM			M	M333D	AQ
DREPANOCLADUS	FLUITANS			M	M333D	AQ
EURHYNCHIUM	PRAELONGUM			M	M333D	AQ
FONTINALIS	ANTIPYRETICA			M	M333D	AQ
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M333D	AQ
FONTINALIS	NEOMEXICANA			M	M333D	AQ
SCOULERIA	AQUATICA			M	M333D	AQ
SCOULERIA	MARGINATA			M	M333D	AQ
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M333D	DW
AULACOMNIUM	ANDROGYNUM			M	M333D	DW
BRACHYTHECIUM	ERYTHRORRHIZON			M	M333D	DW
BRACHYTHECIUM	FRIGIDUM			M	M333D	DW
BRACHYTHECIUM	HYLOTAPETUM			M	M333D	DW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
BRACHYTHECIUM	LEIBERGII			M	M333D	DW
BRACHYTHECIUM	RIVULARE			M	M333D	
BRACHYTHECIUM	RUTABULUM			M	M333D	
BRACHYTHECIUM	VELUTINUM			M	M333D	DW
BUXBAUMIA	PIPERI			M	M333D	DW
BUXBAUMIA	VIRIDIS			M	M333D	DW
CERATODON	PURPUREUS			M	M333D	DW
CIRRIPHYLLUM	CIRROSUM			M	M333D	DW
CLIMACIUM	DENDROIDES			M	M333D	DW
DICHELYMA	UNCINATUM			M	M333D	DW
DICRANUM	FUSCESCENS			M	M333D	DW
DICRANUM	HOWELLII			M	M333D	DW
DICRANUM	PALLIDISETUM			M	M333D	DW
DICRANUM	SCOPARIUM			M	M333D	DW
DICRANUM	TAURICUM			M	M333D	DW
EURHYNCHIUM	OREGANUM			M	M333D	DW
EURHYNCHIUM	PRAELONGUM			M	M333D	DW
EURHYNCHIUM	PULCHELLUM			M	M333D	DW
HERZOGIELLA	SELIGERI			M	M333D	DW
HETEROCLADIUM	PROCURRENS			M	M333D	DW
HOOKERIA	LUCENS			M	M333D	DW
HYLOCOMIUM	SPLENDENS			M	M333D	DW
HYPNUM	CIRCINALE			M	M333D	DW
LEUCOLEPIS	ACANTHONEURON			M	M333D	DW
MNIUM	SPINULOSUM			M	M333D	DW
NECKERA	DOUGLASII			M	M333D	DW
ORTHOTRICHUM	AFFINE			M	M333D	DW
PLAGIOMNIUM	INSIGNE			M	M333D	DW
POHLIA	CRUDA			M	M333D	
POHLIA	NUTANS			M	M333D	
PTERIGYNANDRUM	FILIFORME			M	M333D	DW
RACOMITRIUM	MICROCARPON			M	M333D	DW
RHIZOMNIUM	GLABRESCENS			M	M333D	DW
RHIZOMNIUM	MAGNIFOLIUM			M	M333D	DW
RHIZOMNIUM	PUNCTATUM			M	M333D	DW
RHYTIDIADELPHUS	TRIQUETRUS			M	M333D	DW
RHYTIDIOPSIS	ROBUSTA			M	M333D	DW
ROELLIA	ROELLII			M	M333D	DW
SANIONIA	UNCINATA			M	M333D	DW
SANIONIA	UNCINATA	V	SYMMETRICA	M	M333D	DW
SANIONIA	UNCINATA	V	UNCINATA	M	M333D	DW
TETRAPHIS	PELLUCIDA			M	M333D	DW
TORTULA	RURALIS			M	M333D	DW
ANTITRICHIA	CURTIPENDULA			M	M333D	EP
ANTITRICHIA	CURTIPENDULA	V	GIGANTEA	M	M333D	EP
AULACOMNIUM	ANDROGYNUM			M	M333D	EP
BRACHYTHECIUM	HYLOTAPETUM			M	M333D	EP
BRACHYTHECIUM	VELUTINUM			M	M333D	EP
CLAOPODIUM	CRISPIFOLIUM			M	M333D	EP
DICRANUM	FUSCESCENS			M	M333D	EP
DICRANUM	SCOPARIUM			M	M333D	EP
DICRANUM	TAURICUM			M	M333D	EP
HETEROCLADIUM	PROCURRENS			M	M333D	EP
HOMALOTHECIUM	FULGESCENS			M	M333D	EP
HYPNUM	CIRCINALE			M	M333D	EP
ORTHOTRICHUM	AFFINE			M	M333D	
ORTHOTRICHUM	OBTUSIFOLIUM			M	M333D	
ORTHOTRICHUM	SPECIOSUM			M	M333D	EP
PSEUDOLESKEA	STENOPHYLLA			M	M333D	EP

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
PTERIGYNANDRUM	FILIFORME			M	M333D	EP
RHYTIDIOPSIS	ROBUSTA			M	M333D	EP
SANIONIA	UNCINATA			M	M333D	EP
SANIONIA	UNCINATA	V	SYMMETRICA	M	M333D	EP
AULACOMNIUM	ANDROGYNUM			M	M333D	HD
BRACHYTHECIUM	ALBICANS			M	M333D	HD
BRACHYTHECIUM	GLAREOSUM			M	M333D	HD
BRACHYTHECIUM	HYLOTAPETUM			M	M333D	HD
BRACHYTHECIUM	LEIBERGII			M	M333D	HD
BRACHYTHECIUM	OEDIPODIUM			M	M333D	HD
BRACHYTHECIUM	SALEBROSUM			M	M333D	HD
CLAOPODIUM	BOLANDERI			M	M333D	HD
CLAOPODIUM	CRISPIFOLIUM			M	M333D	HD
DICRANELLA	CRISPA			M	M333D	HD
DICRANUM	SCOPARIUM			M	M333D	HD
EURHYNCHIUM	OREGANUM			M	M333D	HD
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333D	HD
HERZOGIELLA	SELIGERI			M	M333D	HD
HYLOCOMIUM	SPLENDENS			M	M333D	HD
ISOTHECIUM	MYOSUROIDES			M	M333D	HD
LEUCOLEPIS	ACANTHONEURON			M	M333D	HD
MNIUM	SPINULOSUM			M	M333D	HD
PLAGIOMNIUM	INSIGNE			M	M333D	HD
PLAGIOTHECIUM	CAVIFOLIUM			M	M333D	HD
PLAGIOTHECIUM	DENTICULATUM			M	M333D	HD
PLEUROZIUM	SCHREBERI			M	M333D	HD
POLYTRICHASTRUM	ALPINUM			M	M333D	HD
RHYTIDIADELPHUS	SQUARROSUS			M	M333D	HD
RHYTIDIADELPHUS	TRIQUETRUS			M	M333D	HD
RHYTIDIOPSIS	ROBUSTA			M	M333D	HD
ROELLIA	ROELLII			M	M333D	HD
SANIONIA	UNCINATA			M	M333D	HD
TIMMIA	AUSTRIACA			M	M333D	HD
TIMMIA	MEGAPOLITANA			M	M333D	HD
TRACHYBRYUM	MEGAPTILUM			M	M333D	HD
AULACOMNIUM	PALUSTRE			M	M333D	PE
DICRANUM	SCOPARIUM			M	M333D	PE
SPHAGNUM	CENTRALE			M	M333D	PE
SPHAGNUM	MENDOCINUM			M	M333D	PE
SPHAGNUM	SQUARROSUM			M	M333D	PE
SPHAGNUM	SUBSECUNDUM			M	M333D	PE
SPHAGNUM	TERES			M	M333D	PE
BRACHYTHECIUM	ALBICANS			M	M333D	RC
BRACHYTHECIUM	GLAREOSUM			M	M333D	RC
CERATODON	PURPUREUS			M	M333D	RC
FISSIDENS	GRANDIFRONS			M	M333D	RC
HOMALOTHECIUM	AENEUM			M	M333D	RC
ORTHOTRICHUM	LAEVIGATUM			M	M333D	RC
PTYCHOMITRIUM	GARDNERI			M	M333D	RC
RACOMITRIUM	ERICOIDES			M	M333D	RC
SCHISTIDIUM	APOCARPUM			M	M333D	RC
TORTULA	PRINCEPS			M	M333D	RC
TORTULA	RURALIS			M	M333D	RC
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M333D	RO
AMPHIDIUM	LAPPONICUM			M	M333D	RO
ANACOLIA	MENZIESII			M	M333D	RO
ANDREAEA	RUPESTRIS			M	M333D	RO
BARTRAMIA	POMIFORMIS			M	M333D	RO
BRACHYTHECIUM	COLLINUM			M	M333D	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
CERATODON	PURPUREUS			M	M333D	RO
CLAOPODIUM	BOLANDERI			M	M333D	[illegible]
CLAOPODIUM	CRISPIFOLIUM			M	M333D	[illegible]
CYRTO-HYPNUM	MINUTULUM			M	M333D	RO
DICRANELLA	CRISPA			M	M333D	RO
DICRANOWEISIA	CRISPULA			M	M333D	RO
DICRANUM	SCOPARIUM			M	M333D	RO
DRYPTODON	PATENS			M	M333D	RO
EURHYNCHIUM	OREGANUM			M	M333D	RO
EURHYNCHIUM	PRAELONGUM			M	M333D	RO
GRIMMIA	AFFINIS			M	M333D	RO
GRIMMIA	LAEVIGATA			M	M333D	RO
GRIMMIA	MONTANA			M	M333D	RO
GRIMMIA	PULVINATA			M	M333D	RO
GRIMMIA	TORQUATA			M	M333D	RO
GRIMMIA	TRICHOPHYLLA			M	M333D	RO
GRIMMIA	UNICOLOR			M	M333D	RO
HOMALOTHECIUM	AENEUM			M	M333D	RO
HOMALOTHECIUM	NEVADENSE			M	M333D	RO
HOMALOTHECIUM	NUTTALLII			M	M333D	RO
HOMALOTHECIUM	PINNATIFIDUM			M	M333D	RO
HYLOCOMIUM	SPLENDENS			M	M333D	RO
HYPNUM	SUBIMPONENS			M	M333D	RO
ISOTHECIUM	MYOSUROIDES			M	M333D	RO
METANECKERA	MENZIESII			M	M333D	RO
MNIUM	SPINULOSUM			M	M333D	RO
ORTHOTRICHUM	LAEVIGATUM			M	M333D	RO
ORTHOTRICHUM	RUPESTRE			M	M333D	RO
POGONATUM	URNIGERUM			M	M333D	[illegible]
PSEUDOLESKEA	INCURVATA	V	INCURVATA	M	M333D	[illegible]
PSEUDOLESKEA	PATENS			M	M333D	RO
PSEUDOLESKEELLA	TECTORUM			M	M333D	RO
PTERIGYNANDRUM	FILIFORME			M	M333D	RO
RACOMITRIUM	ACICULARE			M	M333D	RO
RACOMITRIUM	ERICOIDES			M	M333D	RO
RACOMITRIUM	HETEROSTICHUM			M	M333D	RO
RACOMITRIUM	VARIUM			M	M333D	RO
RHIZOMNIUM	GLABRESCENS			M	M333D	RO
RHIZOMNIUM	MAGNIFOLIUM			M	M333D	RO
RHYTIDIADELPHUS	SUBPINNATUS			M	M333D	RO
RHYTIDIADELPHUS	TRIQUETRUS			M	M333D	RO
RHYTIDIOPSIS	ROBUSTA			M	M333D	RO
SANIONIA	UNCINATA			M	M333D	RO
SCHISTIDIUM	APOCARPUM			M	M333D	RO
SCHISTIDIUM	CINCLIDODONTEUM			M	M333D	RO
SCHISTIDIUM	RIVULARE			M	M333D	RO
SCLEROPODIUM	OBTUSIFOLIUM			M	M333D	RO
THAMNOBRYUM	NECKEROIDES			M	M333D	RO
TIMMIA	AUSTRIACA			M	M333D	RO
TORTULA	RURALIS			M	M333D	RO
BRACHYTHECIUM	FRIGIDUM			M	M333D	RW
BRACHYTHECIUM	RIVULARE			M	M333D	RW
CAMPYLIUM	CHRYSOPHYLLUM			M	M333D	RW
FONTINALIS	NEOMEXICANA			M	M333D	RW
HYGROHYPNUM	OCHRACEUM			M	M333D	RW
PHILONOTIS	FONTANA			M	M333D	[illegible]
SCLEROPODIUM	OBTUSIFOLIUM			M	M333D	[illegible]
SCOULERIA	AQUATICA			M	M333D	RW
THAMNOBRYUM	NECKEROIDES			M	M333D	RW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
ATRICHUM	SELWYNII			M	M333D	SD
ATRICHUM	UNDULATUM			M	M333D	SD
BARBULA	EUSTEGIA			M	M333D	SD
BRACHYTHECIUM	ALBICANS			M	M333D	SD
BRACHYTHECIUM	COLLINUM			M	M333D	SD
BRACHYTHECIUM	GLAREOSUM			M	M333D	SD
BRACHYTHECIUM	LEIBERGII			M	M333D	SD
BRACHYTHECIUM	RUTABULUM			M	M333D	SD
BRACHYTHECIUM	VELUTINUM			M	M333D	SD
BRYUM	CAESPITICIUM			M	M333D	SD
BRYUM	CAPILLARE			M	M333D	SD
BRYUM	LONCHOCAULON			M	M333D	SD
CERATODON	PURPUREUS			M	M333D	SD
CLAOPODIUM	BOLANDERI			M	M333D	SD
DICRANELLA	VARIA			M	M333D	SD
DICRANOWEISIA	CIRRATA			M	M333D	SD
DICRANUM	HOWELLII			M	M333D	SD
DICRANUM	MUEHLENBECKII			M	M333D	SD
DIDYMODON	VINEALIS			M	M333D	SD
ENCALYPTA	CILIATA			M	M333D	SD
EURHYNCHIUM	OREGANUM			M	M333D	SD
EURHYNCHIUM	PULCHELLUM			M	M333D	SD
EURHYNCHIUM	PULCHELLUM	V	BARNESII	M	M333D	SD
EURHYNCHIUM	PULCHELLUM	V	PULCHELLUM	M	M333D	SD
FISSIDENS	BRYOIDES			M	M333D	SD
FISSIDENS	LIMBATUS			M	M333D	SD
FUNARIA	HYGROMETRICA			M	M333D	SD
HETEROCLADIUM	PROCURRENS			M	M333D	SD
HOMALOTHECIUM	AENEUM			M	M333D	SD
LEPTOBRYUM	PYRIFORME			M	M333D	SD
LEUCOLEPIS	ACANTHONEURON			M	M333D	SD
MNIUM	SPINULOSUM			M	M333D	SD
PLAGIOMNIUM	MEDIUM			M	M333D	SD
POGONATUM	DENTATUM			M	M333D	SD
POGONATUM	URNIGERUM			M	M333D	SD
POHLIA	ANNOTINA			M	M333D	SD
POHLIA	CRUDA			M	M333D	SD
POHLIA	NUTANS			M	M333D	SD
POHLIA	PROLIGERA			M	M333D	SD
POLYTRICHASTRUM	ALPINUM			M	M333D	SD
POLYTRICHUM	JUNIPERINUM			M	M333D	SD
POLYTRICHUM	LYALLII			M	M333D	SD
POLYTRICHUM	PILIFERUM			M	M333D	SD
PSEUDOLESKEA	PATENS			M	M333D	SD
PTERIGYNANDRUM	FILIFORME			M	M333D	SD
RACOMITRIUM	ERICOIDES			M	M333D	SD
RHYTIDIADELPHUS	TRIQUETRUS			M	M333D	SD
RHYTIDIOPSIS	ROBUSTA			M	M333D	SD
SANIONIA	UNCINATA			M	M333D	SD
TIMMIA	AUSTRIACA			M	M333D	SD
TORTULA	RURALIS			M	M333D	SD
TRACHYBRYUM	MEGAPTILUM			M	M333D	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M333D	SW
BRACHYTHECIUM	FRIGIDUM			M	M333D	SW
BRYUM	TURBINATUM			M	M333D	SW
CALLIERGON	RICHARDSONII			M	M333D	SW
CLIMACIUM	AMERICANUM			M	M333D	SW
CLIMACIUM	DENDROIDES			M	M333D	SW
CRATONEURON	FILICINUM			M	M333D	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
DICHODONTIUM	PELLUCIDUM			M	M333D	SW
DICRANELLA	GREVILLEANA			M	M333D	[illegible]
DICRANELLA	SUBULATA			M	M333D	[illegible]
DISTICHIUM	CAPILLACEUM			M	M333D	[illegible]
DREPANOCLADUS	ADUNCUS			M	M333D	SW
EURHYNCHIUM	OREGANUM			M	M333D	SW
EURHYNCHIUM	PRAELONGUM			M	M333D	SW
FISSIDENS	BRYOIDES			M	M333D	SW
FONTINALIS	NEOMEXICANA			M	M333D	SW
FUNARIA	HYGROMETRICA			M	M333D	SW
HOOKERIA	LUCENS			M	M333D	SW
HYGROAMBLYSTEGIUM	TENAX			M	M333D	SW
HYGROHYPNUM	LURIDUM			M	M333D	SW
HYGROHYPNUM	OCHRACEUM			M	M333D	SW
LEPTOBRYUM	PYRIFORME			M	M333D	SW
LEPTODICTYUM	RIPARIUM			M	M333D	SW
LEUCOLEPIS	ACANTHONEURON			M	M333D	SW
MNIUM	AMBIGUUM			M	M333D	SW
MNIUM	BLYTTII			M	M333D	SW
MNIUM	SPINULOSUM			M	M333D	SW
MNIUM	THOMSONII			M	M333D	SW
OLIGOTRICHUM	ALIGERUM			M	M333D	SW
PHILONOTIS	CAPILLARIS			M	M333D	SW
PHILONOTIS	FONTANA			M	M333D	SW
PHILONOTIS	FONTANA	V	AMERICANA	M	M333D	SW
PHILONOTIS	FONTANA	V	PUMILA	M	M333D	SW
PHYSCOMITRIUM	PYRIFORME			M	M333D	SW
PLAGIOMNIUM	ELLIPTICUM			M	M333D	SW
PLAGIOMNIUM	INSIGNE			M	M333D	[illegible]
PLAGIOMNIUM	MEDIUM			M	M333D	[illegible]
PLAGIOTHECIUM	LAETUM			M	M333D	[illegible]
POGONATUM	CONTORTUM			M	M333D	SW
POHLIA	CAMPTOTRACHELA			M	M333D	SW
POHLIA	CRUDA			M	M333D	SW
PSEUDOLESKEA	RADICOSA			M	M333D	SW
RHIZOMNIUM	MAGNIFOLIUM			M	M333D	SW
RHYTIDIADELPHUS	TRIQUETRUS			M	M333D	SW
SANIONIA	UNCINATA			M	M333D	SW
SANIONIA	UNCINATA	V	SYMMETRICA	M	M333D	SW
SANIONIA	UNCINATA	V	UNCINATA	M	M333D	SW

Cascade Mixed Forest:
coniferous forest, alpine meadow

M242C Eastern Cascades (OR, WA)

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
ANTHOCEROS	PUNCTATUS			A	M242C	SW
PHAEOCEROS	HALLII			A	M242C	[illegible]
CHILOSCYPHUS	POLYANTHOS			H	M242C	[illegible]
CHILOSCYPHUS	POLYANTHOS	V	RIVULARIS	H	M242C	[illegible]
RICCIOCARPOS	NATANS			H	M242C	AQ
ANEURA	PINGUIS			H	M242C	DW
BARBILOPHOZIA	HATCHERI			H	M242C	DW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M242C	DW
BLEPHAROSTOMA	TRICHOPHYLLUM	S	BREVIRETE	H	M242C	DW
BLEPHAROSTOMA	TRICHOPHYLLUM	S	TRICHOPHYLLUM	H	M242C	DW
CALYPOGEIA	FISSA			H	M242C	DW
CALYPOGEIA	MUELLERIANA			H	M242C	DW
CALYPOGEIA	SUECICA			H	M242C	DW
CEPHALOZIA	BICUSPIDATA			H	M242C	DW
CEPHALOZIA	BICUSPIDATA	S	BICUSPIDATA	H	M242C	DW
CEPHALOZIA	BICUSPIDATA	S	LAMMERSIANA	H	M242C	DW
CEPHALOZIA	LUNULIFOLIA			H	M242C	DW
CEPHALOZIA	PLENICEPS			H	M242C	DW
CEPHALOZIA	PLENICEPS	V	PLENICEPS	H	M242C	DW
CHILOSCYPHUS	POLYANTHOS			H	M242C	DW
CHILOSCYPHUS	POLYANTHOS	V	POLYANTHOS	H	M242C	DW
DIPLOPHYLLUM	TAXIFOLIUM			H	M242C	DW
DIPLOPHYLLUM	TAXIFOLIUM	V	TAXIFOLIUM	H	M242C	DW
GEOCALYX	GRAVEOLENS			H	M242C	DW
JUNGERMANNIA	LEIANTHA			H	M242C	DW
LEPIDOZIA	REPTANS			H	M242C	DW
LOPHOCOLEA	HETEROPHYLLA			H	M242C	DW
LOPHOCOLEA	MINOR			H	M242C	DW
LOPHOZIA	ALPESTRIS			H	M242C	[illegible]
LOPHOZIA	HETEROCOLPOS			H	M242C	[illegible]
LOPHOZIA	INCISA			H	M242C	[illegible]
LOPHOZIA	INCISA	V	INCISA	H	M242C	DW
LOPHOZIA	LONGIFLORA			H	M242C	DW
LOPHOZIA	VENTRICOSA			H	M242C	DW
LOPHOZIA	VENTRICOSA	V	LONGIFLORA	H	M242C	DW
LOPHOZIA	VENTRICOSA	V	SILVICOLA	H	M242C	DW
LOPHOZIA	VENTRICOSA	V	VENTRICOSA	H	M242C	DW
PELLIA	NEESIANA			H	M242C	DW
PTILIDIUM	CALIFORNICUM			H	M242C	DW
PTILIDIUM	PULCHERRIMUM			H	M242C	DW
RADULA	BOLANDERI			H	M242C	DW
RICCARDIA	CHAMEDRYFOLIA			H	M242C	DW
RICCARDIA	LATIFRONS			H	M242C	DW
RICCARDIA	MULTIFIDA			H	M242C	DW
RICCARDIA	MULTIFIDA	V	MULTIFIDA	H	M242C	DW
RICCARDIA	PALMATA			H	M242C	DW
SCAPANIA	BOLANDERI			H	M242C	DW
SCAPANIA	CURTA	V	CURTA	H	M242C	DW
SCAPANIA	GLAUCOCEPHALA			H	M242C	DW
SCAPANIA	UMBROSA			H	M242C	DW
TRITOMARIA	EXSECTIFORMIS			H	M242C	DW
CEPHALOZIA	PLENICEPS			H	M242C	EP
FRULLANIA	BOLANDERI			H	M242C	EP
FRULLANIA	FRANCISCANA			H	M242C	EP
FRULLANIA	TAMARISCI	S	NISQUALLENSIS	H	M242C	EP
PORELLA	CORDAEANA			H	M242C	[illegible]
PORELLA	NAVICULARIS			H	M242C	[illegible]
PORELLA	PLATYPHYLLA			H	M242C	EP

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
PORELLA	ROELLII			H	M242C	EP
PTILIDIUM	CALIFORNICUM			H	M242C	EP
RADULA	BOLANDERI			H	M242C	EP
RADULA	COMPLANATA			H	M242C	EP
SCAPANIA	BOLANDERI			H	M242C	EP
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M242C	HD
CALYPOGEIA	AZUREA			H	M242C	HD
CEPHALOZIA	LUNULIFOLIA			H	M242C	HD
CEPHALOZIA	PLENICEPS			H	M242C	HD
LOPHOZIA	INCISA			H	M242C	HD
LOPHOZIA	LONGIDENS			H	M242C	HD
LOPHOZIA	LONGIDENS	S	LONGIDENS	H	M242C	HD
PELLIA	ENDIVIIFOLIA			H	M242C	HD
ANEURA	PINGUIS			H	M242C	PE
CALYPOGEIA	SPHAGNICOLA			H	M242C	PE
CEPHALOZIA	BICUSPIDATA			H	M242C	PE
CHILOSCYPHUS	PALLESCENS			H	M242C	PE
DIPLOPHYLLUM	TAXIFOLIUM			H	M242C	PE
GYMNOMITRION	CONCINNATUM			H	M242C	PE
LOPHOCOLEA	CUSPIDATA			H	M242C	PE
LOPHOZIA	ALPESTRIS			H	M242C	PE
LOPHOZIA	LATIFOLIA			H	M242C	PE
LOPHOZIA	LONGIFLORA			H	M242C	PE
LOPHOZIA	VENTRICOSA			H	M242C	PE
SCAPANIA	IRRIGUA			H	M242C	PE
SCAPANIA	PALUDOSA			H	M242C	PE
ANASTROPHYLLUM	MINUTUM			H	M242C	RO
ANTHELIA	JULACEA			H	M242C	RO
BARBILOPHOZIA	ATTENUATA			H	M242C	RO
BARBILOPHOZIA	BARBATA			H	M242C	RO
BARBILOPHOZIA	FLOERKEI			H	M242C	RO
BARBILOPHOZIA	HATCHERI			H	M242C	RO
CEPHALOZIELLA	DIVARICATA			H	M242C	RO
CEPHALOZIELLA	DIVARICATA	V	SCABRA	H	M242C	RO
DIPLOPHYLLUM	TAXIFOLIUM			H	M242C	RO
DOUINIA	OVATA			H	M242C	RO
GYMNOMITRION	OBTUSUM			H	M242C	RO
JAMESONIELLA	AUTUMNALIS			H	M242C	RO
JUNGERMANNIA	EVANSII			H	M242C	RO
LOPHOZIA	HETEROCOLPOS			H	M242C	RO
LOPHOZIA	OPACIFOLIA			H	M242C	RO
MARSUPELLA	BREVISSIMA			H	M242C	RO
MARSUPELLA	EMARGINATA			H	M242C	RO
PLAGIOCHILA	PORELLOIDES			H	M242C	RO
PORELLA	BOLANDERI			H	M242C	RO
PORELLA	CORDAEANA			H	M242C	RO
PORELLA	NAVICULARIS			H	M242C	RO
PORELLA	ROELLII			H	M242C	RO
RICCIA	BEYRICHIANA			H	M242C	RO
RICCIA	SOROCARPA			H	M242C	RO
SCAPANIA	NEMOROSA			H	M242C	RO
SCAPANIA	UNDULATA			H	M242C	RO
SCAPANIA	UNDULATA	V	OAKESII	H	M242C	RO
CALYPOGEIA	MUELLERIANA			H	M242C	RW
CEPHALOZIA	BICUSPIDATA			H	M242C	RW
CEPHALOZIA	BICUSPIDATA	S	AMBIGUA	H	M242C	RW
CHILOSCYPHUS	PALLESCENS			H	M242C	RW
CHILOSCYPHUS	PALLESCENS	V	FRAGILIS	H	M242C	RW
CHILOSCYPHUS	POLYANTHOS			H	M242C	RW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
CHILOSCYPHUS	POLYANTHOS	V	POLYANTHOS	H	M242C	RW
JUNGERMANNIA	ATROVIRENS			H	M242C	[illegible]
JUNGERMANNIA	ATROVIRENS			H	M242C	[illegible]
JUNGERMANNIA	EXSERTIFOLIA			H	M242C	[illegible]
JUNGERMANNIA	EXSERTIFOLIA	S	CORDIFOLIA	H	M242C	RW
JUNGERMANNIA	LEIANTHA			H	M242C	RW
JUNGERMANNIA	OBOVATA			H	M242C	RW
JUNGERMANNIA	PUMILA			H	M242C	RW
JUNGERMANNIA	SPHAEROCARPA			H	M242C	RW
LOPHOZIA	INCISA			H	M242C	RW
LOPHOZIA	VENTRICOSA			H	M242C	RW
MARCHANTIA	POLYMORPHA			H	M242C	RW
PELLIA	ENDIVIIFOLIA			H	M242C	RW
PELLIA	EPIPHYLLA			H	M242C	RW
PLAGIOCHILA	PORELLOIDES			H	M242C	RW
PORELLA	CORDAEANA			H	M242C	RW
SCAPANIA	AMERICANA			H	M242C	RW
SCAPANIA	CURTA			H	M242C	RW
SCAPANIA	IRRIGUA			H	M242C	RW
SCAPANIA	UMBROSA			H	M242C	RW
ANEURA	PINGUIS			H	M242C	SD
ANTHELIA	JULACEA			H	M242C	SD
ANTHELIA	JURATZKANA			H	M242C	SD
ATHALAMIA	HYALINA			H	M242C	SD
BARBILOPHOZIA	HATCHERI			H	M242C	SD
BARBILOPHOZIA	LYCOPODIOIDES			H	M242C	SD
BARBILOPHOZIA	QUADRILOBA	V	QUADRILOBA	H	M242C	SD
CALYPOGEIA	MUELLERIANA	S	MUELLERIANA	H	M242C	SD
CEPHALOZIELLA	DIVARICATA	V	DIVARICATA	H	M242C	[illegible]
DIPLOPHYLLUM	OBTUSIFOLIUM			H	M242C	[illegible]
DIPLOPHYLLUM	TAXIFOLIUM			H	M242C	[illegible]
LOPHOZIA	ALPESTRIS			H	M242C	SD
LOPHOZIA	COLLARIS			H	M242C	SD
LOPHOZIA	GILLMANII	V	GILLMANII	H	M242C	SD
PORELLA	CORDAEANA			H	M242C	SD
PREISSIA	QUADRATA			H	M242C	SD
RICCIA	BEYRICHIANA			H	M242C	SD
RICCIA	GLAUCA			H	M242C	SD
RICCIA	SOROCARPA			H	M242C	SD
SCAPANIA	SUBALPINA			H	M242C	SD
SCAPANIA	UNDULATA			H	M242C	SD
SPHAEROCARPOS	TEXANUS			H	M242C	SD
TARGIONIA	HYPOPHYLLA			H	M242C	SD
ANTHELIA	JURATZKANA			H	M242C	SW
ASTERELLA	LINDENBERGIANA			H	M242C	SW
ASTERELLA	LUDWIGII			H	M242C	SW
BARBILOPHOZIA	BARBATA			H	M242C	SW
BLASIA	PUSILLA			H	M242C	SW
BLEPHAROSTOMA	TRICHOPHYLLUM			H	M242C	SW
CALYPOGEIA	FISSA			H	M242C	SW
CALYPOGEIA	FISSA	S	NEOGAEA	H	M242C	SW
CALYPOGEIA	SUECICA			H	M242C	SW
CEPHALOZIA	BICUSPIDATA			H	M242C	SW
CEPHALOZIA	CONNIVENS			H	M242C	SW
CEPHALOZIELLA	ELACHISTA			H	M242C	SW
CHILOSCYPHUS	PALLESCENS			H	M242C	[illegible]
CHILOSCYPHUS	POLYANTHOS	V	POLYANTHOS	H	M242C	[illegible]
CONOCEPHALUM	CONICUM			H	M242C	SW
FOSSOMBRONIA	FOVEOLATA			H	M242C	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
GEOCALYX	GRAVEOLENS			H	M242C	SW
GYMNOCOLEA	INFLATA			H	M242C	SW
JUNGERMANNIA	LEIANTHA			H	M242C	SW
JUNGERMANNIA	PUMILA			H	M242C	SW
JUNGERMANNIA	RUBRA			H	M242C	SW
JUNGERMANNIA	SPHAEROCARPA			H	M242C	SW
LOPHOCOLEA	BIDENTATA			H	M242C	SW
LOPHOZIA	ALPESTRIS			H	M242C	SW
LOPHOZIA	EXCISA			H	M242C	SW
LOPHOZIA	INCISA			H	M242C	SW
LOPHOZIA	VENTRICOSA			H	M242C	SW
LOPHOZIA	WENZELII			H	M242C	SW
MANNIA	TRIANDRA			H	M242C	SW
MARCHANTIA	POLYMORPHA			H	M242C	SW
MARSUPELLA	EMARGINATA			H	M242C	SW
MOERCKIA	BLYTTII			H	M242C	SW
PELLIA	ENDIVIIFOLIA			H	M242C	SW
PELLIA	EPIPHYLLA			H	M242C	SW
PELLIA	NEESIANA			H	M242C	SW
PLAGIOCHILA	PORELLOIDES			H	M242C	SW
PORELLA	PLATYPHYLLOIDEA			H	M242C	SW
REBOULIA	HEMISPHAERICA			H	M242C	SW
RICCARDIA	LATIFRONS			H	M242C	SW
RICCIA	CAVERNOSA			H	M242C	SW
RICCIA	FROSTII			H	M242C	SW
RICCIA	TRICHOCARPA			H	M242C	SW
SCAPANIA	AMERICANA			H	M242C	SW
SCAPANIA	CURTA			H	M242C	SW
SCAPANIA	SUBALPINA			H	M242C	SW
DICHELYMA	UNCINATUM			M	M242C	AQ
DREPANOCLADUS	ADUNCUS			M	M242C	AQ
FONTINALIS	ANTIPYRETICA			M	M242C	AQ
FONTINALIS	ANTIPYRETICA	V	ANTIPYRETICA	M	M242C	AQ
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M242C	AQ
FONTINALIS	HYPNOIDES	V	DURIAEI	M	M242C	AQ
FONTINALIS	NEOMEXICANA			M	M242C	AQ
SCOULERIA	AQUATICA			M	M242C	AQ
SCOULERIA	MARGINATA			M	M242C	AQ
WARNSTORFIA	EXANNULATA			M	M242C	AQ
AMBLYSTEGIUM	SERPENS			M	M242C	DW
AULACOMNIUM	ANDROGYNUM			M	M242C	DW
AULACOMNIUM	PALUSTRE			M	M242C	DW
BRACHYTHECIUM	STARKEI			M	M242C	DW
BRACHYTHECIUM	VELUTINUM			M	M242C	DW
BUXBAUMIA	APHYLLA			M	M242C	DW
BUXBAUMIA	PIPERI			M	M242C	DW
BUXBAUMIA	VIRIDIS			M	M242C	DW
DICRANOWEISIA	CIRRATA			M	M242C	DW
DICRANOWEISIA	CRISPULA			M	M242C	DW
DICRANUM	FUSCESCENS			M	M242C	DW
DICRANUM	SCOPARIUM			M	M242C	DW
DICRANUM	TAURICUM			M	M242C	DW
DICRANUM	VIRIDE			M	M242C	DW
HERZOGIELLA	SELIGERI			M	M242C	DW
HYPNUM	CIRCINALE			M	M242C	DW
HYPNUM	PALLESCENS			M	M242C	DW
HYPNUM	SUBIMPONENS			M	M242C	DW
ONCOPHORUS	WAHLENBERGII			M	M242C	DW
PLAGIOTHECIUM	LAETUM			M	M242C	DW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
PLAGIOTHECIUM	UNDULATUM			M	M242C	DW
POHLIA	ANNOTINA			M	M242C	
SANIONIA	UNCINATA			M	M242C	
TETRAPHIS	PELLUCIDA			M	M242C	DW
CLAOPODIUM	CRISPIFOLIUM			M	M242C	EP
DENDROALSIA	ABIETINA			M	M242C	EP
DICRANUM	FUSCESCENS			M	M242C	EP
EURHYNCHIUM	PULCHELLUM	V	PULCHELLUM	M	M242C	EP
FABRONIA	PUSILLA			M	M242C	EP
HOMALOTHECIUM	FULGESCENS			M	M242C	EP
HOMALOTHECIUM	NUTTALLII			M	M242C	EP
METANECKERA	MENZIESII			M	M242C	EP
ORTHOTRICHUM	AFFINE			M	M242C	EP
ORTHOTRICHUM	ANOMALUM			M	M242C	EP
ORTHOTRICHUM	CONSIMILE			M	M242C	EP
ORTHOTRICHUM	LYELLII			M	M242C	EP
ORTHOTRICHUM	OBTUSIFOLIUM			M	M242C	EP
ORTHOTRICHUM	PUMILUM			M	M242C	EP
ORTHOTRICHUM	RIVULARE			M	M242C	EP
ORTHOTRICHUM	SPECIOSUM			M	M242C	EP
PSEUDOLESKEA	STENOPHYLLA			M	M242C	EP
PTEROGONIUM	GRACILE			M	M242C	EP
SCLEROPODIUM	CESPITANS			M	M242C	EP
SCLEROPODIUM	CESPITANS	V	SUBLAEVE	M	M242C	EP
TORTULA	LAEVIPILA			M	M242C	EP
TORTULA	LAEVIPILA	V	LAEVIPILA	M	M242C	EP
TORTULA	PRINCEPS			M	M242C	EP
TORTULA	RURALIS			M	M242C	EP
BARTRAMIA	ITHYPHYLLA			M	M242C	
BRACHYTHECIUM	ALBICANS			M	M242C	
BRACHYTHECIUM	HOLZINGERI			M	M242C	HD
BRACHYTHECIUM	HYLOTAPETUM			M	M242C	HD
BRACHYTHECIUM	LEIBERGII			M	M242C	HD
BRACHYTHECIUM	SALEBROSUM			M	M242C	HD
BRACHYTHECIUM	STARKEI			M	M242C	HD
BRYUM	CAPILLARE			M	M242C	HD
DICRANUM	BONJEANII			M	M242C	HD
DICRANUM	HOWELLII			M	M242C	HD
DICRANUM	PALLIDISETUM			M	M242C	HD
DICRANUM	SCOPARIUM			M	M242C	HD
EURHYNCHIUM	OREGANUM			M	M242C	HD
HYLOCOMIUM	SPLENDENS			M	M242C	HD
LEUCOLEPIS	ACANTHONEURON			M	M242C	HD
PLAGIOMNIUM	VENUSTUM			M	M242C	HD
PLEUROZIUM	SCHREBERI			M	M242C	HD
POHLIA	NUTANS			M	M242C	HD
POLYTRICHUM	LYALLII			M	M242C	HD
PSEUDOTAXIPHYLLUM	ELEGANS			M	M242C	HD
RHIZOMNIUM	GLABRESCENS			M	M242C	HD
RHYTIDIADELPHUS	LOREUS			M	M242C	HD
RHYTIDIADELPHUS	TRIQUETRUS			M	M242C	HD
RHYTIDIOPSIS	ROBUSTA			M	M242C	HD
ROELLIA	ROELLII			M	M242C	HD
TRACHYBRYUM	MEGAPTILUM			M	M242C	HD
AULACOMNIUM	PALUSTRE			M	M242C	PE
CALLIERGON	STRAMINEUM			M	M242C	
CAMPYLIUM	POLYGAMUM			M	M242C	
DREPANOCLADUS	ADUNCUS			M	M242C	PE
HELODIUM	BLANDOWII			M	M242C	PE

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
LEPTODICTYUM	RIPARIUM			M	M242C	PE
MEESIA	TRIQUETRA			M	M242C	PE
RHIZOMNIUM	PSEUDOPUNCTATUM			M	M242C	PE
SPHAGNUM	CONTORTUM			M	M242C	PE
SPHAGNUM	FUSCUM			M	M242C	PE
SPHAGNUM	GIRGENSOHNII			M	M242C	PE
SPHAGNUM	LESCURII			M	M242C	PE
SPHAGNUM	MENDOCINUM			M	M242C	PE
SPHAGNUM	PALUSTRE			M	M242C	PE
SPHAGNUM	RUSSOWII			M	M242C	PE
SPHAGNUM	SQUARROSUM			M	M242C	PE
SPHAGNUM	SUBSECUNDUM			M	M242C	PE
SPHAGNUM	SUBSECUNDUM	V	SUBSECUNDUM	M	M242C	PE
SPHAGNUM	TERES			M	M242C	PE
SPHAGNUM	WARNSTORFII			M	M242C	PE
SPLACHNUM	AMPULLACEUM			M	M242C	PE
TOMENTHYPNUM	NITENS			M	M242C	PE
CONARDIA	COMPACTA			M	M242C	RC
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	M242C	RC
GRIMMIA	TRICHOPHYLLA			M	M242C	RC
GYMNOSTOMUM	AERUGINOSUM			M	M242C	RC
ORTHOTRICHUM	LAEVIGATUM			M	M242C	RC
PTYCHOMITRIUM	GARDNERI			M	M242C	RC
SCHISTIDIUM	APOCARPUM			M	M242C	RC
SCHISTIDIUM	RIVULARE			M	M242C	RC
AMPHIDIUM	CALIFORNICUM			M	M242C	RO
AMPHIDIUM	LAPPONICUM			M	M242C	RO
AMPHIDIUM	MOUGEOTII			M	M242C	RO
ANACOLIA	MENZIESII			M	M242C	RO
ANDREAEA	NIVALIS			M	M242C	RO
ANDREAEA	RUPESTRIS			M	M242C	RO
ANTITRICHIA	CALIFORNICA			M	M242C	RO
ANTITRICHIA	CURTIPENDULA			M	M242C	RO
ARCTOA	FULVELLA			M	M242C	RO
BARTRAMIA	ITHYPHYLLA			M	M242C	RO
BARTRAMIA	POMIFORMIS			M	M242C	RO
BLINDIA	ACUTA			M	M242C	RO
BRACHYTHECIUM	COLLINUM			M	M242C	RO
BRACHYTHECIUM	LEIBERGII			M	M242C	RO
BRACHYTHECIUM	PLUMOSUM			M	M242C	RO
BRACHYTHECIUM	VELUTINUM			M	M242C	RO
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M242C	RO
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M242C	RO
BRYUM	DICHOTOMUM			M	M242C	RO
BRYUM	GEMMIPARUM			M	M242C	RO
BRYUM	MINIATUM			M	M242C	RO
BRYUM	PSEUDOTRIQUETRUM			M	M242C	RO
CERATODON	PURPUREUS			M	M242C	RO
CLAOPODIUM	BOLANDERI			M	M242C	RO
COSCINODON	CALYPTRATUS			M	M242C	RO
CRATONEURON	FILICINUM			M	M242C	RO
DICRANELLA	PALUSTRIS			M	M242C	RO
DICRANOWEISIA	CIRRATA			M	M242C	RO
DICRANOWEISIA	CRISPULA			M	M242C	RO
DIDYMODON	VINEALIS			M	M242C	RO
DIDYMODON	VINEALIS	V	BRACHYPHYLLUS	M	M242C	RO
DIDYMODON	VINEALIS	V	RUBIGINOSUS	M	M242C	RO
DIDYMODON	VINEALIS	V	VINEALIS	M	M242C	RO
DITRICHUM	FLEXICAULE			M	M242C	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
DRYPTODON	PATENS			M	M242C	R[illegible]
ENCALYPTA	RHAPTOCARPA			M	M242C	[illegible]
ENCALYPTA	VULGARIS			M	M242C	R[illegible]
GRIMMIA	AFFINIS			M	M242C	RO
GRIMMIA	ANODON			M	M242C	RO
GRIMMIA	ANOMALA			M	M242C	RO
GRIMMIA	DONNIANA			M	M242C	RO
GRIMMIA	INCURVA			M	M242C	RO
GRIMMIA	LAEVIGATA			M	M242C	RO
GRIMMIA	MONTANA			M	M242C	RO
GRIMMIA	PULVINATA			M	M242C	RO
GRIMMIA	PULVINATA	V	AFRICANA	M	M242C	RO
GRIMMIA	TENERRIMA			M	M242C	RO
GRIMMIA	TORQUATA			M	M242C	RO
GRIMMIA	TRICHOPHYLLA			M	M242C	RO
GRIMMIA	TRICHOPHYLLA	V	TENUIS	M	M242C	RO
HEDWIGIA	CILIATA			M	M242C	RO
HETEROCLADIUM	DIMORPHUM			M	M242C	RO
HETEROCLADIUM	PROCURRENS			M	M242C	RO
HOMALOTHECIUM	AENEUM			M	M242C	RO
HOMALOTHECIUM	FULGESCENS			M	M242C	RO
HOMALOTHECIUM	NEVADENSE			M	M242C	RO
HOMALOTHECIUM	NUTTALLII			M	M242C	RO
HOMALOTHECIUM	PINNATIFIDUM			M	M242C	RO
HYPNUM	DIECKII			M	M242C	RO
HYPNUM	REVOLUTUM			M	M242C	RO
HYPNUM	SUBIMPONENS			M	M242C	RO
HYPNUM	VAUCHERI			M	M242C	R[illegible]
ISOPTERYGIOPSIS	PULCHELLA			M	M242C	[illegible]
ISOTHECIUM	MYOSUROIDES			M	M242C	R[illegible]
KIAERIA	BLYTTII			M	M242C	RO
KIAERIA	FALCATA			M	M242C	RO
KIAERIA	STARKEI			M	M242C	RO
LEUCOLEPIS	ACANTHONEURON			M	M242C	RO
METANECKERA	MENZIESII			M	M242C	RO
MNIUM	BLYTTII			M	M242C	RO
ORTHOTRICHUM	CONSIMILE			M	M242C	RO
ORTHOTRICHUM	CUPULATUM			M	M242C	RO
ORTHOTRICHUM	HOLZINGERI			M	M242C	RO
ORTHOTRICHUM	LAEVIGATUM			M	M242C	RO
ORTHOTRICHUM	RUPESTRE			M	M242C	RO
ORTHOTRICHUM	STRIATUM			M	M242C	RO
PLAGIOMNIUM	VENUSTUM			M	M242C	RO
PLAGIOTHECIUM	DENTICULATUM			M	M242C	RO
PLATYDICTYA	JUNGERMANNIOIDES			M	M242C	RO
POLYTRICHUM	SPHAEROTHECIUM			M	M242C	RO
PSEUDOBRAUNIA	CALIFORNICA			M	M242C	RO
PSEUDOLESKEA	INCURVATA			M	M242C	RO
PSEUDOLESKEA	PATENS			M	M242C	RO
PSEUDOLESKEA	RADICOSA			M	M242C	RO
PSEUDOLESKEA	STENOPHYLLA			M	M242C	RO
PTERIGYNANDRUM	FILIFORME			M	M242C	RO
PTYCHOMITRIUM	GARDNERI			M	M242C	RO
RACOMITRIUM	ACICULARE			M	M242C	RO
RACOMITRIUM	BREVIPES			M	M242C	[illegible]
RACOMITRIUM	CANESCENS			M	M242C	[illegible]
RACOMITRIUM	DEPRESSUM			M	M242C	RO
RACOMITRIUM	ELONGATUM			M	M242C	RO
RACOMITRIUM	ERICOIDES			M	M242C	RO

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substra
RACOMITRIUM	HETEROSTICHUM			M	M242C	RO
RACOMITRIUM	LANUGINOSUM			M	M242C	RO
RACOMITRIUM	MACOUNII			M	M242C	RO
RACOMITRIUM	MICROCARPON			M	M242C	RO
RACOMITRIUM	MUTICUM			M	M242C	RO
RACOMITRIUM	OBESUM			M	M242C	RO
RACOMITRIUM	OCCIDENTALE			M	M242C	RO
RACOMITRIUM	SUDETICUM			M	M242C	RO
RACOMITRIUM	VARIUM			M	M242C	RO
RHIZOMNIUM	MAGNIFOLIUM			M	M242C	RO
RHYTIDIADELPHUS	TRIQUETRUS			M	M242C	RO
SCHISTIDIUM	AGASSIZII			M	M242C	RO
SCHISTIDIUM	APOCARPUM			M	M242C	RO
SCHISTIDIUM	HETEROPHYLLUM			M	M242C	RO
SCHISTIDIUM	RIVULARE			M	M242C	RO
THAMNOBRYUM	NECKEROIDES			M	M242C	RO
TIMMIA	AUSTRIACA			M	M242C	RO
TORTELLA	TORTUOSA			M	M242C	RO
TORTULA	NORVEGICA			M	M242C	RO
TORTULA	PAPILLOSISSIMA			M	M242C	RO
TORTULA	PRINCEPS			M	M242C	RO
TORTULA	RURALIS			M	M242C	RO
WEISSIA	CONTROVERSA			M	M242C	RO
BRACHYTHECIUM	FRIGIDUM			M	M242C	RW
FONTINALIS	ANTIPYRETICA			M	M242C	RW
FONTINALIS	ANTIPYRETICA	V	OREGONENSIS	M	M242C	RW
FONTINALIS	HOWELLII			M	M242C	RW
FONTINALIS	NEOMEXICANA			M	M242C	RW
GRIMMIA	PULVINATA			M	M242C	RW
HYGROHYPNUM	BESTII			M	M242C	RW
HYGROHYPNUM	LURIDUM			M	M242C	RW
HYGROHYPNUM	MOLLE			M	M242C	RW
HYGROHYPNUM	OCHRACEUM			M	M242C	RW
HYGROHYPNUM	SMITHII			M	M242C	RW
ISOPTERYGIOPSIS	PULCHELLA			M	M242C	RW
KIAERIA	STARKEI			M	M242C	RW
RACOMITRIUM	ACICULARE			M	M242C	RW
RACOMITRIUM	SUDETICUM			M	M242C	RW
SCLEROPODIUM	OBTUSIFOLIUM			M	M242C	RW
ARCTOA	FULVELLA			M	M242C	SD
ATRICHUM	HAUSSKNECHTII			M	M242C	SD
BARBULA	CONVOLUTA			M	M242C	SD
BARBULA	EUSTEGIA			M	M242C	SD
BRACHYTHECIUM	ALBICANS			M	M242C	SD
BRACHYTHECIUM	ERYTHRORRHIZON			M	M242C	SD
BRACHYTHECIUM	NELSONII			M	M242C	SD
BRACHYTHECIUM	REFLEXUM	V	PACIFICUM	M	M242C	SD
BRACHYTHECIUM	VELUTINUM			M	M242C	SD
BRACHYTHECIUM	VELUTINUM	V	VENUSTUM	M	M242C	SD
BRUCHIA	BOLANDERI			M	M242C	SD
BRYOERYTHROPHYLLUM	RECURVIROSTRE			M	M242C	SD
BRYUM	ARGENTEUM			M	M242C	SD
BRYUM	CAESPITICIUM			M	M242C	SD
BRYUM	CAPILLARE			M	M242C	SD
BRYUM	LISAE	V	CUSPIDATUM	M	M242C	SD
BRYUM	LONCHOCAULON			M	M242C	SD
BRYUM	MUEHLENBECKII			M	M242C	SD
BRYUM	PALLENS			M	M242C	SD
BRYUM	PALLESCENS			M	M242C	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
CERATODON	PURPUREUS			M	M242C	SD
DESMATODON	LATIFOLIUS			M	M242C	[illegible]
DICRANOWEISIA	CIRRATA			M	M242C	[illegible]
DIDYMODON	VINEALIS			M	M242C	[illegible]
DIDYMODON	VINEALIS	V	LURIDUS	M	M242C	SD
DISTICHIUM	CAPILLACEUM			M	M242C	SD
DITRICHUM	MONTANUM			M	M242C	SD
ENCALYPTA	CILIATA			M	M242C	SD
ENCALYPTA	RHAPTOCARPA			M	M242C	SD
ENCALYPTA	VULGARIS			M	M242C	SD
FUNARIA	MUHLENBERGII			M	M242C	SD
HOMALOTHECIUM	PINNATIFIDUM			M	M242C	SD
HYMENOSTYLIUM	RECURVIROSTRE			M	M242C	SD
ISOTHECIUM	CRISTATUM			M	M242C	SD
LEPTOBRYUM	PYRIFORME			M	M242C	SD
MNIUM	LYCOPODIOIDES			M	M242C	SD
MNIUM	SPINULOSUM			M	M242C	SD
OLIGOTRICHUM	HERCYNICUM			M	M242C	SD
OLIGOTRICHUM	PARALLELUM			M	M242C	SD
ONCOPHORUS	VIRENS			M	M242C	SD
ONCOPHORUS	WAHLENBERGII			M	M242C	SD
PHASCUM	CUSPIDATUM			M	M242C	SD
PHILONOTIS	CAPILLARIS			M	M242C	SD
PHYSCOMITRIUM	PYRIFORME			M	M242C	SD
PLEURIDIUM	SUBULATUM			M	M242C	SD
POHLIA	BOLANDERI			M	M242C	SD
POHLIA	CRUDA			M	M242C	SD
POHLIA	DRUMMONDII			M	M242C	SD
POHLIA	ERECTA			M	M242C	[illegible]
POHLIA	LUDWIGII			M	M242C	[illegible]
POHLIA	NUTANS			M	M242C	[illegible]
POLYTRICHASTRUM	ALPINUM			M	M242C	SD
POLYTRICHUM	COMMUNE			M	M242C	SD
POLYTRICHUM	COMMUNE	V	PERIGONIALE	M	M242C	SD
POLYTRICHUM	JUNIPERINUM			M	M242C	SD
POLYTRICHUM	LONGISETUM			M	M242C	SD
POLYTRICHUM	LYALLII			M	M242C	SD
POLYTRICHUM	PILIFERUM			M	M242C	SD
POLYTRICHUM	SEXANGULARE			M	M242C	SD
PSEUDOCROSSIDIUM	REVOLUTUM			M	M242C	SD
PTERIGYNANDRUM	FILIFORME			M	M242C	SD
RHYTIDIADELPHUS	SQUARROSUS			M	M242C	SD
RHYTIDIOPSIS	ROBUSTA			M	M242C	SD
SCLEROPODIUM	TOURETII			M	M242C	SD
SCLEROPODIUM	TOURETII	V	COLPOPHYLLUM	M	M242C	SD
TIMMIELLA	ANOMALA			M	M242C	SD
TIMMIELLA	CRASSINERVIS			M	M242C	SD
TORTULA	BARTRAMII			M	M242C	SD
TORTULA	CANINERVIS			M	M242C	SD
TORTULA	MUCRONIFOLIA			M	M242C	SD
TORTULA	MURALIS			M	M242C	SD
TORTULA	PRINCEPS			M	M242C	SD
TORTULA	RURALIS			M	M242C	SD
AMBLYSTEGIUM	SERPENS			M	M242C	SW
AMBLYSTEGIUM	SERPENS	V	JURATZKANUM	M	M242C	SW
AULACOMNIUM	PALUSTRE			M	M242C	[illegible]
BRACHYTHECIUM	ASPERRIMUM			M	M242C	[illegible]
BRACHYTHECIUM	FRIGIDUM			M	M242C	SW
BRACHYTHECIUM	NELSONII			M	M242C	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
BRACHYTHECIUM	RIVULARE			M	M242C	SW
BRUCHIA	BOLANDERI			M	M242C	SW
BRYUM	ALGOVICUM			M	M242C	SW
BRYUM	DICHOTOMUM			M	M242C	SW
BRYUM	GEMMIPARUM			M	M242C	SW
BRYUM	MEESIOIDES			M	M242C	SW
BRYUM	PALLESCENS			M	M242C	SW
BRYUM	PSEUDOTRIQUETRUM			M	M242C	SW
BRYUM	WEIGELII			M	M242C	SW
CALLIERGON	CORDIFOLIUM			M	M242C	SW
CAMPYLIUM	POLYGAMUM			M	M242C	SW
CERATODON	PURPUREUS			M	M242C	SW
DICHODONTIUM	OLYMPICUM			M	M242C	SW
DICHODONTIUM	PELLUCIDUM			M	M242C	SW
DICRANELLA	HETEROMALLA			M	M242C	SW
DREPANOCLADUS	ADUNCUS			M	M242C	SW
DREPANOCLADUS	CAPILLIFOLIUS			M	M242C	SW
ENCALYPTA	CILIATA			M	M242C	SW
EURHYNCHIUM	PRAELONGUM			M	M242C	SW
FISSIDENS	ADIANTHOIDES			M	M242C	SW
FISSIDENS	BRYOIDES			M	M242C	SW
FISSIDENS	TAXIFOLIUS			M	M242C	SW
FISSIDENS	VENTRICOSUS			M	M242C	SW
FUNARIA	HYGROMETRICA			M	M242C	SW
HYGROHYPNUM	OCHRACEUM			M	M242C	SW
HYPNUM	DIECKII			M	M242C	SW
HYPNUM	LINDBERGII			M	M242C	SW
KIAERIA	FALCATA			M	M242C	SW
LEPTOBRYUM	PYRIFORME			M	M242C	SW
LEPTODICTYUM	HUMILE			M	M242C	SW
LEPTODICTYUM	RIPARIUM			M	M242C	SW
MNIUM	MARGINATUM			M	M242C	SW
OLIGOTRICHUM	ALIGERUM			M	M242C	SW
OLIGOTRICHUM	HERCYNICUM			M	M242C	SW
PALUSTRIELLA	COMMUTATA			M	M242C	SW
PHILONOTIS	FONTANA			M	M242C	SW
PHILONOTIS	FONTANA	V	AMERICANA	M	M242C	SW
PHILONOTIS	FONTANA	V	CAESPITOSA	M	M242C	SW
PHILONOTIS	FONTANA	V	FONTANA	M	M242C	SW
PHILONOTIS	FONTANA	V	PUMILA	M	M242C	SW
PLAGIOMNIUM	INSIGNE			M	M242C	SW
PLAGIOMNIUM	MEDIUM			M	M242C	SW
PLAGIOMNIUM	ROSTRATUM			M	M242C	SW
POGONATUM	CONTORTUM			M	M242C	SW
POHLIA	ANNOTINA			M	M242C	SW
POHLIA	CAMPTOTRACHELA			M	M242C	SW
POHLIA	CRUDA			M	M242C	SW
POHLIA	DRUMMONDII			M	M242C	SW
POHLIA	FILUM			M	M242C	SW
POHLIA	NUTANS			M	M242C	SW
POHLIA	OBTUSIFOLIA			M	M242C	SW
POHLIA	PROLIGERA			M	M242C	SW
POHLIA	WAHLENBERGII			M	M242C	SW
POLYTRICHUM	LYALLII			M	M242C	SW
POLYTRICHUM	STRICTUM			M	M242C	SW
POROTRICHUM	BIGELOVII			M	M242C	SW
RHIZOMNIUM	MAGNIFOLIUM			M	M242C	SW
RHIZOMNIUM	PUNCTATUM			M	M242C	SW
SANIONIA	UNCINATA			M	M242C	SW

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrate
SCLEROPODIUM	OBTUSIFOLIUM			M	M242C	SW
TORTULA	RURALIS			M	M242C	S[illegible]
WARNSTORFIA	EXANNULATA			M	M242C	[illegible]
WARNSTORFIA	FLUITANS			M	M242C	S[illegible]

Sierran Steppe:

coniferous forest, alpine meadow

M261D Southern Cascades (OR)
M261G Modoc Plateau (OR)

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
EURHYNCHIUM	OREGANUM			M	M261D	HD
ORTHOTRICHUM	SPECIOSUM			M	M261D	
TORTULA	PRINCEPS			M	M261D	
TORTULA	RURALIS			M	M261D	SD

Genus	Species	Ext	Ext_name	M/H/A	Physprov	Substrat
CHILOSCYPHUS	PALLESCENS			H	M261G	SW
MARCHANTIA	POLYMORPHA			H	M261G	SW
DIDYMODON	VINEALIS			M	M261G	RO
DIDYMODON	VINEALIS	V	NICHOLSONII	M	M261G	SD
FONTINALIS	ANTIPYRETICA			M	M261G	RW
ORTHOTRICHUM	CUPULATUM			M	M261G	RO
ORTHOTRICHUM	LAEVIGATUM			M	M261G	RO
POLYTRICHUM	LONGISETUM			M	M261G	SD
SCHISTIDIUM	OCCIDENTALE			M	M261G	RW
TORTULA	PRINCEPS			M	M261G	SD

Appendix E. Taxa with five or fewer occurrences in the study area, categorized by endemic status, phytogeographical affinites, documented rariety or problem status. Several taxa with more than 5 occurrences were included if they were well documented as rare. There is overlap in some categories depending on the taxon.

1. ENDEMIC TAXA

A. Western North America

These taxa are confined to the area in or west of the Rocky Mountains. (Schofield 1984) Taxa with narrower endemism within the study area listed separately in Sections B, C, and D.

Liverworts:

Frullania franciscana
Porella bolanderi
Riccia trichocarpa
Sphaerocarpos hians

Hornworts:

Phaeoceros hallii

Mosses:

Amphidium californicum
Anacolia menziesii var. *baueri*
Brachythecium bolanderi
Brachythecium holzingeri
Bryum calobryoides
Bryum gemmascens
Bryum meesioides
Dendroalsia abietina
Dichodontium olympicum
Dicranum rhabdocarpum
Encalypta intermedia
Fissidens ventricosus
Homalothecium arenarium
Isothecium cristatum
Orthotrichum bolanderi
Orthotrichum praemorsum
Pohlia bolanderi
Pohlia bolanderi var. *seriata*
Pohlia tundrae
Porotrichum vancouveriense

Pseudoleskea atricha
Pseudoleskea incurvata var. *gigantea*
Pseudoleskea radicosa var. *denudata*
Racomitrium brevipes
Racomitrium depressum
Racomitrium obesum
Racomitrium varium
Schistidium cinclidodonteum
Tripterocladium leucocladulum

B. Endemic to Northern or Central Rocky Mountains

Mosses:

Pseudoleskea incruvata var. *temiretis*
Pseudoleskea radicosa var. *pallida*

C. Endemic to Dry Intermountain Region ("Dry Interior")

Mosses:

Orthotrichum hallii
Orthotrichum holzingeri
Pseudocrossidium obtusulum
Pottia nevadensis

D. Endemic to Columbia River Basin

Mosses:

Bryoerythrophyllum colulmbianum
Grimmia brittoniae

2. MEDITERRANEAN CLIMATE IN WESTERN NORTH AMERICA

These taxa are confined to winter wet- summer dry climatic areas of the world. (Schofield 1980, 1994) Those marked with an asterisk (*) are endemic to Western North America as listed in Section 1.

Hornworts:

Phaeoceros hallii *

Liverworts:

Douinia ovata
Frullania franciscana *
Lunularia cruciata (a greenhouse weed in the Columbia Basin)

Mosses:

Amphidium californicum *
Porotrichum vancouveriense
Claopodium whippleanum
Crumia latifolia
Dendroalsia abietina *
Desmatodon obtusifolius
Ditrichum ambiguum
Entosthodon fascicularis
Fissidens ventricosus *
Homalothecium arenarium *
Isothecium cristatum *
Racomitrium varium *
Timmiella crassinervis
Tortula laevipila
Tortula subulata

3. EASTERN NORTH AMERICA

These taxa are widespread east of the Rocky Mountains, and many have a circumpolar distribution. They occur mostly along the eastern edge of the Columbia Basin, at the western edge of their range. (Schofield 1980)

Liverworts:

Blepharostoma trichophyllum ssp. *brevirete*
Calypogeia fissa ssp. *neogaea*
Calypogeia integristipula
Lophocolea bidentata
Pedinophyllum interruptum
Porella platyphylloidea

Mosses:

Amblystegium varium
Atrichum angustatum
Atrichum crispum
Barbula unguiculata
Brachythecium campestre
Brachythecium digastrum
Brachythecium oxycladon
Brachythecium populeum
Callicladium haldanianum
Campylium hispidulum
Climacium americanum
Cyrto-hypnum minutulum
Dicranella schreberiana var. *robusta*
Dicranum montanum
Dicranum viride
Herzogiella turfacea
Hygroamblystegium noterophilum
Hygroamblystegium tenax
Hypum imponens
Macrocoma sullivantii
Orthotrichum pumilum
Paraleucobryum longifolium
Philonotis fontana var. *caespitosa*
Philonotis muehlenbergii
Physcomitrium hookeri
Plagiomnium ciliare
Plagiomnium cuspidatum
Platygyrium repens
Pohlia elongata

Pohlia longicolla
Thuidium delicatulum
Tortella humilis
Tortula papillosa

4. SOUTHERN ARID AFFINITIES

Taxa of more arid austral climates. (Schofield 1980)

Liverworts:

Fossombronia longiseta
Mannia fragrans
Sphaerocarpos texanus

Mosses:

Brachythecium fendleri
Desmatodon plinthobius
Grimmia plagiopodia
Grimmia poecilostoma
Jaffueliobryum raui
Mnium arizonicum
Orthotrichum flowersii
Physcomitrium pygmaeum
Tortula bartramii

5. CIRCUMPOLAR

Taxa with continuous arctic, boreal or north temperate distributions, excluding those cited for Eastern North America in Section 3. This list also excludes taxa with discontinuous distributions, which are cited in Section 6.

Liverworts:

Anthelia juratzkana
Apometzgeria pubescens
Asterella gracilis
Asterella lindenbergiana
Asterella saccata
Barbilophozia attenuata
Barbilophozia floerkei
Barbilophozia kunzeana
Barbilophozia quadriloba var. *quadriloba*
Bazzania tricrenata
Calypogeia neesiana
Calypogeia sphagnicola
Cephalozia catenulata
Cephalozia connivens
Cephaloziella elachista
Fossombronia foveolata
Gymnocolea inflata
Harpanthus flotovianus
Hygrobiella laxifolia
Jungermannia evansii
Jungermannia hyalina
Jungermannia obovata
Lophozia badensis
Lophozia latifolia
Lophozia opacifolia
Marsupella sphacelata
Marsupella ustulata
Metzgeria conjugata
Moerckia blyttii
Nardia breidleri
Nardia compressa
Nardia geoscyphus
Nardia scalaris
Pleuroclada albescens
Ptilidium ciliare
Riccardia chamedryfolia
Riccia cavernosa

Riccia fluitans
Riccia frostii
Riccia glauca
Scapania cuspiduligera var. *cuspiduligera*
Scapania paludicola
Tritomaria polita
Tritomaria quinquedentata var. *quinquedentata*

Mosses:

Aloina brevirostris
Amblyodon dealbatus
Arctoa fulvella
Brachythecium reflexum
Brachythecium turgidum
Bryum arcticum
Bryum calophyllum
Bryum cyclophyllum
Bryum pallens
Bryum schleicheri
Calliergon richardsonii
Calliergon trifarium
Campylium halleri
Campylium hispidulum
Campylium stellatum var. *protensum*
Catoscopium nigritum
Cirriphyllum cirrosum
Conostomum tetragonum
Desmatodon cernuus
Desmatodon leucostoma
Desmatodon systylium
Dicranella heteromalla
Dicranella palustris
Dicranella rufescens
Dicranella schreberiana
Dicranum acutifolium
Dicranum elongatum
Dicranum fragilifolium
Dicranum majus
Dicranum spadiceum
Didymodon asperifolius
Didymodon rigidulus var. *icmadophilus*
Didymodon tophaceus
Drepanocladus aduncus var. *polycarpus*
Drepanocladus fluitans

Eucladium verticillatum
Fissidens fontanus
Fissidens grandifrons
Fontinalis antipyretica var. *gigantea*
Grimmia trichophylla
Hypnum bambergeri
Hypnum pallescens
Hypnum pratense
Hypnum recurvatum
Hypnum vaucheri
Limprichtia revolvens
Meesia longiseta
Meesia triquetra
Meesia uliginosa
Myurella julacea
Myurella tenerrima
Orthothecium chryseum
Orthotrichum pylaisii
Orthotrichum speciosum
Oxystegus tenuirostris
Paludella squarrosa
Palustriella decipiens
Philonotis marchica
Plagiobryum demissum
Plagiobryum zieri
Plagiomnium drummondii
Plagiopus oederiana
Plagiothecium cavifolium
Platyhypnidium riparioides
Pogonatum dentatum
Pohlia atropurpurea
Pohlia bolanderi var. *seriata*
Pohlia filum
Pohlia ludwigii
Polytrichum commune var. *jensenii*
Polytrichum commune var. *perigoniale*
Polytrichum norvegicum
Pylaisiella polyantha
Racomitrium affine
Racomitrium fasciculare
Racomitrium lanuginosum
Rhytidium rugosum
Seligeria donniana
Scorpidium scorpioides
Sphagnum compactum

Sphagnum contortum
Sphagnum jensenii
Sphagnum platyphyllum
Sphagnum riparium
Sphagnum rubellum
Splachnum ampullaceum
Stegonia latifolia
Tayloria ligulata
Tayloria serrata
Tayloria splachnoides
Thuidium recognitum
Tortella arctica
Tortella tortelloides
Tortula muralis

6. DISJUNCT DISTRIBUTIONS

These taxa represent disjunct elements found in Western North America, artifacts of discontinuous distribution patterns. (Schofield 1969)

A. Bipolar

These taxa occur disjunctively at middle to high latitudes in both hemispheres and are absent in between.

Mosses:

Polytrichum formosum
Sphagnum palustre
Sphagnum subnitens

B. North Pacific

These taxa are distributed around the rim of the North Pacific Ocean, between Northwestern North America and Japan. Some of the taxa extend inland to the Rocky Mountains. (Schofield 1980)

Liverworts:

Blepharostoma arachnoideum
Frullania tamarisci ssp. *nisquallensis*
Radula bolanderi
Scapania bolanderi

Mosses:

Hypnum dieckii
Oligotrichum aligerum
Oligotrichum parallelum
Pogonatum contortum
Polytrichum sphaerothecium
Racomitrium muticum
Rhizomnium nudum

C. Humid Interior ("Maritime Extension", "Coastal Disjuncts")

These taxa are widely distributed west of the Cascade Mountains, and reappear in the Rocky Mountains. (Schofield 1976) Taxa with an asterisk (*) are endemic to Western North America, as listed in Section 1.

Mosses:

Dichodontium olympicum *
Ditrichum heteromallum

Hookeria lucens
Pseudotaxiphyllum elegans
Racomitrium brevipes *
Schistostega pennata
Tetraphis geniculata

D. Western North America and Western Europe

These taxa are mostly oceanic in distribution, with some occurring in alpine areas (Schofield 1969)

Mosses:

Bryum canariense
Bryum violaceum
Encalypta spathulata
Fabronia pusilla
Funaria muhlenbergii
Hygrohypnum alpinum
Hygrohypnum styriacum
Orthotrichum pulchellum
Orthotrichum striatum
Paraleucobryum enerve
Philonotis yezoana
Plagiothecium undulatum
Pottia lanceolata
Scleropodium cespitans
Tortula latifolia

E. Western North America and Eastern North America

Liverworts:

Diplophyllum obtusifolium

Mosses:

Buxbaumia aphylla
Heterocladium macounii
Neckera pennata
Pleuridium subulatum
Pohlia andalusica
Pohlia erecta
Tortella inclinata

F. Broken Circumpolar

These taxa occur in alpine areas within the Northern Hemisphere, but are absent from the arctic regions.

Liverworts:
Diplophylum albicans (suboceanic)

Mosses:

Andreaea nivalis
Buxbaumia aphylla
Campylopus fragilis
Crumia latifolia
Ditrichum ambiguum
Ditrichum pusillum
Encalypta affinis var. *macounii*
Hygrohypnum duriusclum
Hygrohypnum cochlearifolium
Hypnum procerrimum
Leskea polycarpa
Leskella nervosa
Pterogonium gracile
Schistidium pulvinatum
Schistidium tenerum

G. Circumalpine

Liverworts:

Anthelia julacea
Cephalozia leucantha
Gymnomitrion concinnatum
Gymnomitrion obtusum
Marsupella brevissima

Mosses:

Grimmia mollis
Oligotrichum hercynicum

7. TAXA CITED IN THE LITERATURE AS RARE IN NORTH AMERICA

Hepaticae:

Blepharostoma arachnoideum (Schofield 1969)
Cephalozia lacinulata (Schuster 1974)
Pedinophyllum interruptum (Schuster 1980)
Scapania apiculata (Schuster 1974)
Scapania gymnostomophila (Godfrey 1977)

Mosses:

Brachythecium bolanderi (Lawton 1965)
Bruchia bolanderi (Rushing 1986)
Bryum gemmilucens (Spence 1988)
Calliergon trifarium (Crum & Anderson 1981)
Didymodon vinealis var. *nicholsonii* (McIntosh 1986)
Encalypta spathulata (Horton 1983)
Entosthodon fascicularis (Lawton 1971)
Grimmia brittoniae (Herman 1969)
Grimmia incurva (Crum & Anderson (1981)
Grimmia plagiopodia (Crum & Anderson 1981)
Hamatocaulis vernicosus (Lawton 1971)
Hygrohypnum cochlearifolium (Grout 1931)
Macrocoma sulllivantii (Crum & Anderson 1981)
Orthotrichum flowersii (Vitt 1973)
Orthotrichum holzingeri (Vitt 1991)
Pohlia andalusica (Shaw1982)
Pohlia ludwigii (Shaw 1982)
Polytrichum sphaerothecium (Christy 1980)
Pottia lanceolata (Lawton 1971)
Pottia nevadensis (Lawton 1971)
Pseudocalliergon turgescens (Crum & Anderson 1981)
Pseudoleskea saviana (Lawton 1971)
Racomitrium aquaticum (Schofield 1976)
Splachnum sphaericum (Crum & Anderson 1981)
Tayloria acuminata (Crum & Anderson 1981)
Timmia norvegica (Crum & Anderson 1981)

8. PROBLEM TAXA

A. Species Concept Poorly Known

Liverworts and Hornworts:

Anthoceros fusiformis
Poorly segregated from *A. punctatus*. (Frye & Clark 1947) Widespread and common in western Oregon. (Sanborn 1929) *Aspiromitus* (syn. *Anthoceros*) is a good species but Schuster (1992) does not give range information.

Lophozia wenzelii
"Much confused with other species thus the range is poorly". In western North America reported from Alaska and the Yukon. (Schuster 1969)

Mosses:

Atrichum hausknechtii
"Paroicous specimens of western North America, Japan and Europe can be put into *Atrichum undulatum* var. *gracilisetum*". (Crum & Anderson 1981) May be rare in North America, need to determine the chromosome number for this species. (Noguchi & Osada 1960)

Brachythecium reflexum var. *pacificum*
Lawton (1971) states that *B. reflexum* is rare in the western US, and calls this species *B. reflexum* var. *pacificum*. According to Crum & Anderson (1981), this variety probably belongs to *B. reflexum*.

Bryum uliginosum
"A poorly known species". (Spence 1988)

Fissidens hallianus
Crum & Anderson (1981) does not feel that this taxon is genetically distinct from *Fissidens fontanus*.

Fissidens taxifolius
This is an eastern species, and most western material was referred by Pursell (1976) to *Fissidens aphelotaxifolius*.

Funaria americana
"Of scattered occurrence in the continental interior, especially in the prairie states". Lawton's wider range may be attributed to nomenclature confusion with *F. muhlenbergii*. (Crum & Anderson 1981)

Gymnostomum calcareum

Zander (1977) combined this taxon with *G. aeruginosum*, but it is still recognized by Anderson et al. (1990).

Orthotrichum palousense

There is no record of this species in Vitt (1973). it is probably an unpublished herbarium name.

Sphagnum recurvum

"The complete range is somewhat uncertain owing to a confusion of taxonomic concepts". (Crum 1984)

Rhytidadelphus subpinnatus

This taxon was placed in *R. squarrosus* by Anderson et al. (1990). Yet some feel that it is a valid species. (Koponen 1971, 1975) (Schofield 1991)

B. Taxa Needing Verification, And If Correct Would Represent A Significant Range Extension:

Liverworts:

Barbilophozia atlantica

A high elevation taxon in New England, Great Lakes and in the Hudson Bay area. (Schuster 1969) Unlikely in the Columbia River Basin. (Schofield pers. comm. 1995)

Cephalozia bicuspidata var. *ambigua*

An arctic-alpine species, the American distributions are poorly known, in Alaska and in a few high latitudes eastern locations. (Schuster 1974)

Cephalozia bicuspidata var. *lammersiana*

Poorly known in North America, Schuster (1974) is skeptical of the reports from western North America.

Cephalozia loitlesbergeri

Found in southern and middle California, disjunct in Texas, Oklahoma, Kansas, Arkansas, and Louisiana. (Schuster 1992)

Jungermannia gracillima

A holoarctic taxon restricted to the eastern half of the North American continent. (Schuster 1974)

Jungermannia polaris

Generally a rather rare and sporadic taxon with an arctic-alpine distribution, known from alpine British Columbia sites and doubtful from Alberta. (Schuster 1969) Doubtful in the Columbia River Basin. (Schofield pers. comm. 1995)

Odontoschisma sphagni

Rare and very localized in eastern North America with prior taxonomic problems. (Schuster 1974) Poorly documented in Western North America. (Schofield pers. comm. 1995)

Riccia campbelliana

A northern taxon restricted in range in eastern North America, so unknown from the west. (Schuster 1974)

Mosses:

Anomodon viticulosus

An eastern species. (Crum & Anderson 1981)

Bartramia stricta

Probably based on an unusual morph. of *B. ithyphylla*. (Schofield pers. comm. 1995)

Brachythecium calcareum

An endemic eastern North American taxon with disjuncts in Alaska, British Columbia and the Yukon Territory. (Ireland 1982)

Campylopus schimperi

Mostly in northern sections of eastern North America, the only western records are from Alaska, the Yukon, and the Queen Charlotte Islands. (Crum & Anderson 1981)

Cynodontium polycarpon

"May not even occur on this continent. We have seen only one North American collection correctly named ... from the Lake Superior region. (Crum & Anderson 1981)

Dicranum angustum

A circumpolar, subalpine-alpine taxon from Alaska and northern North America only. (Persson and Holmen 1961) (Persson 1952)

Didymodon fallax var. *reflexus*

A circumtemperate taxon, rare in British Columbia. (McIntosh 1986)

Drepanocladus brevifolius

An arctic-alpine taxon from the Rocky Mts. of Alberta, Alaska and Greenland. (Lawton 1971)

Grimmia pulvinata var. *africana*

This species "is extracted from *Grimmia orbicularis*, *Grimmia decipiens*, includes *Grimmia leibergii*". (Sayre 1952)

Grimmia unicolor

An eastern taxon, "records from British Columbia and Washington are presumed to be incorrect". (Crum & Anderson 1981)

Orthotrichum sordidum

Very common in the east and disjunct in Alaska. (Vitt 1973)

Pottia crinita

A maritime European taxon found on moist banks. (Smith 1978) On sea coasts, on rocks and banks in England. (Dixon 1954)

Pottia intermedia

William's (1966) reports the first North American location as Ontario, Canada. Zander (1993) combined this into *Tortula intermedia*. It is often confused with other *Pottias*.

Ptychomitrium polyphyllum

Rare, more common in western most Norway and eastern Europe and Macaronesia, no North American sites listed. (Nyholm 1960) Not listed by Anderson et al. (1990)

Rhodobryum ontariense

Sporadic from New Finland to Alberta, south to North Carolina. (Ireland 1982). This is the eastern species of *Rhodobryum*, while the *R. roseum* is found in the west. (Schofield pers. comm. 1995)

Rhodobryum roseum

Crum & Anderson (1981) considered the differences between *R. ontariense* and *R. roseum* "trivial and troublesome" and because the ranges overlap they use *R. roseum* for their plants. It is found in Alberta, Alaska and British Columbia. Schofield (pers. comm. 1995) feels that this is the western taxon.

Schistidium maritimum

A maritime taxon found along both coastal eastern and western North America. (Crum & Anderson 1981)

Sphagnum fallax

Is apparently completely absent from the northern Rocky Mountains. (Andrus & Layser 1976)

Sphagnum lescurii
An Amphiatlantic, eastern North American taxon with unclear distribution details due to the similarity between this and other related species. (Andrus 1980) Crum (1984) puts this species into *Sphagnum subsecundum* var. *rufescens*.

Sphagnum tenellum
An eastern taxon that also occurs in southeast Alaska and British Columbia. (Crum 1984). Andrus (1980) gives the western distribution as along the Pacific Coast from Alaska to Vancouver Island, British Columbia.

Thamnobryum alleghaniense
An eastern taxon. (Crum & Anderson 1981)

Timmiella anomala
A southwestern US taxon, records "from Washington and British Columbia so named appear to be *Timmiella crassinervis*. (Crum & Anderson 1981)

Tortula laevipila
A epiphytic taxon, Foster's Wallula collection is not very likely. The locations within the Columbia River Gorge region are probably correctly identified.

Ulota phyllantha
A maritime taxon found along both coastal eastern and western North America. (Crum & Anderson 1981)

C. Taxa That Are No Longer Valid, Or Are Probably Misidentified:

Mosses:

Brachythecium acutum
Excluded from North America. (Crum & Anderson 1981)

Brachythecium erythrorrhizon var. *thedenii*
Excluded from North America. (Crum & Anderson 1981)

Brachythecium glareosum (This is not considered a rare taxon because there are 12 records) Excluded from North America. (Anderson et al. 1990)

Cynodontium gracilescens
Excluded from North America. (Crum & Anderson 1981)

Distichium capillaceum var. *compactum*
Excluded from North America. (Anderson et al. 1990)

Hygrohypnum obtusifolium

This is probably a typographical error and the name does not exist in the literature. It is probably *Scleropodium obtusifolium*.

Plagiomnium affine

Excluded from North America (Anderson et al. 1990)

Pohlia rothii var. *compacta*

Placed into *Pohlia andalusica* (Shaw 1981)

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Appendix F. Special habitat and research needs for states in Columbia River Basin

Contents

A. Nevada.

Concerns about the bryoflora of the study area in northern Nevada can be divided roughly into lowland and montane categories. Habitats and specific management and program issues span the boundaries of the two sections, and can be treated as a broad group.

General research needs

1. High peaks within the lowland provinces, particularly to the east, need be searched to detect the presence of Rocky Mountain species and habitats that may have served as refugia or aided in migration between the Rockies and the Cascade-Sierra axis. Wetland habitats in these areas need the most attention, as these are the modal sites for bryophytes in the arid Great Basin.

2. Soil crusts throughout the region need thorough analysis, to identify regional differences due to climate or soils. They appear to differ from those of the southern Great Basin, where they have been studied extensively. Few good remnant stands have been found to date. Remnants should be sought wherever topography has precluded entry by livestock, such as in rimrock areas.

3. Species of cold springs and riparian areas need to be characterized, to determine what role they play as refugia and in dispersal across an arid landscape. Most riparian areas in the region have been severely degraded by livestock and beaver trapping, and loss of woody species indicates that bryophytes have long since been extirpated. Many springs have been developed for livestock or residential purposes, further degrading habitat for aquatic and wetland bryophytes.

4. Hot springs need to be inventoried, as they have received virtually no collecting.

5. All protected areas such as Research Natural Areas and Areas of Critical Environmental Concern need to be inventoried and their bryofloras identified. There are virtually no collections from any of these places.

6. Few alkaline areas have been collected in any detail.

7. Exposures of calcareous rock, if present, have not been collected.

8. Peatlands: Peatlands contain a large group of boreal taxa that reach their southern limits only in these habitats. Some may be relicts of earlier postglacial floras that have disappeared from elsewhere in the landscape.

LOWLANDS

The lowland areas as discussed here include the northern Great Basin (Northwestern Basin and Range), and the Owyhee Uplands sections. A significant portion of the Jarbridge Mountains are included in the Northwestern Basin and Range section, with peaks to 10,000 feet (the Matterhorn) occurring within these predominantly lowland provinces.

The most widespread vegetation in the lowlands is sagebrush and bunchgrass shrub-steppe, with inclusions of alkali soils and both juniper and ponderosa pine in areas transitioning to montane elevations. The Northwestern Basin and Range and the Owyhee Uplands encompass some of the driest portions of the state, and include alkaline areas that support a vascular vegetation of greasewood, saltbush and saltgrass. Soil crusts are present in a few areas not heavily grazed. Riparian zones support the most luxuriant vegetation, and include several species of willow, creek dogwood, wild rose, aspen and cottonwood.

Most of the Basin and Range and the Owyhee sections are managed by BLM and the Humboldt National Forest. Livestock grazing is the principal use of most of the country, and much of the rangeland has been degraded by 130 years of overuse.

Bryophytes have been very poorly collected in this part of Nevada. Lawton collected mostly it the Santa Rosa Range and the Ruby Mountains, both outside of the study area (Clark 1957, Lawton 1958). The only reports of lowland mosses are those of Lavin (1981, 1982). There are no historical accounts for bryophytes in the area.

Lowland sections

Northwestern Basin and Range -- 342B

1. Peaks: Matterhorn, White Peaks.
2. Soil crusts: mostly in lowlands.
3. Cold springs and riparian: Salmon Creek, Cedar Creek.
4. Hot springs: None known.
5. Protected areas: all RNAs, ACECs, state natural areas.
6. Alkali: Throughout lowlands.
7. Calcareous: None known.
8. Peatlands: None known.

Owyhee Uplands -- 342C

1. Peaks: Trout Creek Mountains, Calico Mt.
2. Soil Crusts: None known.
3. Cold springs and riparian: Owyhee River and tributaries.
4. Hot springs: None known.
5. Protected areas: All RNAs, ACECs.
6. Alkali: Throughout lowlands.
7. Calcareous: None known.
8. Peatlands: None known.

MONTANE

The Jarbridge Mountains occur in the Northwestern Basin and Range section, which is otherwise mostly lowland. The montane areas are forested by aspen, ponderosa pine and Douglas-fir forests at the lower elevations, and lodgepole pine, fir and Engelmann spruce at upper elevations. There are also extensive grasslands such as Idaho and green fescue, alpine meadows and rockfields at timberline. Peatlands are rare and have not been explored. Lawton collected mostly it the Santa Rosa Range and the Ruby Mountains, both outside of the study area (Clark 1957, Lawton 1958).

Northwestern Basin and Range -- 342B

1. Peaks: The Jarbridge Mountains may contain Rocky Mountain species, and may have served as refugia or routes of migration in the past. The high peaks, especially the Matterhorn, need to be collected systematically to characterize their flora.
2. Soil crusts: Soil crusts are no doubt present in some areas of the Jarbridge Mountains. They have received virtually no attention.

3. Cold springs and riparian: No specific sites known, but all are worthy of attention for unusual species.
4. Hot springs: None known.
5. Protected areas: Virtually no collections are known from any of these areas.
6. Alkali: None known.
7. Calcareous: None known.
8. Peatlands: None known.

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B. Oregon

Concerns about the bryoflora of the study area east of the Cascade Range can be divided roughly into lowland and montane categories. Habitats and specific management and program issues span the boundaries of the provinces and sections, and can be treated as a broad group.

General research needs

1. High peaks within the lowland provinces, particularly to the east, need be searched to detect the presence of Rocky Mountain species and habitats that may have served as refugia or aided in migration between the Rockies and the Cascade-Sierra axis. Wetland habitats in these areas need the most attention, as these are the modal sites for bryophytes in the arid Great Basin.

2. Soil crusts throughout the region need thorough analysis, to identify regional differences due to climate or soils. They appear to differ from those of the southern Great Basin, where they have been studied extensively. Few good remnant stands have been found to date. Remnants should be sought wherever topography has precluded entry by livestock, such as in rimrock areas.

3. Species of cold springs and riparian areas need to be characterized, to determine what role they play as refugia and in dispersal across an arid landscape. Most riparian areas in the region have been severely degraded by livestock and beaver trapping, and loss of woody species indicates that bryophytes have long since been extirpated. Many springs have been developed for livestock or residential purposes, further degrading habitat for aquatic and wetland bryophytes.

4. Hot springs need to be inventoried, as they have received virtually no collecting.

5. All protected areas such as Research Natural Areas and Areas of Critical Environmental Concern need to be inventoried and their bryofloras identified. With the exception of the Boardman RNA and Lindsay Grassland Preserve, there are virtually no collections from any of these places.

6. Few alkaline areas have been collected in any detail.

7. Exposures of calcareous rock have been collected in Malheur County, but these are the only ones known from lowlands in the region.

8. Peatlands: Peatlands contain a large group of boreal taxa that reach their southern limits only in these habitats. Some may be relicts of earlier postglacial floras that have disappeared from elsewhere in the landscape. Calcareous fens are particularly rare in the region, known from only a few places in the Wallowa Mountains and on the east slope of the Cascade Range.

LOWLANDS

The lowland areas as discussed here include the northern Great Basin (Northwestern Basin and Range), the Owyhee Uplands, the High Lava Plains, and the Columbia Basin. However, significant montane areas, such as Steens Mountain and Hart Mountain (9,000 and 7,000 feet elevation, respectively) exist within some of these predominantly lowland provinces.

The most widespread vegetation in the lowlands is sagebrush and bunchgrass shrub-steppe, with inclusions of alkali soils and both juniper and ponderosa pine in areas transitioning to montane elevations. The Northwestern Basin and Range and the Owyhee Uplands encompass some of the driest portions of the state, and include alkaline areas that support a vascular vegetation of greasewood, saltbush and saltgrass. Soil crusts are present in a few areas not heavily grazed. Riparian zones support the most luxuriant vegetation, and include several species of willow, creek dogwood, wild rose, aspen and cottonwood.

Most of the Basin and Range and the Owyhee sections are managed by the Lakeview, Burns and Vale BLM districts. Livestock grazing is the principal use of most of the country, and much of the rangeland has been degraded by 130 years of overuse. Large areas have been converted to crested wheatgrass, while agriculture is restricted to bottomlands where irrigation is possible. The Columbia Basin and High Lava Plains are mostly privately owned. The Columbia Basin was formerly dominated by bluebunch wheatgrass with scattered sagebrush, occurring on deep loess soils. Most of this area has been converted to wheat farms. Near the Columbia River, shallow-soiled scabland stripped by the Missoula floods contains much exposure of rock. The area is crossed by Interstate 84 and contains many accessible areas. The region around Bend is experiencing enormous residential sprawl and associated recreational pressures on the surrounding countryside.

Foster (1907) and Jones (1936) are the only historical records for bryophytes in the region. Jones did not cite a specific locality for his work, and virtually all of the original riparian zone described by Foster has been flooded by dams on the Columbia River.

Lowland provinces

Northwestern Basin and Range -- 342B (61 records, 40 species: 2 liverworts, 38 mosses)

1. Peaks: Steens Mountain, Hart Mountain, Pueblo Mountains, Hat Butte, Wagontire Mountain, Squaw Butte, Trout Creek Mountains.
2. Soil crusts: Malheur National Wildlife Refuge, Squaw Butte Experiment Station, Hart Mountain and lower Steens Mountain.
3. Cold springs and riparian: Roaring Springs, Malheur Refuge, Donner und Blitzen River and tributaries.
4. Hot springs: Borax Lake, Mickey Hot Springs and others in the Alvord region.
5. Protected areas: all RNAs, ACECs, state natural areas, Nature Conservancy preserves.
6. Alkali: Alvord Desert, Warner Valley, Lake Abert, Catlow Valley.
7. Calcareous: None known.
8. Peatlands: None known.

Owyhee Uplands -- 342C (10 records, 10 species: 0 liverworts, 10 mosses)

1. Peaks: Mahogany Mountain, Saddle Mountain, Grassy Butte, Black Butte.
2. Soil Crusts: Jordan Craters Kipukas.
3. Cold springs and riparian: Owyhee River, Honeycombs area, Three Forks.
4. Hot springs: Three Forks
5. Protected areas: Honeycombs, Leslie Gulch, Jordan Craters, Stockade Mountain.
6. Alkali: Dry Creek Butte.

7. Calcareous: Burnt River Canyon
8. Peatlands: None known.

High Lava Plains -- 342H (37 records, 21 species: 3 liverworts, 18 mosses)

1. Peaks: None significant as refugia.
2. Soil crusts: The Island RNA, Crooked River National Grasslands
3. Cold springs and riparian: Crooked River, Oak Springs, Deschutes River and tributaries, John Day River, Lower White River.
4. Hot springs: None known.
5. Protected areas: The Island RNA, Horse Ridge RNA, John Day Fossil Beds National Monument
6. Alkali: None known.
7. Calcareous: None known.

Columbia Basin -- 342I (207 records, 86 species: 8 liverworts, 78 mosses)

1. Peaks: None significant as refugia.
2. Soil crusts: Boardman RNA, Lindsay Grassland Preserve
3. Cold springs and riparian: None known.
4. Hot springs: None known.
5. Protected areas: Boardman RNA, Lindsay Grassland Preserve
6. Alkali: None known.
7. Calcareous: None known.
8. Peatlands: None known.

MONTANE

Blue Mountains -- M332G (630 records, 230 species: 57 liverworts, 173 mosses)

This section is part of the Middle Rocky Mountain Steppe province, and includes the Wallowa, Strawberry, Ochoco and Elkhorn Mountains. The montane areas are forested by ponderosa pine and Douglas-fir forests at the lower elevations, and forests of lodgepole pine, fir and mountain hemlock at upper elevations. There are also extensive grasslands such as Idaho and green fescue, alpine meadows and rockfields at timberline. Peatlands and other wetlands are also best represented in these sections.

1. Peaks: All the major ranges in the Blue Mountains may contain Rocky Mountain species, and may have served as refugia or routes of migration in the past. The high peaks, especially the Wallowas, contain the greatest habitat diversity of the

region. The Wallowas have received the most attention from collectors, with the earliest report being that of Duvall (1938) and Clark and Rakestraw (1938). The Elkhorn, Strawberry and Ochoco Mountains all need to be collected systematically to characterize their flora.

2. Soil crusts: Soil crusts are present in some areas of the Blue Mountains, particularly in grasslands on tabular basalts. They have received virtually no attention.
3. Cold springs and riparian: No specific sites known, but all are worthy of attention for unusual species.
4. Hot springs: Blue Mountain Hot Springs, Ritter Hot Springs.
5. Protected areas: Virtually no collections are known from any of these areas.
6. Alkali: None known.
7. Calcareous: The only known sites are in the Wallowa Mountains, where a few collections have been made.
8. Peatlands: A few collections have been made in peatlands in the Wallowa Mountains. A calcareous fen has been discovered there recently (Peter F. Zika, pers. comm.), with interesting vascular plants, but the bryoflora has never been examined.

East slope Cascade Range, Southern Cascades and Modoc Plateau

The vascular vegetation of these sections is predominantly forest of fir, lodgepole and ponderosa pine and Douglas-fir at lower elevations, grading into fir, Engelmann spruce, mountain hemlock and whitebark pine at higher elevations. Peatlands are common in glaciated basins at upper elevations, and there are extensive exposures of rock. The bryoflora of the east slope of the Cascade Range (Cascade Mixed Forest province) does not differ appreciably from that of the Sierran Steppe, which in Oregon includes part of the Southern Cascades and Modoc Plateau sections. Species diversity is greatest on the east slope of the Cascades, and is about as rich as the Blue Mountain section, but decreases from north to south because of increasing aridity. The low numbers of collections from the Southern Cascades and Modoc Plateau indicate that these two sections are, like the Owyhee Uplands, the most poorly known in eastern Oregon. The greatest numbers of liverworts recorded were from the east slope of the Cascades, reflecting the moister climate than in the Blue Mountains. Because of its accessibility from Portland and Hood River, Mount Hood has been the best collected peak in the Oregon Cascades, the first reports dating from Röll (1890, 1893). We found no records from peaks south of the South Sister. Crater Lake National Park has received sporadic collecting, but nothing when compared to Glacier, Yellowstone and Grand Teton National Parks.

1. Peaks: Three Sisters Wilderness, Diamond Peak Wilderness, Mountain Lakes Wilderness. All high peaks south of the South Sister should be examined for boreal and arctic-alpine elements. No doubt some northern species reach their southernmost limits in this area.

2. Soil crusts: Some rudimentary crusts were seen near Lake of the Woods. They become more common southward with increasing aridity. These should be examined to determine composition and differences from crusts at lower elevation.
3. Cold springs and riparian: Such habitats exist in abundance in this region, and may yield interesting records such as *Tritomaria quinquedentata*.
4. Hot springs: None known.
5. Protected areas: Sporadic collections from the Three Sisters Wilderness, Gearhart Mountain Wilderness, and Crater Lake National Park have yielded some interesting records. The peatland flora in Many Lakes RNA has been collected in detail, but no other collections are known from the region. All other protected areas should be examined.
6. Alkali: None known.
7. Calcareous: Many Lakes RNA is and Benchmark Fen are the only known sites for calciphile vegetation, although not underlain by calcareous bedrock.
8. Peatlands: Peatlands are frequent on the east slope of the Cascade Range, decreasing further south because of increasing aridity.

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C. Utah

Concerns about the bryoflora of the study area in northwestern Utah can be divided roughly into lowland and montane categories. Habitats and specific management and program issues span the boundaries of the two sections, and can be treated as a broad group.

General research needs

1. High peaks within the lowland provinces, particularly to the east, need be searched to detect the presence of Rocky Mountain species and habitats that may have served as refugia or aided in migration between the Rockies and the Cascade-Sierra axis. Wetland habitats in these areas need the most attention, as these are the modal sites for bryophytes in the arid Great Basin.

2. Soil crusts throughout the region need thorough analysis, to identify regional differences due to climate or soils. They appear to differ from those of the southern Great Basin, where they have been studied extensively. Few good remnant stands have been found to date. Remnants should be sought wherever topography has precluded entry by livestock, such as in rimrock areas.

3. Species of cold springs and riparian areas need to be characterized, to determine what role they play as refugia and in dispersal across an arid landscape. Most riparian areas in the region have been severely degraded by livestock and beaver trapping, and loss of woody species indicates that bryophytes have long since been extirpated. Many springs have been developed for livestock or residential purposes, further degrading habitat for aquatic and wetland bryophytes.

4. Hot springs need to be inventoried, as they have received virtually no collecting.

5. All protected areas such as Research Natural Areas and Areas of Critical Environmental Concern need to be inventoried and their bryofloras identified. There are virtually no collections from any of these places.

6. Few alkaline areas have been collected in any detail.

7. Exposures of calcareous rock, if present, have not been collected.

8. Peatlands: Peatlands contain a large group of boreal taxa that reach their southern limits only in these habitats. Some may be relicts of earlier postglacial floras that have disappeared from elsewhere in the landscape.

LOWLANDS

The lowland areas as discussed here include the northern Great Basin (Northwestern Basin and Range) section. Parts of the Grouse Creek Mountains, Middle Mountain and the Raft River Mountains are included in the Northwestern Basin and Range section, occurring within a predominantly lowland province.

The most widespread vegetation in the lowlands is sagebrush and bunchgrass shrub-steppe, with inclusions of alkali soils. Both pinyon-juniper woodland and ponderosa pine mark transitions to montane elevations. The section includes alkaline areas that support a vascular vegetation of greasewood, saltbush and saltgrass. Soil crusts are present in a few areas not heavily grazed. Riparian zones support the most luxuriant vegetation, and include several species of willow, creek dogwood, wild rose, aspen and cottonwood.

Most of the section is managed by BLM and the Sawtooth National Forest. Livestock grazing is the principal use of most of the country, and much of the rangeland has been degraded by 130 years of overuse.

Bryophytes have been very poorly collected in this part of Utah. We located only 8 references or specimens from Box Elder County, from the Raft River Mountains (George Creek) and Pilot Butte. The rest of the section appears to be completely uncollected. There are no historical accounts for bryophytes in the area.

Northwestern Basin and Range -- 342B

1. Peaks: None known in lowlands.
2. Soil crusts: Mostly in lowlands.
3. Cold springs and riparian: Raft River.
4. Hot springs: None known.
5. Protected areas: All RNAs, ACECs, state natural areas.
6. Alkali: Throughout lowlands.
7. Calcareous: None known.
8. Peatlands: None known.

MONTANE

The Grouse Creek, and Raft River Mountains, and Middle Mountain occur in the Northwestern Basin and Range section, which is otherwise mostly lowland. The montane areas are forested by pinyon-juniper, aspen, ponderosa pine and Douglas-fir forests. There are also extensive grasslands such as Idaho and green fescue.

Northwestern Basin and Range -- 342B

1. Peaks: Grouse Creek and Raft River Mountains, Middle Mountain, Pilot Butte. The high peaks need to be collected systematically to characterize their flora.
2. Soil crusts: Soil crusts are no doubt present in some areas at lower elevations. They have received virtually no attention.
3. Cold springs and riparian: George Creek only site known, but all are worthy of attention for unusual species.
4. Hot springs: None known.
5. Protected areas: Virtually no collections are known from any of these areas.
6. Alkali: None known.
7. Calcareous: None known.
8. Peatlands: None known.

D. Wyoming

Concerns about the bryoflora of the study area in Wyoming can be divided roughly into lowland and montane categories. Habitats and specific management and program issues span the boundaries of the provinces and sections. and can be treated as a broad group.

General research needs

1. High peaks outside of Yellowstone and Grand Teton National Parks need be searched to detect the presence of arctic and boreal species that may not have been detected by collectors. Habitats may have served as refugia or aided in migration between the Rockies and the Cascade-Sierra axis.

2. Soil crusts throughout the region need thorough analysis, to identify regional differences due to climate or soils. They appear to differ from those of the southern Great Basin, where they have been studied extensively. Few good remnant stands have been found to date. Remnants should be sought wherever topography has precluded entry by livestock, such as in rimrock areas.

3. Species of cold springs and riparian areas need to be characterized, as aquatic species are frequently overlooked. Most riparian areas in the lowlands have been severely degraded by livestock and beaver trapping, and loss of woody species indicates that bryophytes have long since been extirpated. Many springs have been developed for livestock or residential purposes, further degrading habitat for aquatic and wetland bryophytes.

4. Hot springs outside Yellowstone National Park need to be inventoried, as they have received no collecting.

5. All protected areas such as Research Natural Areas and Areas of Critical Environmental Concern need to be inventoried and their bryofloras identified. Outside of Yellowstone and Grand Teton National Parks, virtually no collections have been made from any of these places.

6. Few alkaline areas have been collected in any detail.

7. Exposures of calcareous rock should be sought and collected.

8. Peatlands: Peatlands contain a large group of boreal taxa that reach their southern limits only in these habitats. Some may be relicts of earlier postglacial floras that have disappeared from elsewhere in the landscape.

LOWLANDS

The lowland areas as discussed here include a very small portion of the Snake River Basalts section, on the west slope of the Teton Range, and Jackson Hole and lowland areas of Grand Teton National Park in the Overthrust Mountains section. The remainder of the sections are mountainous.

The most widespread vegetation in the lowlands is sagebrush and bunchgrass shrub-steppe, with inclusions of ponderosa pine in areas transitioning to montane elevations. The lowland portions of the Snake River Basalts and the Overthrust Mountains sections encompass the driest portions of the state within the study area. Soil crusts are present in a few areas not heavily grazed. Riparian zones support the most luxuriant vegetation, and include several species of willow, creek dogwood, wild rose, aspen and cottonwood.

The small portion of the Snake River Basalts section and Jackson Hole is privately owned, except for the National Elk Refuge. The lowland areas within Grand Teton National Park have not been grazed since the 1940's. Outside of the park, livestock grazing is the principal use of most of the country, and much of the rangeland has been degraded by 130 years of overuse. Jackson Hole is experiencing enormous residential sprawl and associated recreational pressures on the surrounding countryside.

There are virtually no collections from lowland areas in the region, and no historic record.

Lowland provinces

Snake River Basalts -- 342D

1. Peaks: None significant.
2. Soil crusts: None known.
3. Cold springs and riparian: Throughout west slope of Teton Range.
4. Hot springs: None known.
5. Protected areas: None known.
6. Alkali: None known.
7. Calcareous: None known.
8. Peatlands: None known.

Overthrust Mountains -- M331D

1. Peaks: None significant.
2. Soil Crusts: Best remnants will be on terraces of Snake River within Grand Teton National Park.
3. Cold springs and riparian: Snake River, within Grand Teton National Park.
4. Hot springs: None known.
5. Protected areas: Grand Teton National Park, National Elk Refuge.
6. Alkali: None known.
7. Calcareous: None known.
8. Peatlands: None known.

MONTANE

Montane areas within the study area include the Overthrust Mountains section and a small portion of the Yellowstone Highlands section, south of the Continental Divide. The Yellowstone Plateau and the Teton, Gros Ventre, Wyoming and Salt River Ranges contain most high elevation habitat. The montane areas are forested by lodgepole pine, ponderosa pine, Douglas-fir, fir and spruce. There are also extensive grasslands, alpine meadows and rockfields at timberline. Peatlands and other wetlands are also best represented in these sections. Collecting in the national parks (539 records from Yellowstone and 190 from Grand Teton) has occurred since the 1870's, with scattered collections occurring in the Gros Ventre and Salt River Range. Ownership is divided between Yellowstone National Park, Grand Teton National Park, and the Bridger-Teton National Forest. Much of the National Forest has been intensively managed for timber production, and grazing leases occur throughout the area.

Montane sections

Yellowstone Highlands -- M331A

1. Peaks: The Red Mountains, with Mt. Hancock and Mt. Sheridan, both over 10,000 feet, are the tallest peaks. They should be collected systematically to characterize their flora.
2. Soil crusts: None known. They have received virtually no attention.
3. Cold springs and riparian: No specific sites known, but all are worthy of attention to document flora.
4. Hot springs: Despite the abundance of thermal features in the park, there were few records from hot springs proper.
5. Protected areas: The flora of the park is well known in more accessible areas, but not in the backcountry.
6. Alkali: None known.
7. Calcareous: None known.
8. Peatlands: None known.

Overthrust Mountains -- M331D

1. Peaks: Peaks outside Grand Teton National Park should be examined to characterize the flora and search for boreal or arctic-alpine species.
2. Soil crusts: None known at elevation.
3. Cold springs and riparian: springs, creeks and rivers outside Grand Teton National Park should be examined to characterize the flora.
4. Hot springs: None known.
5. Protected areas: RNAs outside Grand Teton National Park should be inventoried.
6. Alkali: None known.
7. Calcareous: None known.

E. Montana

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Distributions of mosses and other plants are influenced by the moist, cool Pacific maritime climate, particularly in extreme northwestern Montana in the Yaak and Kootenai River drainages, and in the northern Bitterroot, Purcell and Whitefish Mountain ranges extending eastward to Glacier National Park. Some mosses with floristic affinities in the Pacific coastal region reach their eastern-most distribution within this area of Montana. Vitt et al (1988) show

numerous bryophytes and lichens with Pacific coastal centers of distribution, extending inland to northwestern Montana.

Intermontane valleys, in rain shadows of western Montana mountain ranges, were dominated by Palouse Prairie grasslands (Semiarid Steppe) but much of the area has been converted to cropland or greatly altered by invasion of noxious weeds (e.g., spotted knapweed and leafy spurge). Although these dry habitats do not have a rich bryophyte flora, they provide habitat for widely distributed mosses. These native grasslands have been poorly investigated bryologically but, studies in British Columbia (McIntosh 1989) indicate that rare mosses may be present in these habitats. McIntosh (1989) found several mosses with disjunctions between western North America and arid regions of Eurasia in Semiarid Steppe habitats of British Columbia.

The north-south trending mountain ranges in western Montana are contiguous with the Rocky Mountain chain extending into Canada and south to Mexico. High peaks and alpine areas of these mountains provide habitat for arctic and boreal species which may have been more widespread during cooler, wetter climatic periods. Some mountain peaks and alpine areas provide refugia for northern mosses which were more common during the last glaciations (Schofield 1980). Vitt et al (1988) show distribution patterns of mosses common in montane and boreal habitats of Canada extending southward into the United States along western Montana mountain ranges.

Some uncommon and rare mosses in Montana appear to be closely associated with specific habitats, usually restricted to small areas greatly different from surrounding areas. Such habitats include calcareous fens, fens low in nutrients, warm springs, and limestone outcrops. These isolated habitats are widely distributed throughout western Montana. Cool fens, like alpine areas, often provide cool, moist environments for species more widely distributed at higher latitudes.

Areas Needing Research

Ecological provinces of Montana, within the Columbia River drainage, are Bitterroot/Clark Fork River Valley, Flathead Valley, Northern Rockies, and
Bitterroot Mountains.

Bitterroot/Clark Fork Valley (M332B) and Bitterroot Mountains (M333D)

Warm Springs

The Bitterroot/Clark Fork Valley has several warm springs needing additional studies including:

> Bearmouth Warm Springs and Nimrod Warm Springs, Granite County, west of Missoula, along the Clark Fork River; Phosphate Warm Springs, Powell County, near Garrison. The occurrence in Montana of *Drepanocladus sendtneri*, *Eucladium verticillatum*, *Fissidens fontanus*, *Hygroamblystegium tenax* appears to be limited to warm springs and associated mineral deposits.
>
> Sleeping Child Hotsprings, Ravalli County, east of Darby; Lolo Hotsprings, Missoula County; and Lost Trail Hotsprings, Ravalli County. These hotsprings have been developed but some remaining habitat may exist.

Semiarid Steppe

I can find no indication that mosses have been collected from any Palouse Prairie habitats in Montana. Remnants of native Semiarid Steppe grassland/shrubland exist in the following areas.

> Mount Sentinel and Mount Jumbo in the Missoula Valley.
>
> The east side of the Bitterroot Valley from Lolo south to Darby.
>
> The Clark Fork Valley from Beavertail Hill east to the Continental Divide along the Little Blackfoot River and south to Butte along the Clark Fork River and Silver Bow Creek.
>
> The Blackfoot River Valley near Clearwater Junction, Monture Game Range, and Ovando. Relatively intact remnants of rough fescue prairie remain in the Clearwater - Monture area. Unique kettle-kame topography exist in the Ovando area with a high diversity of interspersed wetland, native grassland, and dry forest habitats.

The Nevada Creek Valley from Helmville to Avon.

The upper Flint Creek Valley near Phillipsburg.

Mountain Peaks and Alpine areas

The Bitterroot and Sapphire mountains have received some attention by bryologists but, like nearly all of Montana, they remain under-collected. Several interesting arctic-alpine collections from Saint Mary's Peak in the Bitterroot Mountains (*Dicranum acutifolium* and *Grimmia incurva*) and Skalkaho Pass in the Sapphire Mountains (*Sphagnum compactum* and *Andreaea rupestris*) indicate that the potential for additional discoveries is high in these habitats.

Some lower elevation canyons in the Bitterroot Mountains support disjunct populations of Pacific Coast maritime plants (McCune 1984). These canyons serve as cold air drainages in which high mountain plants extend to unusually low elevations (Lackschewitz 1991). The only known occurrence in Montana of the Pacific maritime moss, *Porotrichum bigelovii*, is in Big Creek Canyon. McCune (1984) also found lichens with Pacific maritime affinities in eastern canyons of the Bitterroot range.

Areas needing additional study include:

High mountain peaks and alpine areas of the Bitterroot Mountains (e.g., Lolo, Mormon, Saint Mary's, and Trapper peaks).

Canyons on the east slopes of the Bitterroot Mountains (e.g., Tin Cup, Kootenai, Bass, Bear, Big, and Mill creeks).

Rattlesnake Mountains, north of Missoula.

Fens and other Wetlands

Chadde and Shelly (1994) describe both vascular plants and bryophytes growing in significant peatlands of western Montana. Fens in the Bitterroot/Clark Fork River Valley Ecological Province support several boreal species with centers of distribution substantially farther north or Pacific coastal (*Meesia triquetra*, *Sphagnum magellanicum*, *Sphagnum mendocinum*, and *Sphagnum riparium*).

Areas needing additional study include:

Mary's Frog Pond and Shoofly Meadow, Missoula County.

Lost Trail Pass fen near Sula, Ravalli County.

Rock Creek fen near Como Lake, northwest of Darby.

Fens and other wetlands in the Bitterroot and Rattlesnake Mountains.

Flathead Valley and Associated Mountains (M333B)

Warm Springs

Camas Hotsprings, Little Bitterroot Valley, Sanders County.

Semiarid Steppe

Intermontane grasslands west of Flathead Lake, along the Flathead River, south of Flathead Lake, and the Little Bitterroot Valley (mostly Flathead Indian Reservation).

Remnants of rough fescue grassland on the National Bison Range near Moiese.

Fescue grassland in the Jocko Valley between Arlee and Ravalli.

Mountain Peaks and Alpine areas

The only montane area within the Flathead Valley Ecological Province that has been researched with a modicum of intensity is Glacier National Park. Hermann (1969) and various other bryologists have reported the following species, only known from this location in Montana: *Bartramia stricta*, *Bryum calobryoides*, *Bryum schleicheri*, *Drepanocladus brevifolius*, *Hypnum bambergii*, *Plagiobryum demissum*, and *Racomitrium aquaticum*. These species or other rare arctic-alpine mosses would also be expected to occur in the Mission, Swan, and Whitefish mountains. These mountain ranges, especially at high elevations are essentially uncollected. Areas with a high potential for harboring uncommon or disjunct species include:

Mission Mountains from Gray Wolf to McDonald peaks.

Bob Marshall, Great Bear, and Bob Marshall wilderness areas.

Ten Lakes Scenic Area in the Whitefish Mountains

Fens and other Wetlands

Chadde and Shelly (1994) identified significant peatlands within this province and included

mosses in lists of flora. Many fen species with limited occurrence in Montana are present in these fens. More extensive investigation of these fens would probably expand species lists and ecological relationships. Fens and other wetlands needing additional study include:

Swan River, Porcupine, Point Pleasant, Plum Creek, Lost Creek, and Napa Creek fens in the Swan Valley, south of Swan Lake.

Bowen Creek, Gregg Creek, North Sanko Creek, South Sanko Creek, and Sheppard Creek fens in the Tally Lake Ranger district of the Flathead National Forest.

Ambrose fen on private land south of Creston, Montana.

Bent Flat, Trail Creek, Mud Lake, Butcher Mountain and Trout Lake fens in the Spotted Bear Ranger District of the Flathead National Forest.

Crystal and Windfall Creek fens, Swan Lake Ranger District,Flathead National Forest.

Other

The moss, *Grimmia brittoniae*, was collected in 1896 by Williams (1902). This species is endemic to Badrock Canyon, near Columbia Falls in northwestern Montana. Over the past several decades, smelter emissions have subjected portions of Bad Rock Canyon to chronic air pollution which may have affected this rare species. This species should be sought to determine if it remains extant.

Northern Rockies Ecological Province (M333C)

The Northern Rockies Ecological Province is defined in this report as being comprised of lands within the drainage of the Kootenai River. This province includes the Cabinet, Salish and Purcell Mountains, and northern periphery of the Bitterroot Mountains. Areas needing additional study include:

Warm Springs

There appear to be no warm springs within this province.

Semiarid Steppe

The Tobacco Plains near Eureka has remnants of Palouse prairie grassland.

Mountain Peaks and Alpine Areas

Northwest Peak Scenic Area of the Purcell Mountains.

Cabinet Mountains Wilderness.

Fens and Wetlands

Dudley Slough, a calcareous fen near Trego. *Scorpidium scorpioides*, a rich fen species has been collected from this site and other rich fen species also may be present.

Wetlands in the Pinkham Creek drainage. Calcareous seeps and fens are present in this area.

Lower Cody Lake fen, Fisher River Ranger District, Kootenai National Forest.

Hawkins Pond fen, Northwest Peaks Scenic Area, Kootenai National Forest.

Teepee Lake fen, Libby Ranger District, Kootenai National Forest.

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F. Idaho

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Overview of Ecological Regions

Distribution of the moss flora of Idaho is highly influenced by climatic patterns. In Northern Idaho, the Okanogan Highlands, Flathead Valley, Bitterroot Mountains, and parts of the Idaho Batholith have a moist, cool maritime climate. These areas, especially in the canyons and lake regions of the Priest, Kootenai, Pend Oreille, Clearwater, Lochsa, and Selway drainages support a variety of humid, coniferous, forest, bryophytes separated from the main coastal populations.

Palouse Prairie grasslands of Idaho lie on the western edge of the Northern Rocky Mountains. Most of the grasslands have been converted to agriculture lands and little bryological research on the few surviving remnants has been done. Herbarium searches show that Daubenmire collected some mosses from the grasslands in the 1940's.

The climate of the Owyhee Uplands, Snake River Plains, and Basin and Range sections of southern Idaho is semi-arid and supports a variety of grass/shrub communities. Like the Palouse Prairie, large areas of the Snake River Plains have been converted to agricultural and industrial uses. The area has been poorly investigated bryologically, but some mosses with affinities to the southern and dry interior regions have been found.

The Middle Rocky Mountain ranges of the Sawtooth and Salmon, in central Idaho, lack the maritime influence of northern Idaho and have a dry, cool, climate. The high peaks and mountain meadows along with the dry, coniferous, forests provide habitat for a variety of northern boreal and alpine bryophytes.

Throughout Idaho, microhabitats support rare mosses, and add to the diversity of the ecological regions. Limestone outcrops, warm springs, bogs, fens, and old growth forests provide some of these unique habitat.

All of the ecological provinces of Idaho lie within the Columbia River Drainage. The ecological provinces within the state include the Palouse Prairie, Bitterroot Mountains, Flathead Valley, Okanogan Highlands, Idaho Batholith, Beaverhead Mountains, Challis Volcanics, Overthrust Mountains, Northwest Basin and Range, Owyhee Uplands, Snake River Basalts, and

small sections of the Blue Mountains, Yellowstone Highlands, and Bear Lake.

Three mosses are endemic to the Columbia River Basin, *Bryoerythrophyllum columbianum, Grimmia brittoniae, and Orthotrichum holzinger.* Only one, *Orthotrichum holzinger,* was found in Idaho.

Herbarium searches throughout the northwest were used to determine the extent and occurrences of endemic, disjunct, and rare moss in the Columbia River Basin. Table 1. shows the moss species, endemic to western North American, that occur in Idaho. Table 2 shows the disjunct mosses found in the Idaho. Table 3 shows the rare taxa occurring in Idaho.

Table 1. Endemic Western North American Taxa found in Idaho.

GENUS	SPECIES/VARIETY	COUNTY	HABITAT	COLLECTOR
Anacolia	*menziesii v. baueri*	*Kootenai*	*wet ledge*	*Jones, 1928*
Dichodonium	*olympicum*	*Shoshone*	*below snow*	*Sharp, 1961*
Encalypta	*intermedia*	*Custer*	*rock*	*Frye, 1929 Steele, 1973*
Fissidens	*ventricosus*	*Bonner*	*submerged*	*-, 1889*
Homalothecium	*arenarium*	*Elmore*	*bluffs*	*MacFadden, 1942*
Orthotrichum	*hallii*	*Custer*	*rock*	*Herrmann, 1965*
Orthotrihcum	*holzingeri*	*NezPerce*	*-*	*Sandberg, 1892*
Pottia	*nevadensis*	*Gooding*	*sandy soil*	*Steele, 1976*
Pseudoleskea	*radicosa v. denudata*	*Boundary*	*Rock in climax cedar hemlock*	*Daubenmire, 1944*
Racomitrium	*varium*	*Kootenai*	*shale talus*	*Flowers, 1964*
Schistidium	*cinclidodonteum*	*Kootenai*	*rock*	*Lieberg, 1889*
Triptercladum	*leucocladulum*	*NezPerce*	*Ponderosa pine*	*Daubenmire, 1946*

Table 2. Disjunct Taxa found in Idaho.

GENUS	SPECIES	COUNTY	HABITAT	COLLECTOR DATE
MARITIME DISJUNCTS				
Hookeria	lucens	Clearwater	decayed log	Gray, 1994
Dichodontium	olypicum	Shoshone	snow patch	Sharp, 1961
WESTERN NORTH AMERICA/WESTERN EUROPE DISJUNCTS				
Hygrohypnum	alpinum	Bonner	-	Ireland,-
Orthotrichum	pulchellum	Nez Perce	-	Leiberg,-
Orthotrichum	striatum	Idaho Kootenai	Douglas fir & yew	Anderegg, 1975 Leiberg, -
Plagiothecium	undulatum	Latah	-	Piper, 1894
Pottia	lanceolata	Custer	soil	Ireland, 1964
NORTH PACIFIC DISJUNCTS				
Oligotrichum	aligerum	Shoshone	wet soil	Herrmann, 1968
Pogonatum	contortum	Shoshone	wet soil	Schroeder, 1971
BIPOLAR DISJUNCTS				
Polytrichum	formosum	Boundary	fen	Bursik, 1992

Table 3. Taxa rare in Columbia River Basin, occurring in Idaho.

GENUS	SPECIES	COUNTY	HABITAT	COLLECTOR DATE
Didymodon	*tophaceus*	*Idaho*	*riverine*	*Steele, 1975*
Drepanocladus	*fluitans*	*Kootenai* *Latah*	*pool* *watertank*	*Jones, 1931* *Schroeder, 1971*
Hamatocaulis	*vernicosus*	*Bonner* *Custer* *Kootenai*	*epiphytic*	*Daubenmire, 1944-46* *MacFadden,-*
Hygrohypnum	*duriusculum*	*Idaho*	-	-
Hygrohypnum	*styriacum*	*Custer*	-	-
Orthotrichum	*flowersii*	*Owyhee*	-	*Ireland, -*
Plagiothecium	*cavifolium*	*Shoshone*	*cedar, hemlock*	*Daubenmire, 1946*
Pottia	*nevadensis*	*Gooding*	*soil*	*Steele, 1976*
Pseudoleskea	*saviana*	*Valley*	*rock*	*Hermann, 1965*
Racomitrium	*aquaticum*	*Idaho*	*rock*	*Harper, 1975*
Splachnum	*sphaericum*	*Latah*	*Grand Fir* *Pachistima*	*Higinbotham, 1959*
Tayloria	*acuminata*	*Elmore*	*humus near water*	*MacFadden, 1942*

Research Needs

1. Okanogan Highlands/Bitterroot Mountains Wet Coniferous Forests

A number of historical collections in Laird Park, Moscow Mountain, Priest Lake, Pend Orielle Lake, and the Clearwater and Selway drainages where done in the 1940 and 50's. Some of the historic collecting areas done in climax Thuja-Tsuga communities, has since been altered by logging, and development. These areas should be revisited to investigate the effects on the bryological flora and habitat.

A number of species endemic to North America occur in this region. They include: Aloina brevirostris, Anacolia menziesii, Dichodonium olympicum, Fissidens ventrocosus,

Grimmia trichophylla, Orthotrichum striatum, Pseudoleskea radicosa v v. denudata, Racomitrium varium, Schistidium conclidodonteum, and Tripterocladium leucocladulum.

Disjunct species in this area not only reflect the maritime climate but also the extension of the Northern and Bipolar mosses into the fens and the mountainous regions of northern Idaho. Coastal disjuncts include: Anacolia menziesii v. baueri, Dichodontium olypicum, and Hookeria lucens. Western Europe, Northern Pacific and Bipolar disjuncts include: Hygrophynum alpinum, Oligotrichum aligerum, Plagiothecium undulatum, Poganatum contortum, and Polytrichum formosum. Research on the fens of northern Idaho should be continued for they provide a unique habitat for moss flora found nowhere else in the state.

2. Palouse Grasslands

While remnants of the Palouse grasslands occur around Garfield and along the uplands of the Snake River, little collecting has occurred in this ecological region. Some of Daubenmire's moss collections were from grasslands but no extensive collections or research on the bryological components of the grasslands was found.

Grimmia trichophylla, and Orthotrichum holzingeri, both endemic species to Western North America were reported from the grasslands. Both species typically grow on rock and may not represent typical grassland species.

Orthotrichum holzingeri, the only endemic Columbia River Basin reported from Idaho, was first reported from Nez Perce county in 1892 by Sandberg. No other collections of this species from Idaho were found in the herbarium search. Since the original collection, air pollution from local wood pulp-mills could have effected the habitat. Relocation of the population and surveys of the surrounding Snake and Clearwater Canyons should be conducted.

3. Idaho Batholith/ Challis Volcanics/Beaverhead Mountains

The maritime climatic influence of northern Idaho extends into the northern part of the Idaho Batholith. In the Selway, Lochsa, and Clearwater drainages, endemic and disjunct bryological species are similar to those in the Okanogan and Beaverhead wet coniferous forests.

In the central part of the Idaho Batholith, Challis Volcanics, and Beaverhead mountains, historic collections by Lieberg, Frye, and MacFadden still are the main records for endemic, disjunct, and rare mosses.

Endemic species found in this region include: Bryum pallens, Encalypta intermedia, Grimmia

trichophylla, Homalothecium arenarium, Orthotrichum hallii, and Orthotrichum striatum.

Disjunct mosses include Pottia lanceolata.

Throughout this region, the microhabitats produced by warm springs, fens, calcareous outcrops, and canyonlands have been under-collected. Bryum calobryoides has been reported in Idaho only from a spring near Atlanta. This site should be revisited to determine the status of the species. Other numerous hotsprings in the Snake, and Salmon River drainages should be investigated. Recreational use of these areas have the potential to alter hydrological flows and change the habitat.

A number of endemics, disjunct, rare mosses are known to occur on rocky outcrops and calcareous substrate. Neither the rocky canyonlands of the Snake and Salmon River drainages nor the limestone areas of the Lost and Lemhi mountains and valleys have not been extensively collected.

True arctic-alpine areas in Idaho cover a small area and like much of Idaho, they remain uncollected or under-collected. Alpine areas in the White Clouds, Big Horn Crags, Pioneer, and Boulder mountains need additional studies.

4. Owyhee Uplands/Snake River Basalts/Bear Lake/Basin & Range

While the Snake River Basalts, are one of the most developed areas in Idaho, it is also one of the most under-collected areas for bryophytes. Both commercial and agricultural development of the Snake River Basalt area has the potential to effect the bryological flora. Current investigations of the cryptogamic crust should be continue to help determine the ecological role of bryophytes in soil development and stabilization.

Pottia nevadensis, a dry interior endemic and rare species, was found in the Box Canyon area. Box Canyon is known for its large underground springs. Commercial and/or agriculture development of the area could effect the habitat of this species. Collecting in similar sites and a revisit to the original site should be done.

Orthotrichum flowersii, another rare species, has been found in the Owyhee Uplands. This species is possibly a northern extension of the southern population. Investigation of Owyhee Uplands should be done to determine the extent of southern species into Idaho.

Summary

Even though the number of the endemic, disjunct, and rare species of mosses currently know from Idaho is low, these species greatly increase the bryological diversity of the state. A review of the collection dates of these species show that most were collected before the 1970's. No evidence of monitoring or relocation of the earlier sites was found in the literature or herbarium collections.

Relocation of original sites and surveys for endemic, disjunct, and rare species should be conducted throughout the state to ensure that bryological diversity is maintained. Because rich bryological flora is often correlated with wetlands and humid microsites with woody debris, changes in canopy covers and hydrological functions could modify the habitat needed maintain a diverse bryological flora.

Qualified taxonomists should verify the endemic, disjunct, and rare collections reported in Idaho. These verifications would ensure that incorrect identification of species do not lead to invalid range and disturbutions extensions.

Knowledge about the disturbution, ecological role, and indicator value of bryophytes in the ecosystem are severely limited by the lack of research. While finances to conduct bryological research is difficult to obtain, training governmental agency botanists in bryophyte identification could rapidly increase local knowledge of bryological flora.

G._ Washington

Washington Palouse Prairie Section
331A

Issues For Analysis:

There are a total of 112 species for this section. Since the boundaries of the Palouse Prairie Section were not clearly defined with regard to the county boundaries it is difficult to determine if some of these species belong to this section to the Blue Mountain Section. Therefore there may be some overlap with regards to the drier areas next to the Blue Mountains. There are several sites within this region that have a large number of disjunctions of humid interior species, while the remainder of the region has mostly dry interior species. *Fabronia pusilla*, an uncommon moss in Washington, has been reported from near Wawawai. It would be important to confirm this species and look for additional populations.

Areas For Research Needs:

1. Kamiak Butte, Whitman Co.

This area has a high number of Humid Interior species, and there is a fair amount of historical information available, thus it would be interesting to see if these species are still there.

2. Steptoe Canyon and Steptoe Butte, Whitman Co.

Many of the Dry Interior Cordillera Species occur here and again there is some historical information available.

3. Almota, Whitman Co.

This is the only location for *Funaria americana* within Washington.

4. Anatone and 2 miles west of Anatone

Both *Buxbaumia piperi and Roellia roellii* have been found here. This is one of the areas that may be within the Blue Mountains Section but it is difficult to tell. This area should be look at as these two species represent disjunct Humid Interior species and there may be more interesting disjuncts present.

5. Asotin Creek, Whitman Co.

Fissidens grandifrons has been found here. The exact location is not clearly defined but since this species is restricted to calcareous sites it should not be to hard to locate it again. According to Schofield (1980) *Fissidens grandifrons* is a persistent remnant of the milder climates that occurred before the Pleistocene glaciations. Today the populations of *Fissidens grandifrons* in Washington are restricted to only a few sites. Also there are other interesting calcicole bryophytes that could be located within the same area, and these would be worth looking for.

6. Lime Hill, Asotin Co., T7N, R47E, Sec's. 19, 20, 29, 30

There is some historical collection information for this area, and it is also a known limestone site Mills (1962). Thus it would be possible for some of the calcicole bryophytes to be in the area. If these species are there they could represent range exstensions from other calcareous sites in the Great Basin Area.

Disjunctions:

Anacolia menziesii
Atrichum selwynii
Buxbaumia piperi
Dicranum howellii
Dicranum tauricum
Dryptodon patens
Hypnum subimponens
Metaneckera menziesii
Plagiomnium insigne
Rhytidiadelphus loreus
Roellia roellii

} Humid Interior Species (Schofield, 1976)

Ptychomitrium gardneri
Tortula princeps
Trachybryum megaptilum

} Mediterranean Climate Species (Schofield .1976)

Western North American Endemic Species: (Schofield, 1980)

Brachythecium hylotapetum
Buxbaumia piperi
Didymodon vinealis v. brachyphyllus
Didymodon vinealis v. rubiginosus
Eurhynchium oreganum
Plagiomnium insigne
Roellia roellii
Trachybryum megaptilum

Interior Cordillera Endemic Species: (Schofield, 1980)

Coscinodon calyptratus
Homalothecium nevadensis

Washington Columbia Basin Section
342I

Issues For Analysis:

This section has a total of 156 species and several of these represent the only sites known for Washington. There are also several type locations which would merit protection if they are not already protected. Additional research should be done especially on the U.S. Fish & Wildlife lands as they contain some of the best wetland habitat within this dry region. Also several Record of Decision C3 species occur scattered through out the region.

Areas For Research Needs:

1. Arid Lands Ecological Reserve

This area has been closed to the public and should have some of the best undisturbed crusts in the region. Also brief collections made by McIntosh indicate that there are several unusual dry site species in this area., ie *Trichostomopsis australasiae*.

2. Wallula, Horse Heaven Country, and Wallula Gorge. Bluffs of the Columbia River, Walla Walla Co.

This area is the Type location of *Bryoerythrophyllum columbianum*, a Columbia River Gorge endemic species (Schofield 1969).

3. Robinson Canyon west of Thorp. Kittitas Co.

This is the only location for *Orthotrichum praemorsum* in Washington and represents only the third location in North America. This canyon is located in the DNR Lt. Murray Wildlife Recreation Area, abt. 47 N, 120 45W.

4. Yakima River area near Thorp. Yakima Co.

This is the Type location for *Schistidium cinlidodonteum* while the location is somewhat vague the general area should be checked to confirm the population and locate additional sites. The Yakima River is also given as the location of *Scouleria marginata* but the exact location is not known.

5. Skamania Co.

According to Hong (1994) *Tritomaria quinquedentata v. quinquedentata* occurs in the "Chiquash Mountains", or SW of Mt. Adams and E. of Wind River. This is a Suksdorf collection that according to Hong is located at WS. As this is a Record of Decision C3 species it would be important to confirm the location of this population.

Disjunctions:

Orthotrichum holanderi, collected by Leiberg in Spokane, Vitt (1973) considers this species to be rare and endemic to the dry mountains of western and central California. thus the population represents the only disjunct location for the species.

Orthotrichum sordidum found in Ellensberg would represent a range extension from Eastern North America. Vitt (1973) does not show this population on his distribution map nor does he mention it in the text. Thus it is doubtful that this is a good determination.

Western North American Endemic Species: (Schofield 1980)
Amphidium californicum
Brachythecium hylotapetum
Didymodon vinealis v. brachyphyllus
Didymodon vinealis v. rubiginosus
Homalothecium aeneum
Homalothecium fulgescens
Homalothecium pinnatifidum
Plagiomnium venustum
Scleropodium obtusifolium
Scouleria aquatica
Scouleria marginata
Trachybryum megaptilum

Interior Cordillera Endemic Species: (Schofield 1980)
Coscinodon calyptratus
Homalothecium nevadense

Record of Decision C3 Species
Antitrichia curtipendula
Ptilidium californicum
Scouleria marginata
Tritomaria quinquedentata

Washington Eastern Cascades Section
M242C

Issues For Analysis:

This is an extremely large section with a diverse number of habitats that range from alpine to dry oak woodland. Therefore a total of 408 species can be found within this section. Near the Columbia River area it was difficult to determine the exact cut off for the Columbia Basin Section, so for the purpose of this report all collections west of the Klickitat River were considered to be in the Columbia Basin Section. Thus all collections from the White Salmon, Bingen and including the Klickitat River are placed within the Eastern Cascades Section. In the future this may be an area that would need further study as the Columbia River Gorge area is rather unique and may represent its own section.

Areas For Research Needs:

1. Mt. Adams Area, Yakima Co.

a. Bird Creek Meadows Area, This area has several interesting bog sites as well as cliff areas, thus providing a wide variety of unique high elevation sites. While there is also good historical data from the area it would still be important to do a through study of the Mt. Adams area. *Targionia hypophylla* is a disjunct liverwort (Schofield 1984) is also reported from the Mt. Adams area.

2. Klickitat River, Klickitat Co.

This is a location for *Scouleria marginata* a Record of Decision C3 species. This river should be rechecked as all of the records for this are 30 or more years old. Also the surrounding drainage's may also have this species so it would be important to look at them as well.

3. Catherine Creek Area, T3N R12E Sec. 30, Klickitat Co.

This area has several "Mediterranean Climate" species of moss, including: *Orthotrichum lyellii, Grimmia pulvinata, Ptychomitrium gardneri, and Pseudobraunia californica.* It also has a large number of Western North American endemic species. Therefore this location needs to be further study in order to obtain a complete list of the species. It would also be possible for *Scouleria marginata* to be in this drainage.

4. 4mi. W. of Stehekin near Rainbow Falls, Wenatchee Nat. Forest, Chelan Co.

This is a site for *Buxbaumia viridis.*

5. Bingen, Klickitat Co.

There are two historical collections, one each of *Buxbaumia aphylla* and *Buxbaumia piperi.*

6. Lake Kachess, Kittitas Co.

This is the location for historical collections of *Buxbaumia piperi.* These are old collections and probably were done before the dam was put into place. Historical

collections also indicate that this is a very rich bryological area and the area probably should be rechecked to see what is still there.

7. Tiffany Mtn. E. North Cascades, ca. 20mi. NE of Winthrop, Okanogan Co.
This is a location for the Record of Decision C3 species *Tritomaria exsectiformis.* Other locations within Okanogan Co. include:

a. Beaver Lake
b. Buster Mt.
c. Lost Lake
d. Sweat Creek

Western North American Endemic Speices (Schofield 1980)

Amphidium californicum
Brachythecium holzingeri
Brachythecium hylotapetum
Brachythecium leibergii
Buxbaumia piperi
Claopodium bolanderi
Dendroalsia abietina
Dichelyma uncinatum
Dicranum pallidisetum
Didymodon vinealis v. brachyphullus
Didymodon vinealis v. rubiginosus
Ditrichum montanum
Eurhynchium oreganum
Fissidens ventricosus
Heterocladium procurrens
Homalothecium aeneum
Homalothecium fulgescens
Homalothecium pinnatifidum
Hypnum circinale
Leucolepis acanthoneuron
Plagiomnium insigne
Plagiomnium venustum
Porotrichum bigelovii
Pseudobraunia californica
Racomitrium brevipes
Racomitrium varium
Rhyzomnium glabrescens
Rhytidiopsis robusta
Roellia roellii
Scleropodium obtusifolium
Scouleria aquatica
Scoularia marginata
Thamnobryum neckeroides
Trachybryum megaptilum

Western North American Endemic Hepatics and Hornworts: (Schofield 1984)

Porella bolanderi
Radulla bolanderi
Phaeoceros hallii

Record of Decision C3 Species:

Antitrichia curtipendula
Ptilidium californicum
Scouleria marginata
Tritomaria exsectiformis

Washington Blue Mountains Section
M332G

Issues For Analysis:

There has been very little historical bryophyte research done within this area, thus a small database of only 25 species exists for a very interesting region. One historical collection, *Anomodon viticulosus*, represents one of only two collections in Western North America. This species is widespread in Europe, Southern Siberia, Japan, Canary Island, North Africa, The Caucasus, the Himalayas and several parts of Eastern Asia. The North American distribution is: Nova Scotia to Ontario and Michigan, south to Virginia, Tennessee and Arkansas. The normal habitat for this species is on shaded calcareous cliffs and boulders, and rare at or near tree bases. (Crum & Anderson, 1981, Ireland 1982).

Research Needs:

The location and historical collection of *Anomodon viticulosus* should be rechecked and verified. Checking the historical collection will be difficult as the collector and location of the collection is unknown. Field checking should be easier as the location is given as Seven Sisters Springs, Blue Mts., Asotin Co., Washington, habitat is on bases of trees (Jones, 1929).

Disjunctions:

Anomodon viticulosus
Dicranum howellii
Dicranum tauricum
Roellia roellii

} Humid Interior Speceis (Schofield 1976)

Western North American Endemic Species:

Homalothecium pinnatifidum
Brachythecium hylotapetum
Roellia roellii

Doubtful Species:

Homalothecium nuttallii

Washington Okanogan Highlands Section
M333A

Issues For Analysis:

This bryophyte flora is composed of 217 species, of which several represent new records for Western North America. According to Andrus and Layser (1971) there is a strong boreal influence in the northeastern portions of the section. When this is combined with the coastal influence of increased precipitation and the bog communities found within the lake remnants and cirque basins many refugia sites are available for boreal species. They further state that this area has been very under botanized. Thus the bryophyte flora of this region really should be looked at very carefully as it could provide some other significant range extensions.

Areas For Research Needs:

1. Pend Oreille River Gorge, Pend Oreille Co., BLM & USFS land, T39N R43E Sec's. 2 & 10

This area is very rich in limestone deposits that are combined with an aquatic environment, thus providing an excellent site for calcicole mosses. Several of the calcicole mosses found here include: *Fissidens grandifrons*, *Hymenostylium recurvirostre*, and *Cratoneuron commutatum v. falcatum*. Since limestone deposits are not very abundant within the state these rich calcareous areas should be protected.

2. Lake Remnants And Cirque Basins With Bog Communities (Andrus & Layser 1971, 1976)

a. Bunchgrass Meadows, T37N R44E Sec. 24
b. Diamond Lake, T30N R44E Sec. 2
c. Deerhorn Meadows, T36N R45E Sec. 22
d. Granite Creek, T37N R44E Sec. 1
e. Gypsy Lake, T40N R45E Sec. 19
f. Huff Lake, T37N R45E Sec. 2
g. Onata Creek, T37N R44E Sec. 16
h. Sema Meadows, T37N R45E Sec. 26
i. Watch Lake, T40N R45E Sec. 30
j. Lake Thomas, T36n R42E Sec. 17

Pend Oreille Co.

Stevens Co.

The following species of *Sphagnum* have been reported from some of the areas listed above: *Sphagnum centrale*, and *Sphagnum contortum* are new records for the western United States. *Sphagnum jensenii* is a range extension from the only other known site in Wyoming. *Sphagnum riparium* according to Crum (1984) is rare and scattered in the United States, this record is new for the contiguous western US as well as the only record for the State.

3. Republic, in Grosche's Canyon

The historical collections of *Ptilium crista-castrensis*, *Mnium spinulosum*, *Metaneckera menziesii*, and *Hedwigia ciliata* indicate that this could be a very

interesting area to explore. The distribution of the *Ptilium* is not well known for eastern Washington and at the present time this is the only location known.

4. Harvey Creek, Pend Oreille Co.
This is the site for the Record of Decision C3 species *Tritomaria exsectiformis*

5. West Deer Creek, Stevens Co.
This is the site for Record of Decision C3 species *Tritomaria exsectiformis*

6. Calispell Peak, abt. 20mi. SE of Colville, Stevens Co.
This is the site of *Buxbaumia aphylla*. Schofield, (1976) states that this species is rare in southern British Colulmbia thus it probably should be considered as rare in eastern Washington.

7. Fort Colville, Stevens Co.
Plagiothecium undulatum was collected from this site. Schofield (1976) states that this species is restricted to west of the Cascades, thus if this is verified as a valid species then it would be a range extension for the region.

Disjunctions:

Anacolia menziesii
Atrichum selwynii
Dicranum tauricum
Dryptodon patens
Heterocladium macounii
Heterocladium procurrens
Hypnum circinale
Pseudotaxiphyllum elegans
Leucolepis acanthoneuron
Metaneckera menziesii
Plagiomnium insigne
Plagiothecium laetum
Porotrichum bigelovii
Rhytidiopsis robusta
Rhytidiadelphus squarrosus
Roellia roellii
Scouleria aquatica

} Humid Interior Species (Schofield 1976)

Western North American Endemic Species: (Schofield 1980)

Amphidium lapponicum
Brachythecium hylotapetum
Brachythecium leibergii
Heterocladium procurrens
Hypnum circinale
Leucolepis acanthoneuron

Plagiomnium insigne
Porotrichum bigelovii
Rhytidiopsis robusta
Roellia roellii
Scouleria aquatica
Thamnobryum neckeroides
Trachybryum megaptilum

Interior Cordillera Endemic Species (Schofield 1980)
Homalothecium nevadense

Record of Decision C3 Species
Ptilidium californicum
Tritomaria exsectiformis

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