

REPORT ON A COLLECTION OF PLANTS MADE BY J. H. SANDBERG  
AND ASSISTANTS IN NORTHERN IDAHO, IN THE YEAR 1892.

By JOHN M. HOLZINGER.

INTRODUCTORY STATEMENT.

The subject of this report is a collection of plants made in the season of 1892 by Dr. J. H. Sandberg, assisted by Mr. D. T. MacDougal and Mr. A. A. Heller, principally in northern Idaho, but to some extent in the adjacent parts of Washington and Montana. The party were commissioned by the Department of Agriculture to proceed "into the field in northern Idaho and eastern Washington for the collection of the flora of that region."

The first camp was pitched 8 miles above Lewiston in the valley of the Clearwater, on the north side of the river at the Upper Ferry. There the party remained from April 23 to May 17, collecting in the surrounding region the plants numbered 1 to 193. The localities explored from Camp 1 were the valley of Clearwater River; the valleys of Hatwai Creek and Snake River to the west of the camp; of Big Potlatch River, a northern tributary of the Clearwater, east of the camp; of Peter Creek, another small tributary, 2 miles east of the camp; and the vicinity of Lapwai Agency, the same distance to the southeast.

The second camp was located in the neighborhood of Lake Waha, some 20 miles south of Camp 1. The party remained in that vicinity from May 20 to May 28, collecting the plants numbered 194 to 263. The Lake Waha region and Wiessners Peak were the principal localities visited from this camp.

Camp 3 was in the valley of Big Potlatch River, about 4 miles from its entrance into Clearwater River, on the north side of the latter. The party remained in this vicinity until June 10, collecting plants numbered 264 to 375. Collections were made in the valley of Big Potlatch River, the trips extending as far north as Julietta, Latah County, and some distance up Little Potlatch River, tributary to the Big Potlatch at Julietta. The collecting grounds of Camp 1 were also revisited from this point.

Camp 4 was pitched some 15 miles south of Moscow, Latah County, in the valley of Little Potlatch River, on the south side of the stream.

The stay at this camp was from June 13 to June 18, the plants collected being numbered 376 to 430. The excursions extended throughout the valley of Little Potlatch River, northward to within 5 miles of Moscow.

Camp 5 was situated at the head of Little Potlatch River, 5 miles south of Moscow, Latah County. The party remained there from June 18 to June 21, collecting plants numbered 431 to 478. From this point the party explored the region around Moscow, going as far northeast as Cedar Mountain.

Camp 6 was 3 miles south of Viola, Latah County. The party remained in that vicinity from June 23 to June 26, collecting plants numbered 479 to 506. The region explored was the country around Viola, reaching to the Kamyak Buttes, 7 miles west, in Washington.

Camp 7 was pitched 4 miles east of Farmington, Latah County. The party remained there from June 26 to July 1, collecting plants numbered 507 to 530. The principal localities visited were Farmington and vicinity, Pine Creek, and the north fork of Hangman's Creek, a tributary to Latah Creek, running northeast of the camp. Pine Creek runs through Farmington, having its source 3 to 4 miles east of that city.

Camp 8 was located on the south shore of Lake Cœur d'Alene, near Farmington Landing, Kootenai County. The party operated from this point from July 1 to July 14, collecting plants numbered 531 to 649 and No. 661. The explorations from this camp covered the region around Farmington Landing, and around Harrison, near the mouth of the Cœur d'Alene River.

Camp 9 was located in the valley of Spokane River, near Post Falls, Kootenai County. The time spent there extended from July 15 to July 18, and the plants collected were numbered 650 to 669, except No. 661. The region explored was principally the valley of Spokane River.

Camp 10 was situated a short distance to the north of Rathdrum, Kootenai County. The time occupied in the vicinity of this camp was from July 20 to July 25. The plants collected were numbered 670 to 740. The region explored was the vicinity of Rathdrum, Lake Tesemini, and Mud Lake. Another collection was made near Rathdrum, August 12 to 15. The plants there collected were numbered 892 to 894.

Camp 11 was located at or near the south end of Lake Pend d'Oreille, Kootenai County. The party worked from this camp as a basis from July 27 to August 10, collecting numbers 741 to 891. The principal points of exploration were the southern part of the valley of Lake Pend d'Oreille, the vicinity of Granite Station, on the railroad a few miles west of the camp, the vicinity of Lake View, on the east shore of the lake, and Packsaddle Peak, one of the heights of Bitter Root Mountains, a little south of the forty-eighth meridian.

The following smaller collections were made during the trips necessary for securing supplies and on the homeward journey: Near Spo-

kane, Wash., from August 15 to 18, Nos. 895 to 930, and Nos. 1027 and 1028; in the valley of Lake Pend d'Oreille, on a second visit to the locality August 20 to 25, Nos. 931 to 970; near Hope, Kootenai County, August 26, Nos. 1023 to 1026, and No. 1029; near Thompson Falls, Mont., August 28, No. 1030; near Bonner, Missoula County, Mont., August 30 and 31, Nos. 982 to 992; near Colgate, close by Glendive, Dawson County, Mont., September 4 to 6, Nos. 993 to 1022, and 1033 to 1035.

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## CATALOGUE OF SPECIES.

### RANUNCULACEÆ.

**Clematis douglasii** Hook. Fl. Bor. Amer. i, 1, t. 1 (1829).

Dry soil, valley of Big Potlatch River, Nez Perces County; June 6 (No. 320).

**Clematis ligusticifolia** Nutt; Torr. & Gr. Fl. i, 9 (1838).

Common on banks at the Upper Ferry, Clearwater River, above Lewiston, Nez Perces County; May 31 (No. 282).

**Atragene americana** Sims, Bot. Mag. t. 887 (1806); *Clematis verticillaris* DC. Syst. i, 166 (1818).

Occasional on moist woody slopes, Craig Mountains, vicinity of Lake Waha, Nez Perces County; May 23 (No. 233).

**Thalictrum occidentale** Gray, Proc. Amer. Acad. viii, 372 (1872).

Large plants with 8 to 12 pistils in a flower, i. e., about double the number stated in Coulter's Flora of the Rocky Mountain Region.

Common in woods, Craig Mountains, vicinity of Lake Waha, Nez Perces County, at 900 meters altitude; May 20 (No. 199).

**Anemone trifolia** L. Sp. Pl. i, 540 (1753).

Common in woods, Craig Mountains, vicinity of Lake Waha, Nez Perces County, at 900 meters altitude; May 20 (No. 194).

**Myosurus apetalus** Gay, Fl. Chil. i, 31 (1845); *Myosurus aristatus* Benth. Loud. Journ. Bot. vi, 458 [second] (1847).

Growing by roadsides at Lewiston, Nez Perces County, May 13 (No. 159).

**Trautvetteria carolinensis** (Walt.) Vail, Mem. Torr. Club, ii, 42 (1890); *Hydrastis carolinensis* Walt. Fl. Car. 156 (1788).

This plant does not seem to be distinct from the eastern species. Gray<sup>1</sup> refers to it as "forma *occidentalis*, *T. grandis* Nutt.," without description. Therefore the citation in Watson's Index, p. 27, as "var. *occidentalis* Gray" is not warranted, for Dr. Gray himself did not consider it even a variety, practically reducing Nuttall's name to a synonym.

Wet places, head of Little Potlatch River, Latah County; June 20 (No. 442). Also near Viola, Latah County, at Farmington Landing, Lake Coeur d'Alene, and in the valley of Lake Pend d'Oreille.

**Ranunculus affinis** R. Br. in Parry's First Voy. App. 265 (1823).

Moist places near Lake Pend d'Oreille, Kootenai County, August 5 (No. 842).

**Ranunculus alismæfolius** Geyer; Benth. Pl. Hartw. 295 (1839), excl. syn.

Wet places, only at head of Little Potlatch River, Latah County; June 16 (No. 418).

**Ranunculus glaberrimus** Hook. Fl. Bor. Amer. i, 12 (1829).

Common on moist ground, island in Clearwater River near Upper Ferry, above Lewiston; May 2 (No. 95).

<sup>1</sup> Proc. Amer. Acad. viii, 372 (1873).

**Ranunculus lacustris terrestris** (Gray) MacMillan, Met. Minn. Val. 247 (1892); Gray, Man. ed. 5, 41 (1867).

Muddy shores of Mud Lake, Kootenai County; July 25 (No. 729).

**Ranunculus nelsonii** (DC.) Gray, Proc. Amer. Acad. viii, 374 (1872); *R. recurvatus nelsonii* DC. Syst. i, 290 (1818).

Dr. Gray in Proc. Amer. Acad. xxi, 372 (1886), discarded the name *R. nelsonii* for this plant, and called it *R. occidentalis*. But the first publication of the latter name (Nuttall's) was in Torrey & Gray's Flora, i, 23 (1838), and it is thus antedated by the former by about twenty years.

This plant agrees fully with the Wilkes Expedition plant No. 607, in the National Herbarium, which Dr. Torrey<sup>1</sup> calls *R. occidentalis parviflorus*, and of which he says that it "is *R. nelsonii*, forma typica, Gray."

Wet ground at 1,700 meters altitude, Cedar Mountain, Latah County; June 26 (No. 461).

**Ranunculus nelsonii glabriusculus**; *R. nelsonii tenellus* Gray, Proc. Amer. Acad. viii, 374 (1872); *R. tenellus* Nutt.; Torr. & Gr. Fl. i, 23 (1838), not Viviani. This is probably also the same as *R. recurvatus* variety  $\gamma$ , Hook. Fl. Bor. Amer. i, 23 (1829).

Rich bottoms near Lapwai Agency, Nez Perces County; May 5 (No. 126). Also on Clearwater River near mouth of Big Potlatch River and in the valley of the Little Potlatch.

**Ranunculus pennsylvanicus** L. f. Suppl. 272 (1781).

Moist places near Rathdrum, Kootenai County; July 25 (No. 732).

**Ranunculus reptans** L. Sp. Pl. i, 549 (1753); *R. flammula reptans* Meyer, Lab. 96 (1830).

Sandy soil, valley of Lake Tesemini, Kootenai County; July 21 (No. 690).

**Ranunculus reptans intermedius** (Hook.) Torr. & Gr. Fl. i, 16 (1838); *R. flammula intermedius* Hook. Fl. Bor. Amer. i, 11 (1829).

In meadows and on mountains, head of Little Potlatch River, Latah County; June 16 (No. 401).

**Ranunculus septentrionalis** Poir. Encycl. vi, 123 (1804).

Frequent in rich soil, Hatwai Creek, Nez Perces County; May 6 (No. 136). Wet places, valley of Little Potlatch River, Nez Perces County; June 7 (No. 332). Valley of Spokane River, near Post Falls, Kootenai County; July 18 (No. 666).

**Batrachium aquatile** (L.) Wimm. Fl. Schles. 8 (1841); *Ranunculus aquatilis* L. Sp. Pl. i, 566 (1753).

Near Harrison, valley of Coeur d'Alene River, Kootenai County; July 13 (No. 645).

**Batrachium tricophyllum** (Chaix) Bossch, Prodr. Fl. Bat. 5 (1850); *Ranunculus tricophyllus* Chaix, in Vill. Hist. Pl. Dauph. i, 335 (1786); *R. aquatilis tricophyllus* Gray, Man. ed. 5, 40 (1867).

Ponds at Lapwai Agency, Nez Perces County; May 5 (No. 131). Valley of Traille River, Kootenai County; August 9 (No. 882). Streams at Hope, on Lake Pend d'Oreille; August 20 (No. 934).

**Cyrtorhyncha cymbalaria** (Pursh) Britton, Mem. Torr. Club, v, 161 (1894); *Ranunculus cymbalaria* Pursh, Fl. ii, 392 (1814).

Sandy banks of Hellgate River, Bonner, Missoula County, Montana; August 31 (No. 989).

**Coptis occidentalis** (Nutt.) Torr. & Gr. Fl. i, 28 (1838); *Chrysocoptis occidentalis* Nutt. Journ. Acad. Phila. vii, 9 (1834).

Common in woods at 900 meters altitude, Craig Mountains, valley of Lake Waha, Nez Perces County; May 21 (No. 217).

<sup>1</sup> Bot. Wilkes, 214 (1862).

**Aquilegia flavescens** Wats. Bot. King Surv. 10 (1871).

At 2,400 meters altitude. Packsaddle Peak, near Lake Pend d'Oreille; August 5 (No. 840).

**Delphinium scopulorum** Gray, Pl. Wright. ii, 9 (1853).

Copses, Spokane, Washington; August 17 (No. 921).

**Delphinium scopulorum stachydeum** Gray, Bot. Gaz. xii, 52 (1887).

Common at Upper Ferry, Clearwater River, above Lewiston, Nez Perces County; April 23 (No. 4).

**Aconitum fischeri** Reich. Ill. Acon. t. 22 (1820); *A. columbianum* Nutt.; Torr. & Gr. Fl. i, 34 (1838).

Frequent in moist, shady places, on Little Potlatch River, 15 miles south of Moscow, Latah County; June 13 (No. 378).

**Actæa spicata arguta** Torr. Pac. R. Rep. iv, 63 (1857).

Moist woods on the Traille River, Kootenai County; August 8 (No. 884).

**Actæa spicata rubra** Ait. Hort. Kew. ii, 221 (1811).

Common in canyons at 900 meters altitude, Craig Mountains, valley of Lake Waha, Nez Perces County; May 27 (No. 235).

#### BERBERIDACEÆ.

**Berberis aquifolium** Pursh, Fl. i, 219 (1814).

Common on rocks and in copses, valley of Hatwai Creek, Nez Perces County; April 28 (No. 62). Canyons, valley of Spokane River, Kootenai County; July 16 (No. 657).

**Berberis nervosa** Pursh, Fl. i, 219 (1814).

Woods, 4 miles east of Farmington, Latah County; June 26 (No. 507). An eastward extension of range.

#### NYMPHÆACEÆ.

**Brasenia purpurea** (Mx.) Casp. in Engler & Prantl, Nat. Pfl. iii, abt. 2, 6 (1891); *Hydropeltis purpurea* Mx. Fl. i, 324 (1803).

Ponds, Granite Station, Kootenai County; July 29 (No. 782).

**Nymphæa advena** Soland.; Ait. Hort. Kew. ii, 226 (1789).

Sluggish creek near Farmington Landing, Lake Cœur d'Alene; July 8 (No. 621).

**Nymphæa polysepala** (Engelm.) Greene, Bull. Torr. Club, xv, 84 (1888); *Nuphar polysepalum* Engelm. Trans. St. Louis Acad. ii, 283 (1865).

Ponds, valley of Lake Tesemini, Kootenai County; July 22 (No. 701).

**Castalia leibergii** Morong, Bot. Gaz. xiii, 124 (1888).

Ponds, Granite Station, Kootenai County; July 30 (No. 812).

#### FUMARIACEÆ.

**Bikukulla cucullaria** (L.) Millspaugh, Bull. W. Va. Agr. Exp. Sta. 2, 327 (1892); *Fumaria cucullaria* L. Sp. Pl. ii, 699 (1753); *Dicentra cucullaria* Torr. Fl. N. Y. i, 45 (1843).

Rich shady places, Upper Ferry, Clearwater River, above Lewiston; April 24 (No. 34).

**Capnoides montanum** (Engelm.) Britton, Mem. Torr. Club, v, 166 (1894); *Corydalis montana* Engelm.; Gray, Mem. Amer. Acad. iv, 6 (1849), as synonym; *Corydalis aurea occidentalis* Engelm.; Gray, Man. ed. 5, 62 (1867); *Capnoides aureum occidentale* Hitchcock, Spring Fl. Manhattan, 17 (1894).

Rocky hillsides, near Hatwai Creek, Nez Perces County; May 5 (No. 139). Sandy soil, south end of Lake Pend d'Oreille; July 28 (No. 765).

## CRUCIFERÆ.

**Roripa curvisiliqua** (Hook.) Bessey, Mem. Torr. Club, v, 169 (1894); *Sisymbrium curvisiliqua* Hook. Fl. Bor. Amer. i, 61 (1829); *Nasturtium curvisiliqua* Nutt.; Torr. & Gr. Fl. i, 74 (1838).

Frequent in wet places, Julietta, Latah County; June 8 (No. 340).

**Roripa nasturtium** (L.) Rusby, Mem. Torr. Club, iii, 5 (1893); *Sisymbrium nasturtium* L. Sp. Pl. ii, 657 (1753); *Nasturtium officinale* R. Br. in Ait. Hort. Kew. ed. 2, iv, 110 (1812).

Frequent in wet places, Upper Ferry, Clearwater River, above Lewiston; June 2 (No. 298).

**Roripa palustris** (L.) Bess. Enum. 27 (1821); *Sisymbrium amphibium palustre* L. Sp. Pl. ii, 657 (1753); *Nasturtium palustre* DC. Syst. ii, 191 (1821).

Near Hope, Kootenai County; September 25 (No. 1029).

**Barbarea barbarea** (L.) MacMillan, Metasp. Minn. Val. 259 (1892); *Erysimum barbarea* L. Sp. Pl. ii, 660 (1753); *Barbarea vulgaris* R. Br. in Ait. Hort. Kew. ed. 2, iv, 109 (1812).

Island in Clearwater River near Upper Ferry, above Lewiston; May 2 (No. 90). Also Clearwater River near mouth of Big Potlatch, and head of Little Potlatch.

**Arabis arcuata** (Nutt.) Gray, Proc. Amer. Acad. vi, 187 (1864); *Streptanthus arcuatus* Nutt.; Torr. & Gr. Fl. i, 77 (1838).

Shores and sandy soil near Hatwai Creek, Nez Perces County; April 30 (No. 79). Also Upper Ferry, Clearwater River, above Lewiston; valley of Lake Waha; Clearwater River, near mouth of Big Potlatch; and head of Little Potlatch.

**Arabis hirsuta** (L.) Scop. Fl. Carn. ed. 2, ii, 30 (1772); *Turritis hirsuta* L. Sp. Pl. ii, 666 (1753).

Sandy soil, near Hatwai Creek, Nez Perces County; April 24 (No. 41).

**Arabis perfoliata** Lam. Encycl. i, 219 (1788).

Common in sandy soil, island in Clearwater River, near Upper Ferry, above Lewiston; May 2 (No. 88).

**Arabis platysperma** Gray, Proc. Amer. Acad. vi, 519 (1865).

Dry soil at 2,500 meters altitude, Packsaddle Peak, near Lake Pend d'Oreille; August 6 (No. 852).

**Arabis retrofracta** Graham, Edinb. New Phil. Journ. 7 (1829).

A good species, distinct from *A. holboellii*.

Frequent in sandy soil, island in Clearwater River, near Upper Ferry, above Lewiston; May 2 (No. 91).

**Arabis spathulata** Nutt.; Torr. & Gr. Fl. 81 (1838).

Sides of Wiessner's Peak, at 1,800 meters altitude, on the St. Joseph River, Kootenai County; July 8 (No. 601).

**Thelypodium laciniatum** Endl. Gen. Pl. 876 (1836-40).

Rocky banks, valley of Peter Creek, Nez Perces County; May 4 (No. 122). Also along the lower Clearwater River.

**Cardamine hirsuta** L. Sp. Pl. ii, 655 (1753).

Frequent in wet places, valley of Peter Creek, Nez Perces County; May 4 (No. 111).

**Cardamine leibergii** sp. nov.

From a prostrate rootstock rooting like *Nepeta glechoma*; stem glabrous throughout, erect, 12 to 20 cm. high, leafy from the base; leaves few, alternate, simple, or on thrifty plants the lower pinnate by the development on the now elongated petiole of leaflets always much smaller than the terminal one, this slightly 5 to 9 lobed or toothed and oval in general outline, or sometimes nearly



CARDAMINE SANDBERGII HOLZINGER.



circular; petiole 1 to 2 cm. long, more or less distinct; flowers white, 3 to 4 mm. long; calyx half the length of the corolla, on pedicels equaling the flower at the time of blooming, but soon elongating, slightly diverging from the erect rachis. There was no fully matured fruit on any of the numerous plants collected.

Moist places near summit of Packsaddle Peak, Kootenai County; August 6 (No. 856).

**Platyspermum scapigerum** Hook. Fl. Bor. Amer. i, 268 (1830).

On hillsides near Peter Creek, Nez Perces County; May 4 (No. 110).

**Draba caroliniana** Walt. Fl. Car. 174 (1788).

Dry hillsides, Upper Ferry, Clearwater River, above Lewiston; May 9 (No. 141).

**Draba nemorosa** L. Sp. Pl. ii, 643 (1753).

Valleys, Upper Ferry, Clearwater River, above Lewiston; April 23 (No. 14). Also valley of Lake Waha, and near mouth of Big Potlatch River.

**Sisymbrium incisum filipes** Gray, Pl. Fendl. 8 (1849).

Common at Upper Ferry, Clearwater River, above Lewiston; April 28 (No. 59).

**Sisymbrium officinale** Scop. Fl. Carn. ed. 2, ii, 26 (1772); *Erysimum officinale* L. Sp. Pl. ii, 660 (1753).

Near Colgate, Montana; September 6 (No. 1035).

**Erysimum asperum** DC. Syst. ii, 505 (1821).

Common on hillsides, near Hatwai Creek, Nez Perces County; April 24 (No. 35). Shores, south end of Lake Cœur d'Alene; July 5 (No. 558).

**Erysimum cheiranthoides** L. Sp. Pl. ii, 661 (1753).

In woods, south end of Lake Pend d'Oreille; July 27 (No. 766).

**Camelina sativa** (L.) Crantz, Stirp. Austr. i, 18 (1762); *Myagrum sativum* L. Sp. Pl. ii, 641 (1753).

By roadsides, introduced, at Upper Ferry, Clearwater River, above Lewiston; April 28 (No. 72).

**Hutchinsia procumbens** (L.) Desv. Journ. Bot. iii, 168 (1814); *Lepidium procumbens* L. Sp. Pl. ii, 643 (1753); *Capsella diraricata* Nutt.; Walp. Repert. i, 175 (1842).

Moist ground at Lewiston; May 13 (No. 160).

**Lepidium dictyotum** Gray, Proc. Amer. Acad. vii, 329 (1868).

Common by roadsides, near Hatwai Creek, Nez Perces County; April 24 (No. 45).

**Lepidium intermedium** Gray, Pl. Wright. ii, 15 (1853).

Table-lands near Upper Ferry, Clearwater River, above Lewiston; April 26 (No. 60).

**Lepidium montanum alyssoides** (Gray) Jones, Zoe, iv, 266 (1893); *L. alyssoides* Gray, Pl. Fendl. 10 (1849).

Dry hillsides, Upper Ferry, Clearwater River, above Lewiston; May 9 (No. 145).

**Thlaspi alpestre** L. Sp. Pl. ed. 2, ii, 903 (1763).

Slender glabrous form. Rocks at 1,800 meters altitude, near foot of Wiessner's Peak, on the St. Joseph River, Kootenai County; July 8 (No. 595).

**Thysanocarpus curvipes** Hook. Fl. Bor. Amer. i, 69 (1830).

Basaltic rocks, Upper Ferry, Clearwater River, above Lewiston; April 23 (No. 8). Also, valley of Lake Waha, and valley of the Clearwater River near mouth of Big Potlatch.

**Athysanus pusillus** (Hook.) Greene, Bull. Cal. Acad. i, 72 (1884); *Thysanocarpus pusillus* Hook. Icon. Pl. i, t. 42 (1837).

Upper Ferry, Clearwater River, above Lewiston; April 23 (No. 5).

## CAPPARIDACEÆ.

**Cleome lutea** Hook. Fl. Bor. Amer. i, 70 (1829).

On Hangman's Creek, near Spokane, Washington; August 15 (No. 907).

**Cleome serrulata** Pursh, Fl. ii, 441 (1814); *Cleome integrifolia* Torr. & Gr. Fl. i, 122 (1838).

Sandy soil south end of Lake Pend d'Oreille; July 27 (No. 742).

**Jacksonia trachysperma** Greene, Pittonia, ii, 195 (1891); *Polanisia trachysperma* Torr. & Gr. Fl. i, 669 (1840).

Sandy soil, Colgate, near Glendive, Dawson County, Montana; September 6 (No. 1012).

## VIOLACEÆ.

**Viola canadensis** L. Sp. Pl. ii, 936 (1753).

Rich canyons, scarce, at 900 meters altitude, Craig Mountains, Nez Perces County; May 20 (No. 213).

**Viola canina adunca** (Smith) Gray, Proc. Amer. Acad. viii, 377 (1872); *Viola canina* L. Sp. Pl. ii, 935 (1753); *Viola adunca* Smith, in Rees's Cycl. xxxvii (1819).

Frequent in canyons at 900 meters altitude, Craig Mountains, Nez Perces County; May 20 (No. 207).

**Viola glabella** Nutt.; Torr. & Gr. Fl. i, 142 (1838).

Rich canyons, at 900 meters altitude, Craig Mountains, Nez Perces County; May 21 (No. 212). Also near Viola, Latah County, and near south end of Lake Pend d'Oreille.

**Viola howellii** Gray, Proc. Amer. Acad. xxii, 308 (1887).

Frequent in rich soil, mouth of Big Potlatch River, Nez Perces County; May 3 (No. 105). Canyons, Wiessner's Peak, Kootenai County; July 8 (607).

**Viola nuttallii** Pursh, Fl. i, 174 (1814).

Woods at 900 meters altitude, Craig Mountains, Nez Perces County; May 22 (No. 222). Found only at one point.

**Viola orbiculata** Geyer, Hook. Lond. Journ. Bot. vi, 73 (1847).

This has the large rootstalk, the acutely triangular glandular-margined stipules and bracts, and the stigma of *V. glabella*, but it is nearly acaulescent, the stem leaves being mostly reduced to mere stipules; the peduncles are much elongated, and the leaves are quite glabrous, the margin merely glandular-dentate, not ciliate as in *V. glabella*. The general outline of the leaf is that of *V. biflora* L.; but it is less caulescent than that species, and differs from it in rootstock, stipules, and stigma, as above noted.

The leaves are mostly radical, numerous, on slender, glabrous petioles 5 to 10 cm. long, with bright-green blade 3 to 5 cm. in diameter, generally circular in outline, but occasionally slightly elongated, the margin minutely glandular, crenate, the sinus of the deeply cordate base closed by the overlapping lobes, the under surface quite glabrous, the upper beset with scattered, short, stout, appressed hairs. The early-flowering form, with large yellow flowers on long peduncles, appears frequently as if acaulescent, nothing being left to represent the (usually two opposite) leaves of the sarmentose stem except the scarious, acutely triangular, glandular-margined stipules near the ground—the similar peduncular bract is quite near the flower. The later basal leaves are larger, on longer petioles, and in all our specimens exceed the sarmentose stems. The several weak stems bear each usually two opposite leaves much smaller than the basal leaves, on petioles 1 to 2 cm. long, the blade more ovate in outline, and the basal sinus less deep. From their axils spring 2 to 4 short-peduncled cleistogamous flowers, while the stem continues as a slender, usually leafless, stolon. This does not root in any of our specimens, though they are in fruit, and does not exceed the long-petioled later leaves; yet it probably does so later in the season.



VIOLA ORBICULATA GEYER.

In its early-flowering form this species suggests a close affinity with *V. rotundifolia* Mx. But the leafy stems remove it to the neighborhood of *V. sarmentosa* Dougl. From the latter our plant differs abundantly in the bright-green leaves with deeply cordate base, in the short, two-leaved sarmentose stems, reluctantly rooting, if at all, and in the usually clustered cleistogamous flowers.

Hooker,<sup>1</sup> the author, states that he is "not sure there are not two species" among his specimens of *V. sarmentosa* Dougl. One which sent out wiry stems like the runners of the strawberry and had purple-dotted leaves he took to be the probable type of Douglas's species. The other plant, he says, "has no stolons; the pale-green, almost reniform, leaves are quite destitute of dots, and have an injured flower arising from the root." This description agrees very well with the early-flowering form of our plant. For the stipules near the base of the subradical peduncle were probably present, as they are easily overlooked, unless there is at hand a good series, among which some leaf-bearing flowering stems are apt to occur. Another circumstance favoring the supposition that this is the plant referred to by Hooker is that it comes from Nez Perces County, Idaho, less than 200 miles south of the type locality of *V. sarmentosa*.

Our plant has been sent to Kew and verified by comparison with Mr. Geyer's plant.

In the London Journal of Botany, vi, 73, (1847), W. J. Hooker, in the "Catalogue of Mr. Geyer's Collection of Plants," refers to a doubtful *V. rotundifolia* Mx., stating that if it "proves distinct Mr. Geyer's nst. name of *V. orbiculata* should be adopted."

The plant has been known since 1833, as is seen from the following list of the specimens in the National Herbarium:

1. Douglas's plant, from the Columbia River, Washington, collected 1833.
2. The Wilkes Expedition plant, No. 338, from the Cascade Mountains, collected 1838 to 1842.
3. Geyer's plant, No. 295, from the Cœur d'Alene Mountains, Idaho, collected in 1843-4.
4. Rothrock's plant, No. 21, from Northern British Columbia, collected in 1865-6.
5. Sandberg's, No. 214, collected in Nez Perces County, Idaho, in 1892.

The synonymy is as follows:

*V. sarmentosa* Dougl. in part; Hook. Fl. Bor. Amer. i, 81 (1830); *V. rotundifolia* (?) Hook. Lond. Journ. Bot. vi, 73 (1847); Torr. Bot. Wilkes, 237 (1874), not Dougl.

Frequent in rich canyons, at 900 meters altitude. Craig Mountains, Nez Perces County; May 2 (No. 214).

**Viola obliqua** Hill, Hort. Kew. 316 (1769); *V. cucullata* Ait. Hort. Kew. iii, 288 (1789); *V. palmata cucullata* Gray, Bot. Gaz. xi, 254 (1886).

Moist soil, valley of Peter Creek, Nez Perces County; May 4 (113). Also vicinity of Lake Waha.

**Viola palustris** L. Sp. ii, 934 (1753).

Marshes near Granite Station, Kootenai County; July 29 (No. 793).

#### CARYOPHYLLACEÆ.

**Silene antirrhina** L. Sp. Pl. i, 419 (1753).

Common in shady places at Upper Ferry, Clearwater River, above Lewiston; May 17 (No. 190).

**Silene menziesii** Hook. Fl. Bor. Amer. i, 90 (1829).

Rich, shady places, Upper Ferry, Clearwater River, above Lewiston; May 17 (No. 186).

<sup>1</sup> Fl. Bor. Amer. i, 80, 81 (1830).

**Silene multicaulis** Nutt.; Torr. & Gr. Fl. i, 192 (1842).

Common on dry hillsides, Julietta, Latah County; June 8 (No. 342).

**Silene scouleri** Hook. Fl. Bor. Amer. i, 88 (1830).

Sandy soil near Rathdrum; July 18 (No. 669).

**Cerastium arvense** L. Sp. Pl. i, 438 (1753).

Sandy soil at Upper Ferry, Clearwater River, above Lewiston; April 26 (No. 49).

**Cerastium longipedunculatum** Muhl. Cat. 46 (1813); *C. nutans* Raf. Prec. Dec. 36 (1814).

Island in Clearwater River, near Upper Ferry, above Lewiston; May 2 (No. 98).

Woods, valley of Pine Creek, near Farmington, Latah County; June 28 (No. 514).

**Alsine borealis** (Bigel.) Britton, Mem. Torr. Club, v, 149 (1894); *Stellaria borealis* Bigel. Fl. Bost. ed. 2, 182 (1824).

Frequent in moist places, near Julietta, Latah County; June 8 (No. 349).

**Alsine crispa** (Cham. & Schlecht.); *Stellaria crispa* Cham. & Schlecht. Linn. i, 51 (1826).

Springy places, valley of Pine Creek, near Farmington, Latah County; June 29 (No. 527).

**Alsine jamesii** (Torr.); *Stellaria jamesii* Torr. Ann. Lyc. N. Y. ii, 169 (1828).

Common along creeks, near Hatwai Creek, Nez Perces County; April 30 (No. 78). Wooded ravine, on the St. Joseph River at 1,800 meters altitude, Wiessner's Peak, Kootenai County; July 8 (No. 608).

**Alsine longifolia** (Muhl.) Britton, Mem. Torr. Club, v, 150 (1894); *Stellaria longifolia* Muhl.; Willd. Enum. 479 (1809).

Frequent in meadows, head of Little Potlatch River, Latah County; June 16 (No. 410). Wet places near Mud Lake, Kootenai County; July 25 (No. 740).

**Alsine longipes** (Goldie) Coville, Contr. Nat. Herb. iv, 70 (1893); *Stellaria longipes* Goldie, Edinb. Phil. Journ. vi, 327 (1822).

Valley of the Big Potlatch River, 4 miles from its mouth, Nez Perces County; June 8 (No. 361). Frequent in wet places near Viola, Latah County; June 23 (No. 487).

**Alsine media** L. Sp. Pl. i, 272 (1753); *Stellaria media* Cyr. Char. Comm. 36 (1784).

Common along creeks, near Upper Ferry, Clearwater River, above Lewiston; May 10 (No. 154).

**Alsine nitens** (Nutt.); Greene, Bot. Bay Reg. 33 (1894); *Stellaria nitens* Nutt.; Torr. & Gray, Fl. i, 185 (1838).

On hillsides, throughout valley of Clearwater River, Nez Perces County; April 23 (No. 15). Also valley of Lake Waha and mouth of Big Potlatch River.

**Alsine uliginosa** (Murr.) Britton, Mem. Torr. Club, v, 150 (1893); *Stellaria uliginosa* Murr. Prodr. Goett. 55 (1770).

Moist places, Packsaddle Peak, Kootenai County; Aug. 6 (No. 865).

**Arenaria capillaris** Poir. Lam. Encycl. vi, 380 (1804).

Summit of Wiessner's Peak on the St. Joseph River, at 1,800 meters altitude, Kootenai County; July 8 (No. 589).

**Arenaria congesta** Nutt.; Torr. & Gr. Fl. i, 178 (1838).

Frequent on dry hillsides, head of little Potlatch River; Latah County, June 2 (No. 478).

**Arenaria lateriflora** L. Sp. Pl. i, 423 (1753).

Frequent on dry soil, head of little Potlatch River, Latah County; June 16 (No. 399).

**Arenaria macrophylla** Hook. Fl. Bor. Amer. i, 102 (1830).

Sandy soil, Craig Mountains, at 900 meters altitude, Nez Perces County; May 17 (No. 201). Also Clearwater River, near mouth of Big Potlatch, head of Little Potlatch, and near Farmington, Latah County.

**Tissa rubra** (L.) Britton, Bull. Torr. Club, xvi, 127 (1889); *Arenaria rubra* L. Sp. Pl. i, 423 (1753).

Roadsides, head of Little Potlatch River, Latah County; June 16 (No. 408). Farmington Landing, Lake Cœur d'Alene; July 4 (No. 548). Also near Viola and Farmington, Latah County.

#### PORTULACACEÆ.

**Portulaca oleracea** L. Sp. Pl. i, 445 (1753).

Spokane Bridge, 18 miles east of Spokane, Washington; August 15 (No. 897).

**Claytonia arenicola** Henderson, Bull. Torr. Club, xxii, 49 (1895).

Common in shady, moist places on Hatwai Creek, Nez Perces County; April 24 (No. 36).

**Claytonia chamissoi** Ledeb.; Spreng. Syst. Veg. i, 790 (1825).

Wet places, head of Little Potlatch River, Latah County; June 16 (No. 398). Also near Viola, Latah County.

**Claytonia caroliniana sessilifolia** Torr. Pac. R. Rep. iv, 70 (1856).

Rich, moist soil, Craig Mountains, at 900 meters altitude, Nez Perces County; May 20 (No. 1040).

**Claytonia parvifolia** Moçino; DC. Prodr. iii, 361 (1828).

Moist crevices at 2,600 meters altitude, Packsaddle Peak, near Lake Pend d'Oreille; August 5 (No. 849). There were only two small plants of this species in the collection.

**Claytonia perfoliata** Donn; Willd. Sp. Pl. i, 1186 (1798).

Common in shady, moist places, valley of Hatwai Creek, Nez Perces County; April 24 (No. 37).

**Claytonia sibirica** L. Sp. Pl. i, 204 (1753).

Rich, moist soil, Craig Mountains, at 900 meters altitude, Nez Perces County, May 20 (No. 208). Same locality; May 25 (No. 246). Also near Upper Ferry, Clearwater River, above Lewiston; valley and head of Little Potlatch River, Latah County, and near Viola, Latah County.

#### HYPERICACEÆ.

**Hypericum formosum scouleri** (Hook.) Coult. Bot. Gaz. xi, 108 (1886); *Hypericum scouleri* Hook. Fl. Bor. Amer. i, 111 (1830).

Copses 4 miles east of Farmington, Latah County, Idaho; June 28 (No. 512). Meadows, Granite Station, Kootenai County; July 29 (No. 792).

#### MALVACEÆ.

**Sidalcea malvæflora** (DC.) Gray, Pl. Wright. i, 16 (1852); *Sida malvæflora* DC. Prodr. i, 474 (1824).

Meadows 15 miles south of Moscow, Latah County; June 14 (No. 391). Also valley and head of Little Potlatch River, and North Fork of Hangman's Creek, east of Farmington, Latah County.

**Sphæralcea acerifolia** Nutt.; Torr. & Gray, Fl. i, 228 (1838).

In canyons near Farmington Landing, Lake Cœur d'Alene, Kootenai County; July 5 (No. 562).

**Sphæralcea munroana** (Dougl.) Spach, Proc. Amer. Acad. xxii, 292 (1887); *Malva munroana* Dougl.; Lindl. Bot. Reg. t. 1306 (1830).

Rocky hillsides, valley of Big Potlatch River, 4 miles from its mouth; June 4 (No. 302).

#### LINACEÆ.

**Linum digynum** Gray, Proc. Amer. Acad. vii, 334 (1868).

Sandy soil, valley of Big Potlatch River, 4 miles from its mouth; June 4 (No. 311). Moist places near Spokane, Washington; August 18 (No. 929).

**Linum lewisii** Pursh, Fl. i, 210 (1814).

Dry ridges near Farmington Landing, Lake Cœur d'Alene, July 2 (No. 533).

#### GERANIACEÆ.

**Geranium carolinianum longipes** Wats. Bot. King Surv. 50 (1871).

Common on sandy soil, Upper Ferry, Clearwater River, above Lewiston; May 31 (No. 279).

**Geranium incisum** Nutt.; Torr. & Gr. Fl. i, 20 (1838).

Upper Ferry, Clearwater River, above Lewiston; May 5 (No. 140).

**Erodium cicutarium** (L.) L'Her.; Ait. Hort. Kew. 2, 414 (1811); *Geranium cicutarium* L. Sp. Pl. ii, 680 (1753).

Hills and valleys, common, Upper Ferry, Clearwater River, above Lewiston; April 28 (No. 58). Widely distributed in Nez Perces and Latah counties.

**Impatiens aurea** Muhl. Cat. 26 (1813); *I. pallida* Nutt. Gen. i, 46 (1818).

Moist places, valley of Mud Lake, Kootenai County; July 25 (No. 738).

#### CELASTRACEÆ.

**Pachystima myrsinites** (Pursh) Raf. Amer. Monthly Mag. 176 (Jan., 1818); *Ilex myrsinites* Pursh, Fl. i, 119 (1814).

Frequent in woods at 1,050 meters altitude, Cedar Mountain, Latah County; June 17 (No. 428).

#### RHAMNACEÆ.

**Rhamnus alnifolia** L'Her. Sert. Angl. 5 (1788).

Shores at Farmington Landing, Lake Cœur d'Alene; June 6 (No. 566). A low, straggling bush.

**Rhamnus californica** Esch. Mem. Acad. Petr. x, 285 (1826).

Copses, valley of Big Potlatch River, 4 miles from its mouth, Nez Perces County; June 8 (No. 352). This plant approaches *R. purshiana*.

**Rhamnus purshiana** DC. Prodr. ii, 25 (1825).

Frequent along streams, vicinity of Hatwai Creek, Nez Perces County; May 9 (No. 156). Deep canyons near Farmington Landing, Lake Cœur d'Alene; July 7 (No. 576).

**Ceanothus sanguineus** Pursh, Fl. i, 167 (1814).

Common in copses, head of Little Potlatch River, Latah County; June 16 (No. 414).

**Ceanothus velutinus** Dougl.; Hook. Fl. Bor. Amer. i, 125 (1830).

Frequent in canyons at 1,100 meters altitude, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 473).

**Ceanothus velutinus lævigatus** Torr. & Gr. Fl. i, 265 (1838).

Camyak Butte, Washington; June 26 (No. 501).

## ACERACEÆ.

**Acer glabrum** Torr. Ann. Lyc. N. Y. 2, 172 (1826).

Common in moist copses, on Hatwai Creek, Nez Perces County; April 30 (No. 81). Bottom lands, same locality; May 17 (No. 182). Copses at Upper Ferry, Clearwater River, above Lewiston; May 30 (No. 277).

## ANACARDIACEÆ.

**Rhus glabra** L. Sp. Pl. i, 265 (1753).

At Spokane Bridge, 18 miles east of Spokane, Washington; August 10 (No. 895).

**Rhus radicans** L. Sp. Pl. i, 266 (1753); *Rhus toxicodendron* L. loc. cit.

Copses at Hope, east side of Lake Pend d'Oreille; August 25 (No. 963).

**Rhus trilobata** Nutt.; Torr. & Gr. Fl. i, 219 (1838).

On plains, near Glendive, Dawson County, Montana; September 6 (No. 1008).

## LEGUMINOSÆ.

**Thermopsis montana** Nutt.; Torr. & Gr. Fl. i, 388 (1838).

Sandy shores, valley of Hatwai Creek, Nez Perces County; April 28 (No. 68). Also at Upper Ferry, Clearwater River, above Lewiston; valley of Lake Waha; Clearwater River above mouth of Big Potlatch; and head of Little Potlatch River.

**Lupinus burkei** Wats. Proc. Amer. Acad. viii, 525 (1873).

Grassy hillsides, island in Clearwater River, near Upper Ferry, above Lewiston; May 2 (No. 99). Also in the valley of Lake Waha.

**Lupinus flexuosus** Lindl.; Agardh, Syn. 34 (1835).

Common at Upper Ferry, Clearwater River, above Lewiston; April 24 (No. 1041).

**Lupinus laxiflorus** Dougl.; Lindl. Bot. Reg. xiv, t. 1140 (1828).

Craig Mountains at 900 meters altitude; May 22 (No. 226).

**Lupinus lepidus** Dougl.; Lindl. Bot. Reg. xiv, t. 1149 (1828). Albino form.

On Peter Creek near Upper Ferry, Clearwater River, above Lewiston; May 4 (No. 120). Very common in that vicinity; not found elsewhere.

**Lupinus leucophyllus** Dougl.; Lindl. Bot. Reg. xiii, t. 1124 (1828).

Upper Ferry, Clearwater River, above Lewiston; May 17 (No. 189). Also valley of Lake Waha, valley of Little Potlatch River, and near Viola, Latah County.

**Lupinus ornatus** Dougl.; Lindl. Bot. Reg. xv, t. 1216 (1829).

Common at Upper Ferry, Clearwater River, above Lewiston; April 24 (No. 23).

**Lupinus polyphyllus** Lindl. Bot. Reg. xiii, t. 1096 (1827).

Canyons at Farmington Landing, Lake Cœur d'Alene; July 7 (No. 577).

**Medicago sativa** L. Sp. Pl. ii, 778 (1753).

Railroad tracks, Spokane, Washington; August 18 (No. 927).

**Trifolium altissimum** Dougl.; Hook. Fl. Bor. Amer. i, 130 (1830).

Bottom lands on Little Potlatch River; June 7 (No. 334). Also head of Little Potlatch River; near Viola, Latah County; and 4 miles east of Farmington, Latah County.

**Trifolium cyathiferum** Lindl. Bot. Reg. xiii, sub. t. 1070 (1827).

Sparingly in moist places, Julietta, Latah County; June 8 (No. 346).

**Trifolium involucreatum** Willd. Sp. Pl. iii, 1372 (1800).

Near Spokane, Washington; August 17 (No. 1028).



- Trifolium longipes latifolium** Hook. Lond. Journ. Bot. vi, 209 (1847).  
Frequent on grassy slopes, Craig Mountains at 900 meters altitude, Nez Perces County; May 20 (No. 216).
- Trifolium microcephalum** Pursh, Fl. ii, 478 (1814).  
Sandy soil on Big Potlatch River, 4 miles from its mouth; June 2 (No. 310). Also on Clearwater River above mouth of Big Potlatch; valley of Little Potlatch; and near Viola, Latah County.
- Trifolium pauciflorum** Nutt.; Torr. & Gr. Fl. i, 319 (1838).  
Moist places near Spokane, Washington; August 18 (No. 923).
- Lotus americanus** (Nutt.) Bisch. Litt. Ber. Linnaea, xiv, 132 (1840); *Trigonella americana* Nutt. Gen. ii, 120 (1818); *Lotus sericeus* Pursh, Fl. i, 489 (1814), not DC. (1813); *Hosackia purshiana* Benth. Bot. Reg. xv, t. 1257 (1829).  
Sandy soil, shore of Lake Cœur d'Alene, near Farmington Landing; July 11. (No. 615).
- Lotus douglasii** Greene, Pittonia, ii, 149 (1892); *Hosackia decumbens* Benth. Bot. Reg. xv, sub t. 1257 (1829).  
Sandy shores, near Farmington Landing, Lake Cœur d'Alene; July 4 (No. 551).
- Lotus pinnatus** Hook. Bot. Mag. t. 2913 (1829); *Hosackia bicolor* Dougl.; Lindl. Bot. Reg. xv, t. 1257 (1829).  
Meadows, head of Little Potlatch River, Latah County; June 16 (No. 402). Also near Viola, Latah County.
- Psoralea lanceolata** Pursh, Fl. ii, 475 (1814).  
Upper Ferry, Clearwater River, above Lewiston; June 2 (No. 301).
- Astragalus arrectus** Gray, Proc. Amer. Acad. viii, 289 (1870).  
Northern slopes on Hatwai Creek, Nez Perces County; May 5 (No. 135). Also valley of Lake Waha.
- Astragalus gibbsii** Kellogg, Proc. Cal. Acad. ii, 161 (1863).  
Dry hillsides, near Upper Ferry, Clearwater River, above Lewiston; May 5 (No. 142). Also valley of Lake Waha.
- Astragalus inflexus** Dougl.; Hook. Fl. Bor. Amer. i, 151 (1830).  
Hillsides, Upper Ferry, Clearwater River, above Lewiston; April 23 (No. 9). Also valley of Lake Waha.
- Astragalus microcystis** Gray, Proc. Amer. Acad. vi, 220 (1864).  
Sandy shores at south end of Lake Pend d'Oreille; August 1 (No. 816).
- Astragalus mortoni** Nutt. Journ. Acad. Phila. vii, 19 (1831).  
Frequent at 1,170 meters altitude, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 473).
- Astragalus spaldingii** Gray, Proc. Amer. Acad. vi, 524 (1865).  
Frequent on dry hillsides, head of Little Potlatch River, Latah County; June 18 (No. 1037).
- Glycyrrhiza lepidota** Pursh, Fl. 480 (1814).  
Shore of Lake Cœur d'Alene, south end; August 4 (No. 826).
- Hedysarum flavescens** Coult. & Fish. Bot. Gaz. xviii, 300 (1893).  
This species is distinguished from *H. boreale* by larger leaflets, only 9 to 15, and especially by the cream-colored flowers on slender pedicels. The joints of the laments are little larger than in *H. boreale*, usually only two maturing, the lowest aborted one serving as a stipe.

<sup>1</sup>The Astragali were determined by Mr. E. P. Sheldon, University of Minnesota, Minneapolis, Minn.

Besides Sandberg's 748 (Idaho Exp., 1892), there are in the National Herbarium Rev. F. D. Kelsey's plant from Helena, Montana (July, 1888), in fruit; and Frank Tweedy's plant from Yellowstone Park (July, 1885), in flower.

South end of Lake Pend d'Oreille; July 27 (No. 748).

**Onobrychis sativa** Lam. Fl. Fr. ii, 652 (1815).

Meadows, near Viola, Latah County; June 26 (No. 494).

**Vicia americana** Muhl.; Willd. Sp. Pl. iii, 1096 (1801).

Common in copses, valley of Hatwai Creek, Nez Perces County; April 28 (No. 65).

Frequent at head of Little Potlatch River, Latah County; June 16 (No. 413).

**Vicia americana truncata** Nutt.; Brewer. Bot. Cal. i, 158 (1876).

Copses, valley of Big Potlatch River, Nez Perces County; June 4 (No. 314).

Woods, valley of Spokane River, Kootenai County; July 17 (No. 667).

**Lathyrus nevadensis** Wats. Proc. Amer. Acad. xi, 133 (1876).

Woods, at 2,700 meters altitude, Wiessner's Peak, Kootenai County; July 8 (No. 611).

**Lathyrus palustris** L. Sp. Pl. ii, 733 (1753).

Sandy hillsides, on Little Potlatch River, Nez Perces County; June 13 (No. 383).

**Lathyrus bijugatus** White, Bull. Torr. Club, xxi, 457 (1894).

Rocky ground at 900 meters altitude on Big Potlatch River, Nez Perces County; June 9 (No. 362). Not found elsewhere.

**Lathyrus bijugatus sandbergii** White, Bull. Torr. Club, xxi, 457 (1894).

Frequent on hillsides, head of little Potlatch River, Latah County; June 16 (No. 412).

**Lathyrus venosus californicus** Wats. Proc. Amer. Acad. xi, 133 (1876).

On slopes, near Upper Ferry, Clearwater River, above Lewiston; April 28, (No. 74).

#### ROSACEÆ.

**Prunus demissa** (Nutt.) Walp. Rep. ii, 10 (1843); *Cerasus demissa* Nutt.; Torr. & Gr. Fl. i, 411 (1840).

Common in copses, island in Clearwater River, near Upper Ferry, above Lewiston; May 2 (No. 97). Copses at Thompson Falls, Montana; August 27 (No. 977).

**Prunus emarginata mollis** Brewer, Bot. Cal. i, 167 (1876).

Common in copses on Hatwai Creek, Nez Perces County; May 5 (No. 137).

**Prunus subcordata** Benth. Pl. Hartw. 308 (1818).

Rich woods, at 900 meters altitude, Craig Mountains, Nez Perces County; May 17 (No. 203).

**Opulaster capitatus** (Pursh) Kuntze, Rev. Gen. Pl. ii, 949 (1891); *Spiraea capitata* Pursh, Fl. i, 342 (1814).

Deep canyons, near Farmington Landing, Lake Cœur d'Alene; July 7 (No. 575).

**Opulaster monogynus** (Torr.) Kuntze, Rev. Gen. Pl. ii, 949 (1891); *Spiraea monogyna* Torr. Ann. Lyc. N. Y. ii, 194 (1828).

Frequent in copses, Upper Ferry, Clearwater River, above Lewiston; May 30 (No. 1042).

**Opulaster opulifolius** (L.) Kuntze, Rev. Gen. Pl. ii, 949 (1891); *Spiraea opulifolia* L. Sp. Pl. i, 489 (1753).

Frequent in copses, Upper Ferry, Clearwater River; May 30 (No. 274).

**Spiraea ariæfolia** Smith, in Rees's Cycl. xxxiii (1819).

Shore of Lake Cœur d'Alene, near Farmington Landing; July 7 (No. 583).

**Spiraea betulifolia** Pallas, Fl. Ross. i, 33, t. 16 (1784).

No. 539 is not typical. It has the corymb somewhat elongated, as in *S. salicifolia*, and may be a hybrid.

Common on dry hillsides, near Upper Ferry, Clearwater River, above Lewiston; June 2 (No. 299). In canyons and on shores, near Farmington Landing, Lake Cœur d'Alene; July 4 (No. 539).

**Spiræa douglasii menziesii** (Hook.) Presl. Epimel. Bot. 195 (1849); *Spiræa menziesii* Hook. Fl. Bor. Amer. 173 (1834).

Along streams near Farmington Landing, Lake Cœur d'Alene; July 2 (No. 537); July 4 (No. 538).

**Rubus arcticus** L. Sp. Pl. i, 494 (1753).

Marshes and rivers, Granite Station, Kootenai County; July 29 (No. 794).

**Rubus nutkanus** Moçino. Lindl. Bot. Reg. t. 1368 (1830).

Common in copses, near Upper Ferry, Clearwater River, above Lewiston; June 2 (No. 300).

**Rubus pedatus** Smith, Icon. Ined. t. 63 (1789-1791).

Moist places, valley of Traille River, Kootenai County; August 10 (No. 888).

**Rubus strigosus** Mx. Fl. i, 297 (1803).

Common on rich bottoms, valley of Hatwai Creek, Nez Perces County; May 27 (No. 259). Among rocks, near the summit of Packsaddle Peak, Kootenai County; August 6 (No. 859).

**Rubus ursinus** Cham. & Schlecht. Linnaea, ii, 11 (1827).

Burnt tract, near Farmington Landing, Lake Cœur d'Alene; July 6 (No. 570).

**Geum ciliatum** Pursh, Fl. i, 352 (1814).

According to MacMillan<sup>1</sup> this is the older name for *Geum triflorum* Pursh.<sup>2</sup>

Common on hillsides, Clearwater River, at mouth of Big Potlatch, Nez Perces County; May 2 (No. 107).

**Geum japonicum** Thunb. Fl. Jap. 220 (1781).

Rich soil, Lapwai Agency, Nez Perces County; May 5 (No. 127). Also Upper Ferry, Clearwater River, above Lewiston; valley of Lake Waha, and of Little Potlatch River; vicinity of Farmington, Latah County; and south end of Lake Pend d'Oreille.

**Geum strictum** Ait. Hort. Kew. ii, 217 (1789).

Frequent in shady places near Julietta, Latah County; June 8 (No. 345).

**Fragaria** sp.

With the aspect in leaves and pubescence of *F. vesca*. But the flowering stems are weak, 1 to 2 dm. long; the large, light rose-colored flowers, 1.5 to 2 cm. in diameter, are borne nodding on curved pedicels, and there are scattered hairs among the superficial akenes. Ripe fruit was not collected, hence it is not certain that it is fleshy and juicy.

Woods, valley of Pine Creek, near Farmington Landing, Latah County; June 28 (No. 508).

**Fragaria virginiana illinoensis** Gray, Man. ed. 5, 155 (1867).

This plant has two extra bracts on the petiole.

Common on rich hillsides, Clearwater River at mouth of Big Potlatch, Nez Perces County; May 2 (No. 106). Craig Mountains at 900 meters altitude, near Lake Waha, Nez Perces County; May 21 (No. 219); May 22 (No. 223).

**Potentilla anserina** L. Sp. Pl. i, 495 (1753).

Shore of Lake Pend d'Oreille, near Hope; August 20 (No. 937).

**Potentilla glandulosa** Lindl. Bot. Reg. xix, t. 1583 (1833).

Sandy soil, Upper Ferry, Clearwater River, above Lewiston; April 26 (No. 47). Rocky hillsides on Hatwai Creek, Nez Perces County; May 11 (No. 175). Dry copses, frequent, valley of Big Potlatch River, Nez Perces County; June 6 (No. 316).

<sup>1</sup> Metasp. Minn. Valley, 299 (1892).

<sup>2</sup> Fl. ii, 736 (1814).

**Potentilla gracilis** Dougl.; Hook. Bot. Mag. t. 2984 (1830).

Sandy soil, island in Clearwater River, near Upper Ferry, above Lewiston; May 10 (No. 153). Common in rocky soil on Hatwai Creek, Nez Perces County; May 27 (No. 257). Also valley of Lake Waha.

**Potentilla millegrana** Engelm.; Lehm. Add. Ind. Sem. Hamb. 12 (1849); *P. rivalis millegrana* Wats. Proc. Amer. Acad. viti, 553 (1873).

**Potentilla palustris** (L.) Scop. Fl. Carn. ed. 2, i, 359 (1772); *Comarum palustre* L. Sp. Pl. i, 502 (1753).

Wet marshes, valley of Lake Tesemini, Kootenai County; July 21 (No. 688).

Rich bottoms at Lewiston, Nez Perces County; May 13 (No. 158). Also on Clearwater River, near mouth of Big Potlatch, and at head of Little Potlatch River.

**Sibbaldia procumbens** L. Sp. Pl. i, 284 (1753).

On rocks, summit of Paeksaddle Peak, Kootenai County; August 5 (No. 836).

**Sanguisorba annua** nom. nov.; *Poterium annuum* Nutt.; Hook. Fl. Bor. Amer. i, 198 (1834).

Frequent on sandy soil, valley of Big Potlatch River, Nez Perces County; June 4 (No. 309).

**Rosa blanda** Ait. Hort. Kew. ii, 202 (1789).

High ridges, valley of Little Potlatch River, Latah County; June 13 (No. 381).

In canyons at Farmington Landing, Lake Cœur d'Alene; July 7 (No. 581). Also at head of Little Potlatch River.

**Rosa californica** Cham. & Schlecht. Linnæa, ii, 35 (1827).

Common in copses on Hatwai Creek, Nez Perces County; May 14 (No. 173). Shores of Lake Pend d'Oreille, east side, near Lake View; August 7 (No. 871).

**Rosa fendleri** Crepin, Prim. Monogr. Ros. 452 (1874).

Copses at Thompson Falls, Montana; August 27 (No. 973). Plains, Colgate, near Glendive, Dawson County, Montana; September 6 (No. 1009).

**Rosa gymnocarpa** Nutt.; Torr. & Gr. Fl. i, 461 (1840).

Canyons, valley of Little Potlatch River, Latah County; June 13 (No. 385). Woods on Wiessner's Peak, Kootenai County; July 11 (No. 619). Also head of Little Potlatch River, North Fork of Hangman's Creek, Kootenai County, valley of Spokane River, Kootenai County, and south end of Lake Pend d'Oreille.

**Rosa pisocarpa** Gray, Proc. Amer. Acad. viii, 382 (1872).

Copses at Thompson Falls, Montana; August 27 (No. 974).

**Rosa** sp.

Distinguished at once from all other North American roses by the densely spiny fruits, and the stem with few epidermal spines, or frequently with none. Infra-stipular thorns none; flowers solitary at the ends of short, leafy branches. Leaves and size of flowers nearly as in *R. lucida*.

Canyons near Farmington Landing, south end of Lake Cœur d'Alene; July 7 (No. 572).

**Sorbus sambucifolia** (Cham. & Schlecht.) Rœm. Syn. Monogr. iii, 39 (1847); *Pyrus (Sorbus) sambucifolia* Cham. & Schlecht. Linnæa, ii, 36 (1827).

Frequent in woods at 1,000 meters altitude, Cedar Mountain, Latah County; June 17 (No. 421).

**Cratægus rivularis** Nutt.; Torr. & Gr. Fl. i, 461 (1840).

Common along streams, valley of Hatwai Creek, Nez Perces County; April 25 (No. 43). Copses, scarce, on Little Potlatch River, Latah County; June 13 (No. 377).

**Cratægus tomentosa** L. Sp. Pl. i, 476 (1753).

Copses, frequent, Craig Mountains at 900 meters altitude, Nez Perces County; May 25 (No. 249). Hope, Kootenai County; August 26 (No. 1032).

**Amelanchier alnifolia** Nutt.; Torr. & Gr. Fl. i, 473 (1840), as synonym; *Aronia alnifolia* Nutt. Gen. i, 306 (1818).

Banks of Hatwai Creek, Nez Perces County; April 24 (No. 26). Copses near Upper Ferry, Clearwater River, above Lewiston; April 26 (No. 53). Also vicinity of Lake Waha, and Clearwater River near mouth of Big Potlatch.

#### SAXIFRAGACEÆ.

**Saxifraga bronchialis** L. Sp. Pl. i, 400 (1753).

South end of Lake Pend d'Oreille; July 27 (No. 755).

**Saxifraga heterantha** Hook. Fl. Bor. Amer. i, 252 (1834).

Moist crevices of rocks, Upper Ferry, Clearwater River, above Lewiston; May 2 (No. 92). Also on Packsaddle Peak, Kootenai County, in August.

**Saxifraga integrifolia** Hook. Fl. Bor. Amer. i, 249 (1834).

Grassy slopes, Upper Ferry, Clearwater River, above Lewiston; April 30 (No. 73).

Meadows, head of Little Potlatch River, Latah County; June 18 (No. 432).

**Saxifraga leucanthemifolia** Mx. Fl. i, 268 (1803).

Crevices of rocks, near summit of Packsaddle Peak, Kootenai County; August 5 (No. 831).

**Saxifraga reflexa** Hook. Fl. Bor. Amer. i, 249 (1834).

Moist hillsides, island in Clearwater River, near Upper Ferry, above Lewiston; May 2 (No. 93). Also near south end of Lake Pend d'Oreille.

**Tiarella unifoliata** Hook. Fl. Bor. Amer. i, 238, t. 81 (1834).

Common in woods at 1,170 meters altitude, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 451).

**Tellima parviflora** (Nutt.) Hook. Fl. Bor. Amer. i, 239 (1834); *Lithophragma parviflora* Nutt. Journ. Acad. Phila. vii, 26 (1834).

Common in rocky places, Upper Ferry, Clearwater River, above Lewiston; April 24 (No. 19).

**Mitella breweri** Gray, Proc. Amer. Acad. vi, 533 (1865).

Wet places, near summit of Packsaddle Peak, Kootenai County; August 6 (No. 843).

**Mitella caulescens** Nutt.; Torr. & Gr. Fl. i, 586 (1840).

Near Farmington Landing, Lake Coeur d'Alene; July 5 (No. 553).

**Mitella pentandra** Hook. Bot. Mag. lvi, t. 2933 (1829); Fl. Bor. Amer. i, 241 (1834).

Moist, grassy places, near summit of Packsaddle Peak, Kootenai County; August 5 (No. 837).

**Mitella trifida** Graham, Edinb. N. Phil. Journ. April-June, 1829, 185 (1829).

Frequent in canyons, Craig Mountains at 900 meters altitude, Nez Perces County; May 23 (No. 232). Common in moist places on Little Potlatch River, Nez Perces County; June 13 (No. 380).

**Heuchera cylindrica** Dougl.; Hook. Fl. Bor. Amer. i, 236 (1834).

Petals usually none, occasionally present, then very small.

Common on rocky soil, valley of Clearwater River near Lewiston; May 13 (No. 161).

**Parnassia fimbriata** Banks, in Koenig & Sims, Ann. Bot. i, 391 (1805).

South end of Lake Pend d'Oreille; July 27 (No. 760).

**Philadelphus lewisii** Pursh, Fl. i, 329 (1814).

Common on hillsides and in copses on Hatwai Creek, Nez Perces County; May 27 (No. 253).

**Ribes aureum** Pursh, Fl. i, 164 (1814).

Banks, Upper Ferry, Clearwater River, above Lewiston, Nez Perces County; April 28 (No. 57). Also valley of Lake Waha, and on Clearwater River near mouth of Big Potlatch.

**Ribes cereum** Dougl. Trans. Hort. Soc. vii, 512 (1830).

On rocks, Spokane, Washington; April 20 (No. 130).

**Ribes lacustre** Poir. Encycl. Suppl. ii, 856 (1811).

Frequent in canyons at 900 meters altitude, Craig Mountains, Nez Perces County; May 27 (No. 231). Canyons near Rathdrum, Kootenai County; July 23 (No. 710).

**Ribes niveum** Lindl. Bot. Reg. xx, t. 1692 (1834).

The excellent series of specimens sent in by Dr. Sandberg leaves no doubt as to the specific rank of this plant. Its name, therefore, can not belong to the synonymy of *R. gracile* Mx., as in Watson's Index.

Along Hatwal Creek, Nez Perces County; April 24 (No. 31). In wet places at 900 meters altitude, Craig Mountains, Nez Perces County; May 24 (No. 243).

**Ribes oxyacanthoides** L. Sp. Pl. i, 201 (1753).

Shady places, Craig Mountains at 900 meters altitude, Nez Perces County; May 20 (No. 210). Canyons, scarce, valley of Little Potlatch River, Latah County; June 13 (No. 386). Also near Upper Ferry, Clearwater River, above Lewiston.

**Ribes viscosissimum** Pursh, Fl. i, 163 (1811).

Frequent in woods at 900 meters altitude, Craig Mountains, Nez Perces County; May 21 (No. 218).

#### CRASSULACEÆ.

**Sedum roseum** (L.) Scop. Fl. Carn. ed. 2, i, 326 (1772); *Rhodiola rosea* L. Sp. Pl. ii, 1035 (1753).

Crevices of rocks at 2,600 meters, Packsaddle Peak, Kootenai County; August 6 (No. 860).

**Sedum spathulifolium** Hook. Fl. Bor. Amer. i, 227 (1834).

Common on rocky slopes, Upper Ferry, Clearwater River, above Lewiston, Nez Perces County; May 17 (No. 191).

#### DROSERACEÆ.

**Drosera rotundifolia** L. Sp. Pl. i, 281 (1755).

Marshes, Granite Station, Kootenai County; July 30 (No. 810).

#### ONAGRACEÆ.

**Epilobium adenocaulon** Hausskn. Gest. Bot. Zeitschr. xxix, 119 (1879).

Common in wet places, Upper Ferry, Clearwater River, above Lewiston; May 30 (No. 275).

**Epilobium anagallidifolium** Lam. Encycl. ii, 376 (1786).

The plants are young, and the determination is not certain. The petioled leaves forbid that this should be *E. oregonense* Hausskn.<sup>1</sup>

Crevices of rocks at 2,600 meters altitude, Packsaddle Peak, Kootenai County; August 5 (No. 844). Springy places, same locality; August 6 (No. 855).

**Epilobium franciscanum** Barbey; Brewer & Wats. Bot. Cal. i, 220 (1876).

Moist places, valley of Mud Lake, Kootenai County; July 25 (No. 737).

**Epilobium halleanum** Hausskn. Monogr. Gatt. Epi. 261 (1884).

Frequent in meadows, head of Little Potlatch River, Latah County; June 16 (No. 397).

**Epilobium hornemanni** Reichenb. Icon. Crit. ii, 73 (1824).

Crevices of rocks, subalpine, near south end of Lake Pend d'Oreille; July 27 (No. 746).

<sup>1</sup> Monogr. Gatt. Epi. 276, pl. 14, fig. 66 (1884).

**Epilobium lineare** Muhl. Cat. 39 (1813).

Marshes, Granite Station, Kootenai County; July 30 (No. 802).

**Epilobium minutum** Lindl.; Hook. Fl. Bor. Amer. i, 207 (1834).

Moist rocks at 1,100 meters altitude, Cedar Mountain, Latah County; June 17 (No. 423).

**Epilobium paniculatum** Nutt.; Torr. & Gr. Fl. i, 490 (1840).

Sandy soil, valley of Spokane River, Kootenai County; June 16 (No. 656).  
Common on hillsides, head of Little Potlatch River, Latah County; June 21 (No. 477).

**Epilobium ursinum** Parish; Trelease, Rep. Mo. Bot. Gard. 100 (1891).

Frequent in meadows, head of Little Potlatch River, Latah County; June 16 (No. 409).

**Chamænerion angustifolium** (L.) Scop. Fl. Carn. ed. 2, i, 271 (1772); *Epilobium angustifolium* L. Sp. Pl. i, 347 (1753); *E. spicatum* Lam. Fl. Fr. iii, 482 (1778).

Waste places, south end of Lake Pend d'Oreille, Kootenai County; August 1 (No. 818).

**Clarkia pulchella** Pursh, Fl. i, 260, t. 11 (1814).

Common on hillsides, valley of Hatwai Creek, Nez Perces County; May 14 (No. 171).

**Clarkia rhomboidea** Dougl.; Hook. Fl. Bor. Amer. i, 214 (1834).

Sandy soil, valley of Pine Creek, Latah County; June 29 (No. 526).

**Gayophytum ramosissimum** Torr. & Gr. Fl. i, 513 (1840).

Gravelly soil, along railroad, valley of Spokane River, Kootenai County; July 14 (No. 652).

**Onagra biennis** (L.) Scop. Fl. Carn. ed. 2, i, 269 (1772); *Enothera biennis* L. Sp. Pl. i, 346 (1753).

Waste places near Rathdrum, Kootenai County; July 25 (No. 717).

**Enothera caespitosa** Nutt. Fraser's Cat. No. 53 (1813).

On rocky slopes at Lewiston; May 17 (No. 185).

**Boisduvalia densiflora** (Lindl.) Wats. Bot. Cal. i, 233 (1876); *Enothera densiflora* Lindl. Bot. Reg. xix, t. 1593 (1833); *Boisduvalia douglasii* Spach, Monogr. Onagr. 80, t. 31, fig. 2 (1835).

Moist places, Spokane, Washington; August 17 (No. 922).

**Boisduvalia stricta** (Gray) Greene, Fl. Franc. 225 (1891); *Gayophytum strictum* Gray, Proc. Amer. Acad. vii, 340 (1868).

Basaltic soils, Spokane, Washington; August 16 (No. 905).

**Circæa pacifica** Ascherson & Magnus, Bot. Zeit. xxix, 392 (1871).

Rocky hillsides, east of Lewiston; June 2 (No. 289).

**LOASACEÆ.****Mentzelia dispersa** Wats. Proc. Amer. Acad. xi, 137 (1876).

Sandy hillsides near Upper Ferry, Clearwater River, above Lewiston; May 9 (No. 144).

**Mentzelia lævicaulis** (Dougl.) Torr. & Gr. Fl. i, 535 (1840); *Bartonia lævicaulis* Dougl.; Hook. Fl. Bor. Amer. i, 221 (1834).

Gravelly banks of Spokane River, Kootenai County; July 15 (No. 651).

**Mentzelia ornata** (Pursh) Torr. & Gr. Fl. i, 534 (1840); *Bartonia ornata* Pursh, Fl. i, 326 (1814).

Plains, Colgate near Glendive, Dawson County, Montana; September 6 (No. 1033).

## CACTACEÆ.

**Opuntia missouriensis** DC. Prodr. iii, 472 (1828).

Rocky hillsides, Upper Ferry, Clearwater River, above Lewiston; May 31 (No. 281).

## AIZOACEÆ.

**Mollugo verticillata** L. Sp. Pl. i, 89 (1753).

Seeds nearly glabrous, and without the coiled lines of dots; otherwise as this species.

Sandy soil near Spokane Bridge, 18 miles east of Spokane, Washington; August 15 (No. 899)

## UMBELLIFERÆ.

**Sanicula marilandica** L. Sp. Pl. i, 235 (1753).

Springy places near south end of Lake Pend d'Oreille; July 28 (No. 763).

**Cicuta bulbifera** L. Sp. Pl. i, 255 (1853).

Meadows at Granite Station, Kootenai County; July 29 (No. 789).

**Cicuta virosa maculata** (L.) Coult. & Rose, Rev. Umbel. 130 (1888); *Cicuta maculata* L. Sp. Pl. i, 256 (1753).

Wet meadows, valley of Lake Tesemini, Kootenai County; July 21 (No. 686).

**Carum gairdneri** (Hook. & Arn.) Gray, Proc. Amer. Acad. vii, 344 (1868); *Atenia gairdneri* Hook. & Arn. Bot. Beech. 349 (1840).

Copses, south end of Lake Pend d'Oreille; August 4 (No. 823).

**Sium cicutæfolium** Gaelin, Syst. ii, 482 (1791). A pre-Linnaean species.

Moist places, valley of Mud Lake, near Rathdrum, Kootenai County; July 25 (No. 733).

**Osmorhiza nuda** Torr. Pacif. R. Rep. iv, 93 (1857).

Rich, moist soil, valley of Hatwai Creek, Nez Perces County; May 14 (No. 168). Moist places at 2,600 meters altitude, Packsaddle Peak, Kootenai County; August 6 (No. 845).

**Osmorhiza occidentalis** (Nutt.) Torr. Bot. Mex. Bound. 71 (1859); *Glycosma occidentalis* Nutt.; Torr. & Gr. Fl. i, 639 (1840).

Frequent in wet places, Clearwater River, at mouth of Big Potlatch, Nez Perces County; May 3 (No. 108).

**Ligusticum scopulorum** Gray, Proc. Amer. Acad. vii, 347 (1868).

In rich canyons, Farmington Landing, Lake Coeur d'Alene; July 2 (No. 535).

**Angelica dawsonii** Wats. Proc. Amer. Acad. xx, 369 (1885).

Along creeks in the valley of Traille River, Kootenai County; August 10 (No. 889).

**Angelica lyallii** Wats. Proc. Amer. Acad. xvii, 374 (1882).

Canyons at Farmington Landing, Lake Coeur d'Alene; July 6 (No. 565). Frequent in wet places, valley of Little Potlatch River, Latah County; June 14 (No. 393).

**Peucedanum ambiguum** Nutt.; Torr. & Gr. Fl. i, 626 (1840); *Eulophus ambiguum* Nutt. Journ. Acad. Phila. vii, 27 (1834).

Rocky banks of streams, valley of Peter Creek, Nez Perces County; May 4 (No. 125). Gravelly banks of Spokane River, Kootenai County; July 16 (No. 659).

**Peucedanum bicolor** Wats. Bot. King Surv. 129 (1871).

Slopes of Wiessner's Peak, on the St. Joseph River, Kootenai County; July 8 (No. 596).

<sup>1</sup>The Umbelliferae were determined by Mr. J. N. Rose, assistant botanist, Department of Agriculture.



**Peucedanum canbyi** Coult. & Rose, Bot. Gaz. xiii, 78 (1888).

Northern slopes, Upper Ferry, Clearwater River, above Lewiston; May 10 (No. 150).

**Peucedanum circumdatum** Wats. Proc. Amer. Acad. xxii, 474 (1887).

On basaltic rocks, Upper Ferry, Clearwater River, above Lewiston; April 24 (No. 21).

**Peucedanum geyeri** Wats. Proc. Amer. Acad. xiv, 293 (1879).

Basaltic rocks on Hatwai Creek and south side of Clearwater River, Nez Perces County; April 30 (No. 82).

**Peucedanum grayi** Coult. & Rose, Bot. Gaz. xiii, 209 (1888); *P. millefolium* Wats. Bot. King Surv. 129 (1871), not Sonder.

Hillsides, Upper Ferry, Clearwater River, above Lewiston; April 24 (No. 22). Also vicinity of Lake Waha and on Clearwater River near mouth of Big Potlatch.

**Peucedanum macrocarpum** Nutt.; Torr. & Gr. Fl. i, 627 (1840).

Frequent on hillsides, Upper Ferry, Clearwater River, above Lewiston; April 26 (No. 52).

**Peucedanum salmoniflorum** Coult. & Rose, sp. nov.

Short-caulescent or sometimes tall, 30 to 45 cm. high, bearing 3 or 4 leaves, glabrous throughout; leaves large, ternately compound, finely dissected; ultimate segments short, filiform; involucre none; bracts of the involucre few, filiform; rays of the umbel few (4 to 10), somewhat unequal, 2.5 to 5 cm. long; pedicels 8 to 12 mm. long; fruit oblong, 10 mm. long, glabrous; carpel strongly flattened dorsally, with a broad layer of corky cells on the ventral face; dorsal and intermediate ribs low and obtuse; lateral wings narrow, thick, and corky; oil tubes solitary in the intervals, 2 on the commissural side; seed strongly flattened, somewhat constricted near the middle, not grooved under the oil tubes; stylopodium none; flowers salmon-colored.

A species with much the habit and foliage and with the lateral wings of *Leptotænia*, but differing in having oil tubes and distinct dorsal and intermediate ribs.

On basaltic rocks, near Upper Ferry, Clearwater River, above Lewiston; April 24 (No. 21). Rocky hillsides, island in Clearwater River, same vicinity; May 2 (No. 91).

**Peucedanum triternatum robustius** Coult. & Rose; *P. triternatum macrocarpum* Coult. & Rose, Rev. Umbel. 70 (1888), not *P. macrocarpum* Nutt.

Basaltic rocks, Upper Ferry, Clearwater River, above Lewiston; April 24 (No. 28).

**Heracleum lanatum** Mx. Fl. i, 166 (1803).

Frequent along streams, valley of Hatwai Creek, Nez Perces County; May 24 (No. 252).

**Leptotænia dissecta** Nutt.; Torr. & Gr. Fl. i, 630 (1840).

Hillsides, Craig Mountains, near Lake Waha, Nez Perces County; May 21 (No. 227).

**Leptotænia multifida** Nutt.; Torr. & Gr. Fl. i, 630 (1840).

Frequent on rich hillsides, Upper Ferry, above Lewiston, Nez Perces County; May 2 (No. 103).

**Caucalis microcarpa** Hook. & Arn. Bot. Beech. 348 (1840).

Rocky creek bottoms on Little Potlatch River, Nez Perces County; June 7 (No. 328).

## ARALIACEÆ.

**Aralia nudicaulis** L. Sp. Pl. i, 274 (1753).

Woods, south end of Lake Pend d'Oreille; July 28 (No. 772).

**Echinopanax horridum** (Smith) Dec. & Planch. Rev. Hort. 1854, 105 (1854); *Panax horridum*, Smith in Rees's Cycl. xxvi, no. 10 (1819); *Fatsia horrida* Benth. & Hook. Gen. Pl. i, 939 (1867).

Springy places, Lake View, Kootenai County; August 7 (No. 867). A large tree.

## CORNACEÆ.

**Cornus canadensis** L. Sp. Pl. i, 118 (1753).

Woods at 1,000 meters altitude, Cedar Mountain, Latah County; June 20 (No. 463).

**Cornus stolonifera** Mx. Fl. i, 92 (1803).

Common along creeks, near Upper Ferry, Clearwater River, above Lewiston; May 9 (No. 143).

## CAPRIFOLIACEÆ.

**Sambucus glauca** Nutt.; Torr. & Gr. Fl. ii, 13 (1811).

Frequent along creeks, near Upper Ferry, Clearwater River, above Lewiston; May 31 (No. 283). Woods, south end of Lake Pend d'Oreille; August 1 (No. 813).

**Sambucus melanocarpa** Gray, Proc. Amer. Acad. xix, 76 (1883).

Occasional on river banks, Lapwai Agency, Nez Perces County; May 5 (No. 128). Canyons, near Rathdrum, Kootenai County; July 23 (No. 709). Moist places on grassy slopes at 2,550 meters altitude, Packsaddle Peak, Kootenai County; August 6 (No. 857).

**Symphoricarpos occidentalis** Hook. Fl. Bor. Amer. i, 285 (1834).

Frequent in copses, Upper Ferry, Clearwater River, above Lewiston; May 30 (No. 270). Rocky hillsides on the Little Potlatch River, Nez Perces County; June 6 (No. 335). Copses, south end of Lake Pend d'Oreille; August 24 (No. 952).

**Linnæa borealis** L. Sp. Pl. ii, 631 (1753).

Common in woods, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 441).

**Lonicera ciliosa** (Pursh) Poir. Encycl. v, 612 (1817); *Caprifolium ciliosum* Pursh, Fl. i, 160 (1814).

Common on hillsides and in copses, valley of Little Potlatch River, Latah County; June 13 (No. 390).

**Lonicera involucrata** (Richards.) Banks; Richards. Bot. App. ed. 2, 6 (1823); *Xylosteum involucratum* Richards. Bot. App. ed. 2, 6 (1823).

Bank of St. Joseph River at Wiessner's Peak, Kootenai County; July 28 (No. 597).

**Lonicera utahensis** Wats. Bot. King Surv. 133 (1871).

Woods, Craig Mountains near Waha, Nez Perces County; May 21 (No. 221); May 23 (No. 286). North slope, near summit of Wiessner's Peak, Kootenai County; July 8 (No. 590). Also on Clearwater River near mouth of Big Potlatch, near Viola, Latah County, and near south end of Lake Pend d'Oreille.

## RUBIACEÆ.

**Galium aparine** L. Sp. Pl. i, 108 (1753).

Common on rocks and in copses, island in Clearwater River, near Upper Ferry, above Lewiston; April 30 (No. 83).

**Galium boreale** L. Sp. Pl. i, 108 (1753).

Frequent in low grounds, valley of Big Potlatch River, Nez Perces County; June 6 (No. 322).

**Galium trifidum** L. Sp. Pl. i, 105 (1753).

Common in wet places, head of Little Potlatch River, Latah County; June 17 (No. 416). Woods on the St. Joseph River, at 1,800 meters altitude, Wiessner's Peak, Kootenai County; July 8 (No. 600).

**Galium triflorum** Mx. Fl. i, 80 (1803).

Wet woods, Pine Creek, 4 miles east of Farmington, Latah County; June 29 (No. 525).

#### VALERIANACEÆ.

**Valeriana edulis** Nutt.; Torr. & Gr. Fl. ii, 48 (1841).

Grassy slopes, Craig Mountains, near Lake Waha, Nez Percés County; May 24 (No. 240). Also valley of Little Potlatch River.

**Valeriana sylvatica** Banks; Richards. Bot. App. 730 (1823).

At 1,500 meters altitude, sides of Wiessner's Peak, Kootenai County; July 8 (No. 587).

**Valerianella congesta** Lindl. Bot. Reg. xiii, t. 1095 (1827); *Plectritis congesta* DC. Prodr. iv, 631 (1830).

Common in shady places, Upper Ferry, Clearwater River, above Lewiston; April 26 (No. 55).

**Valerianella olitoria** Poll. Hist. Pl. Palat. i, 30 (1776).

Grassy meadows, Lewiston, valley of Clearwater River; May 13 (No. 157).

#### COMPOSITÆ.

**Coleosanthus grandiflorus** (Hook.) Kuntze, Rev. Gen. Pl. 328 (1891); *Eupatorium grandiflorum* Hook. Fl. Bor. Amer. ii, 26 (1834); *Brickellia grandiflora* Nutt. Trans. Amer. Phil. Soc. n. ser. vii, 287 (1841).

On precipitous ledges of granite, near south end of Lake Pend d'Oreille; July 27 (No. 749).

**Coleosanthus oblongifolius** (Nutt.) Kuntze, Rev. Gen. Pl. 328 (1891); *Brickellia oblongifolia* Nutt. Trans. Amer. Phil. Soc. n. ser. vii, 288 (1841).

In sandy soil, Spokane Bridge, 18 miles east of Spokane, Washington; August 17 (No. 911).

**Lacinaria punctata** (Hook.) Kuntze, Rev. Gen. Pl. i, 349 (1891); *Liatris punctata* Hook. Fl. Bor. Amer. i, 306 (1834).

Plains, Colgate, near Glendive, Dawson County, Montana; Sept. 6 (No. 1020).

**Gutierrezia euthamiæ** (Nutt.) Torr. & Gr. Fl. ii, 193 (1842); *Brachyris euthamiæ* Nutt. Gen. ii, 163 (1818).

Sandy soil, Bonner Missoula County, Montana; August 30 (No. 993). Sandy soil, Colgate, near Glendive, Dawson County, Montana; September 4 (No. 993).

**Grindelia nana** Nutt. Trans. Amer. Phil. Soc. vii, 314 (1841).

Sandy soil, near Granite Station, Kootenai County; July 29 (No. 784). Near Thompson Falls, Montana; August 28 (No. 1836).

**Grindelia squarrosa** (Pursh) Dunal, Mem. Mus. H. N. Par. v, 50, fide DC. Prodr. v, 315 (1836); *Donia squarrosa* Pursh, Fl. ii, 559 (1814).

Sandy soil near Bonner, Missoula County, Montana; August 31 (No. 991).

**Chrysopsis villosa hispida** (Hook.) Gray, Syn. Fl. i, pt. ii, 123 (1884); *Diplopappus hispidus* Hook. Fl. Bor. Amer. ii, 22 (1834).

Common on sandy soil, Upper Ferry, Clearwater River, above Lewiston; May 31 (No. 280). Sandy plains, valley of Spokane River, Kootenai County; July 17 (No. 664). On precipitous ledges of granite, near south end of Lake Pend d'Oreille; July 27 (No. 752).

**Pyrocoma carthamoides** Hook., Fl. Bor. Amer. i, 306, t. 107 (1834); *Aplopappus carthamoides* Gray, Proc. Acad. Phila. xv, 65 (1863).

Sandy places, Granite Station, Kootenai County; July 29 (No. 785).

**Eriocarpum spinulosum** (Pursh) Greene, Erythea, ii, 108 (1894); *Amellus spinulosus* Pursh, Fl. ii, 564 (1814); *Aplopappus (?) spinulosus*, DC. Prodr. v, 347 (1836).

Plains, Colgate, near Glendive, Dawson County, Montana; September 5 (No. 1000).

**Bigelovia douglasii** Gray, Proc. Amer. Acad. viii, 645 (1873).

Sandy soil, Colgate, near Glendive, Dawson County, Montana; September 4 (No. 994).

**Bigelovia graveolens** (Nutt.) Gray, Proc. Amer. Acad. viii, 644 (1873); *Chrysocoma graveolens* Nutt. Gen. ii, 136 (1818).

On buttes, Colgate, near Glendive, Dawson County, Montana; September 6 (No. 1007).

**Bigelovia graveolens albicaulis** Gray, Proc. Amer. Acad. viii, 645 (1873).

Sandy soil, Bonner, Missoula County, Montana; August 31 (No. 992).

**Bigelovia graveolens glabrata** Gray, Proc. Amer. Acad. viii, 645 (1873).

Sandy plains, near Spokane, Washington; August 17 (No. 913).

**Solidago elongata** Nutt. Trans. Amer. Phil. Soc. n. ser. vii, 328 (1841).

Grassy slopes at 1,200 meters altitude, near Rathdrum, Kootenai County; July 20 (No. 671).

**Solidago missouriensis** Nutt. Journ. Acad. Phila. vii, 32 (1834).

Woods at Farmington Landing, Lake Coeur d'Alene; July 11 (No. 614).

**Solidago occidentalis** Nutt.; Torr. & Gr. Fl. ii, 226 (1842).

River banks, Spokane Bridge, 18 miles east of Spokane, Washington; August 16 (No. 909).

**Solidago radula** Nutt. Journ. Acad. Phila. vii, 102 (1834).

Bad Lands at Colgate, near Glendive, Dawson County, Montana; September 4 (No. 995). Plains, near the same place, September 5 (No. 1001).

**Solidago serotina** Ait. Hort. Kew. iii, 211 (1789).

Shores of Mud Lake, Kootenai County; July 25 (Nos. 728, 730).

**Aster adscendens** Lindl.; Hook. Fl. Bor. Amer. ii, 8 (1834).

Marshes, near Granite Station, Kootenai County; July 30 (No. 804). Meadows near Hope, north end of Lake Pend d'Oreille; August 25 (No. 957).

**Aster canescens** Pursh, Fl. ii, 547 (1814).

On basaltic rocks, Spokane, Washington; August 17 (No. 912). Plains, Colgate, near Glendive, Dawson County, Montana; September 5 (No. 1004).

**Aster incanopilosus** (Lindl.) Sheldon, Bull. Torr. Club, xx, 286 (1893); *A. ramulosus incanopilosus* Lindl.; DC. Prodr. v, 243 (1836); *A. multiflorus commutatus* Torr. & Gr. Fl. ii, 125 (1841); *Aster commutatus* Gray, Syn. Fl. i, pt. ii, 185 (1884).

Plains, Colgate, near Glendive, Dawson County, Montana; September 5 (No. 998). Same locality; September 6 (No. 1021).

**Aster conspicuus** Lindl.; Hook. Fl. Bor. Amer. ii, 7 (1840); *Aster macdougalii* Coult. & Fish. Bot. Gaz. xviii, 301 (1893).

Woods, near Farmington Landing, Lake Coeur d'Alene; July 9 (No. 550).

**Aster engelmanni** (Eaton) Gray, Bot. King Surv. 144 (1871); *A. elegans engelmanni* Eaton, Bot. King Surv. loc. cit.

Grassy slopes near summit of Paeksaddle Peak, Kootenai County; August 5 (No. 839).

**Aster foliaceus** Lindl.; DC. Prodr. v, 228 (1836).

Woods near Farmington Landing, Lake Coeur d'Alene; July 12 (No. 625).

- Aster fremonti** (Torr. & Gr.) Gray, Syn. Fl. i, pt. ii, 191 (1888); *A. adscendens fremonti* Torr. & Gr. Fl. ii, 503 (1843).  
Alluvial soil, Lake View, Kootenai County; August 6 (No. 868). Mountain meadows, valley of Traill River, Kootenai County; August 9 (No. 877). River banks, Thompson Falls, Montana; August 28 (No. 980).
- Aster laevis** L. Sp. Pl. ii, 876 (1753).  
Moist copses, near Hope, north end of Lake Pend d'Oreille; August 25 (No. 953).
- Aster modestus** Lindl.: Hook. Fl. Bor. Amer. ii, 8 (1834).  
Along creeks, south end of Lake Pend d'Oreille; July 28 (No. 764).
- Aster multiflorus** Ait. Hort. Kew. iii, 203 (1789).  
Dry soil near Spokane, Washington; August 17 (No. 917).
- Aster sibiricus** L. Sp. Pl. ii, 872 (1753).  
On precipitous ledges of granite, subalpine, near south end of Lake Pend d'Oreille; July 27 (No. 759).
- Aster stenomerus** Gray, Proc. Amer. Acad. xvii, 209 (1882).  
Grassy mountain slopes at 1,200 meters altitude, near Rathdrum, Kootenai County; July 20 (No. 672).
- Aster tanacetifolius** H. B. K. Nov. Gen. & Sp. iv, 95 (1820).  
Plains at Colgate, near Glendive, Dawson County, Montana; September 6 (No. 1017).
- Erigeron acris** L. Sp. Pl. ii, 863 (1753).  
Sandy soil, valley of Lake Tesemini, Kootenai County; July 22 (No. 705).
- Erigeron acris debilis** Gray, Syn. Fl. i, pt. ii, 220 (1884).  
Crevices of rocks, summit of Packsaddle Peak, 2,600 meters altitude, Kootenai County; August 5 (No. 847). Ligules very fine and slender.
- Erigeron canadensis** L. Sp. Pl. ii, 863 (1753).  
Waste places near Rathdrum, Kootenai County, July 25 (No. 731).
- Erigeron compositus pinnatisectus** Gray, Proc. Amer. Acad. xvi, 90 (1880).  
Gravelly banks, Upper Ferry, Clearwater River, above Lewiston, April 26 (No. 48). Also near mouth of Big Potlatch River.
- Erigeron concinnus** (Hook. & Arn.) Gray, Syn. Fl. i, pt. ii, 210 (1888); *Distasis? concinna* Hook. & Arn. Bot. Beech. 350 (1841).  
Frequent in sandy soil, Upper Ferry, Clearwater River, above Lewiston; June 2 (No. 294). Sandy plains, valley of Spokane River, Kootenai County; July 17 (No. 665).
- Erigeron corymbosus** Nutt. Trans. Amer. Phil. Soc. vii, 308 (1841).  
Sandy soil at Farmington Landing, Lake Cœur d'Alene; July 12 (No. 628).
- Erigeron divergens** Torr. & Gr. Fl. ii, 175 (1841).  
Sandy soil, Thompson Falls, Montana; August 28 (No. 979).
- Erigeron filifolius** Nutt. Trans. Amer. Phil. Soc. vii, 328 (1841).  
Sandy plains, near Spokane, Washington; August 17 (No. 915).
- Erigeron macranthus** Nutt. Trans. Amer. Phil. Soc. vii, 310 (1841).  
Frequent in sandy soil, Julietta, Latah County, June 8 (No. 338).
- Erigeron ramosus** (Walt.) B. S. P. Cat. Pl. N. Y. (1888); *Doronicum ramosum* Walt. Fl. Car. 205 (1788).  
Shores, Farmington Landing, Lake Cœur d'Alene; July 5 (No. 557).
- Erigeron ramosus beyrichii** (Fisch. & Mey.) Smith & Pound, Rep. Bot. Surv. Neb. ii, 11 (1893); *Stenactis beyrichii* Fisch. & Mey. Ind. Sem. Petrop. v, 27 (1838).  
Sandy soil near Thompson Falls, Montana; August 27 (No. 976).
- Erigeron speciosus** DC. Prodr. v, 284 (1836).  
Waste places, valley of Lake Tesemini, Kootenai County; July 21 (No. 681).

**Antennaria carpathica pulcherrima** Hook. Fl. Bor. Amer. i, 329 (1834).

Rocky hillsides, valley of Hatwai Creek, Nez Perces County; May 17 (No. 181).

**Antennaria dioica** (L.) Gärtn. Fruct. ii, 410, t. 167 f. 3 (1791); *Gnaphalium dioicum* L. Sp. Pl. ii, 850 (1753).

Frequent in dry soil, valley of Little Potlatch River, Latah County; June 13 (No. 389).

**Antennaria geyeri** Gray, Pl. Fendl. 107 (1849).

Sandy plains near Spokane, Washington; August 17 (No. 916).

**Antennaria luzuloides** Torr. & Gr. Fl. ii, 430 (1843).

Sandy low grounds, valley of Big Potlatch River, Nez Perces County; June 4 (No. 313). Also valley and head of Little Potlatch River, Latah County.

**Antennaria plantaginifolia** (L.) Richards. Bot. App. ed. 2, 30 (1823); *Gnaphalium plantaginifolium* L. Sp. Pl. ii, 850 (1753).

Hillsides, Craig Mountains, near Lake Waha, Nez Perces County; May 27 (No. 229). Dry soil, Julietta, Latah County; June 8 (No. 339). Also valley and head of Little Potlatch River, Latah County.

**Antennaria racemosa** Hook. Fl. Bor. Amer. i, 330 (1834).

Frequent in shady woods, Cedar Mountain, Latah County; June 17 (No. 422).

**Antennaria margaritacea** (L.) Hook. Fl. Bor. Amer. i, 329 (1834); *Gnaphalium margaritaceum* L. Sp. Pl. ii, 850 (1753).

Frequent in sandy soil at 1,150 meters altitude, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 468).

**Gnaphalium decurrens** Ives, Amer. Journ. Sci. i, 380 (1819).

Sandy soil, valley of Cœur d'Alene River, Kootenai County; July 12 (No. 635).

**Gnaphalium microcephalum** Nutt. Trans. Amer. Phil. Soc. n. ser. vii, 404 (1841).

Sandy soil, Lake View, Kootenai County; August 7 (No. 872).

**Gnaphalium palustre** Nutt. Trans. Amer. Phil. Soc. n. ser. vii, 404 (1841).

Frequent in moist places, valley of Little Potlatch River, Nez Perces County; June 7 (No. 329). Sandy soil, valley of Cœur d'Alene River, Kootenai County; July 13 (No. 647).

**Gnaphalium sprengelii** Hook. & Arn. Bot. Beech. 150 (1841).

Waste places, Granite Station, Kootenai County; July 29 (No. 783).

**Adenocaulon bicolor** Hook. Bot. Misc. i, 19, t. 15 (1830).

Frequent in woods, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 443).

**Iva axillaris** Pursh, Fl. ii, 743 (1814).

Plains, Colgate, near Glendive, Dawson County, Montana; September 6 (1015).

**Iva xanthifolia** Nutt. Gen. ii, 185 (1818).

Waste grounds near Spokane, Washington; August 17 (No. 919).

**Ambrosia psilostachya** DC. Prodr. v, 526 (1836).

Near Hope, north end of Lake Pend d'Oreille; August 26 (No. 1031).

**Gærtneria acanthicarpa** (Hook.) Britton, Mem. Torr. Club, v, 332 (1891); *Ambrosia acanthicarpa* Hook. Fl. Bor. Amer. i, 309 (1834); *Frauseria hookeriana* Nutt. Trans. Amer. Phil. Soc. n. ser. vii, 345 (1841).

Sandy soil at Colgate, near Glendive, Dawson County, Montana; September 4 (No. 1006).

**Xanthium canadense** Mill. Gard. Diet. ed. 8, no. 2 (1768).

Sandy banks, Spokane Bridge, 18 miles east of Spokane, Washington; August 17 (No. 910).

**Rudbeckia laciniata** L. Sp. Pl. ii, 906 (1753).

Copses on Hellgate River, Bonner, Missoula County, Montana; August 31 (No. 990).

**Rudbeckia occidentalis** Nutt. Trans. Amer. Phil. Soc. vii, 355 (1841).

Moist places near south end of Lake Pend d'Oreille; July 28 (No. 768).

**Balsamorhiza hookeri** Nutt. Trans. Amer. Phil. Soc. vii, 349 (1841).

Hillsides, Craig Mountains at Lake Waha, Nez Perces County; May 24 (No. 248).

**Balsamorhiza sagittata** (Pursh) Nutt. Trans. Amer. Phil. Soc. vii, 349 (1841);

*Buphthalmum sagittatum* Pursh, Fl. ii, 564 (1814).

Common on hills, on Hatwai Creek, Nez Perces County; April 24 (No. 32).

**Wyethia amplexicaulis** (Nutt.) Nutt. Trans. Amer. Phil. Soc. vii, 349 (1841); *Espeletia amplexicaulis* Nutt. Journ. Acad. Phila. vii, 38 (1834).

Frequent on hillsides, Craig Mountains at Lake Waha, Nez Perces County; May 25 (No. 247).

**Helianthus annuus** L. Sp. Pl. ii, 904 (1753).

Waste places at Mud Lake, near Rathdrum, Kootenai County; July 25 (No. 726).

**Helianthus douglasii** Torr. & Gr. Fl. ii, 332 (1842).

Frequent on sandy soil, valley of Big Potlatch River, Nez Perces County; June 6 (No. 321).

**Coreopsis atkinsoniana** Dougl.; Lindl. Bot. Reg. t. 1376 (1830).

On shores near Farmington Landing, Lake Cœur d'Alene; July 11 (No. 617).

**Bidens frondosa** L. Sp. Pl. ii, 832 (1753).

Wet places near Spokane, Washington; August 17 (No. 914).

**Blepharipappus scaber** Hook. Fl. Bor. Amer. i, 316 (1834).

On basaltic rocks, Upper Ferry, Clearwater River, above Lewiston; April 23 (No. 6). Also valley of Lake Waha, and Clearwater River near mouth of Big Potlatch.

**Madia filipes** Gray, Proc. Amer. Acad. viii, 391 (1872); *Harpocarpus madarioides* Nutt. Trans. Amer. Phil. Soc. n. ser. vii (1841).

Dry hillsides, head of Little Potlatch River, Latah County; June 20 (No. 447).

Sandy soil near Farmington Landing, Lake Cœur d'Alene; July 4 (No. 549).

**Madia glomerata** Hook. Fl. Bor. Amer. ii, 24 (1834).

Sandy soil, valley of Lake Tesemini, Kootenai County; July 22 (No. 696).

**Madia sativa** Molina; Don, Bot. Reg. xvii, t. 1458 (1831).

Frequent on rocky grounds, Upper Ferry, Clearwater River, above Lewiston; May 30 (No. 276).

**Madia sativa racemosa** (Nutt.) Gray, Bot. Cal. i, 359 (1876); *Madorella racemosa* Nutt. Trans. Amer. Phil. Soc. vii, 388 (1841).

Sandy soil, valley of Cœur d'Alene River, Kootenai County; July 13 (No. 640).

**Lagophylla ramosissima** Nutt. Trans. Amer. Phil. Soc. vii, 390 (1841).

Frequent on dry soil, Upper Ferry, Clearwater River, above Lewiston; May 17 (No. 193). Gravelly soil, valley of Spokane River, Kootenai County; July 16 (No. 654).

**Chænactis douglasii** (Hook.) Hook. & Arn. Bot. Beech. 354 (1840-41); *Hymenopappus douglasii* Hook. Fl. Bor. Amer. i, 316 (1834).

Gravelly soil, valley of Spokane River, Kootenai County; July 16 (No. 653).

**Eriophyllum caespitosum** Lindl. Bot. Reg. xiv, t. 1167 (1828).

On rocks, Upper Ferry, Clearwater River, above Lewiston; May 16 (No. 180).

**Rigiopappus leptocladus** Gray, Proc. Amer. Acad. vi, 548 (1865).

Rocky hillsides, Upper Ferry, Clearwater River, above Lewiston; May 30 (No. 278).

**Dysodia papposa** (Vent.) Hitchcock, Trans. St. Louis Acad. v, 503 (1891); *Tagetes papposa* Vent. Hort. Cels. t. 36 (1800); *Bobera chrysanthemoides* Willd. Sp. Pl. iii, 2125 (1804); *Dysodia chrysanthemoides* Lag. Nov. Gen. & Sp. 29 (1816).

Sandy soil, Colgate, near Glendive, Dawson County, Montana; September 5 (No. 1005).

**Helenium autumnale** L. Sp. Pl. ii, 886 (1753).

River banks, Colgate, near Glendive, Dawson County, Montana; September 6 (No. 1022).

**Gaillardia aristata** Pursh, Fl. ii, 573 (1814).

Common in sandy soil, Upper Ferry, Clearwater River, above Lewiston; May 30 (No. 273).

**Gaillardia pulchella** Foug. Mem. Acad. Sci. Par. 1786, 5 (1788).

Three miles south of Viola, Latah County; June 26 (No. 497).

**Achillea millefolium** L. Sp. Pl. ii, 899 (1753).

Common on hillsides, valley of Clearwater River, Nez Perces County; May 9 (No. 147).

**Matricaria matricarioides** (Less.) Porter, Mem. Torr. Club, v, 341 (1894); *Artemisia matricarioides* Less. Linnaea, vi, 210 (1831); *Matricaria discoidea* DC. Prodr. vi, 50 (1837).

Frequent in moist places, Upper Ferry, Clearwater River, Nez Perces County; May 9 (No. 149).

**Artemisia dracunculoides** Pursh, Fl. ii, 742 (1814).

River banks near Spokane, Washington; August 16 (No. 908). Sandy soil, Thompson Falls, Montana; August 27 (No. 975).

**Artemisia frigida** Willd. Sp. Pl. iii, 1838 (1804).

Sandy soil, Thompson Falls, Montana; August 28 (No. 981).

**Artemisia gnaphalodes** Nutt. Gen. ii, 143 (1818).

Shores at Farmington Landing, lake Cœur d'Alene; July 6 (No. 569). On precipitous ledges of granite, valley of Lake Pend d'Oreille; July 27 (No. 754). Rocks on lake shore, same locality; August 1 (No. 822). Sandy soil at Spokane, Washington; August 16 (No. 902).

**Artemisia longifolia** Nutt. Gen. ii, 142 (1818).

Plains, Colgate, near Glendive, Dawson County, Montana; September 6 (Nos. 1011, 1014).

**Artemisia trifida** Nutt. Trans. Amer. Phil. Soc. vii, 398 (1841).

Sandy soil at Bonner, Missoula County, Montana; August 30 (No. 984). Plains, Colgate, near Glendive, Dawson County, Montana; September 6 (No. 1010).

**Tussilago sagittata** Pursh, Fl. ii, 531 (1814); *Nardosmia sagittata* Hook. Fl. Bor. Amer. i, 307 (1834); *Petasites sagittata* Gray, Bot. Cal. i, 407 (1876).

Marshes, Granite Station, Kootenai County; July 30 (No. 805).

**Arnica alpina** Olin, Mon. Arn. Upsala (1799).

Frequent on hillsides, vicinity of Lake Waha, Nez Perces County; May 24 (No. 244). Rocky soil along Clearwater River, Nez Perces County; June 6 (No. 325).

**Arnica cordifolia** Hook. Fl. Bor. Amer. i, 331 (1833).

Frequent in woods and canyons, vicinity of Lake Waha, Nez Perces County; May 20 (No. 197).

**Arnica latifolia** Bong. Veg. Sitch. 147 (1833).

On precipitous ledges of granite, valley of Lake Pend d'Oreille; July 27 (No. 753).

**Senecio aureus** L. Sp. Pl. ii, 870 (1753). A large form.

Meadows at Granite Station, Kootenai County; July 30 (No. 803).

**Senecio canus** Hook. Fl. Bor. Amer. i, 333, t. 116 (1834).

Sandy plains, valley of Spokane River, Kootenai County; July 18 (No. 668).



**Senecio hydrophilus** Nutt. Trans. Amer. Phil. Soc. vii, 411 (1841).

Moist river banks, Spokane, Washington; August 18 (No. 924). Wet shores, valley of Lake Pend d'Oreille, Kootenai County; August 20 (No. 938).

**Senecio lugens** Richards. Bot. App. ed. 2, 31 (1823).

Frequent in wet places, valley of Big Potlatch River, Nez Perces County; June 9 (No. 363). Slopes on Wiessner's Peak, Kootenai County; July 8 (No. 609).

**Senecio lugens exaltatus** (Nutt.) Gray, Bot. Cal. i, (1876); *S. exaltatus* Nutt. Trans. Amer. Phil. Soc. vii, 410 (1841).

Rocky slopes, mouth of Big Potlatch River, Nez Perces County; May 3 (No. 109). Also vicinity of Lake Waha.

**Senecio serra** Hook. Fl. Bor. Amer. i, 332 (1834).

Valley of Traille River, Kootenai County; August 10 (No. 890).

**Senecio triangularis** Hook. Fl. Bor. Amer. i, 332, t. 115 (1834).

Along streams, valley of Pine Creek, Farmington, Latah County; June 29 (No. 524).

**Senecio vulgaris** L. Sp. Pl. ii, 867 (1753).

Frequent in moist places, Julietta, Latah County; June 8 (No. 343).

**Tetradymia canescens** DC. Prodr. vi, 440 (1837).

Dry hillsides, Spokane, Washington; August 19 (No. 930).

**Carduus drummondii** (Torr. & Gr.) Coville, Contr. Nat. Herb. iv, 142 (1893); *Cirsium drummondii* Torr. & Gr. Fl. ii, 459 (1843).

Meadows, head of Little Potlatch River, Latah County; June 16 (No. 395).

**Carduus foliosus** Hook. Fl. Bor. Amer. i, 303 (1833); *Cnicus foliosus* Gray, Proc. Amer. Acad. x, 40 (1874).

Woods near Granite Station, at the south end of Lake Pend d'Oreille, Kootenai County; July 29 (No. 773).

**Carduus remotifolius** Hook. Fl. Bor. Amer. i, 302 (1834); *Cnicus remotifolius* Gray, Proc. Amer. Acad. xix, 56 (1883).

Sparingly in meadows at Viola, Latah County; June 25 (No. 489).

**Carduus undulatus** Nutt. Gen. ii, 130 (1818); *Cnicus undulatus* Gray, Proc. Amer. Acad. x, 42 (1874).

Sandy soil at the north end of Lake Pend d'Oreille; August 25 (No. 964).

**Carduus undulatus megacephalus** (Gray) Greene, Proc. Acad. Phila. 1892, 360 (1893); *Cnicus undulatus megacephalus* Gray, Proc. Amer. Acad. x, 42 (1874).

Frequent on hillsides, valley of Clearwater River, Nez Perces County; May 30 (No. 272).

**Saussurea americana** Eaton, Bot. Gaz. vi, 283 (1881).

Mountain meadows, valley of Traille River, Kootenai County; August 9 (No. 879).

**Centaurea cyanus** L. Sp. Pl. ii, 911 (1753).

Hillsides, Viola, Latah County; June 26 (No. 495).

**Microseris linearifolia** (DC.) Gray, Proc. Amer. Acad. ix, 211 (1874); *Calais linearifolia* DC. Prodr. vii, 85 (1839).

Common in sandy soil, valley of Clearwater River, Nez Perces County; April 24 (No. 18).

**Microseris nutans** (Hook.) Gray, Proc. Amer. Acad. ix, 208 (1874); *Scorzonella nutans* Hook. Loud. Journ. Bot. vi, 253 (1847).

Hillsides, vicinity of Lake Waha, Nez Perces County; May 22 (No. 225). Copses, valley of Big Potlatch River, Nez Perces County; June 9 (No. 371). Cedar Mountain, Latah County; June 17 (No. 429). Also valley of Little Potlatch River and near Viola, Latah County.

**Crepis acuminata** Nutt. Trans. Amer. Phil. Soc. n. ser. vii, 437 (1841).

Rocky places, valley of Clearwater River, Nez Perces County; June 4 (No. 303); rocky hillsides, scarce, valley of Big Potlatch River, Nez Perces County; June 6 (No. 326). Also valley of Lake Waha and near Viola and Farmington, Latah County.

**Crepis occidentalis** Nutt. Journ. Acad. Phila. vii, 29 (1834); *Psilochenia occidentalis* Nutt. Trans. Amer. Phil. Soc. vii, 437 (1841).

Frequent in rocky soil, valley of Clearwater River, Nez Perces County; May 30 (No. 268).

**Hieracium albiflorum** Hook. Fl. Bor. Amer. i, 298 (1834).

Woods, valley of Pine Creek, Farmington, Latah County; June 28 (No. 509).

**Hieracium canadense** Mx. Fl. ii, 86 (1803).

Canyons near Farmington Landing, Lake Cœur d'Alene; July 7 (No. 573).

**Hieracium gracile detonsum** Gray, Syn. Fl. i, pt. ii, 427 (1884).

Grassy slopes near summit of Packsaddle Peak, Kootenai County; August 5 (No. 835).

**Hieracium scouleri** Hook. Fl. Bor. Amer. i, 289 (1834).

Woods near Farmington Landing, Lake Cœur d'Alene July 5 (No. 560).  
Canyons, same locality; July 7 (No. 574).

**Nothocalais cuspidata** (Pursh) Greene, Bull. Cal. Acad. ser. 2, ii, 55 (1886); *Troximon cuspidatum* Pursh, Fl. ii, 472 (1814).

Common on hillsides, along Hatwai Creek, Nez Perces County; April 30 (No. 77).

**Agoseris aurantiaca** (Hook) Greene, Pittonia, ii, 177 (1891); *Troximon aurantiacum* Hook. Fl. Bor. Amer. i, 300, t. 104 (1834).

Moist places at 2,300 meters altitude, Packsaddle Peak, Kootenai County; August 6 (No. 862).

**Agoseris elata** (Nutt.) Greene, Pittonia, ii, 177 (1891); *Stylopappus elatus* Nutt. Trans. Amer. Phil. Soc. vii, 433 (1841).

Rocky soil, valley of Big Potlatch River, Nez Perces County; June 6 (No. 324).  
Also valley and head of Little Potlatch River.

**Agoseris grandiflora** (Nutt.) Greene, Pittonia, ii, 178 (1891); *Stylopappus grandiflorus* Nutt. Trans. Amer. Phil. Soc. vii, 435 (1841).

Meadows, valley of Cœur d'Alene River, Kootenai County; July 12 (No. 633).

**Agoseris hirsuta** (Hook.) Greene, Pittonia, ii, 177 (1891); *Leontodon hirsutum* Hook. Fl. Bor. Amer. i, 296 (1834).

Common on hillsides, valley of Clearwater River, Nez Perces County; April 23 (No. 12).

**Agoseris laciniata** (Nutt.) Greene, Pittonia, ii, 178 (1891); *Stylopappus laciniatus* Nutt. Trans. Amer. Phil. Soc. vii, 435 (1841).

Frequent in meadows, Viola, Latah County; June 25 (No. 488).

**Taraxacum taraxacum** (L.) Karst. Deutsch. Flora, 1138 (1880-83); *Leontodon taraxacum* L. Sp. Pl. ii, 798 (1753).

Common on lowlands, valley of Hatwai Creek, Nez Perces County; April 25 (No. 42).

**Lactuca spicata** (Lam.) Hitchcock, Trans. St. Louis Acad. v, 506 (1891); *Sonchus spicatus* Lam. Encycl. iii, 401 (1789); *Sonchus leucophaeus* Willd. Sp. Pl. iii, 1520 (1800); *Lactuca leucophara* Gray, Proc. Amer. Acad. xix, 73 (1883), not Sibth.

Waste grounds, valley of Lake Tesemini, Kootenai County; July 22 (No. 706).

**Prenanthes alata sagittata** Gray, Syn. Fl. i, pt. ii, 435 (1884).

Crevices of rocks, valley of Traile River, Kootenai County; August 10 (No. 887).

**Sonchus oleraceus** L. Sp. Pl. ii, 794 (1753).

Common on waste grounds, valley of Hatwai Creek, Nez Perces County; May 27 (No. 251).

**Lygodesmia juncea** (Pursh) Don, Edinb. N. Phil. Journ. vi, 311 (1828-29); *Prenanthes juncea* Pursh, Fl. ii, 498 (1814).

Sandy soil, Colgate, near Glendive, Dawson County, Montana; September 5 (No. 1003).

**Ptiloria tenuifolia** (Torr.) Raf. Atl. Journ. 145 (1832); *Prenanthes* (?) *tenuifolia* Torr. Ann. Lyc. N. Y. ii, 210 (1827); *Lygodesmia minor* Hook. Fl. Bor. Amer. i, 205 (1834); *Stephanomeria minor* Nutt. Trans. Amer. Phil. Soc. n. ser. vii, 427 (1841).

Gravelly shores, valley of Cœur d'Alene River, Kootenai County; July 16 (No. 658).

#### LOBELIACEÆ.

**Howellia aquatilis** Gray, Proc. Amer. Acad. xv, 43 (1879).

Floating in subalpine lakes, valley of Lake Tesemini, Kootenai County; July 22 (No. 699).

**Bolelia elegans** (Dougl.) Greene, Pittonia, ii, 126 (1889); *Clintonia elegans* Dougl.; Lindl. Bot. Reg. xv, t. 1241 (1829); *Downingia elegans* Torr. Bot. Wilkes Exped. ii, 375 (1874).

Muddy shores, Farmington Landing, Lake Cœur d'Alene; July 2 (No. 536). Similar situations, valley of Lake Pend d'Oreille; August 21 (No. 942).

#### CAMPANULACEÆ.

**Campanula rotundifolia** L. Sp. Pl. i, 163 (1753).

Common on sandy soil, Julietta, Latah County; June 8 (No. 337).

**Heterocodon rariflorum** Nutt. Trans. Amer. Phil. Soc. viii, 255 (1843).

Sandy, moist places near Rathdrum, Kootenai County; July 25 (No. 712).

**Legouzia perfoliata** (L.) Britton, Mem. Torr. Club, v, 309 (1894); *Campanula perfoliata* L. Sp. Pl. i, 169 (1753); *Specularia perfoliata* DC. Monogr. Camp. (1830).

In woods, but scarce, region of Lake Waha, Nez Perces County; May 23 (No. 285).

#### VACCINIACEÆ.

**Vaccinium cæspitosum** Mx. Fl. i, 234 (1803).

Woods, region of Lake Waha, Nez Perces County; May 24 (No. 238).

**Vaccinium membranaceum** Dougl.; Hook. Fl. Bor. Amer. ii, 32 (1834), as synonym; *Vaccinium myrtilloides* Hook. loc. cit., not Mx.

Woods, vicinity of Lake Waha, Nez Perces County, May 20 (No. 195). Also near Viola, Latah County, and in valley of Spokane River, Kootenai County.

**Vaccinium myrtilus** L. Sp. Pl. i, 349 (1753).

Summit of Packsaddle Peak, at 2,700 meters altitude, near Lake Pend d'Oreille; August 5 (No. 829).

**Vaccinium ovalifolium** Smith in Rees's Cycl. no. 2 (1817).

Woods, valley of Lake Tesemini, Kootenai County; July 21 (No. 680).

#### ERICACEÆ.

**Arctostaphylos uva-ursi** (L.) Spreng. Syst. ii, 287 (1825); *Arbutus uva-ursi* L. Sp. Pl. i, 395 (1753).

Craig Mountains at 900 meters altitude, near Lake Waha, Nez Perces County; May 20 (No. 204).

**Menziesia glabella** Gray, Syn. Fl. ii, pt. i, 39 (1878).

Frequent in woods, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 469).

**Pyrola aphylla** Smith in Rees's Cycl. xxix (1819-20).

Several of the numerous flowering specimens sent in by Dr. Sandberg have, at the base of the scape, developed leaves of the texture and color of those of *P. picta*, but smaller.

Valley of Spokane River, Kootenai County; July 17 (No. 663).

**Pyrola chlorantha** Swartz, Kongl. Vetensk. Acad. Handl. ser. 2, xxxi, 194, t. 5 (1810).

Valley of Pine Creek, near Farmington, Latah County; June 28 (No. 521).

**Pyrola elliptica** Nutt. Gen. i, 273 (1818).

Bottom land, on Cœur d'Alene River, near Harrison, Kootenai County; July 12 (No. 631).

**Pyrola picta** Smith in Rees's Cycl. xxix (1819-1820).

The flowers of this plant are greenish, as described. But in some specimens they assume a purplish tinge near their base, communicated, seemingly, from the scape and pedicels of the same color. No. 674 differs from No. 678 principally in the flowers being purplish-brown throughout, the anthers lighter-colored, and in the few, smaller leaves at the base of the scape. These, however, are quite of the same color, texture, and form as those of *P. picta*, which makes No. 674 intermediate between No. 663 (*P. aphylla*) and No. 678.

Wooded mountain slopes at 1,200 and 900 meters altitude, near Rathdrum, Kootenai County; July 20 (Nos. 674, 678).

**Pyrola rotundifolia bracteata** (Hook.) Gray, Syn. Fl. ii, pt. i, 48 (1878); *P. bracteata* Hook. Fl. Bor. Amer. ii, 47, 1834.

Woods, valley of Pine Creek, Farmington, Latah County; June 28 (No. 522).

**Pyrola rotundifolia incarnata** DC. Prodr. vii, 773 (1839).

Wooded slopes, near Lake Pend d'Oreille; August 3 (No. 821).

**Pyrola secunda** L. Sp. Pl. i, 396 (1753).

Woods, valley of Pine Creek, Farmington, Latah County, June 28 (No. 520).

**Moneses uniflora** (L.) Gray, Man. 273 (1848); *Pyrola uniflora* L. Sp. Pl. i, 397 (1753).

Frequent in canyons, at 1,000 meters altitude, Cedar Mountain, Latah County; June 20 (No. 462).

**Chimaphila menziesii** (R. Br.) Spreng. Syst. ii, 317 (1825); *Pyrola menziesii* R. Br.; D. Don, Mem. Wern. Soc. v, 245 (1823-24).

Woods, valley of Pine Creek, near Farmington, Latah County; June 28 (No. 1050).

**Chimaphila umbellata** (L.) Nutt. Gen. i, 274 (1818); *Pyrola umbellata* L. Sp. Pl. i, 396 (1753).

Woods, valley of Pine Creek, near Farmington, Latah County; June 28 (No. 519).

**Pterospora andromedea** Nutt. Gen. i, 269 (1818).

Sandy soil, valley of Pine Creek, near Farmington, Latah County; June 28 (No. 516).

**Monotropa uniflora** L. Sp. Pl. i, 387 (1753).

Deep woods, valley of Lake Pend d'Oreille; August 21 (No. 940).

**Hypopitys multiflora** Scop. Fl. Carn. i, 285 (1772).

Wooded slopes on Packsaddle Peak, Kootenai County; August 6 (No. 846).

**PRIMULACEÆ.****Dodecatheon dentatum** Hook. Fl. Bor. Amer. i, 119 (1830).

Heavily wooded ravines, Wiessner's Peak, Kootenai County; July 8 (No. 602).

**Dodecatheon** sp.

Moist places, valley of Hatwai Creek, Nez Perces County; April 28 (No. 63). Also valley of Clearwater River; near Viola, Latah County; and valley of Lake Cœur d'Alene.

**Lysimachia thyrsiflora** L. Sp. Pl. i, 147 (1753).

Moist shores, valley of Mud Lake, Kootenai County; July 25 (No. 735).

**Steironema ciliatum** (L.) Raf. Ann. Gen. Phys. Brux. vii, 192 (1820); *Lysimachia ciliata* L. Sp. Pl. i, 147 (1753).

Canyons near Farmington Landing, Lake Cœur d'Alene; July 7 (No. 580).

**Trientalis europæa latifolia** (Hook.) Torr. Pacif. R. Rep. iv, 118 (1856); *Trientalis latifolia* Hook. Fl. Bor. Amer. ii, 121 (1838).

Woods at 1,800 meters altitude, Wiessner's Peak, Kootenai County; July 11 (No. 612).

**Centunculus minimus** L. Sp. Pl. i, 116 (1753).

Along dry creeks, near Rathdrum, Kootenai County; August 15 (No. 894).

#### APOCYNACEÆ.

**Apocynum androsæmifolium pumilum** Gray, Syn. Fl. ii, pt. i, 83 (1878).

Common in copses, valley of Big Potlatch River, Nez Perces County; June 9 (No. 372).

**Apocynum cannabinum** L. Sp. Pl. i, 213 (1753).

Shores, south end of Lake Pend d'Oreille; August 4 (No. 825).

#### ASCLEPIADACEÆ.

**Asclepias mexicana** Cav. Ic. Pl. i, 42, t. 58 (1791).

Sandy hillsides at Spokane Bridge, 18 miles east of Spokane, Washington; August 15 (No. 896).

**Asclepias speciosa** Torr. Ann. Lyc. N. Y. ii, 218 (1827).

Sandy soil, south end of Lake Pend d'Oreille; August 1 (No. 815).

#### GENTIANACEÆ.

**Gentiana acuta** Mx. Fl. i, 177 (1803).

Dry woods, at 1,000 meters altitude, Cedar Mountain, Latah County; June 17 (No. 424). Also head of Little Potlatch River; near Viola, Latah County; and near Farmington Landing, Lake Cœur d'Alene.

**Gentiana oregana** Engelm.; Gray, Syn. Fl. ii, pt. i, 122 (1886).

Sandy places near Rathdrum, Kootenai County; July 25 (No. 725).

**Frasera albicaulis** Griseb.; Hook. Fl. Bor. Amer. ii, 67 (1840).

Meadows, valley of Clearwater River, Nez Perces County; May 3 (No. 101). Also head of Little Potlatch River; near Viola, Latah County; and near Farmington Landing, Lake Cœur d'Alene.

**Frasera speciosa** Dougl.; Hook. Fl. Bor. Amer. ii, 66 (1838).

Frequent on grassy slopes, vicinity of Lake Waha, Nez Perces County; May 23 (No. 239).

**Menyanthes trifoliata** L. Sp. Pl. i, 145 (1753).

Marshes, south end of Lake Pend d'Oreille; August 11 (No. 828).

#### POLEMONIACEÆ.

**Phlox gracilis** (Dougl.) Greene, Pittonia, i, 141 (1887); *Collomia gracilis* Dougl.; Benth. Bot. Reg. xix, t. 1622 (1833).

Common on rocky hillsides, valley of Clearwater River, Nez Perces County, April 23 (No. 2). Frequent on sandy shores, island in Clearwater River near Upper Ferry, above Lewiston; May 2 (No. 84).

**Phlox longifolia** Nutt. Journ. Acad. Phila. vii, 41 (1834).

Common on hillsides, valley of Clearwater River, Nez Perces County; April 24 (No. 25).

**Phlox speciosa** Pursh, Fl. i, 149 (1814).

Frequent in shady places, valley of Lake Waha, Nez Perces County; May 24 (No. 242).

**Collomia grandiflora** Dougl.; Lindl. Bot. Reg. xiv, t. 1174, (1828); *Gilia grandiflora* Gray, Proc. Amer. Acad. xvii, 223 (1882).

Frequent on sandy banks, valley of Peter Creek, Nez Perces County, May 4 (No. 121). Sandy soil and in rocky places, valley of Big Potlatch River, Nez Perces County; June 4 (No. 304).

**Collomia linearis** Nutt. Gen. i, 126 (1818); *Gilia linearis* Gray, Proc. Amer. Acad. xvii, 223 (1882).

Common on hillsides, valley of Clearwater River, Nez Perces County; April 26 (No. 46).

**Gilia aggregata** (Pursh) Spreng. Syst. i, 626 (1825); *Cantua aggregata* Pursh, Fl. i, 147 (1814).

Frequent in rich canyons, valley of Clearwater River, Nez Perces County; May 17 (No. 188). Hillsides near Viola, Latah County; June 26 (No. 492).

**Gilia capillaris** Kellogg, Proc. Cal. Acad. v, 46 (1875).

Along the railroad, near Hope, north end of Lake Pend d'Oreille, August 20 (No. 936).

**Gilia capitata** Dougl.; Sims, Bot. Mag. t. 2698 (1826).

Ridges at North Fork of Hangman's Creek, Indian Reservation; July 1 (No. 529).

**Gilia heterophylla** Dougl.; Hook. Bot. Mag. t. 2895 (1829).

Woods at 1,200 meters altitude on Wiessner's Peak, Kootenai County; July 8 (No. 585).

**Gilia liniflora pharnaceoides** (Benth.) Gray, Proc. Amer. Acad. viii, 263 (1870); *Gilia pharnaceoides* Benth. Bot. Reg. sub t. 1622 (1833).

Dry soil, Viola, Latah County; June 23 (No. 490). Also near Farmington, Latah County, and Farmington Landing, Lake Cœur d'Alene in valley of Spokane River and near Rathdrum.

**Navarretia intertexta** Hook. Fl. Bor. Amer. ii, 75 (1838); *Gilia intertexta* Steud. Nom. i, 683 (1840).

Sandy soil, Farmington Landing, Lake Cœur d'Alene; July 12 (No. 624). Low grounds, Spokane, Washington; August 16 (No. 904).

**Polemonium occidentale** Greene, Pittonia, ii, 75 (1890).

Wiessner's Peak, Kootenai County; July 8 (No. 591).

**Polemonium humile** Willd.; Rœm. & Schult. Syst. iii, 792 (1819).

Wiessner's Peak, Kootenai County; July 8 (No. 1049).

**Polemonium humile pulchellum** (Bunge) Gray, Syn. Fl. ii, pt. i, 150 (1878); *P. pulchellum* Bunge, in Ledeb. Fl. Alt. i, 233 (1829).

In crevices of rocks at Granite Station, Kootenai County; July 29 (No. 791).

**Polemonium micranthum** Benth. in DC. Prodr. ix, 318 (1845).

Rocky grounds, valley of Hatwai Creek, Nez Perces County; April 28 (No. 61). Also valleys of Clearwater and Big Potlatch rivers, head of Little Potlatch River, and near Farmington, Latah County.

#### HYDROPHYLLACEÆ.

**Hydrophyllum capitatum** Dougl.; Benth. Linn. Trans. xvii, 273 (1837).

Rich soil, valley of Clearwater River, Nez Perces County; April 24 (No. 29). Also region of Lake Waha.

**Hydrophyllum virginianum** L. Sp. Pl. i, 146 (1753).

The first edition of Linnaeus's Species spells this *virginianum*, not *virginicum*. Moist places, valley of Peter Creek, Nez Perces County; May 4 (No. 112).

**Phacelia magellanica** (Lam.) Coville, Contr. Nat. Herb. iv, 159 (1893); *Hydrophyllum magellanicum* Lam. Journ. Hist. Nat. i, 373 (1787); *P. circinata* (Willd.) Jacq. f. Eclog. Amer. i, 135, t. 91 (1811).

Common on rocky hillsides and in sandy soil, valley of Hatwai Creek, Nez Perces County; May 14 (No. 174). Sandy soil, valley of Spokane River, Kootenai County; July 16 (No. 655). No. 174 is the form called *P. circinata stricta* Gray.

**Phacelia linearis** (Pursh); *Hydrophyllum lineare* Pursh, Fl. i, 134 (1814); *Eutoca menziesii* R. Br.; Richards. Bot. App. 764, t. 27, figs. 1-5 (1823).

Common on basaltic rocks, valley of Clearwater River, Nez Perces County; April 24 (No. 16).

#### BORAGINACEÆ.

**Lappula lappula** (L.) Karst. Deutsch. Flora, 979 (1880-83); *Myosotis lappula* L. Sp. Pl. i, 131 (1753); *Echinosperrum lappula* Lehm. Pug. ii, 23 (1818).

Growing along railroad embankments, Spokane, Washington; August 19 (No. 928).

**Lappula texana** (Scheele) Britton, Mem. Torr. Club, v, 273 (1894); *Echinosperrum texanum* Scheele, Linnæa, xxv, 260 (1852); *E. redowskii cupulatum* Gray, Bot. Cal. i, 530 (1876).

Common on sandy soil, valley of the Clearwater River, Nez Perces County; April 24 (No. 17).

**Plagiobothrys tenellus** (Nutt.) Gray, Proc. Amer. Acad. xx, 283 (1885); *Myosotis tenella* Nutt. Hook. Kew Journ. Bot. iii, 295 (1851).

Sandy soil, island in Clearwater River, near Upper Ferry, above Lewiston; May 2 (No. 87).

**Cryptanthe flaccida** (Dougl.) Greene, Pittonia, i, 115 (1887); *Myosotis flaccida* Dougl.; Lehm. Pug. pt. ii, 22 (1830); *Krynitzkia oxycarya* Gray, Proc. Amer. Acad. xx, 269 (1885).

Valley of Clearwater River, Nez Perces County; May 14 (No. 163). Also valley of Big Potlatch River.

**Cryptanthe leiocarpa** (Fisch. & Mey.) Greene, Pittonia, i, 117 (1887); *Echinosperrum leiocarpum* Fisch. & Mey. Ind. Sem. Petrop. 36 (1835).

Very common on sandy soil, valley of Clearwater River, Nez Perces County; April 23 (No. 10). Common on sandy soil near Julietta, Latah County; June 8 (No. 351).

**Cryptanthe pterocarya** (Torr.) Greene, Pittonia, i, 120 (1887); *Krynitzkia pterocarya* Gray, Proc. Amer. Acad. xx, 276 (1885); *Eritrichium pterocaryum* Torr. Bot. Wilkes, 415, t. 13 (1854).

Common in dry soil, valley of Big Potlatch River, Nez Perces County; June 9 (No. 365).

**Amsinckia intermedia** Fisch. & Mey. Ind. Sem. Petrop. 26 (1835).

Common in the valley of Clearwater River, Nez Perces County; April 23 (No. 3).

**Amsinckia lycopsoides** Lehm; DC. Prodr. x, 117 (1846).

Common on basaltic rocks, valley of Clearwater River, Nez Perces County; April 23 (No. 20).

**Mertensia oblongifolia** (Nutt.) Don, Hist. Diehl. Pl. iv, 372 (1838); *Pulmonaria oblongifolia* Nutt. Journ. Acad. Phila. vii, 43 (1824).

Frequent on slopes, valley of Clearwater River, Nez Perces County; April 28 (No. 75).

**Mertensia paniculata** (Ait.) Don, Hist. Diehl. Pl. iv, 318 (1838); *Pulmonaria paniculata* Ait. Hort. Kew. i, 181 (1789).

Moist places at 1,050 meters altitude, Cedar Mountain, Latah County; June 17 (No. 420).

**Myosotis verna** Nutt. Gen. ii, Add. (1818).

Rocky banks, valley of Hatwai Creek, Nez Perces County; May 17 (No. 184).  
Also valley of Big Potlatch, and valley and head of Little Potlatch River.

**Lithospermum pilosum** Nutt. Journ. Acad. Phila. vii, 43 (1834).

Common in sandy soil, valley of Hatwai Creek, Nez Perces County; April 25 (No. 40). Grassy slopes, same locality; May 10 (No. 155).

#### CONVOLVULACEÆ.

**Convolvulus sepium** L. Sp. Pl. i, 153 (1753).

Along railroad embankments, valley of Lake Pend d'Oreille; August 23 (No. 944).

#### SOLANACEÆ.

**Solanum nigrum** L. Sp. Pl. i, 186 (1753).

Waste ground near Granite Station, Kootenai County; July 29 (No. 779).

**Solanum triflorum** Nutt. Gen. i, 128 (1818).

Sandy soil near Bonner, Missoula County, Montana; August 30 (No. 985).

**Physalis lanceolata** Mx. Fl. i, 149 (1803).

This plant is only in flower, and the determination is doubtful. It is more glabrous than the species to which it is here referred, and it branches from near the ground.

Along railroad tracks, Hope, north end of Lake Pend d'Oreille; August 26 (No. 969).

#### SCROPHULARIACEÆ.

**Verbascum blattaria** L. Sp. Pl. i, 178 (1753).

Bottom lands, valley of Cœur d'Alene River, Kootenai County; July 13 (No. 642). Sandy soil, Thompson Falls, Montana; August 26 (No. 971).

**Verbascum thapsus** L. Sp. Pl. i, 177 (1753).

Along roadsides, Spokane, Washington; August 17 (No. 918).

**Scrophularia marilandica** L. Sp. Pl. ii, 619 (1753); *Scrophularia nodosa marilandica* Gray, Syn. Fl. ii, pt. i, 258 (1878).

Common in shady places, valley of Hatwai Creek, Nez Perces County, May 24 (No. 250).

**Pentstemon confertus** Dougl. Bot. Reg. xv, t. 1260 (1829).

Frequent on rocky hillsides, Craig Mountains near Lake Waha, Nez Perces County; May 24 (No. 245). Frequent in dry soil, head of Little Potlatch River, Latah County; June 16 (No. 406). Thompson Falls, Montana; August 28 (No. 1030).

**Pentstemon confertus procerus** (Dougl.) Coville, Contr. Nat. Herb. iv, 169 (1893); *P. procerus* Dougl.; Graham, Edinb. N. Phil. Journ. vii, 348 (1829).

Moist places, Julietta, Latah County; June 8 (No. 341).

**Pentstemon deustus** Dougl. Bot. Reg. xvi, t. 1318 (1830).

Crevices of rocks, Post Falls, valley of Spokane River, Kootenai County; July 15 (No. 650).

**Pentstemon ellipticus** Coult. & Fish. Bot. Gaz. xviii, 302 (1893).

This plant has the leaves not quite entire, leaning in this respect toward *P. newberryi* Gray, Pacific R. Rep. vi, 82, t. 14 (1855-57), which has a more southerly range.

Rocks, summit of Wiessner's Peak, Kootenai County; July 8 (No. 603).

**Pentstemon glandulosus** Lindl. Bot. Reg. xv, t. 1262 (1829).

Rocky soil, valley of Hatwai Creek, Nez Perces County; May 14 (No. 169). Also vicinity of Lake Waha and valley of Big Potlatch River.



**Pentstemon lyallii** Gray, Syn. Fl. ii, pt. i, 440 (1878); *P. menziesii* var. ? *lyallii* Gray, Proc. Amer. Acad. vi, 76 (1862).

On precipitous ledges of granite, south end of Lake Pend d'Oreille; July 27 (No. 757).

**Pentstemon menziesii** Hook. Fl. Bor. Amer. ii, 98 (1838).

In crevices of rocks, at 1,200 meters altitude, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 466). Mountains at 1,200 meters altitude near Rathdrum, Kootenai County; July 20 (No. 673). Also near south end of Lake Pend d'Oreille.

**Pentstemon rattani minor** Gray, Proc. Amer. Acad. xv, 51 (1879).

Sandy soil, island near Upper Ferry, Clearwater River, above Lewiston; May 10 (No. 151). Frequent in rocky places, valley of Hatwai Creek, Nez Perces County, May 14 (No. 172).

**Pentstemon triphyllus** Dougl. Bot. Reg. xv, t. 1245 (1829).

Frequent in dry soil, valley of Clearwater River, Nez Perces County; May 31 (No. 284).

**Pentstemon venustus** Dougl. Bot. Reg. xvi, t. 1309 (1830).

Rocky hillsides, valley of Big Potlatch River, Nez Perces County; June 4 (No. 307). Also valley of Big Potlatch and head of Little Potlatch River.

**Collinsia grandiflora** Dougl. Bot. Reg. xiii, t. 1107 (1827).

Basaltic rocks, valley of the Clearwater River, Nez Perces County; April (No. 7).

**Collinsia parviflora** Dougl. Bot. Reg. xiii, t. 1082 (1827).

Rich soil, valley of Hatwai Creek, Nez Perces County; April 24 (No. 38).

**Mimulus moschatus** Dougl.; Lindl. Bot. Reg. xiii, t. 1118 (1827).

Frequent in wet places, Julietta, Latah County; June 8 (No. 336). In like situations, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 444).

**Mimulus nasutus** Greene, Bull. Cal. Acad. i, 112 (1885).

Common in springy places, valley of Hatwai Creek, Nez Perces County; April 28 (No. 66).

**Mimulus pulsiferæ** Gray, Proc. Amer. Acad. xi, 98 (1876).

Moist ground, Spokane, Washington; August 18 (No. 926).

**Mimulus rubellus** Gray, Bot. Mex. Bound. 116 (1859).

But this plant has pure yellow flowers and is also more tender.

Moist places, Julietta, Latah County; June 8 (No. 347).

**Eunanus** sp.

Slopes near foot of Wiessner's Peak, Kootenai County; July 8 (No. 586).

**Eunanus nanus** (Hook. & Arn.) nom. nov.; *Mimulus nanus* Hook. & Arn. Bot. Beech. 378 (1840).

Rocky places, at 900 meters altitude, Craig Mountains, near Laka Waha, Nez Perces County; May 24 (No. 241).

**Gratiola ebracteata** Benth. in DC. Prodr. x, 595 (1846).

Frequent on muddy shores, Cedar Mountain, Latah County; June 17 (No. 430).

**Gratiola virginiana** L. Sp. Pl. i, 17 (1753).

Frequent in muddy places, valley of the Big Potlatch River, Nez Perces County; June 9 (No. 368).

**Synthyris reniformis** (Dougl.) DC. Prodr. x, 454 (1846); *Wulfenia reniformis* Dougl.; Benth. Scroph. Ind. 46 (1835).

Shady, moist places, Craig Mountains near Lake Waha, Nez Perces County; May 20 (No. 200).

**Synthyris rubra** (Dougl.) DC. Prodr. x, 455 (1846); *Gymnandra rubra* Dougl.; Hook. Fl. Bor. Amer. ii, 103 (1838).

Common on grassy slopes, valley of Hatwai Creek, Nez Perces County; April 28 (No. 67).

**Veronica americana** Schwein.; Benth. in DC. Prodr. x, 468 (1846).

Common in wet places, valley of Hatwai Creek; May 27 (No. 254).

**Veronica peregrina** L. Sp. Pl. i, 11 (1753).

Common in wet places, valley of Hatwai Creek, Nez Perces County; May 27 (No. 255).

**Veronica scutellata** L. Sp. Pl. i, 12 (1753).

Meadows, head of Little Potlatch River, Latah County; June 18 (No. 431).

**Veronica serpyllifolia** L. Sp. Pl. i, 12 (1753).

On a grassy, wooded slope, valley of Lake Waha, Nez Perces County; May 22 (No. 236). Moist places, Julietta, Latah County; June 8 (No. 350).

**Castilleja miniata** Dougl.; Hook. Fl. Bor. Amer. ii, 106 (1838).

Frequent on grassy slopes, Cedar Mountain, Latah County; June 17 (No. 426).

**Castilleja acuminata** (Pursh) Spreng. Syst. ii, 775 (1825); *Bartsia acuminata* Pursh, Fl. i, 429 (1814); *C. septentrionalis* Lindl. Bot. Reg. t. 925 (1825); *C. pallida septentrionalis* Gray, Bot. Cal. i, 575 (1876).

ES Frequent on hillsides, head of Little Potlatch River, Latah County; June 20 (No. 450).

**Castilleja parviflora** Bong. Veg. Sitch. 158 (1831).

Rocky hillsides, on Hatwai Creek, Nez Perces County; April 30 (No. 76).

**Orthocarpus luteus** Nutt. Gen. ii, 57 (1818).

Sandy soil, valley of Big Potlatch River, Nez Perces County; June 6 (No. 318). Also valley and head of Little Potlatch River, and near Viola, Latah County.

**Orthocarpus tenuifolius** Benth. Scroph. Ind. 12 (1835).

Dry soil, near Bald Knob, Cedar Mountain, Latah County; June 20 (No. 455). Also near Viola and Farmington, Latah County, and in valley of Spokane River, Kootenai County.

**Pedicularis bracteosa** Benth.; Hook. Fl. Bor. Amer. ii, 110 (1838).

In canyons, near Farmington Landing, Lake Cœur d'Alene; July 6 (No. 1053).

**Pedicularis contorta** Benth.; Hook. Fl. Bor. Amer. ii, 108 (1838).

On mountain slopes, Wiessner's Peak, Kootenai County; July 8 (No. 592).

**Pedicularis racemosa** Dougl.; Hook. Fl. Bor. Amer. ii, 108 (1838).

Deep woods, Viola, Latah County; June 25 (No. 486). Also near Farmington, Latah County, and Farmington Landing, Kootenai County.

**Melampyrum americanum** Mx. Fl. ii, 16 (1803).

Woods, Granite Station, Kootenai County; July 30 (No. 808).

#### OROBANCHACEÆ.

**Thalesia fasciculata** (Nutt.) Britton, Mem. Torr. Club, v, 298 (1894); *Orobanche fasciculata* Nutt. Gen. ii, 59 (1818); *Aphyllon fasciculatum* Gray, Syn. Fl. ii, pt. 1 (1878).

Growing on Eriogonum.

Valley of Big Potlatch River, Nez Perces County; June 4 (No. 308).

**Thalesia uniflora** (L.) Britton, Mem. Torr. Club, v, 298 (1894); *Orobanche uniflora* L. Sp. Pl. ii, 633 (1753); *Aphyllon uniflorum* Torr. & Gr.; Gray, Man. 290 (1848).

Common on hillsides, valley of Clearwater River, Nez Perces County; April 23 (No. 11). Also vicinity of Lake Waha.

**Orobanche pinetorum** Geyer, Hook. Kew Journ. Bot. iii, 297 (1851); *Aphyllon pinetorum* Gray, Bot. Cal. i, 585 (1876).

But the anthers are fringed with scattered hairs, not "glabrous"  
Growing on Abies, Wiessner's Peak, Kootenai County; July 11 (No. 625).

#### LENTIBULARIACEÆ.

**Utricularia vulgaris** L. Sp. Pl. i, 18 (1753).

Ponds, at Granite Station, Kootenai County; July 29 (No. 780).

#### VERBENACEÆ.

**Verbena bracteosa** Mx. Fl. ii, 13 (1803).

Frequent on rocky hillsides, valley of Clearwater River, Nez Perces County; May 30 (No. 264). Sandy soil, Thompson Falls, Montana; August 27 (No. 972).

#### LABIATÆ.

**Mentha canadensis** L. Sp. Pl. ii, 577 (1753); *M. borealis* Mx. Fl. ii, 2 (1803).

Moist places, valley of Mud Lake, Kootenai County; July 25 (No. 734). Valley of Lake Tesemini, Kootenai County; July 22 (No. 698).

**Lycopus virginicus** L. Sp. Pl. i, 21 (1753).

Moist places at Mud Lake, Kootenai County; July 25 (No. 727).

**Micromeria douglasii** (Benth.) Benth. Lab. 372 (1832-36); *Thymus douglasii* Benth. Linnaea, vi, 80 (1831).

Frequent in woods, Bald Knob, Cedar Mountain, Latah County; June 20, (No. 445).

**Salvia carnososa** Dougl. Bot. Reg. xvii, t. 1469 (1831); *Audibertia incana* Benth. loc. cit. Spokane, Washington; August 17 (No. 1027).

**Monarda fistulosa mollis** (L.) Benth. Lab. 317 (1832-36); *M. mollis* L. Sp. Pl. ed. 2, i, 32 (1762).

Sandy shore, Lake Pond d'Oreille; August 1 (No. 817).

**Vleckia urticifolia** (Benth.) nom. nov.; *Lophanthus urticifolius* Benth. Bot. Reg. xv, sub t. 1282 (1829) and Lab. 462 (1832-36).

Rich bottoms, valley of Hatwai Creek, Nez Perces County; May 28 (No. 263). Also vicinity of Lake Waha, valley of Big Potlatch River, and near Viola and Farmington, Latah County.

**Nepeta cataria** L. Sp. Pl. ii, 570 (1753).

In waste places, Bonner, Missoula County, Montana; August 30 (No. 983).

**Dracocephalum parviflorum** Nutt. Gen. ii, 35 (1818).

Waste ground, Granite Station, Kootenai County; July 29 (No. 786).

**Scutellaria angustifolia** Pursh, Fl. ii, 412 (1814).

Common on hillsides, valley of Peter Creek, Nez Perces County; May 4 (No. 115).

**Scutellaria galericulata** L. Sp. Pl. ii, 599 (1753).

Creek bottoms, Wiessner's Peak, Kootenai County; July 8 (No. 598).

**Scutellaria lateriflora** L. Sp. Pl. ii, 598 (1753).

Wet places, valley of Cœur d'Alene River, Kootenai County; July 13 (No. 641).

**Prunella vulgaris** L. Sp. Pl. ii, 600 (1753).

Common in meadows, valley of the Big Potlatch River, Nez Perces County; June 9 (No. 366).

**Physostegia parviflora** Nutt.; Benth. in DC. Prodr. xii, 434 (1848), as synonym.

Alluvial soil, Lake View, Kootenai County; August 7 (No. 869).

**Marrubium vulgare** L. Sp. Pl. ii, 583 (1753).

Hillsides, Viola, Latah County; June 26 (No. 491).

**Stachys palustris** L. Sp. Pl. ii, 580 (1753).

Wet places, valley of Cœur d'Alene River, Kootenai County; July 13 (No. 639).

**Trichostema oblongum** Benth. Lab. 659 (1832-36).

Moist places, valley of Pine Creek, near Farmington, Latah County; June 28 (No. 511).

#### PLANTAGINACEÆ.

**Plantago lanceolata** L. Sp. Pl. i, 113 (1753).

Meadows, near Viola, Latah County; June 23 (No. 480).

**Plantago purshii** Röm. & Schult. Syst. Veg. iii, 120 (1818); *P. gnaphaloides* Nutt. Gen. i, 100 (1818); *P. patagonica gnaphaloides* Gray, Man. ed. 2, 269 (1856). Common on sandy soil, valley of Clearwater River, Nez Percés County; May 30 (No. 267).

#### NYCTAGINACEÆ.

**Abronia fragrans** Nutt.; Hook. Kew Journ. Bot. v, 261 (1853).

From its fruit, though not quite mature, this plant seems to belong to the species named. It differs, however, from the typical form in its narrower leaves and more elongated peduncles. More abundant material and fully ripened fruit are needed entirely to establish this reference. The specimens do not agree with the description of *A. suksdorfii* by Coulter & Fisher,<sup>1</sup> of which, however, I have seen no typical examples.

Sandy soil, Colgate, near Glendive, Dawson County, Montana; September 6 (No. 1016).

#### AMARANTHACEÆ.

**Amaranthus albus** L. Sp. Pl. ed. 2, ii, 1404 (1764).

Waste places, near Hope, Kootenai County; August 25 (No. 962).

**Amaranthus blitoides** Wats. Proc. Amer. Acad. xii, 273 (1877).

Near Bonner, on Hellgate River, Missoula County, Montana; August 30 (No. 987).

**Amaranthus californicus** (Moq.) Wats. Bot. Cal. ii, 42 (1880); *Mengea californica* Moq. in DC. Prodr. xiii, pt. ii, 270 (1849).

Near Bonner, Missoula County, Montana; August 30 (No. 1044).

**Amaranthus retroflexus** L. Sp. Pl. ii, 991 (1753).

Except in the reddish tinge of stem and spikes, this plant agrees well with our specimens of *A. retroflexus*. But not one of our plants referred to this species agrees with the original Linnæan description "caule firmo, subvillosa, flexuosa a folio ad folium," i. e., the rigid stem zigzag. The lower branches also are described as "at first recurved, then ascending," apparently as in *A. albus*. The plant at present understood to be *A. retroflexus* thus appears not to be the Linnæan species.

Waste places, near Hope, Kootenai County; August 25 (No. 961).

#### CHENOPODIACEÆ.

**Monolepis nuttalliana** (Röm. & Schult.) Greene, Fl. Fran. 168 (1891); *Blitum nuttallianum* Röm. & Schult. Syst. Mant. i, 65 (1822); *Monolepis chenopodioides* Moq. in DC. Prodr. xiii, pt. 2, 85 (1849); *Blitum chenopodioides* Nutt. Gen. i, 4 (1818), not Lam.

On shady rocks, valley of Clearwater River, Nez Percés County; May 17 (No. 192). Also valleys of Big Potlatch and Little Potlatch Rivers.

<sup>1</sup> Bot. Gaz. xvii, 348 (1892).

- Chenopodium album** L. Sp. Pl. i, 219 (1753).  
Waste ground, near Lake Tesemini, Kootenai County; July 21 (No. 695).
- Chenopodium botrys** L. Sp. Pl. i, 219 (1753).  
Railroad embankments near Granite Station; July 29 (No. 775).
- Atriplex patula** L. Sp. Pl. ii, 1053 (1753).  
Sandy soil, plains at Colgate, near Glendive, Montana; September 6 (No. 1018).
- Corispermum hyssopifolium** L. Sp. Pl. i, 4 (1753).  
Sandy soil, near Glendive, Montana; September 6 (No. 1013).
- Suaeda depressa** (Pursh) Wats. Bot. King Surv. 294 (1871); *Salsola depressa* Pursh, Fl. i, 197 (1814).  
On buttes, Colgate, near Glendive, Dawson County, Montana; September 6 (No. 1034).

## POLYGONACEÆ.

- Eriogonum annuum** Nutt. Trans. Amer. Phil. Soc. v, 164 (1837).  
On buttes, Colgate, near Glendive, Dawson County, Montana; September 4 (No. 996).
- Eriogonum cernuum** Nutt. Journ. Acad. Phila. n. ser. i, 162 (1847).  
Sandy soil, Colgate, near Glendive, Dawson County, Montana; September 5 (No. 1002).
- Eriogonum compositum** Dougl.; Benth. Trans. Linn. Soc. xvii, 410, t. 17, f. 10 (1837).  
Rocky soil, valley of Clearwater River, Nez Perces County; May 30 (No. 269).  
Also vicinity of Lake Waha, valley of Little Potlatch River, and near Viola and Farmington, Latah County.
- Eriogonum flavum** Nutt.; Benth. in DC. Prodr. xiv, 8 (1856).  
In exposed crevices, Packsaddle Peak, Kootenai County; August 6 (No. 854).
- Eriogonum heracleoides** Nutt. Journ. Acad. Phila. vii, 49 (1834).  
Frequent in sandy soil, valley of Big Potlatch River, Nez Perces County; June 4 (No. 306).
- Eriogonum multiceps** Nees, in Pr. Neuwied, Reise Nord. Amer. ii, 446 (1841).  
On buttes at Colgate, near Glendive, Dawson County, Montana; September 4 (No. 997).
- Eriogonum niveum** Dougl.; Benth. Trans. Linn. Soc. xvii, 414 (1837).  
On basaltic formations, Spokane, Washington; August 16 (No. 903).
- Eriogonum ovalifolium** Nutt. Journ. Acad. Phila. vii, 50 (1834).  
On precipitous ledges of granite, valley of Lake Pend d'Oreille; July 27 (No. 747).
- Eriogonum umbellatum** Torr. Ann. Lye. N. Y. ii, 241 (1828).  
Mountains, at 1,200 meters altitude, near Rathdrum, Kootenai County; July 20 (No. 677).
- Polygonum alpinum** All. Fl. Ped. ii, 206, t. 68, f. i (1785); *P. polymorphum* Ledeb. Fl. Ross. iii, 524 (1849).  
Wiessner's Peak, Kootenai County; July 8 (No. 662).
- Polygonum amphibium** L. Sp. Pl. i, 361 (1753).  
Ponds, valley of Lake Tesemini, Kootenai County; July 21 (No. 689). Wet shores, near Rathdrum, Kootenai County; July 23 (No. 711).
- Polygonum aviculare** L. Sp. Pl. i, 362 (1753).  
Waste grounds, valley of Lake Pend d'Oreille, Kootenai County; August 26 (No. 966).
- Polygonum bistortoides** Pursh, Fl. i, 217 (1814).  
Meadows, valley of Little Potlatch River, Latah County; June 16 (No. 400).

**Polygonum convolvulus** L. Sp. Pl. i, 364 (1753).

Common on waste grounds, valley of Clearwater River, Nez Perces County; June 2 (No. 287).

**Polygonum douglasii** Greene, Bull. Cal. Acad. iii, 125 (1885).

Very common in dry soil, valley of Clearwater River, Nez Perces County; May 30 (No. 271). At 1,200 meters altitude, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 474). Sandy soil, valley of Lake Pend d'Oreille; August 26 (No. 968).

**Polygonum hartwrightii** Gray, Proc. Amer. Acad. viii, 294 (1870).

Near Granite Station, Kootenai County; July 30 (No. 807).

**Polygonum imbricatum** Wats. Amer. Nat. vii, 665 (1873).

Frequent in dry soil, valley of Little Potlatch River, Latah County; June 16 (No. 411).

**Polygonum lapathifolium** L. Sp. Pl. i, 360 (1753).

Moist places, valley of Mud Lake, Kootenai County; July 25 (No. 736).

**Polygonum minimum** Wats. Bot. King Surv. v, 315 (1871).

Exposed rocky slope at 2,550 meters altitude, Packsaddle Peak, Kootenai County; August 6 (No. 851).

**Polygonum pennsylvanicum** L. Sp. Pl. i, 362 (1753).

Wet places at north end of Lake Pend d'Oreille; August 25 (No. 960).

**Oxyria digyna** (L.) Hill, Veg. Syst. x, 21 (1765); *Rumex digynus* L. Sp. Pl. i, 337 (1753).

Crevices of rocks near summit of Packsaddle Peak, Kootenai County; August 5 (No. 833).

**Rumex acetosella** L. Sp. Pl. i, 338 (1753).

Common on sandy soil, valley of Clearwater River, Nez Perces County; May 9 (No. 148).

**Rumex maritimus** L. Sp. Pl. i, 335 (1753).

Wet places, near Granite Station, Kootenai County; July 29 (No. 778).

**Rumex occidentalis** Wats. Proc. Amer. Acad. xii, 253 (1877).

Common in wet coves, valley of the Big Potlatch River, Nez Perces County; June 9 (No. 364). Along creeks near Rathdrum, Kootenai County; July 25 (No. 720).

**Rumex salicifolius** Weinm. Flora, iv, 28 (1821).

Common on river banks, valley of Clearwater River, Nez Perces County; May 10 (No. 152). At Hope, Kootenai County; August 26 (No. 1025).

**Rumex venosus** Pursh, Fl. ii, 733 (1814).

Rocky hillsides, valley of Clearwater River, Nez Perces County; April 26 (No. 50). Also valley of Big Potlatch River.

#### ARISTOLOCHIACEÆ.

**Asarum caudatum** Lindl. Bot. Reg. xvii, sub t. 1399 (1831). See also DC. Prodr. xv, pt. i, 424, under *A. hookeri majus* (1864).

Frequent in shady canyons, at 1,100 meters altitude, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 456).

#### ELEAGNACEÆ.

**Lepargyræa argentea** (Pursh) Greene, Pittonia, ii, 122 (1890); *Hippophaë argentea* Pursh, Fl. i, 115 (1814).

On buttes, Colgate, near Glendive, Dawson County, Montana; September 6 (No. 1019).

**Lepargyræa canadensis** (L.) Greene, Pittonia, ii, 122 (1890); *Hippophaë canadensis* L. Sp. Pl. ii, 1024 (1753); *Shepherdia canadensis* Nutt. Gen. ii, 241 (1818).

Copses, near Lake View, Kootenai County; August 5 (No. 870).

## LORANTHACEÆ.

**Razoumofskya americana** (Engelm.) Kuntze, Rev. Gen. Pl. ii, 587 (1891); *Arceuthobium americanum* Engelm.; Gray, Pl. Lindh. ii, 214 (1850).

On *Pinus contorta*.

Near Rathdrum, Kootenai County; August 12 (No. 892).

**Razoumofskya douglasii** (Engelm.) Kuntze, Rev. Gen. Pl. ii, 587 (1891); *Arceuthobium douglasii* Engelm. Bot. Wheeler Surv. vi, 253 (1878).

On *Pseudotsuga mucronata*.

At the south end of Lake Pend d'Oreille; July 27 (No. 744).

**Razoumofskya occidentalis** (Engelm.) Kuntze, Rev. Gen. Pl. ii, 587 (1891); *Arceuthobium occidentale* Engelm. Bot. Wheeler Surv. 254 (1878).

On *Pinus ponderosa*.

Near Spokane, Washington; August 18 (No. 925).

**Razoumofskya** sp. An inch or two high; branching; stems and branches brownish, the latter with the flowers inclined to yellow.

On *Larix occidentalis*.

Granite Station, Kootenai County; July 29 (No. 787).

## SANTALACEÆ.

**Comandra pallida** DC. Prodr. xiv, 636 (1857).

Kamyak Butte, near Viola, Latah County; June 26 (No. 499).

## EUPHORBIACEÆ.

**Euphorbia dictyosperma** Fisch. & Mey. Ind. Sem. Hort. Petrop. ii, 37 (1835).

Bottom lands, valley of Hatwai Creek, Nez Perces County; May 27 (No. 256).

Also vicinity of Lake Waha, and valley of Big Potlatch River.

**Euphorbia serpyllifolia** Pers. Syn. Pl. ii, 14 (1807).

Sandy soil, near Spokane Bridge, Washington; August 15 (No. 898).

## URTICACEÆ.

**Celtis occidentalis pumila** (Pursh) Gray, Man. ed. 2, 307 (1856); *C. pumila* Pursh, Fl. 200 (1814).

A low, straggling bush, which does not leaf out till May.

Valley of Clearwater River, Nez Perces County; May 2 (No. 85).

**Urtica gracilis** Ait. Hort. Kew. iii, 341 (1789). See also DC. Prodr. xvi, pt. i, 52 (1869), synonyms under *U. dioica angustifolia*.

Moist places, common, on Little Potlatch River, Latah County; June (No. 376).

**Urtica Iyallii** Wats. Proc. Amer. Acad. x, 348 (1875).

Moist places, Packsaddle Peak, Kootenai County; August 6 (No. 864).

**Parietaria pennsylvanica** Muhl.; Willd. Sp. Pl. iv, 955 (1805).

Moist places, valley of Clearwater River, Nez Perces County; May 14 (No. 176).

## CUPULIFERÆ.

**Betula occidentalis** Hook. Fl. Bor. Amer. ii, 155 (1838).

Common along streams, valley of Hatwai Creek, Nez Perces County; April 24 (No. 33). Woods, valley of Pine Creek, near Farmington, Latah County;

June 26 (No. 513). Copses at Hope, Kootenai County; August 26 (No. 1024).

**Betula pumila** L. Mant. 124 (1767).

Marshes, Granite Station, Kootenai County; July 29 (No. 796).

**Alnus incana virescens** Wats. Bot. Cal. ii, 81 (1880).

Frequent in shady woods, Cedar Mountain, Latah County; June 17 (No. 427); June 20 (No. 464).

**Alnus serrulata** (Ait.) Willd. Sp. Pl. iv, 336 (1805); *Betula serrulata* Ait. Hort. Kew. iii, 338 (1789).

Common on sand flats, Lapwai Agency, Nez Perces County; May 5 (No. 133).

### SALICACEÆ.<sup>1</sup>

**Salix cordata** Muhl. Neue Schrift. Gesell. Naturf. Freunde Berlin, iv, 236 (1803).

Common along streams, valley of Hatwai Creek, Nez Perces County; April 24 (No. 39); April 28 (No. 70). Bottom lands, valley of Clearwater River, Nez Perces County; May 2 (No. 96). On Peter Creek, Nez Perces County; May 4, (No. 117). Canyons, valley of Lake Waha, Nez Perces County; May 21 (No. 215).

**Salix flavescens scouleriana** (Barratt) Bebb, nom. nov.; *S. scouleriana* Barratt; Hook. Fl. Bor. Amer. ii, 145 (1838).

Woods, valley of Lake Waha, Nez Perces County; May 27 (No. 237).

**Salix lasiandra** Benth. Pl. Hartw. 335 (1857).

Banks of Hatwai Creek, Nez Perces County; April 28 (No. 69). River banks, Lapwai Agency, Nez Perces County; May 5 (No. 129).

**Salix lasiandra lancifolia** (Andersson) Bebb, in Bot. Cal. ii, 84 (1880); *Salix lancifolia* Andersson, Monogr. Sal. 34 (1863).

River banks at Thompson Falls, Montana; August 28 (No. 1045).

**Salix lasiolepis** Benth. Pl. Hartw. 335 (1857).

Common on banks of streams, valley of Hatwai Creek, Nez Perces County; April 28 (No. 71).

**Salix longifolia** Muhl. Neue Schrift. Gesell. Naturf. Freunde Berlin, iv, 238 (1803).

Common on banks of Hatwai Creek, Nez Perces County; April 30 (No. 80). Copses, Thompson Falls, Montana; August 27 (No. 978).

**Salix rostrata** Richards. Bot. App. 753 (1823).

Frequent on banks of Peter Creek, Nez Perces County; May 4 (No. 118).

**Populus trichocarpa** Torr. & Gr.; Hook. Ic. Pl. ix, 878 (1852).

Common along streams, valley of Clearwater River, Nez Perces County; April 28 (No. 56).

### ORCHIDACEÆ.

**Calypso bulbosa** (L.) Oakes, Cat. Verm. Pl. 28 (1842); *Cypripedium bulbosum* L. Sp. Pl. ii, 951 (1753); *Calypso borealis* Salisb. Parad. Lond. t. 89 (1807).

The beard on the lip of the eastern form is yellow, but it is white on this western plant. The latter may therefore be designated as *forma occidentalis*.

Deep canyons, Craig Mountains at Lake Waha, Nez Perces County; May 21 (No. 211). Also valley of Clearwater River, Nez Perces County, and near south end of Lake Pend d'Oreille.

**Corallorhiza corallorhiza** (L.) Karst. Deutsch. Fl. 448 (1880-83); *Ophrys corallorhiza* L. Sp. Pl. ii, 945 (1753); *Corallorhiza innata* R. Br.; Ait. Hort. Kew. ed. 2, v, 209 (1813).

In deep woods, scarce, Viola, Latah County; June 23 (No. 485).

**Corallorhiza multiflora** Nutt. Journ. Acad. Phila. iii, 138, t. 7 (1823).

In deep canyons, Farmington Landing, Lake Cœur d'Alene; July 5 (No. 552).

**Corallorhiza striata** Lindl. Gen. & Sp. Orchid. 534 (1840).

Frequent in canyons, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 460).

<sup>1</sup> The Willows were determined by Mr. M. S. Bebb, Rockford, Ill.



**Listera convallarioides** (Swartz) Torr. Comp. 320 (1826); *Epipactis convallarioides* Swartz, Kongl. Vet. Akad. Handl. Stockh. ser. 2, xxi, 232 (1800); *Listera convallarioides* Nutt. Gen. ii, 191 (1818), *nomen nudum*, without description or cross-reference to Swartz's plant.

Canyons, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 458). Also head of Little Potlatch River; near Viola and Farmington, Latah County; and near Lake Pend d'Oreille.

**Listera cordata** (L.) R. Br.; Ait. Hort. Kew. ed. 2, v, 201 (1813); *Ophrys cordata* L. Sp. Pl. ii, 946 (1753).

Moist woods, valley of Traill River, Kootenai County; August 8 (No. 875).

**Gyrostachys romanzoffiana** (Cham.) MacMillan, Metasp. Minn. Val. 171 (1892); *Spiranthes romanzoffiana* Cham. Linnæa, iii, 32 (1828).

Wet places, Granite Station, Kootenai County; July 30 (No. 797).

**Peramium menziesii** (Lindl.) Morong, Mem. Torr. Club, v, 124 (1894); *Goodyera menziesii* Lindl. Gen. & Sp. Orchid. 492 (1840).

Woods, valley of Lake Tesemini, Kootenai County; July 21 (No. 679).

**Cephalanthera oregana** Reichenb. f. Linnæa, xli, 53 (1877).

Wooded mountain slopes, near Rathdrum, Kootenai County; July 20 (No. 676).

**Epipactis gigantea** Dougl.; Hook. Fl. Bor. Amer. ii, 202 (1840).

Near springs, north end of Lake Pend d'Oreille; August 26 (No. 970).

**Habenaria dilatata** (Pursh) Hook. Exot. Fl. ii, t. 95 (1825); *Orchis dilatata* Pursh, Fl. ii, 588 (1814).

Frequent in rich canyons, valley of Clearwater River, Nez Perces County; June 2 (No. 288).

**Habenaria elegans** (Lindl.) Boland. Cat. 29 (1870); *Platanthera elegans* Lindl. Gen. & Sp. Orchid. 285 (1826).

Woods on the St. Joseph River, Wiessner's Peak, at 1,800 meters altitude, Kootenai County; July 7 (No. 584).

**Habenaria gracilis** (Lindl.) Wats. Bot. Cal. ii, 135 (1880); *Platanthera gracilis* Lindl. Gen. & Sp. Orchid. 288 (1826).

Frequent in canyons, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 471). Moist places, Packsaddle Peak, Kootenai County, August 6 (No. 861).

**Habenaria orbiculata** (Pursh) Torr. Compend. 318 (1826); *Orchis orbiculata* Pursh, Fl. ii, 588 (1814).

Rich woods, near south end of Lake Pend d'Oreille, July 28 (No. 767).

**Habenaria unalascensis** (Spreng.) Wats. Proc. Amer. Acad. xii, 277 (1877); *Spiranthes unalascensis* Spreng. Syst. iii, 708 (1826).

Meadows, near Viola, Latah County; June 26 (No. 1039).

**Cypripedium montanum** Dougl.; Lindl. Gen. & Sp. Orchid. 528 (1840).

Rich shady grounds, valley of Little Potlatch River, Latah County; June 13 (No. 384).

#### IRIDACEÆ.

**Iris missouriensis** Nutt. Journ. Acad. Phila. vii, 58 (1834).

Frequent in wet places, valley of the Big Potlatch River, Nez Perces County; June 6 (No. 315).

**Sisyrinchium grandiflorum** Dougl.; Lindl. Bot. Reg. xvi, t. 1364 (1830).

Common on table lands; island in Clearwater River, near Upper Ferry, above Lewiston, Nez Perces County; May 2 (No. 100).

**Sisyrinchium bermudiana** L. Sp. Pl. ii, 954 (1753); *S. mucronatum* Mx. Fl. ii, 33 (1803).

Moist ground, valley of Big Potlatch River, Nez Perces County; June 6 (No. 317).

## LILIACEÆ.

**Streptopus amplexifolius** (L.) DC.; Lam. & DC. Fl. Franc. iii, 174 (1805); *Uvularia amplexifolia* L. Sp. Pl. i, 304 (1753).

Frequent in canyons, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 470).

**Vagnera amplexicaulis** (Nutt.) Greene, Bot. San Fr. Bay, 316 (1894); *Smilacina amplexicaulis* Nutt. Journ. Acad. Phila. vii, 58 (1834).

Frequent on hillsides, vicinity of Lake Waha, Nez Perces County; May 22 (No. 228).

**Vagnera sessilifolia** (Nutt.) Greene, Bot. San Fr. Bay, 316 (1894); *Smilacina sessilifolia* Nutt.; Wats. Proc. Amer. Acad. xiv, 245 (1879); *Toraria sessilifolia* Baker, Journ. Linn. Soc. xiv, 566 (1875).

Frequent in rich, shady soil, island in Clearwater River, near Upper Ferry, above Lewiston, Nez Perces County; May 2 (No. 89).

**Brodiaea douglasii** Wats. Proc. Amer. Acad. xiv, 237 (1879).

Common on hillsides and in bottoms, valley of Hatwai Creek, Nez Perces County; April 24 (No. 30).

**Brodiaea lactea** (Lindl.) Wats. Proc. Amer. Acad. xiv, 238 (1879); *Hesperoscordum lacteum* Lindl. Bot. Reg. xix, t. 1639 (1833); *Allium lacteum* Benth. Pl. Hartw. 339 (1839).

Wet places, valley of Pine Creek, near Farmington, Latah County; June 28 (No. 510).

**Allium acuminatum** Hook. Fl. Bor. Amer. ii, 184, t. 146 (1840).

Rocky hillsides, valley of Hatwai Creek, Nez Perces County; May 27 (No. 258). Also valley of lower Clearwater River.

**Allium attenuifolium** Kellogg, Proc. Cal. Acad. ii, 110, f. 34 (1863).

Shores, valley of Lake Pend d'Oreille; July 27 (No. 745).

**Allium cusickii** Wats. Proc. Amer. Acad. xiv, 228 (1879).

On all basaltic outcroppings, valley of Clearwater River, Nez Perces County; April 23 (No. 1).

**Allium geyeri** Wats. Proc. Amer. Acad. xiv, 227 (1879).

Rocky river bottoms, valley of Clearwater River, Nez Perces County; May 16 (No. 177).

**Allium schœnoprasum** L. Sp. Pl. i, 301 (1753).

Lake shores, Hope, Kootenai County; August 26 (No. 1023).

**Allium serratum** Wats. Bot. King Surv. 487 (1871).

But the scapes are taller in this plant and the stamens are fully as long as or even longer than the acuminate petals.

Rocky hillsides, scarce, valley of Big Potlatch River, Nez Perces County; June 9 (No. 355).

**Camassia esculenta** (Ker) Lindl. Bot. Reg. xviii, t. 1486 (1832); *Scilla esculenta* Ker, Bot. Mag. t. 1574 (1813).

Meadows near Lapwai Agency, Nez Perces County; April 20 (No. 132).

**Lilium parviflorum** (Hook.) nom. nov.; *L. canadense parviflorum* Hook. Fl. Bor. Amer. ii, 181 (1840); *Lilium columbianum* Hanson; Baker, Journ. Linn. Soc. xiv, 243 (1875).

This is the variety  $\gamma$ , to which alone of the three varieties named Hooker refers when he says "My NW. American specimens have much smaller flowers, of a redder hue, and are more disposed to be revolute." According to Watson<sup>1</sup> this is the same as *L. columbianum* Hanson.

Woods at the south end of Lake Pend d'Oreille; July 7 (No. 743).

<sup>1</sup> Proc. Amer. Acad. xiv, 257 (1879).

**Fritillaria lanceolata** Pursh, Fl. i, 230 (1814), excl. syn.

Along streams, valley of Pine Creek, Farmington, Latah County; June 28 (No. 517).

**Fritillaria pudica** (Pursh) Spreng. Syst. ii, 64 (1825); *Lilium* (?) *pudicum* Pursh, Fl. i, 228, t. 8 (1814).

In No. 13, collected in April, the flowers are very strongly marked with pink; the anthers are white; the style of the well-formed pistil projects beyond the perianth. In No. 220, collected a month later at a higher altitude, the flowers are predominately yellowish, with only traces of pink; the anthers are yellow; the style does not reach half the length of the perianth parts, and the entire pistil is frequently absent by abortion. It seems from these data that the flowers of this species in earlier forms and lower altitudes are apt to be proterogynous; while in later, higher altitude forms they are proterandrous.

Common on hillsides throughout the valley of Clearwater River, Nez Perces County; April 23 (No. 13): already in fruit. Frequent on hillsides, valley of Lake Waha, Nez Perces County; May 21 (No. 220).

**Erythronium grandiflorum** Pursh, Fl. i, 231 (1814).

Common on Craig Mountains, vicinity of Lake Waha, Nez Perces County; May 20 (No. 202)

**Calochortus elegans** Pursh, Fl. i, 240 (1814). See also Dougl. Hort. Trans. vii, 278 (1830).

Frequent on hillsides, region of Lake Waha, Nez Perces County; May 20 (No. 196). Shady places near Julietta, Latah County; June 8 (No. 344). Rich woods near Farmington Landing, Lake Cœur d'Alene; July 2 (No. 532). Slopes on Wiessner's Peak, Kootenai County; July 8 (No. 604).

**Calochortus macrocarpus** Dougl. Hort. Trans. vii, 276, t. 8 (1830).

Valley of the Spokane River, near Post Falls, Kootenai County; July 17 (No. 660).

**Xerophyllum tenax** (Pursh) Nutt. Gen. i, 235 (1818); *Helonias tenax* Pursh, Fl. i, 243 (1814).

Grassy slopes near summit of Wiessner's Peak, Kootenai County; July 8 (No. 588).

**Disporum majus** (Hook.) Britton, Bull. Torr. Club, xv, 188 (1888); *Prosartes lanuginosa major* Hook. Fl. Bor. Amer. ii, 174 (1840).

With *Disporum trachycarpum*.

Canyons, Craig Mountains, near Lake Waha, Nez Perces County; May 20 (No. 198).

**Disporum trachycarpum** (Wats.) Benth. & Hook. Gen. Pl. iii, 832 (1883); *Prosartes trachycarpa* Wats. Bot. King Surv. v, 344 (1871).

Frequent in canyons, Craig Mountains, at 900 meters altitude, Lake Waha, Nez Perces County; May 20 (No. 1038).

**Clintonia uniflora** (Menzies) Kunth, Enum. v, 159 (1850); *Convallaria borealis uniflora* Menzies; Rœm. & Schult. Syst. Veg. vii, 307 (1828).

There is a first brief description of this plant without name, under *Smilacina borealis* Ker, sub nom. Gawler, Bot. Mag. xxxiv, t. 1403 (1811).

Woods, frequent, Cedar Mountain, Latah County; June 17 (No. 425).

**Trillium ovatum** Pursh, Fl. i, 245 (1814).

Frequent in rich woods, valley of Lake Waha, Nez Perces County; May 20 (No. 209).

**Trillium petiolatum** Pursh, Fl. i, 244 (1814).

Rich soil, valley of Hatwai Creek, Nez Perces County; April 24 (No. 27). Also vicinity of Lake Waha, and valley and head of Little Potlatch River.

- Veratrum californicum** Durand, Journ. Acad. Phila. ser. 2, iii, 103 (1855-58).  
South end of Lake Pend d'Oreille; July 27 (No. 741).
- Veratrum viride** Ait. Hort. Kew. iii, 422 (1789).  
Michaux<sup>1</sup> considered this the same as the European *Veratrum album* L.<sup>2</sup>  
Moist places on Packsaddle Peak, Kootenai County; August 6 (No. 863).
- Stenanthium occidentale** Gray, Proc. Amer. Acad. viii, 405 (1872).  
Precipitous ledges of granite, south end of Lake Pend d'Oreille; July 27 (No. 756).
- Zygadenus venenosus** Wats. Proc. Amer. Acad. xiv, 279 (1879).  
Rocky hillsides on Peter Creek, Nez Perces County; May 4 (No. 114). Frequent on low ground along Big Potlatch River, Nez Perces County; June 6 (No. 319).
- JUNCACEÆ.<sup>3</sup>**
- Juncus alpinus insignis** Fries; Engelm. Trans. St. Louis Acad. ii, 459 (1868).  
Wet shores of Lake Pend d'Oreille, at Hope, Kootenai County; August 24 (No. 950).
- Juncus balticus** Willd. Berlin Mag. iii, 298 (1809).  
Frequent in wet places, at the head of Little Potlatch River, Latah County; June 18 (No. 436). Springy places at Hope, valley of Lake Pend d'Oreille, Kootenai County; August 21 (No. 951).
- Juncus bufonius** L. Sp. Pl. i, 328 (1753).  
Common in wet places, valley of Big Potlatch River, Nez Perces County; June 4 (No. 312).
- Juncus filiformis** L. Sp. Pl. i, 326 (1753).  
Shores, valley of Lake Tesemini, Kootenai County; July 21 (No. 692). Wet mountain meadows, valley of Traille River, Kootenai County; August 9 (No. 880).
- Juncus nevadensis** Wats. Proc. Amer. Acad. xiv, 303 (1879).  
Nos. 261, 684, and 949 are only provisionally referred here.  
Frequent in wet places, valley of Hatwai Creek, Nez Perces County; May 27 (No. 261). Valley of Little Potlatch River, Latah County; June 16 (No. 405). Head of Little Potlatch River, June 20 (No. 457). Valley of Lake Tesemini, Kootenai County; July 21 (No. 684). Valley of Lake Pend d'Oreille; August 24 (No. 949).
- Juncus nodosus** L. Sp. Pl. ed. 2, i, 466 (1762).  
Wet places, Granite Station, Kootenai County; July 29 (No. 776).
- Juncus parryi** Engelm. Trans. St. Louis Acad. ii, 447 (1866).  
Near summit of Wiessner's Peak, Kootenai County; July 8 (No. 593).
- Juncus tenuis** Willd. Sp. Pl. ii, 214 (1799).  
Frequent in moist places on Little Potlatch River, Nez Perces County; June 13 (No. 379).
- Juncus xiphioides triandrus** Engelm. Trans. St. Louis Acad. ii, 482 (1868).  
Frequent in wet places on Little Potlatch River, Nez Perces County; June 7 (No. 330).
- Juncoides campestre** (L.) Kuntze, Rev. Gen. Pl. ii, 722 (1891); *Juncus campestris* L. Sp. Pl. i, 329 (1753); *Luzula campestris* DC. Fl. Fr. iii, 161 (1805).  
Common in woods about Lake Waha, Nez Perces County; May 22 (No. 230).
- Juncoides glabratum** (Hoppe) Sheldon, Bull. Geol. Hist. Minn. ix, 63 (1894); *Juncus glabratus* Hoppe; Rostk. Monogr. June. 27 (1801).  
Wiessner's Peak, Kootenai County; July 8 (No. 613).

<sup>1</sup> Fl. ii, 249 (1803).<sup>2</sup> Sp. Pl. ii, 1044 (1753).<sup>3</sup> The Juncaceæ were determined by Mr. Frederick V. Coville.

**Juncoides parviflorum** (Ehrh.) Coville, Contr. Nat. Herb. iv, 209 (1893); *Juncus parviflorus* Ehrh. Beitr. vi, 139 (1791); *Luzula spadicea parviflora* E. Meyer, Linnaea, xxii, 402 (1849).

Deep woods at Farmington Landing, Lake Cœur d'Alene, Kootenai County; July 5 (No. 554).

#### TYPHACEÆ.

**Typha latifolia** L. Sp. Pl. ii, 971 (1753).

Wet places, valley of Mud Lake, Kootenai County; July 25 (No. 739).

**Sparganium simplex** Hudson, Fl. Ang. ed. 2, 401 (1788).

Along creeks, near Rathdrum, Kootenai County; July 25 (No. 715).

**Sparganium simplex angustifolium** (Mx.) Engelm. in Gray Man. ed. 5, 481 (1867);

*S. angustifolium* Mx. Fl. ii, 189 (1803).

Leaves floating.

Subalpine lakes, valley of Lake Tesemini, Kootenai County; July 22 (No. 700).

#### ARACEÆ.

**Lysichiton kamschatcensis** (L.) Schott, Gen. Aroid. t. 91 (1858); Prodr. Aroid.

421 (1860); *Dracontium kamschatcense* L. Sp. Pl. ed. 2, ii, 1372 (1763).

Cool, springy ground, near Rathdrum, Kootenai County; July 25 (No. 722).

#### LEMNACEÆ.

**Lemna minor** L. Sp. Pl. ii, 970 (1753).

Ponds, Granite Station, Kootenai County; July 30 (No. 801).

#### ALISMACEÆ.

**Alisma plantago** L. Sp. Pl. i, 342 (1753).

Wet places, Hope, Kootenai County; August 20 (No. 935).

**Sagittaria latifolia** Willd. Sp. Pl. iv, 409 (1806).

Wet places near Hope, Kootenai County; August 21 (No. 941).

#### NAIADACEÆ.

**Triglochin maritima** L. Sp. Pl. i, 339 (1753).

Wet shores, near Hope, Kootenai County; August 23 (No. 946).

**Triglochin palustris** L. Sp. Pl. i, 338 (1753).

Marshes, Granite Station, Kootenai County; July 29 (No. 790).

**Potamogeton heterophyllus longipedunculatus** (Merat) Morong, Mem. Torr. Club, iii, 24 (1893); *P. longipedunculatus* Merat, Fl. Paris (1812).

Shallow water, margin of Lake Pend d'Oreille, near Hope; August 24 (No. 955). Same vicinity; August 26 (No. 1026).

**Potamogeton natans** L. Sp. Pl. i, 126 (1753).

Shallow places, margin of Lake Pend d'Oreille, near Hope; August 20 (No. 939).

**Potamogeton pectinatus** L. Sp. Pl. i, 127 (1753).

Shallow water, margin of Lake Pend d'Oreille, near Hope; August 5 (No. 954).

**Potamogeton perfoliatus richardsonii** A. Bennett, Britten's Journ. Bot. xxvii, 25 (1889).

Shallow water, margin of Lake Pend d'Oreille, near Hope; August 25 (No. 956).

**Potamogeton pulcher** Tuckerm. Amer. Journ. Sci. ser. i, xlv, 38 (1843).

Subalpine lakes, at 900 meters altitude, valley of Lake Tesemini, Kootenai County; July 22 (No. 697).

CYPERACEÆ.<sup>1</sup>

**Cyperus aristatus** Rottb. Descr. et Icon. 23 (1773).

Moist places, near Rathdrum, Kootenai County; July 25 (No. 719).

**Cyperus houghtonii** Torr. Ann. Lyc. N. Y. iii, 277 (1836). See also Bull. Torr. Club, xviii, 368, 369 (1891).

Sandy soil, valley of Clearwater River, Nez Perces County; June 2 (No. 292).

**Dulichium arundinaceum** (L.) Britton, Bull. Torr. Club, xxi, 29 (1894); *Cyperus arundinacea* L. Sp. Pl. i, 44 (1753); *Schœnus spathaceus* L. Sp. Pl. ed. 2, i, 63 (1762); *Dulichium spathaceum* Pers. Syn. i, 65 (1805).

Wet places, near Granite Station, Kootenai County; July 29 (No. 777).

**Eleocharis acicularis** (L.) Rœm. & Schult. Syst. Veg. ii, 154 (1817); *Scirpus acicularis* L. Sp. Pl. i, 48 (1753).

Common in wet places, Viola, Latah County; June 23 (No. 484).

**Eleocharis ovata** (Roth) Rœm. & Schult. Syst. Veg. ii, 152 (1817); *Scirpus ovatus* Roth, Cat. i, 5 (1797).

Muddy places, valley of Cœur d'Alene River, Kootenai County; July 14 (No. 649).

**Eleocharis palustris** (L.) Rœm. & Schult. Syst. Veg. ii, 151 (1817); *Scirpus palustris* L. Sp. Pl. i, 47 (1753).

Wet places, valley of Lake Tesemini; June 21 (No. 685).

**Scirpus lacustris occidentalis** Wats. Bot. Cal. ii, 218 (1880).

Wet shores, valley of Lake Tesemini, Kootenai County; July 21 (No. 687).

**Scirpus microcarpus** Presl, Rel. Haenk. i, 195 (1828).

Wet mountain meadows, valley of Traille River, Kootenai County; August 9 (No. 881).

**Scirpus nanus** Spreng. Pug. i, 4 (1815); *Eleocharis pygmaea* Torr. Ann. Lyc. N. Y. iii, 313 (1836).

Three miles south of Viola, Latah County; June 26 (No. 1052).

**Scirpus subterminalis** Torr. Fl. U. S. i, 47, (1824).

Ponds at Granite Station, Kootenai County; July 29 (781).

**Carex amplexifolia** Boott; Hook. Fl. Bor. Amer. ii, 228, t. 226 (1839).

Wet places, south end of Lake Pend d'Oreille; July 28 (No. 761).

**Carex aperta** Hook. Fl. Bor. Amer. ii, 218 (1840).

Wet places, valley of Cœur d'Alene River; July 12 (No. 634).

**Carex athrostachya** Olney, Proc. Amer. Acad. vii, 393 (1868).

Frequent in meadows, head of Little Potlatch River, Latah County; June 20 (No. 448). Wet places near Rathdrum, Kootenai County; July 25 (No. 716).

**Carex canescens brunnescens** (Pers.) Poir. Encycl. Suppl. iii, 286 (1813); *C. canescens alpicola* Wahl. Fl. Lapp. 232 (1812); *C. curta brunnescens* Pers. Syn. ii, 539 (1807).

Canyons, south end of Lake Pend d'Oreille; August 1 (No. 814).

**Carex capillaris** L. Sp. Pl. ii, 977 (1753).

On precipitous ledges of granite, south end of Lake Pend d'Oreille; July 29 (No. 751).

**Carex deflexa media** Bailey, Mem. Torr. Club, i, 43 (1889).

Mountains, south end of Lake Pend d'Oreille; August 3 (No. 820). At 2,550 meters altitude on Packsaddle Peak, Kootenai County; August 5 (No. 841).

**Carex deflexa rossii** (Boott) Bailey, Mem. Torr. Club, i, 43 (1889); *C. rossii* Boott; Hook. Fl. Bor. Amer. ii, 222 (1838).

Common in canyons, valley of Lake Waha, Nez Perces County; May 23 (No. 234).

<sup>1</sup>The Cyperaceæ were determined by Mr. C. F. Wheeler, Agricultural College, Michigan.

- Carex deweyana sparsiflora** (Olney) Bailey, Bot. Gaz. xiii, 87 (1888); *C. bolanderi sparsiflora* Olney; Bailey, loc. cit. as synonym.  
Woods, valley of Pine Creek, near Farmington, Latah County; June 28 (No. 518).
- Carex exsiccata** Bailey, Mem. Torr. Club, i, 6 (1889).  
Frequent in wet places, valley of the Little Potlatch River, Latah County; June 16 (No. 417).
- Carex festiva** Dew. Amer. Journ. Sci. xxix, 246 (1836).  
Common in wet places, valley of Big Potlatch River, Nez Perces County; June 9 (No. 357). Same situations, Farmington Landing, Lake Cœur d'Alene; July 6 (No. 568).
- Carex festiva polystachya** Bailey, Mem. Torr. Club, i, 51 (1889).  
Frequent on river banks, mouth of Big Potlatch River, Nez Perces County; May 3 (No. 104).
- Carex filiformis lanuginosa** (Mx.) B. S. P. Prel. Cat. N. Y. 63 (1888); *C. lanuginosa* Mx. Fl. ii, 175 (1803); *C. filiformis latifolia* Bæckl. Linnaea, xii, 300 (1877).  
Frequent in meadows, head of Little Potlatch River, Latah County; June 20 (No. 449). Wet places near Rathdrum, Kootenai County; July 25 (No. 721).
- Carex flava recte-rostrata** Bailey, Bot. Gaz. xiii, 84 (1888).  
Shores of Lake Pend d'Oreille, at Hope, August 20 (No. 931).
- Carex geyeri** Boott, Trans. Linn. Soc. xx, 118 (1846).  
Frequent on hillsides, valley of Lake Waha, Nez Perces County; May 22 (No. 224). Mountain heights, Wiessner's Peak, Kootenai County; July 8 (No. 606).
- Carex interrupta impressa** Bailey, Mem. Torr. Club, i, 18 (1889).  
Wet places, valley of Lake Tesemini, Kootenai County; July 21 (No. 693).  
Wet shores near Hope, north end of Lake Pend d'Oreille; August 20 (No. 933).
- Carex leptalea** Wahl. Kongl. Vet. Acad. Handl. ser. 2, xxiv, 139 (1803); *C. polytrichoides* Willd.; Wahl. loc. cit. as synonym.  
Swamps, Granite Station, Kootenai County; July 30 (No. 800).
- Carex limosa** L. Sp. Pl. ii, 977 (1753).  
Marshes, Granite Station, Kootenai County; July 30 (No. 809).
- Carex nebraskensis prævia** Bailey, Mem. Torr. Club, i, 49 (1889).  
Wet places, near Viola, Latah County, June 26 (No. 502).
- Carex pratensis** Drejer, Rev. Crit. Car. Bor. 24 (1841).  
Common in wet places, head of Little Potlatch River, Latah County; June 20 (No. 452).
- Carex preslii** Steud. Pl. Cyp. 242 (1855).  
Slopes of Wiessner's Peak, Kootenai County; July 8 (No. 610).
- Carex pseudo-cyperus americana** Hochst. Herb. Unio Itin. (1837).  
Marshes, Granite Station, Kootenai County; July 30 (No. 811).
- Carex pyrenaica** Wahl. Kongl. Acad. Handl. xxiv, 139 (1802).  
On mountains of Packsaddle Peak, Kootenai County; August 6 (No. 850).
- Carex retrorsa** Schwein. Ann. Lye. N. Y. i, 71 (1824).  
Wet places, Farmington Landing, Lake Cœur d'Alene; July 6 (No. 567). Wet places, Granite Station, Kootenai County; July 29 (No. 774).
- Carex reynoldsii** Dew. Amer. Journ. Sci. xxxii, 39 (1837).  
Mountain meadows, valley of Traille River, Kootenai County. August 10 (No. 891).
- Carex scoparia** Schk. Riedgr. Nachtr. 20, f. 175 (1806).  
Wet places, valley of Cœur d'Alene River, Kootenai County; July 14 (No. 648).

**Carex stipata** Muhl.; Willd. Sp. Pl. iv, 233 (1805).

Wet places, valley of Big Potlatch River, Nez Perces County; June 9 (No. 359). Valley of the Cœur d'Alene River, Kootenai County; July 13 (No. 638).

**Carex straminea festucacea** (Willd.) Tuckerm. Enum. Meth. 18 (1843); *C. festucacea* Willd. Sp. Pl. iv, 242 (1805).

Rocky banks of the Clearwater River, Nez Perces County; June 2 (No. 295). Common in meadows, valley of Big Potlatch River, Nez Perces County; June 9 (No. 367).

**Carex tenella** Schk. Riedgr. 23, f. 104 (1801).

Meadows, Granite Station, Kootenai County; July 30 (No. 798).

**Carex teretiuscula ampla** Bailey, Mem. Torr. Club, i, 53 (1889).

Wet places at the North Fork of Hangman's Creek, Indian reservation, Latah County; July 1 (No. 528).

**Carex utriculata minor** Boott; Hook. Fl. Bor. Amer. ii, 221 (1839).

Wet places at Granite Station, Kootenai County; July 29 (No. 788).

### GRAMINEÆ.

By L. H. DEWEY.

The grasses obtained on this expedition, amounting to 120 numbers, form a most important part of the collection from an economic standpoint. The vegetable resources of that region for some time to come will consist chiefly in the native forests for the production of lumber, and in the native pastures for the production of beef and mutton. The collectors' notes indicate that many of the mountain meadows, the lake shores, and the alluvial deposits along the river bottoms abound in grasses mostly unlike those found east of the Mississippi River, but many of them evidently just as valuable for grazing, and certainly better adapted to that region than any which are cultivated in the East. A careful and considerate use of these grazing lands will permit them to continue productive and valuable for many years, while a single season of overstocking is likely to ruin them for all time, as the more valuable varieties are always killed out first, and their places are usually taken by less valuable annual plants or by weeds that are positively injurious. Some of the grasses collected are certainly worthy of trial in cultivation, and may form valuable additions to our cultivated grasses. At least half a dozen varieties even in their wild state are as valuable as many of the grasses introduced from Europe that have been developed by long cultivation.

An exact knowledge of the economic values of grasses must be based to some extent upon a technical knowledge of their systematic relationships and their morphological characters. This collection is no less valuable as an aid to our knowledge in these lines. It is the first collection of real importance that has been made in exactly this region. Nuttall, Hooker, Howell, Suksdorf, and others have collected on the Columbia River and west of the Cascade Mountains, while Scribner, Tweedy, and Williams have worked over a large part of Montana; but the region just west of the Bitter Root Mountains was almost unknown



to the agrostologist, as well as to other botanists. The grasses composing this collection are in exceptionally good condition for systematic work, and in many instances the series of varying forms seems to be well represented, so that the specimens will certainly prove valuable for future study.

**Panicum capillare minus** Muhl. Gram. Descr. 124 (1817).

Damp places near Rathdrum, Kootenai County; July 25 (No. 713).

**Panicum pubescens** Lam. Encycl. iv, 748 (1797).

Shores at Farmington Landing, Lake Cœur d'Alene; July 11 (No. 616). Sandy soil, valley of Cœur d'Alene River, Kootenai County; July 13 (No. 643). Hope, shore of Lake Pend d'Oreille; August 24 (No. 948).

All of the forms represented by these numbers have heretofore been referred to the ambiguous species, *Panicum dichotomum* L.

**Panicum scoparium** Lam. Encycl. iv, 744 (1797).

Frequent on sandy soil, valley of Clearwater River, Nez Perces County; June 2 (No. 296).

**Phalaris arundinacea** L. Sp. Pl. i, 55 (1753).

Alluvial soil, Farmington Landing, Lake Cœur d'Alene, July 5 (No. 563).

**Aristida fasciculata fendleriana** (Stend.) Vasey, Contr. Nat. Herb. ii, 515 (1894).

River banks, Spokane Bridge, 18 miles east of Spokane, Washington; August 16 (No. 906).

This is one of the forms of the variable *Aristida fasciculata* Torr. (*A. purpurea* Nutt.) and approaches most nearly to the variety *fendleriana*; but the range of that variety, as known heretofore, does not extend north of Colorado and Utah.

**Stipa comata** Trin. & Rupr. Mem. Acad. St. Pet. ser. 6, v, 75 (1849).

Sandy soil, scarce, valley of Clearwater River, Nez Perces County; June 2 (No. 293).

**Stipa viridula** Trin. Bull. Sci. Acad. St. Pet. i, 67 (1836).

Sandy soil on Hellgate River, Bonner, Missoula County, Montana; August 30 (No. 986).

**Alopecurus californicus** Vasey, Bull. Torr. Club xv, 13 (1888).

Wet meadows, head of Little Potlatch River, Latah County; June 16 (Nos. 396, 415).

This robust, leafy grass is apparently as promising for cultivation in moist meadows as the European foxtail, *Alopecurus pratensis*, from which it differs chiefly in its looser spikes with smaller spikelets.

**Alopecurus geniculatus fulvus** (Smith) Scribn. Mem. Torr. Club, v, 38 (1894); *A. fulvus* Smith, Engl. Bot. t. 1467 (1793); *A. geniculatus aristulatus* (Mx.) Torr. Fl. U. S. i, 97 (1824); *A. aristulatus* Mx. Fl. i, 43 (1803).

Along creeks, valley of Lake Pend d'Oreille; August 23 (No. 947).

**Polygogon monspeliensis** (L.) Desf. Fl. Alt. i, 67 (1798); *Alopecurus monspeliensis* L. Sp. Pl. i, 89 (1753).

Sandy soil, near Spokane, Washington; August 17 (No. 920).

**Cinna pendula glomerula** Scribner, Proc. Acad. Phila. 1884, 290 (1884).

Along creeks near Rathdrum, Kootenai County, July 25 (No. 724).

This is a robust form with rough sheaths and leaves nearly 1 cm. wide, and with the florets nearly sessile in the numerous small spikelets, which are somewhat crowded in clusters along the rays of the ample panicle.

**Agrostis exarata** Trin. Dis. Unif. 207 (1824).

Bottom lands, valley of Cœur d'Alene River, Kootenai County; July 13 (No. 646). Wet places, valley of Traill River, Kootenai County; August 9 (No. 883).

**Agrostis exarata asperifolia** (Trin.) Thurb. Bot. Cal. ii, 273 (1880); *A. asperifolia* Trin. Mem. Acad. St. Pet. Sci. Nat. ser. 6, 318 (1845).

Gravel banks and in streams, valley of Traille River, Kootenai County; August 8 (No. 878).

**Agrostis scabra** Willd. Sp. Pl. i, 370 (1798); *A. hiemalis* (Walt.) B. S. P. Prel. Cat. N. Y. 68 (1888); *Cornucopiae hyemalis* Walt. (?) Fl. Car. 74 (1788).

Sandy soil, Farmington Landing, Lake Cœur d'Alene; July 4 (No. 547).

**Calamagrostis canadensis** (Mx.) Beauv. Agrost. 15 (1812); *Arundo canadensis* Mx. Fl. i, 73 (1803).

Alluvial soil, Farmington Landing, Lake Cœur d'Alene; July 5 (No. 561). Canyons, same locality; July 7 (No. 578). Shores, valley of Lake Tesemini, Kootenai County; July 21 (No. 694).

**Calamagrostis canadensis dubia** (Scribner) Vasey, Contr. Nat. Herb. iii, 80 (1892); *Deyeuxia dubia* Scribn. Bot. Gaz. xi, 174 (1886).

Bottom lands, valley of Cœur d'Alene River, Kootenai County; July 13 (No. 637).

**Calamagrostis cusickii** Vasey, Ill. N. A. Gr. ii, 39 (1892); *Deyeuxia cusickii* Vasey, Bot. Gaz. x, 224 (1885).

Hillsides, Farmington Landing, Lake Cœur d'Alene; July 12 (No. 630).

**Calamagrostis suksdorfii** Scribner; Vasey, Contr. Nat. Herb. iii, 82 (1892).

Farmington Landing, Lake Cœur d'Alene; July 6 (No. 564). Dry ridges, valley of Lake Tesemini, Kootenai County; July 21 (No. 682). Woods at the south end of Lake Pend d'Oreille; July 28 (No. 769).

Nos. 682 and 769 with straw-colored panicles are typical forms of the species, but No. 564, not quite mature, is referred to it with some doubt.

**Calamovilfa longifolia** (Hook.) Hack. True Grasses, 113 (1890); *Calamagrostis longifolia* Hook. Fl. Bor. Amer. ii, 241 (1840).

Plains, Colgate, near Glendive, Dawson County, Montana; September 5 (No. 999).

This species, with its strong, creeping rootstocks, is valuable for holding the light, drifting sands in the prairie region.

**Deschampsia cæspitosa** (L.) Beauv. Agrost. 91 (1812); *Aira cæspitosa* L. Sp. Pl. i, 61 (1753).

Wet places, head of Little Potlatch River, Latah County; June 17 (No. 419). Meadows, same locality; June 18 (No. 433). Canyons at Farmington Landing, Lake Cœur d'Alene; July 7 (No. 579). Hope, north end of Lake Pend d'Oreille, Kootenai County; August 21 (No. 945).

**Deschampsia calycina** Presl, Rel. Haenk. i, 251 (1830).

Frequent on sandy soil, valley of the Big Potlatch River, Nez Perces County; June 6 (No. 323).

**Deschampsia elongata** (Hook.) Munro; Benth. Pl. Hartw. 342 (1857); *Aira elongata* Hook. Fl. Bor. Amer. ii, 243, t. 228 (1840).

Common in copses, valley of Big Potlatch River, Nez Perces County; June 9 (No. 374). Moist places, head of Little Potlatch River, Latah County; June 18 (No. 439).

**Trisetum canescens** Buckley, Proc. Acad. Phila. 1862, 100 (1862).

Meadows, head of Little Potlatch River, Latah County; June 18 (No. 438). Moist places, same locality; June 20 (No. 440).

**Trisetum cernuum** Trin. Mem. Acad. St. Pet. ser. 6, i, 61 (1831).

Frequent in moist places, valley of Big Potlatch River, Nez Perces County; June 9 (No. 369). Farmington Landing, Lake Cœur d'Alene; July 4 (No. 541).

**Trisetum subspicatum** (L.) Beauv. Agrost. 88 (1812); *Aira subspicata* L. Syst. Veg. ed. 10, 673 (1769).

Mountains, south end of Lake Pend d'Oreille; August 3 (No. 819). Mountains of Packsaddle Peak, Kootenai County; August 6 (No. 848).

**Danthonia californica** Boland. Proc. Cal. Acad. ii, 182 (1862-63).

Meadows, head of Little Potlatch River, Latah County; June 21 (No. 476).

**Danthonia californica unispicata** Thurb. Bot. Cal. ii, 294 (1880).

Dry hills, head of Little Potlatch River, Latah County; June 20 (No. 453).

**Spartina cynosuroides** (L.) Willd. Enum. Pl. 80 (1809); *Dactylis cynosuroides* L. Sp. Pl. i, 71 (1753).

Shores of Lake Tesemini, Kootenai County; July 21 (No. 691).

**Koeleria cristata** (L.) Pers. Syn. i, 97 (1805); *Aira cristata* L. Sp. Pl. i, 63 (1753).

Sandy soil on Little Potlatch River, Nez Perces County; June 7 (No. 333).

**Melica subulata** (Griseb.) Scribner, Proc. Acad. Phila. 1885, 47 (1885); *Bromus subulatus* Griseb. Fl. Ross. iv, 358 (1849); *Melica acuminata* Boland. Proc. Cal. Acad. iv, 104 (1866).

Frequent in canyons, valley of Little Potlatch River, Latah County; June 13 (No. 387). Mountains, south end of Lake Pend d'Oreille; August 11 (No. 827).

**Poa annua rigidiuscula** var. nov.

Culms 15 to 20 cm. high, rather robust, striate, glabrous, leafy to the middle, tufted from running rootstocks, evidently perennial; leaves flat, mostly erect, abruptly acute or rounded at apex, 2 to 4 mm. wide, 2 to 5 cm. long; ligule obtuse, about 2 mm. long; sheaths smooth, shorter than the internodes, the lower ones membranaceous, the upper one keeled; panicle pyramidal, 3 to 4 cm. long, and spreading to nearly that width at the base; axis rigidly erect with 5 or 6 nodes; rays 2 to 4 at the base, 2 or single above, spikelet-bearing beyond the middle, smooth, rigid, and divaricate, or somewhat reflexed; spikelets 3- to 5- (usually 4-) flowered, about 5 mm. long; empty glumes smooth, nearly equal in length; nearly two-thirds as long as the lower floret, the first narrowly ovate, acute, the second broadly lanceolate, obtuse; floral glume 3 mm. long, broadly lance-oblong, obtuse, membranaceous above, prominently ciliate on the 5 nerves below the upper third; palea about one-fourth shorter than its glume, prominently ciliate on the keels; grain yellow, subtranslucent, slightly rugose under the lens, 1.5 mm. long, one-third as thick, slightly flattened or triquetrous, with a tuft of hairs at the apex. This variety differs from the type of the species in the running rootstock, rather robust rigid culms, short subobtuse leaves, rigid panicle, larger florets, and pubescent floral glumes.

Type specimen collected at Lapwai Agency, Nez Perces County, by J. H. Sandberg; May 5, 1892 (No. 134). Also found on the plains of eastern Oregon. It is said to be common in rich soil in this region.

**Poa compressa** L. Sp. Pl. i, 69 (1753).

Dry hillsides near Farmington Landing, Lake Coeur d'Alene; July 2 (No. 534).

**Poa filifolia** Vasey, Contr. Nat. Herb. i, 271 (1893).

"Culms densely clustered, from a slender rootstock, erect, slender, 16 to 24 inches high, with 2 or 3 distant, narrow, short-bladed leaves; radical leaves abundant, filiform, 6 to 10 inches long, flaccid, erect; leaves of the culm 2 to 3, distant, with long sheaths and short (1 to 3 inches), erect, filiform blades; ligule less than 1 line long, acute; panicle loose and flexuous, 3 to 4 inches long; branches capillary, scabrous, rather distant, the lower in twos or threes, unequal, the longer about 1.5 inches long, with few spikelets near the extremity, naked below; spikelets compressed, 3 to 5 lines long, rather loosely 5- to 7-flowered, on filiform pedicels; empty glumes nearly equal, one-third shorter than the adjacent florets, lance-ovate, acute, broadly scarious-margined; floral

glumes 2.5 to 3 lines long, lance-oblong, subacute, scarious at the apex, minutely scabrid throughout, slightly more so on the keel, intermediate nerves rather indistinct; palet nearly equaling the glume, scabrous on the keels."

Frequent on rocky hillsides, island in Clearwater River, near Upper Ferry, above Lewiston; May 2 (No. 86). Northern slopes, on Hatwai Creek, Nez Perces County; May 6 (No. 138, type number).

**Poa flava** L. Sp. Pl. i, 68 (1753); *Poa serotina* Ehrh. Beitr. vi, 83 (1791).

Wet places, near Farmington Landing, Lake Cœur d'Alene; July 4 (No. 543). Sandy soil, valley of Cœur d'Alene River, Kootenai County; July 12 (No. 632). Bottom lands, same locality; July 13 (No. 644). Moist places, valley of Big Potlatch River, Nez Perces County; June 9 (No. 1051).

**Poa nemoralis** L. Sp. Pl. i, 69 (1753).

Sandy soil, Farmington Landing, Lake Cœur d'Alene; July 4 (No. 545).

**Poa nevadensis** Vasey, Bull. Torr. Club, x, 66 (1883).

Frequent by roadsides, valley of Clearwater River, Nez Perces County; May 30 (No. 266). Banks of Big Potlatch River, Nez Perces County; June 4 (No. 305). Roadsides, same locality; June 9 (No. 354). Copses, same locality; June 9 (No. 375). Near Viola, Latah County; June 26 (No. 505).

This robust long-leaved "mountain blue grass" is one of the most valuable forage grasses in the region where it grows, and it is apparently well worthy of being tried in cultivation.

**Poa pratensis** L. Sp. Pl. i, 67 (1753).

Sparingly in meadows, head of Little Potlatch River, Latah County; June 18 (No. 437). Along creeks, 4 miles east of Farmington, Latah County; June 28 (No. 515). Sandy soil, Farmington Landing, Lake Cœur d'Alene; July 4 (No. 546).

Numbers 437 and 546 represent a peculiar mountain form of this species, somewhat more robust than usual, with a rather loose panicle of spikelets slightly larger than the average size of those in the eastern form, and usually more or less brightly colored with purple, often appearing almost iridescent through the coloration of the floral glumes. This form and also numerous intermediate forms connecting this with the typical form of the species have been collected in many localities in the Rocky Mountains from Northern Arizona and New Mexico to British America. It has been cultivated with success at one of the Canadian experiment farms.

**Poa sandbergii** Vasey, Contr. Nat. Herb. i, 276 (1893).

"Culms tufted, 10 to 16 inches long, slender, upper portion naked, the lower portions bearing about two sheaths with very short blades; leaves 2, the blade 1 inch long or less; ligule about 1 line long; panicle 1.5 to 3 inches long, sometimes very narrow, or less than 1 inch wide, the branches ascending, nearly smooth, the lower in twos or threes, unequal, the longer one 1 to 2 inches long, spikelet-bearing above the middle; spikelets short-pedicel, 2- to 4-flowered about 3 lines long, often purplish; empty glumes lanceolate, subacute, about two-thirds as long as the adjacent florets; floral glumes linear-oblong, obtuse, nearly 2 lines long, sparsely pubescent or puberulent, somewhat villose near the base but not webbed, scarious at the apex; palet equaling its glume, pubescent on the keels; internode of the rachilla puberulent, one-half line long."

"It approaches some forms of *Poa tenuifolia* Nutt., from which it may be distinguished by its smaller spikelets, shorter florets, and more pubescent floral glumes."

Grassy slopes, valley of Clearwater River, Nez Perces County; May 14, (No. 164).

**Poa tenuifolia** Nutt. Proc. Acad. Phila. 1862, 96 (1862).

Frequent on banks of Hatwai Creek, Nez Perces County; May 17 (No. 183).  
Hillsides, valley of Clearwater River, Nez Perces County; May 17 (No. 187).  
Rocky places, scarce, near Hatwai Creek, Nez Perces County; May 27 (No. 260).  
Meadows near Viola, Latah County; June 26 (No. 503).

**Grapphephorum wolffii** Vasey, Grasses of the U. S. 42 (1883); *Trisetum wolffii* Vasey, Bot. Wheeler Surv. 194, t. 27 (1878).

Frequent in meadows, head of Little Potlatch River, Latah County; June 18 (No. 435).

**Panicularia fluitans** (L.) Kuntze, Rev. Gen. Pl. 782 (1891); *Festuca fluitans* L. Sp. Pl. i, 75 (1753); *Glyceria fluitans* R. Br. Prodr. Fl. Nov. Holl. i, 179 (1810).

Wet places near Rathdrum, Kootenai County; July 20 (No. 670). Wet shores, valley of Lake Tesemini, Kootenai County; July 22 (No. 702).

**Panicularia nervata** (Willd.) Kuntze, Rev. Gen. Pl. ii, 783 (1891); *Poa nervata* Willd. Sp. Pl. i, 389 (1798); *Glyceria nervata* Trin. Mem. Acad. St. Pet. ser. 6, i, 365 (1831).

Frequent in wet places, valley of Big Potlatch River, Nez Perces County; June 9 (Nos. 358, 360). Similar localities, valley of Little Potlatch River, Latah County; June 13 (No. 392). Farmington Landing, Lake Cœur d'Alene; July 4 (No. 540). Valley of Traille River, Kootenai County; August 8 (No. 876).

**Panicularia pauciflora** (Presl) Kuntze, Rev. Gen. Pl. ii, 783 (1891); *Glyceria pauciflora* Presl, Rel. Haenk. i, 257 (1830).

Near springs, scarce, valley of Big Potlatch River, Nez Perces County; June 9 (No. 356). Wet places, valley of Cœur d'Alene River, Kootenai County; July 13 (No. 636).

**Panicularia remota** (Fors.) Kuntze, Rev. Gen. Pl. ii, 782 (1891); *Poa remota* Fors. Act. Inst. Linn. Ups. i, t. 1 (1807); *Glyceria arundinacea* Kunth, Enum. i, 367 (1833).

Along creeks near Rathdrum, Kootenai County; July 25 (No. 718).

This belongs to a form readily recognized by its thick, almost succulent culm, broad leaves, and ample panicle of rather large spikelets.

**Festuca jonesii** Vasey, Contr. Nat. Herb. i, 278 (1893).

Frequent in wet places, valley of Little Potlatch River, Nez Perces County; June 14 (No. 394).

This species has often been mistaken for *F. occidentalis* Hook., which it resembles in the inflorescence, but it may be readily distinguished by its tall culms with abundant flat leaves.

**Festuca microstachys** Nutt. Journ. Acad. Phila. ser. 2, i, 187 (1847).

Rocky ground on Peter Creek, Nez Perces County; May 4 (No. 124).

**Festuca myurus** L. Sp. Pl. i, 74 (1753).

Frequent in sandy soil, valley of Clearwater River, Nez Perces County; June 2 (No. 291).

**Festuca octiflora** Walt. Fl. Car. 81 (1788); *Festuca tenella* Willd. Enum. i, 113 (1809).

Sandy river banks, scarce, valley of Clearwater River, Nez Perces County; June 2 (No. 290).

**Festuca oregona** Vasey, Bot. Gaz. ii, 126 (1877).

Meadows, near Viola, Latah County; June 26 (No. 504). Dry ridges, valley of Lake Tesemini, Kootenai County; July 21 (No. 683). On mountains at 900 meters altitude, same locality; July 22 (No. 703).

**Festuca ovina** L. Sp. Pl. i, 73 (1753).

Frequent in copses, head of Little Potlatch River, Latah County; June 20 (No. 451).

**Festuca ovina polyphylla** Vasey, ined.

Frequent in dry, sandy soil, valley of Little Potlatch River, Latah County; June 13 (No. 388).

This is the form which has been mentioned in published lists, but as the forms and named varieties of this group of *Festucas* are in a very unsettled state it is thought best not to give a description until the entire genus can be carefully studied.

**Festuca rubra longearistata** Hack. ined.

Farmington Landing, Lake Cœur d'Alene; July 4 (No. 544).

This form agrees well with specimens in the National Herbarium labeled with this name by Dr. Eduard Hackel, but its description is deferred for the reason already mentioned.

**Festuca scabrella major** Vasey, Contr. Nat. Herb. i, 278 (1893).

Plains on the North Fork of Hangman's Creek, Indian Reservation, Latah County; July 1 (No. 530).

**Festuca viridula** Vasey, Ill. N. A. Gr. ii, 93 (1893).

Summits of Packsaddle Peak, Kootenai County; August 5 (No. 831).

**Bromus breviaristatus** (Hook.) Buckl. Proc Acad. Phila. 1862, 98 (1862); *Ceratocloa breviaristata* Hook. Fl. Bor. Amer. ii, 253 (1840).

Common on rocky banks of Peter Creek, Nez Perces County; May 4 (No. 123). Waste ground, valley of Clearwater River, Nez Perces County; May 14 (No. 166). Roadsides, valley of Little Potlatch River, Nez Perces County; June 7 (No. 331). Meadows, head of Little Potlatch River, Latah County; June 18 (No. 434).

**Bromus brizæformis** Fisch. & Mey. Ind. Sem. Petrop. iii, 30 (1836).

In meadows, only near Viola, Latah County; June 23 (No. 482).

**Bromus ciliatus** L. Sp. Pl. i, 76 (1753).

Open places, valley of Pine Creek, near Farmington, Latah County; June 29 (No. 523). Canyons, Farmington Landing, Lake Cœur d'Alene; July 7 (No. 582). Woods on the St. Joseph River, Wiessner's Peak, Kootenai County; July 8 (No. 599).

**Bromus hordeaceus** L. Sp. Pl. i, 77 (1753); *Bromus mollis* L. Sp. Pl. ed. 2, i, 112 (1762).

Frequent on waste ground, valley of Clearwater River, Nez Perces County; May 14 (No. 167).

**Bromus secalinus** L. Sp. Pl. i, 76 (1753).

Hillsides, south shore of Lake Cœur d'Alene; July 1 (No. 531).

**Agropyron divergens** Nees; Steud. Syn. Gram. 347 (1855).

Frequent on rocky ground, valley of Clearwater River, Nez Perces County; May 16 (No. 178). Sandy river banks, same locality; June 2 (No. 297). Hillsides, valley of Little Potlatch River, Latah County; June 13 (No. 382). Meadows near Viola, Latah County; June 23 (No. 481). On basaltic rocks at Farmington Landing, Lake Cœur d'Alene; July 5 (No. 559).

**Agropyron repens glaucum** (Desf.) Scribner, Mem. Torr. Club, v, 57 (1894); *Triticum glaucum* Desf. Tabl. Bot. Mus. 16 (1804); *Agropyron glaucum* Ram. & Schult. Syst. Veg. ii, 752 (1817).

Mountains near Lake Tesemini, Kootenai County; July 22 (No. 704).

**Agropyron tenerum** Vasey, Bot. Gaz. x, 258 (1885).

Rocky ground, valley of Clearwater River, Nez Perces County; May 16 (No. 179). Dry prairies near Rathdrum, Kootenai County; July 5 (No. 714).

**Agropyron violaceum major** Vasey, Contr. Nat. Herb. i, 280 (1893).

Farmington Landing, shore of Lake Cœur d'Alene; July 5 (No. 556).

**Hordeum jubatum** L. Sp. Pl. i, 85 (1753).

Common on waste grounds, near Viola, Latah County; June 23 (No. 483).

**Hordeum nodosum** L. Sp. Pl. ed. 2, i, 126 (1762).

Frequent in sandy soil, valley of Clearwater River, Nez Perces County; May 9 (No. 146). Meadows near Viola, Latah County; June 26 (No. 493). Valley of Lake Pend d'Oreille; August 25 (No. 958).

This form, which is referred here until the genus can be more thoroughly studied, differs from the type in the short, flat leaves, pubescent on both sides, with inflated sheaths, the lower sheaths being retrorsely pubescent; in the spikes shorter and thicker than usual, with awns 10 to 15 mm. long, and in the sterile florets on stipes about  $1\frac{1}{2}$  mm. long.

**Hordeum pusillum** Nutt. Gen. i, 87 (1818).

Hillsides, scarce, valley of Big Potlatch River, Nez Perces County; June 8 (No. 370).

**Elymus canadensis** L. Sp. Pl. i, 83 (1753).

On Hellgate River, Bonner, Missoula County, Montana; August 30 (No. 982).

**Elymus condensatus** Presl, Rel. Haenk. i, 265 (1830).

Frequent in sandy soil, valley of Hatwai Creek, Nez Perces County; May 27 (No. 262).

**Elymus glaucus** Buckl. Proc. Acad. Phila. 1862, 99 (1862); *Elymus sibiricus* Hook. Fl. Bor. Amer. ii, 255 (1840), not L.; *Elymus americanus* Vasey & Scribner, in Macconn, Cat. Can. Pl. 245 (1888).

Common in copses, valley of Big Potlatch River, Nez Perces County; June 9 (No. 353). Along creeks, Farmington Landing, Lake Cœur d'Alene; July 6 (No. 571).

**CONIFERÆ.****Pinus contorta** London, Arb. et Frut. iv, 2292, f. 2210, 2211 (1838).

Woods, Farmington Landing, Lake Cœur d'Alene; July 12 (No. 627).

**Pinus ponderosa** Dougl.; Lawson's Manual, 354 (1836)

Banks of Clearwater River, Nez Perces County; April 26 (No. 51).

A good-sized tree.

**Larix occidentalis** Nutt. Sylva, iii, 143, t. 120 (1849).

Common in woods, at 600 meters altitude, Craig Mountains, near Lake Waha, Nez Perces County; May 20 (No. 206).

Sometimes 6 or 8 feet in diameter.

**Juniperus nana** Willd. Berl. Baumz. ed. 1, 159 (1796); *J. communis* Gaudich. Fl. Helv. vi, 301 (1830).

Summits of Packsaddle Peak, Kootenai County; August 5 (No. 830).

**Juniperus virginiana** L. Sp. Pl. ii, 1039 (1753).

Rocky shore at south end of Lake Pend d'Oreille; August 4 (No. 824).

**Tsuga mertensiana** (Bong.) Carrière, Trait. Conif. ed. 2, 250 (1867); *Pinus mertensiana* Bong. Veg. Sitch. 163 (1831).

Canyons near Rathdrum, Kootenai County; July 23 (No. 708).

**Pseudotsuga mucronata** (Raf.) Sudworth, nom. nov.; *Pinus taxifolia* Lamb. Pinus, ed. 1, 51, t. 33 (1803), not Salisb. (1796); *Abies mucronata* Raf. Atl. Journ. 119 (1832); *Ps. douglasii* Carrière, Trait. Conif. nouv. éd. 256 (1867); *Ps. taxifolia* Britton, Trans. N. Y. Acad. viii, 741 (1889).

Woods, Farmington Landing, Lake Cœur d'Alene; July 12 (No. 629).

<sup>1</sup>The *Coniferae* were determined by Mr. George B. Sudworth, botanist of the Division of Forestry, U. S. Department of Agriculture.

**Abies grandis** Lindl. Penn. Cycl. i, 30 (1833).

Common in woods at 900 meters altitude, Craig Mountains, near Lake Waha, Nez Perces County; May 20 (No. 205). Woods, Farmington Landing, Lake Cœur d'Alene; July 12 (No. 626).

**Thuja plicata** Lamb. Pinus, ii, 19 (1824); *T. gigantea* Nutt. Journ. Acad. Phila. vii, 52 (1834).

Near Hope, at the north end of Lake Pend d'Oreille; August 25 (No. 967).  
A tree 3 to 5 meters in diameter.

**Taxus brevifolia** Nutt. Sylva, iii, 86, t. 108 (1849).

Trailing in habit.

In woods, valley of Traill River, Kootenai County; August 8 (No. 886).

#### EQUISETACEÆ.<sup>1</sup>

**Equisetum arvense** L. Sp. Pl. ii, 1061 (1753).

Common along Hatwai Creek, Nez Perces County; April 28 (No. 64). Wet places, valley of Clearwater River, Nez Perces County; May 13 (No. 162).

**Equisetum hyemale** L. Sp. Pl. ii, 1062 (1753).

Marshes, Granite Station, Kootenai County; July 30 (No. 806). Common, bottom lands along Hatwai Creek, Nez Perces County; April 24 (No. 44).

**Equisetum limosum** L. Sp. Pl. ii, 1062 (1753).

Alluvial soil, valley of Lake Pend d'Oreille; August 25 (No. 959).

**Equisetum robustum** A. Braun. Amer. Journ. Sci. xlv, 88 (1843).

Common in wet places, along Peter Creek, Nez Perces County; May 3 (No. 116). Along irrigation ditches, valley of Clearwater River, Nez Perces County; May 14 (No. 165).

#### FILICES.

**Woodsia oregana** Eaton, Can. Nat. ii, 90 (1865).

Common on rocks, valley of Peter Creek, Nez Perces County; May 4 (No. 119). Similar situations, valley of the Big Potlatch River, Nez Perces County; June 6 (No. 327).

**Woodsia scopulina** Eaton, Can. Nat. ii, 91 (1865).

In crevices of rocks, near Farmington Landing, Lake Cœur d'Alene; July 11 (No. 620). On precipitous ledges of granite, south end of Lake Pend d'Oreille; July 27 (No. 758).

**Cystopteris fragilis** (L.) Bernh. Schrad. Neues. Journ. Bot. i, 1, 27, t. 2, f. 9 (1799).

Common on rocks, valley of Peter Creek, Nez Perces County; May 4 (No. 1047).

**Adiantum pedatum** L. Sp. Pl. ii, 1095 (1753).

On precipitous ledges of granite, valley of Lake Pend d'Oreille; July 27 (No. 750).

**Cheilanthes gracillima** Eaton, Bot. Mex. Bound. 234 (1859).

Mountains near Viola, Latah County; June 26 (No. 500).

**Cryptogramme acrostichoides** R. Br. in Richards. Bot. App. 767 (1823).

On rocks, near foot of Wiessner's Peak, Kootenai County; July 8 (No. 594).

**Pellaea densa** Hook. Sp. Fil. ii, 150, t. 125 B (1847).

Crevices of rocks, scarce, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 467).

**Pteris aquilina lanuginosa** Bong. Veg. Sitch. 176 (1831).

Open woods, among bushes, valley of Lake Pend d'Oreille; August 21 (No. 943).

**Asplenium filix-femina cyclosorum** Rupr. Dist. Crypt. Vasc. 41 (1845).

Along creeks near Rathdrum, Kootenai County; July 25 (No. 723).

<sup>1</sup>The Pteridophyta were determined by Prof. Lucien M. Underwood, Greencastle, Indiana.



- Phegopteris dryopteris robertiana** (Hoffm.) Davenp. Cat. Dav. Herb. Suppl. 47 (1883); *Polypodium robertianum* Hoffm. Deutsch. Fl. Add. (1795).  
Canyons, Wiessner's Peak, Kootenai County; July 8 (No. 605).
- Dryopteris cristata** (L.) Gray, Man. (1848); *Aspidium cristatum* Sw. Schrad. Journ. Bot. ii, 37 (1800); *Polypodium cristatum* L. Sp. Pl. ii, 1090 (1753).  
Moist woods at Granite Station, Kootenai County; July 29 (No. 795).
- Dryopteris filix-mas** (L.) Schott, Gen. Fil. (1834); *Aspidium filix-mas* Sw. Schrad. Journ. Bot. ii, 38 (1800); *Polypodium filix-mas* L. Sp. Pl. ii, 1090 (1753).  
Woods, on Wiessner's Peak, at 1,800 meters altitude, Kootenai County; July 8 (No. 661). Lake View, east shore of Lake Pend d'Oreille; August 8 (No. 873).
- Dryopteris lonchitis** (L.) Kuntze, Rev. Gen. Pl. ii, 813 (1891); *Polypodium lonchitis* L. Sp. Pl. ii, 1088 (1753); *Aspidium lonchitis* Sw. Schrad. Journ. Bot. ii, 30 (1800).  
Packsaddle Peak at 2,250 meters altitude, near Lake Pend d'Oreille; August 6 (No. 853).
- Dryopteris munita** (Kaulf.) Kuntze, Rev. Gen. Pl. ii, 813 (1891); *Aspidium munitum* Kaulf. Enum. Fil. 236 (1824).  
Frequent in canyons, Bald Knob, Cedar Mountain, Latah County; June 20 (No. 459).
- Dryopteris spinulosa dilatata** (Hoffm.) Underw. Our Native Ferns, ed. 4, 116 (1893); *Polypodium dilatatum* Hoffm. Deutsch. Fl. ii, 7 (1795); *Aspidium spinulosum dilatatum* Hook. Brit. Fl. 444 (1830).  
Moist woods, Granite Station, Kootenai County; July 30 (No. 799).
- Dryopteris spinulosa intermedia** (Muhl.) Underw. Our Native Ferns, ed. 4, 116 (1893); *Aspidium intermedium* Muhl.; Willd. Sp. Pl. v, 262 (1810).  
Near Lake View, east shore of Lake Pend d'Oreille; August 8 (No. 874).
- Phegopteris alpestris** (Sw.) Mett. Fil. Hort. Lips. 83 (1856); *Aspidium alpestre* Sw. Syn. Fil. 421 (1806).  
Moist places, Packsaddle Peak, Kootenai County; August 6 (No. 858).

#### OPHIOGLOSSACEÆ.

- Botrychium virginianum** (L.) Sw. Schrad. Journ. Bot. ii, 111 (1800); *Osmunda virginiana* L. Sp. Pl. ii, 1064 (1753).  
Deep woods, near south end of Lake Pend d'Oreille; July 28 (No. 762).

#### MARSILIACEÆ.

- Marsilia vestita** Hook. & Grev. Ic. Fil. t. 159 (1831).  
Along creeks, valley of the Little Potlatch River, Latah County; June 16 (No. 407). Same situations, Spokane Bridge, 18 miles east of Spokane, Washington; August 15 (No. 901). Also near south end of Lake Pend d'Oreille.  
No. 407 is the smooth aquatic form; No. 901 the amphibious fruiting form.

#### LYCOPODIACEÆ.

- Lycopodium annotinum** L. Sp. Pl. ii, 1103 (1753).  
Woods, near south end of Lake Pend d'Oreille; July 28 (No. 771).
- Lycopodium complanatum** L. Sp. Pl. ii, 1104 (1753).  
Woods, near south end of Lake Pend d'Oreille; July 28 (No. 770).

#### SELAGINELLACEÆ.

- Selaginella rupestris** Spring, in Mart. Fl. Bras. i, pt. 2, 118 (1840).  
Occasionally on rocks, valley of Clearwater River, Nez Percés County; April 26 (No. 51).

MUSCI.<sup>1</sup>

- Sphagnum squarrosum spectabile** Russ.; Warnstorf, Bot. Gaz. xv, 224 (1890).  
Hope, Kootenai County; August (No. 1083).
- Gymnostomum curvirostre** (Ehrh.) Hedw. Stirp. Crypt. ii, 68, t. 24 (1789); *Pottia curvirostris* Ehrh. Beitr. i, 188 (1787).  
Farmington Landing, Kootenai County; July (No. 1095).
- Dicranoweisia contermina** Ren. & Card. sp. nov.  
*D. crispulae* valde affinis; differt foliis perichætalibus intimis breviter cuspidatis et cellulis alaribus vix distinctis; a *D. obliqua* Kindb. capsula symmetrica primo visu distincta.  
Farmington Landing; July (No. 1093). Hope, Kootenai County; August (Nos. 1167, 1219). Mr. Henderson had also sent this species to Mr. Cardot from Mount Hood, Oregon.
- Dichodontium pellucidum** (L.) Schimp. Bry. Eur. Coroll. 12 (1855); *Bryum pellucidum* L. Sp. Pl. ii, 1118 (1753).  
Hope, Kootenai County; August (No. 1110).
- Dicranella crispa** (Ehrh.) Schimp. Coroll. Bry. Eur. 13 (1856); *Dicranum crispum* Ehrh.; Hedw. Stirp. Crypt. ii, 91, t. 33 (1788).  
Hope, Kootenai County; August (Nos. 1118, 1120).
- Dicranum fuscescens** Turn. Musc. Hib. 60, t. 5, f. 1 (1804).  
Hope, Kootenai County; August (No. 1204).
- Dicranum howellii** Ren. & Card. Bot. Gaz. xiv, 93, t. xii (1889).  
Hope, Kootenai County; August (No. 1109).
- Dicranum scoparium** (L.) Hedw. Fund. Musc. ii, 92, t. 8, f. 41, 42 (1782); *Bryum scoparium* L. Sp. Pl. ii, 1117 (1753).  
Lewiston, Nez Perces County; April, May (No. 1202). Farmington Landing, Kootenai County; July (No. 1072). Hope, Kootenai County; August (No. 1203).
- Dicranum starkei** Web. & Mohr. Bot. Taschenb. 189 and 471 (1807).  
Hope, Kootenai County; August (No. 1104).
- Dicranum strictum** Schleich. Cent. iii, No. 26 (1806).  
No. 1205 has leaves with thickened, pitted cell walls, and is a larger plant than the other numbers, but it has all the other characters of this species.  
Lewiston, Nez Perces County, April and May (No. 1205). Farmington Landing, Kootenai County; July (Nos. 1061, 1260).
- Ceratodon purpureus** (L.) Brid. Bryol. Univ. i, 480 (1826); *Mnium purpureum* L. Sp. Pl. ii, 1111 (1753).  
Lewiston, Nez Perces County; April and May (Nos. 1063, 1136); Farmington Landing, Kootenai County; (No. 1201).
- Pottia cavifolia** Ehrh. Beitr. i, 187 (1787).  
Lewiston, Nez Perces County; April and May (No. 1147).
- Ditrichum montanum** Leiberg, Bull. Torr. Club, xx, 112, t. 143 (1893).  
Hope, Kootenai County; August (No. 1119).
- Barbula mucronifolia** (Brid.) Bruch & Schimp. Mon. 38, t. 23 (1842); *Syntrichia mucronifolia* Brid. Mant. 97 (1819).  
Lewiston, Nez Perces County; April and May (No. 1154).

<sup>1</sup>The difficult and doubtful species of mosses were submitted to Mr. Jules Cardot, except the species of *Sphagnum*, which were determined by Dr. C. Warnstorf, and those of *Orthotrichum*, which were submitted to Mrs. E. G. Britton. Mrs. Britton, Mr. Cardot, Professor Barnes, and Mr. L. S. Cheney have also kindly aided in verifying the references.

- Barbula mülleri** Bruch & Schimp. Bryol. Eur. ii, 44, t. xxviii (1836-51).  
Farmington Landing, Kootenai County; July (Nos. 1066, 1237, 1245). Hope, Kootenai County; August (No. 1197).
- Scouleria aquatica** Hook. Bot. Misc. i, 33, t. 18 (1830).  
Hope, Kootenai County; August (No. 1126).
- Grimmia alpestris** Schleich.; Nees & Hornsch. Bry. Germ. ii, pt. i, 139, t. 21, f. 12 (1827).  
Farmington Landing, Kootenai County; July (No. 1077).
- Grimmia apocarpa** Hedw. Descr. Musc. i, t. 39 (1787).  
Farmington Landing, Kootenai County. July (No. 1178).
- Grimmia leucophæa** Grev. Wern. Trans. iv, 87, t. 6 (1822).  
Lewiston, Nez Perces County; April and May (No. 1139).
- Grimmia pachyphylla** Leiberg, Bull. Torr. Club, xx, 113, t. cxliv (1893).  
Hope, Kootenai County; August (No. 1169).
- Amphoridium lapponicum** (Hedw.) Schimp. Syn. Musc. Eur. 293 (1876); *Gymnostomum lapponicum* Hedw. Descr. Musc. iii, 10, t. 5 (1792); *Aneclangium lapponicum* Hedw. Sp. Musc. 40 (1801).  
Lewiston, Nez Perces County; April and May (No. 1200). Hope, Kootenai County; August (No. 1111).
- Rhacomitrium lanuginosum** (Hedw.) Brid. Musc. Recent. Suppl. iv, 79 (1822); *Trichostomum lanuginosum* Hedw. Descr. Musc. iii, 3, t. 2 (1792).  
Farmington Landing, Kootenai County; July (No. 1071).
- Rhacomitrium occidentale** (Ren. & Card.) Ren. & Card. Musc. Amer. Sept. (1893); *R. heterastichum occidentale* Ren. & Card. Bot. Gaz. xv, 41 (1890); *R. micropus* Kindb.  
Farmington Landing, Kootenai County; July (No. 1168).
- Rhacomitrium patens** (Dicks.) Hüb. Musc. Germ. 198 (1833); *Bryum patens* Dicks. Pl. Crypt. fasc. ii, 6, t. 4, f. 8 (1790).  
Farmington Landing, Kootenai County; July (No. 1094).
- Rhacomitrium sudeticum** (Funck). Bruch & Schimp. Bryol. Eur. iii, sub Monogr. Rhac. 7, t. i (1836-51); *Trichostomum sudeticum* Funck, Moostasch. 26, t. 18 (1820).  
Hope, Kootenai County; August (No. 1163).
- Orthotrichum fastigiatum** Bruch; Brid. Bryol. Univ. i, 795 (1826).  
Hope, Kootenai County; August (No. 1102).
- Orthotrichum holzingeri** Ren. & Card. sp. nov.  
Ab *O. stenocarpo* (*macounii*) capsula sulcata, ab *O. rhabdocarpo* peristomio siccitate erecto, ab *O. lavigato* capsula sicca sulcata, dentibusque peristomii levibus vel vix papillosis, siccitate erectis, distinctum. Calyptra pilosa vel nuda.  
Mr. Cardot states that he has this species also from Mount Hood, Oregon, communicated by Mr. Henderson, and that in that plant the calyptra is hairy, while in the Idaho plant it is glabrous.  
Lewiston, Nez Perces County; April and May (No. 1155).
- Orthotrichum roëllii** Vent. Bot. Centralb. xlv, 51 (1890); *O. lonchothecium* C. Müll. & Kindb.; *O. stenocarpum* Vent.; *O. macounii* Aust. sec. E. G. Britton.  
*O. roëllii* Vent. and *O. schlottaueri* Vent. seem to constitute a single specific, probably quite variable, type, according to Mr. Cardot.  
Lewiston, Nez Perces County; April and May (Nos. 1133, 1140).
- Orthotrichum speciosum** Nees; Sturm, Deutsch. Fl. abth. ii, 17 (1819).  
Lewiston, Nez Perces County; April to May (No. 1060). Hope, Kootenai County; August (No. 1081).
- Orthotrichum tenellum** Bruch. Brid. Bryol. Univ. i, 786 (1826).  
Mr. Cardot considers this to be *O. pumilum* Sw.  
Lewiston, Nez Perces County; April and May (No. 1142).

- Tetraphis pellucida** Hedw. Fund. Musc. ii, 87, t. 7, f. 32 (1782).  
Farmington Landing, Kootenai County; July (No. 1097).
- Funaria hygrometrica** (L.) Hedw. Sp. Musc. 172 (1801); *Mnium hygrometricum* L. Sp. Pl. ii, 1110 (1753).  
Lewiston, Nez Perces County; April and May (No. 1137). Farmington Landing, Kootenai County; July (No. 1212).
- Bartramia ithyphylla** Brid. Musc. Recent. ii, pt. iii, 132, t. 1, f. 6 (1803).  
Hope, Kootenai County, August (No. 1116).
- Bartramia menziesii** Turn. in Koenig & Sims, Ann. Bot. i, 525, t. 11, f. 1 (1805).  
Farmington Landing, Kootenai County; July (No. 1085).
- Bartramia pomiformis crispa** (Sw.) Schimp Bryol. Eur. fasc. 12, Monogr. 13 (1842);  
*Bartramia crispa* Sw. Musc. Suec. 73 (1799).  
Farmington Landing, Kootenai County, July (No. 1092). Hope, Kootenai County; August (No. 1179).
- Philonotis fontana** (L.) Brid. Bryol. Univ. ii, 18 (1827); *Mnium fontanum* L. Sp. Pl. ii, 1110 (1753).  
Hope, Kootenai County; August (Nos. 1115, 1223).
- Webera commutata** Schimp. Syn. Musc. ed. 2, 403, excl. var.  $\beta$  (1876).  
Hope, Kootenai County; August (No. 1206).
- Webera cruda** (L.) Schwæg. Sp. Musc. 50 (1830); *Mnium crudum* L. Sp. Pl. ii, 1112 (1753).  
Inflorescence quite variable, No. 1129 being dioecious, No. 1157 syncocious, and No. 1257 polygamous.  
Farmington Landing, Kootenai County; July (Nos. 1129, 1257). Hope, Kootenai County; August (No. 1157).
- Webera nutans** (Schreb.) Hedw. Deser. Musc. i, 10, t. 4 (1787); *Bryum nutans* Schreb. Spic. Fl. Lips. 81 (1771).  
Lewiston, Nez Perces County; April and May (No. 1201). Farmington Landing, Kootenai County; July (No. 1156).
- Meesia longiseta** Hedw. Deser. Musc. i, 36 (1787).  
Hope, Kootenai County; August (No. 1100).
- Leptobryum pyriforme** (L.) Schimp. Syn. Musc. Eur. 390 (1876); *Mnium pyriforme* L. Sp. Pl. ii, 1112 (1753).  
Lewiston, Nez Perces County; April and May (Nos. 1144, 1227).
- Bryum caespiticium** L. Sp. Pl. ii, 1121 (1753).  
Lewiston, Nez Perces County; April and May (Nos. 1135, 1210, 1232).
- Bryum cirrhatum** Hoppe & Hornsch. Fl. 90 (1819).  
Farmington Landing, Kootenai County; July (No. 1082).
- Bryum cuspidatum** Schimp. Syn. Musc. Eur. 430 (1876.)  
Hope, Kootenai County; August (No. 1114).
- Bryum sandbergii** Holzinger, sp. nov.  
Dioecious, male plants not seen; female plants 1 to 2 cm. high, glossy green, with the habit of *Mnium*; leaves, whether wet or dry, spreading, soft; on fertile plants in an approximate rosette near the apex, on sterile shoots less crowded, decurrent at basal angles, oblanceolate, 0.8 mm. wide at base, 1.8 mm. wide above the middle, 6.5 mm. long; perichaetial leaves 0.8 mm. wide, 6 mm. long, tapering from the base, the innermost reduced to 0.4 mm. wide, 2.5 mm. long, all serrate above the middle; costa percurrent, or ceasing below the apex, like the margin of narrow cells, reddish; cells in the upper part of the leaf rhombic-hexagonal, 20 to 26  $\mu$  wide, 50 to 62  $\mu$  long; in the lower part rectangular, 14 to 16  $\mu$  wide, 65 to 90  $\mu$  long; in the margin thick-walled, 1 to 5  $\mu$  wide, of variable length, in 2 or 3 rows; seta 2 to 2.5 cm. long, glossy, dark brown; capsule brown, arcuate, ascend-

ing to pendent, 5 mm. long excluding peristome, 1 mm. in diameter, with a ring of darker-colored cells around the mouth, and constricted under the mouth when dry; collum 2 mm. long; outer peristome light-yellow, inner peristome as long, cilia 3 or 4.

The leaf areolation of this plant suggests an affinity to *Bryum ontariense*, though the latter has not so distinct a margin of narrow, *thick-walled*, colored cells. It is distinguished from that species by the absence of radicles on the stem, which is dark-colored and beset with squamose rudimentary leaves, by the larger and looser leaf cells, the leaf margin not revolute, and the less crowded rosette of leaves at the apex of the stem.

Hope, Kootenai County; August (No. 1161).

**Bryum miniatum atwateriæ** (C. Müll.) Ren. & Card. Musc. Amer. Sept. (1893); *B. atwateriæ* C. Müll. Regensb. Flora, 76 (1873).

Hope, Kootenai County; August (No. 1127).

**Mnium marginatum** (Dicks.) Beauv. Prodr. 75 (1805); *Bryum marginatum* Dicks. Pl. Crypt. fasc. 2, 9, t. 5 (1790); *Mnium serratum* Schrad. in L. Syst. Nat. ed. 13, ii, 1330 (1791).

Farmington Landing, Kootenai County; July (Nos. 1087, 1255).

**Mnium medium** Bruch & Schimp. Bryol. Eur. fasc. 5, 32, t. 10 (1838).

Hope, Kootenai County; August (1103).

**Mnium punctatum** (L.) Hedw. Fund. Musc. ii, 94 (1784); *Bryum serpyllifolium punctatum* L. Sp. Pl. ii, 1113 (1753).

Hope, Kootenai County; August (No. 1113).

**Mnium spinulosum** Bruch & Schimp. Bryol. Eur. fasc. 31, Suppl. iv, 4 (1846).

Lewiston, Nez Perces County; April and May (No. 1149). Farmington Landing, Kootenai County; July (No. 1130).

**Mnium umbratile** Mitt. Journ. Linn. Soc. viii, 30 (1865).

Hope, Kootenai County; August (No. 1105).

**Leucolepis acanthoneura** (Schwæg.) Lindb. Muic. Eur. 81. (1866); *Hypnum acanthoneuron* Schwæg. Suppl. Hedw. Sp. Musc. iii, pt. ii, 1, t. 258 (1827).

Farmington Landing, Kootenai County; July (No. 1075).

**Aulacomnium androgynum** (L.) Schwæg. Suppl. Hedw. Sp. Musc. iii, t. 215 (1827); *Mnium androgynum* L. Sp. Pl. ii, 1110 (1753).

Lewiston, Nez Perces County, April and May (Nos. 1153, 1231). Farmington Landing, Kootenai County, July (Nos. 1216, 1252, 1256).

**Aulacomnium palustre** Schwæg. Suppl. Hedw. Sp. Musc. iii, t. 216 (1827).

Hope, Kootenai County; August (No. 1101).

**Timmia austriaca** Hedw. Sp. Musc. 176, t. 42 (1801).

Lewiston, Nez Perces County; April and May (No. 1059). Farmington Landing, Kootenai County; July (Nos. 1148, 1254). Hope, Kootenai County (No. 1224).

**Atrichum undulatum altecristatum** Ren. & Card. Bot. Gaz. xv, 58 (1890).

Lewiston, Nez Perces County; April and May (No. 1058). Hope, Kootenai County; August (No. 1152).

**Polytrichum attenuatum** Menz. Trans. Linn. Soc. iv, 72, t. 6, f. 2 (1798).

Hope, Kootenai County; August (No. 1121).

**Polytrichum juniperinum** Willd. Fl. Ber. Prodr. 305 (1787).

Lewiston, Nez Perces County; April and May (No. 1151). Farmington Landing, Kootenai County; August (No. 1213).

**Fontinalis antipyretica** L. Sp. Pl. ii, 1107 (1753).

Hope, Kootenai County; August (No. 1164).

**Fontinalis neo-mexicana** Sull. & Lesq.; Sull. Icon. Musc. Suppl. 76, t. 57 (1874).

Hope, Kootenai County; August (No. 1165).

- Dichelyma uncinatum** Mitt. Journ. Linn. Soc. viii, 44 (1865).  
Hope, Kootenai County; August (No. 1166).
- Homalothecium nevadense** (Lesq.) Ren. & Card. Bot. Gaz. xiii, 202 (1888); *Hypnum* (*Camptothecium*) *nevadense* Lesq. Mem. Cal. Acad. i, 33 (1868).  
Farmington Landing, Kootenai County; July (No. 1067).
- Climacium americanum** Brid. Musc. Recent. Suppl. ii, 45 (1822).  
Farmington Landing, Kootenai County; July (No. 1099).
- Pseudoleskea atrovirens** Bruch & Schimp. Bryol. Eur. t. 477 (1851-55). No. 1171 is, according to Mr. Cardot, the form of this species called by Kindberg *Pseudoleskea oligoclada*.  
Hope, Kootenai County; August (Nos. 1170, 1171).
- Pseudoleskea atrovirens brachyclados** (Schwæg.) Schimp. Bryol. Eur. sub. t. 477 (1851-55); *Leskea brachyclados* Schwæg. in Schultes, Reise auf den Glockner, ii, 364. Description in Web. & Mohr. Bot. Taseh. 248 (1807).  
Hope, Kootenai County; August (Nos. 1160, 1264).
- Pseudoleskea rigescens** Wils.; Lindb. Act. Soc. Sci. Fenn. x, 247 (1872).  
Hope, Kootenai County; August (No. 1159).
- Heterocladium aberrans** Ren. & Card. Bot. Gaz. xv, 59, t. 9 (1890).  
Hope, Kootenai County; August (No. 1122).
- Camptothecium æneum** (Mitt.) Lesq. & James, Man. 331 (1884); *Hypnum æneum* Mitt. Journ. Linn. Soc. viii, 31, t. 5 (1865).  
Lewiston, Nez Perces County; April and May (Nos. 1146, 1230).
- Camptothecium dolosum** Ren. & Card. Bot. Centralbl. No. 51 (1890).  
Farmington Landing, Kootenai County; July (No. 1177).
- Camptothecium lutescens** (Huds.) Bruch & Schimp. Bryol. Eur. t. 558 (1851-55).  
*Hypnum lutescens* Huds. Fl. Angl. 421 (1762).  
Farmington Landing, Kootenai County; July (No. 1091).
- Claopodium crispifolium** (Hook.) Lesq. & James, Man. 329 (1884); *Hypnum crispifolium* Hook. Musc. Exot. t. 33 (1818), with description.  
Farmington Landing, Kootenai County; July (Nos. 1057, 1248). Hope, Kootenai County; August (No. 1076).
- Thamnum bigelovii** (Sull.) Lesq. & James, Man. 362 (1884); *Hypnum bigelovii* Sull. Pac. R. Rep. iv, 189, t. 9 (1856).  
This species is mixed with *Thamnum leibergii* both in No. 1107 and 1221.  
Hope, Kootenai County; August (No. 1221).
- Thamnum leibergii** E. G. Britton, Bull. Torr. Club, xvi, 111 (1889).  
Hope, Kootenai County, August (No. 1107).
- Brachythecium albicans** (Neck.) Bruch & Schimp. Bryol. Eur. t. 553 (1851-55);  
*Hypnum albicans* Neck. Meth. Musc. 180 (1771).  
Farmington Landing, Kootenai County; July (No. 1198).
- Brachythecium œdipodium** Mitt. Journ. Linn. Soc. viii, 32 t. 5 (1865).  
Hope, Kootenai County; August (No. 1175).
- Brachythecium rivulare** Bruch & Schimp. Bryol. Eur. t. 546 (1851-55).  
Lewiston, Nez Perces County; April and May (Nos. 1176, 1229).
- Brachythecium rutabulum** Bruch & Schimp. Bryol. Eur. t. 543 (1851-55); *Hypnum rutabulum* L. Sp. Pl. ii, 1124 (1753).  
Hope, Kootenai County; August (No. 1117).
- Brachythecium salebrosum** (Hoffm.) Bruch & Schimp. Bryol. Eur. t. 549 (1851-55); *Hypnum salebrosum* Hoffm. Deutsch. Fl. ii, 74, (1804).  
Farmington Landing, Kootenai County; July (Nos. 1068, 1234, 1241, 1251).
- Brachythecium starkei** (Brid.) Bruch & Schimp. Bryol. Eur. t. 541 (1851-55);  
*Hypnum starkei* Brid. Musc. Recent. ii, pt. ii, 107 (1801).  
Hope, Kootenai County; August (No. 1207).

- Eurhynchium strigosum** (Hoffm.) Bruch & Schimp. Bryol. Eur. t. 519 (1851-55);  
*Hypnum strigosum* Hoffm. Deutsch. Fl. ii, 76 (1804).  
Lewiston, Nez Perces County; April and May (No. 1150). Farmington Land-  
ing, Kootenai County; July (Nos. 1214, 1243, 1250).
- Eurhynchium strigosum barnesii** Ren. & Card. Bot. Gaz, xiv, 97 (1889).  
Hope, Kootenai County; August (Nos. 1172, 1222).
- Eurhynchium strigosum fallax** Ren. & Card. Bot. Gaz, xiv, 98 (1889).  
Lewiston, Nez Perces County; April and May (No. 1173). Farmington Land-  
ing, Kootenai County; July (No. 1246).
- Scleropodium obtusifolium** (Hook.) Ren. & Card. Musc. Amer. Sept. 53 (1893);  
*Hypnum obtusifolium* Hook.; Lesq. & James, Man. 400 (1884).  
Farmington Landing, Kootenai County; July (No. 1078). Hope, Kootenai  
County; August (No. 1261).
- Plagiothecium denticulatum microcarpum** Ren. & Card. Bot. Gaz, xiv, 98 (1889).  
These plants are not typical of this variety.  
Farmington Landing, Kootenai County; July (No. 1086). Hope, Kootenai  
County; August (Nos. 1106, 1123, 1158).
- Plagiothecium sandbergii** Ren. & Card. sp. nov.  
A *P. lato* aliisque formis minoribus *P. denticulati* differt foliis latioribus brevius  
acuminatis vel apiculatis, magis decurrentibus, reti laxiore cellulis multo lati-  
oribus efformato, costa longiore distinctiore. Monoicum! Capsula erecta.  
Hope, Kootenai County; August (No. 1174).
- Plagiothecium silesiacum** (Beauv.) Bruch & Schimp. Bryol. Eur. t. 500 (1851-55);  
*Hypnum silesiacum* Beauv. Prodr. 70 (1805).  
Farmington Landing, Kootenai County, July (No. 1096).
- Amblystegium hygrophilum** (Juratz.) Schimp. Syn. Musc. 715 (1876); *Hypnum*  
*hygrophilum* Juratz.<sup>1</sup> in Müll. Westph. Lanbm.  
Lewiston, Nez Perces County; April and May (Nos. 1134, 1225).
- Amblystegium juratzkanum** Schimp. Syn. Musc. Eur. 710 (1876).  
Lewiston, Nez Perces County; April and May (No. 1131).
- Amblystegium orthocladon** (Beauv.) Ren. & Card. Musc. Amer. Sept. 57 (1893);  
*Hypnum orthocladon* Beauv. Prodr. 72 (1805).  
Lewiston, Nez Perces County, April and May (No. 1266).
- Amblystegium serpens** (L.) Bruch & Schimp. Bryol. Eur. t. 564 (1851-55);  
*Hypnum serpens* L. Sp. Pl. ii, 1130 (1753).  
Lewiston, Nez Perces County, April and May (Nos. 1132, 1138, 1141, 1145, 1208,  
1226, 1228).
- Amblystegium varium** (Beauv.) Lindb. Musc. Scand. 29 (1879); *Hypnum varium*  
Beauv. Prodr. 72 (1805).  
Lewiston, Nez Perces County; April and May (No. 1064).
- Hypnum capillifolium** Warnst. Bot. Zeit. 1877, 478 (1877); *Hypnum fluitans capilli-*  
*folium* (Warnst.) Ren. & Card. Musc. Amer. Sept. 59 (1893); *Hypnum longinerve*  
Kindb. Can. Musc. 230 (1892); *Dichelyma longinerve* Kindb. Bull. Torr. Club, xvi,  
97 (1889).  
Farmington Landing, Kootenai County; July (No. 1098).
- Hypnum cordifolium** Hedw. Musc. Froud. iv, 97, t. 37 (1842).  
This plant was collected with *Lemna minor*, in water, and is a peculiar pin-  
nately branching form of the species.  
Granite Station, Kootenai County; July (No. 1199).

<sup>1</sup> Mr. Cardot states that unfortunately the date of publication of these exsiccata is not stated either by Schimper, Bonley, or Husnot.

**Hypnum hispidulum** Brid. Muse. Recent. Suppl. ii, 198 (1812).

Lewiston, Nez Perces County; April and May (No. 1209). Farmington Landing, Kootenai County, July (No. 1253).

**Hypnum ochraceum** Turn.; Wils. Bryol. Brit. 400 (1855).

Farmington Landing, Kootenai County; July (No. 1074). Hope, Kootenai County; August (Nos. 1220, 1265).

**Hypnum subimponens** Lesq. Trans. Amer. Phil. Soc. xiii, 14 (1863).

Farmington Landing, Kootenai County; July (Nos. 1070, 1084, 1259). Hope, Kootenai County; August (No. 1056).

**Hypnum symmetricum** Ren. & Card. Bot. Gaz. xiv, 99, t. 14 (1889).

Lewiston, Nez Perces County; April and May (Nos. 1055, 1233). Farmington Landing, Kootenai County; July (Nos. 1065, 1234, 1235, 1236, 1238, 1240, 1242, 1244, 1247, 1249).

**Hypnum uncinatum** Hedw. Sp. Musc. 289 (1801).

Farmington Landing, Kootenai County; July (Nos. 1069, 1079, 1258).

**Hylocomium loreum** (L.) Bruch & Schimp. Bryol. Eur. t. 490 (1851-55); *Hypnum loreum* L. Sp. Pl. ii, 1127 (1753).

Hope, Kootenai County; August (No. 1125).

**Hylocomium parietinum** (L.) Lindb. Muse. Scand. 37 (1879); *Hypnum parietinum* L. Sp. Pl. ii, 1125 (1753); *Hypnum schreberi* Willd.

Farmington Landing, Kootenai County; July (No. 1217). Hope, Kootenai County; August (No. 1088).

**Hylocomium proliferum** (L.) Lindb. Muse. Scand. 37 (1879); *Hypnum proliferum* L. Sp. Pl. ii, 1125 (1753); *Hypnum splendens* Hedw.

Farmington Landing, Kootenai County; July (No. 1218). Hope, Kootenai County; August (No. 1089).

**Hylocomium robustum** (Hook.) Kindb. Enum. Bry. Exot. 18 (1888); *Hypnum robustum* Hook. Musc. Exot. t. 108, with description.

**Hylocomium triquetrum** (L.) Bruch & Schimp. Bryol. Eur. t. 491 (1851-55); *Hypnum triquetrum* L. Sp. Pl. ii, 1124 (1753).

Lewiston, Nez Perces County; April and May (No. 1062). Farmington Landing, Kootenai County; July (No. 1090). Hope, Kootenai County; August (No. 1262).

#### HEPATICÆ.<sup>1</sup>

**Hygrobiella taxifolia.**

This is new to North America.

Hope, Kootenai County; August (No. 1268).

**Plagiochila asplenioides.**

Farmington Landing, Kootenai County; July (No. 1269).

**Blepharostoma trichophyllum.**

Hope, Kootenai County; August (No. 1270).

**Lophocolea bidentata.**

Hope, Kootenai County; August (No. 1271).

**Ptilidium californicum.**

Hope, Kootenai County; August (No. 1272).

#### FUNGI.<sup>2</sup>

**Æcidium euphorbiæ** (Schrank) Gmel. Linn. Syst. Nat. ii. 2, 1493 (1791); *Lycoperdon euphorbiæ* Schrank, Fl. Bav. ii, 631 (1789).

On *Euphorbia* sp. (No. 1184).

<sup>1</sup>A few fragments of Hepaticæ, found among the mosses, were determined by L. M. Underwood.

<sup>2</sup>The Fungi were determined by Mr. J. B. Ellis, Newfield, N. J., and arranged by Mr. Joseph F. James, of the Division of Vegetable Physiology and Pathology, Department of Agriculture.



- Æcidium hydrophylli** Peck, 26th Rep. New York State Mus. Nat. Hist. 78 (1874).  
On *Hydrophyllum capitatum* (No. 1183).
- Æcidium ranunculacearum** DC. Lam. & DC. Fl. Fran. vi, 97 (1815).  
On *Delphinium scopulorum* (No. 1181).
- Puccinia asperior** Ellis & Everh. Bull. Washburn Lab. Nat. Hist. 3 (1884).  
Æcidium form.  
On *Peucedanum* sp. (No. 1190).
- Puccinia mariæwilsoni** Clinton, 25th Rep. N. Y. State Mus. Nat. Hist. 115 (1873);  
*Ceoma* (*Æcidium*) *claytoniatum* Schw. Trans. Amer. Phil. Soc. n. ser. iv, 294 (1834).  
Æcidium form.  
On an unidentified host (No. 1185).
- Puccinia oreoselini** (Strauss) Körn. Hedwigia, 1877, 2; *Uredo oreoselini* Strauss, Ann. der Wetterauschen Gesellsch. ii, 97 (1811); *Puccinia jonesii* Peck, Bot. Gaz. vi, 226 (1881).  
On an umbelliferous plant (No. 1194).
- Erysipheæ** sp.  
Pycnidial and conidial stages.  
On *Hydrophyllum capitatum* (No. 1182).
- Albugo candidus** (Pers.) Kuntze, Rev. Gen. Pl. ii, 658 (1891); *Cystopus candidus* (Pers.) Lév. Ann. Sci. Nat. (Bot.) ser. 3, viii, 371 (1847); *Æcidium candidum* Pers.; Gmel. L. Syst. Nat. ed. 13, ii, pt. 2, 1473 (1791).  
On *Barbarea barbarea* (No. 1188). On *Sisymbrium* sp. (No. 1192).
- Melampsora farinosa** (Pers.) Schræt. Pilze Schles. 360 (188-); *Uredo farinosa salicis-capreae* Pers. Syn. Fung. 217 (1801).  
On *Salix* sp. (No. 1196).
- Melampsorella cerastii** (Pers.) Schræt. Krypt. Fl. Schles. 366 (188-); *Uredo pustulata cerastii* Pers. Syn. Fung. 219 (1801).  
Uredo form.  
On *Cerastium arvense* (No. 1187).
- Oidium erysiphoides** Fries, Syst. Mycol. iii, 432 (1829).  
On *Amsinckia lycopsioides* (No. 1186).
- Peronospora gilizæ** Ellis & Everh. sp. nov.  
Hypophyllous, the interwoven hyphæ forming a loose, ashy-gray coat on the surface of the leaf. Fertile hyphæ erect, stout, 300 to 400  $\mu$  high, 8 to 10  $\mu$  thick, 3 to 4 times dichotomously divided above, the branches sending out lateral, short, horn-like, slightly recurved branchlets 10 to 15  $\mu$  long, the tips of the last bifurcation often bifid. Conidia elliptical, smooth, and colorless or nearly so, 18 to 22  $\times$  12 to 15  $\mu$ . Oospores globose, yellow-brown, 30 to 45 (mostly 35)  $\mu$  in diameter, with a very thick epispore, coarsely subreticulate, tubercular roughened.  
On *Gilia* sp. (No. 1191).
- Peronospora parasitica** (Pers.) Fries, Summa Veg. Scand. sect. post. 493 (1849); *Botrytis parasitica* Pers. Obs. Mycol. i, 96 (1796).  
On *Erysimum asperum* (No. 1189).
- Phragmidium disciflorum** (Tode) James, nom. nov.; *Phragmidium subcorticium* (Schrank) Winter, Die Pilze, 228 (1884); *Lycoperdon subcorticium* Schrank in Hoppe, Bot. Taschenb. 68 (1793); *Ascophora disciflora* Tode, Fungi Meckl. i, 16 (1791).  
On *Rosa* sp. (No. 1195). This is the same as *Coleosporium miniatum* Bon. Coniomye. und Cryptomye. 17 (1860).
- Septoria sisymbrii** Ellis, Amer. Naturalist, xvi, 811 (1882).  
On *Sisymbrium* sp. (No. 1193).

## CATALOGUE OF SPECIMENS.

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <i>Allium cusickii</i> Wats.</li> <li>2. <i>Phlox gracilis</i> (Dougl.) Greene.</li> <li>3. <i>Amsinckia intermedia</i> Fisch. &amp; Mey.</li> <li>4. <i>Delphinium scopulorum stachydeum</i> Gray.</li> <li>5. <i>Athysanus pusillus</i> (Hook.) Greene.</li> <li>6. <i>Blepharipappus scaber</i> Hook.</li> <li>7. <i>Collinsia grandiflora</i> Dougl.</li> <li>8. <i>Thysanocarpus curvipes</i> Hook.</li> <li>9. <i>Astragalus inflexus</i> Dougl.</li> <li>10. <i>Cryptanthe leiocarpa</i> (Fisch. &amp; Mey.) Greene.</li> <li>11. <i>Thalesia uniflora</i> (L.) Britton.</li> <li>12. <i>Agoseris hirsuta</i> (Hook.) Greene.</li> <li>13. <i>Fritillaria pudica</i> (Pursh) Spreng.</li> <li>14. <i>Draba nemorosa</i> L.</li> <li>15. <i>Alsine nitens</i> (Nutt.) Rydberg.</li> <li>16. <i>Phacelia linearis</i> (Pursh) Holzinger.</li> <li>17. <i>Lappula texana</i> (Scheele) Britton.</li> <li>18. <i>Microseris linearifolia</i> (DC.) Gray.</li> <li>19. <i>Tellima parviflora</i> (Nutt.) Hook.</li> <li>20. <i>Amsinckia lycopsoides</i> Lehm.</li> <li>21. <i>Peucedanum circumdatum</i> Wats.</li> <li>22. <i>Peucedanum grayi</i> Coult. &amp; Rose.</li> <li>23. <i>Lupinus ornatus</i> Dougl.</li> <li>24. <i>Peucedanum salmoniflorum</i> Coult. &amp; Rose.</li> <li>25. <i>Phlox longifolia</i> Nutt.</li> <li>26. <i>Amelanchier alnifolia</i> Nutt.</li> <li>27. <i>Trillium petiolatum</i> Pursh.</li> <li>28. <i>Peucedanum triternatum robustius</i> Coult. &amp; Rose.</li> <li>29. <i>Hydrophyllum capitatum</i> Dougl.</li> <li>30. <i>Brodiaea douglasii</i> Wats.</li> <li>31. <i>Ribes niveum</i> Lindl.</li> <li>32. <i>Balsamorhiza sagittata</i> (Pursh) Nutt.</li> <li>33. <i>Betula occidentalis</i> Hook.</li> <li>34. <i>Bikukulla cucularia</i> (L.) Millspaugh.</li> <li>35. <i>Cryptanthe leiocarpa</i> (Fisch. &amp; Mey.) Greene.</li> <li>36. <i>Claytonia arenicola</i> Henderson.</li> <li>37. <i>Claytonia perfoliata</i> Donn.</li> <li>38. <i>Collinsia parviflora</i> Dougl.</li> <li>39. <i>Salix cordata</i> Muhl.</li> <li>40. <i>Lithospermum pilosum</i> Nutt.</li> <li>41. <i>Arabis hirsuta</i> (L.) Scop.</li> <li>42. <i>Taraxacum taraxacum</i> (L.) Karst.</li> <li>43. <i>Crataegus rivularis</i> Nutt.</li> <li>44. <i>Equisetum hyemale</i> L.</li> <li>45. <i>Lepidium dictyotum</i> Gray.</li> <li>46. <i>Collomia linearis</i> Nutt.</li> <li>47. <i>Potentilla glandulosa</i> Lindl.</li> <li>48. <i>Erigeron compositus pinnatisectus</i> Gray.</li> <li>49. <i>Cerastium arvense</i> L.</li> <li>50. <i>Rumex venosus</i> Pursh.</li> </ol> | <ol style="list-style-type: none"> <li>51. <i>Pinus contorta</i> London.</li> <li>52. <i>Peucedanum macrocarpum</i> Nutt.</li> <li>53. <i>Amelanchier alnifolia</i> Nutt.</li> <li>54. <i>Selaginella rupestris</i> Spring.</li> <li>55. <i>Valerianella congesta</i> Lindl.</li> <li>56. <i>Populus trichocarpa</i> Torr. &amp; Gr.</li> <li>57. <i>Ribes aureum</i> Pursh.</li> <li>58. <i>Erodium cicutarium</i> L'Her.</li> <li>59. <i>Sisymbrium incisum filipes</i> Gray.</li> <li>60. <i>Lepidium intermedium</i> Gray.</li> <li>61. <i>Polemonium micranthum</i> Benth.</li> <li>62. <i>Berberis aquifolium</i> Pursh.</li> <li>63. <i>Dodecatheon</i> sp.</li> <li>64. <i>Equisetum arvense</i> L.</li> <li>65. <i>Vicia americana</i> Muhl.</li> <li>66. <i>Mimulus nasutus</i> Greene.</li> <li>67. <i>Synthyris rubra</i> (Dougl.) DC.</li> <li>68. <i>Thermopsis montana</i> Nutt.</li> <li>69. <i>Salix lasiandra</i> Benth.</li> <li>70. <i>Salix cordata</i> Muhl.</li> <li>71. <i>Salix lasiolepis</i> Benth.</li> <li>72. <i>Camelina sativa</i> (L.) Crantz.</li> <li>73. <i>Saxifraga integrifolia</i> Hook.</li> <li>74. <i>Lathyrus venosus californicus</i> Wats.</li> <li>75. <i>Mertensia oblongifolia</i> (Nutt.) Don.</li> <li>76. <i>Castilleja parviflora</i> Bong.</li> <li>77. <i>Nothocakia cuspidata</i> (Pursh) Greene.</li> <li>78. <i>Alsine jamesii</i> (Torr.) Holzinger.</li> <li>79. <i>Arabis arcuata</i> (Nutt.) Gray.</li> <li>80. <i>Salix longifolia</i> Muhl.</li> <li>81. <i>Acer glabrum</i> Torr.</li> <li>82. <i>Peucedanum geyeri</i> Wats.</li> <li>83. <i>Galium aparine</i> L.</li> <li>84. <i>Phlox gracilis</i> (Dougl.) Greene.</li> <li>85. <i>Celtis occidentalis pumila</i> (Pursh) Gray.</li> <li>86. <i>Poa filifolia</i> Vasey.</li> <li>87. <i>Plagiobothrys tenellus</i> (Nutt.) Gray.</li> <li>88. <i>Arabis perfoliata</i> Lam.</li> <li>89. <i>Vagnera sessilifolia</i> (Nutt.) Greene.</li> <li>90. <i>Barbarea barbarea</i> (L.) MacMillan.</li> <li>91. <i>Arabis retrofracta</i> Graham.</li> <li>92. <i>Saxifraga heterantha</i> Hook.</li> <li>93. <i>Saxifraga reflexa</i> Hook.</li> <li>94. <i>Peucedanum salmoniflorum</i> Coult. &amp; Rose.</li> <li>95. <i>Ranunculus glaberrimus</i> Hook.</li> <li>96. <i>Salix cordata</i> Muhl.</li> <li>97. <i>Prunus demissa</i> (Nutt.) Walp.</li> <li>98. <i>Cerastium longipedunculatum</i> Muhl.</li> <li>99. <i>Lupinus burkei</i> Wats.</li> <li>100. <i>Sisyrinchium grandiflorum</i> Dougl.</li> <li>101. <i>Frasera albicaulis</i> Griseb.</li> </ol> |
|---|---|

102. Blank.  
 103. *Leptotenia multifida* Nutt.  
 104. *Carex festiva polystachya* Bailey.  
 105. *Viola howellii* Gray.  
 106. *Fragaria virginiana illinoensis* Gray.  
 107. *Geum ciliatum* Pursh.  
 108. *Osmorhiza occidentalis* (Nutt.) Torr.  
 109. *Senecio lugens exaltatus* (Nutt.) Gray.  
 110. *Platyspermum scapigerum* Hook.  
 111. *Cardamine hirsuta* L.  
 112. *Hydrophyllum virginianum* L.  
 113. *Viola obliqua* Hill.  
 114. *Zygadenus venenosus* Wats.  
 115. *Scutellaria angustifolia* Pursh.  
 116. *Equisetum robustum* Al. Braun.  
 117. *Salix cordata* Muhl.  
 118. *Salix rostrata* Richards.  
 119. *Woodsia oregana* Eaton.  
 120. *Lupinus lepidus* Dougl.  
 121. *Collomia grandiflora* Dougl.  
 122. *Thelypodium laciniatum* Endl.  
 123. *Bromus breviaristatus* (Hook.) Buckl.  
 124. *Festuca microstachys* Nutt.  
 125. *Pencedanum ambiguum* Nutt.  
 126. *Ranunculus nelsonii glabrinseculus* Holzinger.  
 127. *Geum japonicum* Thunb.  
 128. *Sambucus melanocarpa* Gray.  
 129. *Salix lasiandra* Benth.  
 130. *Ribes cereum* Dougl.  
 131. *Batrachium trichophyllum* (Chaix) Bossch.  
 132. *Canassia esculenta* (Ker) Lindl.  
 133. *Alnus serrulata* (Ait.) Willd.  
 134. *Poa annua rigidinsecula* Dewey.  
 135. *Astragalus arrectus* Gray.  
 136. *Ranunculus septentrionalis* Poir.  
 137. *Prunus emarginata mollis* Brewer.  
 138. *Poa filifolia* Vasey.  
 139. *Capnoides montanum* (Engelm.) Britton.  
 140. *Geranium incisum* Nutt.  
 141. *Draba caroliniana* Walt.  
 142. *Astragalus gibbsii* Kellogg.  
 143. *Cornus stolonifera* Mx.  
 144. *Mentzelia dispersa* Wats.  
 145. *Lepidium montanum alyssoides* (Gray) Jones.  
 146. *Hordeum nodosum* L.  
 147. *Achillea millefolium* L.  
 148. *Rumex acetosella* L.  
 149. *Matricaria matricarioides* (Less.) Porter.  
 150. *Peucedanum canbyi* Coult. & Rose.  
 151. *Pentstemon rattani minor* Gray.  
 152. *Rumex salicifolius* Weinn.  
 153. *Potentilla gracilis* Dougl.  
 154. *Alsine media* L.  
 155. *Lithospermum pilosum* Nutt.  
 156. *Rhamnus purshiana* DC.  
 157. *Valerianella oltoria* Poll.  
 158. *Potentilla rivalis millegrana* Engelm.  
 159. *Myosurus apetalus* Gay.  
 160. *Hutchinsia procumbens* (L.) Desv.  
 161. *Heuchera cylindrica* Dougl.  
 162. *Equisetum arvense* L.  
 163. *Cryptantho flaccida* (Lohm.) Greene.  
 164. *Poa sandbergii* Vasey.  
 165. *Equisetum robustum* A. Braun.  
 166. *Bromus breviaristatus* (Hook.) Buckley.  
 167. *Bromus hordeaceus* L.  
 168. *Osmorhiza nuda* Torr.  
 169. *Pentstemon glandulosus* Lindl.  
 170. Blank.  
 171. *Clarkia pulchella* Pursh.  
 172. *Pentstemon rattani minor* Gray.  
 173. *Rosa californica* Cham. & Schlecht.  
 174. *Phacelia circinata stricta* Gray.  
 175. *Potentilla glandulosa* Lindl.  
 176. *Parietaria pennsylvanica* Muhl.  
 177. *Allium geyeri* Wats.  
 178. *Agropyron divergens* Nees.  
 179. *Agropyron tenerum* Vasey.  
 180. *Eriophyllum caespitosum* Lindl.  
 181. *Antennaria carpathica pulcherrima* Hook.  
 182. *Acer glabrum* Torr.  
 183. *Poa tenuifolia* Nutt.  
 184. *Myosotis verna* Nutt.  
 185. *Oenothera caespitosa* Nutt.  
 186. *Silene menziesii* Hook.  
 187. *Poa tenuifolia* Nutt.  
 188. *Gilia aggregata* (Pursh) Spreng.  
 189. *Lupinus leucophyllus* Dougl.  
 190. *Silene antirrhina* L.  
 191. *Sedum spathulifolium* Hook.  
 192. *Monolepis nuttalliana* (R. & S.) Greene.  
 193. *Lagophylla ramosissima* Nutt.  
 194. *Anemone tritolia* L.  
 195. *Vaccinium membranaceum* Dougl.  
 196. *Calochortus elegans* Pursh.  
 197. *Arnica cordifolia* Hook.  
 198. *Disporum majus* (Hook.) Britton.  
 199. *Thalictrum occidentale* Gray.  
 200. *Synthyris reniformis* (Dougl.) DC.  
 201. *Arenaria macrophylla* Hook.  
 202. *Erythronium grandiflorum* Pursh.  
 203. *Prunus subcordata* Benth.  
 204. *Arctostaphylos uva-ursi* (L.) Spreng.  
 205. *Abies grandis* Lindl.  
 206. *Larix occidentalis* Nutt.  
 207. *Viola canina* L.  
 208. *Claytonia sibirica* L.  
 209. *Trillium ovatum* Pursh.  
 210. *Ribes oxycanthoides* L.  
 211. *Calypso bulbosa* (L.) Oakes.  
 212. *Viola glabella* Nutt.  
 213. *Viola canadensis* L.  
 214. *Viola orbiculata* Geyer.  
 215. *Salix cordata* Muhl.  
 216. *Trifolium longipes latifolium* Hook.  
 217. *Coptis occidentalis* (Nutt.) Torr. & Gr.  
 218. *Ribes viscosissimum* Pursh.  
 219. *Fragaria virginiana illinoensis* Gray.  
 220. *Fritillaria pudica* (Pursh) Spreng.  
 221. *Lonicera utahensis* Wats.  
 222. *Viola nuttallii* Pursh.  
 223. *Fragaria virginiana illinoensis* Gray.  
 224. *Carex geyeri* Boott.  
 225. *Microseris nutans* (Hook.) Gray.  
 226. *Lupinus laxiflorus* Dougl.  
 227. *Leptotenia dissecta* Nutt.  
 228. *Vagnera amplexicaulis* (Nutt.) Greene.  
 229. *Antennaria plantaginifolia* (L.) Richards.  
 230. *Juncoides campestre* (L.) Kuntze.  
 231. *Ribes lacustre* Poir.  
 232. *Mitella trifida* Graham.  
 233. *Atragene americana* Sims.  
 234. *Carex deflexa rossii* (Boott) Bailey.

235. *Actæa spicata rubra* Ait.  
 236. *Veronica serpyllifolia* L.  
 237. *Salix flavescens scouleriana* (Barratt) Bebb.  
 238. *Vaccinium caespitosum* Mx.  
 239. *Frasera speciosa* Dougl.  
 240. *Valeriana edulis* Nutt.  
 241. *Eunanus nanus* (Hook. & Arn.) Holzinger.  
 242. *Phlox speciosa* Pursh.  
 243. *Ribes niveum* Lindl.  
 244. *Arnica alpina* Olin.  
 245. *Pentstemon confertus* Dougl.  
 246. *Claytonia sibirica* L.  
 247. *Wyethia amplexicaulis* Nutt.  
 248. *Balsamorhiza hookeri* Nutt.  
 249. *Crataegus tomentosa* L.  
 250. *Scrophularia marilandica* L.  
 251. *Sonchus oleraceus* L.  
 252. *Heracleum lanatum* Mx.  
 253. *Philadelphus lewisii* Pursh.  
 254. *Veronica americana* Schwein.  
 255. *Veronica peregrina* L.  
 256. *Euphorbia dietyosperma* Fisch. & Mey.  
 257. *Potentilla gracilis* Dougl.  
 258. *Allium acuminatum* Hook.  
 259. *Rubus strigosus* Mx.  
 260. *Poa tenuifolia* Nutt.  
 261. *Juncus nevadensis* Wats.  
 262. *Elymus condensatus* Presl.  
 263. *Vleekia urticifolia* (Benth.) Holzinger.  
 264. *Verbena bracteosa* Mx.  
 265. Blank.  
 266. *Poa nevadensis* Vasey.  
 267. *Plantago purshii* Rom. & Schult.  
 268. *Crepis occidentalis* Nutt.  
 269. *Erigeron compositum* Dougl.  
 270. *Symphoricarpos occidentalis* Hook.  
 271. *Polygonum douglassii* Greene.  
 272. *Carduus undulatus megacephalus* Gray.  
 273. *Gaillardia aristata* Pursh.  
 274. *Opulaster opulifolius* (L.) Kuntze.  
 275. *Epilobium adenocaulon* Haussk.  
 276. *Madia sativa* Mohra.  
 277. *Acer glabrum* Torr.  
 278. *Rigiopappus leptocladus* Gray.  
 279. *Geranium carolinianum longipes* Wats.  
 280. *Chrysopsis villosa hispida* (Hook.) Gray.  
 281. *Opuntia missouriensis* DC.  
 282. *Clematis ligusticifolia* Nutt.  
 283. *Sambucus glauca* Nutt.  
 284. *Pentstemon triphyllus* Dougl.  
 285. *Legouzia perfoliata* (L.) Britton.  
 286. *Lonicera utahensis* Wats.  
 287. *Polygonum convolvulus* L.  
 288. *Habenaria dilatata* (Pursh) Hook.  
 289. *Circea pacifica* Ascherson & Magnus.  
 290. *Panicularia remota* (Fors.) Kuntze.  
 291. *Festuca myurus* L.  
 292. *Cyperus houghtonii* Torr.  
 293. *Stipa comata* Trin. & Rupr.  
 294. *Erigeron concinnus* (Hook. & Arn.) Gray.  
 295. *Carex straminea festuacea* (Willd.) Hook. & Arn.  
 296. *Panicum scoparium* Lam.  
 297. *Agropyron divergens* Nees.  
 298. *Roripa nasturtium* (L.) Rusby.  
 299. *Spiraea betulifolia* Pallas.  
 300. *Rubus nutkanus* Moçino.  
 301. *Psoralea lanceolata* Pursh.  
 302. *Sphæralcea munroana* (Dougl.) Spach.  
 303. *Crepis acuminata* Nutt.  
 304. *Collomia grandiflora* Dougl.  
 305. *Poa nevadensis* Vasey.  
 306. *Eriogonum heracleoides* Nutt.  
 307. *Pentstemon venustus* Dougl.  
 308. *Thalesia fasciculata* (Nutt.) Britton.  
 309. *Sanguisorba annua* (Nutt.) Holzinger.  
 310. *Trifolium microcephalum* Pursh.  
 311. *Linum digynum* Gray.  
 312. *Juncus bufonius* L.  
 313. *Antennaria luzuloides* Torr. & Gr.  
 314. *Vicia americana truncata* Nutt.  
 315. *Iris missouriensis* Nutt.  
 316. *Potentilla glandulosa* Lindl.  
 317. *Sisyrinchium bermudiana* L.  
 318. *Orthocarpus luteus* Nutt.  
 319. *Zygadenus venenosus* Wats.  
 320. *Clematis douglasii* Hook.  
 321. *Helianthus douglasii* Torr. & Gr.  
 322. *Galium boreale* L.  
 323. *Deschampsia calycina* Presl.  
 324. *Agoseris elata* (Nutt.) Greene.  
 325. *Arnica alpina* Olin.  
 326. *Crepis acuminata* Nutt.  
 327. *Woodsia oregana* Eaton.  
 328. *Caucalis microcarpa* Hook. & Arn.  
 329. *Gnaphalium palustre* Nutt.  
 330. *Juncus xiphioides triandrus* Engelm.  
 331. *Bromus breviaristatus* (Hook.) Buckley.  
 332. *Ranunculus septentrionalis* Poir.  
 333. *Koeleria cristata* (L.) Pers.  
 334. *Trifolium altissimum* Dougl.  
 335. *Symphoricarpos occidentalis* Hook.  
 336. *Mimulus moschatus* Dougl.  
 337. *Campanula rotundifolia* L.  
 338. *Erigeron macranthus* Nutt.  
 339. *Antennaria plantaginifolia* (L.) Richards.  
 340. *Roripa curvisiliqua* (Hook.) Bessey.  
 341. *Pentstemon confertus procerus* (Dougl.) Coville.  
 342. *Silene multicaulis* Nutt.  
 343. *Senecio vulgaris* L.  
 344. *Calochortus elegans* Pursh.  
 345. *Gemm strictum* Ait.  
 346. *Trifolium cyathiferum* Lindl.  
 347. *Mimulus rubellus* Gray.  
 348. Blank.  
 349. *Alsine borealis* (Bigel.) Britton.  
 350. *Veronica serpyllifolia* L.  
 351. *Cryptanthe leiocarpa* (Fisch. & Mey.) Greene.  
 352. *Rhamnus californica* Esch.  
 353. *Elymus glaucus* Buckl.  
 354. *Poa nevadensis* Vasey.  
 355. *Allium serratum* Wats.  
 356. *Panicularia pauciflora* (Presl.) Kuntze.  
 357. *Carex festiva* Dew.  
 358. *Panicularia nervata* (Willd.) Kuntze.  
 359. *Carex stipata* Muhl.  
 360. *Panicularia nervata* (Willd.) Kuntze.  
 361. *Alsine longipes* (Goldie) Coville.  
 362. *Lathyrus palustris nanus* Holzinger.  
 363. *Senecio lugens* Richards.  
 364. *Rumex occidentalis* Wats.  
 365. *Cryptanthe pterocarya* (Torr.) Greene.

366. *Prunella vulgaris* L.  
 367. *Carex straminea festucacea* (Willd.) Tuckerm.  
 368. *Gratiola virginiana* L.  
 369. *Trisetum ceruum* Trin.  
 370. *Hordeum pusillum* Nutt.  
 371. *Microseris nutans* (Hook.) Gray.  
 372. *Apocynum androsaemifolium pumilum* Gray.  
 373. Blank.  
 374. *Deschampsia elongata* (Hook.) Munro.  
 375. *Poa nevadensis* Vasey.  
 376. *Urtica gracilis* Ait.  
 377. *Cratægus rivularis* Nutt.  
 378. *Aconitum fischeri* Reich.  
 379. *Juncus tennis* Willd.  
 380. *Mitella trifida* Graham.  
 381. *Rosa blanda* Ait.  
 382. *Agropyron divergens* Nees.  
 383. *Lathyrus palustris* L.  
 384. *Cypripedium montanum* Dougl.  
 385. *Rosa gymnocarpa* Nutt.  
 386. *Ribes oxycanthoides* L.  
 387. *Melica subulata* (Griseb.) Scribner.  
 388. *Festuca ovina polyphylla* Vasey, ined.  
 389. *Antennaria dioica* (L.) Gært.  
 390. *Lonicera ciliosa* (Pursh) Poir.  
 391. *Sida malvaeflora* DC.  
 392. *Panicularia nervata* (Willd.) Kuntze.  
 393. *Angelica lyallii* Wats.  
 394. *Festuca jonesii* Vasey.  
 395. *Carduus drummondii* (Torr. & Gr.) Coville.  
 396. *Alopecurus californicus* Vasey.  
 397. *Epilobium halleanum* Haussk.  
 398. *Claytonia chamissoi* Ledeb.  
 399. *Arenaria lateriflora* L.  
 400. *Polygonum bistortoides* Pursh.  
 401. *Ranunculus reptans intermedius* (Hook.)  
     Torr. & Gr.  
 402. *Lotus pinnatus* Hook.  
 403. Blank.  
 404. Blank.  
 405. *Juncus nevadensis* Wats.  
 406. *Penstemon confertus* Dougl.  
 407. *Marsilia vestita* Hook.  
 408. *Tissa rubra* (L.) Britton.  
 409. *Epilobium ursinum* Parish.  
 410. *Alsine longifolia* (Muhl.) Britton.  
 411. *Polygonum imbricatum* Wats.  
 412. *Lathyrus sandbergii* Holzinger.  
 413. *Vicia americana* Muhl.  
 414. *Ceanothus sanguineus* Pursh.  
 415. *Alopecurus californicus* Vasey.  
 416. *Galium trifidum* L.  
 417. *Carex exsiccata* Bailey.  
 418. *Ranunculus alismæfolius* Geyer.  
 419. *Deschampsia caespitosa* (L.) Beauv.  
 420. *Mertensia paniculata* (Ait.) Don.  
 421. *Sorbus saubucifolia* (Cham. & Schlecht.)  
     Rœm.  
 422. *Antennaria racemosa* Hook.  
 423. *Epilobium minutum* Lindl.  
 424. *Gentiana acuta* Mx.  
 425. *Clintonia uniflora* (Menz.) Kunth.  
 426. *Castilleja miniata* Dougl.  
 427. *Alnus incana virescens* Wats.  
 428. *Pachystima myrsinites* (Pursh) Raf.  
 429. *Microseris nutans* (Hook.) Gray.  
 430. *Gratiola ebracteata* Benth.  
 431. *Veronica scutellata* L.  
 432. *Saxifraga integrifolia* Hook.  
 433. *Deschampsia caespitosa* (L.) Beauv.  
 434. *Bromus breviaristatus* (Hook.) Buckley.  
 435. *Graphenhorum wolffii* Vasey.  
 436. *Juncus balticus* Willd.  
 437. *Poa pratensis* L.  
 438. *Trisetum canescens* Buckley.  
 439. *Deschampsia elongata* (Hook.) Munro.  
 440. *Trisetum canescens* Buckley.  
 441. *Linnaea borealis* L.  
 442. *Trautvetteria carolinensis* (Walt.) Vail.  
 443. *Adenocaulon bicolor* Hook.  
 444. *Mimulus moschatus* Dougl.  
 445. *Micromeria douglasii* Benth.  
 472. Blank.  
 447. *Madia filipes* Gray.  
 448. *Carex athrostachya* Olney.  
 449. *Carex filiformis latifolia* Beckl.  
 450. *Castilleja acuminata* (Pursh) Spreng.  
 451. *Festuca ovina* L.  
 452. *Carex pratensis* Drejer.  
 453. *Danthonia californica unispicata* Thurb.  
 454. *Tiarella unifoliata* Hook.  
 455. *Orthocarpus tenuifolius* Benth.  
 456. *Asarum caudatum* Lindl.  
 457. *Juncus nevadensis* Wats.  
 458. *Listera convallarioides* (Sw.) Torr.  
 459. *Dryopteris munita* (Kaulf.) Kuntze  
 460. *Corallorhiza striata* Lindl.  
 461. *Ranunculus nelsoni* Gray.  
 462. *Moneses uniflora* (L.) Gray.  
 463. *Cornus canadensis* L.  
 464. *Alnus incana virescens* Wats.  
 465. Blank.  
 466. *Penstemon menziesii* Hook.  
 467. *Pollia densa* Hook.  
 468. *Antennaria margaritacea* (L.) Hook.  
 469. *Menziesia glabella* Gray.  
 470. *Streptopus amplexifolius* (L.) DC.  
 471. *Habenaria gracilis* (Lindl.) Wats.  
 472. Blank.  
 473. *Ceanothus velutinus* Dougl.  
 474. *Polygonum douglasii* Greene.  
 475. *Astragalus mortoni* Nutt.  
 476. *Danthonia californica* Boland.  
 477. *Epilobium paniculatum* Nutt.  
 478. *Arenaria congesta* Nutt.  
 479. Blank.  
 480. *Plantago lanceolata* L.  
 481. *Agropyron divergens* Nees.  
 482. *Bromus briziformis* Fisch. & Mey.  
 483. *Hordeum jubatum* L.  
 484. *Eleocharis acicularis* (L.) Rœm & Schult.  
 485. *Corallorhiza corallorhiza* (L.) Karst.  
 486. *Pedicularis racemosa* Dougl.  
 487. *Alsine longipes* (Goldie) Coville.  
 488. *Agoseris laciniata* (Nutt.) Greene.  
 489. *Carduus remotifolius* Hook.  
 490. *Gilia liniflora pharnaceoides* (Benth.) Gray.  
 491. *Marrubium vulgare* L.  
 492. *Gilia aggregata* (Pursh) Spreng.  
 493. *Hordeum nodosum* L.  
 494. *Onobrychis sativa* Lam.  
 495. *Centaurea cyanus* L.

496. Blank.  
 497. *Gaillardia pulchella* Foug.  
 498. Blank.  
 499. *Comandra pallida* DC.  
 500. *Cheilanthes gracilima* Eaton.  
 501. *Ceanothus velutinus laevigatus* Torr. & Gr.  
 502. *Carex nebraskensis prævia* Bailey.  
 503. *Poa tenuifolia* Nutt.  
 504. *Festuca oregona* Vasey.  
 505. *Poa nevadensis* Vasey.  
 506. Blank.  
 507. *Berberis nervosa* Pursh.  
 508. *Fragaria* sp.  
 509. *Hieracium albiflorum* Hook.  
 510. *Brodiaea lactea* (Lindl.) Wats.  
 511. *Trichostema oblongum* Benth.  
 512. *Hypericum formosum scouleri* (Hook.) Coult.  
 513. *Betula occidentalis* Hook.  
 514. *Cerastium longipedunculatum* Muhl.  
 515. *Poa pratensis* L.  
 516. *Pterospora andromedea* Nutt.  
 517. *Fritillaria lanceolata* Pursh.  
 518. *Carex deweyana sparsiflora* (Olney) Bailey.  
 519. *Chimaphila umbellata* (L.) Nutt.  
 520. *Pyrola secunda* L.  
 521. *Pyrola chlorantha* Swartz.  
 522. *Pyrola rotundifolia bracteata* (Hook.) Gray.  
 523. *Bromus ciliatus* L.  
 524. *Senecio triangularis* Hook.  
 525. *Galium triflorum* Mx.  
 526. *Clarkia rhomboidea* Dougl.  
 527. *Alsine crispa* (Cham. & Schlect.) Holzinger.  
 528. *Carex teretiuscula ampla* Bailey.  
 529. *Gilia capitata* Dougl.  
 530. *Festuca scabrella major* Vasey.  
 531. *Bromus secalinus* L.  
 532. *Calochortus elegans* Pursh.  
 533. *Linum lewisii* Pursh.  
 534. *Poa compressa* L.  
 535. *Ligusticum scopulorum* Gray.  
 536. *Bolelia elegans* (Dougl.) Greene.  
 537. *Spiraea douglasii menziesii* (Hook.) Presl.  
 538. *Spiraea douglasii menziesii* (Hook.) Presl.  
 539. *Spiraea betulifolia* Pall.  
 540. *Panicularia nervata* (Willd.) Kuntze.  
 541. *Trisetum cernuum* Trin.  
 542. *Festuca jonesii* Vasey.  
 543. *Poa flava* L.  
 544. *Festuca rubra longearistata* Hack. ined.  
 545. *Poa nemoralis* L.  
 546. *Poa pratensis* L.  
 547. *Agrostis scabra* Willd.  
 549. *Madia filipes* Gray.  
 550. *Aster conspicuus* Lindl.  
 551. *Lotus douglasii* Greene.  
 552. *Corallorhiza multiflora* Nutt.  
 553. *Mitella caulescens* Nutt.  
 554. *Juncoides parviflorum* (Ehrh.) Coville.  
 555. Blank.  
 556. *Agropyron violaceum major* Vasey.  
 557. *Erigeron ramosus* (Walt.) B. S. P.  
 558. *Erysimum asperum* DC.  
 559. *Agropyron divergens* Nees.  
 560. *Hieracium scouleri* Hook.  
 561. *Calamagrostis canadensis* (Mx.) Beauv.  
 562. *Spharaleca acerifolia* Nutt.  
 563. *Phalaris arundinacea* L.  
 564. *Calamagrostis suksdorfii* Scribner.  
 565. *Angelica lyallii* Wats.  
 566. *Rhamnus alnifolia* L. Her.  
 567. *Carex retrorsa* Schwein.  
 568. *Carex festiva* Dew.  
 569. *Artemisia gnaphalodes* Nutt.  
 570. *Rubus ursinus* Cham. & Schlect.  
 571. *Elymus glaucus* Buckl.  
 572. *Rosa sandbergii* Holzinger.  
 573. *Hieracium canadense* Mx.  
 574. *Hieracium scouleri* Hook.  
 575. *Opulaster capitatus* (Pursh) Kuntze.  
 576. *Rhamnus purshiana* DC.  
 577. *Lupinus polyphyllus* Lindl.  
 578. *Calamagrostis canadensis* (Mx.) Beauv.  
 579. *Deschampsia caespitosa* (L.) Beauv.  
 580. *Steironema ciliatum* (L.) Raf.  
 581. *Rosa blanda* Ait.  
 582. *Bromus ciliatus* L.  
 583. *Spiraea ariefolia* Smith.  
 584. *Habenaria elegans* (Lindl.) Boland.  
 585. *Gilia heterophylla* Dougl.  
 586. *Eunanus* sp.  
 587. *Valeriana sylvatica* Banks.  
 588. *Xerophyllum tenax* (Pursh) Nutt.  
 589. *Arenaria capillaris* Poir.  
 590. *Lonicera utahensis* Wats.  
 591. *Polemonium caeruleum* L.  
 592. *Pedicularis contorta* Benth.  
 593. *Juncus parryi* Engelm.  
 594. *Cryptogramme acrostichoides* R. Br.  
 595. *Thlaspi alpestre* L.  
 596. *Pencedanum bicolor* Wats.  
 597. *Lonicera involucrata* Banks.  
 598. *Scutellaria galericulata* L.  
 599. *Bromus ciliatus* L.  
 600. *Galium trifidum* L.  
 601. *Arabis spathulata* Nutt.  
 602. *Dodecatheon dentatum* Hook.  
 603. Blank.  
 604. *Calochortus elegans* Pursh.  
 605. *Phegopteris dryopteris robertiana* (Hoffm.)  
     Davenp.  
 606. *Carex geeyeri* Boott.  
 607. *Viola howellii* Gray.  
 608. *Alsine jamesii* (Torr.) Holzinger.  
 609. *Senecio lugens* Richards.  
 610. *Carex preslii* Steud.  
 611. *Lathyrus nevadensis* Wats.  
 612. *Trientalis europæa latifolia* (Hook.) Torr.  
 613. *Juncoides glabratum* (Hoppe) Sheldon.  
 614. *Solidago missouriensis* Nutt.  
 615. *Lotus americanus* (Nutt.) Bisch.  
 616. *Panicum pubescens* Lam.  
 617. *Coreopsis atkinsoniana* Dougl.  
 618. Blank.  
 619. *Rosa gymnocarpa* Nutt.  
 620. *Woodsia scopulina* Eaton.  
 621. *Nymphaea advena* Soland.  
 622. Blank.  
 623. *Orobanche pinetorum* Geyer.  
 624. *Navarretia intertexta* Hook.  
 625. *Aster foliaceus* Lindl.  
 626. *Abies grandis* Lindl.  
 627. *Pinus contorta* Loudon.

628. *Erigeron corymbosus* Nutt.  
 629. *Tsuga mertensiana* (Bong.) Carriere.  
 630. *Calamagrostis cusickii* Vasey.  
 631. *Pyrola elliptica* Nutt.  
 632. *Poa flava* L.  
 633. *Agoseris grandiflora* (Nutt.) Greene.  
 634. *Carex aperta* Hook.  
 635. *Gnaphalium decurrens* Ives.  
 636. *Panicularia pauciflora* (Presl) Kuntze.  
 637. *Calamagrostis canadensis dubia* (Scribner) Vasey.  
 638. *Carex stipata* Muhl.  
 639. *Stachys palustris* L.  
 640. *Madia sativa* Molina.  
 641. *Scutellaria lateriflora* L.  
 642. *Verbascum blattaria* L.  
 643. *Panicum pubescens* Lam.  
 644. *Poa flava* L.  
 645. *Batrachium aquatile* (L.) Wimm.  
 646. *Agrostis exarata* Trin.  
 647. *Gnaphalium palustre* Nutt.  
 648. *Carex scoparia* Schk.  
 649. *Eleocharis ovata* (Roth.) Roem. & Schult.  
 650. *Pentstemon densus* Dougl.  
 651. *Mentzelia leviceaulis* (Dougl.) Torr. & Gr.  
 652. *Gayophytum ramosissimum* Torr. & Gr.  
 653. *Chaenactis douglasii* (Hook.) Hook. & Arn.  
 654. *Lagophylla ramosissima* Nutt.  
 655. *Phacelia magellanica* (Lam.) Coville.  
 656. *Epilobium paniculatum* Nutt.  
 657. *Berberis aquifolium* Pursh.  
 658. *Ptiloria tenuifolia* (Torr.) Raf.  
 659. *Peucedanum ambiguum* Nutt.  
 660. *Calochortus macrocarpus* Dougl.  
 661. *Dryopteris filix-mas* (L.) Schott.  
 662. *Polygonum alpinum* All.  
 663. *Pyrola aphylla* Smith.  
 664. *Chrysopsis villosa hispida* (Hook.) Gray.  
 665. *Erigeron concinnus* (Hook. & Arn.) Gray.  
 666. *Ranunculus septentrionalis* Poir.  
 667. *Vicia americana truncata* Nutt.  
 668. *Senecio canus* Hook.  
 669. *Silene scouleri* Hook.  
 670. *Panicularia fluitans* (L.) Kuntze.  
 671. *Solidago elongata* Nutt.  
 672. *Aster stenomerus* Gray.  
 673. *Pentstemon menziesii* Hook.  
 674. *Pyrola picta* Smith.  
 675. Blank.  
 676. *Cephalanthera oregana* Reichenb.  
 677. *Eriogonum umbellatum* Torr.  
 678. *Pyrola picta* Smith.  
 679. *Peramium menziesii* (Lindl.) Morong.  
 680. *Vaccinium ovalifolium* Smith.  
 681. *Erigeron speciosus* DC.  
 682. *Calamagrostis suksdorfii* Scribner.  
 683. *Festuca oregona* Vasey.  
 684. *Juncus nevadensis* Wats.  
 685. *Eleocharis palustris* (L.) Roem. & Schult.  
 686. *Cicuta virosa maculata* (L.) Coult. & Rose.  
 687. *Scirpus lacustris occidentalis* Wats.  
 688. *Potentilla palustris* (L.) Scop.  
 689. *Polygonum amphibium* L.  
 690. *Ranunculus reptans* L.  
 691. *Spartina cynosuroides* (L.) Willd.  
 692. *Juncus filiformis* L.  
 693. *Carex interrupta impressa* Bailey.  
 694. *Calamagrostis canadensis* (Mx.) Beauv.  
 695. *Chenopodium album* L.  
 696. *Madia glomerata* Hook.  
 697. *Potamogeton pulcher* Tuckerm.  
 698. *Mentha canadensis* L.  
 699. *Howellia aquatilis* Gray.  
 700. *Sparganium simplex angustifolium* (Mx.) Engelm.  
 701. *Nymphaea polysepala* (Engelm.) Greene  
 702. *Panicularia fluitans* (L.) Kuntze.  
 703. *Festuca oregona* Vasey.  
 704. *Agropyron repens glaucum* (Desf.) Scribner.  
 705. *Erigeron acris* L.  
 706. *Lactuca spicata* (Lam.) Hitchcock.  
 707. Blank.  
 708. *Tsuga mertensiana* (Bong.) Carriere.  
 709. *Sambucus lacustre* Poir.  
 710. *Ribes lacustre* Poir.  
 711. *Polygonum amphibium* L.  
 712. *Heterocodon rariflorum* Nutt.  
 713. *Panicum capillare minus* Muhl.  
 714. *Agropyron tenerum* Vasey.  
 715. *Sparganium simplex* Hudson.  
 716. *Carex athrostachya* Olney.  
 717. *Onagra biennis* (L.) Scop.  
 718. *Poa remota* Fors.  
 719. *Cyperus aristatus* Rottb.  
 720. *Rumex occidentalis* Wats.  
 721. *Carex filiformis latifolia* Boeckl.  
 722. *Lysichiton kamtschatcensis* (L.) Schott.  
 723. *Asplenium filix-femina cyclosorum* Rupr.  
 724. *Cinna pendula glomerula* Scribner.  
 725. *Gentiana oregana* Engelm.  
 726. *Helianthus annuus* L.  
 727. *Lycopus virginicus* L.  
 728. *Solidago serotina* Ait.  
 729. *Ranunculus lacustris terrestris* (Gray) Mac-Millan.  
 730. *Solidago serotina* Ait.  
 731. *Erigeron canadensis* L.  
 732. *Ranunculus pennsylvanicus* L. f.  
 733. *Sium cicutifolium* Gmelin.  
 734. *Mentha canadensis* L.  
 735. *Lysimachia thyrsiflora* L.  
 736. *Polygonum lapathifolium* L.  
 737. *Epilobium franciscanum* Barbey.  
 738. *Impatiens aurea* Muhl.  
 739. *Typha latifolia* L.  
 740. *Alsine longifolia* (Muhl.) Britton.  
 741. *Veratrum californicum* Durand.  
 742. *Cleome serrulata* Pursh.  
 743. *Lilium parviflorum* (Hook.) Holzinger.  
 744. *Razoumofskya douglasii* (Engelm.) Kuntze.  
 745. *Allium attenuifolium* Kellogg.  
 746. *Epilobium hornemanni* Reichenb.  
 747. *Eriogonum ovalifolium* Nutt.  
 748. *Hedysarum flavescens* Coult. & Fish.  
 749. *Coleosanthus grandiflorus* (Hook.) Kuntze.  
 750. *Adiantum pedatum* L.  
 751. *Carex capillaris* L.  
 752. *Chrysopsis villosa hispida* (Hook.) Gray.  
 753. *Arnica latifolia* Bong.  
 754. *Artemisia gnaphalodes* Nutt.  
 755. *Saxifraga bronchialis* L.  
 756. *Stenanthium occidentale* Gray.

757. *Pentstemon lyallii* Gray.  
 758. *Woodsia scopulina* Eaton.  
 759. *Aster sibiricus* L.  
 760. *Botrychium virginianum* (L.) Sw.  
 761. *Carex amplexifolia* Boott.  
 762. *Botrychium marilandica* L.  
 763. *Sanicula marilandica* L.  
 764. *Aster modestus* Lindl.  
 765. *Capnoides montanum* (Engelm.) Britton.  
 766. *Erysimum cheiranthoides* L.  
 767. *Habenaria orbiculata* (Pursh) Torr.  
 768. *Rudbeckia occidentalis* Nutt.  
 769. *Calamagrostis suksdortii* Scribner.  
 770. *Lycopodium complanatum* L.  
 771. *Lycopodium annotinum* L.  
 772. *Aralia nudicaulis* L.  
 773. *Carduus foliosus* Hook.  
 774. *Carex retrorsa* Schwein.  
 775. *Chenopodium botrys* L.  
 776. *Juncus nodosus* L.  
 777. *Dulichium arundinaceum* (L.) Britton.  
 778. *Rumex maritimus* L.  
 779. *Solanum nigrum* L.  
 780. *Utricularia vulgaris* L.  
 781. *Scirpus subterminalis* Torr.  
 782. *Brasenia purpurea* (Mx.) Casp.  
 783. *Gnaphalium sprengelii* Hook. & Arn.  
 784. *Grindelia nana* Nutt.  
 785. *Pyrocoma carthamoides* Hook.  
 786. *Dracocephalum parviflorum* Nutt.  
 787. *Razoumofskya* sp.  
 788. *Carex utriculata minor* Boott.  
 789. *Cicuta bulbifera* L.  
 790. *Triglochin palustris* L.  
 791. *Polemonium humile pulchellum* (Bunge) Gray.  
 792. *Hypericum formosum scouleri* (Hook.) Coult.  
 793. *Viola palustris* L.  
 794. *Rubus arcticus* L.  
 795. *Dryopteris cristata* (L.) Gray.  
 796. *Betula pumila* L.  
 797. *Gyrostachys romanzolliana* (Cham.) Mac-Millan.  
 798. *Carex tenella* Schk.  
 799. *Dryopteris spinulosa dilatata* (Hoffm.) Underwood.  
 800. *Carex leptalea* Wahl.  
 801. *Lemna minor* L.  
 802. *Epilobium lineare* Muhl.  
 803. *Senecio aureus* L.  
 804. *Aster adscendens* Lindl.  
 805. *Tussilago sagittata* Banks.  
 806. *Equisetum hyemale* L.  
 807. *Polygonum hartwrightii* Gray.  
 808. *Melampyrum americanum* Mx.  
 809. *Carex limosa* L.  
 810. *Drosera rotundifolia* L.  
 811. *Carex pseudo-cyperus americana* Hochst.  
 812. *Castalia leibergii* Morong.  
 813. *Sambucus glauca* Nutt.  
 814. *Carex canescens brunescens* (Pers.) Poir.  
 815. *Asclepias speciosa* Torr.  
 816. *Astragalus microcystis* Gray.  
 817. *Monarda fistulosa mollis* (L.) Benth.  
 818. *Chamaerion angustifolium* (L.) Scop.  
 819. *Trisetum subspicatum* (L.) Beauv.  
 820. *Carex deflexa meadia* Bailey.  
 821. *Pyrola rotundifolia incarnata* DC.  
 822. *Artemisia gnaphalodes* Nutt.  
 823. *Carum gairdneri* (Hook. & Arn.) Gray.  
 824. *Juniperus virginiana* L.  
 825. *Apocynum cannabinum* L.  
 826. *Glycyrrhiza lepidota* Pursh.  
 827. *Melica subulata* (Griseb.) Scribner.  
 828. *Menyanthes trifoliata* L.  
 829. *Vaccinium myrtillus* L.  
 830. *Juniperus nana* Willd.  
 831. *Festuca viridula* Vasey.  
 832. Blank.  
 833. *Oxyria digyna* (L.) Hill.  
 834. *Saxifraga leucanthemifolia* Mx.  
 835. *Hieracium gracile detonsum* Gray.  
 836. *Sibbaldia procumbens* L.  
 837. *Mitella pentandra* Hook.  
 838. Blank.  
 839. *Aster engelmanni* (Eaton) Gray.  
 840. *Aquilegia flavescens* Wats.  
 841. *Carex deflexa media* Bailey.  
 842. *Ranunculus affinis* R. Br.  
 843. *Mitella breweri* Gray.  
 844. *Epilobium anagallidifolium* Lam.  
 845. *Osmorhiza nuda* Torr.  
 846. *Hypopitys multiflora* Scop.  
 847. *Erigeron acris debillis* Gray.  
 848. *Trisetum subspicatum* (L.) Beauv.  
 849. *Claytonia parvifolia* Moçino.  
 850. *Carex pyrenaica* Wahl.  
 851. *Polygonum minimum* Wats.  
 852. *Arabis platysperma* Gray.  
 853. *Dryopteris louchitis* (L.) Kuntze.  
 854. *Eriogonum flavum* Nutt.  
 855. *Epilobium anagallidifolium* Lam.  
 856. *Cardamine leibergii* Holzinger.  
 857. *Sambucus melanocarpa* Gray.  
 858. *Phegopteris alpestris* (Swartz) Mett.  
 859. *Rubus strigosus* Mx.  
 860. *Sedum roseum* (L.) Scop.  
 861. *Habenaria gracilis* (Lindl.) Wats.  
 862. *Agoseris aurantiaca* (Hook.) Greene.  
 863. *Veratrum viride* Ait.  
 864. *Urtica lyallii* Wats.  
 865. *Alsine uliginosa* (Murr.) Britton.  
 866. Blank.  
 867. *Echinopanax horridum* (Smith) Dec. & Planch.  
 868. *Aster fremonti* (Torr. & Gr.) Gray.  
 869. *Physostegia parviflora* Nutt.  
 870. *Lepargyrea canadensis* (L.) Greene.  
 871. *Rosa californica* Cham. & Schlecht.  
 872. *Gnaphalium microcephalum* Nutt.  
 873. *Dryopteris filix-mas* (L.) Schott.  
 874. *Dryopteris spinulosa intermedia* (Muhl.) Underwood.  
 875. *Listera cordata* (L.) R. Br.  
 876. *Panicularia nervata* (Willd.) Kuntze.  
 877. *Aster fremonti* (Torr. & Gr.) Gray.  
 878. *Agrostis exarata asperifolia* (Trin.) Thurb.  
 879. *Saussurea americana* Eaton.  
 880. *Juncus filiformis* L.  
 881. *Scirpus microcarpus* Presl.  
 882. *Batrachium trichophyllum* (Chaix) Bossch.  
 883. *Agrostis exarata* Trin.



884. *Actæa spicata arguta* Torr.  
 885. Blank.  
 886. *Taxus brevifolia* Nutt.  
 887. *Prenanthes alata sagittata* Gray.  
 888. *Rubus pedatus* Smith.  
 889. *Angelica dawsonii* Wats.  
 890. *Senecio serra* Hook.  
 891. *Carex reynoldsii* Dew.  
 892. *Razoumofskya americana* (Engelm.) Gray.  
 893. Blank.  
 894. *Centunculus minimus* L.  
 895. *Rhus glabra* L.  
 896. *Asclepias mexicana* Cav.  
 897. *Portulaca oleracea* L.  
 898. *Euphorbia serpyllifolia* Pers.  
 899. *Mollugo verticillata* L.  
 900. Blank.  
 901. *Marsilia vestita* Hook. & Grv.  
 902. *Artemisia gnaphalodes* Nutt.  
 903. *Eriogonum niveum* Dougl.  
 904. *Navarretia intertexta* Hook.  
 905. *Boisduvallia stricta* (Gray) Greene.  
 906. *Aristida fasciculata fendleriana* (Steud.) Vasey.  
 907. *Cleome lutea* Hook.  
 908. *Artemisia dracunculoides* Pursh.  
 909. *Solidago occidentalis* Nutt.  
 910. *Xanthium canadense* (Herm.) Mill.  
 911. *Coleosanthus oblongifolius* (Nutt.) Kuntze.  
 912. *Aster canescens* Pursh.  
 913. *Bigelovia graveolens glabrata* Gray.  
 914. *Bidens frondosa* L.  
 915. *Erigeron filifolius* Nutt.  
 916. *Antennaria geyeri* Gray.  
 917. *Aster multiflorus* Ait.  
 918. *Verbascum thapsus* L.  
 919. *Iva xanthifolia* Nutt.  
 920. *Polypogon monspeliensis* (L.) Desf.  
 921. *Delphinium scopulorum* Gray.  
 922. *Boisduvallia densiflora* (Lindl.) Wats.  
 923. *Trifolium pauciflorum* Nutt.  
 924. *Senecio hydrophilus* Nutt.  
 925. *Razoumofskya occidentalis* (Engelm.) Kuntze.  
 926. *Mimulus pulsiferæ* Gray.  
 927. *Medicago sativa* L.  
 928. *Lappula lappula* (L.) Karst.  
 929. *Linum digynum* Gray.  
 930. *Tetradymia canescens* DC.  
 931. *Carex flava recte-rostrata* Bailey.  
 932. Blank.  
 933. *Carex interrupta impressa* Bailey.  
 934. *Batrachium trichophyllum* (Chaix) Bossch.  
 935. *Alisma plantago* L.  
 936. *Gilia capillaris* Kellogg.  
 937. *Potentilla anserina* L.  
 938. *Senecio hydrophilus* Nutt.  
 939. *Potamogeton natans* L.  
 940. *Monotropa uniflora* L.  
 941. *Sagittaria latifolia* Willd.  
 942. *Bolelia elegans* (Dougl.) Greene.  
 943. *Pteris aquilina lanuginosa* Bong.  
 944. *Convolvulus sepium* L.  
 945. *Deschampsia cespitosa* (L.) Beauv.  
 946. *Triglochin maritima* L.  
 947. *Alopecurus geniculatus fulvus* (Smith) Scribner.  
 948. *Panicum pubescens* Lam.  
 949. *Juncus nevadensis* Wats.  
 950. *Juncus alpinus insignis* Fries.  
 951. *Juncus balticus* Willd.  
 952. *Symphoricarpos occidentalis* Hook.  
 953. *Aster laevis* L.  
 954. *Potamogeton pectinatus* L.  
 955. *Potamogeton heterophyllus longipedunculatus* (Merat) Morong.  
 956. *Potamogeton perfoliatus richardsonii* Bennett.  
 957. *Aster adscendens* Lindl.  
 958. *Hordeum nodosum* L.  
 959. *Equisetum limosum* L.  
 960. *Polygonum pennsylvanicum* L.  
 961. *Amaranthus retroflexus* L.  
 962. *Amaranthus albus* L.  
 963. *Rhus radicans* L.  
 964. *Carduus undulatus* Nutt.  
 965. Blank.  
 966. *Polygonum aviculare* L.  
 967. *Thuja plicata* Lamb.  
 968. *Polygonum douglasii* Greene.  
 969. *Physalis lanceolata* Mx.  
 970. *Epipactis gigantea* Dougl.  
 971. *Verbascum blattaria* L.  
 972. *Verbena bracteosa* Mx.  
 973. *Rosa fendleri* Crepin.  
 974. *Rosa pisocarpa* Gray.  
 975. *Artemisia dracunculoides* Pursh.  
 976. *Erigeron ramosus beyrichii* (Fisch. & Mey.) Smith & Pound.  
 977. *Prunus demissa* (Nutt.) Walp.  
 978. *Salix longifolia* Muhl.  
 979. *Erigeron divergens* Torr. & Gr.  
 980. *Aster fremonti* (Torr. & Gr.) Gray.  
 981. *Artemisia frigida* Willd.  
 982. *Elymus canadensis* L.  
 983. *Nepeta cataria* L.  
 984. *Artemisia trifida* Nutt.  
 985. *Solanum trilorum* Nutt.  
 986. *Stipa viridula* Trin.  
 987. *Amaranthus blitoides* Wats.  
 988. Blank.  
 989. *Cyrtorhyncha cymbalaria* (Pursh) Britton.  
 990. *Rudbeckia laciniata* L.  
 991. *Grindelia squarrosa* (Pursh) Dunal.  
 992. *Bigelovia graveolens albicaulis* Gray.  
 993. *Gutierrezia euthamiae* (Nutt.) Torr. & Gr.  
 994. *Bigelovia douglasii* Gray.  
 995. *Solidago radula* Nutt.  
 996. *Eriogonum annuum* Nutt.  
 997. *Eriogonum multiceps* Nees.  
 998. *Aster incanopilosus* (Lindl.) Sheldon.  
 999. *Calamoviifa longifolia* (Hook.) Hack.  
 1000. *Eriocarpum spinulosum* (Pursh) Greene.  
 1001. *Solidago radula* Nutt.  
 1002. *Eriogonum cernuum* Nutt.  
 1003. *Lygodesmia juveca* (Pursh) Don.  
 1004. *Aster canescens* Pursh.  
 1005. *Dysodia papposa* (Vent.) Hitchcock.  
 1006. *Gartneria acanthicarpa* (Hook.) Britton.  
 1007. *Bigelovia graveolens* (Nutt.) Gray.  
 1008. *Rhus trilobata* Nutt.  
 1009. *Rosa fendleri* Crepin.  
 1010. *Artemisia trifida* Nutt.

1011. *Artemisia longifolia* Nutt.  
 1012. *Polanisia trachysperma* Torr. & Gr.  
 1013. *Corispermum hyssopifolium* L.  
 1014. *Artemisia longifolia* Nutt.  
 1015. *Iva axillaris* Pursh.  
 1016. *Abronia fragrans* Nutt.  
 1017. *Aster tenacetifolius* H. B. K.  
 1018. *Atriplex patula* L.  
 1019. *Lepargyrea argentea* (Pursh) Greene.  
 1020. *Lacinaria punctata* (Hook.) Kuntze.  
 1021. *Aster incanopilosus* (Lindl.) Sheldon.  
 1022. *Helenium autumnale* L.  
 1023. *Allium schœnoprasum* L.  
 1024. *Betula occidentalis* Hook.  
 1025. *Rumex salicifolius* Weinm.  
 1026. *Potamogeton heterophyllus longipedunculatus* (Merat) Morong.  
 1027. *Salvia carnosae* Dougl.  
 1028. *Trifolium involueratum* Willd.  
 1029. *Roripa palustris* (L.) Bess.  
 1030. *Pentstemon confertus* Lindl.  
 1031. *Ambrosia psilostachya* DC.  
 1032. *Cratægus tomentosa* L.  
 1033. *Mentzelia ornata* (Pursh) Torr.  
 1034. *Suaeda depressa* (Pursh) Wats.  
 1035. *Sisymbrium officinale* Scop.  
 1036. *Grindelia nana* Nutt.  
 1037. *Astragalus spaldingii* Gray.  
 1038. *Disporum trachycarpum* (Wats.) Benth. & Hook.  
 1039. *Habenaria unalascensis* (Spreng.) Wats.  
 1040. *Claytonia caroliniana sessilifolia* Torr.  
 1041. *Lupinus flexuosus* Lindl.  
 1042. *Opulaster monogynus* (Torr.) Kuntze.  
 1043. Blank.  
 1044. *Amaranthus californica* (Moq.) Wats.  
 1045. *Salix lasiantha laucifolia* (Anders.) Bebb.  
 1046. Blank.  
 1047. *Cystopteris fragilis* (L.) Bernh.  
 1048. Blank.  
 1049. *Polemonium humile* Willd.  
 1050. *Chimaphila menziesii* (R. Br.) Spreng.  
 1051. *Poa flava* L.  
 1052. *Scirpus nanus* Spreng.  
 1053. *Pedicularis bracteosa* Benth.  
 1054. Blank.  
 1055. *Hypnum symmetricum* Ren. & Card.  
 1056. *Hypnum subimponens* Lesq.  
 1057. *Cladopodium crispifolium* (Hook.) Lesq. & James.  
 1058. *Atrichum undulatum alteristatum* Ren. & Card.  
 1059. *Timmia austriaca* Hedw.  
 1060. *Orthotrichum speciosum* Nees.  
 1061. *Dicranum strictum* Schleich.  
 1062. *Hylocomium triquetrum* L.  
 1063. *Ceratodon purpureus* (L.) Brid.  
 1064. *Amblystegium varium* (Beauv.) Lindb.  
 1065. *Hypnum symmetricum* Ren. & Card.  
 1066. *Barbula mülleri* Bruch & Schimp.  
 1067. *Homalothecium nevadense* (Lesq.) Ren. & Card.  
 1068. *Brachythecium salebrosum* (Hoff.) Bruch & Schimp.  
 1069. *Hypnum uncinatum* Ren. & Card.  
 1070. *Hypnum subimponens* Lesq.  
 1071. *Rhacomitrium occidentale* Ren. & Card.  
 1072. *Dicranum scoparium* (L.) Hedw.  
 1073. *Polytrichum juniperinum* Willd.  
 1074. *Hypnum ochraceum* Turn.  
 1075. *Leucelepis acanthoneura* (Schwæg.) Lindb.  
 1076. *Cladopodium crispifolium* (Hook.) Lesq. & James.  
 1077. *Grimmia alpestris* Schleich.  
 1078. *Scleropodium obtusifolium* (Hook.) Ren. & Card.  
 1079. *Hypnum uncinatum* Hedw.  
 1080. Blank.  
 1081. *Orthotrichum speciosum* Nees.  
 1082. *Bryum cirrhatum* Hoppe & Hornsch.  
 1083. *Sphagnum squarrosum spectabile* Russ.  
 1084. *Hypnum subimponens* Lesq.  
 1085. *Bartramia menziesii* Turn.  
 1086. *Plagiothecium denticulatum microcarpum* Ren. & Card.  
 1087. *Mnium marginatum* (Dicks.) Beauv.  
 1088. *Hylocomium parietinum* (L.) Lindb.  
 1089. *Hylocomium proliferum* (L.) Lindb.  
 1090. *Hylocomium triquetrum* (L.) Bruch & Schimp.  
 1091. *Camptothecium lutescens* (Huds.) Bruch & Schimp.  
 1092. *Bartramia pomiformis crispa* (Sw.) Schimp.  
 1093. *Dicranoweisia contermina* Ren. & Card.  
 1094. *Rhacomitrium patens* (Dicks.) Hüb.  
 1095. *Gymnostomum curvirostre* (Ehrh.) Hedw.  
 1096. *Plagiothecium silesiacum* (Beauv.) Schimp.  
 1097. *Tetraphis pellucida* Hedw.  
 1098. *Hypnum capillifolium* Warnst.  
 1099. *Climacium americanum* Brid.  
 1100. *Meesia longiseta* Hedw.  
 1101. *Aulacomnium palustre* Schwæg.  
 1102. *Orthotrichum fastigiatum* Bruch.  
 1103. *Mnium medium* Bruch & Schimp.  
 1104. *Dicranum starkei* Web. & Mohr.  
 1105. *Mnium umbratile* Mitt.  
 1106. *Plagiothecium denticulatum microcarpum* Ren. & Card.  
 1107. *Thamnum leibergii* R. G. Britton.  
 1108. Blank.  
 1109. *Dicranum howellii* Ren. & Card.  
 1110. *Dichodontium pellucidum* (L.) Schimp.  
 1111. *Amphoridium lapponicum* (Hedw.) Schimp.  
 1112. *Hylocomium robustum* (Hook.) Lindb.  
 1113. *Mnium punctatum* Hedw.  
 1114. *Bryum cuspidatum* Schimp.  
 1115. *Philonotis fontana* (L.) Brid.  
 1116. *Bartramia ithyphylla* Brid.  
 1117. *Brachythecium rutabulum* (L.) Schimp.  
 1118. *Dicranella crispa* (Ehrh.) Schimp.  
 1119. *Ditrichum montanum* Leiberg.  
 1120. *Dicranella crispa* (Ehrh.) Schimp.  
 1121. *Polytrichum attenuatum* Menz.  
 1122. *Heterocladium aberrans* Ren. & Card.  
 1123. *Plagiothecium denticulatum microcarpum* Ren. & Card.  
 1124. Blank.  
 1125. *Hylocomium squarrosum* (L.) Bruch & Schimp.  
 1126. *Scouleria aquatica* Hook.  
 1127. *Bryum miniatum atwateriae* (C. Müll.) Ren. & Card.

1181. *Mecidium raumoculacearum* DC.  
 1182. *Ryasiphora* sp.  
 1183. *Mecidium hydrophyllum* Peck.  
 1184. *Mecidium ephorbiae* (Schrank) Gmel.  
 1185. *Mecidium marian-wilsoni* (Tinton).  
 1186. *Oidium erysiphoides* Fries.  
 1187. *Melanosporella gerastii* (Pers.) Schret.  
 1188. *Albugo candidus* (Pers.) Kuntze.  
 1189. *Peronospora parasitica* (Pers.) Fries.  
 1190. *Puccinia asperior* Ellis & Everh.  
 1191. *Peronospora gilvæ* Ellis & Everh.  
 1192. *Albugo candidus* (Pers.) Kuntze.  
 1193. *Septoria sisymbrii* Ellis.  
 1194. *Puccinia oreosolini* (Strauss) Kern.  
 1195. *Phragmidium discolorum* (Tode) James.  
 1196. *Melanospora farinosa* (Pers.) Schret.  
 1197. *Barbula multeri* Bruch & Schimp.  
 1198. *Brachythecium albicans* (Neck.) Bruch & Schimp.  
 1199. *Hypnum cordifolium* Hedw.  
 1200. *Amphoridium japonicum* (Hedw.) Schimp.  
 1201. *Weberia nutans* (Schreb.) Hedw.  
 1202. *Dicranum scoparium* (L.) Hedw.  
 1203. *Dicranum scoparium* (L.) Hedw.  
 1204. *Dicranum fuscescens* Turm.  
 1205. *Dicranum strictum* Schreb.  
 1206. *Weberia commutata* Schimp.  
 1207. *Brachythecium starkei* (Brid.) Bruch & Schimp.  
 1198. *Brachythecium albicans* (Neck.) Bruch & Schimp.  
 1199. *Hypnum cordifolium* Hedw.  
 1200. *Amphoridium japonicum* (Hedw.) Schimp.  
 1201. *Weberia nutans* (Schreb.) Hedw.  
 1202. *Dicranum scoparium* (L.) Hedw.  
 1203. *Dicranum scoparium* (L.) Hedw.  
 1204. *Dicranum fuscescens* Turm.  
 1205. *Dicranum strictum* Schreb.  
 1206. *Weberia commutata* Schimp.  
 1207. *Brachythecium starkei* (Brid.) Bruch & Schimp.  
 1199. *Hypnum hispidulum* Brid.  
 1210. *Bryum caespitosum* L.  
 1211. *Ceratodon purpureus* (L.) Brid.  
 1212. *Funaria hygrometrica* (L.) Hedw.  
 1213. *Polytrichum juniperinum* Willd.  
 1214. *Eurhynchium strigosum* (Hoff.) Bruch & Schimp.  
 1215. Blank.  
 1216. *Anacamnum androgynum* (L.) Schwag.  
 1217. *Hylacomium parietinum* (L.) Lindb.  
 1218. *Hylacomium proliferum* (L.) Lindb.  
 1219. *Dicranoweisia confertina* Ken. & Card.  
 1220. *Hypnum ochraceum* Turm.  
 1221. *Thamnum bigelovii* (Sull.) Lesq. & James.  
 1222. *Eurhynchium strigosum barnesii* Ken. & Card.  
 1223. *Psiloneotis fontana* (L.) Brid.  
 1224. *Timmia austriaca* Hedw.  
 1225. *Amblystegium hygrophilum* (Duratz.) Schimp.  
 1226. *Amblystegium serpens* (L.) Bruch & Schimp.  
 1227. *Lepidobryum pyriforme* (L.) Schimp.  
 1228. *Amblystegium serpens* (L.) Bruch & Schimp.  
 1229. *Brachythecium rivulare* Bruch & Schimp.  
 1230. *Camptothecium aeneum* (Mitt.) Lesq.  
 1231. *Anacamnum androgynum* (L.) Schwag.  
 1232. *Bryum caespitosum* L.  
 1233. *Hypnum symmetricum* Ken. & Card.  
 1234. *Hypnum symmetricum* Ken. & Card.  
 1235. *Hypnum symmetricum* Ken. & Card.  
 1236. *Hypnum symmetricum* Ken. & Card.  
 1237. *Barbula multeri* Bruch & Schimp.  
 1238. *Hypnum symmetricum* Ken. & Card.  
 1239. *Brachythecium salebrosum* (Hoff.) Bruch & Schimp.
1128. Blank.  
 1129. *Weberia eruda* (L.) Schwag.  
 1130. *Mnium spinulosum* Bruch & Schimp.  
 1131. *Amblystegium juratzkanum* Schimp.  
 1132. *Amblystegium serpens* (L.) Bruch & Schimp.  
 1133. *Orthotrichum rotlii* Vent.  
 1134. *Amblystegium hygrophilum* (Duratz.) Schimp.  
 1135. *Bryum caespitosum* L.  
 1136. *Ceratodon purpureus* (L.) Brid.  
 1137. *Funaria hygrometrica* (L.) Hedw.  
 1138. *Amblystegium serpens* (L.) Bruch & Schimp.  
 1139. *Grinnia leucophara* (Crev.) Schimp.  
 1140. *Orthotrichum rotlii* Vent.  
 1141. *Amblystegium serpens* (L.) Bruch & Schimp.  
 1142. *Orthotrichum tenellum* Bruch.  
 1143. Blank.  
 1144. *Lepidobryum pyriforme* (L.) Schimp.  
 1145. *Amblystegium serpens* (L.) Bruch & Schimp.  
 1146. *Camptothecium aeneum* (Mitt.) Lesq.  
 1147. *Pottia cavifolia* Ehrh.  
 1148. *Timmia austriaca* Hedw.  
 1149. *Mnium spinulosum* Bruch & Schimp.  
 1150. *Eurhynchium strigosum* (Hoff.) Bruch & Schimp.  
 1151. *Polytrichum juniperinum* Willd.  
 1152. *Atrichum undulatum* alteristatum Ken. & Card.  
 1153. *Anacamnum androgynum* (L.) Schwag.  
 1154. *Barbula mucronifolia* (Brid.) Bruch & Schimp.  
 1155. *Orthotrichum boltingeri* Ken. & Card.  
 1156. *Weberia nutans* (Schreb.) Hedw.  
 1157. *Weberia eruda* (L.) Schwag.  
 1158. *Plagiothecium denticulatum* microcarpum Ken. & Card.  
 1159. *Pseudoleskea rigescens* Wils.  
 1160. *Pseudoleskea atroviridis* brachyclados (Schwag.) Schimp.  
 1161. *Bryum saddebergii* Holzinger.  
 1162. Blank.  
 1163. *Macomitrium sudeticum* (Frick) Bruch & Schimp.  
 1164. *Fontinalis antipyretica* L.  
 1165. *Fontinalis neo-mexicana* Sull. & Lesq.  
 1166. *Pichelyma uchiatum* Mitt.  
 1167. *Dicranoweisia confertina* Ken. & Card.  
 1168. *Rhaconitrium occidentale* Ken. & Card.  
 1169. *Grinnia pachyphylloides* Lauberger.  
 1170. *Pseudoleskea atroviridis* Schimp.  
 1171. *Pseudoleskea atroviridis* Schimp.  
 1172. *Eurhynchium strigosum barnesii* Ken. & Card.  
 1173. *Eurhynchium strigosum fallax* Ken. & Card.  
 1174. *Plagiothecium saddebergii* Ken. & Card.  
 1175. *Brachythecium edipodium* Mitt.  
 1176. *Brachythecium rivulare* Bruch & Schimp.  
 1177. *Camptothecium dolosum* Ken. & Card.  
 1178. *Grinnia apocarpa* Hedw.  
 1179. *Barbula pomiformis* crispa (Sw.) Schimp.  
 1180. Blank.

1240. *Hypnum symmetricum* Ren. & Card.  
 1241. *Brachythecium salebrosum* (Hoff.) Bruch & Schimp.  
 1242. *Hypnum symmetricum* Ren. & Card.  
 1243. *Eurhynchium strigosum* (Hoff.) Bruch & Schimp.  
 1244. *Hypnum symmetricum* Ren. & Card.  
 1245. *Barbula mülleri* Bruch & Schimp.  
 1246. *Eurhynchium strigosum fallax* Ren. & Card.  
 1247. *Hypnum symmetricum* Ren. & Card.  
 1248. *Claopodium crispifolium* (Hook.) Lesq. & James.  
 1249. *Hypnum symmetricum* Ren. & Card.  
 1250. *Eurhynchium strigosum* (Hoff.) Bruch & Schimp.  
 1251. *Brachythecium salebrosum* (Hoff.) Bruch & Schimp.  
 1252. *Aulacomnium androgynum* (L.) Schwæg.  
 1253. *Hypnum hispidulum* Brid.  
 1254. *Timmia austriaca* Hedw.  
 1255. *Mnium marginatum* (Dicks.) Beauv.
1256. *Aulacomnium androgynum* (L.) Schwæg.  
 1257. *Webera cruda* (L.) Schwæg.  
 1258. *Hypnum uncinatum* Hedw.  
 1259. *Hypnum subimponens* Lesq.  
 1260. *Dicranum strictum* Schleich.  
 1261. *Scleropodium obtusifolium* (Hook.) Ren. & Card.  
 1262. *Hylocomium triquetrum* (L.) Bruch & Schimp.  
 1263. Blank.  
 1264. *Pseudoleskea atrovirens brachyclados* (Schwæg.) Schimp.  
 1265. *Hypnum ochraceum* Turn.  
 1266. *Amblystegium orthocladon* (Beauv.) Ren. & Card.  
 1267. Blank.  
 1268. *Hygrobiella laxifolia* Spruce.  
 1269. *Plagiochila asplenioides* (L.) Nees & Mont.  
 1270. *Blepharostoma trichostomum* (L.) Dum.  
 1271. *Lophocolea bidentata* (L.) Dum.  
 1272. *Ptilidium californicum* (Aust.) Pearson.